

# TOSHIBA



## HOME

Air conditioners for your home

## ESTIA

Cost-effective heating:  
Air-to-water heat pumps



## BUSINESS

Air conditioning solutions for  
business and industry

## CHILLER

Chillers and heat pumps  
for trade and industry



PRODUCT CATALOGUE 2022/23  
**Air conditioners & heat pumps**



# GENERAL TERMS OF BUSINESS

## 1. General information

a) Unless otherwise stated, the general terms of business as well as the individual purchasing conditions declared by us apply. Regulations deviating from our conditions only apply if they are expressly declared in writing.  
b) The application of any terms of business of the buyer is excluded.

## 2. Placing orders, changing of order

a) Orders require a clear information regarding the desired collection or delivery date (at least calendar week). Orders without this information cannot be confirmed.  
b) On our part, orders are only considered accepted if they have been confirmed by us in writing by an order confirmation, or the delivery has been carried out. Oral arrangements and arrangements by phone shall require a written confirmation.  
c) It is the responsibility of the buyer to check the order confirmation for correctness. We hold ourselves harmless in the event of errors in the order confirmation and a resulting incorrect delivery.  
d) If the collection or delivery date stated in advance is exceeded by 6 weeks, we reserve the right to cancel the order and to charge the cancellation fees listed in point e). Any resulting claims for damages cannot be asserted against us.  
e) A complete or partial cancellation or change of an order by the customer is only permitted with our written confirmation and entitles us to charge a (cancellation or change) fee of 10% of the net order value, in addition to the services already provided and costs incurred.

## 3. Pricing

a) The prices are based on the currently valid price list. We reserve the right to change prices during the year.  
b) The prices are net without any taxes, fees or charges in the indicated currency including normal packaging.  
c) For self-collectors, the prices apply ex loading ramp of our warehouse, however without loading. In the case of delivery, the prices are DDP (from an invoice value of EUR 850 net on). Additional costs based on special requests, such as accelerated or special delivery, special packaging, etc. can be considered, but are at the expense of the buyer. Packaging will not be taken back.  
d) Separate agreements on pricing are noted on the individual purchase conditions.  
e) Should the cost situation and prices of our suppliers change, in particular in the event of exchange rate fluctuations, customs, tax and freight costs, we reserve the right to adjust prices, also for existing orders.

## 4. Terms of payment

a) The terms of payment are valid according to the individually agreed purchase conditions issued by us.  
b) We reserve the right to send invoices exclusively by email. If transmission by post is desired, we must be informed of this separately in writing.  
c) In the event of default in payment by the buyer, we grant ourselves the right to exercise a right of retention for all further services from the business relationship until the delay in payment has been remedied. We are then entitled to demand payment in advance for any and all subsequent orders that have already been placed.  
d) In the event of a delay in payment, the buyer must pay interest on the outstanding amount at an annual rate of 8 percentage points above the base rate. The possibility to assert higher damage caused by default remains unaffected by the regulation.  
e) Payments are always assigned to the oldest invoices due.

## 5. Delivery

a) Any indication of delivery times provided by us is an approximation only and non-binding. However, we endeavour to meet the specified deadlines. There is no entitlement to compliance with a specific delivery time. Delivery delays therefore neither entitle in claims for damages, nor do they entitle to terminate the contract.  
b) We do not accept any penalty claims by the customer.  
c) Unless otherwise agreed, partial deliveries are permitted.  
d) Incoterms are valid in the 2020 version.  
e) If we have not been given separate instructions, the delivery shall be made to the address known to us. In the absence of other instructions from the buyer, the choice of the transport route and means of transport is made at the best of our discretion and without liability for the cheapest and fastest shipping.  
f) If the delivery of the goods is delayed on request or at the fault of the buyer, the goods will be stored at the buyer's expense and risk.  
g) Any costs resulting from incorrect deliveries cannot be asserted towards us.

## 6. Transfer of goods, transfer of risk, transport damage

a) In the case of self-collection, the risk is transferred to the buyer as soon as the goods have left the ramp on which they are made available for collection. The buyer already bears the risks of loading. Upon delivery, the risk is transferred to the buyer upon the acceptance of the goods.

b) The responsibility rests with the buyer that when the goods are accepted, the goods are checked for the correctness of delivery, in accordance with the order confirmation, and for any damages. Any damage to the packaging or the device must be noted on the delivery note and reported to the shipping company and AIR-COND immediately. If the customer discovers hidden defects, i.e. defects that are not visible due to the packaging, the customer is obliged to report these immediately, but no later than within 7 days after collection/delivery, in export countries within 10 days after collection/delivery, using the form available online for this purpose, since insurance claims/liability will expire otherwise. We hold ourselves harmless in the event of any damage, incorrect quantities, etc. that are reported later than that.  
c) We are entitled to charge the customer for the costs incurred by default in acceptance, in particular the costs of storage.  
d) If the forwarder is granted permission to park the goods, the risk of loss and damage to the goods shall be transferred to the customer upon parking as instructed at the specified location. Any liability of AIR-COND for damages or defects occurring after that point is excluded.

## 7. Returns

a) Returns and exchanges of goods require our express, written consent in each individual case.  
b) Correctly delivered goods can only be returned for credit within a period of 2 months from the date of the invoice, in their original packaging and in the original condition.  
c) The return takes place at the expense and risk of the customer to the place specified by us.  
d) If the goods are taken back, the sales price will be reimbursed in the form of a credit note, less 15% processing costs from the net invoice amount.  
e) If the goods have not been returned as agreed i.e. not in the form specified in paragraphs a) and b), we reserve the right to refuse the return and to send the goods back to the customer at the customer's expense and risk.

## 8. Reservation of ownership

The goods delivered or otherwise handed over by us remain our property until they have been paid for in full.

## 9. Material warranty

a) Claims for material warranty can be asserted by the buyer 36 months from delivery and invoice date by means of a fully completed guarantee request form and upon request against return of the defective part, within 2 months, at his own expense.  
b) A material warranty of 12 months from delivery and invoice date applies to spare parts.  
c) The material warranty only includes the provision of spare parts. It is expressly mentioned that the material warranty does not include compensation for wages, refrigerants, travel expenses, etc.  
d) A prerequisite for the material warranty is a proper installation by the specialist company in accordance with the TOSHIBA's installation guidelines and operating conditions, as well as regular maintenance of the system in accordance with the TOSHIBA's maintenance instructions. Any warranty claims will be rejected if the device is improperly installed and if the TOSHIBA's operating conditions and maintenance guidelines are not followed.  
e) Extended material warranty for VRF products is granted on the condition that it is a VRF project, a commissioning protocol has been completed and a design is available. After reviewing all documents, the period of the material warranty will be extended from 3 to 5 years. This is confirmed separately by means of a corresponding certificate. A guarantee extension can be requested a maximum of two months after commissioning.  
f) A material warranty of 60 months from delivery and invoice date applies to ESTIA compressors.  
g) Extended material warranty for ESTIA components other than those mentioned in point f) can be applied for 4 or 5 years against a fee. A commissioning report must be completed. After all documents have been checked, the extension will be confirmed by means of a corresponding certificate. A guarantee extension can be requested a maximum of two months after commissioning.  
h) Guarantee requests can only be made online ([www.toshiba-klima.at](http://www.toshiba-klima.at)) in the AIR-COND partner portal using the form provided for this purpose.

## 10. Export certificates (applies to non-EU member states)

The buyer undertakes to send us the export certificate (certificate of export of the goods from the EU) by registered mail within 14 days of collection. If this is not done, 20% VAT, customs costs and customs penalties will be charged.

## 11. Place of jurisdiction

The place of jurisdiction for both parties is the Landesgericht [Regional Court] of Graz as commercial court. Applicable law is the law of the Republic of Austria.

Rev. January 2021

**Validity of the price list: April 1, 2022 to March 31, 2023.**  
**The general terms and conditions of AIR-COND International GmbH apply.**

Subject to change without notice! All information and type designations as well as illustrations are subject to change, printing and typesetting errors. For detailed product information, please refer to the data sheets provided online, which can be found on our website: [www.toshiba-aircondition.com](http://www.toshiba-aircondition.com). Technical document for the specialized trade.

# CONTENT

<b>RAS .....</b>	<b>4</b>	<b>VRF .....</b>	<b>96</b>
HOME PRODUCT OVERVIEW .....	6	Outdoor units .....	98
SEIYA / Set .....	8	SMMSu .....	98
SEIYA NEW / Set .....	9	SMMSu Outdoor units .....	98
SHORAI Edge / Set .....	10	Combination tables SMMSu .....	100
SHORAI Premium / Set .....	11	Combination tables SMMSu .....	102
HAORI / Set .....	13	MINI SMMS Single Fan Outdoor units .....	109
DAISEIKAI 9 / Set .....	14	MINI SMMSe Outdoor units .....	110
Console / Set .....	15	SMMSe .....	112
INVERTER MULTI SYSTEMS: Indoor units .....	17	SMMSe LowRef Outdoor units .....	112
SEIYA .....	17	SMMSe Outdoor units .....	113
SEIYA NEW .....	17	SHRMe Outdoor units .....	114
SHORAI Edge .....	18	Combination tables SHRMe .....	116
SHORAI Premium .....	18	Power consumption + fuse protection .....	120
HAORI .....	19	Sound data .....	121
DAISEIKAI 9 .....	20	Indoor units .....	122
Console .....	20	VRF INDOOR UNITS: overview .....	122
60x60 Slim Cassette .....	21	High wall unit .....	124
Duct unit .....	21	High wall unit with external PMV-Kit .....	126
INVERTER MULTI SYSTEMS: Outdoor units .....	23	Ceiling unit .....	128
Combination table INVERTER MULTI SYSTEMS .....	24	60x60 Slim Cassette .....	129
Quick overview outdoor units .....	26	4-Way Standard cassette .....	130
Power consumption + fuse protection .....	27	4-Way SMART Cassette .....	132
Sound data .....	28	2-Way cassette .....	134
Accessories RAS .....	30	1-Way Flat cassette .....	136
RAS Control options .....	31	1-Way cassette .....	139
<b>ESTIA .....</b>	<b>32</b>	Standard duct unit .....	140
ESTIA R32 .....	34	SSD Super slim duct unit .....	142
ESTIA R32 Hydrobox .....	35	Slim duct unit .....	144
ESTIA R32 AIO All-in-One .....	37	High pressure duct unit .....	146
ESTIA Accessories .....	37	Fresh air duct unit SMMSe .....	148
ESTIA Series 5 .....	38	Fresh air duct unit SMMSu .....	150
ESTIA HI POWER Series 5 .....	40	Console .....	153
ESTIA Accessories .....	41	Chassis .....	154
ESTIA Domestic hot water tank .....	41	Floor standing .....	155
ESTIA Domestic hot water heat pump Mono .....	42	DX-Kit Exhaust air control .....	156
Power consumption + fuse protection .....	43	DX-Kit 0 – 10 V control capacity .....	156
Sound data .....	44	Cross flow heat exchanger .....	158
<b>RAV .....</b>	<b>46</b>	Cross flow heat exchanger and direct expansion HEX with humidifier .....	160
Indoor units .....	46	Hot water module MT (2&3 pipes) .....	162
RAV INDOOR UNITS: Overview .....	48	Hot water module HT (3 pipes) .....	163
High wall unit .....	50	SMMSu / SMMSe / Mini SMMSe (2-pipes-system) branching .....	165
High wall unit 10 kW .....	52	SHRMe (3-pipes-system) branching .....	165
High wall unit .....	53	Wiring / Electrical Installation .....	166
Ceiling unit .....	54	Controls .....	169
60x60 Slim Cassette .....	58	TOSHIBA Service software .....	178
Smart Cassette .....	59	Icons of unit characteristics .....	179
4-Way Standard Cassette .....	60	Messuring arrangement for determining the sound pressure level .....	179
4-Way Standard Cassette .....	63	Measurement conditions for TOSHIBA air conditioners & heat pumps .....	180
Slim Duct unit .....	65	Performance data for ESTIA products .....	180
Standard duct unit .....	66	Glossary .....	181
Standard duct unit .....	70	<b>USX CHILLER .....</b>	<b>182</b>
High pressure duct unit .....	72		
Digital Inverter BIG .....	72		
Floor standing .....	73		
DX-Kits exhaust air temperature control RAV-DXC010 .....	76		
DX-Kit 0 – 10 V capacity control RBC-DXC031 .....	77		
Performance data for DX-Kits .....	78		
RAV Split solution for one temperature zone .....	78		
Branch kits for multi installations .....	78		
Air curtain .....	81		
<b>Outdoor units .....</b>	<b>82</b>		
Digital Inverter .....	82		
Super Digital Inverter .....	84		
Digital Inverter CLASSIC .....	85		
Digital Inverter BIG .....	86		
Quick overview Outdoor units .....	87		
Power consumption + fuse protection .....	88		
Sound data .....	89		
Controls .....	90		



# HOME Indoor units overview

- Top design and high efficiency up to A+++
- Indoor units in different designs for all applications
- Different air filter technologies cover all requirements



## WALL UNITS

### **SEIYA**

Sizes: 7, 10, 13, 16, 18, 24

**Page 8, 17**

### **SEIYA NEU**

Sizes: 7, 10, 13, 16, 18, 24

**Page 9, 17**

### **SHORAI Edge**

Sizes: 7, 10, 13, 16, 18, 22, 24

**Page 10, 18**

### **SHORAI Premium**

Sizes: 10, 18, 22, 24

**Page 11, 18**

### **HAORI**

Sizes: 10, 13, 16

**Page 13, 19**

### **DAISEIKAI 9**

Sizes: 10, 13, 16

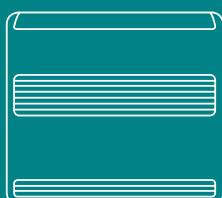
**Page 14, 20**

## CONSOLE UNITS

### **CONSOLE**

Sizes: 10, 13, 18

**Page 15, 20**



## CASSETTES UNITS

### **60x60 SLIM CASSETTE**

Sizes: 10, 13, 16

**Page 21**



## DUCT UNIT

### **DUCT UNIT**

Sizes: 10, 13, 16, 22, 24

**Page 21**



# HOME PRODUCT OVERVIEW

## PRODUCT FEATURES

	FUNCTIONS	DAISEIKAI 9	HAORI	SEIYA	SEIYA NEW	SHORAI PREMIUM	SHORAI EDGE	CONSOLE	DUCT UNIT	SLIM CASSETTE
Type	SINGLE split insert									
	MULTI split insert									
Functions	Cooling	●	●	●	●	●	●	●	●	●
	Heating	●	●	●	●	●	●	●	●	●
	Refrigerant R32	●	●	●	●	●	●	●	●	●
Technology	Hybrid Inverter control	●	●	●	●	●	●	●	●	●
	Rotary compressor		●	07 – 18	07 – 18	10/13/16	10/13/16	10/13		
	Twin rotary compressor	●		24	24	18/22/24	18/22/24	18	●	●
Air quality	Self-cleaning function	●	●	●	●	●	●	●	●	●
	Dust Filter	●	●	●	●	●	●	●	○	●
	IAQ Filter	○	○		○	●	○	●		
	Activ Carbon Catechol Filter	○	○	○	○	○	○	○		
	Ultra Pure Filter		●	○	○		●			
	Ultra Fresh Filter	○	○	○	●	○	○	○		
	Plasma Filter / Ionisator	●								
	Ozone Air Purifier / Ionisator		●			●				
Features	HI POWER	●	●	●	●	●	●	●	●	●
	Auto Diagnose	●	●	●	●	●	●	●	●	●
	Eco Mode	●	●	●	●	●	●	●	●	●
	Quiet Mode	●	●	●	●	●	●	●	●	●
	Silent Mode	●	●	●	●	●	●	●		
	Comfort Sleep	●			●	●	●	●	●	●
	Power Selection	●	●			●	●			
	Floor Mode							●		
	Preset Mode	●			●	●	●	●	●	●
	One-Touch Mode								●	
	TOSHIBA WIFI	○	●	○	○	○	○	○		
	Weekly timer	●	●	○	○	●	●	●	○	○
	Timer			●	●				●	●
	Automatic Restart	●	●	●	●	●	●	●	●	●
	8°C Frost protection	●	●	○	●			●		
	Fireplace Mode	●	●			●	●	●		
	3D Airflow	●	●			18/22/24	18/22/24			
	Presence Sensor									○

● Standard ○ Optional

TOSHIBA

HOME / RAS



TOSHIBA

# SEIYA / Set



- With compact inverter
- A++ in cooling mode
- Easy to clean Dust Filter



INDOOR UNIT OUTDOOR UNIT	RAS-B07J2KVG-E* RAS-07J2AVG-E*	RAS-B10J2KVG-E* RAS-10J2AVG-E*	RAS-B13J2KVG-E* RAS-13J2AVG-E*	RAS-B16J2KVG-E* RAS-16J2AVG-E*	RAS-18J2KVG-E* RAS-18J2AVG-E*	RAS-24J2KVG-E* RAS-24J2AVG-E*
Cooling capacity	kW	2,00	2,50	3,30	4,20	5,00
Cooling range (min.-max.)	kW	0,76 - 2,60	0,80 - 3,00	1,00 - 3,60	1,20 - 4,70	1,30 - 5,50
Power consumption (min./nom./max.)	kW	0,22/0,53/0,83	0,24/0,77/1,00	0,26/1,10/1,25	0,32/1,40/1,80	0,27/1,55/1,80
Energy efficiency EER	W/W	3,77	3,25	3,00	3,00	3,23
Energy efficiency SEER		6,10	6,10	6,10	6,30	6,10
Energy efficiency class		A++	A++	A++	A++	A++
Outdoor temperature operating range (min.-max.)	°C	-15/+46	-15/+46	-15/+46	-15/+46	-15/+46
Heating capacity	kW	2,50	3,20	3,60	5,00	5,40
Heating range (min.-max.)	kW	0,92 - 3,30	1,00 - 3,90	1,10 - 4,50	1,30 - 6,00	1,00 - 6,00
Power consumption (min./nom./max.)	kW	0,19/0,64/0,90	0,20/0,86/1,11	0,22/0,92/1,24	0,24/1,40/1,70	0,20/1,60/1,85
Energy efficiency COP	W/W	3,91	3,72	3,91	3,57	3,38
Energy efficiency SCOP		4,00	4,00	4,00	4,00	4,00
Energy efficiency class		A+	A+	A+	A+	A+
Outdoor temperature operating range (min.-max.)	°C	-15/+24	-15/+24	-15/+24	-15/+24	-15/+24
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	10	10	10	13	13
<b>Set price</b>	<b>€</b>	<b>1.095,-</b>	<b>1.180,-</b>	<b>1.285,-</b>	<b>1.665,-</b>	<b>1.985,-</b>
<b>1.285,-</b>	<b>1.665,-</b>	<b>1.985,-</b>	<b>2.415,-</b>			

INDOOR UNIT	RAS-B07J2KVG-E*	RAS-B10J2KVG-E*	RAS-B13J2KVG-E*	RAS-B16J2KVG-E*	RAS-18J2KVG-E*	RAS-24J2KVG-E*
Airflow	m³/h	234 - 534	240 - 552	264 - 618	330 - 768	480 - 840
Sound pressure level (low/med/high)	dB(A)	20/31/38	21/32/39	21/33/41	22/35/43	27/40/47
Sound pressure level (low/med/high)	dB(A)	20/31/38	21/32/39	21/34/42	22/35/43	27/40/48
Dimensions (HxWxD)	mm	293 x 798 x 230	320 x 1050 x 250			
Weight	kg	9	9	9	9	14
<b>Price</b>	<b>€</b>	<b>355,-</b>	<b>360,-</b>	<b>365,-</b>	<b>405,-</b>	<b>590,-</b>

OUTDOOR UNIT	RAS-07J2AVG-E*	RAS-10J2AVG-E*	RAS-13J2AVG-E*	RAS-16J2AVG-E*	RAS-18J2AVG-E*	RAS-24J2AVG-E*
Sound pressure level (low/med/high)	dB(A)	47	48	48	49	50
Sound pressure level (low/med/high)	dB(A)	49	49	49	52	52
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	12,7 (1/2)	12,7 (1/2)
Liquid pipe diameter	mm (inch)	6,3 (1/4)	6,3 (1/4)	6,3 (1/4)	6,3 (1/4)	6,3 (1/4)
Pipe length (min.)	m	2	2	2	2	2
Pipe length (max.)	m	15	15	15	20	20
Height difference (max.)	m	12	12	12	12	12
Compressor type		Rotary	Rotary	Rotary	Rotary	Twin-Rotary
Refrigerant		R32	R32	R32	R32	R32
Refrigerant charge	kg	0,40	0,43	0,46	0,62	0,88
Dimensions (HxWxD)	mm	530 x 660 x 240	530 x 660 x 240	530 x 660 x 240	550 x 780 x 290	550 x 780 x 290
Weight	kg	22	23	24	30	38
<b>Price</b>	<b>€</b>	<b>740,-</b>	<b>820,-</b>	<b>920,-</b>	<b>1.260,-</b>	<b>1.500,-</b>
<b>920,-</b>	<b>1.260,-</b>	<b>1.500,-</b>	<b>1.825,-</b>			

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
<b>Remote control</b>	Infrared remote control included	✓	
<b>RB-RXS33-E</b>	Infrared remote control including weekly timer and 8°C frost protection function		<b>105,-</b>
<b>RB-N105S-G</b>	TOSHIBA Home AC control - wireless WiFi control / Seiya (24), Seiya NEW, Shorai Edge, Daiseikai 9		<b>115,-</b>
<b>RB-N106S-G</b>	TOSHIBA Home AC Control - WiFi control with cable / Seiya (7,10,13,16,18), Shorai Premium (10,13,16), console		<b>120,-</b>
<b>818F0023</b>	Active carbon-catechin filter strips		<b>27,-</b>
<b>818F0036</b>	IAQ filter strips		<b>40,-</b>
<b>818F0050</b>	Ultra-pure 2.5 filter strips		<b>40,-</b>
<b>818F0072</b>	Ultra-Fresh filter strips		<b>35,-</b>
<b>TCB-IFCB5-PE</b>	External on/off PCB, window contact module		<b>67,-</b>
<b>TCB-PX100-PE</b>	Casing for outdoor installation of window contact module for high-wall units		<b>45,-</b>

\* While stocks last.

All optional control options can be found on page 31.

## SEIYA NEW / Set



- BASIC Line Compact inverter
- A++ for cooling & heating
- Dust Filter and Ultra Fresh Filter
- WIFI Module can be integrated in the indoor unit



SEIYA



INDOOR UNIT OUTDOOR UNIT		RAS-B07E2KVG-E RAS-07E2AVG-E	RAS-B10E2KVG-E RAS-10E2AVG-E	RAS-B13E2KVG-E RAS-13E2AVG-E	RAS-B16E2KVG-E RAS-16E2AVG-E	RAS-18E2KVG-E RAS-18E2AVG-E	RAS-24E2KVG-E RAS-24E2AVG-E
Cooling capacity	kW	2,00	2,50	3,30	4,20	5,00	6,50
Cooling range (min.-max.)	kW	0,76 - 2,60	0,80 - 3,00	1,20 - 3,60	1,40 - 4,70	1,45 - 5,50	1,70 - 7,20
Power consumption (min./nom./max.)	kW	0,20/0,53/0,83	0,20/0,70/1,00	0,25/1,10/1,25	0,34/1,27/1,60	0,34/1,50/1,80	0,41/2,25/2,60
Energy efficiency EER	W/W	3,77	3,57	3,00	3,31	3,33	2,89
Energy efficiency SEER		6,90	7,00	7,00	7,00	7,00	6,90
Energy efficiency class		A++	A++	A++	A++	A++	A++
Outdoor temperature operating range (min.-max.)	°C	-15/+46	-15/+46	-15/+46	-15/+46	-15/+46	-15/+46
Heating capacity	kW	2,50	3,20	3,60	5,00	5,40	7,00
Heating range (min.-max.)	kW	0,82 - 3,30	0,95 - 3,90	0,97 - 4,50	1,30 - 6,00	1,35 - 6,00	1,50 - 8,10
Power consumption (min./nom./max.)	kW	0,16/0,64/0,94	0,18/0,86/1,11	0,18/0,92/1,25	0,24/1,34/1,70	0,26/1,50/1,80	0,29/2,10/2,55
Energy efficiency COP	W/W	3,91	3,72	3,91	3,73	3,60	3,33
Energy efficiency SCOP		4,60	4,60	4,60	4,60	4,40	4,30
Energy efficiency class		A++	A++	A++	A++	A+	A+
Outdoor temperature operating range (min.-max.)	°C	-15/+24	-15/+24	-15/+24	-15/+24	-15/+24	-15/+24
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	10	10	10	13	13	16
<b>Set price</b>	<b>€</b>	<b>1.150,-</b>	<b>1.240,-</b>	<b>1.350,-</b>	<b>1.750,-</b>	<b>2.085,-</b>	<b>2.535,-</b>

INDOOR UNIT		RAS-B07E2KVG-E	RAS-B10E2KVG-E	RAS-B13E2KVG-E	RAS-B16E2KVG-E	RAS-18E2KVG-E	RAS-24E2KVG-E
Airflow	m³/h	500	510	560	760	840	1070
Sound pressure level (low/med/high)	dB(A)	19/-/38	19/-/39	20/-/41	21/-/43	26/-/47	29/-/48
Sound pressure level (low/med/high)	dB(A)	19/-/38	20/-/39	20/-/42	22/-/43	26/-/48	29/-/48
Dimensions (HxWxD)	mm	288 x 770 x 225	288 x 770 x 225	288 x 770 x 225	293 x 798 x 230	293 x 798 x 230	320 x 1050 x 250
Weight	kg	9	9	9	9	9	15
<b>Price</b>	<b>€</b>	<b>390,-</b>	<b>395,-</b>	<b>400,-</b>	<b>425,-</b>	<b>510,-</b>	<b>620,-</b>

OUTDOOR UNIT		RAS-07E2AVG-E	RAS-10E2AVG-E	RAS-13E2AVG-E	RAS-16E2AVG-E	RAS-18E2AVG-E	RAS-24E2AVG-E
Sound pressure level (low/med/high)	dB(A)	-/-/47	--/-/47	--/-/48	--/-/50	--/-/50	--/-/54
Sound pressure level (low/med/high)	dB(A)	-/-/49	--/-/49	--/-/49	--/-/51	--/-/51	--/-/54
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	12,7 (½)	12,7 (½)	12,7 (½)
Liquid pipe diameter	mm (inch)	6,3 (¼)	6,3 (¼)	6,3 (¼)	6,3 (¼)	6,3 (¼)	6,3 (¼)
Pipe length (min.)	m	2	2	2	2	2	2
Pipe length (max.)	m	15	15	15	20	20	20
Height difference (max.)	m	15	15	15	15	15	15
Compressor type		Rotary	Rotary	Rotary	Rotary	Rotary	Twin Rotary
Refrigerant		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	0,34	0,49	0,54	0,68	0,93	1,18
Dimensions (HxWxD)	mm	530 x 660 x 240	530 x 660 x 240	530 x 660 x 240	550 x 780 x 290	550 x 780 x 290	550 x 780 x 290
Weight	kg	21	22	22	30	34	38
<b>Price</b>	<b>€</b>	<b>760,-</b>	<b>845,-</b>	<b>950,-</b>	<b>1.325,-</b>	<b>1.575,-</b>	<b>1.915,-</b>

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	
RB-RXS33-E	Infrared remote control including weekly timer and 8°C frost protection function		105,-
RB-RXS34-E	HAORI design infrared remote control, black, with magnetic holder		120,-
RB-N105S-G	TOSHIBA Home AC control - wireless WiFi control / Seiya (24), Seiya NEW, Shorai Edge, Daiseikai 9		115,-
818F0036	IAQ filter strips		40,-
818F0023	Active carbon-catechin filter strips		27,-
818F0050	Ultra-pure 2.5 filter strips		40,-
818F0072	Ultra-Fresh filter strips		35,-
TCB-IFCB5-PE	External on/off PCB, window contact module		67,-
TCB-PX100-PE	Casing for outdoor installation of window contact module for high-wall units		45,-

All optional control options can be found on page 31.

# SHORAI Edge / Set



- HIGH Line Allrounder with Careflow
- A+++ for cooling & heating
- Dust Filter and Ultra Pure Filter
- WIFI Module can be integrated in the indoor unit

A+++



INDOOR UNIT OUTDOOR UNIT	RAS-B07J2KVSG-E RAS-07J2AVSG-E	RAS-B10J2KVSG-E RAS-10J2AVSG-E1	RAS-B13J2KVSG-E RAS-13J2AVSG-E1	RAS-B16J2KVSG-E RAS-16J2AVSG-E1	RAS-18J2KVSG-E RAS-18J2AVSG-E	RAS-B22J2KVSG-E RAS-22J2AVSG-E	RAS-B24J2KVSG-E RAS-24J2AVSG-E	
Cooling capacity	kW	2,00	2,50	3,50	4,60	5,00	6,10	7,00
Cooling range (min.-max.)	kW	0,89 - 2,90	0,89 - 3,20	1,00 - 4,10	1,20 - 5,30	1,20 - 6,00	1,39 - 6,70	1,70 - 7,70
Power consumption (min./nom./max.)	kW	0,19/0,39/0,67	0,19/0,54/0,79	0,25/0,90/1,12	0,34/1,35/1,72	0,35/1,42/2,00	0,36/1,99/2,20	0,38/2,25/2,55
Energy efficiency EER	W/W	5,13	4,63	3,89	3,41	3,52	3,07	3,11
Energy efficiency SEER		8,50	8,60	8,60	7,80	7,80	7,30	6,30
Energy efficiency class		A+++	A+++	A+++	A++	A++	A++	A++
Outdoor temperature operating range (min.-max.)	°C	-15/+46	-15/+46	-15/+46	-15/+46	-15/+46	-15/+46	-15/+46
Heating capacity	kW	2,50	3,20	4,20	5,50	6,00	7,00	8,00
Heating range (min.-max.)	kW	0,90 - 3,60	0,90 - 4,80	1,00 - 5,30	1,10 - 6,50	1,10 - 6,50	1,15 - 7,50	1,70 - 8,80
Power consumption (min./nom./max.)	kW	0,16/0,50/0,80	0,16/0,70/1,23	0,20/1,08/1,55	0,24/1,52/1,90	0,25/1,59/1,75	0,26/1,88/2,10	0,29/2,35/2,75
Energy efficiency COP	W/W	5,00	4,57	3,89	3,62	3,77	3,72	3,40
Energy efficiency SCOP		5,10	5,10	5,10	4,60	4,60	4,60	4,10
Energy efficiency class		A+++	A+++	A+++	A++	A++	A++	A+
Outdoor temperature operating range (min.-max.)	°C	-15/+24	-15/+24	-15/+24	-15/+24	-15/+24	-15/+24	-15/+24
Power supply	V/Ph+N/Hz	220-240/1/50	230/1/50	230/1/50	230/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	10	10	10	10	16	16	16
<b>Set price</b>	<b>€</b>	<b>1.410,-</b>	<b>1.450,-</b>	<b>1.680,-</b>	<b>1.975,-</b>	<b>2.305,-</b>	<b>2.640,-</b>	<b>3.070,-</b>

INDOOR UNIT	RAS-B07J2KVSG-E	RAS-B10J2KVSG-E	RAS-B13J2KVSG-E	RAS-B16J2KVSG-E	RAS-18J2KVSG-E	RAS-B22J2KVSG-E	RAS-B24J2KVSG-E	
Airflow	m³/h	660	312-660	342-732	360-768	990	1032	1122
Sound pressure level (low/med/high)	dB(A)	19/22/40	19/-/40	19/-/43	21/-/43	26/31/44	27/34/45	28/35/47
Sound pressure level (low/med/high)	dB(A)	19/23/40	19/-/40	19/-/43	22/-/44	26/31/44	27/34/46	28/35/48
Dimensions (HxWxD)	mm	293 x 800 x 226	320 x 1053 x 245	320 x 1053 x 245	320 x 1053 x 245			
Weight	kg	10	10	10	10	14	14	14
<b>Price</b>	<b>€</b>	<b>550,-</b>	<b>555,-</b>	<b>595,-</b>	<b>625,-</b>	<b>645,-</b>	<b>740,-</b>	<b>865,-</b>

OUTDOOR UNIT	RAS-07J2AVSG-E	RAS-10J2AVSG-E1	RAS-13J2AVSG-E1	RAS-16J2AVSG-E1	RAS-18J2AVSG-E	RAS-22J2AVSG-E	RAS-24J2AVSG-E	
Sound pressure level (low/med/high)	dB(A)	36/43/44	-/-/44	-/-/46	-/-/48	42/47/48	43/48/49	43/49/50
Sound pressure level (low/med/high)	dB(A)	38/44/46	-/-/46	-/-/48	-/-/50	44/49/50	46/50/51	46/52/52
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	12,7 (½)	12,7 (½)	12,7 (½)	12,7 (½)
Liquid pipe diameter	mm (inch)	6,3 (¼)	6,3 (¼)	6,3 (¼)	6,3 (¼)	6,3 (¼)	6,3 (¼)	6,3 (¼)
Pipe length (min.)	m	2	2	2	2	2	2	2
Pipe length (max.)	m	20	20	20	20	20	20	25
Height difference (max.)	m	12	12	12	12	12	12	15
Compressor type		Rotary	Rotary	Rotary	Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32						
Refrigerant charge	kg	0,55	0,55	0,80	0,80	1,10	1,10	1,14
Dimensions (HxWxD)	mm	550 x 780 x 290	630 x 800 x 300					
Weight	kg	26	26	30	33	34	34	42
<b>Price</b>	<b>€</b>	<b>860,-</b>	<b>895,-</b>	<b>1.085,-</b>	<b>1.350,-</b>	<b>1.660,-</b>	<b>1.900,-</b>	<b>2.205,-</b>

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	
<b>RB-N105S-G</b>	TOSHIBA Home AC control - wireless WiFi control / Seiya (24), Seiya NEW, Shorai Edge, Daiseikai 9		<b>115,-</b>
<b>818F0036</b>	IAQ filter strips		<b>40,-</b>
<b>818F0023</b>	Active carbon-catechin filter strips		<b>27,-</b>
<b>818F0050</b>	Ultra-pure 2.5 filter strips		<b>40,-</b>
<b>818F0072</b>	Ultra-Fresh filter strips		<b>35,-</b>
<b>TCB-IFCB5-PE</b>	External on/off PCB, window contact module		<b>67,-</b>
<b>TCB-PX100-PE</b>	Casing for outdoor installation of window contact module for high-wall units		<b>45,-</b>

All optional control options can be found on page 31.

# SHORAI Premium / Set



- with 3D-Airflow (18, 22, 24)
- A++ for cooling & heating
- equipped with Dust Filter, IAQ Filter, Ozone Air Purifier
- WIFI Module can be integrated in the indoor unit (18, 22, 24)



INDOOR UNIT OUTDOOR UNIT	RAS-18J2KVRG-E* RAS-18J2AVRG-E*	RAS-B22J2KVRG-E* RAS-22J2AVRG-E*	RAS-B24J2KVRG-E* RAS-24J2AVRG-E*
Cooling capacity	kW	5,00	6,10
Cooling range (min.-max.)	kW	1,24 - 6,00	1,29 - 6,70
Power consumption (min./nom./max.)	kW	0,23/1,42/2,00	0,24/1,99/2,20
Energy efficiency EER	W/W	3,52	3,07
Energy efficiency SEER		7,30	6,80
Energy efficiency class		A++	A++
Outdoor temperature operating range (min.-max.)	°C	-15/+46	-15/+46
Heating capacity	kW	6,00	7,00
Heating range (min.-max.)	kW	0,88 - 6,50	0,93 - 7,50
Power consumption (min./nom./max.)	kW	0,16/1,60/1,75	0,19/1,94/2,10
Energy efficiency COP	W/W	3,75	3,61
Energy efficiency SCOP		4,40	4,40
Energy efficiency class		A+	A+
Outdoor temperature operating range (min.-max.)	°C	-15/+24	-15/+24
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50
Recommended fusing	A	13	16
<b>Set price</b>	<b>€</b>	<b>2.175,-</b>	<b>2.830,-</b>

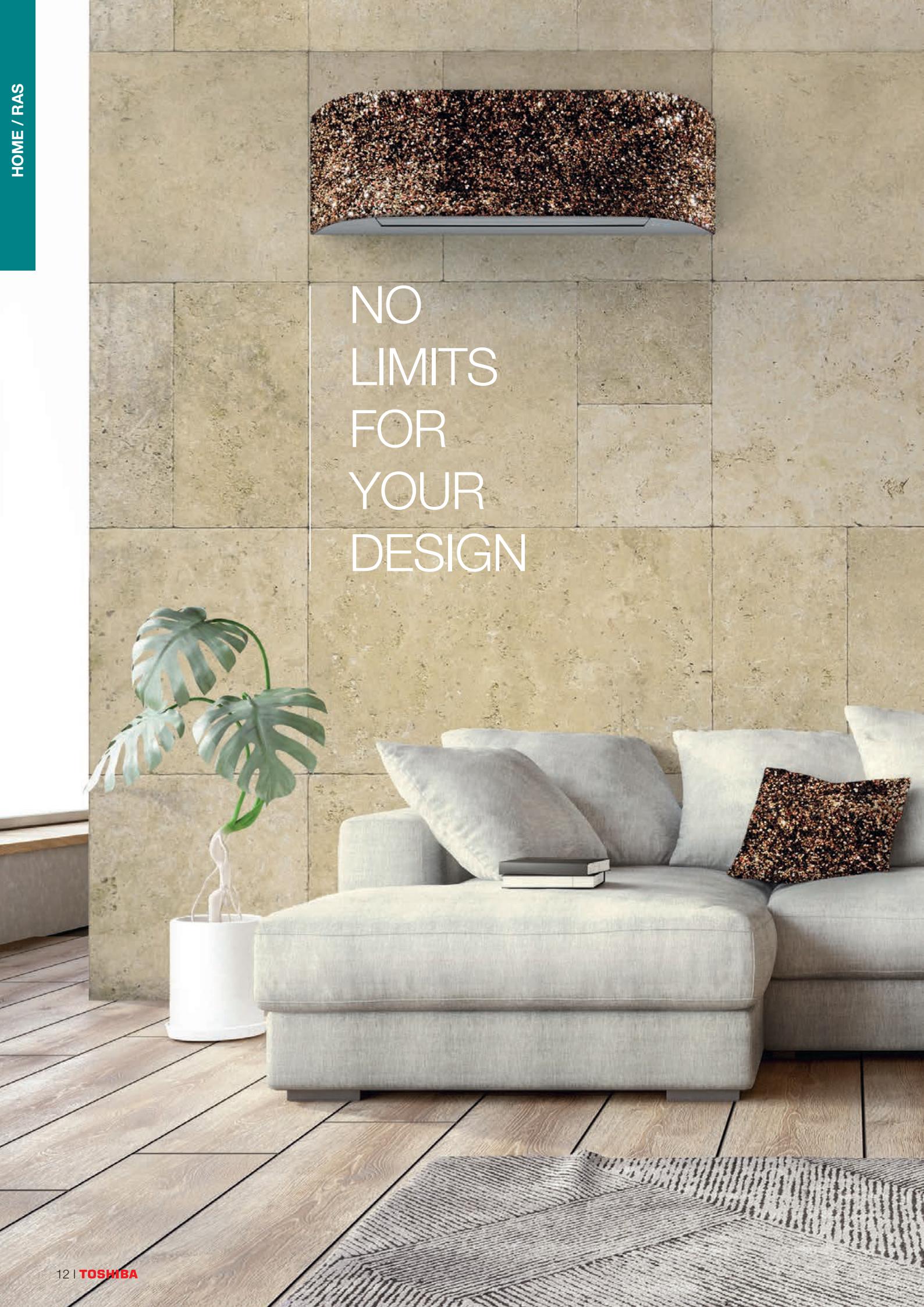
INDOOR UNIT	RAS-18J2KVRG-E*	RAS-B22J2KVRG-E*	RAS-B24J2KVRG-E*
Airflow	m³/h	499 - 950	606 - 984
Sound pressure level (low/med/high)	dB(A)	26/-/44	27/-/45
Sound pressure level (low/med/high)	dB(A)	26/-/44	27/-/46
Dimensions (HxWxD)	mm	320 x 1050 x 265	320 x 1050 x 265
Weight	kg	15	15
<b>Price</b>	<b>€</b>	<b>645,-</b>	<b>780,-</b>
<b>915,-</b>			

OUTDOOR UNIT	RAS-18J2AVRG-E*	RAS-22J2AVRG-E*	RAS-24J2AVRG-E*
Sound pressure level (low/med/high)	dB(A)	49	53
Sound pressure level (low/med/high)	dB(A)	50	53
Suction gas pipe diameter	mm (inch)	12,7 (½)	12,7 (½)
Liquid pipe diameter	mm (inch)	6,3 (¼)	6,3 (¼)
Pipe length (min.)	m	2	2
Pipe length (max.)	m	20	25
Height difference (max.)	m	12	15
Compressor type		Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32
Refrigerant charge	kg	1,10	1,10
Dimensions (HxWxD)	mm	550 x 780 x 290	550 x 780 x 290
Weight	kg	34	34
<b>Price</b>	<b>€</b>	<b>1.530,-</b>	<b>1.655,-</b>
<b>1.915,-</b>			

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	
<b>RB-N105S-G</b>	TOSHIBA Home AC control - wireless WiFi control / Seiya (24), Seiya NEW, Shorai Edge, Daiseikai 9		<b>115,-</b>
<b>RB-N106S-G</b>	TOSHIBA Home AC Control - WiFi control with cable / Seiya (7,10,13,16,18), Shorai Premium (10,13,16), console		<b>120,-</b>
<b>818F0023</b>	Active carbon-catechin filter strips		<b>27,-</b>
<b>818F0036</b>	IAQ filter strips		<b>40,-</b>
<b>818F0050</b>	Ultra-pure 2.5 filter strips		<b>40,-</b>
<b>818F0072</b>	Ultra-Fresh filter strips		<b>35,-</b>
<b>TCB-IFCB5-PE</b>	External on/off PCB, window contact module		<b>67,-</b>
<b>TCB-PX100-PE</b>	Casing for outdoor installation of window contact module for high-wall units		<b>45,-</b>

\* While stocks last.

All optional control options can be found on page 31.



NO  
LIMITS  
FOR  
YOUR  
DESIGN

## HAORI / Set



- DESIGN Line with innovative textile cover
- A+++ for cooling & heating
- Dust Filter, Ozone Air Purifier and Ultra Pure Filter
- WIFI Module integrated as standard



INDOOR UNIT OUTDOOR UNIT	RAS-B10N4KVRG-E RAS-10J2AVSG-E1	RAS-B13N4KVRG-E RAS-13J2AVSG-E1	RAS-B16N4KVRG-E RAS-16J2AVSG-E1
Cooling capacity	kW	2,50	3,50
Cooling range (min.-max.)	kW	0,89 - 3,20	1,00 - 4,10
Power consumption (min./nom./max.)	kW	0,19/0,54/0,79	0,25/0,80/1,12
Energy efficiency EER	W/W	4,63	4,38
Energy efficiency SEER		8,60	8,70
Energy efficiency class		A+++	A+++
Outdoor temperature operating range (min.-max.)	°C	-15/+46	-15/+46
Heating capacity	kW	3,20	4,20
Heating range (min.-max.)	kW	0,90 - 4,70	1,00 - 5,30
Power consumption (min./nom./max.)	kW	0,18/0,74/1,23	0,20/1,08/1,55
Energy efficiency COP	W/W	4,32	3,89
Energy efficiency SCOP		5,10	5,10
Energy efficiency class		A+++	A+++
Outdoor temperature operating range (min.-max.)	°C	-15/+24	-15/+24
Power supply	V/Ph+N/Hz	230/1/50	230/1/50
Recommended fusing	A	10	10
<b>Set price</b>	<b>€</b>	<b>1.745,-</b>	<b>2.010,-</b>
<b>2.335,-</b>			

INDOOR UNIT	RAS-B10N4KVRG-E	RAS-B13N4KVRG-E	RAS-B16N4KVRG-E
Airflow	m³/h	300-600	320-670
Sound pressure level (low/med/high)	dB(A)	19/-/41	19/-/43
Sound pressure level (low/med/high)	dB(A)	19/-/41	19/-/43
Dimensions (HxWxD)	mm	300 x 987 x 210	300 x 987 x 210
Weight	kg	11	11
<b>Price</b>	<b>€</b>	<b>850,-</b>	<b>925,-</b>

OUTDOOR UNIT	RAS-10J2AVSG-E1	RAS-13J2AVSG-E1	RAS-16J2AVSG-E1
Sound pressure level (low/med/high)	dB(A)	-/-/44	-/-/46
Sound pressure level (low/med/high)	dB(A)	-/-/46	-/-/48
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)
Liquid pipe diameter	mm (inch)	6,3 (1/4)	6,3 (1/4)
Pipe length (min.)	m	2	2
Pipe length (max.)	m	20	20
Height difference (max.)	m	12	12
Compressor type		Rotary	Rotary
Refrigerant		R32	R32
Refrigerant charge	kg	0,55	0,80
Dimensions (HxWxD)	mm	550 x 780 x 290	550 x 780 x 290
Weight	kg	26	30
<b>Price</b>	<b>€</b>	<b>895,-</b>	<b>1.085,-</b>
<b>1.350,-</b>			

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
<b>RB-RXS34-E</b>	HAORI design infrared remote control, black, with magnetic holder	✓	
<b>RB-RXS33-E</b>	Infrared remote control including weekly timer and 8°C frost protection function		<b>105,-</b>
<b>RB-I4101-E</b>	Fabric cover Dark Gray enclosed	✓	
<b>RB-I4102-E</b>	Fabric cover Light Gray enclosed	✓	
<b>RB-I4103-E</b>	Fabric cover Bluish Gray		<b>125,-</b>
<b>RB-I4104-E</b>	Fabric cover Gray Beige		<b>125,-</b>
<b>RB-I4105-E</b>	Fabric cover Dark Brown		<b>125,-</b>
<b>RB-I4106-E</b>	Fabric cover Emerald Blue		<b>125,-</b>
<b>818F0023</b>	Active carbon-catechin filter strips		<b>27,-</b>
<b>818F0036</b>	IAQ filter strips		<b>40,-</b>
<b>818F0050</b>	Ultra-pure 2.5 filter strips	✓	
<b>818F0072</b>	Ultra-Fresh filter strips		<b>35,-</b>
<b>TCB-IFCB5-PE</b>	External on/off PCB, window contact module		<b>67,-</b>
<b>TCB-PX100-PE</b>	Casing for outdoor installation of window contact module for high-wall units		<b>45,-</b>

# DAISEIKAI 9 / Set



- PREMIUM Line with 3D-Airflow
- A+++ for cooling & heating
- Dust Filter, Plasma Filter with Ionisator
- WIFI Modul can be integrated in the indoor unit

A+++

**DAISEIKAI**

INDOOR UNIT OUTDOOR UNIT	RAS-10PKVPG-E RAS-10PAVPG-E	RAS-13PKVPG-E RAS-13PAVPG-E	RAS-16PKVPG-E RAS-16PAVPG-E
Cooling capacity	kW	2,50	3,50
Cooling range (min.-max.)	kW	0,80 - 3,50	0,90 - 4,10
Power consumption (min./nom./max.)	kW	0,15/0,45/0,82	0,18/0,75/1,00
Energy efficiency EER	W/W	5,56	4,67
Energy efficiency SEER		10,60	9,50
Energy efficiency class		A+++	A+++
Outdoor temperature operating range (min.-max.)	°C	-15/+46	-15/+46
Heating capacity	kW	3,20	4,00
Heating range (min.-max.)	kW	0,70 - 5,80	0,80 - 6,30
Power consumption (min./nom./max.)	kW	0,15/0,60/1,55	0,17/0,80/2,00
Energy efficiency COP	W/W	5,33	5,00
Energy efficiency SCOP		5,20	5,10
Energy efficiency class		A+++	A++
Outdoor temperature operating range (min.-max.)	°C	-15/+24	-15/+24
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50
Recommended fusing	A	10	10
<b>Set price</b>	<b>€</b>	<b>2.090,-</b>	<b>2.305,-</b>

INDOOR UNIT	RAS-10PKVPG-E	RAS-13PKVPG-E	RAS-16PKVPG-E
Airflow	m³/h	690	710
Sound pressure level (low/med/high)	dB(A)	20/33/44	20/34/45
Sound pressure level (low/med/high)	dB(A)	20/33/44	20/34/45
Dimensions (HxWxD)	mm	293 x 851 x 270	293 x 851 x 270
Weight	kg	14	14
<b>Price</b>	<b>€</b>	<b>740,-</b>	<b>780,-</b>

OUTDOOR UNIT	RAS-10PAVPG-E	RAS-13PAVPG-E	RAS-16PAVPG-E
Sound pressure level (low/med/high)	dB(A)	46	48
Sound pressure level (low/med/high)	dB(A)	47	50
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)
Liquid pipe diameter	mm (inch)	6,3 (1/4)	6,3 (1/4)
Pipe length (min.)	m	2	2
Pipe length (max.)	m	25	25
Height difference (max.)	m	10	10
Compressor type		Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32
Refrigerant charge	kg	1,00	1,00
Dimensions (HxWxD)	mm	630 x 800 x 300	630 x 800 x 300
Weight	kg	43	43
<b>Price</b>	<b>€</b>	<b>1.350,-</b>	<b>1.525,-</b>

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	
<b>RB-N105S-G</b>	TOSHIBA Home AC control - wireless WiFi control / Seiya (24), Seiya NEW, Shorai Edge, Daiseikai 9		<b>115,-</b>
<b>818F0023</b>	Active carbon-catechin filter strips		<b>27,-</b>
<b>818F0036</b>	IAQ filter strips		<b>40,-</b>
<b>818F0050</b>	Ultra-pure 2.5 filter strips		<b>40,-</b>
<b>818F0072</b>	Ultra-Fresh filter strips		<b>35,-</b>
<b>TCB-IFCB5-PE</b>	External on/off PCB, window contact module		<b>67,-</b>
<b>TCB-PX100-PE</b>	Casing for outdoor installation of window contact module for high-wall units		<b>45,-</b>

All optional control options can be found on page 31.

# Console / Set



- Bi-Flow Console with variable air outlet
- A++ – with floor heating effect
- Large area Dust Filter with IAQ Filter
- prepared for optional Leak Detection

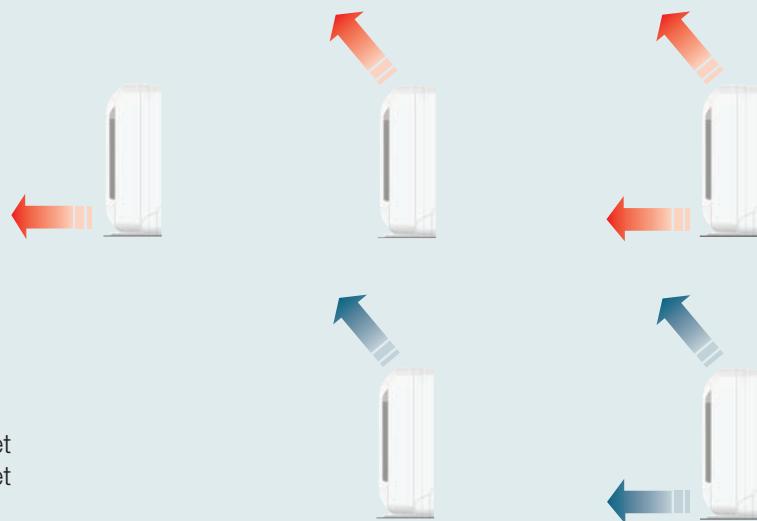


INDOOR UNIT OUTDOOR UNIT	RAS-B10J2FVG-E RAS-10J2AVSG-E1	RAS-B13J2FVG-E RAS-13J2AVSG-E1	RAS-B18J2FVG-E RAS-18J2AVSG-E
Cooling capacity	kW	2,50	3,50
Cooling range (min.-max.)	kW	0,95 - 3,20	1,05 - 4,10
Power consumption (min./nom./max.)	kW	0,21/0,59/0,90	0,27/0,87/1,20
Energy efficiency EER	W/W	4,24	4,02
Energy efficiency SEER		7,20	7,00
Energy efficiency class		A++	A++
Outdoor temperature operating range (min.-max.)	°C	-15/+46	-15/+46
Heating capacity	kW	3,20	4,20
Heating range (min.-max.)	kW	0,85 - 4,40	1,00 - 5,00
Power consumption (min./nom./max.)	kW	0,18/0,82/1,25	0,22/1,27/1,55
Energy efficiency COP	W/W	3,90	3,31
Energy efficiency SCOP		4,70	4,70
Energy efficiency class		A++	A++
Outdoor temperature operating range (min.-max.)	°C	-15/+24	-15/+24
Power supply	V/Ph+N/Hz	230/1/50	230/1/50
Recommended fusing	A	10	10
<b>Set price</b>	<b>€</b>	<b>2.020,-</b>	<b>3.140,-</b>

INDOOR UNIT	RAS-B10J2FVG-E	RAS-B13J2FVG-E	RAS-B18J2FVG-E
Airflow	m³/h	258-492	288-552
Sound pressure level (low/med/high)	dB(A)	23/-/39	24/-/40
Sound pressure level (low/med/high)	dB(A)	23/-/39	24/-/40
Dimensions (HxWxD)	mm	600 x 700 x 220	600 x 700 x 220
Weight	kg	16	16
<b>Price</b>	<b>€</b>	<b>1.125,-</b>	<b>1.230,-</b>

OUTDOOR UNIT	RAS-10J2AVSG-E1	RAS-13J2AVSG-E1	RAS-18J2AVSG-E
Sound pressure level (low/med/high)	dB(A)	-/-/44	-/-/46
Sound pressure level (low/med/high)	dB(A)	-/-/46	-/-/48
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)
Liquid pipe diameter	mm (inch)	6,3 (1/4)	6,3 (1/4)
Pipe length (min.)	m	2	2
Pipe length (max.)	m	20	20
Height difference (max.)	m	12	12
Compressor type		Rotary	Rotary
Refrigerant		R32	R32
Refrigerant charge	kg	0,55	0,80
Dimensions (HxWxD)	mm	550 x 780 x 290	550 x 780 x 290
Weight	kg	26	30
<b>Price</b>	<b>€</b>	<b>895,-</b>	<b>1.085,-</b>

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	
RB-RXS33-E	Infrared remote control including weekly timer and 8°C frost protection function		105,-
RB-N106S-G	TOSHIBA Home AC Control - WiFi control with cable / Seiya (7,10,13,16,18), Shorai Premium (10,13,16), console		120,-
818F0023	Active carbon-catechin filter strips		27,-
818F0036	IAQ filter strips		40,-
818F0050	Ultra-pure 2.5 filter strips		40,-
818F0072	Ultra-Fresh filter strips		35,-
RB-I301-E	Leak detection sensor for J2FVG-E model type consoles		255,-
TCB-IFCB5-PE	External on/off PCB, window contact module		67,-
TCB-PX100-PE	Casing for outdoor installation of window contact module for high-wall units		45,-



Various settings of the air outlet direction are possible to meet individual requirements.



# INVERTER MULTI SYSTEMS: Indoor units

## SEIYA



- BASIC Line Compact-Inverter
- Dust Filter and Ultra Fresh Filter
- WIFI Module can be integrated in the indoor unit



INDOOR UNIT	RAS-B07J2KVG-E*	RAS-B10J2KVG-E*	RAS-B13J2KVG-E*	RAS-B16J2KVG-E*
Cooling capacity	kW	2,00	2,50	3,30
Sound pressure level (low/med/high)	dB(A)	20/31/38	21/32/39	21/33/41
Heating capacity	kW	2,50	3,20	3,60
Sound pressure level (low/med/high)	dB(A)	20/31/38	21/32/39	21/34/42
Airflow	m³/h	234 - 534	240 - 552	264 - 618
Dimensions (HxWxD)	mm	293 x 798 x 230	293 x 798 x 230	293 x 798 x 230
Weight	kg	9	9	9
Price	€	<b>355,-</b>	<b>360,-</b>	<b>365,-</b>

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	

\* While stocks last.

The accessories can be found on page 31.

## SEIYA NEW



- BASIC Line Compact-Inverter
- Dust Filter and Ultra Fresh Filter
- WIFI Module can be integrated in the indoor unit



SEIYA



INDOOR UNIT	RAS-B07E2KVG-E	RAS-B10E2KVG-E	RAS-B13E2KVG-E	RAS-B16E2KVG-E
Cooling capacity	kW	2,00	2,50	3,30
Sound pressure level (low/med/high)	dB(A)	19/-/38	19/-/39	20/-/41
Heating capacity	kW	2,50	3,20	3,60
Sound pressure level (low/med/high)	dB(A)	19/-/38	20/-/39	20/-/42
Airflow	m³/h	500	510	560
Dimensions (HxWxD)	mm	288 x 770 x 225	288 x 770 x 225	288 x 770 x 225
Weight	kg	9	9	9
Price	€	<b>390,-</b>	<b>395,-</b>	<b>400,-</b>

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	

The accessories can be found on page 31.

## SHORAI Edge



- HIGH Line Allrounder with Careflow
- Dust Filter and Ultra Pure Filter
- WIFI Modul can be integrated in the indoor unit



INDOOR UNIT	RAS-B07J2KVSG-E	RAS-B10J2KVSG-E	RAS-B13J2KVSG-E	RAS-B16J2KVSG-E	RAS-B22J2KVSG-E	RAS-B24J2KVSG-E
Cooling capacity	kW	2,00	2,50	3,50	4,60	6,10
Sound pressure level (low/med/high)	dB(A)	19/22/40	19/22/40	19/23/43	21/25/44	27/34/45
Heating capacity	kW	2,50	3,20	4,20	5,50	7,00
Sound pressure level (low/med/high)	dB(A)	19/23/40	19/23/40	19/23/43	22/26/44	27/34/46
Airflow	m³/h	660	660	732	750	1032
Dimensions (HxWxD)	mm	293 x 800 x 226	320 x 1053 x 245			
Weight	kg	10	10	10	10	14
Price	€	550,-	555,-	595,-	625,-	740,-
						865,-

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	

The accessories can be found on page 31.

## SHORAI Premium



- With 3D-Airflow (18, 22)
- Dust Filter, IAQ Filter, Ozone Air Purifier



INDOOR UNIT	RAS-B22J2KVRG-E*	RAS-B24J2KVRG-E*
Cooling capacity	kW	6,10
Sound pressure level (low/med/high)	dB(A)	27/-/45
Heating capacity	kW	7,00
Sound pressure level (low/med/high)	dB(A)	27/-/46
Airflow	m³/h	606 - 984
Dimensions (HxWxD)	mm	320 x 1050 x 265
Weight	kg	15
Price	€	780,-
		915,-

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	

\* While stocks last.

The accessories can be found on page 31.

## HAORI



- Design unit with innovative textile cover
- Dust Filter, Ozone Air Purifier and Ultra Pure Filter
- WIFI Modul integrated as standard



*HAORI indoor unit  
2 kW for MULTI  
from summer 2022*



HAORI



INDOOR UNIT	RAS-B10N4KVRG-E	RAS-B13N4KVRG-E	RAS-B16N4KVRG-E
Cooling capacity	kW	2,50	3,50
Sound pressure level (low/med/high)	dB(A)	19/-/41	19/-/43
Heating capacity	kW	3,20	4,20
Sound pressure level (low/med/high)	dB(A)	19/-/41	19/-/43
Airflow	m³/h	300/610	320/670
Dimensions (HxWxD)	mm	300 x 987 x 210	300 x 987 x 210
Weight	kg	11	11
Price	€	<b>850,-</b>	<b>925,-</b>

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
RB-RXS34-E	HAORI design infrared remote control, black, with magnetic holder	✓	
RB-I4101-E	Fabric cover Dark Gray enclosed	✓	
RB-I4102-E	Fabric cover Light Gray enclosed	✓	
RB-I4103-E	Fabric cover Bluish Gray		125,-
RB-I4104-E	Fabric cover Gray Beige		125,-
RB-I4105-E	Fabric cover Dark Brown		125,-
RB-I4106-E	Fabric cover Emerald Blue		125,-

The accessories can be found on page 31.



Private Home Graz,  
Cool Company Kälte - Klima - Gastro

# DAISEIKAI 9



- Premium model with 3D-Airflow
- Dust Filter, Plasma Filter with Ionisator
- WIFI Modul can be integrated in the indoor unit



**DAISEIKAI**



INDOOR UNIT	RAS-M10PKVPG-E	RAS-M13PKVPG-E	RAS-M16PKVPG-E
Cooling capacity	kW	2,50	3,50
Sound pressure level (low/med/high)	dB(A)	20/42	20/43
Heating capacity	kW	3,20	4,00
Sound pressure level (low/med/high)	dB(A)	20/44	20/44
Airflow	m³/h	726	726
Dimensions (HxWxD)	mm	293 x 851 x 270	293 x 851 x 270
Weight	kg	14	14
Price	€	<b>740,-</b>	<b>780,-</b>
			<b>890,-</b>

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	

The accessories can be found on page 31.

# Console



- Bi-Flow console with variable air outlet
- Large surface Dust Filter and IAQ Filter
- Prepared for optional Leak Detection



INDOOR UNIT	RAS-B10J2FVG-E	RAS-B13J2FVG-E	RAS-B18J2FVG-E
Cooling capacity	kW	2,50	3,50
Sound pressure level (low/med/high)	dB(A)	26/32/39	27/33/40
Heating capacity	kW	3,20	4,20
Sound pressure level (low/med/high)	dB(A)	26/32/39	27/33/40
Airflow	m³/h	258/492	270/528
Dimensions (HxWxD)	mm	600 x 700 x 220	600 x 700 x 220
Weight	kg	16	16
Price	€	<b>1.125,-</b>	<b>1.230,-</b>
			<b>1.480,-</b>

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	

The accessories can be found on page 31.

## 60x60 Slim Cassette



- Euroraster cassette with 360° air distribution & presence sensor option
- Slim design panel with individual air movement patterns
- Large surface Dust Filter
- ➔ Required accessories: remote control + panel



INDOOR UNIT	RAS-M10U2MUVG-E	RAS-M13U2MUVG-E	RAS-M16U2MUVG-E
Cooling capacity	kW	2,70	3,70
Sound pressure level (low/med/high)	dB(A)	30/-/37	33/-/39
Heating capacity	kW	4,00	5,00
Sound pressure level (low/med/high)	dB(A)	30/-/37	32/-/39
Airflow	m³/h	590/430	620/430
Dimensions (HxWxD)	mm	256 x 575 x 575	256 x 575 x 575
Weight	kg	15	15
Panel dimensions (HxWxD)	mm	16 x 620 x 620	16 x 620 x 620
Panel weight	kg	3	3
Price	€	<b>1.120,-</b>	<b>1.180,-</b>
<b>1.220,-</b>			

ACCESSORIES	DESCRIPTION	PRICE €
<b>RBC-UM21PG(W)-E</b>	Panel for 60x60 slim cassette	<b>405,-</b>
<b>RBC-AXU31UM-E</b>	Infrared remote control + receiver kit for installation in 60x60 slim cassette (SMMSu)	<b>165,-</b>
<b>RB-RWS21-E</b>	Wired remote control with weekly timer	<b>305,-</b>

The accessories can be found on page 31.

## Duct unit



- Smallest installation height of only 210 mm
- Adjustable external static pressure up to 45 Pa
- Condensate drain pump included



INDOOR UNIT	RAS-M10U2DVG-E	RAS-M13U2DVG-E	RAS-M16U2DVG-E	RAS-M22U2DVG-E	RAS-M24U2DVG-E
Cooling capacity	kW	2,70	3,70	4,50	6,00
Sound pressure level (low/med/high)	dB(A)	27/35	27/37	24/35	32/38
Heating capacity	kW	4,00	5,00	5,50	7,00
Sound pressure level (low/med/high)	dB(A)	27/35	27/37	25/35	32/38
Airflow	m³/h	570	610	780	1000
External static pressure	Pa	10/20/35/45	10/20/35/45	10/20/35/45	10/20/35/45
Dimensions (HxWxD)	mm	210 x 700 x 450	210 x 700 x 450	210 x 900 x 450	210 x 1100 x 450
Weight	kg	16	16	19	22
Price	€	<b>1.305,-</b>	<b>1.340,-</b>	<b>1.430,-</b>	<b>1.660,-</b>
					<b>1.685,-</b>

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
<b>Remote control</b>	Infrared remote control included	✓	
<b>RB-RWS21-E</b>	Wired remote control with weekly timer		<b>305,-</b>

The accessories can be found on page 31.



# INVERTER MULTI SYSTEMS: Outdoor units



RAS-2M14U2AVG-E  
RAS-2M18U2AVG-E  
RAS-3M18U2AVG-E



RAS-3M26U2AVG-E  
RAS-4M27U2AVG-E  
RAS-5M34U2AVG-E

OUTDOOR UNIT	2-ROOM MULTISPLIT			3-ROOM MULTISPLIT		4-ROOM MULTISPLIT	5-ROOM MULTISPLIT
		RAS-2M14U2AVG-E	RAS-2M18U2AVG-E	RAS-3M18U2AVG-E	RAS-3M26U2AVG-E	RAS-4M27U2AVG-E	RAS-5M34U2AVG-E
Cooling capacity	kW	4,00	5,20	5,20	7,50	8,00	10,00
Cooling range (min.-max.)	kW	1,60 - 4,90	1,70 - 6,20	2,40 - 6,50	4,10 - 9,00	4,20 - 9,30	3,70 - 11,00
Power consumption (min./nom./max.)	kW	0,92	1,34	1,17	2,00	2,29	2,98
Energy efficiency EER	W/W	4,35	3,88	4,44	3,75	3,50	3,36
Energy efficiency SEER		6,73	6,90	6,80	6,19	6,11	6,31
Energy efficiency class		A++	A++	A++	A++	A++	A++
Outdoor temperature operating range (min.-max.)	°C	-10/+46	-10/+46	-10/+46	-10/+46	-10/+46	-10/+46
Heating capacity	kW	4,40	5,60	6,80	9,00	9,00	12,00
Outdoor temperature operating range (min.-max.)	°C	-20/+24	-20/+24	-20/+24	-15/+24	-15/+24	-15/+24
Power consumption (min./nom./max.)	kW	0,89	1,19	1,58	2,20	1,93	2,83
Energy efficiency COP	W/W	4,94	4,71	4,30	4,09	4,67	4,24
Energy efficiency SCOP		4,60	4,60	4,60	4,44	4,26	4,08
Energy efficiency class		A++	A++	A++	A++	A++	A+
Heating range (min.-max.)	kW	1,30 - 5,20	1,30 - 7,50	1,90 - 8,00	2,00 - 11,20	2,90 - 11,70	2,70 - 14,00
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	13	13	13	16	20	20
Sound pressure level (low/med/high)	dB(A)	45	47	47	48	48	52
Sound pressure level (low/med/high)	dB(A)	46	50	50	49	49	55
Pipe length (max.)	m	30	30	50	70	70	80
Pipe length/indoor unit (min.)	m	2	2	2	3	3	3
Pipe length/indoor unit (max.)	m	20	20	25	25	25	25
Height difference (max.)	m	10	10	10	15	15	15
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	1,02	1,02	1,05	1,92	1,92	2,39
Dimensions (HxWxD)	mm	630 x 800 x 300	630 x 800 x 300	630 x 800 x 300	890 x 900 x 320	890 x 900 x 320	890 x 900 x 320
Weight	kg	43	45	46	72	72	78
Price	€	1.720,-	1.805,-	2.455,-	2.810,-	3.245,-	3.750,-

# Combination table INVERTER MULTI SYSTEMS

OUTDOOR UNIT	RAS-2M14U2AVG-E	RAS-2M18U2AVG-E	RAS-3M18U2AVG-E	RAS-3M26U2AVG-E				
<b>1 unit *</b>	07 10 13	07 10 13 16	07 10 13 16	07 10 13 16 18 22 24				
<b>2 units</b>		07+07 10+07 10+10 13+07 13+10 13+13	07+07 10+07 10+10 13+07 13+10 13+13 16+07 16+10 16+13 16+16	07+07 10+07 10+10 13+07 13+10 13+13 16+07 16+10 16+13 16+16 18+07 18+10 18+13	07+07 10+07 10+10 13+07 13+10 13+13 16+07 16+10 16+13 16+16 18+07 18+10 18+13	18+16 18+18 22+07 22+10 22+13 22+16 22+18 24+07 24+10 24+13 24+16 24+18		
<b>3 units</b>				07+07+07 10+07+07 10+10+07 10+10+10 13+07+07 13+10+07 13+10+10 13+13+07 13+13+10 16+07+07 16+10+10 16+13+07	07+07+07 10+07+07 10+10+07 10+10+10 13+07+07 13+10+07 13+10+10 13+13+07 13+13+10 16+07+07 16+10+07 16+10+10	16+13+07 16+13+10 18+16+13 18+16+16 16+16+10 16+16+13 16+16+16 18+07+07 18+10+10 18+13+07 18+13+10 18+13+13	18+16+07 18+16+10 18+16+13 18+16+16 22+07+07 22+10+07 22+10+10 22+13+07 22+13+10 22+13+13 22+16+07 22+16+10 22+16+13	22+16+16 24+07+07 24+10+07 24+10+10 24+13+07 24+13+10 24+13+13 24+16+07 24+16+10 24+16+13
<b>4 units</b>								
<b>5 units</b>								

\* 1 unit for cooling only



# Quick overview outdoor units

TYPE	Pipe length (min.)	Pipe length (max.)	Pre-charged up to	Height difference (max.)	Pipe length/indoor unit (max.)	Suction gas pipe diameter	Liquid pipe diameter	Refrigerant charge	Added refrigerant charge
	m	m	m	m	m	mm (inch)	mm (inch)	kg	g/m
<b>SEIYA</b>									
RAS-07J2AVG-E*	2	15	15	12	-	9,5 (3/8)	6,3 (1/4)	0,40	20
RAS-10J2AVG-E*	2	15	15	12	-	9,5 (3/8)	6,3 (1/4)	0,43	20
RAS-13J2AVG-E*	2	15	15	12	-	9,5 (3/8)	6,3 (1/4)	0,46	20
RAS-16J2AVG-E*	2	20	15	12	-	12,7 (1/2)	6,3 (1/4)	0,62	20
RAS-18J2AVG-E*	2	20	15	12	-	12,7 (1/2)	6,3 (1/4)	0,88	20
RAS-24J2AVG-E*	2	20	15	12	-	12,7 (1/2)	6,3 (1/4)	1,08	20
<b>SEIYA NEW</b>									
RAS-07E2AVG-E	2	15	15	15	-	9,5 (3/8)	6,3 (1/4)	0,34	20
RAS-10E2AVG-E	2	15	15	15	-	9,5 (3/8)	6,3 (1/4)	0,49	20
RAS-13E2AVG-E	2	15	15	15	-	9,5 (3/8)	6,3 (1/4)	0,54	20
RAS-16E2AVG-E	2	20	15	15	-	12,7 (1/2)	6,3 (1/4)	0,68	20
RAS-18E2AVG-E	2	20	15	15	-	12,7 (1/2)	6,3 (1/4)	0,93	20
RAS-24E2AVG-E	2	20	15	15	-	12,7 (1/2)	6,3 (1/4)	1,18	20
<b>HAORI + SHORAI EDGE + CONSOLE</b>									
RAS-07J2AVSG-E	2	20	15	12	-	9,5 (3/8)	6,3 (1/4)	0,55	20
RAS-10J2AVSG-E1	2	20	15	12	-	9,5 (3/8)	6,3 (1/4)	0,55	20
RAS-13J2AVSG-E1	2	20	15	12	-	9,5 (3/8)	6,3 (1/4)	0,80	20
RAS-16J2AVSG-E1	2	20	15	12	-	12,7 (1/2)	6,3 (1/4)	0,80	20
RAS-18J2AVSG-E	2	20	15	12	-	12,7 (1/2)	6,3 (1/4)	1,10	20
RAS-22J2AVSG-E	2	20	15	12	-	12,7 (1/2)	6,3 (1/4)	1,10	20
RAS-24J2AVSG-E	2	25	15	15	-	12,7 (1/2)	6,3 (1/4)	1,14	20
<b>SHORAI PREMIUM</b>									
RAS-10J2AVRG-E*	2	20	15	12	-	9,5 (3/8)	6,3 (1/4)	0,51	20
RAS-18J2AVRG-E*	2	20	15	12	-	12,7 (1/2)	6,3 (1/4)	1,10	20
RAS-22J2AVRG-E*	2	20	15	12	-	12,7 (1/2)	6,3 (1/4)	1,10	20
RAS-24J2AVRG-E*	2	25	15	12	-	12,7 (1/2)	6,3 (1/4)	1,14	20
<b>DAISEIKAI 9</b>									
RAS-10PAVPG-E	2	25	15	12	-	9,5 (3/8)	6,3 (1/4)	1,00	20
RAS-13PAVPG-E	2	25	15	12	-	9,5 (3/8)	6,3 (1/4)	1,00	20
RAS-16PAVPG-E	2	25	15	12	-	12,7 (1/2)	6,3 (1/4)	1,00	20
<b>MULTISPLIT</b>									
RAS-2M14U2AVG-E	2	30	30	10	20	2x 9,5 (3/8)	2x 6,3 (1/4)	1,02	20
RAS-2M18U2AVG-E	2	30	30	10	20	2x 9,5 (3/8)	2x 6,3 (1/4)	1,02	20
RAS-3M18U2AVG-E	2	50	50	10	25	2x 9,5 (3/8), 1x 12,7 (1/2)	3x 6,3 (1/4)	1,05	20
RAS-3M26U2AVG-E	3	70	40	15	25	1x 9,5 (3/8), 2x 12,7 (1/2)	3x 6,3 (1/4)	1,92	20
RAS-4M27U2AVG-E	3	70	40	15	25	2x 9,5 (3/8), 2x 12,7 (1/2)	4x 6,3 (1/4)	1,92	20
RAS-5M34U2AVG-E	3	80	40	15	25	3x 9,5 (3/8), 2x 12,7 (1/2)	5x 6,3 (1/4)	2,39	20

\* While stocks last.

# Power consumption + fuse protection

TYPE	Current consumption (max.)	Current consumption (nom.)	Power consumption (min./nom./max.)	Power consumption (min./nom./max.)	Recommended fusing	Power supply	Recommended power supply line type	Communication line
	A	A	kW	kW	A	V/Ph+N/Hz		
<b>SEIYA</b>								
RAS-07J2AVG-E*	3,14	2,30	0,22/0,53/0,83	0,19/0,64/0,90	10	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAS-10J2AVG-E*	4,10	3,32	0,24/0,77/1,00	0,20/0,86/1,11	10	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAS-13J2AVG-E*	5,15	3,97	0,26/1,10/1,25	0,22/0,92/1,24	10	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAS-16J2AVG-E*	6,41	5,81	0,32/1,40/1,80	0,24/1,40/1,70	13	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAS-18J2AVG-E*	7,50	6,33	0,27/1,55/1,80	0,20/1,60/1,85	13	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAS-24J2AVG-E*	10,55	8,66	0,32/2,25/2,60	0,29/2,10/2,55	16	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
<b>SEIYA NEW</b>								
RAS-07E2AVG-E	-	-	0,20/0,53/0,83	0,16/0,64/0,94	10	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAS-10E2AVG-E	-	-	0,20/0,70/1,00	0,18/0,86/1,11	10	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAS-13E2AVG-E	-	-	0,25/1,10/1,25	0,18/0,92/1,25	10	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAS-16E2AVG-E	-	-	0,34/1,27/1,60	0,24/1,34/1,70	13	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAS-18E2AVG-E	-	-	0,34/1,50/1,80	0,26/1,50/1,80	13	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAS-24E2AVG-E	-	-	0,41/2,25/2,60	0,29/2,10/2,55	16	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
<b>HAORI + SHORAI EDGE + CONSOLE</b>								
RAS-07J2AVSG-E	2,70	1,80	0,19/0,39/0,67	0,16/0,50/0,80	10	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAS-10J2AVSG-E1	3,65	2,45	0,19/0,54/0,79	0,16/0,70/1,23	10	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAS-13J2AVSG-E1	5,35	3,89	0,25/0,90/1,12	0,20/1,08/1,55	10	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAS-16J2AVSG-E1	7,55	5,61	0,34/1,35/1,72	0,24/1,52/1,90	16	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAS-18J2AVSG-E	9,70	7,27	0,35/1,42/2,00	0,25/1,59/1,75	16	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAS-22J2AVSG-E	9,30	8,14	0,36/1,99/2,20	0,26/1,88/2,10	16	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAS-24J2AVSG-E	11,30	10,00	0,38/2,25/2,55	0,29/2,35/2,75	16	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
<b>SHORAI PREMIUM</b>								
RAS-10J2AVRG-E*	3,75	2,57	0,17/0,60/0,82	0,17/0,75/1,40	10	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAS-18J2AVRG-E*	7,75	6,15	0,23/1,42/2,00	0,16/1,60/1,75	13	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAS-22J2AVRG-E*	9,30	8,45	0,24/1,99/2,20	0,19/1,94/2,10	16	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAS-24J2AVRG-E*	10,94	9,36	0,30/2,25/2,55	0,30/2,41/2,75	16	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
<b>DAISEIKAI 9</b>								
RAS-10PAVPG-E	2,86	3,12	0,15/0,45/0,82	0,15/0,60/1,55	10	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAS-13PAVPG-E	3,73	3,39	0,18/0,75/1,00	0,17/0,80/2,00	10	220-240/1/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAS-16PAVPG-E	6,16	5,63	0,18/1,08/1,38	0,17/1,37/2,05	13	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
<b>MULTISPLIT</b>								
RAS-2M14U2AVG-E	4,55	4,35	0,92	0,89	13	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAS-2M18U2AVG-E	6,43	6,15	1,34	1,19	13	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAS-3M18U2AVG-E	7,54	7,22	1,17	1,58	13	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAS-3M26U2AVG-E	10,53	10,07	2,00	2,20	16	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAS-4M27U2AVG-E	10,94	10,46	2,29	1,93	20	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAS-5M34U2AVG-E	14,26	13,65	2,98	2,83	20	220-240/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5

\* While stocks last.

# Sound data

TYPE	Sound power level	Sound power level	Sound pressure level (low/med/high)	Sound pressure level (low/med/high)
	dB(A)	dB(A)	dB(A)	dB(A)
<b>SEIYA</b>				
RAS-07J2AVG-E*	61	63	47	49
RAS-10J2AVG-E*	63	65	48	49
RAS-13J2AVG-E*	63	65	48	49
RAS-16J2AVG-E*	64	66	49	52
RAS-18J2AVG-E*	65	67	50	52
RAS-24J2AVG-E*	70	70	55	55
<b>SEIYA NEW</b>				
RAS-07E2AVG-E	60	62	--/-/47	--/-/49
RAS-10E2AVG-E	60	62	--/-/47	--/-/49
RAS-13E2AVG-E	61	62	--/-/48	--/-/49
RAS-16E2AVG-E	63	64	--/-/50	--/-/51
RAS-18E2AVG-E	63	64	--/-/50	--/-/51
RAS-24E2AVG-E	67	67	--/-/54	--/-/54
<b>HAORI + SHORAI EDGE + CONSOLE</b>				
RAS-07J2AVSG-E	57	59	36/43/44	38/44/46
RAS-10J2AVSG-E1	57	59	37/43/44	39/45/46
RAS-13J2AVSG-E1	59	61	39/45/46	43/46/48
RAS-16J2AVSG-E1	61	63	40/47/48	43/49/50
RAS-18J2AVSG-E	61	63	42/47/48	44/49/50
RAS-22J2AVSG-E	62	64	43/48/49	46/50/51
RAS-24J2AVSG-E	63	65	43/49/50	46/52/52
<b>SHORAI PREMIUM</b>				
RAS-10J2AVRG-E*	61	62	46	47
RAS-18J2AVRG-E*	64	65	49	50
RAS-22J2AVRG-E*	68	67	53	52
RAS-24J2AVRG-E*	68	68	53	53
<b>DAISEIKAI 9</b>				
RAS-10PAVPG-E	61	62	46	47
RAS-13PAVPG-E	63	65	48	50
RAS-16PAVPG-E	64	65	49	50
<b>MULTISPLIT</b>				
RAS-2M14U2AVG-E	58	59	45	46
RAS-2M18U2AVG-E	60	63	47	50
RAS-3M18U2AVG-E	60	63	47	50
RAS-3M26U2AVG-E	63	64	48	49
RAS-4M27U2AVG-E	63	64	48	49
RAS-5M34U2AVG-E	66	68	52	55

\* While stocks last.



# Accessories RAS



works with the Google Assistant

WORKS WITH amazon alexa

## High-wall unit

ACCESSORIES	DESCRIPTION	PRICE €
818F0023	Active carbon-catechin filter strips	27,-
818F0036	IAQ filter strips	40,-
818F0050	Ultra-pure 2.5 filter strips	40,-
818F0072	Ultra-Fresh filter strips	35,-
RB-RXS33-E	Infrared remote control including weekly timer and 8°C frost protection function	105,-
RB-RXS34-E	HAORI design infrared remote control, black, with magnetic holder	120,-
RB-N105S-G	TOSHIBA Home AC control - wireless WiFi control / Seiya (24), Seiya NEW, Shorai Edge, Daiseikai 9	115,-
RB-N106S-G	TOSHIBA Home AC Control - WiFi control with cable / Seiya (7,10,13,16,18), Shorai Premium (10,13,16), console	120,-
TCB-IFCB5-PE	External on/off PCB, window contact module	67,-
TCB-PX100-PE	Casing for outdoor installation of window contact module for high-wall units	45,-

## Console

ACCESSORIES	DESCRIPTION	PRICE €
818F0023	Active carbon-catechin filter strips	27,-
818F0036	IAQ filter strips	40,-
818F0050	Ultra-pure 2.5 filter strips	40,-
RB-I301-E	Leak detection sensor for J2FVG-E model type consoles	255,-
RB-RXS33-E	Infrared remote control including weekly timer and 8°C frost protection function	105,-
RB-N106S-G	TOSHIBA Home AC Control - WiFi control with cable / Seiya (7,10,13,16,18), Shorai Premium (10,13,16), console	120,-
TCB-IFCB5-PE	External on/off PCB, window contact module	67,-
TCB-PX100-PE	Casing for outdoor installation of window contact module for high-wall units	45,-

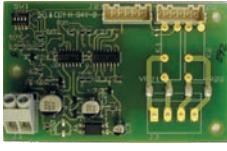
## 60x60 Slim cassette

ACCESSORIES	DESCRIPTION	PRICE €
RBC-UM21PG(W)-E	Panel for 60x60 slim cassette	405,-
RB-RWS21-E	Wired remote control with weekly timer	305,-
RBC-AXU31UM-E	Infrared remote control + receiver kit for installation in 60x60 slim cassette (SMMSu)	165,-
TCB-SIR41UM-E	Occupancy sensor kit for installation in 60x60 slim cassette	120,-
AP-IR-WIFI-1	WiFi module to control all functions of an indoor unit using an app on a cell phone	340,-
TCB-FF101URE2	Spigot flange for fresh air connection Ø 100 mm	75,-
TCB-IFCB5-PE	External on/off PCB, window contact module	67,-
TCB-PX100-PE	Casing for outdoor installation of window contact module for high-wall units	45,-

## Duct unit

ACCESSORIES	DESCRIPTION	PRICE €
RB-RWS21-E	Wired remote control with weekly timer	305,-
AP-IR-WIFI-1	WiFi module to control all functions of an indoor unit using an app on a cell phone	340,-
TCB-DUCEX10M	Extension cable for infrared receiver kit 10 m	95,-
TCB-DUC-AF1	Air filter for model sizes 10 + 13	235,-
TCB-DUC-AF2	Air filter for model size 16	265,-
TCB-DUC-AF3	Air filter for model sizes 22 + 24	285,-
TCB-IFCB5-PE	External on/off PCB, window contact module	67,-
TCB-PX100-PE	Casing for outdoor installation of window contact module for high-wall units	45,-

# RAS Control options

TYPE / DESCRIPTION	PRICE €
<b>RB-RXS33-E</b>  Infrared remote control including weekly timer and 8°C frost protection function <ul style="list-style-type: none"> <li>• for single + multi</li> <li>• Comfort functions: Weekly timer, one touch, eco mode, comfort sleep, Hi Power, power select, 8°C frost protection</li> </ul>	105,-
<b>RB-RXS34-E</b>  HAORI design infrared remote control, black, with magnetic holder	120,-
<b>RB-RWS21-E</b>  Wired remote control with weekly timer <ul style="list-style-type: none"> <li>• with large backlit display</li> <li>• for RAS cassette and duct units</li> <li>• Comfort functions: Weekly timer, quiet mode, eco mode, HI POWER</li> </ul>	305,-
<b>TCB-IFCB5-PE</b>  External on/off PCB, window contact module <ul style="list-style-type: none"> <li>• Potential-free contact for on/off and window contact input.</li> <li>• Remote ON/OFF function</li> </ul>	67,-
<b>TCB-PX100-PE</b>  Casing for outdoor installation of window contact module for high-wall units <ul style="list-style-type: none"> <li>• for high-wall units</li> </ul>	45,-
<b>RBC-Combi Control</b>  Module to control the main functions via SMS or an app (SIM card required) <ul style="list-style-type: none"> <li>• To control the main functions such as on/off, operating mode, temperature and fan speed, plus alarms in the event of a power blackout or when temperature is too high/too low</li> <li>• Compatible with all indoor units that have a standard infrared remote control</li> <li>• Free app for iOS or Android</li> </ul>	615,-
<b>AP-IR-WIFI-1</b>  WiFi module to control all functions of an indoor unit using an app on a cell phone <ul style="list-style-type: none"> <li>• Temperature and humidity alarm configurable</li> <li>• Compatible with all indoor units that have a standard infrared remote control</li> <li>• WLAN and internet access required</li> <li>• Free app for iOS or Android</li> <li>• Not a stock item - lead time on request</li> <li>• for cassette + duct unit only</li> </ul>	340,-
<b>RB-N105S-G</b>  TOSHIBA Home AC control - wireless WiFi control / Seiya (24), Seiya NEW, Shorai Edge, Daiseikai 9 <ul style="list-style-type: none"> <li>• WLAN and internet access required</li> <li>• TOSHIBA cloud, free app for iOS or Android</li> <li>• Voice Control via Google Assistant/Amazon Alexa</li> </ul>	115,-
<b>RB-N106S-G</b>  TOSHIBA Home AC Control - WiFi control with cable / Seiya (7,10,13,16,18), Shorai Premium (10,13,16), console <ul style="list-style-type: none"> <li>• WLAN and internet access required</li> <li>• TOSHIBA cloud; free app for iOS or Android</li> <li>• Voice Control via Google Assistant/Amazon Alexa</li> </ul>	120,-



Family home Podersdorf,  
Robert Müllner GmbH - Kälte Klima Installateur

## ESTIA – Air-to-water heat pump

- A++ for heating, COP up to 4,90
- Low investment, installation and operating costs
- Reliable heating down to -25°C outdoor temperature

### OUTDOOR UNITS R32, Series 5 & HI POWER

**Page 34, 38, 40**

The compressor raises the temperature of the outside air to a higher level and transfers the recovered energy to the hydrobox.



ESTIA

### HYDROBOX R32, Series 5 & HI POWER

**Page 35, 39, 41**

In the hydrobox, the heat is transferred to the heating system via a plate heat exchanger with low losses.

### ALL-IN-ONE INDOOR UNIT R32

**Page 37**

The all-in-one indoor unit integrates the hydrobox and hot water tank components in the smallest possible footprint.



### REMOTE CONTROL

**Page 37**

The control panel directly on the Hydrobox controls all functions. An external room remote control including temperature sensor is optionally available.

### DOMESTIC HOT WATER

**Page 41**

Here the hot water is stored temporarily. The insulated tank is made of stainless steel, which ensures the lowest heat loss and high durability.

### DOMESTIC HOT WATER HEAT PUMP MONO

**Page 42**

The domestic hot water heat pump MONO offers space-saving water heating & storage in a compact unit for indoor installation.

**ESTIA**

# ESTIA R32

- The new generation. Compact – efficient – quiet
- A+++ in heating mode
- Comfort remote control, optionally via WIFI, Modbus, KNX or 0 – 10 Volt



OUTDOOR UNIT		HWT-401HW-E	HWT-601HW-E	HWT-801HW-E	HWT-1101HW-E
Heating capacity @ A+7/W+35 (nom.)	kW	4,00	6,00	8,00	11,00
Power consumption @ A+7/W+35 (nom.)	kW	0,77	1,25	1,54	2,39
Energy efficiency COP @ A+7/W+35 (nom.)	W/W	5,20	4,80	5,19	4,60
Heating capacity @ A+2/W+35 (max.)	kW	6,42	6,42	10,30	11,46
Power consumption @ A+2/W+35 (max.)	kW	1,52	1,52	2,77	3,24
Energy efficiency COP @ A+2/W+35 (max.)	W/W	4,22	4,22	3,72	3,54
Heating capacity @ A-7/W+35 (max.)	W/W	4,80	6,06	8,11	9,10
Energy efficiency class		A+++	A+++	A+++	A+++
Cooling capacity @ A+35/W+7 (nom.)	kW	4,00	5,00	6,00	8,00
Power consumption @ A+35/W+7 (nom.)	kW	1,16	1,52	1,88	2,86
Energy efficiency EER @ A+35/W+7 (nom.)	W/W	3,45	3,30	3,20	2,80
Energy efficiency class		-	-	-	-
COP		-	-	-	-
Power supply	V/Ph+N/Hz	220-230/1/50	220-230/1/50	220-230/1/50	220-230/1/50
Running current (max.)	A	14,60	14,60	20,30	20,30
Starting current	A	Softstart	Softstart	Softstart	Softstart
Recommended fusing	A	16	16	25	25
Outdoor temperature operating range (min.-max.)	°C	-20 / +35	-20 / +35	-25 / +35	-25 / +35
Outdoor temperature operating range (min.-max.)	°C	+10 / +43	+10 / +43	+10 / +43	+10 / +43
Liquid pipe diameter	mm (inch)	6,3 (1/4)	6,3 (1/4)	6,3 (1/4)	6,3 (1/4)
Suction gas pipe diameter	mm (inch)	12,7 (1/2)	12,7 (1/2)	15,9 (5/8)	15,9 (5/8)
Pipe length (min.)	m	5	5	5	5
Pipe length (max.)	m	30	30	30	30
Height difference (max.)	m	30	30	30	30
Sound pressure level (low/med/high)	dB(A)	45	46	51	51
Sound pressure level (low/med/high)	dB(A)	46	45	50	49
Refrigerant		R32	R32	R32	R32
Refrigerant charge	kg	0,9	0,9	1,25	1,25
Dimensions (HxWxD)	mm	630 x 800 x 320	630 x 800 x 320	1050 x 1010 x 371	1050 x 1010 x 371
Weight	kg	42	42	75	75
Price	€	1.925,-	2.140,-	3.765,-	4.215,-



# ESTIA R32 Hydrobox

- Air-to-Water heat pump split system
- A+++ in heating mode, COP up to 5,20
- Easy when replacing an existing heater
- Leaving water temperature up to +65°C



ESTIA

INDOOR UNIT		HWT-601XWHM3W-E	HWT-601XWHT6W-E	HWT-1101XWHT6W-E	HWT-1101XWHT9W-E
Supply water temperature (min.-max.)	°C	20/55	20/55	20/65	20/65
Supply water temperature (min.-max.)	°C	7/25	7/25	7/25	7/25
Compatible outdoor units		401/601	401/601	801/1101	801/1101
Backup heater, capacity	kW	3	6	6	9
Backup heater, connection	Ph+N	220-230/1/50	380-400/3/50	380-400/3/50	380-400/3/50
Backup heater, recommend fusing	A	16	2x 16	2x 16	3x 16
Water flow rate (min.)	m³/h	0,60	0,60	0,78	0,78
Water pump, power consumption (max.)	kW	0,060	0,060	0,060	0,060
Water pump, discharge head (max.)	m	7,2	7,2	7,2	7,2
Water pump, energy efficiency class		EEI <0,20	EEI <0,20	EEI <0,20	EEI <0,20
Expansion vessel	l	8	8	8	8
Water connection (inlet/outlet)	Inch	1	1	1	1
Liquid pipe diameter	mm (inch)	6,3 (¼)	6,3 (¼)	6,3 (¼)	6,3 (¼)
Suction gas pipe diameter	mm (inch)	12,7 (½)	12,7 (½)	15,9 (5/8)	15,9 (5/8)
Sound pressure level (low/med/high)	dB(A)	28	28	28	28
Sound pressure level (low/med/high)	dB(A)	28	28	28	28
Sound power level	dB(A)	40	40	40	40
Sound power level	dB(A)	40	40	40	40
Dimensions (HxDxD)	mm	725 x 450 x 235	725 x 450 x 235	725 x 450 x 235	725 x 450 x 235
Weight	kg	27	27	27	27
Price	€	<b>3.600,-</b>	<b>3.755,-</b>	<b>4.200,-</b>	<b>4.355,-</b>





## ESTIA Warranty

The statutory warranty is 36 months. For the stable and reliable ESTIA, TOSHIBA provides a 5-year warranty on the heart of the unit – the compressor. The extended warranty of 60 months is optionally available for all other components.



### 5 YEARS COMPRESSOR WARRANTY

You automatically receive a 5-year warranty on the ESTIA compressor.



### WARRANTY EXTENSION

In addition, a warranty extension to 4 or 5 years is possible on all other components.



## ESTIA R32 AIO All-in-One

- Compact system with storage tank, perfect for new buildings
- A+++ in heating mode, COP up to 5,20
- One system for heating and domestic hot water
- Leaving water temperature up to +65°C



INDOOR UNIT		HWT-601F21SM3W-E	HWT-601F21ST6W-E	HWT-1101F21ST6W-E	HWT-1101F21ST9W-E	HWT-1101F21MT6W-E	HWT-1101F21MT9W-E
Supply water temperature (min.-max.)	°C	20/55	20/55	20/65	20/65	20/65	20/65
Supply water temperature (min.-max.)	°C	7/25	7/25	7/25	7/25	7/25	7/25
Compatible outdoor units		401/601	401/601	801/1101	801/1101	801/1101	801/1101
Backup heater, capacity	kW	3	6	6	9	6	9
Backup heater, connection	Ph+N	220-230/1/50	380-400/3/50	380-400/3/50	380-400/3/50	380-400/3/50	380-400/3/50
Backup heater, recommend fusing	A	16	2x 16	2x 16	3x 16	2x 16	3x 16
Water flow rate (min.)	m³/h	0,60	0,60	0,78	0,78	0,78	0,78
Water pump, power consumption (max.)	kW	0,060	0,060	0,060	0,060	0,060	0,060
Water pump, discharge head (max.)	m	7,2	7,2	7,2	7,2	7,2	7,2
Water pump, energy efficiency class		EEI <0,20	EEI <0,20	EEI <0,20	EEI <0,20	EEI <0,20	EEI <0,20
Expansion vessel	l	10	10	10	10	10	10
Water connection (inlet/outlet)	Inch	22	22	22	22	22	22
Liquid pipe diameter	mm (inch)	6,3 (1/4)	6,3 (1/4)	6,3 (1/4)	6,3 (1/4)	6,3 (1/4)	6,3 (1/4)
Suction gas pipe diameter	mm (inch)	12,7 (1/2)	12,7 (1/2)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Sound pressure level (low/med/high)	dB(A)	30	30	30	30	32	32
Sound pressure level (low/med/high)	dB(A)	30	30	30	30	32	32
Sound power level	dB(A)	42	42	42	42	44	44
Sound power level	dB(A)	42	42	42	42	44	44
Dimensions (HxWxD)	mm	1700 x 600 x 670	1700 x 600 x 670	1700 x 600 x 670	1700 x 600 x 670	1700 x 600 x 670	1700 x 600 x 670
Weight	kg	157	157	157	157	162	162
Price	€	<b>7.740,-</b>	<b>7.795,-</b>	<b>7.845,-</b>	<b>7.910,-</b>	<b>8.775,-</b>	<b>8.880,-</b>



## ESTIA ACCESSORIES

### ESTIA R32 / ALL IN ONE

ACCESSORIES	DESCRIPTION	PRICE €
<b>HWS-AMSU51-E</b>	External room remote control (wired)	200,-
<b>BMS-IFMBOUEW-E</b>	Modbus interface, integration in building control systems, group control for up to 8 units	615,-
<b>BMS-IFKX0AWR-E</b>	KNX® interface, integration in building control systems, group control for up to 8 units	680,-
<b>HWS-IFAIP01U-E</b>	0-10 volt interface, for external control via 0-10 volt signals	330,-
<b>HWS-IWF0010UP-E</b>	ESTIA R32 WiFi Adapter	180,-
<b>95612037</b>	Temperature sensor for locally provided hot water tank	67,-



# ESTIA Series 5

- High quality – durable – efficient
- A++ in heating mode, COP up to 4,90
- Comfort control, optionally via Modbus or KNX



## 1-phase

OUTDOOR UNIT		HWS-455H-E*	HWS-1405H-E
Heating capacity @ A+7/W+35 (nom.)	kW	4,50	14,00
Power consumption @ A+7/W+35 (nom.)	kW	0,92	3,11
Energy efficiency COP @ A+7/W+35 (nom.)	W/W	4,90	4,50
Heating capacity @ A+2/W+35 (max.)	kW	4,97	10,65
Power consumption @ A+2/W+35 (max.)	kW	1,56	3,20
Energy efficiency COP @ A+2/W+35 (max.)	W/W	3,18	3,33
Heating capacity @ A-7/W+35 (max.)	W/W	4,48	10,79
Energy efficiency class		A++	A++
Cooling capacity @ A+35/W+7 (nom.)	kW	4,50	11,00
Power consumption @ A+35/W+7 (nom.)	kW	1,46	3,81
Energy efficiency EER @ A+35/W+7 (nom.)	W/W	4,90	2,89
Energy efficiency class		A++	A++
COP		4,27	4,03
Power supply	V/Ph+N/Hz	220-230/1/50	220-230/1/50
Running current (max.)	A	11,10	22,80
Starting current	A	Softstart	Softstart
Recommended fusing	A	16	25
Outdoor temperature operating range (min.-max.)	°C	-20 / +43	-20 / +43
Outdoor temperature operating range (min.-max.)	°C	+15 / +43	+15 / +43
Liquid pipe diameter	mm (inch)	6,3 (1/4)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	12,7 (1/2)	15,9 (5/8)
Pipe length (min.)	m	5	5
Pipe length (max.)	m	15	30
Height difference (max.)	m	10	30
Sound pressure level (low/med/high)	dB(A)	48	52
Sound pressure level (low/med/high)	dB(A)	48	52
Refrigerant		R410A	R410A
Refrigerant charge	kg	1,15	2,7
Dimensions (HxWxD)	mm	630 x 800 x 300	1340 x 900 x 320
Weight	kg	42	92
<b>Price</b>	<b>€</b>	<b>1.220,-</b>	<b>4.780,-</b>

Values measured according to EN14511 incl. defrosting

\* While stocks last.



## 3-phase

OUTDOOR UNIT		HWS-1105H8-E	HWS-1405H8-E	HWS-1605H8-E
Heating capacity @ A+7/W+35 (nom.)	kW	11,20	14,00	16,00
Power consumption @ A+7/W+35 (nom.)	kW	2,34	3,16	3,72
Energy efficiency COP @ A+7/W+35 (nom.)	W/W	4,80	4,44	4,30
Heating capacity @ A+2/W+35 (max.)	kW	10,46	11,01	11,61
Power consumption @ A+2/W+35 (max.)	kW	2,90	3,21	3,46
Energy efficiency COP @ A+2/W+35 (max.)	W/W	3,61	3,44	3,36
Heating capacity @ A-7/W+35 (max.)	W/W	9,50	10,64	11,25
Energy efficiency class		A++	A++	A++
Cooling capacity @ A+35/W+7 (nom.)	kW	10,00	11,00	13,00
Power consumption @ A+35/W+7 (nom.)	kW	3,26	3,81	4,80
Energy efficiency EER @ A+35/W+7 (nom.)	W/W	3,07	2,89	2,71
Energy efficiency class		A++	A++	A++
COP		4,42	4,23	4,10
Power supply	V/Ph+N/Hz	380-400/3/50	380-400/3/50	380-400/3/50
Running current (max.)	A	14,60	14,60	14,60
Starting current	A	Softstart	Softstart	Softstart
Recommended fusing	A	3 x 16	3 x 16	3 x 16
Outdoor temperature operating range (min.-max.)	°C	-20 / +43	-20 / +43	-20 / +43
Outdoor temperature operating range (min.-max.)	°C	+15 / +43	+15 / +43	+15 / +43
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Pipe length (min.)	m	5	5	5
Pipe length (max.)	m	30	30	30
Height difference (max.)	m	30	30	30
Sound pressure level (low/med/high)	dB(A)	51	52	53
Sound pressure level (low/med/high)	dB(A)	51	52	53
Refrigerant		R410A	R410A	R410A
Refrigerant charge	kg	2,7	2,7	2,7
Dimensions (HxWxD)	mm	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Weight	kg	93	93	93
<b>Price</b>	<b>€</b>	<b>4.540,-</b>	<b>4.980,-</b>	<b>5.485,-</b>

Values measured according to EN14511 incl. defrosting

INDOOR UNIT		HWS-455XWHM3-E*	HWS-1405XWHT6-E	HWS-1405XWHT9-E
Supply water temperature (min.-max.)	°C	20/55	20/55	20/55
Supply water temperature (min.-max.)	°C	7/25	7/25	7/25
Compatible outdoor units		455	1105/1405/1605	1105/1405/1605
Backup heater, capacity	kW	3	6	9
Backup heater, connection	Ph+N	220-230/1/50	380-400/3/50	380-400/3/50
Backup heater, recommend fusing	A	16	2x 16	3x 16
Water flow rate (min.)	m³/h	0,78	1,05	1,05
Water pump, power consumption (max.)	kW	0,125	0,190	0,190
Water pump, discharge head (max.)	m	6,3	8,8	8,8
Water pump, energy efficiency class		A	A	A
Expansion vessel	l	12	12	12
Water connection (inlet/outlet)	Inch	1 1/4	1 1/4	1 1/4
Liquid pipe diameter	mm (inch)	6,3 (1/4)	9,5 (3/8)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	12,7 (1/2)	15,9 (5/8)	15,9 (5/8)
Sound pressure level (low/med/high)	dB(A)	29	32	32
Sound pressure level (low/med/high)	dB(A)	29	32	32
Sound power level	dB(A)	41	43	43
Sound power level	dB(A)	41	43	43
Dimensions (HxWxD)	mm	925 x 525 x 355	925 x 525 x 355	925 x 525 x 355
Weight	kg	47	52	52
<b>Price</b>	<b>€</b>	<b>3.130,-</b>	<b>5.615,-</b>	<b>5.735,-</b>

Values measured according to EN14511 incl. defrosting

\* While stocks last.

# ESTIA HI POWER Series 5

- The renovation classic – flow temperature up to +60°C.
- A<sup>++</sup> in heating mode, COP up to 4,88
- Comfort control, optionally via Modbus or KNX



OUTDOOR UNIT		HWS-P805H8R-E	HWS-P1105H8R-E	HWS-P1405H8R-E
Heating capacity @ A+7/W+35 (nom.)	kW	8,00	11,20	14,00
Power consumption @ A+7/W+35 (nom.)	kW	1,71	2,34	3,15
Energy efficiency COP @ A+7/W+35 (nom.)	W/W	4,68	4,80	4,44
Heating capacity @ A+2/W+35 (max.)	kW	12,13	12,88	14,60
Power consumption @ A+2/W+35 (max.)	kW	3,44	4,08	4,85
Energy efficiency COP @ A+2/W+35 (max.)	W/W	3,53	3,16	3,01
Heating capacity @ A-7/W+35 (max.)	W/W	10,82	11,63	13,44
Energy efficiency class		A++	A+++	A++
Cooling capacity @ A+35/W+7 (nom.)	kW	6,00	10,00	11,00
Power consumption @ A+35/W+7 (nom.)	kW	1,64	3,33	3,90
Energy efficiency EER @ A+35/W+7 (nom.)	W/W	3,66	3,00	2,82
Energy efficiency class		A++	A++	A++
COP		0,00	0,00	0,00
Power supply	V/Ph+N/Hz	380-400/3+N/50	380-400/3+N/50	380-400/3+N/50
Running current (max.)	A	14,60	14,60	14,60
Starting current	A	Softstart	Softstart	Softstart
Recommended fusing	A	3 x 16	3 x 16	3 x 16
Outdoor temperature operating range (min.-max.)	°C	-25 / +43	-25 / +43	-25 / +43
Outdoor temperature operating range (min.-max.)	°C	+15 / +43	+15 / +43	+15 / +43
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Pipe length (min.)	m	5	5	5
Pipe length (max.)	m	30	30	30
Height difference (max.)	m	30	30	30
Sound pressure level (low/med/high)	dB(A)	52	52	53
Sound pressure level (low/med/high)	dB(A)	52	52	53
Refrigerant		R410A	R410A	R410A
Refrigerant charge	kg	2,7	2,7	2,7
Dimensions (HxWxD)	mm	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Weight	kg	94	94	93
Price	€	<b>5.555,-</b>	<b>5.795,-</b>	<b>6.090,-</b>

Values measured according to EN14511 incl. defrosting



INDOOR UNIT		HWS-P805XWHM3-E*	HWS-P805XWHT6-E	HWS-P805XWHT9-E	HWS-P1105XWHT6-E	HWS-P1105XWHT9-E
Supply water temperature (min.-max.)	°C	20/60	20/60	20/60	20/60	20/60
Supply water temperature (min.-max.)	°C	7/25	7/25	7/25	7/25	7/25
Compatible outdoor units		P805	P805	P805	P1105/P1405	P1105/P1405
Backup heater, capacity	kW	3	6	9	6	9
Backup heater, connection	Ph+N	220-230/1/50	380-400/3/50	380-400/3/50	380-400/3/50	380-400/3/50
Backup heater, recommend fusing	A	16	2x 16	3x 16	2x 16	3x 16
Water flow rate (min.)	m³/h	0,78	0,78	0,78	1,05	1,05
Water pump, power consumption (max.)	kW	0,125	0,125	0,125	0,190	0,190
Water pump, discharge head (max.)	m	6,3	6,3	6,3	8,8	8,8
Water pump, energy efficiency class		A	A	A	A	A
Expansion vessel	l	12	12	12	12	12
Water connection (inlet/outlet)	inch	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Sound pressure level (low/med/high)	dB(A)	29	29	29	32	32
Sound pressure level (low/med/high)	dB(A)	29	29	29	32	32
Sound power level	dB(A)	41	41	41	43	43
Sound power level	dB(A)	41	41	41	43	43
Dimensions (HxWxD)	mm	925 x 525 x 355	925 x 525 x 355	925 x 525 x 355	925 x 525 x 355	925 x 525 x 355
Weight	kg	49	49	49	52	52
Price	€	<b>3.980,-</b>	<b>4.050,-</b>	<b>4.175,-</b>	<b>5.615,-</b>	<b>5.735,-</b>

\* While stocks last.

## ESTIA ACCESSORIES



### ESTIA SPLIT Series 5

ACCESSORIES	DESCRIPTION	PRICE €
<b>HWS-AMS54E</b>	External room remote control (wired)	225,-
<b>TCB-PCIN3E</b>	Enable signal for external heat generator and error signal output or compressor operating and defrosting signal outputs	180,-
<b>TCB-PCM03E</b>	Input for external room thermostat or input for emergency stop or external on/off	140,-
<b>95612037</b>	Temperature sensor for locally provided hot water tank	67,-
<b>VK320MOAIRC001</b>	Replacement flow switch, for sizes 8, 11, 14	85,-
<b>VK320MOAIRC002</b>	Replacement flow switch, for size 4	125,-
<b>BMS-IFKX0AWR-E</b>	KNX® interface, integration in building control systems, group control for up to 8 units	680,-
<b>BMS-IFMBQUEW-E</b>	Modbus interface, integration in building control systems, group control for up to 8 units	615,-

## ESTIA Domestic hot water tank



- Durable made of stainless steel

INDOOR UNIT		HWS-1501CSHM3-E	HWS-2101CSHM3-E	HWS-3001CSHM3-E
Tank volume	l	150	210	300
Water temperature (max.)	°C	75	75	75
Backup heater, capacity	W	2,75	2,75	2,75
Power supply	V/Ph+N/Hz	220-230/1/50	220-230/1/50	220-230/1/50
Dimensions (HxØ)	mm	1090 x 550	1474 x 550	2040 x 550
Weight (dry/wet)	kg	31 / 181	41 / 251	60 / 360
Price	€	<b>1.455,-</b>	<b>1.720,-</b>	<b>2.025,-</b>

# ESTIA Domestic hot water heat pump MONO

- Whisper-quiet premium compact unit for indoor use
- "Best In Class" COP 3,57 with wide operating range (-7°C to +40°C)
- Comfort control on the unit or via Modbus
- Not in stock – delivery time on request



ESTIA

INDOOR UNIT		HWS-G1901CNMR-E	HWS-G2601CNMR-E
Energy efficiency class		A+	A+
Energy efficiency COP @ A+7/W+10 to +52,9 (EN16147)	W/W	3,57	3,69
Air temperature operating range (min.-max.)	°C	-7/+40	-7/+40
Heating-up time @ A+7/W+10 to +53,5 (EN16147)	hh:mm	06:27	09:12
Tank volume	l	190	260
Water temperature, with backup heater (max.)	°C	65	65
Water temperature, heat pump mode only (max.)	°C	60	60
Corrosion protection		Magnesium Anode	Magnesium Anode
Sound power level, with air connections (ISO12102)	dB(A)	49,0	49,0
Sound pressure level, with air connections @ 2 m	dB(A)	32,0	32,0
Sound power level, without air connections (ISO12102)	dB(A)	55,6	55,6
Sound pressure level, without air connections @ 2 m	dB(A)	38,6	38,6
Airflow (min./nom./max.)	m³/h	0/450/800	0/450/800
External static pressure (max.)	Pa	200	200
Air connections diameter	mm	160	160
Room volume, without air connections (min.)	m³	60	60
Power consumption (max.)	W	2185	2185
Backup heater, capacity	W	1500	1500
Water connection (inlet/outlet)	Inch	3/4 - 3/4	3/4 - 3/4
Condensate pipe diameter	mm	19	19
Power supply	V/Ph+N/Hz	230/1/50	230/1/50
Recommended fusing	A	13	13
Required height for installation (min.)	mm	1868	2223
Refrigerant		R134A	R134A
Refrigerant charge	kg	1,20	1,28
CO2 equivalent	t	1,72	1,83
Dimensions (HxØ)	mm	1600 x 620	1960 x 620
Weight (dry/wet)	kg	94 / 284	100 / 350
Price	€	3.780,-	3.920,-

OUTDOOR UNIT	HWS-G1901CNRR-E	HWS-G2601CNRR-E	HWS-G1901CNXR-E	HWS-G2601CNXR-E	HWS-G1901ENXR-E	HWS-G2601ENXR-E
Tank volume	l	190	260	190	260	190
Price	€	3.985,-	4.110,-	4.120,-	4.320,-	4.540,-
	Alternative position of the Water inlet connection: 180° inlet / outlet (45° inlet / outlet for standard version)	Deluxe PCB option allows the connection of: ■ Photovoltaic ■ Smart Grid Ready ■ Auxiliary water pump ■ external ventilation flap	All connection options of the Deluxe PCB option: ■ Photovoltaic ■ Smart Grid Ready ■ Auxiliary water pump external ventilation flap + additional: ■ second heat exchanger for connection of a thermal solar system			

## Power consumption + fuse protection

TYPE	Running current (max.)	Recommended fusing	Power supply	Recommended power supply line type	Communication line
	A	A	V/Ph+N/Hz		
<b>ESTIA R32</b>					
HWT-401HW-E	14,60	16	220-230/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
HWT-601HW-E	14,60	16	220-230/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
HWT-801HW-E	20,30	25	220-230/1/50	H07RN-F 3G4,0	H07RN-F 4G1,5
HWT-1101HW-E	20,30	25	220-230/1/50	H07RN-F 3G4,0	H07RN-F 4G1,5
<b>ESTIA Series 5</b>					
HWS-455H-E*	11,10	16	220-230/1/50	H07RN-F 3G2,5	H07RN-F 4G1,5
HWS-1405H-E	22,80	25	220-230/1/50	H07RN-F 3G4,0	H07RN-F 4G1,5
HWS-1105H8-E	14,60	3 x 16	380-400/3/50	H07RN-F 5G2,5	H07RN-F 4G1,5
HWS-1405H8-E	14,60	3 x 16	380-400/3/50	H07RN-F 5G2,5	H07RN-F 4G1,5
HWS-1605H8-E	14,60	3 x 16	380-400/3/50	H07RN-F 5G2,5	H07RN-F 4G1,5
<b>HI POWER</b>					
HWS-P805H8R-E	14,60	3 x 16	380-400/3+N/50	H07RN-F 3G4,0	H07RN-F 4G1,5
HWS-P1105H8R-E	14,60	3 x 16	380-400/3+N/50	H07RN-F 3G4,0	H07RN-F 4G1,5
HWS-P1405H8R-E	14,60	3 x 16	380-400/3+N/50	H07RN-F 3G4,0	H07RN-F 4G1,5

TYPE	Running current (max.)	Recommended fusing	Power supply	Recommended power supply line type	Communication line
	A	A	V/Ph+N/Hz		
<b>DHW MONO</b>					
HWS-G1901CNMR-E	-	13	230/1/50	H07RN-F 3G2,5	-
HWS-G2601CNMR-E	-	13	230/1/50	H07RN-F 3G2,5	-



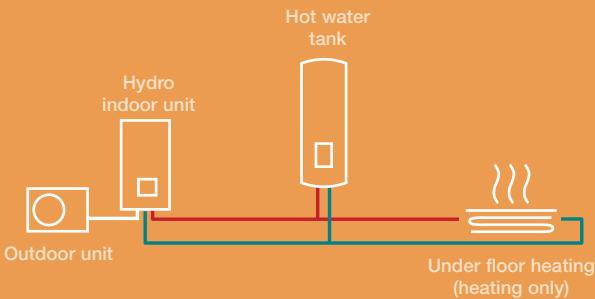
# Sound data

TYPE	Sound power level (max.) dB(A)	Sound pressure level (low/med/high) dB(A) *		Sound pressure level (night operation) dB(A)
		dB(A) *	dB(A) *	
<b>ESTIA R32</b>				
HWT-401HW-E	65	45	46	40
HWT-601HW-E	65	46	45	42
HWT-801HW-E	65	51	50	46
HWT-1101HW-E	65	51	49	49
<b>ESTIA Series 5</b>				
HWS-455H-E*	65	48	48	47
HWS-1405H-E	68	52	52	46
HWS-1105H8-E	66	51	51	46
HWS-1405H8-E	68	52	52	46
HWS-1605H8-E	69	53	53	46
<b>HI POWER</b>				
HWS-P805H8R-E	66	52	52	46
HWS-P1105H8R-E	67	52	52	46
HWS-P1405H8R-E	68	53	53	46

TYPE	Sound power level, with air connections (ISO12102)	Sound power level, without air connections (ISO12102)	Sound pressure level, with air connections @ 2 m	Sound pressure level, without air connections @ 2 m
	dB(A)	dB(A)	dB(A)	dB(A)
<b>DHW MONO</b>				
HWS-G1901CNMR-E	49,0	55,6	32,0	38,6
HWS-G2601CNMR-E	49,0	55,6	32,0	38,6

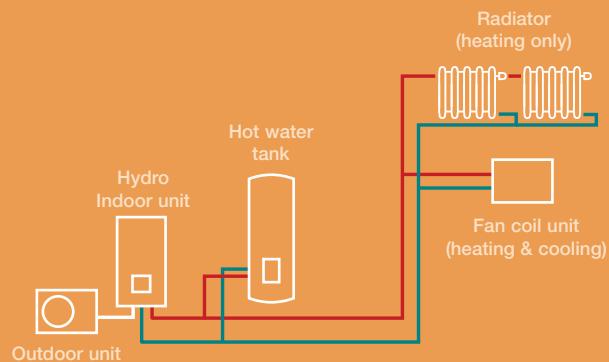
## 1 ZONE WITH HEATING FUNCTION

1 zone with heating function and hot water preparation.



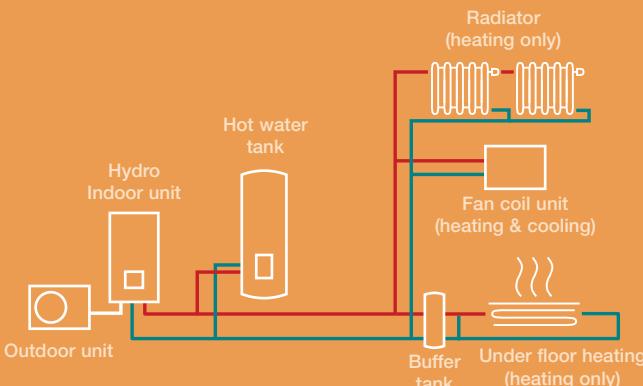
## 1 ZONE WITH HEATING AND COOLING FUNCTION

1 Zone with heating and cooling function and hot water preparation.



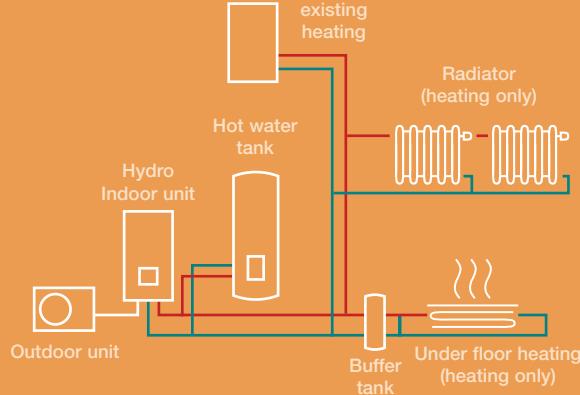
## 2 ZONES WITH HEATING FUNCTION

Application example for a new house.



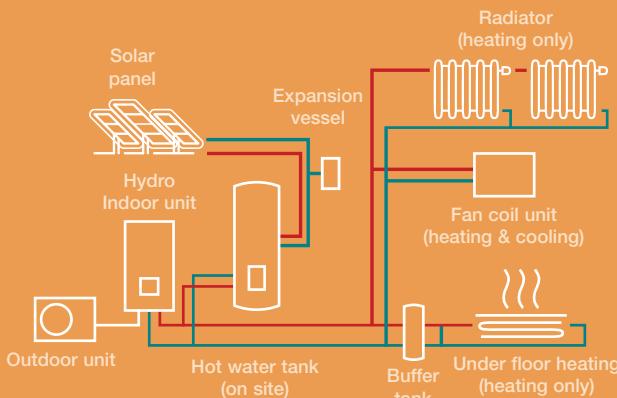
## 2 ZONES WITH EXISTING HEATING

Application example for a house with an existing heating.



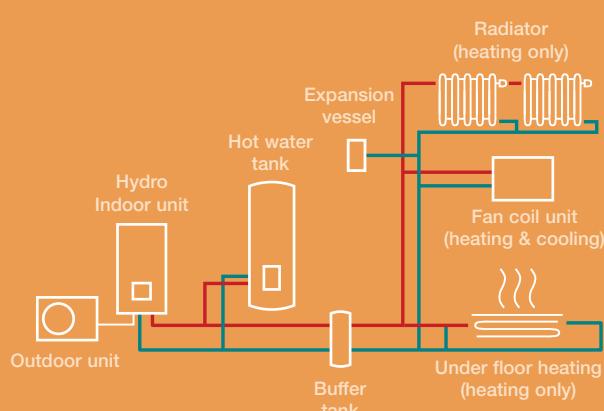
## 2 ZONES WITH SOLAR AND COOLING FUNCTION

Application example for a new house.



## 2 ZONES WITH BUFFER TANK AND COOLING FUNCTION

Application example for a new house.





MRCT Diagnostic center Dr. Andreas Oberhauser GmbH Innsbruck,  
EDMUND SPARER Klima & Kältetechnik GmbH

# RAV SYSTEMS: One room solution

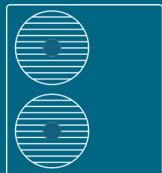
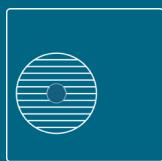
- Reliable & durable partner for all commercial areas
- Efficiency up to A+++ in 24/7 use
- Control locally, centrally or via BMS



## DIGITAL INVERTER (DI)

Cooling: 2,5 | 3,6 | 5,0 | 6,7 | 8,0 | 10,0 | 12,0 | 14,0

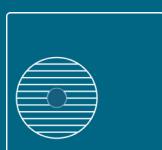
**Page 82**



## SUPER DIGITAL INVERTER (SDI)

Cooling: 5,3 | 7,1 | 10,0 | 12,5 | 14,0

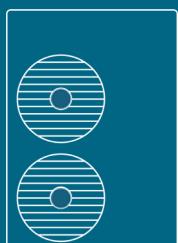
**Page 84**



## DIGITAL INVERTER CLASSIC (DI-C)

Cooling: 5,0 | 6,7 | 10,0 | 12,0 | 14,0

**Page 85**



## DIGITAL INVERTER BIG (DI BIG)

Cooling: 19,4 | 22,5

**Page 86**



# RAV INDOOR UNITS: Overview

## WALL UNITS

### WALL UNIT

Cooling: 2,5 | 3,6 | 5,0 | 6,7 | 8,0

DI, SDI, DI-C, DI BIG

Page 50, 53



### WALL UNIT 10 kW

Cooling: 9,5 | 10,0

DI, SDI, DI-C

Page 52, 53

## CEILING UNITS

### CEILING UNIT

Cooling: 3,6 | 5,0 | 6,9 | 8,0 | 9,5 | 12,1 | 14,0

DI, SDI, DI BIG

Page 54, 55, 56, 57



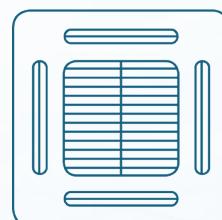
## CASSETTE UNITS

### 60x60 SLIM CASSETTE

Cooling: 2,5 | 3,6 | 5,0

DI, SDI, DI BIG

Page 58



### SMART CASSETTE

Cooling: 5,0 | 7,1 | 10,0 | 12,5

SDI

Page 59

### 4-WAY STANDARD CASSETTE

Cooling: 5,0 | 6,7 | 8,0 | 9,5 | 12,0 | 14,0

DI, SDI, DI-C, DI BIG

Page 60, 61, 62, 63, 64

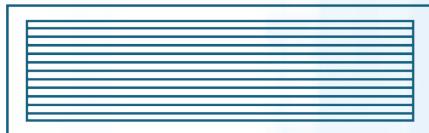
## DUCT UNIT

### FLAT DUCT UNIT

Cooling: 2,5 | 3,6 | 5,0

DI, SDI, DI BIG

Page 65



### STANDARD DUCT UNIT

Cooling: 5,0 | 6,7 | 8,0 | 9,5 | 12,1 | 14,0

DI, SDI, DI-C, DI BIG

Page 66, 67, 68, 69, 70, 71

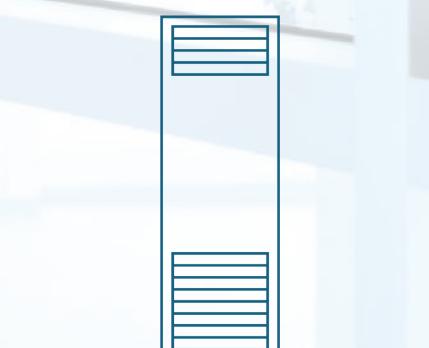


### HIGH PRESSURE DUCT UNIT

Cooling: 19,0 | 22,5

DI BIG

Page 72



## FLOOR STANDING

### FLOOR STANDING

Cooling: 5,0 | 6,7 | 9,5 | 12,1 | 14,0

DI, SDI

Page 73, 74, 75



## SPECIAL SOLUTIONS

### DX-KITS

Cooling: 2,5 – 23,0

DI, SDI, DI BIG

Page 76, 77, 78



### AIR CURTAINS

Heating: 8,0 – 16,0

DI, SDI

Page 81

# High wall unit

- Compact all-rounder for all applications
- Efficiency up to A<sup>++</sup>, COP up to 4,00
- Whisper-quiet 5-speed fan



## Digital Inverter – High wall unit

INDOOR UNIT OUTDOOR UNIT	RAV-RM301KRTP-E* RAV-GM301ATP-E	RAV-RM401KRTP-E* RAV-GM401ATP-E	RAV-RM561KRTP-E* RAV-GM561ATP-E	RAV-RM801KRTP-E* RAV-GM801ATP-E	RAV-GM901KRTP-E* RAV-GM901ATP-E
Cooling capacity	kW	2,50	3,60	5,00	6,70
Cooling range (min.-max.)	kW	0,90 - 3,00	0,90 - 4,00	1,50 - 5,60	1,50 - 8,00
Power consumption (min./nom./max.)	kW	0,25/0,61/0,82	-/1,13/-	-/1,66/-	-/2,44/-
Energy efficiency EER	W/W	4,10	3,19	3,01	2,75
Energy efficiency SEER		6,36	6,12	6,19	5,73
Energy efficiency class		A++	A++	A++	A+
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	3,40	4,00	5,30	7,70
Heating range (min.-max.)	kW	0,80 - 4,50	0,80 - 5,00	1,50 - 6,30	1,50 - 9,00
Power consumption (min./nom./max.)	kW	0,17/0,85/1,40	-/1,12/-	-/1,55/-	-/2,61/-
Energy efficiency COP	W/W	4,00	3,57	3,42	2,95
Energy efficiency SCOP		4,10	4,22	4,00	4,01
Energy efficiency class		A+	A+	A+	A+
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-15 / +15	-15 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	10	10	16	16
<b>Set price</b>	<b>€</b>	<b>1.730,-</b>	<b>2.030,-</b>	<b>2.280,-</b>	<b>2.755,-</b>
<b>RAV-GM901KRTP-E*</b>					<b>3.040,-</b>
INDOOR UNIT	RAV-RM301KRTP-E*	RAV-RM401KRTP-E*	RAV-RM561KRTP-E*	RAV-RM801KRTP-E*	RAV-GM901KRTP-E*
Airflow	m <sup>3</sup> /h	450/540/670	45/580/700	680/830/960	680/910/1040
Sound pressure level (low/med/high)	dB(A)	29/34/40	30/36/41	36/39/42	35/41/45
Sound pressure level (low/med/high)	dB(A)	29/34/40	30/36/41	36/39/42	35/41/45
Dimensions (HxWxD)	mm	293 x 798 x 230	293 x 798 x 230	320 x 1050 x 250	320 x 1050 x 250
Weight	kg	10	10	14	14
<b>Price</b>	<b>€</b>	<b>585,-</b>	<b>625,-</b>	<b>685,-</b>	<b>710,-</b>
<b>RAV-GM901KRTP-E*</b>					<b>785,-</b>
OUTDOOR UNIT	RAV-GM301ATP-E	RAV-GM401ATP-E	RAV-GM561ATP-E	RAV-GM801ATP-E	RAV-GM901ATP-E
Sound pressure level (low/med/high)	dB(A)	46	49	46	48
Sound pressure level (low/med/high)	dB(A)	47	50	48	52
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	12,7 (1/2)	12,7 (1/2)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	6,4 (1/4)	6,4 (1/4)	6,4 (1/4)	9,5 (3/8)
Pipe length (min.)	m	2	2	5	5
Pipe length (max.)	m	20	20	30	50
Height difference (max.)	m	10	10	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32	R32
Refrigerant charge	kg	0,6	0,9	0,9	1,3
Dimensions (HxWxD)	mm	550 x 780 x 290	550 x 780 x 290	550 x 780 x 290	600 x 800 x 300
Weight	kg	29	34	40	44
<b>Price</b>	<b>€</b>	<b>1.145,-</b>	<b>1.405,-</b>	<b>1.595,-</b>	<b>2.045,-</b>
<b>RAV-GM901ATP-E*</b>					<b>2.255,-</b>

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

## Super Digital Inverter – High wall unit

INDOOR UNIT OUTDOOR UNIT		RAV-RM561KRTP-E* RAV-GP561ATW-E	RAV-RM801KRTP-E* RAV-GP801ATW-E
Cooling capacity	kW	5,00	7,10
Cooling range (min.-max.)	kW	1,20 - 5,60	1,90 - 8,00
Power consumption (min./nom./max.)	kW	0,19/1,43/1,98	0,26/2,06/3,17
Energy efficiency EER	W/W	3,50	3,45
Energy efficiency SEER		7,59	7,34
Energy efficiency class		A++	A+
Outdoor temperature operating range (min.-max.)	°C	-15 / +52	-15 / +52
Heating capacity	kW	5,60	8,00
Heating range (min.-max.)	kW	0,90 - 7,30	1,30 - 11,30
Power consumption (min./nom./max.)	kW	0,16/1,39/2,67	0,20/2,25/3,50
Energy efficiency COP	W/W	4,03	3,56
Energy efficiency SCOP		4,17	4,13
Energy efficiency class		A+	A+
Outdoor temperature operating range (min.-max.)	°C	-27 / +15	-27 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50
Recommended fusing	A	16	20
<b>Set price</b>	<b>€</b>	<b>2.710,-</b>	<b>3.325,-</b>
INDOOR UNIT		RAV-RM561KRTP-E*	RAV-RM801KRTP-E*
Airflow	m³/h	678/828/960	-
Sound pressure level (low/med/high)	dB(A)	35/39/42	35/41/45
Sound pressure level (low/med/high)	dB(A)	35/39/42	35/41/45
Dimensions (HxWxD)	mm	293 x 798 x 230	-
Weight	kg	14	-
<b>Price</b>	<b>€</b>	<b>685,-</b>	<b>710,-</b>
OUTDOOR UNIT		RAV-GP561ATW-E	RAV-GP801ATW-E
Sound pressure level (low/med/high)	dB(A)	46	46
Sound pressure level (low/med/high)	dB(A)	48	48
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)
Pipe length (min.)	m	3	3
Pipe length (max.)	m	50	50
Height difference (max.)	m	30	30
Compressor type		Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32
Refrigerant charge	kg	1,35	1,3
Dimensions (HxWxD)	mm	630 x 799 x 299	1050 x 1010 x 370
Weight	kg	45	74
<b>Price</b>	<b>€</b>	<b>2.025,-</b>	<b>2.615,-</b>

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

# High wall unit 10 kW

- Highest performance with simplest installation
- Efficiency up to A<sup>++</sup>, COP up to 4,00
- Whisper-quiet 5-speed fan



INDOOR UNIT OUTDOOR UNIT	RAV-GM1101K RTP-E* RAV-GM1101ATP-E	RAV-GM1101K RTP-E* RAV-GM1101AT8P-E	RAV-GM1101K RTP-E* RAV-GP1101AT-E	RAV-GM1101K RTP-E* RAV-GP1101AT8-E
Cooling capacity	kW	9,50	9,50	10,00
Cooling range (min.-max.)	kW	3,00 - 11,20	3,00 - 11,20	3,10 - 12,00
Power consumption (min./nom./max.)	kW	2,97	2,97	2,77
Energy efficiency EER	W/W	3,20	3,20	3,61
Energy efficiency SEER		6,10	6,10	7,20
Energy efficiency class		A++	A++	A++
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +52
Heating capacity	kW	11,20	11,20	11,20
Heating range (min.-max.)	kW	3,00 - 13,00	3,00 - 13,00	2,60 - 13,00
Power consumption (min./nom./max.)	kW	3,47	3,47	3,13
Energy efficiency COP	W/W	3,23	3,23	3,58
Energy efficiency SCOP		4,20	4,20	4,41
Energy efficiency class		A+	A+	A+
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-27 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	380-415/3+N/50	220-240/1/50
Recommended fusing	A	25	3x 16	25
<b>Set price</b>	<b>€</b>	<b>3.575,-</b>	<b>3.815,-</b>	<b>4.785,-</b>
<b>4.700,-</b>				

INDOOR UNIT	RAV-GM1101K RTP-E*	RAV-GM1101K RTP-E*	RAV-GM1101K RTP-E*	RAV-GM1101K RTP-E*
Airflow	m <sup>3</sup> /h	1180/1350/1610	1180/1350/1610	1180/1350/1610
Sound pressure level (low/med/high)	dB(A)	41/45/49	41/45/49	41/45/49
Sound pressure level (low/med/high)	dB(A)	41/45/49	41/45/49	41/45/49
Dimensions (HxWxD)	mm	348 x 1200 x 280	348 x 1200 x 280	348 x 1200 x 280
Weight	kg	19	19	19
<b>Price</b>	<b>€</b>	<b>890,-</b>	<b>890,-</b>	<b>890,-</b>

OUTDOOR UNIT	RAV-GM1101ATP-E	RAV-GM1101AT8P-E	RAV-GP1101AT-E	RAV-GP1101AT8-E
Sound pressure level (low/med/high)	dB(A)	54	54	49
Sound pressure level (low/med/high)	dB(A)	57	57	50
Suction gas pipe diameter	mm (inch)	15,9 (3/8)	15,9 (3/8)	15,9 (3/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5
Pipe length (max.)	m	50	50	75
Height difference (max.)	m	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32
Refrigerant charge	kg	2,1	2,1	3,10
Dimensions (HxWxD)	mm	890 x 900 x 320	890 x 900 x 320	1550 x 1010 x 370
Weight	kg	68	68	104
<b>Price</b>	<b>€</b>	<b>2.685,-</b>	<b>2.925,-</b>	<b>3.895,-</b>
				<b>3.810,-</b>

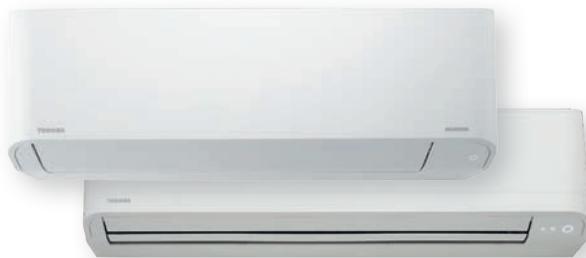
ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

## High wall unit

- Combination with CLASSIC outdoor unit
- Compact all-rounder for all applications
- Efficiency up to A++, COP up to 4,00
- Whisper-quiet 5-speed fan



### Digital Inverter CLASSIC – High wall unit

INDOOR UNIT OUTDOOR UNIT		RAV-HM561KRTP-E RAV-GV561ATP-E	RAV-HM801KRTP-E RAV-GV801ATP-E	RAV-HM1101KRTP-E RAV-GV1101ATP-E	RAV-HM1101KRTP-E RAV-GV1101AT8P-E
Cooling capacity	kW	5,00	6,70	9,50	9,50
Cooling range (min.-max.)	kW	-	-	-	-
Power consumption (min./nom./max.)	kW	-	-	-	-
Energy efficiency EER	W/W	2,99	2,73	2,97	2,97
Energy efficiency SEER		6,20	5,75	6,00	6,00
Energy efficiency class		A++	A+	A+	A+
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	5,30	7,70	10,00	10,00
Heating range (min.-max.)	kW	-	-	-	-
Power consumption (min./nom./max.)	kW	-	-	-	-
Energy efficiency COP	W/W	3,40	2,95	2,70	2,70
Energy efficiency SCOP		3,90	3,90	4,00	4,00
Energy efficiency class		A	A	A+	A+
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-15 / +15	-15 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3+N/50
Recommended fusing	A	-	-	-	-
<b>Set price</b>	<b>€</b>	<b>2.055,-</b>	<b>2.490,-</b>	<b>3.160,-</b>	<b>3.515,-</b>

INDOOR UNIT		RAV-HM561KRTP-E	RAV-HM801KRTP-E	RAV-HM1101KRTP-E	RAV-HM1101KRTP-E
Airflow	m³/h	450/-670	680/-1040	680/-1180	680/-1180
Sound pressure level (low/med/high)	dB(A)	35/39/42	35/41/45	41/45/49	41/45/49
Sound pressure level (low/med/high)	dB(A)	35/39/42	35/41/45	41/45/49	41/45/49
Dimensions (HxWxD)	mm	320 x 1050 x 250	320 x 1050 x 250	320 x 1050 x 250	348 x 1200 x 280
Weight	kg	14	14	14	19
<b>Price</b>	<b>€</b>	<b>685,-</b>	<b>710,-</b>	<b>890,-</b>	<b>890,-</b>

OUTDOOR UNIT		RAV-GV561ATP-E	RAV-GV801ATP-E	RAV-GV1101ATP-E	RAV-GV1101AT8P-E
Sound pressure level (low/med/high)	dB(A)	46	48	53	53
Sound pressure level (low/med/high)	dB(A)	48	51	55	55
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,9 (¾)	15,9 (¾)
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	-	5	5	5
Pipe length (max.)	m	20	20	30	30
Height difference (max.)	m	20	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32	R32
Refrigerant charge	kg	-	-	-	-
Dimensions (HxWxD)	mm	550 x 780 x 290	550 x 780 x 290	630 x 800 x 300	710 x 900 x 320
Weight	kg	-	-	-	-
<b>Price</b>	<b>€</b>	<b>1.370,-</b>	<b>1.780,-</b>	<b>2.270,-</b>	<b>2.625,-</b>

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.



**Digital Inverter CLASSIC 1-phase from SUMMER 2022 and Digital Inverter CLASSIC 3-phase from AUTUMN 2022 available.**

# Ceiling unit

- Attractive design for optimal air distribution
- Efficiency up to A+++
- High air throw



## Digital Inverter – Ceiling unit – 1-phase

INDOOR UNIT OUTDOOR UNIT	RAV-RM401CTP-E*	RAV-GM401ATP-E	RAV-RM561CTP-E*	RAV-GM561ATP-E	RAV-RM801CTP-E*	RAV-GM801ATP-E	RAV-GM901CTP-E*	RAV-GM901ATP-E	RAV-RM1101CTP-E*	RAV-GM1101ATP-E	RAV-RM1401CTP-E*	RAV-GM1401ATP-E	RAV-RM1601CTP-E*	RAV-GM1601ATP-E
Cooling capacity	kW	3,60	5,00	6,90	8,00	9,50	12,10	14,00						
Cooling range (min.-max.)	kW	0,90 - 4,00	1,50 - 5,60	1,50 - 7,40	1,90 - 8,80	3,00 - 11,20	3,00 - 13,20	3,00 - 16,00						
Power consumption (min./nom./max.)	kW	0,18/0,83/2,00	0,29/1,61/1,95	0,29/2,38/2,76	2,58	0,60/2,95/4,10	0,60/4,42/4,71	4,65						
Energy efficiency EER	W/W	4,34	3,11	2,90	3,10	3,22	2,74	3,01						
Energy efficiency SEER		6,34	5,50	5,62	6,10	5,86	5,36	5,90						
Energy efficiency class		A++	A	A+	A++	A+	A+	-						
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46	-15/+46	-15 / +46	-15 / +46	-15 / +46						
Heating capacity	kW	4,00	5,30	7,70	9,00	11,20	13,00	16,00						
Heating range (min.-max.)	kW	0,80 - 5,00	1,50 - 6,30	1,50 - 9,00	1,6 - 9,90	3,00 - 13,00	3,00 - 16,00	3,00 - 18,00						
Power consumption (min./nom./max.)	kW	0,14/0,78/1,70	0,29/1,36/2,40	0,29/2,13/3,20	2,65	0,60/2,94/4,10	0,60/3,48/4,60	4,69						
Energy efficiency COP	W/W	5,13	3,90	3,62	3,40	3,81	374	3,47						
Energy efficiency SCOP		5,10	4,32	4,21	4,60	4,27	4,19	4,35						
Energy efficiency class		A+++	A+	A+	A++	A+	A+	-						
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-15 / +15	-15/+15	-15 / +15	-15 / +15	-15 / +15						
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50						
Recommended fusing	A	10	16	16	-	25	25	-						
<b>Set price incl. RBC-AMTU31-E</b>	<b>€</b>	<b>2.680,-</b>	<b>2.940,-</b>	<b>3.545,-</b>	<b>3.900,-</b>	<b>4.370,-</b>	<b>4.760,-</b>	<b>5.845,-</b>						
INDOOR UNIT	RAV-RM401CTP-E*	RAV-RM561CTP-E*	RAV-RM801CTP-E*	RAV-GM901CTP-E*	RAV-RM1101CTP-E*	RAV-RM1401CTP-E*	RAV-RM1601CTP-E*							
Airflow	m <sup>3</sup> /h	540/720/900	540/720/900	750/1002/1410	900/1600	1020/1350/1860	1200/1530/2040	1260/1650/2040						
Sound pressure level (low/med/high)	dB(A)	28/35/37	28/35/37	29/36/41	30/38/42	32/38/44	35/41/46	36/42/46						
Sound pressure level (low/med/high)	dB(A)	28/35/37	28/35/37	29/36/41	30/38/42	32/38/44	35/41/46	36/42/46						
Dimensions (HxWxD)	mm	235 x 952 x 690	235 x 952 x 690	235 x 1270 x 690	235 x 1586 x 690									
Weight	kg	23	23	29	37	37	37	37						
<b>Price</b>	<b>€</b>	<b>1.135,-</b>	<b>1.205,-</b>	<b>1.360,-</b>	<b>1.505,-</b>	<b>1.545,-</b>	<b>1.720,-</b>	<b>1.820,-</b>						
OUTDOOR UNIT	RAV-GM401ATP-E	RAV-GM561ATP-E	RAV-GM801ATP-E	RAV-GM901ATP-E	RAV-GM1101ATP-E	RAV-GM1401ATP-E	RAV-GM1601ATP-E							
Sound pressure level (low/med/high)	dB(A)	49	46	48	51	54	55	53						
Sound pressure level (low/med/high)	dB(A)	50	48	52	55	57	57	55						
Suction gas pipe diameter	mm (inch)	12,7 (½)	12,7 (½)	15,9 (5/8)	15,9 (5/8)	15,9 (¾)	15,9 (5/8)	15,9 (5/8)						
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)						
Pipe length (min.)	m	2	5	5	5	5	5	5						
Pipe length (max.)	m	20	30	30	50	50	50	50						
Height difference (max.)	m	10	30	30	30	30	30	30						
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary						
Refrigerant		R32	R32	R32	R32	R32	R32	R32						
Refrigerant charge	kg	0,9	0,9	1,3	2,0	2,1	2,1	2,40						
Dimensions (HxWxD)	mm	550 x 780 x 290	550 x 780 x 290	550 x 780 x 290	600 x 800 x 300	890 x 900 x 320	890 x 900 x 320	1340 x 900 x 320						
Weight	kg	34	40	44	47	68	68	95						
<b>Price</b>	<b>€</b>	<b>1.405,-</b>	<b>1.595,-</b>	<b>2.045,-</b>	<b>2.255,-</b>	<b>2.685,-</b>	<b>2.900,-</b>	<b>3.885,-</b>						

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

## Digital Inverter – Ceiling unit – 3-phase

INDOOR UNIT OUTDOOR UNIT		RAV-RM1101CTP-E* RAV-GM1101AT8P-E	RAV-RM1401CTP-E* RAV-GM1401AT8P-E	RAV-RM1601CTP-E* RAV-GM1601AT8P-E
Cooling capacity	kW	9,50	12,10	14,00
Cooling range (min.-max.)	kW	3,00 - 11,20	3,00 - 13,20	3,00 - 16,00
Power consumption (min./nom./max.)	kW	0,60/2,95/4,10	0,60/4,42/4,71	4,65
Energy efficiency EER	W/W	3,22	2,74	3,12
Energy efficiency SEER		5,86	5,36	5,90
Energy efficiency class		A++	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	11,20	13,00	16,00
Heating range (min.-max.)	kW	3,00 - 13,00	3,00 - 16,00	3,00 - 18,00
Power consumption (min./nom./max.)	kW	0,60/2,94/4,10	0,60/3,48/4,60	4,69
Energy efficiency COP	W/W	3,81	3,74	3,47
Energy efficiency SCOP		4,27	4,19	4,35
Energy efficiency class		A+	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-15 / +15
Power supply	V/Ph+N/Hz	380-415/3+N/50	380-415/3+N/50	380-415/3+N/50
Recommended fusing	A	3x 16	3x 16	3x 16
<b>Set price incl. RBC-AMTU31-E</b>	<b>€</b>	<b>4.610,-</b>	<b>4.990,-</b>	<b>6.405,-</b>

INDOOR UNIT		RAV-RM1101CTP-E*	RAV-RM1401CTP-E*	RAV-RM1601CTP-E*
Airflow	m³/h	1020/1350/1860	1200/1530/2040	1260/1650/2040
Sound pressure level (low/med/high)	dB(A)	32/38/44	35/41/46	36/42/46
Sound pressure level (low/med/high)	dB(A)	32/38/44	35/41/46	36/42/46
Dimensions (HxWxD)	mm	235 x 1586 x 690	235 x 1586 x 690	235 x 1586 x 690
Weight	kg	37	37	37
<b>Price</b>	<b>€</b>	<b>1.545,-</b>	<b>1.720,-</b>	<b>1.820,-</b>

OUTDOOR UNIT		RAV-GM1101AT8P-E	RAV-GM1401AT8P-E	RAV-GM1601AT8P-E
Sound pressure level (low/med/high)	dB(A)	54	55	53
Sound pressure level (low/med/high)	dB(A)	57	57	55
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5
Pipe length (max.)	m	50	50	50
Height difference (max.)	m	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32
Refrigerant charge	kg	2,1	2,1	2,40
Dimensions (HxWxD)	mm	890 x 900 x 320	890 x 900 x 320	1340 x 900 x 320
Weight	kg	69	69	94
<b>Price</b>	<b>€</b>	<b>2.925,-</b>	<b>3.130,-</b>	<b>4.445,-</b>

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

## Super Digital Inverter – Ceiling unit – 1-phase

INDOOR UNIT OUTDOOR UNIT		RAV-RM561CTP-E* RAV-GP561ATW-E	RAV-RM801CTP-E* RAV-GP801ATW-E	RAV-RM1101CTP-E* RAV-GP1101AT-E	RAV-RM1401CTP-E* RAV-GP1401AT-E1
Cooling capacity	kW	5,00	7,10	10,00	12,50
Cooling range (min.-max.)	kW	1,20 - 5,60	1,90 - 8,00	3,10 - 12,00	3,10 - 14,00
Power consumption (min./nom./max.)	kW	0,19/1,37/1,98	0,26/1,60/3,17	0,55/2,23/3,45	0,55/3,58/3,97
Energy efficiency EER	W/W	3,65	4,44	4,48	3,49
Energy efficiency SEER		6,76	-	8,23	7,58
Energy efficiency class		A++	-	A++	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +52	-15 / +52	-15 / +52	-15 / +52
Heating capacity	kW	5,60	8,00	11,20	14,00
Heating range (min.-max.)	kW	0,90 - 7,40	1,30 - 11,30	2,60 - 13,00	2,60 - 16,50
Power consumption (min./nom./max.)	kW	0,16/1,39/2,67	0,20/1,80/3,55	0,41/2,38/3,09	0,41/3,59/4,40
Energy efficiency COP	W/W	4,03	4,44	4,71	3,90
Energy efficiency SCOP		4,70	-	4,72	4,71
Energy efficiency class		A++	-	A++	-
Outdoor temperature operating range (min.-max.)	°C	-27 / +15	-27/ +15	-27 / +15	-27 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	16	16	25	25
<b>Set price incl. RBC-AMTU31-E</b>	<b>€</b>	<b>3.370,-</b>	<b>4.115,-</b>	<b>5.580,-</b>	<b>6.160,-</b>

INDOOR UNIT		RAV-RM561CTP-E*	RAV-RM801CTP-E*	RAV-RM1101CTP-E*	RAV-RM1401CTP-E*
Airflow	m³/h	540/720/900	1410	1020/1350/1860	1200/1530/2040
Sound pressure level (low/med/high)	dB(A)	28/35/37	29/36/41	32/38/44	35/41/46
Sound pressure level (low/med/high)	dB(A)	28/35/37	29/36/41	32/38/44	35/41/46
Dimensions (HxWxD)	mm	235 x 952 x 690	235 x 1270 x 690	235 x 1586 x 690	235 x 1586 x 690
Weight	kg	23	29	35	35
<b>Price</b>	<b>€</b>	<b>1.205,-</b>	<b>1.360,-</b>	<b>1.545,-</b>	<b>1.720,-</b>

OUTDOOR UNIT		RAV-GP561ATW-E	RAV-GP801ATW-E	RAV-GP1101AT-E	RAV-GP1401AT-E1
Sound pressure level (low/med/high)	dB(A)	46	46	49	50
Sound pressure level (low/med/high)	dB(A)	48	48	50	51
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,9 (¾)	15,9 (¾)
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5	5
Pipe length (max.)	m	50	50	75	75
Height difference (max.)	m	30	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32	R32
Refrigerant charge	kg	1,35	1,3	3,10	3,10
Dimensions (HxWxD)	mm	630 x 799 x 299	1050 x 1010 x 370	1550 x 1010 x 370	1550 x 1010 x 370
Weight	kg	45	74	104	104
<b>Price</b>	<b>€</b>	<b>2.025,-</b>	<b>2.615,-</b>	<b>3.895,-</b>	<b>4.300,-</b>

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

## Super Digital Inverter – Ceiling unit – 3-phase

INDOOR UNIT OUTDOOR UNIT		RAV-RM1101CTP-E* RAV-GP1101AT8-E	RAV-RM1401CTP-E* RAV-GP1401AT8-E	RAV-RM1601CTP-E* RAV-GP1601AT8-E
Cooling capacity	kW	10,00	12,50	14,00
Cooling range (min.-max.)	kW	2,60 - 12,00	2,60 - 14,00	2,60 - 16,00
Power consumption (min./nom./max.)	kW	0,66/2,56/3,81	0,66/3,68/4,85	0,66/4,60/6,33
Energy efficiency EER	W/W	3,91	3,40	3,04
Energy efficiency SEER		6,61	6,30	6,00
Energy efficiency class		A++	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	11,20	14,00	16,00
Heating range (min.-max.)	kW	2,40 - 14,00	2,40 - 18,00	2,40 - 19,00
Power consumption (min./nom./max.)	kW	0,53/2,51/4,26	0,53/3,48/5,95	0,53/4,30/6,96
Energy efficiency COP	W/W	4,46	4,02	3,72
Energy efficiency SCOP		4,21	4,20	4,19
Energy efficiency class		A+	-	-
Outdoor temperature operating range (min.-max.)	°C	-20/ +15	-20/ +15	-20/ +15
Power supply	V/Ph+N/Hz	380-415/3+N/50	380-415/3+N/50	380-415/3+N/50
Recommended fusing	A	3x 16	3x 16	3x 16
<b>Set price incl. RBC-AMTU31-E</b>	<b>€</b>	<b>5.495,-</b>	<b>5.850,-</b>	<b>6.500,-</b>

INDOOR UNIT		RAV-RM1101CTP-E*	RAV-RM1401CTP-E*	RAV-RM1601CTP-E*
Airflow	m³/h	1020/1350/1860	1200/1530/2040	1260/1650/2040
Sound pressure level (low/med/high)	dB(A)	32/38/44	35/41/46	36/42/46
Sound pressure level (low/med/high)	dB(A)	32/38/44	35/41/46	36/42/46
Dimensions (HxWxD)	mm	235 x 1586 x 690	235 x 1586 x 690	235 x 1586 x 690
Weight	kg	37	37	37
<b>Price</b>	<b>€</b>	<b>1.545,-</b>	<b>1.720,-</b>	<b>1.820,-</b>

OUTDOOR UNIT		RAV-GP1101AT8-E	RAV-GP1401AT8-E	RAV-GP1601AT8-E
Sound pressure level (low/med/high)	dB(A)	49	51	51
Sound pressure level (low/med/high)	dB(A)	50	52	53
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5
Pipe length (max.)	m	75	75	75
Height difference (max.)	m	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32
Refrigerant charge	kg	2,60	2,6	2,60
Dimensions (HxWxD)	mm	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Weight	kg	95	95	95
<b>Price</b>	<b>€</b>	<b>3.810,-</b>	<b>3.990,-</b>	<b>4.540,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
<b>RBC-AMTU31-E</b>	Standard Wired Remote Control	<b>140,-</b>
<b>RBC-AXU31C-E</b>	Infrared remote control + receiver kit for installation in ceiling unit	<b>325,-</b>
<b>TCB-DP31CE</b>	Drain pump, discharge head 600 mm, measured from lower edge of unit	<b>405,-</b>
<b>TCB-KP13CE</b>	Elbow-kit (required for drain pump), RAV: Sizes 4 + 5 / VRF: Sizes 15 + 18	<b>95,-</b>
<b>TCB-KP14CPE</b>	Elbow-kit, ISO14093 certified flares (required for drain pump), RAV: Sizes 4 + 5 / VRF: Sizes 15 + 18	<b>120,-</b>
<b>TCB-KP24CPE</b>	Elbow-kit, ISO14093 certified flares (required for drain pump), RAV: Sizes 8 + 16 / VRF: Sizes 24 to 56	<b>145,-</b>
<b>TCB-PCUC2E</b>	Control board for external control, alarms and messages	<b>185,-</b>
<b>TCB-FF101URE2</b>	Spigot flange for fresh air connection Ø 100 mm	<b>75,-</b>

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

# 60x60 Slim Cassette

- 360° air distribution in Euro grid with unit height of only 256 mm
- Efficiency up to A++; extended energy saving via presence sensor option
- Condensate pump integrated (850 mm); prepared for external fresh air supply  
→ Required accessories: remote control + panel



INDOOR UNIT OUTDOOR UNIT	RAV-RM301MUT-E* RAV-GM301ATP-E	RAV-RM401MUT-E* RAV-GM401ATP-E	RAV-RM561MUT-E* RAV-GM561ATP-E	RAV-RM561MUT-E* RAV-GP561ATW-E
Cooling capacity	kW	2,50	3,60	5,00
Cooling range (min.-max.)	kW	0,90 - 3,00	0,90 - 4,00	1,50 - 5,60
Power consumption (min./nom./max.)	kW	0,25/0,59/0,32	0,18/0,90/2,00	0,30/1,65/1,86
Energy efficiency EER	W/W	4,24	4,00	3,05
Energy efficiency SEER		5,94	5,76	5,69
Energy efficiency class		A++	A+	A+
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	3,40	4,00	5,30
Heating range (min.-max.)	kW	0,80 - 4,50	0,80 - 5,00	1,50 - 6,30
Power consumption (min./nom./max.)	kW	0,17/0,76/1,40	0,14/0,95/1,70	0,30/1,47/2,40
Energy efficiency COP	W/W	4,47	4,21	3,61
Energy efficiency SCOP		4,70	4,44	4,37
Energy efficiency class		A++	A+	A+
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-15 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	10	10	16
Set price incl. RBC-AMTU31-E + RBC-UM21PG(W)-E	€	2.855,-	3.155,-	3.365,-
INDOOR UNIT	RAV-RM301MUT-E*	RAV-RM401MUT-E*	RAV-RM561MUT-E*	RAV-RM561MUT-E*
Airflow	m³/h	440/520/640	468/552/660	546/672/798
Sound pressure level (low/med/high)	dB(A)	30/36/38	32/36/41	35/39/40
Sound pressure level (low/med/high)	dB(A)	30/36/38	32/36/41	35/39/40
Dimensions (HxWxD)	mm	256 x 575 x 575	256 x 575 x 575	256 x 575 x 575
Weight	kg	15	15	15
Panel dimensions (HxWxD)	mm	12 x 620 x 620	12 x 620 x 620	12 x 620 x 620
Panel weight	kg	3	3	3
Price	€	1.165,-	1.205,-	1.225,-
OUTDOOR UNIT	RAV-GM301ATP-E	RAV-GM401ATP-E	RAV-GM561ATP-E	RAV-GP561ATW-E
Sound pressure level (low/med/high)	dB(A)	46	49	46
Sound pressure level (low/med/high)	dB(A)	47	50	48
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	12,7 (1/2)	12,7 (1/2)
Liquid pipe diameter	mm (inch)	6,4 (1/4)	6,4 (1/4)	6,4 (1/4)
Pipe length (min.)	m	2	2	5
Pipe length (max.)	m	20	20	30
Height difference (max.)	m	10	10	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32
Refrigerant charge	kg	0,6	0,9	0,9
Dimensions (HxWxD)	mm	550 x 780 x 290	550 x 780 x 290	630 x 799 x 299
Weight	kg	29	34	40
Price	€	1.145,-	1.405,-	1.595,-
<b>ACCESSORIES</b>	<b>DESCRIPTION</b>			<b>PRICE €</b>
RBC-UM21PG(W)-E	Panel for 60x60 slim cassette			405,-
RBC-AMTU31-E	Standard Wired Remote Control			140,-
RBC-AXU31UM-E	Infrared remote control + receiver kit for installation in 60x60 slim cassette (SMMSu)			165,-
TCB-SIR41UM-E	Occupancy sensor kit for installation in 60x60 slim cassette			120,-
TCB-FF101URE2	Spigot flange for fresh air connection Ø 100 mm			75,-

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

# Smart Cassette

- 4-way high-efficiency design for high performance
- Efficiency up to A<sup>++</sup>; extended energy saving via presence sensor option
- Condensate pump integrated (850 mm); prepared for external fresh air supply
- ➔ Required accessories: remote control + panel



## Super Digital Inverter – Smart Cassette

INDOOR UNIT OUTDOOR UNIT	RAV-GM561UT-E* RAV-GP561ATW-E	RAV-GM801UT-E* RAV-GP801ATW-E	RAV-GM1101UT-E* RAV-GP1101AT-E	RAV-GM1401UT-E* RAV-GP1401AT-E1
Cooling capacity	kW	5,00	7,10	10,00
Cooling range (min.-max.)	kW	1,20 - 5,60	1,90 - 8,00	3,10 - 12,00
Power consumption (min./nom./max.)	kW	0,19/1,52/1,99	0,26/1,37/2,94	0,56/1,90/2,80
Energy efficiency EER	W/W	3,29	5,18	5,26
Energy efficiency SEER		8,07	-	8,80
Energy efficiency class		A <sup>++</sup>	-	A <sup>+++</sup>
Outdoor temperature operating range (min.-max.)	°C	-15 / +52	-15 / +52	-15 / +52
Heating capacity	kW	5,60	8,00	11,20
Heating range (min.-max.)	kW	0,90 - 7,40	1,30 - 11,30	2,60 - 13,00
Power consumption (min./nom./max.)	kW	0,16/1,61/2,76	0,20/1,45/3,15	0,41/2,18/2,98
Energy efficiency COP	W/W	3,48	5,52	5,14
Energy efficiency SCOP		5,01	-	5,00
Energy efficiency class		A <sup>++</sup>	-	A <sup>+++</sup>
Outdoor temperature operating range (min.-max.)	°C	-27 / +15	-27 / +15	-27 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	16	16	25
<b>Set price incl. RBC-AMTU31-E + RBC-U41PG(W)-E</b>	<b>€</b>	<b>3.730,-</b>	<b>4.605,-</b>	<b>6.080,-</b>
<b>6.690,-</b>				

INDOOR UNIT	RAV-GM561UT-E*	RAV-GM801UT-E*	RAV-GM1101UT-E*	RAV-GM1401UT-E*
Airflow	m <sup>3</sup> /h	750/900/1050	1920	1050/1650/2250
Sound pressure level (low/med/high)	dB(A)	26/29/32	27/35/42	31/40/48
Sound pressure level (low/med/high)	dB(A)	26/29/32	27/35/42	31/40/48
Dimensions (HxWxD)	mm	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840
Weight	kg	20	25	25
Panel dimensions (HxWxD)	mm	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950
Panel weight	kg	5	5	5
<b>Price</b>	<b>€</b>	<b>1.170,-</b>	<b>1.455,-</b>	<b>1.650,-</b>
				<b>1.855,-</b>

OUTDOOR UNIT	RAV-GP561ATW-E	RAV-GP801ATW-E	RAV-GP1101AT-E	RAV-GP1401AT-E1
Sound pressure level (low/med/high)	dB(A)	46	46	49
Sound pressure level (low/med/high)	dB(A)	48	48	50
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,9 (¾)
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5
Pipe length (max.)	m	50	50	75
Height difference (max.)	m	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32
Refrigerant charge	kg	1,35	1,3	3,10
Dimensions (HxWxD)	mm	630 x 799 x 299	1050 x 1010 x 370	1550 x 1010 x 370
Weight	kg	45	74	104
<b>Price</b>	<b>€</b>	<b>2.025,-</b>	<b>2.615,-</b>	<b>3.895,-</b>
				<b>4.300,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
RBC-U41PG(W)-E	Panel for smart cassette	395,-
RBC-AMTU31-E	Standard Wired Remote Control	140,-
RBC-AX41U(W)-E	Infrared remote control + receiver kit for installation in smart cassette	285,-
TCB-SIR41U-E	Occupancy sensor kit for installation in smart cassette	120,-
TCB-GFC1603UE	Fresh air filter	265,-
TCB-SP1603UE	Spacer frame for lowering the panel by 70 mm	200,-
TCB-BC1603UE	Air discharge direction kit for blocking of up to three discharge sides	70,-
TCB-FF101URE2	Spigot flange for fresh air connection Ø 100 mm	75,-
TCB-PCUC2E	Control board for external control, alarms and messages	185,-

# 4-Way Standard Cassette

- 360° Luftverteilung oder direkter Luftstrom
- Effizienz bis A++
- Kondensatpumpe integriert (850 mm); für externe Frischluftzufuhr vorbereitet  
→ Required accessories: remote control + panel



## Digital Inverter – 4-Way Standard Cassette – 1-phase

INDOOR UNIT OUTDOOR UNIT		RAV-RM561UTP-E* RAV-GM561ATP-E	RAV-RM801UTP-E* RAV-GM801ATP-E	RAV-GM901UTP-E* RAV-GM901ATP-E	RAV-RM1101UTP-E* RAV-GM1101ATP-E	RAV-RM1401UTP-E* RAV-GM1401ATP-E	RAV-RM1601UTP-E* RAV-GM1601ATP-E
Cooling capacity	kW	5,00	6,70	8,00	9,50	12,00	14,00
Cooling range (min.-max.)	kW	1,50 - 5,60	1,50 - 8,00	1,90 - 8,80	3,00 - 11,20	3,00 - 13,20	3,00 - 16,00
Power consumption (min./nom./max.)	kW	0,26/1,56/1,86	0,26/2,22/2,60	-	0,60/2,87/4,10	0,60/4,29/4,71	4,49
Energy efficiency EER	W/W	3,21	3,02	3,30	3,31	2,80	3,12
Energy efficiency SEER		6,34	5,81	7,00	6,15	5,71	6,30
Energy efficiency class		A++	A+	A++	A++	A+	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15/+46	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	5,30	7,70	9,00	11,20	13,00	16,00
Heating range (min.-max.)	kW	1,50 - 6,30	1,50 - 9,00	1,6 - 9,90	3,00 - 13,00	3,00 - 16,00	3,00 - 18,00
Power consumption (min./nom./max.)	kW	0,26/1,36/2,08	0,26/2,13/3,03	-	0,60/2,93/4,30	0,60/3,40/4,50	4,43
Energy efficiency COP	W/W	3,90	3,62	3,72	3,82	3,76	3,61
Energy efficiency SCOP		4,60	4,42	4,60	4,28	4,29	4,35
Energy efficiency class		A+	A+	A++	A+	A+	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-15/+15	-15 / +15	-15 / +15	-15 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	16	16	-	25	25	-
<b>Set price incl. RBC-AMTU31-E + RBC-U31PGP(W)-E</b>	<b>€</b>	<b>3.185,-</b>	<b>3.790,-</b>	<b>4.135,-</b>	<b>4.715,-</b>	<b>5.115,-</b>	<b>6.320,-</b>

INDOOR UNIT		RAV-RM561UTP-E*	RAV-RM801UTP-E*	RAV-GM901UTP-E*	RAV-RM1101UTP-E*	RAV-RM1401UTP-E*	RAV-RM1601UTP-E*
Airflow	m³/h	780/870/1050	810/960/1230	900/1600	1170/1440/2010	1230/1440/2100	1260/1500/2130
Sound pressure level (low/med/high)	dB(A)	28/29/32	28/31/35	33/36/40	33/38/43	34/38/44	36/40/45
Sound pressure level (low/med/high)	dB(A)	28/29/32	28/31/35	33/36/40	33/38/43	34/38/44	36/40/45
Dimensions (HxWxD)	mm	256 x 840 x 840	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
Weight	kg	20	20	24	24	24	24
Panel dimensions (HxWxD)	mm	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950			
Panel weight	kg	4,2	4,2	4,2	4,2	4,2	4,2
<b>Price</b>	<b>€</b>	<b>1.085,-</b>	<b>1.240,-</b>	<b>1.375,-</b>	<b>1.525,-</b>	<b>1.710,-</b>	<b>1.930,-</b>

OUTDOOR UNIT		RAV-GM561ATP-E	RAV-GM801ATP-E	RAV-GM901ATP-E	RAV-GM1101ATP-E	RAV-GM1401ATP-E	RAV-GM1601ATP-E
Sound pressure level (low/med/high)	dB(A)	46	48	51	54	55	53
Sound pressure level (low/med/high)	dB(A)	48	52	55	57	57	55
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5	5	5	5
Pipe length (max.)	m	30	30	50	50	50	50
Height difference (max.)	m	30	30	30	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	0,9	1,3	-	2,1	2,1	2,40
Dimensions (HxWxD)	mm	550 x 780 x 290	550 x 780 x 290	600 x 800 x 300	890 x 900 x 320	890 x 900 x 320	1340 x 900 x 320
Weight	kg	40	44	47	68	68	95
<b>Price</b>	<b>€</b>	<b>1.595,-</b>	<b>2.045,-</b>	<b>2.255,-</b>	<b>2.685,-</b>	<b>2.900,-</b>	<b>3.885,-</b>

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.



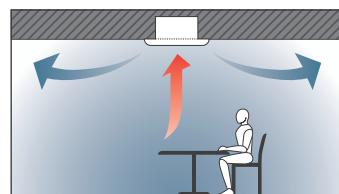
**Panel  
RBC-U31PGP(W)-E**

The special lamella shape guarantees perfect air distribution in a 360° radius.



**Panel  
RBC-U31PGSP(W)-E**

The design of the louvers ensures that the air flows are discharged in a straight line.



## Digital Inverter – 4-Way Standard Cassette – 3-phase

INDOOR UNIT OUTDOOR UNIT		RAV-RM1101UTP-E* RAV-GM1101AT8P-E	RAV-RM1401UTP-E* RAV-GM1401AT8P-E	RAV-RM1601UTP-E* RAV-GM1601AT8P-E
Cooling capacity	kW	9,50	12,00	14,00
Cooling range (min.-max.)	kW	3,00 - 11,20	3,00 - 13,20	3,00 - 16,00
Power consumption (min./nom./max.)	kW	0,60/4,29/4,71	0,60/4,29/4,71	4,49
Energy efficiency EER	W/W	3,31	2,80	3,12
Energy efficiency SEER		6,15	5,71	6,30
Energy efficiency class		A++	A+	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	11,20	13,00	16,00
Heating range (min.-max.)	kW	3,00 - 11,20	3,00 - 13,20	3,00 - 18,00
Power consumption (min./nom./max.)	kW	0,60/2,93/4,30	0,60/4,46/4,50	4,43
Energy efficiency COP	W/W	3,82	3,76	3,61
Energy efficiency SCOP		4,28	4,29	4,35
Energy efficiency class		A+	A+	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-15 / +15
Power supply	V/Ph+N/Hz	380-415/3+N/50	380-415/3+N/50	380-415/3+N/50
Recommended fusing	A	3x 16	3x 16	3x 16
<b>Set price incl. RBC-AMTU31-E + RBC-U31PGP(W)-E</b>	<b>€</b>	<b>4.955,-</b>	<b>5.345,-</b>	<b>6.880,-</b>

INDOOR UNIT		RAV-RM1101UTP-E*	RAV-RM1401UTP-E*	RAV-RM1601UTP-E*
Airflow	m³/h	1170/1440/2010	1230/1440/2100	1260/1500/2130
Sound pressure level (low/med/high)	dB(A)	33/38/43	34/38/44	36/40/45
Sound pressure level (low/med/high)	dB(A)	33/38/43	34/38/44	36/40/45
Dimensions (HxWxD)	mm	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
Weight	kg	24	24	24
Panel dimensions (HxWxD)	mm	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950
Panel weight	kg	4,2	4,2	4,2
<b>Price</b>	<b>€</b>	<b>1.525,-</b>	<b>1.710,-</b>	<b>1.930,-</b>

OUTDOOR UNIT		RAV-GM1101AT8P-E	RAV-GM1401AT8P-E	RAV-GM1601AT8P-E
Sound pressure level (low/med/high)	dB(A)	54	55	53
Sound pressure level (low/med/high)	dB(A)	57	57	55
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5
Pipe length (max.)	m	50	50	50
Height difference (max.)	m	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32
Refrigerant charge	kg	2,1	2,1	2,40
Dimensions (HxWxD)	mm	890 x 900 x 320	890 x 900 x 320	1340 x 900 x 320
Weight	kg	69	69	94
<b>Price</b>	<b>€</b>	<b>2.925,-</b>	<b>3.130,-</b>	<b>4.445,-</b>

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

## Super Digital Inverter – 4-Way Standard Cassette

INDOOR UNIT OUTDOOR UNIT		RAV-RM561UTP-E*	RAV-RM801UTP-E*	RAV-RM1101UTP-E*	RAV-RM1401UTP-E*	RAV-RM1101UTP-E*	RAV-RM1401UTP-E*	RAV-RM1601UTP-E*
		RAV-GP561ATW-E	RAV-GP801ATW-E	RAV-GP1101AT-E	RAV-GP1401AT-E1	RAV-GP1101AT8-E	RAV-GP1401AT8-E	RAV-GP1601AT8-E
Cooling capacity	kW	5,00	7,10	10,00	12,50	10,00	12,50	14,00
Cooling range (min.-max.)	kW	1,20 - 5,60	-	3,10 - 12,00	3,10 - 14,00	2,60 - 12,00	2,60 - 14,00	2,60 - 16,00
Power consumption (min./nom./max.)	kW	0,19/1,22/1,97	-	0,53/2,13/3,05	0,53/3,16/3,55	0,66/2,32/3,60	0,66/3,42/5,50	0,66/4,34/5,70
Energy efficiency EER	W/W	4,10	-	4,69	3,96	4,31	3,65	3,23
Energy efficiency SEER		7,61	-	8,65	8,15	7,10	7,01	6,72
Energy efficiency class		A++	-	A+++	-	-	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +52	-15 / +52	-15 / +52	-15 / +52	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	5,60	8,00	11,20	14,00	11,20	14,00	16,00
Heating range (min.-max.)	kW	0,90 - 8,10	-	2,60 - 13,00	2,60 - 16,50	2,40 - 15,60	2,40 - 18,00	2,40 - 19,00
Power consumption (min./nom./max.)	kW	0,16/1,30/2,76	-	0,40/2,34/3,08	0,40/3,21/4,38	0,53/2,41/4,30	0,53/3,41/5,50	0,53/4,28/6,51
Energy efficiency COP	W/W	4,31	-	4,79	4,36	4,65	4,11	3,74
Energy efficiency SCOP		4,96	-	4,73	4,72	4,31	4,30	4,36
Energy efficiency class		A+	-	A++	-	-	-	-
Outdoor temperature operating range (min.-max.)	°C	-27 / +15	-27 / +15	-27 / +15	-27 / +15	-20/ +15	-20/ +15	-20/ +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3+N/50	380-415/3+N/50	380-415/3+N/50
Recommended fusing	A	16	16	25	25	3x 16	3x 16	3x 16
<b>Set price incl. RBC-AMTU31-E + RBC-U31PGP(W)-E</b>	<b>€</b>	<b>3.615,-</b>	<b>4.360,-</b>	<b>5.925,-</b>	<b>6.515,-</b>	<b>5.840,-</b>	<b>6.205,-</b>	<b>6.975,-</b>

INDOOR UNIT		RAV-RM561UTP-E*	RAV-RM801UTP-E*	RAV-RM1101UTP-E*	RAV-RM1401UTP-E*	RAV-RM1101UTP-E*	RAV-RM1401UTP-E*	RAV-RM1601UTP-E*
		RAV-GP561ATW-E	RAV-GP801ATW-E	RAV-GP1101AT-E	RAV-GP1401AT-E1	RAV-GP1101AT8-E	RAV-GP1401AT8-E	RAV-GP1601AT8-E
Airflow	m³/h	780/870/1050	-	1170/1440/2010	1170/1440/2010	1170/1440/2010	1230/1440/2100	1260/1500/2130
Sound pressure level (low/med/high)	dB(A)	28/29/32	-	33/38/43	34/38/44	33/38/43	34/38/44	36/40/45
Sound pressure level (low/med/high)	dB(A)	28/29/32	-	33/38/43	34/38/44	33/38/43	34/38/44	36/40/45
Dimensions (HxWxD)	mm	256 x 840 x 840	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
Weight	kg	-	-	24	24	24	24	24
Panel dimensions (HxWxD)	mm	30 x 950 x 950	-	30 x 950 x 950				
Panel weight	kg	4,2	-	4,2	4,2	4,2	4,2	4,2
<b>Price</b>	<b>€</b>	<b>1.085,-</b>	<b>1.240,-</b>	<b>1.525,-</b>	<b>1.710,-</b>	<b>1.525,-</b>	<b>1.710,-</b>	<b>1.930,-</b>

OUTDOOR UNIT		RAV-GP561ATW-E	RAV-GP801ATW-E	RAV-GP1101AT-E	RAV-GP1401AT-E1	RAV-GP1101AT8-E	RAV-GP1401AT8-E	RAV-GP1601AT8-E
Sound pressure level (low/med/high)	dB(A)	46	46	49	50	49	34/38/44	36/40/45
Sound pressure level (low/med/high)	dB(A)	48	48	50	51	50	34/38/44	36/40/45
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,9 (¾)	15,9 (¾)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5	5	5	5	5
Pipe length (max.)	m	50	50	75	75	75	75	75
Height difference (max.)	m	30	30	30	30	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	1,35	1,3	3,10	3,10	2,60	2,60	2,60
Dimensions (HxWxD)	mm	630 x 799 x 299	1050 x 1010 x 370	1550 x 1010 x 370	1550 x 1010 x 370	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Weight	kg	45	74	104	104	95	95	95
<b>Price</b>	<b>€</b>	<b>2.025,-</b>	<b>2.615,-</b>	<b>3.895,-</b>	<b>4.300,-</b>	<b>3.810,-</b>	<b>3.990,-</b>	<b>4.540,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
<b>RBC-U31PGP(W)-E</b>	Panel for wide airflow (SMMSe)	365,-
<b>RBC-U31PGSP(W)-E</b>	Panel for straight airflow (SMMSe)	385,-
<b>RBC-U33P-E</b>	FLAT Panel - pure white, for 4-way standard cassette (from summer 2022)	365,-
<b>RBC-AMTU31-E</b>	Standard Wired Remote Control	140,-
<b>RBC-AXU31U-E</b>	Infrared remote control + receiver kit for installation in 4-way standard cassette	300,-
<b>RBC-AXU33UP-E</b>	Infrared remote control + receiver kit for installation in FLAT Panel 4-way standard cassette (from summer 2022)	220,-
<b>TCB-FF101URE2</b>	Spigot flange for fresh air connection Ø 100 mm	75,-
<b>TCB-PLFC1UPE</b>	PM 2.5 Filterset (before dustfilter), compatible to RBC-U32PGP-E and RBC-U31PGP(W)-E	20,-
<b>TCB-SIR33UP-E</b>	Occupancy sensor kit for installation in FLAT Panel (from summer 2022)	125,-
<b>TCB-EACP1UHP-E</b>	PURE Plasmafilter kit for installation in FLAT Panel 4-way standard cassette (from summer 2022)	TBC
<b>TCB-ADCN510UP-E</b>	Panel adapter for RBC-U33P-E	55,-
<b>TCB-PLFC1UPE</b>	PM 2.5 Filterset (before dustfilter), compatible to RBC-U32PGP-E and RBC-U31PGP(W)-E	20,-

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

# 4-Way Standard Cassette

- Combination with CLASSIC outdoor unit
- 360° air distribution or direct air flow
- Efficiency up to A++
- Condensate pump integrated (850 mm); prepared for external fresh air supply  
→ Required accessories: remote control + panel



## Digital Inverter CLASSIC – 4-Way Standard Cassette – 1-phase

INDOOR UNIT OUTDOOR UNIT		RAV-HM561UTP-E RAV-GV561ATP-E	RAV-HM801UTP-E RAV-GV801ATP-E	RAV-HM1101UTP-E RAV-GV1101ATP-E	RAV-HM1401UTP-E RAV-GV1401ATP-E	RAV-HM1601UTP-E RAV-GV1601ATP-E
Cooling capacity	kW	5,00	6,70	9,50	12,10	13,00
Cooling range (min.-max.)	kW	-	-	-	-	-
Power consumption (min./nom./max.)	kW	-	-	-	-	-
Energy efficiency EER	W/W	3,13	3,05	3,02	2,61	2,41
Energy efficiency SEER		6,20	6,00	6,00	5,10	5,90
Energy efficiency class		A++	A+	A+	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	5,30	7,00	10,00	12,30	13,50
Heating range (min.-max.)	kW	-	-	-	-	-
Power consumption (min./nom./max.)	kW	-	-	-	-	-
Energy efficiency COP	W/W	-	3,63	3,08	3,24	3,65
Energy efficiency SCOP		4,20	4,15	4,00	3,90	4,20
Energy efficiency class		A+	A+	A+	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-15 / +15	-15 / +15	-15 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	16	16	25	25	25
<b>Set price incl. RBC-AMTU31-E + RBC-U32PGP-E</b>	<b>€</b>	<b>2.960,-</b>	<b>3.525,-</b>	<b>4.300,-</b>	<b>4.790,-</b>	<b>5.785,-</b>

INDOOR UNIT		RAV-HM561UTP-E	RAV-HM801UTP-E	RAV-HM1101UTP-E	RAV-HM1401UTP-E	RAV-HM1601UTP-E
Airflow	m³/h	780/870/1050	810/960/1230	1170/1440/2010	1230/1440/2100	1260/1500/2130
Sound pressure level (low/med/high)	dB(A)	28/29/32	28/31/35	33/38/43	34/38/44	36/40/45
Sound pressure level (low/med/high)	dB(A)	28/29/32	28/31/35	33/38/43	34/38/44	36/40/45
Dimensions (HxWxD)	mm	256 x 840 x 840	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
Weight	kg	20	20	24	24	24
Panel dimensions (HxWxD)	mm	30 x 950 x 950				
Panel weight	kg	4,2	4,2	4,2	4,2	4,2
<b>Price</b>	<b>€</b>	<b>1.085,-</b>	<b>1.240,-</b>	<b>1.525,-</b>	<b>1.710,-</b>	<b>1.930,-</b>

OUTDOOR UNIT		RAV-GV561ATP-E	RAV-GV801ATP-E	RAV-GV1101ATP-E	RAV-GV1401ATP-E	RAV-GV1601ATP-E
Sound pressure level (low/med/high)	dB(A)	46	48	53	54	56
Sound pressure level (low/med/high)	dB(A)	48	51	55	57	57
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5	5	5
Pipe length (max.)	m	20	20	30	30	30
Height difference (max.)	m	20	20	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32	R32	R32
Refrigerant charge	kg	-	-	-	-	-
Dimensions (HxWxD)	mm	550 x 780 x 290	550 x 780 x 290	630 x 800 x 300	710 x 900 x 320	890 x 900 x 320
Weight	kg	-	-	-	-	-
<b>Price</b>	<b>€</b>	<b>1.370,-</b>	<b>1.780,-</b>	<b>2.270,-</b>	<b>2.575,-</b>	<b>3.350,-</b>

All optional control options can be found from page 90.

## Digital Inverter CLASSIC – 4-Way Standard Cassette – 3-phase

INDOOR UNIT		RAV-HM1101UTP-E RAV-GV1101AT8P-E	RAV-HM1401UTP-E RAV-GV1401AT8P-E	RAV-HM1601UTP-E RAV-GV1601AT8P-E
Cooling capacity	kW	9,50	12,10	13,00
Cooling range (min.-max.)	kW	-	-	-
Power consumption (min./nom./max.)	kW	-	-	-
Energy efficiency EER	W/W	3,02	2,61	2,41
Energy efficiency SEER		6,00	5,10	5,90
Energy efficiency class		A+	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	10,00	12,30	13,50
Heating range (min.-max.)	kW	-	-	-
Power consumption (min./nom./max.)	kW	-	-	-
Energy efficiency COP	W/W	3,08	3,24	3,65
Energy efficiency SCOP		4,00	3,90	4,20
Energy efficiency class		A+	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-15 / +15
Power supply	V/Ph+N/Hz	380-415/3+N/50	380-415/3+N/50	380-415/3+N/50
Recommended fusing	A	3x 16	3x 16	3x 16
<b>Set price incl. RBC-AMTU31-E + RBC-U32PGP-E</b>	<b>€</b>	<b>4.655,-</b>	<b>5.045,-</b>	<b>6.335,-</b>

INDOOR UNIT		RAV-HM1101UTP-E	RAV-HM1401UTP-E	RAV-HM1601UTP-E
Airflow	m³/h	1170/1440/2010	1230/1440/2100	1260/1500/2130
Sound pressure level (low/med/high)	dB(A)	33/38/43	34/38/44	36/40/45
Sound pressure level (low/med/high)	dB(A)	33/38/43	34/38/44	36/40/45
Dimensions (HxWxD)	mm	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
Weight	kg	24	24	24
Panel dimensions (HxWxD)	mm	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950
Panel weight	kg	4,2	4,2	4,2
<b>Price</b>	<b>€</b>	<b>1.525,-</b>	<b>1.710,-</b>	<b>1.930,-</b>

OUTDOOR UNIT		RAV-GV1101AT8P-E	RAV-GV1401AT8P-E	RAV-GV1601AT8P-E
Sound pressure level (low/med/high)	dB(A)	53	54	56
Sound pressure level (low/med/high)	dB(A)	55	57	57
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5
Pipe length (max.)	m	30	30	30
Height difference (max.)	m	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32
Refrigerant charge	kg	-	-	-
Dimensions (HxWxD)	mm	710 x 900 x 320	710 x 900 x 320	890 x 900 x 320
Weight	kg	-	-	-
<b>Price</b>	<b>€</b>	<b>2.625,-</b>	<b>2.830,-</b>	<b>3.900,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
<b>RBC-U32PGP-E</b>	Panel for wide airflow (SMMS-u)	365,-
<b>RBC-U33P-E</b>	FLAT Panel - pure white, for 4-way standard cassette (from summer 2022)	365,-
<b>RBC-AMTU31-E</b>	Standard Wired Remote Control	140,-
<b>RBC-AXU31U-E</b>	Infrared remote control + receiver kit for installation in 4-way standard cassette	300,-
<b>RBC-AXU33UP-E</b>	Infrared remote control + receiver kit for installation in FLAT Panel 4-way standard cassette (from summer 2022)	220,-
<b>TCB-FF101URE2</b>	Spigot flange for fresh air connection Ø 100 mm	75,-
<b>TCB-PLFC1UPE</b>	PM 2.5 Filterset (before dustfilter), compatible to RBC-U32PGP-E and RBC-U31PGP(W)-E	20,-
<b>TCB-SIR33UP-E</b>	Occupancy sensor kit for installation in FLAT Panel (from summer 2022)	125,-
<b>TCB-EAPC1UHP-E</b>	PURE Plasmafilter kit for installation in FLAT Panel 4-way standard cassette (from summer 2022)	TBC
<b>TCB-PLFC1UPE</b>	PM 2.5 Filterset (before dustfilter), compatible to RBC-U32PGP-E and RBC-U31PGP(W)-E	20,-

All optional control options can be found from page 90.



**Digital Inverter CLASSIC 1-phase from SUMMER 2022 and Digital Inverter CLASSIC 3-phase from AUTUMN 2022 available.**

# Slim Duct unit

- Smallest installation height of only 210 mm
- Efficiency up to A<sup>++</sup>, air filter integrated
- Condensate pump integrated (850 mm); prepared for external fresh air supply



INDOOR UNIT OUTDOOR UNIT	RAV-RM301SDT-E* RAV-GM301ATP-E	RAV-RM401SDT-E* RAV-GM401ATP-E	RAV-RM561SDT-E* RAV-GM561ATP-E	RAV-RM561SDT-E* RAV-GP561ATW-E
Cooling capacity	kW	2,50	3,60	5,00
Cooling range (min.-max.)	kW	0,90 - 3,00	0,90 - 4,00	1,50 - 5,60
Power consumption (min./nom./max.)	kW	0,25/0,56/0,82	0,18/0,93/2,00	0,32/1,91/2,75
Energy efficiency EER	W/W	4,46	3,87	2,62
Energy efficiency SEER		6,29	5,86	5,14
Energy efficiency class		A++	A+	A+
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	3,40	4,00	5,30
Heating range (min.-max.)	kW	0,80 - 4,50	0,80 - 5,00	1,50 - 6,30
Power consumption (min./nom./max.)	kW	0,17/0,86/1,40	0,14/0,97/1,70	0,32/1,50/2,40
Energy efficiency COP	W/W	3,95	4,12	3,53
Energy efficiency SCOP		4,60	4,01	4,16
Energy efficiency class		A++	A+	A+
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-27 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	10	10	16
<b>Set price incl. RBC-AMTU31-E</b>	<b>€</b>	<b>2.590,-</b>	<b>2.885,-</b>	<b>3.110,-</b>
<b>RAV-RM561SDT-E*</b>			<b>3.110,-</b>	<b>3.540,-</b>

INDOOR UNIT	RAV-RM301SDT-E*	RAV-RM401SDT-E*	RAV-RM561SDT-E*	RAV-RM561SDT-E*
Airflow	m <sup>3</sup> /h	480/560/660	522/600/690	582/678/780
External static pressure	Pa	5 - 45	5 - 45	4 - 44
Sound pressure level (low/med/high)	dB(A)	33/36/39	33/36/39	36/40/45
Sound pressure level (low/med/high)	dB(A)	33/36/39	33/36/39	36/40/45
Dimensions (HxWxD)	mm	210 x 845 x 645	210 x 845 x 645	210 x 845 x 645
Weight	kg	22	22	22
<b>Price</b>	<b>€</b>	<b>1.305,-</b>	<b>1.340,-</b>	<b>1.375,-</b>
<b>RAV-RM561SDT-E*</b>			<b>1.375,-</b>	<b>1.375,-</b>

OUTDOOR UNIT	RAV-GM301ATP-E	RAV-GM401ATP-E	RAV-GM561ATP-E	RAV-GP561ATW-E
Sound pressure level (low/med/high)	dB(A)	46	49	46
Sound pressure level (low/med/high)	dB(A)	47	50	48
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	12,7 (½)	12,7 (½)
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	6,4 (¼)
Pipe length (min.)	m	2	2	5
Pipe length (max.)	m	20	20	50
Height difference (max.)	m	10	10	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32
Refrigerant charge	kg	0,6	0,9	0,9
Dimensions (HxWxD)	mm	550 x 780 x 290	550 x 780 x 290	630 x 799 x 299
Weight	kg	29	34	40
<b>Price</b>	<b>€</b>	<b>1.145,-</b>	<b>1.405,-</b>	<b>2.025,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
RBC-AMTU31-E	Standard Wired Remote Control	140,-
RBC-AXU31-E	Infrared remote control with external receiver kit for all indoor units	425,-
TCB-FF101URE2	Spigot flange for fresh air connection Ø 100 mm	75,-

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

# Standard duct unit

- Low installation height of only 275 mm
- External static pressure up to 120 Pa, air filter integrated
- Condensate pump integrated (850 mm); prepared for external fresh air supply



## Digital Inverter – Standard duct unit – 1-phase

INDOOR UNIT OUTDOOR UNIT		RAV-RM561BTP-E* RAV-GM561ATP-E	RAV-RM801BTP-E* RAV-GM801ATP-E	RAV-GM901BTP-E* RAV-GM901ATP-E	RAV-RM1101BTP-E* RAV-GM1101ATP-E	RAV-RM1401BTP-E* RAV-GM1401ATP-E	RAV-RM1601BTP-E* RAV-GM1601ATP-E
Cooling capacity	kW	5,00	6,70	8,00	9,50	12,10	14,00
Cooling range (min.-max.)	kW	1,50 - 5,60	1,50 - 7,40	1,90 - 8,80	3,00 - 11,20	3,00 - 13,20	3,00 - 16,00
Power consumption (min./nom./max.)	kW	0,31/1,83/2,05	0,31/2,38/2,76	-	0,60/2,99/4,50	0,60/4,42/4,71	5,13
Energy efficiency EER	W/W	2,73	2,82	3,00	3,18	2,74	2,73
Energy efficiency SEER		5,28	5,20	6,10	5,28	5,36	5,30
Energy efficiency class		A	A	A++	A	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15/+46	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	5,30	7,70	9,00	11,20	13,00	16,00
Heating range (min.-max.)	kW	1,50 - 6,30	1,50 - 9,00	1,6 - 9,90	3,00 - 13,00	3,00 - 16,00	3,00 - 18,00
Power consumption (min./nom./max.)	kW	0,31/1,62/2,47	0,31/2,32/3,18	-	0,60/2,99/4,00	0,60/3,60/4,55	4,69
Energy efficiency COP	W/W	3,27	3,32	3,40	3,75	3,61	3,41
Energy efficiency SCOP		4,08	4,13	4,60	4,19	4,19	3,90
Energy efficiency class		A+	A+	A++	A+	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-15/+15	-15 / +15	-15 / +15	-15 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	16	16	-	25	25	-
<b>Set price incl. RBC-AMTU31-E</b>	<b>€</b>	<b>2.955,-</b>	<b>3.570,-</b>	<b>3.995,-</b>	<b>4.535,-</b>	<b>4.805,-</b>	<b>5.940,-</b>
INDOOR UNIT		RAV-RM561BTP-E*	RAV-RM801BTP-E*	RAV-GM901BTP-E*	RAV-RM1101BTP-E*	RAV-RM1401BTP-E*	RAV-RM1601BTP-E*
Airflow	m³/h	480/630/800	720/930/1200	1000/1700	1260/1650/2100	1260/1650/2100	1500/1740/2100
External static pressure	Pa	30/120	30/120	50 - 120	30/120	30/120	50/120
Sound pressure level (low/med/high)	dB(A)	25/29/33	26/30/34	30/33/37	33/36/40	33/36/40	33/36/40
Sound pressure level (low/med/high)	dB(A)	25/29/33	26/30/34	30/33/37	33/36/40	33/36/40	33/36/40
Dimensions (HxWxD)	mm	275 x 700 x 750	275 x 1000 x 750	275 x 1400 x 750	275 x 1400 x 750	275 x 1400 x 750	275 x 1400 x 750
Weight	kg	23	30	40	40	40	40
<b>Price</b>	<b>€</b>	<b>1.220,-</b>	<b>1.385,-</b>	<b>1.600,-</b>	<b>1.710,-</b>	<b>1.765,-</b>	<b>1.915,-</b>
OUTDOOR UNIT		RAV-GM561ATP-E	RAV-GM801ATP-E	RAV-GM901ATP-E	RAV-GM1101ATP-E	RAV-GM1401ATP-E	RAV-GM1601ATP-E
Sound pressure level (low/med/high)	dB(A)	46	48	51	54	55	53
Sound pressure level (low/med/high)	dB(A)	48	52	55	57	57	55
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,9 (5/8)	15,9 (¾)	15,9 (¾)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5	5	5	5
Pipe length (max.)	m	30	30	50	50	50	50
Height difference (max.)	m	30	30	30	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	0,9	1,3	-	2,1	2,1	2,40
Dimensions (HxWxD)	mm	550 x 780 x 290	550 x 780 x 290	600 x 800 x 300	890 x 900 x 320	890 x 900 x 320	1340 x 900 x 320
Weight	kg	40	44	47	68	68	95
<b>Price</b>	<b>€</b>	<b>1.595,-</b>	<b>2.045,-</b>	<b>2.255,-</b>	<b>2.685,-</b>	<b>2.900,-</b>	<b>3.885,-</b>

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

## Digital Inverter – Standard duct unit – 3-phase

INDOOR UNIT OUTDOOR UNIT		RAV-RM1101BTP-E* RAV-GM1101AT8P-E	RAV-RM1401BTP-E* RAV-GM1401AT8P-E	RAV-RM1601BTP-E* RAV-GM1601AT8P-E
Cooling capacity	kW	9,50	12,10	14,00
Cooling range (min.-max.)	kW	3,00 - 11,20	3,00 - 13,20	3,00 - 16,00
Power consumption (min./nom./max.)	kW	0,60/2,99/4,50	0,60/4,42/4,71	5,13
Energy efficiency EER	W/W	3,18	2,74	2,73
Energy efficiency SEER		5,28	5,36	5,30
Energy efficiency class		A	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	11,20	13,00	16,00
Heating range (min.-max.)	kW	3,00 - 13,00	3,00 - 16,00	3,00 - 18,00
Power consumption (min./nom./max.)	kW	0,60/2,99/4,00	0,60/3,60/4,55	4,69
Energy efficiency COP	W/W	3,75	3,61	3,41
Energy efficiency SCOP		4,19	4,19	3,90
Energy efficiency class		A+	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-15 / +15
Power supply	V/Ph+N/Hz	380-415/3+N/50	380-415/3+N/50	380-415/3+N/50
Recommended fusing	A	3x 16	3x 16	3x 16
<b>Set price incl. RBC-AMTU31-E</b>	<b>€</b>	<b>4.775,-</b>	<b>5.035,-</b>	<b>6.500,-</b>

INDOOR UNIT		RAV-RM1101BTP-E*	RAV-RM1401BTP-E*	RAV-RM1601BTP-E*
Airflow	m³/h	1260/1650/2100	1260/1650/2100	1500/1740/2100
External static pressure	Pa	30/120	30/120	50/120
Sound pressure level (low/med/high)	dB(A)	33/36/40	33/36/40	33/36/40
Sound pressure level (low/med/high)	dB(A)	33/36/40	33/36/40	33/36/40
Dimensions (HxWxD)	mm	275 x 1400 x 750	275 x 1400 x 750	275 x 1400 x 750
Weight	kg	40	40	40
<b>Price</b>	<b>€</b>	<b>1.710,-</b>	<b>1.765,-</b>	<b>1.915,-</b>

OUTDOOR UNIT		RAV-GM1101AT8P-E	RAV-GM1401AT8P-E	RAV-GM1601AT8P-E
Sound pressure level (low/med/high)	dB(A)	54	55	53
Sound pressure level (low/med/high)	dB(A)	57	57	55
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5
Pipe length (max.)	m	50	50	50
Height difference (max.)	m	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32
Refrigerant charge	kg	2,1	2,1	2,40
Dimensions (HxWxD)	mm	890 x 900 x 320	890 x 900 x 320	1340 x 900 x 320
Weight	kg	69	69	94
<b>Price</b>	<b>€</b>	<b>2.925,-</b>	<b>3.130,-</b>	<b>4.445,-</b>

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

## Super Digital Inverter – Standard duct unit – 1-phase

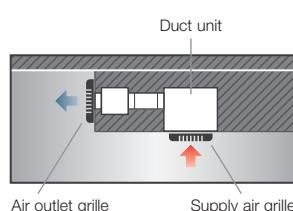
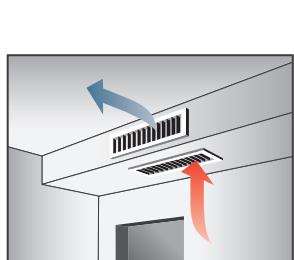
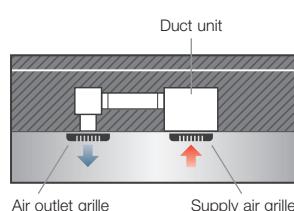
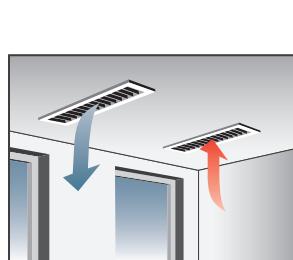
INDOOR UNIT OUTDOOR UNIT	RAV-RM561BTP-E* RAV-GP561ATW-E	RAV-RM801BTP-E* RAV-GP801ATW-E	RAV-RM1101BTP-E* RAV-GP1101AT-E	RAV-RM1401BTP-E* RAV-GP1401AT-E
Cooling capacity	kW	5,00	7,10	10,00
Cooling range (min.-max.)	kW	1,20 - 5,60	-	3,10 - 12,00
Power consumption (min./nom./max.)	kW	0,19/1,52/1,99	-	0,65/2,40/3,63
Energy efficiency EER	W/W	3,29	-	4,17
Energy efficiency SEER		5,60	-	6,60
Energy efficiency class		A+	-	A++
Outdoor temperature operating range (min.-max.)	°C	-15 / +52	-15 / +52	-15 / +52
Heating capacity	kW	5,60	8,00	11,20
Heating range (min.-max.)	kW	0,9 - 7,40	-	2,60 - 13,00
Power consumption (min./nom./max.)	kW	0,16/1,61/2,76	-	0,47/2,73/3,38
Energy efficiency COP	W/W	3,48	-	4,10
Energy efficiency SCOP		4,24	-	4,24
Energy efficiency class		A+	-	A+
Outdoor temperature operating range (min.-max.)	°C	-27 / +15	-27 / +15	-27 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	16	16	25
<b>Set price incl. RBC-AMTU31-E</b>	<b>€</b>	<b>3.385,-</b>	<b>4.140,-</b>	<b>5.745,-</b>
<b>6.205,-</b>				

INDOOR UNIT	RAV-RM561BTP-E*	RAV-RM801BTP-E*	RAV-RM1101BTP-E*	RAV-RM1401BTP-E*
Airflow	m³/h	540/660/800	-	1500/1740/2100
External static pressure	Pa	30/120	-	50/120
Sound pressure level (low/med/high)	dB(A)	25/29/33	-	33/36/40
Sound pressure level (low/med/high)	dB(A)	25/29/33	-	33/36/40
Dimensions (HxWxD)	mm	275 x 700 x 750	275 x 1000 x 750	275 x 1400 x 750
Weight	kg	23	-	40
<b>Price</b>	<b>€</b>	<b>1.220,-</b>	<b>1.385,-</b>	<b>1.710,-</b>
				<b>1.765,-</b>

OUTDOOR UNIT	RAV-GP561ATW-E	RAV-GP801ATW-E	RAV-GP1101AT-E	RAV-GP1401AT-E
Sound pressure level (low/med/high)	dB(A)	46	46	49
Sound pressure level (low/med/high)	dB(A)	48	48	50
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,9 (¾)
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5
Pipe length (max.)	m	50	50	75
Height difference (max.)	m	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32
Refrigerant charge	kg	1,35	1,3	3,10
Dimensions (HxWxD)	mm	630 x 799 x 299	1050 x 1010 x 370	1550 x 1010 x 370
Weight	kg	45	74	104
<b>Price</b>	<b>€</b>	<b>2.025,-</b>	<b>2.615,-</b>	<b>3.895,-</b>
				<b>4.300,-</b>

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.



In an existing false ceiling, the room air is drawn in at the bottom of the air conditioning unit, conditioned and then blown back into the room via air ducts and a diffuser.

If no false ceiling is available, a lowered ceiling on only one side of the room can be used to achieve almost invisible air conditioning.

## Super Digital Inverter – Standard duct unit – 3-phase

INDOOR UNIT OUTDOOR UNIT	RAV-RM1101BTP-E* RAV-GP1101AT8-E	RAV-RM1401BTP-E* RAV-GP1401AT8-E	RAV-RM1601BTP-E* RAV-GP1601AT8-E
Cooling capacity	kW	10,00	12,50
Cooling range (min.-max.)	kW	2,60 - 12,00	2,60 - 14,00
Power consumption (min./nom./max.)	kW	0,66/2,58/4,01	0,66/3,81/4,89
Energy efficiency EER	W/W	3,87	3,28
Energy efficiency SEER		5,70	5,48
Energy efficiency class		A+	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46
Heating capacity	kW	11,20	14,00
Heating range (min.-max.)	kW	2,40 - 15,60	2,40 - 18,00
Power consumption (min./nom./max.)	kW	0,53/2,76/4,42	0,53/3,66/5,71
Energy efficiency COP	W/W	4,06	3,83
Energy efficiency SCOP		4,14	3,94
Energy efficiency class		A+	-
Outdoor temperature operating range (min.-max.)	°C	-20/ +15	-20/ +15
Power supply	V/Ph+N/Hz	380-415/3+N/50	380-415/3+N/50
Recommended fusing	A	3x 16	3x 16
<b>Set price incl. RBC-AMTU31-E</b>	<b>€</b>	<b>5.660,-</b>	<b>5.895,-</b>

INDOOR UNIT	RAV-RM1101BTP-E*	RAV-RM1401BTP-E*	RAV-RM1601BTP-E*
Airflow	m³/h	1260/1740/2100	1260/1740/2100
External static pressure	Pa	30/120	30/120
Sound pressure level (low/med/high)	dB(A)	33/36/40	33/36/40
Sound pressure level (low/med/high)	dB(A)	33/36/40	33/36/40
Dimensions (HxWxD)	mm	275 x 1400 x 750	275 x 1400 x 750
Weight	kg	40	40
<b>Price</b>	<b>€</b>	<b>1.710,-</b>	<b>1.765,-</b>

OUTDOOR UNIT	RAV-GP1101AT8-E	RAV-GP1401AT8-E	RAV-GP1601AT8-E
Sound pressure level (low/med/high)	dB(A)	49	51
Sound pressure level (low/med/high)	dB(A)	50	51
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5
Pipe length (max.)	m	75	75
Height difference (max.)	m	30	30
Compressor type		Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32
Refrigerant charge	kg	2,60	2,60
Dimensions (HxWxD)	mm	1340 x 900 x 320	1340 x 900 x 320
Weight	kg	95	95
<b>Price</b>	<b>€</b>	<b>3.810,-</b>	<b>3.990,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
<b>RBC-AMTU31-E</b>	Standard Wired Remote Control	140,-
<b>TCB-AX32E2</b>	Infrared remote control with external receiver kit for all indoor units	370,-
<b>TCB-SF56C6BPE</b>	Connection flange (2 x Ø 200 mm) RAV: Size 5 / VRF: Sizes 5 to 18	155,-
<b>TCB-SF80C6BPE</b>	Connection flange (3 x Ø 200 mm) RAV: Size 8 / VRF: Sizes 24 to 30	185,-
<b>TCB-SF160C6BPE</b>	Connection flange (4 x Ø 200 mm) RAV: Sizes 11 to 16 / VRF: Sizes 36 to 56	235,-
<b>TCB-FF101URE2</b>	Spigot flange for fresh air connection Ø 100 mm	75,-

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

# Standard duct unit

- Combination with CLASSIC outdoor unit
- Low installation height of only 275 mm
- External static pressure up to 120 Pa, air filter integrated
- Condensate pump integrated (850 mm); prepared for external fresh air supply



## Digital Inverter CLASSIC – Standard duct unit – 1-phase

INDOOR UNIT OUTDOOR UNIT		RAV-HM561BTP-E RAV-GV561ATP-E	RAV-HM801BTP-E RAV-GV801ATP-E	RAV-HM1101BTP-E RAV-GV1101ATP-E	RAV-HM1401BTP-E RAV-GV1401ATP-E	RAV-HM1601BTP-E RAV-GV1601ATP-E
Cooling capacity	kW	5,00	6,70	9,50	12,10	13,00
Cooling range (min.-max.)	kW	-	-	-	-	-
Power consumption (min./nom./max.)	kW	-	-	-	-	-
Energy efficiency EER	W/W	-	3,00	3,00	2,60	2,40
Energy efficiency SEER		-	5,10	5,10	5,10	5,90
Energy efficiency class		-	A	A	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	5,30	7,00	10,00	12,30	13,50
Heating range (min.-max.)	kW	-	-	-	-	-
Power consumption (min./nom./max.)	kW	-	-	-	-	-
Energy efficiency COP	W/W	-	3,30	3,30	3,20	3,70
Energy efficiency SCOP		-	4,00	3,80	3,80	4,20
Energy efficiency class		-	A+	A	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-15 / +15	-15 / +15	-15 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	16	16	25	25	25
<b>Set price incl. RBC-AMTU31-E</b>	<b>€</b>	<b>2.730,-</b>	<b>3.305,-</b>	<b>4.120,-</b>	<b>4.480,-</b>	<b>5.405,-</b>
INDOOR UNIT		RAV-HM561BTP-E	RAV-HM801BTP-E	RAV-HM1101BTP-E	RAV-HM1401BTP-E	RAV-HM1601BTP-E
Airflow	m³/h	480/630/800	720/930/1200	1260/1650/2100	1260/1650/2100	1260/1650/2100
External static pressure	Pa	30/120	30/120	50/120	50/120	50/120
Sound pressure level (low/med/high)	dB(A)	25/29/33	26/30/34	33/36/40	33/36/40	33/36/40
Sound pressure level (low/med/high)	dB(A)	25/29/33	26/30/34	33/36/40	33/36/40	33/36/40
Dimensions (HxWxD)	mm	275 x 700 x 750	275 x 1000 x 750	275 x 1400 x 750	275 x 1400 x 750	275 x 1400 x 750
Weight	kg	23	30	40	40	40
<b>Price</b>	<b>€</b>	<b>1.220,-</b>	<b>1.385,-</b>	<b>1.710,-</b>	<b>1.765,-</b>	<b>1.915,-</b>
OUTDOOR UNIT		RAV-GV561ATP-E	RAV-GV801ATP-E	RAV-GV1101ATP-E	RAV-GV1401ATP-E	RAV-GV1601ATP-E
Sound pressure level (low/med/high)	dB(A)	46	48	53	54	56
Sound pressure level (low/med/high)	dB(A)	48	51	55	57	57
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,9 (¾)	15,9 (¾)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5	5	5
Pipe length (max.)	m	20	20	30	30	30
Height difference (max.)	m	20	20	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32	R32	R32
Refrigerant charge	kg	-	-	-	-	-
Dimensions (HxWxD)	mm	550 x 780 x 290	550 x 780 x 290	630 x 800 x 300	710 x 900 x 320	890 x 900 x 320
Weight	kg	-	-	-	-	-
<b>Price</b>	<b>€</b>	<b>1.370,-</b>	<b>1.780,-</b>	<b>2.270,-</b>	<b>2.575,-</b>	<b>3.350,-</b>

## Digital Inverter CLASSIC – Standard duct unit – 3-phase

INDOOR UNIT OUTDOOR UNIT	RAV-HM1101BTP-E RAV-GV1101AT8P-E	RAV-HM1401BTP-E RAV-GV1401AT8P-E	RAV-HM1601BTP-E RAV-GV1601AT8P-E
Cooling capacity	kW	9,50	12,10
Cooling range (min.-max.)	kW	-	-
Power consumption (min./nom./max.)	kW	-	-
Energy efficiency EER	W/W	3,00	2,60
Energy efficiency SEER		5,10	5,10
Energy efficiency class		A	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46
Heating capacity	kW	10,00	12,3
Heating range (min.-max.)	kW	-	-
Power consumption (min./nom./max.)	kW	-	-
Energy efficiency COP	W/W	3,30	3,20
Energy efficiency SCOP		3,80	3,80
Energy efficiency class		A	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15
Power supply	V/Ph+N/Hz	380-415/3+N/50	380-415/3+N/50
Recommended fusing	A	3x 16	3x 16
<b>Set price incl. RBC-AMTU31-E</b>	<b>€</b>	<b>4.475,-</b>	<b>4.735,-</b>
<b>5.955,-</b>			

INDOOR UNIT	RAV-HM1101BTP-E	RAV-HM1401BTP-E	RAV-HM1601BTP-E
Airflow	m³/h	1260/1650/2100	1260/1650/2100
External static pressure	Pa	50/120	50/120
Sound pressure level (low/med/high)	dB(A)	33/36/40	33/36/40
Sound pressure level (low/med/high)	dB(A)	33/36/40	33/36/40
Dimensions (HxWxD)	mm	275 x 1400 x 750	275 x 1400 x 750
Weight	kg	40	40
<b>Price</b>	<b>€</b>	<b>1.710,-</b>	<b>1.765,-</b>
			<b>1.915,-</b>

OUTDOOR UNIT	RAV-GV1101AT8P-E	RAV-GV1401AT8P-E	RAV-GV1601AT8P-E
Sound pressure level (low/med/high)	dB(A)	53	54
Sound pressure level (low/med/high)	dB(A)	55	57
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5
Pipe length (max.)	m	30	30
Height difference (max.)	m	30	30
Compressor type		Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32
Refrigerant charge	kg	-	-
Dimensions (HxWxD)	mm	710 x 900 x 320	710 x 900 x 320
Weight	kg	-	-
<b>Price</b>	<b>€</b>	<b>2.625,-</b>	<b>2.830,-</b>
			<b>3.900,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
<b>RBC-AMTU31-E</b>	Standard Wired Remote Control	<b>140,-</b>
<b>TCB-AX32E2</b>	Infrared remote control with external receiver kit for all indoor units	<b>370,-</b>
<b>TCB-SF56C6BPE</b>	Connection flange (2 x Ø 200 mm) RAV: Size 5 / VRF: Sizes 5 to 18	<b>155,-</b>
<b>TCB-SF80C6BPE</b>	Connection flange (3 x Ø 200 mm) RAV: Size 8 / VRF: Sizes 24 to 30	<b>185,-</b>
<b>TCB-SF160C6BPE</b>	Connection flange (4 x Ø 200 mm) RAV: Sizes 11 to 16 / VRF: Sizes 36 to 56	<b>235,-</b>
<b>TCB-FF101URE2</b>	Spigot flange for fresh air connection Ø 100 mm	<b>75,-</b>

All optional control options can be found from page 90.



**Digital Inverter CLASSIC 1-phase from SUMMER 2022 and Digital Inverter CLASSIC 3-phase from AUTUMN 2022 available.**

# High pressure duct unit

## Digital Inverter BIG

- For combination with Digital Inverter BIG
- Adjustable external static pressure up to 250 Pa



INDOOR UNIT OUTDOOR UNIT	RAV-RM2241DTP-E2 RAV-GM2241AT8-E1	RAV-RM2801DTP-E2 RAV-GM2801AT8-E1	
Cooling capacity	kW	19,00	22,50
Cooling range (min.-max.)	kW	4,60 - 22,40	4,60 - 27,00
Power consumption (min./nom./max.)	kW	1,27/5,86/9,05	1,27/7,98/11,87
Energy efficiency EER	W/W	3,24	2,82
Energy efficiency SEER		5,82	5,49
Energy efficiency class		-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46
Heating capacity	kW	22,40	27,00
Heating range (min.-max.)	kW	4,60 - 25,00	4,60 - 31,50
Power consumption (min./nom./max.)	kW	1,27/5,71/10,15	1,27/7,52/13,83
Energy efficiency COP	W/W	3,92	3,59
Energy efficiency SCOP		3,78	3,69
Energy efficiency class		-	-
Outdoor temperature operating range (min.-max.)	°C	-20/ +15	-20/ +15
Power supply	V/Ph+N/Hz	380-415/3+N/50	380-415/3+N/50
Recommended fusing	A	3x 20	3x 25
<b>Set price incl. RBC-AMTU31-E</b>	<b>€</b>	<b>11.730,-</b>	<b>12.650,-</b>
INDOOR UNIT	RAV-RM2241DTP-E2	RAV-RM2801DTP-E2	
Airflow	m³/h	3800	4800
External static pressure	Pa	50/150/250	50/150/250
Sound pressure level (low/med/high)	dB(A)	36/40/44	38/42/46
Sound pressure level (low/med/high)	dB(A)	36/40/44	38/42/46
Dimensions (HxWxD)	mm	448 x 1400 x 900	448 x 1400 x 900
Weight	kg	97	97
<b>Price</b>	<b>€</b>	<b>4.900,-</b>	<b>5.160,-</b>
OUTDOOR UNIT	RAV-GM2241AT8-E1	RAV-GM2801AT8-E1	
Sound pressure level (low/med/high)	dB(A)	58	61
Sound pressure level (low/med/high)	dB(A)	60	63
Suction gas pipe diameter	mm (inch)	28,6 (1 1/8)	28,6 (1 1/8)
Liquid pipe diameter	mm (inch)	12,7 (½)	12,7 (½)
Pipe length (min.)	m	5	5
Pipe length (max.)	m	60	60
Height difference (max.)	m	30	30
Compressor type		Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32
Refrigerant charge	kg	5,0	5,0
Dimensions (HxWxD)	mm	1550 x 1010 x 370	1550 x 1010 x 370
Weight	kg	142	142
<b>Price</b>	<b>€</b>	<b>6.690,-</b>	<b>7.350,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
RBC-AMTU31-E	Standard Wired Remote Control	140,-
TCB-AX32E2	Infrared remote control with external receiver kit for all indoor units	370,-
TCB-DP40DPE	Drain pump, RAV: 22 + 28 / VRF: 72 + 96	445,-
TCB-LK2801DP-E	Long Life Airfilter kit, for model sizes RAV: 22 + 28 / VRF: 72 + 96	155,-
TCB-PCUC2E	Control board for external control, alarms and messages	185,-

All optional control options can be found from page 90.

# Floor standing

- Perfect air circulation
- Plug & Play with integrated comfort remote control
- Integrated leak detection system



## Digital Inverter – Floor standing – 1-phase

INDOOR UNIT OUTDOOR UNIT		RAV-RM561FT-ES* RAV-GM561ATP-E	RAV-RM801FT-ES* RAV-GM801ATP-E	RAV-RM1101FT-ES* RAV-GM1101ATP-E	RAV-RM1401FT-ES* RAV-GM1401ATP-E	RAV-RM1601FT-ES* RAV-GM1601ATP-E
Cooling capacity	kW	5,00	6,70	9,50	12,10	14,00
Cooling range (min.-max.)	kW	1,50 - 5,60	1,50 - 7,40	3,00 - 11,20	3,00 - 13,20	3,00 - 16,00
Power consumption (min./nom./max.)	kW	-/1,79/-	-/3,18/-	-/3,06/-	-/4,71/-	-
Energy efficiency EER	W/W	2,79	2,11	3,10	2,57	-
Energy efficiency SEER		5,15	4,89	5,16	4,86	-
Energy efficiency class		A	B	A	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	5,30	7,70	11,20	13,00	16,00
Heating range (min.-max.)	kW	1,50 - 6,30	1,50 - 9,00	3,00 - 13,00	3,00 - 16,00	3,00 - 18,00
Power consumption (min./nom./max.)	kW	-/1,72/-	-/3,20/-	-/3,19/-	-/4,01/-	-
Energy efficiency COP	W/W	3,08	2,41	3,51	3,24	-
Energy efficiency SCOP		4,00	3,81	3,92	3,90	-
Energy efficiency class		A+	A	A	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-15 / +15	-15 / +15	-15 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	16	16	25	25	-
<b>Set price</b>	<b>€</b>	<b>4.105,-</b>	<b>4.690,-</b>	<b>5.600,-</b>	<b>5.875,-</b>	<b>6.910,-</b>

INDOOR UNIT		RAV-RM561FT-ES*	RAV-RM801FT-ES*	RAV-RM1101FT-ES*	RAV-RM1401FT-ES*	RAV-RM1601FT-ES*
Airflow	m³/h	600/820	640/930	1190/1660	1350/1760	1350/1760
Sound pressure level (low/med/high)	dB(A)	38/42/46	41/45/50	41/46/51	45/48/53	45/48/53
Sound pressure level (low/med/high)	dB(A)	38/42/46	41/45/50	41/46/51	45/48/53	45/48/53
Dimensions (HxWxD)	mm	1750 x 600 x 210	1750 x 600 x 210	1750 x 600 x 390	1750 x 600 x 390	1750 x 600 x 390
Weight	kg	44	45	59	59	59
<b>Price</b>	<b>€</b>	<b>2.510,-</b>	<b>2.645,-</b>	<b>2.915,-</b>	<b>2.975,-</b>	<b>3.025,-</b>

OUTDOOR UNIT		RAV-GM561ATP-E	RAV-GM801ATP-E	RAV-GM1101ATP-E	RAV-GM1401ATP-E	RAV-GM1601ATP-E
Sound pressure level (low/med/high)	dB(A)	46	48	54	55	53
Sound pressure level (low/med/high)	dB(A)	48	52	57	57	55
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,9 (¾)	15,9 (¾)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5	5	5
Pipe length (max.)	m	30	30	50	50	50
Height difference (max.)	m	30	30	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32	R32	R32
Refrigerant charge	kg	0,9	1,3	2,1	2,1	2,40
Dimensions (HxWxD)	mm	550 x 780 x 290	550 x 780 x 290	890 x 900 x 320	890 x 900 x 320	1340 x 900 x 320
Weight	kg	40	44	68	68	95
<b>Price</b>	<b>€</b>	<b>1.595,-</b>	<b>2.045,-</b>	<b>2.685,-</b>	<b>2.900,-</b>	<b>3.885,-</b>

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

RAV-HM\*\*\*\*\* indoor units without integrated comfort remote control.

## Digital Inverter – Floor standing – 3-phase

INDOOR UNIT OUTDOOR UNIT		RAV-RM1101FT-ES* RAV-GM1101AT8P-E	RAV-RM1401FT-ES* RAV-GM1401AT8P-E	RAV-RM1601FT-ES* RAV-GM1601AT8P-E
Cooling capacity	kW	9,50	12,10	14,00
Cooling range (min.-max.)	kW	3,00 - 11,20	3,00 - 13,20	3,00 - 16,00
Power consumption (min./nom./max.)	kW	- / 3,06 / -	- / 4,71 / -	-
Energy efficiency EER	W/W	3,10	2,57	-
Energy efficiency SEER		5,16	4,86	-
Energy efficiency class		A	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	11,20	13,00	16,00
Heating range (min.-max.)	kW	3,00 - 13,00	3,00 - 16,00	3,00 - 18,00
Power consumption (min./nom./max.)	kW	- / 3,19 / -	- / 4,01 / -	-
Energy efficiency COP	W/W	3,51	3,24	-
Energy efficiency SCOP		3,92	3,90	-
Energy efficiency class		A	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +15	-15 / +15	-15 / +15
Power supply	V/Ph+N/Hz	380-415/3+N/50	380-415/3+N/50	380-415/3+N/50
Recommended fusing	A	3x 16	3x 16	3x 16
<b>Set price</b>	<b>€</b>	<b>5.840,-</b>	<b>6.105,-</b>	<b>7.470,-</b>

INDOOR UNIT		RAV-RM1101FT-ES*	RAV-RM1401FT-ES*	RAV-RM1601FT-ES*
Airflow	m³/h	1190/1660	1350/1760	1350/1760
Sound pressure level (low/med/high)	dB(A)	41/46/51	45/48/53	45/48/53
Sound pressure level (low/med/high)	dB(A)	41/46/51	45/48/53	45/48/53
Dimensions (HxWxD)	mm	1750 x 600 x 390	1750 x 600 x 390	1750 x 600 x 390
Weight	kg	59	59	59
<b>Price</b>	<b>€</b>	<b>2.915,-</b>	<b>2.975,-</b>	<b>3.025,-</b>

OUTDOOR UNIT		RAV-GM1101AT8P-E	RAV-GM1401AT8P-E	RAV-GM1601AT8P-E
Sound pressure level (low/med/high)	dB(A)	54	55	53
Sound pressure level (low/med/high)	dB(A)	57	57	55
Suction gas pipe diameter	mm (inch)	15,9 (3/4)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5
Pipe length (max.)	m	50	50	50
Height difference (max.)	m	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32
Refrigerant charge	kg	2,1	2,1	2,40
Dimensions (HxWxD)	mm	890 x 900 x 320	890 x 900 x 320	1340 x 900 x 320
Weight	kg	68	69	94
<b>Price</b>	<b>€</b>	<b>2.925,-</b>	<b>3.130,-</b>	<b>4.445,-</b>

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

## Super Digital Inverter – Floor standing

INDOOR UNIT OUTDOOR UNIT		RAV-RM561FT-ES*	RAV-RM801FT-ES*	RAV-RM1101FT-ES*	RAV-RM1401FT-ES*	RAV-RM1101FT-ES*	RAV-RM1401FT-ES*	RAV-RM1601FT-ES*
		RAV-GP561ATW-E	RAV-GP801ATW-E	RAV-GP1101AT-E	RAV-GP1401AT-E1	RAV-GP1101AT8-E	RAV-GP1401AT8-E	RAV-GP1601AT8-E
Cooling capacity	kW	5,00	7,10	10,00	12,50	10,00	12,50	14,00
Cooling range (min.-max.)	kW	1,20 - 5,60	-	3,10 - 12,00	3,10 - 14,00	2,60 - 12,00	2,60 - 14,00	2,60 - 16,00
Power consumption (min./nom./max.)	kW	1,42/-	-	2,39/-	3,52/-	2,46/4,10	3,61/4,91	4,39/6,50
Energy efficiency EER	W/W	3,51	-	4,18	3,55	4,07	3,46	3,19
Energy efficiency SEER		5,75	-	6,67	6,10	5,86	5,65	5,55
Energy efficiency class		A+	-	A++	-	A+	-	-
Outdoor temperature operating range (min.-max.)	°C	-15 / +52	-15 / +52	-15 / +52	-15 / +52	-15 / +46	-15 / +46	-15 / +46
Heating capacity	kW	5,60	8,00	8,00	11,20	12,50	14,00	16,00
Heating range (min.-max.)	kW	0,90 - 7,00	-	2,60 - 13,00	2,60 - 16,50	2,40 - 14,00	2,40 - 18,00	2,40 - 19,00
Power consumption (min./nom./max.)	kW	1,65/-	-	2,76/-	3,97/-	3,09/4,80	3,81/5,95	4,83/6,96
Energy efficiency COP	W/W	3,39	-	4,06	3,53	4,04	3,67	3,31
Energy efficiency SCOP		4,20	-	4,37	4,35	4,00	4,00	3,96
Energy efficiency class		A+	-	A+	-	A+	-	-
Outdoor temperature operating range (min.-max.)	°C	-27 / +15	-27 / +15	-27 / +15	-27 / +15	-20/ +15	-20/ +15	-20/ +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3+N/50	380-415/3+N/50	380-415/3+N/50
Recommended fusing	A	16	16	25	25	3x 16	3x 16	3x 16
<b>Set price</b>	<b>€</b>	<b>4.535,-</b>	<b>5.260,-</b>	<b>6.810,-</b>	<b>7.275,-</b>	<b>6.725,-</b>	<b>6.965,-</b>	<b>7.565,-</b>

INDOOR UNIT		RAV-RM561FT-ES*	RAV-RM801FT-ES*	RAV-RM1101FT-ES*	RAV-RM1401FT-ES*	RAV-RM1101FT-ES*	RAV-RM1401FT-ES*	RAV-RM1601FT-ES*
		RAV-GP561ATW-E	RAV-GP801ATW-E	RAV-GP1101AT-E	RAV-GP1401AT-E1	RAV-GP1101AT8-E	RAV-GP1401AT8-E	RAV-GP1601AT8-E
Airflow	m³/h	600/820	-	1190/1660	1350/1760	1190/1660	1350/1760	1350/1760
Sound pressure level (low/med/high)	dB(A)	38/42/46	-	41/46/51	45/48/53	41/46/51	45/48/53	45/48/53
Sound pressure level (low/med/high)	dB(A)	38/42/46	-	41/46/51	45/48/53	41/46/51	45/48/53	45/48/53
Dimensions (HxWxD)	mm	1700 x 600 x 210	1750 x 600 x 210	1750 x 600 x 390				
Weight	kg	44	-	59	59	59	59	59
<b>Price</b>	<b>€</b>	<b>2.510,-</b>	<b>2.645,-</b>	<b>2.915,-</b>	<b>2.975,-</b>	<b>2.915,-</b>	<b>2.975,-</b>	<b>3.025,-</b>

OUTDOOR UNIT		RAV-GP561ATW-E	RAV-GP801ATW-E	RAV-GP1101AT-E	RAV-GP1401AT-E1	RAV-GP1101AT8-E	RAV-GP1401AT8-E	RAV-GP1601AT8-E
		RAV-GP561ATW-E	RAV-GP801ATW-E	RAV-GP1101AT-E	RAV-GP1401AT-E1	RAV-GP1101AT8-E	RAV-GP1401AT8-E	RAV-GP1601AT8-E
Sound pressure level (low/med/high)	dB(A)	46	46	49	50	49	51	51
Sound pressure level (low/med/high)	dB(A)	48	48	50	51	50	52	53
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,9 (¾)	15,9 (¾)	15,9 (¾)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5	5	5	5	5
Pipe length (max.)	m	50	50	75	75	75	75	75
Height difference (max.)	m	30	30	30	30	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R32	R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	1,35	1,3	3,10	3,10	2,60	2,60	2,60
Dimensions (HxWxD)	mm	630 x 799 x 299	1050 x 1010 x 370	1550 x 1010 x 370	1550 x 1010 x 370	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Weight	kg	45	74	104	104	95	95	95
<b>Price</b>	<b>€</b>	<b>2.025,-</b>	<b>2.615,-</b>	<b>3.895,-</b>	<b>4.300,-</b>	<b>3.810,-</b>	<b>3.990,-</b>	<b>4.540,-</b>

All optional control options can be found from page 90.

\* Indoor unit: While stocks last. Outdoor unit also compatible with new RAV-HM\*\*\*\*\* indoor units.

# DX-Kits

## INTEGRATION OF EXTERNAL HEAT EXCHANGERS

The ventilation kit enables the integration of external heat exchangers into a TOSHIBA system. It is perfect for use with central ventilation systems or air curtains. The kit is expandable for larger capacities. Wirings are ready for connection. Appropriate valve kit is required for use.

## DX-Kits exhaust air temperature control RAV-DXC010

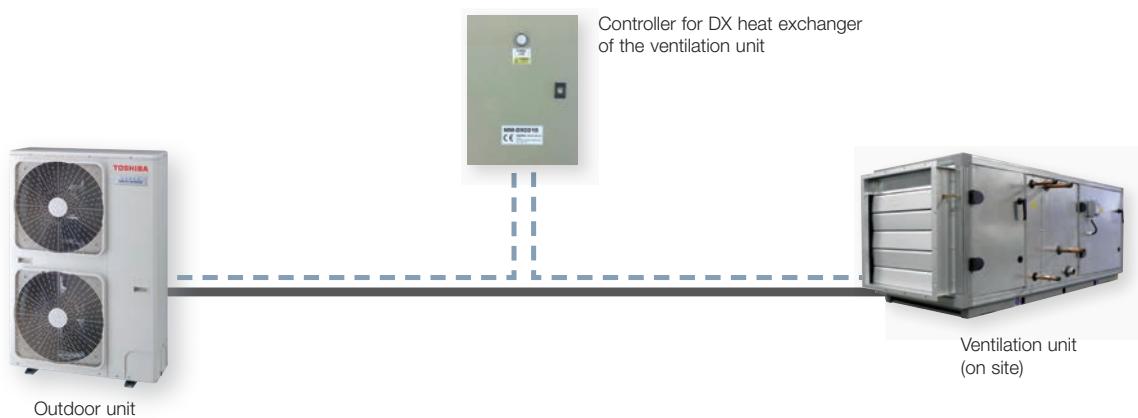
RAV DX interface for connecting a TOSHIBA heat pump to an external DX register, consisting of control cabinet and all necessary sensors.

Compatible with outdoor units of the product lines:

- Digital Inverter
- Super Digital Inverter
- Digital Inverter BIG

Supply air temperature application limits:

- Cooling mode: „Air On“ Temp.: Min. 15°C WB (18°C DB) / Max. 24°C WB (32°C DB)
- Heating mode: „Air On“ Temp.: Min. 15°C DB / Max. 28°C DB





## DX-Kit 0 – 10 V capacity control RBC-DXC031



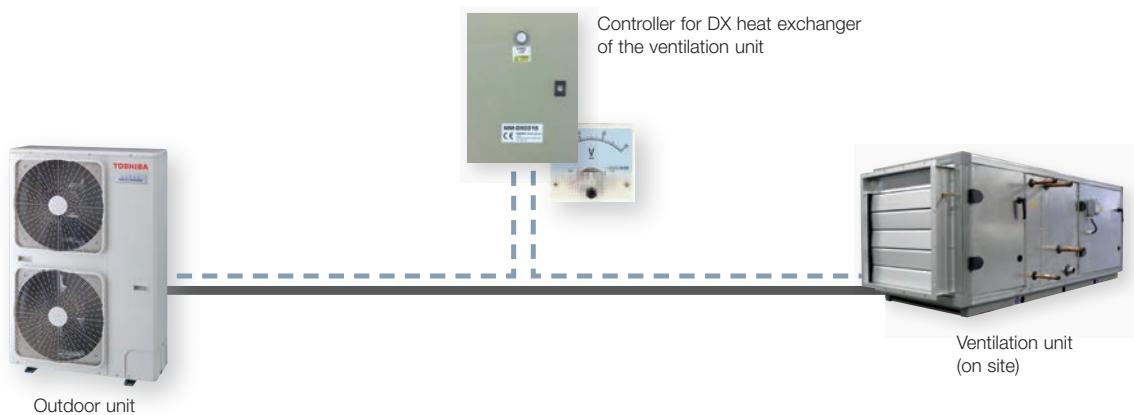
The RAV/VRF DX interface allows the capacity control of a TOSHIBA heat pump with external DX register by a 0 – 10 V signal from the existing building control system.

### Compatible with outdoor units of the product lines:

- Digital Inverter
- Super Digital Inverter
- VRF – SMMSe (only 8 & 10 PS)
- Digital Inverter BIG

### Functions

- The controller can be configured via DIP switch for RAV or VRF
- RAV systems use the pulse modulation valve built into the outdoor unit; no further accessories are required here
- No TA sensor is required at the register
- Analog input for power request (0 – 10 volt signal)
- Digital inputs for on / off, operating mode, remote control lockout, and digital outputs for error and alarm messages, defrost, fan motor, etc.



# Performance data for DX-Kits

- Direct evaporation kit with PC board, transformer and terminal strips
- Remote control required
- Can be used in conjunction with ventilation systems and air curtains
- Available in two different versions for exhaust air temperature control or 0 – 10 V control



MODEL	REFRIGERANT	COOLING CAPACITY MIN.-MAX. (kW)	HEATING CAPACITY MIN.-MAX. (kW)	AIR VOLUME STANDARD (m³/h)	VOLUME DX REGISTER (dm³)	
DI	RAV-GM301ATP-E	R32	0,90 - 3,00	0,80 - 4,50	570	0,5 - 0,7
DI	RAV-GM401ATP-E	R32	0,90 - 4,00	0,80 - 5,00	610	0,5 - 0,7
DI	RAV-GM561ATP-E	R32	1,50 - 5,60	1,50 - 6,30	900	0,8 - 1,1
SDI	RAV-GP561ATW-E	R32	1,20 - 5,60	0,90 - 7,40	900	0,8 - 1,1
DI	RAV-GM801ATP-E	R32	1,50 - 7,40	1,50 - 9,00	1320	1,0 - 1,4
SDI	RAV-GP801ATW-E	R32	1,90 - 8,00	1,30 - 11,30	1320	1,0 - 1,4
DI	RAV-GM1101ATP/AT8P-E	R32	3,00 - 11,20	3,00 - 11,20	1600	1,5 - 2,1
SDI	RAV-GP1101AT/AT8-E	R32	3,10 - 12,00	2,60 - 13,00	1600	1,5 - 2,1
DI	RAV-GM1401ATP/AT8P-E	R32	3,00 - 13,20	3,00 - 16,00	2100	1,7 - 2,7
SDI	RAV-GP1401AT-E1/AT8-E	R32	3,10 - 14,00	2,60 - 16,50	2100	1,7 - 2,7
DI	RAV-GM1601ATP-E/AT8P-E	R32	2,60 - 16,00	2,40 - 19,00	2720	1,7 - 3,2
SDI	RAV-GP1601AT8-E	R32	2,60 - 16,00	2,40 - 19,00	2720	1,7 - 3,2
DI BIG	RAV-GM2241AT8-E1	R32	9,80 - 22,40	9,80 - 25,00	3600	3,0 - 4,2
DI BIG	RAV-GM2801AT8-E1	R32	9,80 - 27,00	9,80 - 31,50	4200	3,0 - 5,4

DI: Digital Inverter SDI: Super Digital Inverter

TYPE	POWER SUPPLY	DIMENSIONS (HxWxD)	WEIGHT	PRICE €
RAV-DXC010	V/Ph+N/Hz 220-240/1N/50	mm 400 x 300 x 150	kg 8	1.295,-
RBC-DXC031	220-240/1/50	400 x 300 x 150	8	1.385,-

Supply air temperature application limits

Cooling mode: „Air ON“ Temp.: Min. 15°C WB (18°C DB) / Max. 24°C WB (32°C DB) Heating mode: „Air ON“ Temp.: Min. 15°C DB / Max. 28°C DB  
The DX heat exchanger tube volume must be designed according to the Installation Manual; +/- 10 % over/under limits are permissible.

R32 outdoor units from page 82.

## RAV Split solution for one temperature zone

- Economical multi solutions for one temperature zone
- Twin, Triple and Double Twin split combinations with up to four indoor units
- Indoor unit types must be identical for multi solutions (same design and performance)

## Branch kits for multi installations

### DIGITAL INVERTER BIG

ACCESSORIES	DESCRIPTION	PRICE €
RBC-TWP101E	Branch for twin kit - 22,40 and 28,00 kW	290,-
RBC-TRP100E	Triple kit - DI BIG: 22,40 and 28,00 kW / DI + SDI: 16,00 kW	395,-
RBC-DTWP101E	Branch for double twin kit - 22,40 and 28,00 kW	400,-

### DIGITAL INVERTER / SUPER DIGITAL INVERTER

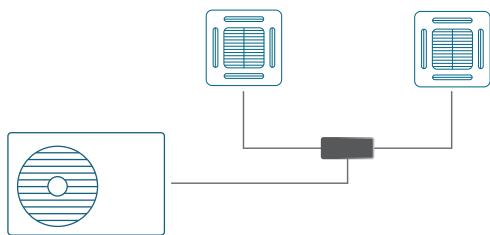
ACCESSORIES	DESCRIPTION	PRICE €
RBC-TWP30E2	Branch for twin kit - 11,20 kW	135,-
RBC-TWP50E2	Branch for twin kit - 14,00 kW	140,-
RBC-TRP100E	Triple kit - DI BIG: 22,40 and 28,00 kW / DI + SDI: 16,00 kW	395,-



Office Troyer Fliesen & Marmor GmbH Innsbruck,  
EDMUND SPARER Klima & Kältetechnik GmbH

# TWIN

Digital- / Super-Digital Inverter

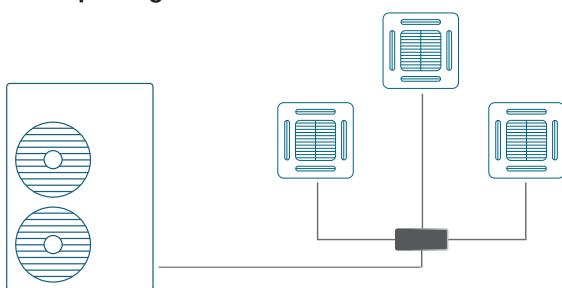


Combination possibilities (Model)\*

OUTDOOR UNIT	INDOOR UNIT	BRANCH-KIT
11,2	5,6 + 5,6	RBC-TWP30E2
14,0	8,0 + 8,0	RBC-TWP50E2

# TRIPLE

Digital- / Super-Digital Inverter

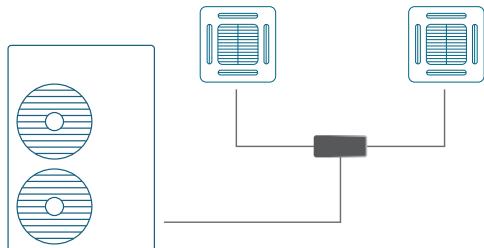


Combination possibilities (Model)\*

OUTDOOR UNIT	INDOOR UNIT	BRANCH-KIT
16	5,6 + 5,6 + 5,6	RBC-TRP100E

# TWIN

Digital Inverter BIG

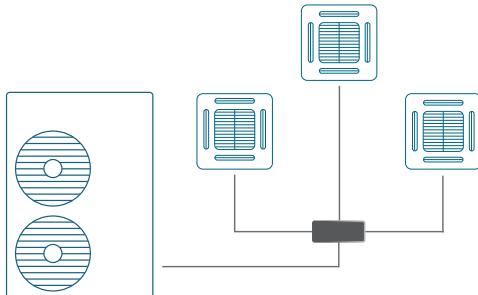


Combination possibilities (Model)\*

OUTDOOR UNIT	INDOOR UNIT	BRANCH-KIT
22,4	11,2 + 11,2	RBC-TWP101E
28,0	14,0 + 14,0	RBC-TWP101E

# TRIPLE

Digital Inverter BIG

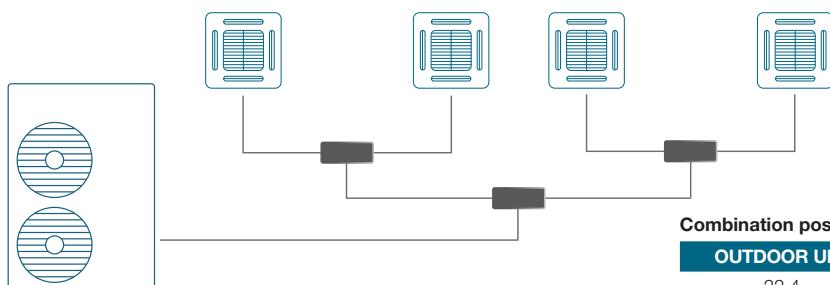


Combination possibilities (Model)\*

OUTDOOR UNIT	INDOOR UNIT	BRANCH-KIT
22,4	8,0 + 8,0 + 8,0	RBC-TRP100E
28,0	8,0 + 8,0 + 8,0	RBC-TRP100E

# DOUBLE-TWIN

Digital Inverter BIG



Combination possibilities (Model)\*

OUTDOOR UNIT	INDOOR UNIT	BRANCH-KIT
22,4	5,6 + 5,6 + 5,6 + 5,6	RBC-DTWP101E
28,0	8,0 + 8,0 + 8,0 + 8,0	RBC-DTWP101E

Excerpts – for the complete combinations, data and values, please refer to the corresponding data sheets.

# Air curtain

- Heating mode or efficient air lock for entrance areas
- Compatible with Digital & Super Digital Inverter
- Not in stock – delivery time on request
- Combinable outdoor units on request



## FREE HANGING UNIT

INDOOR UNIT		RAV-CT101CH-M	RAV-CT101CH-L	RAV-CT151CH-M	RAV-CT151CH-L	RAV-CT201CH-M	RAV-CT201CH-L	RAV-CT251CH-M	RAV-CT251CH-L
Heating capacity	kW	8,00	8,00	11,20	11,20	14,00	14,00	16,00	16,00
Airflow	m³/h	1600	2210	2400	2950	3200	4420	4000	5160
Power consumption (min./nom./max.)	kW	0,35	0,53	0,53	0,70	0,70	1,05	0,88	1,23
Sound pressure level (low/med/high)	dB(A)	54	55	55	56	56	57	57	58
Weight	kg	48	51	77	80	101	107	132	138
Dimensions (HxWxD)	mm	260 x 1210 x 490	260 x 1210 x 490	260 x 1710 x 490	260 x 1710 x 490	260 x 2210 x 490	260 x 2210 x 490	260 x 2710 x 490	260 x 2710 x 490
Price	€	<b>8.510,-</b>	<b>8.850,-</b>	<b>9.955,-</b>	<b>10.270,-</b>	<b>11.195,-</b>	<b>12.600,-</b>	<b>12.645,-</b>	<b>13.885,-</b>



## CASSETTE UNIT

INDOOR UNIT		RAV-CT101UH-M	RAV-CT101UH-L	RAV-CT151UH-M	RAV-CT151UH-L	RAV-CT201UH-M	RAV-CT201UH-L	RAV-CT251UH-M	RAV-CT251UH-L
Heating capacity	kW	8,00	8,00	11,20	11,20	14,00	14,00	16,00	16,00
Airflow	m³/h	1600	2210	2400	2950	3200	4420	4000	5160
Power consumption (min./nom./max.)	kW	0,35	0,53	0,53	0,70	0,70	1,05	0,88	1,23
Sound pressure level (low/med/high)	dB(A)	54	55	55	56	56	57	57	58
Weight	kg	40	43	95	98	99	105	120	126
Dimensions (HxWxD)	mm	260 x 1050 x 780	260 x 1050 x 780	260 x 1550 x 780	260 x 1550 x 780	260 x 2050 x 780	260 x 2050 x 780	260 x 2550 x 780	260 x 2550 x 780
Price	€	<b>8.945,-</b>	<b>9.330,-</b>	<b>10.030,-</b>	<b>10.585,-</b>	<b>11.345,-</b>	<b>12.680,-</b>	<b>13.495,-</b>	<b>14.795,-</b>



## BUILT-IN UNIT

INDOOR UNIT		RAV-CT101BH-M	RAV-CT101BH-L	RAV-CT151BH-M	RAV-CT151BH-L	RAV-CT201BH-M	RAV-CT201BH-L	RAV-CT251BH-M	RAV-CT251BH-L
Heating capacity	kW	8,00	8,00	11,20	11,20	14,00	14,00	16,00	16,00
Airflow	m³/h	1600	2210	2400	2950	3200	4420	4000	5160
Power consumption (min./nom./max.)	kW	0,35	0,53	0,53	0,70	0,70	1,05	0,88	1,23
Sound pressure level (low/med/high)	dB(A)	54	55	55	56	56	57	57	58
Weight	kg	71	74	105	108	129	135	170	176
Dimensions (HxWxD)	mm	405-485 x 1105 x 720	405-485 x 1105 x 720	405-485 x 1605 x 720	405-485 x 1605 x 720	405-485 x 2105 x 720	405-485 x 2105 x 720	405-485 x 2605 x 720	405-485 x 2605 x 720
Price	€	<b>9.390,-</b>	<b>9.675,-</b>	<b>11.130,-</b>	<b>11.345,-</b>	<b>12.580,-</b>	<b>13.530,-</b>	<b>14.150,-</b>	<b>15.270,-</b>

# Digital Inverter

- Compact – durable – efficient
- Operating range from -15°C to +46°C
- Cable lengths up to 50 m



## Digital Inverter – 1-phase

OUTDOOR UNIT		RAV-GM301ATP-E	RAV-GM401ATP-E	RAV-GM561ATP-E	RAV-GM801ATP-E
Cooling capacity	kW	2,50	3,60	5,00	6,70
Heating capacity	kW	3,40	4,00	5,30	7,70
Sound pressure level (low/med/high)	dB(A)	46	49	46	48
Sound pressure level (low/med/high)	dB(A)	47	50	48	52
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	12,7 (1/2)	12,7 (1/2)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	6,3 (1/4)	6,3 (1/4)	6,3 (1/4)	9,5 (3/8)
Pipe length (min.)	m	2	2	5	5
Pipe length (max.)	m	20	20	30	30
Height difference (max.)	m	10	10	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Power supply	V/Ph+N/Hz	220-240/1N/50	220-240/1N/50	220-240/1N/50	220-240/1N/50
Recommended fusing	A	10	10	16	16
Refrigerant		R32	R32	R32	R32
Refrigerant charge	kg	0,60	0,90	0,90	1,30
Dimensions (HxWxD)	mm	550 x 780 x 290			
Weight	kg	33	39	40	44
<b>Price</b>	<b>€</b>	<b>1.145,-</b>	<b>1.405,-</b>	<b>1.595,-</b>	<b>2.045,-</b>

OUTDOOR UNIT		RAV-GM901ATP-E	RAV-GM1101ATP-E	RAV-GM1401ATP-E	RAV-GM1601ATP-E
Cooling capacity	kW	8,00	10,00	12,00	14,00
Heating capacity	kW	9,00	11,20	14,00	16,00
Sound pressure level (low/med/high)	dB(A)	51	54	55	53
Sound pressure level (low/med/high)	dB(A)	55	57	57	55
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5	5
Pipe length (max.)	m	50	50	50	50
Height difference (max.)	m	30	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Power supply	V/Ph+N/Hz	220-240/1N/50	220-240/1N/50	220-240/1N/50	220-240/1N/50
Recommended fusing	A	16	20	25	25
Refrigerant		R32	R32	R32	R32
Refrigerant charge	kg	2,00	2,10	2,10	2,40
Dimensions (HxWxD)	mm	630 x 800 x 300	890 x 900 x 320	890 x 900 x 320	1340 x 900 x 320
Weight	kg	47	68	68	95
<b>Price</b>	<b>€</b>	<b>2.255,-</b>	<b>2.685,-</b>	<b>2.900,-</b>	<b>3.885,-</b>

## Digital Inverter – 3-phase

OUTDOOR UNIT		RAV-GM1101AT8P-E	RAV-GM1401AT8P-E	RAV-GM1601AT8P-E
Cooling capacity	kW	10,00	12,00	14,00
Heating capacity	kW	11,20	14,00	16,00
Sound pressure level (low/med/high)	dB(A)	54	55	53
Sound pressure level (low/med/high)	dB(A)	57	57	55
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5
Pipe length (max.)	m	50	50	50
Height difference (max.)	m	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary
Power supply	V/Ph+N/Hz	380-415/3N/50	380-415/3N/50	380-415/3N/50
Recommended fusing	A	3 x 16	3 x 16	3 x 16
Refrigerant		R32	R32	R32
Refrigerant charge	kg	2,10	2,10	2,40
Dimensions (HxWxD)	mm	890 x 900 x 320	890 x 900 x 320	1340 x 900 x 320
Weight	kg	69	69	94
<b>Price</b>	<b>€</b>	<b>2.925,-</b>	<b>3.130,-</b>	<b>4.445,-</b>



# Super Digital Inverter

- Compact – durable – efficient
- Operating range from -27°C to +52°C
- Cable lengths up to 75 m



## Super Digital Inverter – 1-phase

OUTDOOR UNIT	RAV-GP561ATW-E	RAV-GP801ATW-E	RAV-GP1101AT-E	RAV-GP1401AT-E1
Cooling capacity	kW	5,30	7,10	10,00
Heating capacity	kW	5,60	8,00	11,20
Sound pressure level (low/med/high)	dB(A)	46	46	49
Sound pressure level (low/med/high)	dB(A)	48	48	50
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	6,3 (¼)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5
Pipe length (max.)	m	50	50	75
Height difference (max.)	m	30	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary
Power supply	V/Ph+N/Hz	220-240/1N/50	220-240/1N/50	220-240/1N/50
Recommended fusing	A	16	16	20
Refrigerant		R32	R32	R32
Refrigerant charge	kg	1,35	1,90	3,10
Dimensions (HxWxD)	mm	630 x 799 x 299	1050 x 1010 x 370	1550 x 1010 x 370
Weight	kg	45	74	104
Price	€	<b>2.025,-</b>	<b>2.615,-</b>	<b>3.895,-</b>
				<b>4.300,-</b>

## Super Digital Inverter – 3-phase

OUTDOOR UNIT	RAV-GP1101AT8-E	RAV-GP1401AT8-E	RAV-GP1601AT8-E
Cooling capacity	kW	10,00	12,50
Heating capacity	kW	11,20	14,00
Sound pressure level (low/med/high)	dB(A)	49	51
Sound pressure level (low/med/high)	dB(A)	50	53
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5
Pipe length (max.)	m	75	75
Height difference (max.)	m	30	30
Compressor type		Twin-Rotary	Twin-Rotary
Power supply	V/Ph+N/Hz	380-415/3N/50	380-415/3N/50
Recommended fusing	A	3x 16	3x 16
Refrigerant		R32	R32
Refrigerant charge	kg	2,60	2,60
Dimensions (HxWxD)	mm	1340 x 900 x 320	1340 x 900 x 320
Weight	kg	95	95
Price	€	<b>3.810,-</b>	<b>3.990,-</b>
			<b>4.540,-</b>

# Digital Inverter CLASSIC

- Robust CLASSIC-Line with compact & lightweight chassis
- Durable and efficient
- Operating range from -15°C to +46°C
- Cable lengths up to 30 m



## Digital Inverter CLASSIC – 1-phase

OUTDOOR UNIT	RAV-GV561ATP-E	RAV-GV801ATP-E	RAV-GV1101ATP-E	RAV-GV1401ATP-E	RAV-GV1601ATP-E
Cooling capacity	kW	5,00	6,70	9,50	12,10
Heating capacity	kW	5,30	7,00	10,00	12,30
Sound pressure level (low/med/high)	dB(A)	46	48	53	54
Sound pressure level (low/med/high)	dB(A)	48	51	55	57
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,9 (¾)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5	5	5
Pipe length (max.)	m	20	20	30	30
Height difference (max.)	m	20	20	30	30
Compressor type		Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Recommended fusing	A	16	16	25	25
Refrigerant		R32	R32	R32	R32
Refrigerant charge	kg	-	-	-	-
Dimensions (HxWxD)	mm	550 x 780 x 290	550 x 780 x 290	630 x 800 x 300	710 x 900 x 320
Weight	kg	-	-	-	-
<b>Price</b>	<b>€</b>	<b>1.370,-</b>	<b>1.780,-</b>	<b>2.270,-</b>	<b>2.575,-</b>
					<b>3.350,-</b>

## Digital Inverter CLASSIC – 3-phase

OUTDOOR UNIT	RAV-GV1101AT8P-E	RAV-GV1401AT8P-E	RAV-GV1601AT8P-E
Cooling capacity	kW	9,50	12,10
Heating capacity	kW	10,00	12,3
Sound pressure level (low/med/high)	dB(A)	53	54
Sound pressure level (low/med/high)	dB(A)	55	57
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)
Pipe length (min.)	m	5	5
Pipe length (max.)	m	30	30
Height difference (max.)	m	30	30
Compressor type		Twin-Rotary	Twin-Rotary
Power supply	V/Ph+N/Hz	380-415/3+N/50	380-415/3+N/50
Recommended fusing	A	3x 16	3x 16
Refrigerant		R32	R32
Refrigerant charge	kg	-	-
Dimensions (HxWxD)	mm	710 x 900 x 320	710 x 900 x 320
Weight	kg	-	-
<b>Price</b>	<b>€</b>	<b>2.625,-</b>	<b>2.830,-</b>
			<b>3.900,-</b>



**Digital Inverter CLASSIC 1-phase from SUMMER 2022 and  
Digital Inverter CLASSIC 3-phase from AUTUMN 2022 available.**

# Digital Inverter BIG

- Robust 3-phase continuous runner
- Operating range from -27°C to +52°C
- Cable lengths up to 100 m



## Digital Inverter BIG – 3-phase

OUTDOOR UNIT		RAV-GM2241AT8-E1	RAV-GM2801AT8-E1
Cooling capacity	kW	19,00	22,50
Heating capacity	kW	22,40	27,00
Sound pressure level (low/med/high)	dB(A)	58	61
Sound pressure level (low/med/high)	dB(A)	60	63
Suction gas pipe diameter	mm (inch)	28,6 (1 1/8)	28,6 (1 1/8)
Liquid pipe diameter	mm (inch)	12,7 (½)	12,7 (½)
Pipe length (min.)	m	5	5
Pipe length (max.)	m	100	100
Height difference (max.)	m	30	30
Compressor type		Twin-Rotary	Twin-Rotary
Power supply	V/Ph+N/Hz	380-415/3N/50	380-415/3N/50
Recommended fusing	A	3x 20	3x 25
Refrigerant		R32	R32
Refrigerant charge	kg	5,00	5,00
Dimensions (HxWxD)	mm	1550 x 1010 x 370	1550 x 1010 x 370
Weight	kg	142	142
<b>Price</b>	<b>€</b>	<b>6.690,-</b>	<b>7.350,-</b>

# Quick overview Outdoor units

TYPE	Pipe length (min.)	Pipe length (max.)	Pre-charged up to	Height difference (max.)	Pipe length/indoor unit (max.)	Suction gas pipe diameter	Liquid pipe diameter	Refrigerant charge	Added refrigerant charge
	m	m	m	m	m	mm (inch)	mm (inch)	kg	g/m
<b>DIGITAL INVERTER 1-phase</b>									
RAV-GM301ATP-E	2	20	15	10	-	9,5 (3/8)	6,3 (1/4)	0,60	20
RAV-GM401ATP-E	2	20	15	10	-	12,7 (1/2)	6,3 (1/4)	0,90	20
RAV-GM561ATP-E	5	30	20	30	-	12,7 (1/2)	6,3 (1/4)	0,90	20
RAV-GM801ATP-E	5	30	20	30	-	15,9 (5/8)	9,5 (3/8)	1,30	35
RAV-GM901ATP-E	5	50	30	30	50	15,9 (5/8)	9,5 (3/8)	2,00	35
RAV-GM1101ATP-E	5	50	30	30	-	15,9 (5/8)	9,5 (3/8)	2,10	35
RAV-GM1401ATP-E	5	50	30	30	-	15,9 (5/8)	9,5 (3/8)	2,10	35
RAV-GM1601ATP-E	5	50	30	30	-	15,9 (5/8)	9,5 (3/8)	2,40	40
<b>DIGITAL INVERTER 3-phase</b>									
RAV-GM1101AT8P-E	5	50	30	30	-	15,9 (5/8)	9,5 (3/8)	2,10	35
RAV-GM1401AT8P-E	5	50	30	30	-	15,9 (5/8)	9,5 (3/8)	2,10	35
RAV-GM1601AT8P-E	5	50	30	30	-	15,9 (5/8)	9,5 (3/8)	2,40	40
<b>SUPER DIGITAL INVERTER 1-phase</b>									
RAV-GP561ATW-E	5	50	20	30	-	12,7 (1/2)	6,3 (1/4)	1,35	20
RAV-GP801ATW-E	5	50	30	30	-	15,9 (5/8)	9,5 (3/8)	1,90	35
RAV-GP1101AT-E	5	75	30	30	-	15,9 (5/8)	9,5 (3/8)	3,10	35
RAV-GP1401AT-E1	3	75	30	30	-	15,9 (5/8)	9,5 (3/8)	3,10	35
<b>SUPER DIGITAL INVERTER 3-phase</b>									
RAV-GP1101AT8-E	5	75	30	30	-	15,9 (5/8)	9,5 (3/8)	2,60	40
RAV-GP1401AT8-E	5	75	30	30	-	15,9 (5/8)	9,5 (3/8)	2,60	40
RAV-GP1601AT8-E	5	75	30	30	-	15,9 (5/8)	9,5 (3/8)	2,60	40
<b>DIGITAL INVERTER CLASSIC 1-phase</b>									
RAV-GV561ATP-E	5	20	20	20	-	12,7 (1/2)	6,4 (1/4)	-	20
RAV-GV801ATP-E	5	20	20	20	-	15,9 (5/8)	9,5 (3/8)	-	35
RAV-GV1101ATP-E	5	30	30	30	-	15,9 (3/4)	9,5 (3/8)	-	35
RAV-GV1401ATP-E	5	30	30	30	-	15,9 (3/4)	9,5 (3/8)	-	35
RAV-GV1601ATP-E	5	30	30	30	-	15,9 (5/8)	9,5 (3/8)	-	35
<b>DIGITAL INVERTER CLASSIC 3-phase</b>									
RAV-GV1101AT8P-E	5	30	30	30	-	15,9 (5/8)	9,5 (3/8)	-	35
RAV-GV1401AT8P-E	5	30	30	30	-	15,9 (5/8)	9,5 (3/8)	-	35
RAV-GV1601AT8P-E	5	30	30	30	-	15,9 (5/8)	9,5 (3/8)	-	35
<b>DIGITAL INVERTER BIG 3-phase</b>									
RAV-GM2241AT8-E1	5	100	30	30	-	28,6 (1 1/8)	12,7 (1/2)	5,00	40
RAV-GM2801AT8-E1	5	100	30	30	-	28,6 (1 1/8)	12,7 (1/2)	5,00	80

# Power consumption + fuse protection

TYPE	Current consumption (max.)	Current consumption (nom.)	Power consumption (min./nom./max.)	Power consumption (min./nom./max.)	Recommended fusing	Power supply	Recommended power supply line type	Communication line
	A	A	kW	kW	A	V/Ph+N/Hz		
<b>DIGITAL INVERTER 1-phase</b>								
RAV-GM301ATP-E	7,8	2,7	0,25/0,56/0,82	0,17/0,86/1,40	10	220-240/1N/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAV-GM401ATP-E	9,1	4,4	0,18/0,93/2,00	0,14/0,97/1,70	10	220-240/1N/50	H07RN-F 3G1,5	H07RN-F 4G1,5
RAV-GM561ATP-E	15,5	8,5	-/1,79/-	-/1,72/-	16	220-240/1N/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAV-GM801ATP-E	15,5	11,7	-/3,18/-	-/3,20/-	16	220-240/1N/50	H07RN-F 3G4,0	H07RN-F 4G1,5
RAV-GM901ATP-E	-	-	-	-	16	220-240/1N/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAV-GM1101ATP-E	22,8	13,8	-/3,06/-	-/3,19/-	20	220-240/1N/50	H07RN-F 3G4,0	H07RN-F 4G1,5
RAV-GM1401ATP-E	22,8	20,5	-/4,71/-	-/4,01/-	25	220-240/1N/50	H07RN-F 3G4,0	H07RN-F 4G1,5
RAV-GM1601ATP-E	-	-	-	-	25	220-240/1N/50	H07RN-F 3G4,0	H07RN-F 4G1,5
<b>DIGITAL INVERTER 3-phase</b>								
RAV-GM1101AT8P-E	14,1	4,6	- /3,06/ -	- /3,19/ -	3 x 16	380-415/3N/50	H07RN-F 5G1,5	H07RN-F 4G1,5
RAV-GM1401AT8P-E	14,1	6,8	- /4,71/ -	- /4,01/ -	3 x 16	380-415/3N/50	H07RN-F 5G1,5	H07RN-F 4G1,5
RAV-GM1601AT8P-E	-	-	-	-	3 x 16	380-415/3N/50	H07RN-F 5G2,5	H07RN-F 4G1,5
<b>SUPER DIGITAL INVERTER 1-phase</b>								
RAV-GP561ATW-E	13,1	7,1	-	-	16	220-240/1N/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAV-GP801ATW-E	20,7	7,6	-	-	16	220-240/1N/50	H07RN-F 3G2,5	H07RN-F 4G1,5
RAV-GP1101AT-E	20,5	8,3	0,56/1,90/2,80	0,41/2,18/2,98	20	220-240/1N/50	H07RN-F 3G4,0	H07RN-F 4G1,5
RAV-GP1401AT-E1	20,5	13,3	0,59/2,91/3,40	0,41/3,04/4,18	25	220-240/1N/50	H07RN-F 3G4,0	H07RN-F 4G1,5
<b>SUPER DIGITAL INVERTER 3-phase</b>								
RAV-GP1101AT8-E	16,2	4,7	0,66/2,32/3,60	0,53/2,41/4,30	3x 16	380-415/3N/50	H07RN-F 5G1,5	H07RN-F 4G1,5
RAV-GP1401AT8-E	16,5	6,5	0,66/3,42/3,60	0,53/3,41/5,50	3x 16	380-415/3N/50	H07RN-F 5G1,5	H07RN-F 4G1,5
RAV-GP1601AT8-E	16,9	7,5	0,66/4,34/5,70	0,53/4,28/6,51	3x 16	380-415/3N/50	H07RN-F 5G1,5	H07RN-F 4G1,5
<b>DIGITAL INVERTER CLASSIC 1-phase</b>								
RAV-GV561ATP-E	-	-	-	-	16	220-240/1/50	-	-
RAV-GV801ATP-E	-	-	-	-	16	220-240/1/50	-	-
RAV-GV1101ATP-E	-	-	-	-	25	220-240/1/50	-	-
RAV-GV1401ATP-E	-	-	-	-	25	220-240/1/50	-	-
RAV-GV1601ATP-E	-	-	-	-	25	220-240/1/50	-	-
<b>DIGITAL INVERTER CLASSIC 3-phase</b>								
RAV-GV1101AT8P-E	-	-	-	-	3x 16	380-415/3+N/50	-	-
RAV-GV1401AT8P-E	-	-	-	-	3x 16	380-415/3+N/50	-	-
RAV-GV1601AT8P-E	-	-	-	-	3x 16	380-415/3+N/50	-	-
<b>DIGITAL INVERTER BIG 3-phase</b>								
RAV-GM2241AT8-E1	18,0	9,1	1,27/5,86/9,05	1,27/5,71/10,15	3x 20	380-415/3N/50	H07RN-F 5G2,5	H07RN-F 4G1,5
RAV-GM2801AT8-E1	23,0	12,5	1,27/7,98/11,87	1,27/7,52/13,83	3x 25	380-415/3N/50	H07RN-F 5G2,5	H07RN-F 4G1,5

# Sound data

TYPE	Sound power level	Sound power level	Sound pressure level (low/med/high)	Sound pressure level (low/med/high)	Sound pressure level (night operation)
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
<b>DIGITAL INVERTER 1-phase</b>					
RAV-GM301ATP-E	61	62	46	47	43/44
RAV-GM401ATP-E	64	65	49	50	46/47
RAV-GM561ATP-E	63	65	46	48	41/43
RAV-GM801ATP-E	65	69	48	52	41/43
RAV-GM901ATP-E	68	72	51	55	44/45
RAV-GM1101ATP-E	70	74	54	57	44/45
RAV-GM1401ATP-E	70	74	55	57	44/45
RAV-GM1601ATP-E	70	72	53	55	48/50
<b>DIGITAL INVERTER 3-phase</b>					
RAV-GM1101AT8P-E	70	74	54	57	44/45
RAV-GM1401AT8P-E	70	74	55	57	44/45
RAV-GM1601AT8P-E	70	72	53	55	48/50
<b>SUPER DIGITAL INVERTER 1-phase</b>					
RAV-GP561ATW-E	63	65	46	48	41/43
RAV-GP801ATW-E	63	65	46	48	41/43
RAV-GP1101AT-E	66	67	49	50	44/45
RAV-GP1401AT-E1	67	68	50	51	-
<b>SUPER DIGITAL INVERTER 3-phase</b>					
RAV-GP1101AT8-E	66	67	49	50	45
RAV-GP1401AT8-E	68	69	51	52	45
RAV-GP1601AT8-E	68	70	51	53	45
<b>DIGITAL INVERTER CLASSIC 1-phase</b>					
RAV-GV561ATP-E	63	65	46	48	-
RAV-GV801ATP-E	65	68	48	51	-
RAV-GV1101ATP-E	70	72	53	55	-
RAV-GV1401ATP-E	71	74	54	57	-
RAV-GV1601ATP-E	73	74	56	57	-
<b>DIGITAL INVERTER CLASSIC 3-phase</b>					
RAV-GV1101AT8P-E	70	72	53	55	-
RAV-GV1401AT8P-E	71	74	54	57	-
RAV-GV1601AT8P-E	73	74	56	57	-
<b>DIGITAL INVERTER BIG 3-phase</b>					
RAV-GM2241AT8-E1	76	76	58	60	53/55
RAV-GM2801AT8-E1	78	80	61	63	56/58

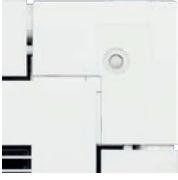
**Sound pressure Night Operation:** with sound reduction module, see external control options.

# Local wired remote controls

TYPE / DESCRIPTION	PRICE €
 <b>RBC-AS41E</b> Simplified wired remote control <ul style="list-style-type: none"> <li>• To control all main functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• DN codes cannot be set</li> </ul>	140,-
 <b>RBC-AMTU31-E</b> Standard Wired Remote Control <ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• 168 hour On/Off timer</li> <li>• DN codes can be set</li> </ul>	140,-
 <b>RBC-AMS41E</b> Wired remote control with integrated weekly timer <ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• Weekly timer integrated, 8 events/day, 6 parameters/event can be programmed</li> <li>• DN codes can be set</li> </ul>	145,-
 <b>RBC-ASCU11-E</b> Compact wired remote control <ul style="list-style-type: none"> <li>• Slimline version of standard wired remote control</li> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• Off timer</li> <li>• DN codes can be set</li> </ul>	100,-
 <b>RBC-AMSU51-ES</b> Comfort wired remote control with backlit display <ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• Weekly timer, soft keys, night operation, louver lock, key lock</li> <li>• Energy monitoring in conjunction with Super Digital Inverter outdoor units</li> <li>• DN codes can be set</li> </ul>	190,-
 <b>RBC-MTSC1</b> Local touch lite remote control <ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• Controlled via 4.5" color touch display</li> <li>• Personalized graphics for screen &amp; logo via upload (480x272)</li> <li>• DN codes can be set</li> <li>• Not a stock item - lead time on request</li> </ul>	475,-
 <b>TCB-TC41U-E</b> Remote Temperature Sensor <ul style="list-style-type: none"> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• When exact temperature measurement is not possible using the sensor in the indoor unit or in the wired remote control.</li> <li>• Takes priority over the unit and remote control sensor</li> </ul>	125,-

# Local infrared remote controls

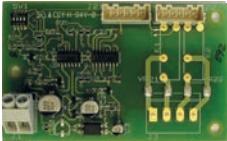
TYPE / DESCRIPTION	PRICE €
 <p><b>RBC-AXU31-E</b> Infrared remote control with external receiver kit for all indoor units</p> <ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Function range same as RBC-AMTU31-E (RBC-AMT32E), but wireless.</li> <li>• DN codes cannot be set</li> </ul>	425,-
 <p><b>RBC-AXU31C-E</b> Infrared remote control + receiver kit for installation in ceiling unit</p> <ul style="list-style-type: none"> <li>• also for 1 way cassette (Series SH)</li> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Function range same as RBC-AMTU31-E (RBC-AMT32E), but wireless.</li> <li>• DN codes cannot be set</li> </ul>	325,-
 <p><b>RBC-AXU31UW-E</b> Infrared remote control + receiver kit for installation in 2-way cassette</p> <ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units.</li> <li>• Function range same as RBC-AMTU31-E (RBC-AMT32E), but wireless.</li> <li>• DN codes cannot be set</li> </ul>	345,-
 <p><b>RBC-AX33UYP-E</b> Infrared remote control + receiver kit for installation in 1-way cassette (SMMSu)</p> <ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Function range same as RBC-AMTU31-E (RBC-AMT32E), but wireless.</li> <li>• DN codes cannot be set</li> </ul>	80,-
 <p><b>RBC-AXU31UM-E</b> Infrared remote control + receiver kit for installation in 60x60 slim cassette (SMMSu)</p> <ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Function range same as RBC-AMTU31-E (RBC-AMT32E), but wireless.</li> <li>• DN codes cannot be set</li> </ul>	165,-
 <p><b>RBC-AX41U(W)-E</b> Infrared remote control + receiver kit for installation in smart cassette</p> <ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 8 indoor units</li> <li>• Function range same as RBC-AMT32E, but wireless.</li> <li>• DN codes cannot be set</li> </ul>	285,-
 <p><b>RBC-AXU33UP-E</b> Infrared remote control + receiver kit for installation in FLAT Panel 4-way standard cassette (from summer 2022)</p>	220,-

TYPE / DESCRIPTION	PRICE €
	120,-
<b>TCB-SIR41UM-E</b> Occupancy sensor kit for installation in 60x60 slim cassette <ul style="list-style-type: none"> <li>Automatic motion detection in room</li> <li>If no one is detected for 60 minutes, the indoor unit switches automatically into OFF or Standby mode</li> <li>Requires RBC-AMSU51-ES (RBC-AMS55E-ES) wired remote control</li> <li>Required for every cassette in the group in the case of group control</li> </ul>	120,-
	120,-
<b>TCB-SIR41U-E</b> Occupancy sensor kit for installation in smart cassette <ul style="list-style-type: none"> <li>Automatic motion detection in room</li> <li>If no one is detected for 60 minutes, the indoor unit switches automatically into OFF or Standby mode</li> <li>Requires RBC-AMS55E-ES wired remote control</li> <li>Required for every cassette in the group in the case of group control</li> </ul>	120,-
	125,-
<b>TCB-SIR33UP-E</b> Occupancy sensor kit for installation in FLAT Panel (from summer 2022)	125,-

## Mobile- / APP- / KNX®-control options

TYPE / DESCRIPTION	PRICE €
	615,-
<b>RBC-Combi Control</b> Module to control the main functions via SMS or an app (SIM card required) <ul style="list-style-type: none"> <li>To control the main functions such as on/off, operating mode, temperature and fan speed, plus alarms in the event of a power blackout or when temperature is too high/too low</li> <li>Compatible with all indoor units that have a standard infrared remote control</li> <li>Free app for iOS or Android</li> </ul>	615,-
	340,-
<b>AP-IR-WIFI-1</b> WiFi module to control all functions of an indoor unit using an app on a cell phone <ul style="list-style-type: none"> <li>Temperature and humidity alarm configurable</li> <li>Compatible with all indoor units that have a standard infrared remote control</li> <li>WLAN and internet access required</li> <li>Free app for iOS or Android</li> <li>Not a stock item - lead time on request</li> <li>for cassette + duct unit only</li> </ul>	340,-
	480,-
<b>TO-RC-WIFI-1</b> WiFi module to control all functions of an indoor unit using an app or an internet browser <ul style="list-style-type: none"> <li>Compatible with all indoor units that have an A/B remote control bus</li> <li>WLAN and internet access required</li> <li>Free app for iOS or Android</li> </ul>	480,-
	505,-
<b>TO-RC-KNX-1i</b> Module for controlling all the functions of an indoor unit via the KNX® Bus. <ul style="list-style-type: none"> <li>Compatible with all indoor units that have an A/B remote control bus</li> <li>KNX® bus system required</li> </ul>	505,-
	2.085,-
<b>BMS-IWF0320E</b> Small central APP 32 <ul style="list-style-type: none"> <li>Controls up to 32 indoor units.</li> <li>Connection via TCC link</li> <li>Internet/intranet access required</li> <li>Free app for iOS or Android</li> </ul>	2.085,-

# External control options

TYPE / DESCRIPTION	PRICE €
 <p><b>TCB-IFCB5-PE</b> External on/off PCB, window contact module</p> <ul style="list-style-type: none"> <li>• Potential-free contact for on/off and window contact input.</li> <li>• Remote ON/OFF function</li> </ul>	67,-
<p><b>TCB-PX100-PE</b> Casing for outdoor installation of window contact module for high-wall units</p> <ul style="list-style-type: none"> <li>• for high-wall units</li> </ul>	45,-
<p><b>TCB-PX30MUE</b> Casing for indoor installation for 4-way standard cassette</p> <ul style="list-style-type: none"> <li>• for 4-way standard cassette</li> </ul>	125,-
<p><b>TCB-PX40MUME</b> Casing for: PC board for external control, TCC link interface, window contact PC board for 60x60 slim cassette, 4-way standard cassette, SMART cassette</p> <ul style="list-style-type: none"> <li>• for 60x60 slim cassette, 4-way standard cassette, SMART cassette</li> </ul>	125,-
 <p><b>TCB-PCUC2E</b> Control board for external control, alarms and messages</p> <ul style="list-style-type: none"> <li>• Compatible with ceiling unit, high pressure duct unit series 4, 60x60 cassette, 4-way standard cassette, SMART cassette and VN-M heat exchanger</li> <li>• Connection to CN521</li> <li>• 3 analog inputs</li> <li>• 3 potential-free digital inputs/outputs</li> <li>• Input and output functions configurable via rotary switch</li> </ul>	185,-
<p><b>TCB-PX30MUE</b> Casing for indoor installation for 4-way standard cassette</p> <ul style="list-style-type: none"> <li>• for 4-way standard cassette</li> </ul>	125,-
<p><b>TCB-PX40MUME</b> Casing for: PC board for external control, TCC link interface, window contact PC board for 60x60 slim cassette, 4-way standard cassette, SMART cassette</p> <ul style="list-style-type: none"> <li>• for 60x60 slim cassette, 4-way standard cassette, SMART cassette</li> </ul>	125,-
 <p><b>TCB-IFCB-4E2</b> Operating, error signal, remote On/Off module</p> <ul style="list-style-type: none"> <li>• Operating and error signal output</li> <li>• Can be connected to the master unit of a group to handle the I/O control and error messages of up to 16 indoor units</li> <li>• For connecting to a CN61</li> <li>• Potential-free contact</li> </ul>	435,-
 <p><b>RBC-FDP3-PE</b> Analog Interface</p> <ul style="list-style-type: none"> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• Controls all main functions via 0-10V signals or fixed resistors</li> <li>• Operating and error signal output</li> <li>• Modbus connection possible</li> </ul>	700,-
 <p><b>TO-RC-BAC-1</b> BACnet® 1:1 interface</p> <ul style="list-style-type: none"> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• Control of all main functions</li> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> </ul>	650,-

# External control options

TYPE / DESCRIPTION	PRICE €
 <p><b>TCB-PC0S1E2</b> Noise reduction module</p> <ul style="list-style-type: none"> <li>• Compatible with R32 outdoor units DI &amp; SDI, 1-phase, sizes 5 to 14</li> <li>• Compatible with R410A series 4 outdoor units SDI, size 5</li> <li>• Input for noise reduction (night operation)</li> <li>• Input for max. capacity control 0/50/75 %</li> <li>• Output for compressor operating signal</li> </ul>	305,-
 <p><b>TCB-KB0S4E</b> Noise Reduction Cable Set</p> <ul style="list-style-type: none"> <li>• Compatible with R32 outdoor units DI-BIG &amp; SDI, 3-phase, sizes 11 to 16</li> <li>• Compatible with R410A outdoor units DI-BID, series 4 &amp; 6</li> <li>• Compatible with R410A series 4 outdoor units SDI, sizes 8 to 16; 1-/3-phase</li> <li>• Input for noise reduction (night operation)</li> <li>• Input for max. capacity control 0/50/75 %</li> <li>• Output for compressor operating signal</li> </ul>	45,-
 <p><b>TCB-PCNT30TLE2</b> TCC link network adapter</p> <ul style="list-style-type: none"> <li>• For integrating RAV in VRF control systems</li> <li>• Supports the interfacing of network units such as central or BMS controllers to RAV systems</li> <li>• For indoor units</li> <li>• Already integrated in all high-wall units</li> </ul>	150,-
<p><b>TCB-PX30MUE</b> Casing for indoor installation for 4-way standard cassette</p> <ul style="list-style-type: none"> <li>• for 4-way standard cassette</li> </ul>	125,-
<p><b>TCB-PX40MUME</b> Casing for: PC board for external control, TCC link interface, window contact PC board for 60x60 slim cassette, 4-way standard cassette, SMART cassette</p> <ul style="list-style-type: none"> <li>• for 60x60 slim cassette, 4-way standard cassette, SMART cassette</li> </ul>	125,-
 <p><b>TCB-ACREDU2-E</b> Redundancy Box</p> <ul style="list-style-type: none"> <li>• Redundancy switchover unit for two indoor units (or groups) in the event of a fault</li> <li>• Operating hours-dependent switchover for two indoor units</li> <li>• Temperature-dependent activation of second system</li> <li>• Connection to CN61 of indoor units</li> <li>• Plug &amp; Play, temperature sensor included</li> <li>• LAN port, monitoring via web browser possible.</li> </ul>	1.750,-
 <p><b>TCB-KBCN32VEE</b> CN32 - DO: Control of an external fan</p>	5,15
 <p><b>TCB-KBCN60OPE</b> CN60 - DO: Operating signal cooling, heating, fan, defrost, thermo On</p>	10,30
 <p><b>TCB-KBCN61HAE</b> CN61 - DI/DO HA terminal: On/Off, enable/block, operating performance, alarm</p>	10,30
 <p><b>TCB-KBCN700AE</b> CN70 - DI: external alarm input</p>	5,15
 <p><b>TCB-KBCN73DEE</b> CN73 - DI: external thermo Off input</p>	5,15
 <p><b>TCB-KBCN80EXE</b> CN80 - DI: external alarm input</p>	5,15



SLC iCable GmbH Bad Schallerbach,  
Gebrüder Hartinger GesmbH

TOSHIBA | 95



Offices and IT rooms, Windmühlgasse Wien,  
Klimatech Wärme Kälte Klima

# VRF SYSTEMS: Multi room solutions

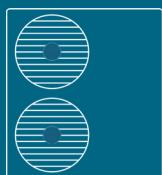
- Integration of heating, cooling, domestic hot water & fresh air supply
- Systems for heating or cooling and simultaneous heating & cooling
- Capacities up to 168 kW cooling and 178 kW heating
- Up to 64 indoor units connectable
- External heat exchangers can be integrated
- Convenient control options for all needs



## **MiNi SMMS SINGLE FAN**

Cooling: 12,1 | 14,0

**Page 109**



## **MiNi SMMSe**

Cooling: 12,1 | 14,0 | 15,5 | 22,4 | 28,0

**Page 110**



## **SMMSe LowRef**

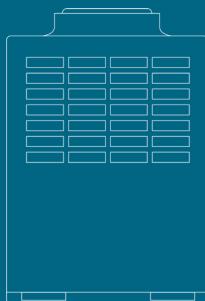
Cooling: 22,4 | 28,0

**Page 112**

## **SMMSu**

Cooling: 22,4 | 28,0 | 33,5 | 40,0 | 45,0 | 50,4 | 56,0 | 61,5

**Page 98**



## **SMMSe**

Cooling: 22,4 | 28,0 | 45,0 | 61,5

**Page 113**

## **SHRMe**

Cooling: 22,4 | 28,0 | 33,5 | 40,0 | 45,0 | 50,4 | 56,0

**Page 114**



# SMMSu Outdoor units

- Latest generation with universal combinability
- With new defrost technology and high-speed system bus
- Highest efficiency, operational reliability and serviceability
- Leading flexibility in piping & control options
- 2-wire outdoor units for up to 128 indoor units
- SEER efficiency ratings up to 7,73 – SCOP efficiency ratings up to 4,79
- Controls locally wired or infrared, centrally, and / or via BMS
- World's first Triple-Rotary Compressor



**SMMSu**  
SUPER MODULAR MULTI SYSTEM



OUTDOOR UNIT		MMY-MUP0801HT8P-E	MMY-MUP1001HT8P-E	MMY-MUP1201HT8P-E	MMY-MUP1401HT8P-E
Capacity code	HP	8	10	12	14
Cooling capacity	kW	22,40	28,00	33,50	40,00
Power consumption (min./nom./max.)	kW	5,64	8,36	10,34	14,55
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SEER		7,44	7,73	7,32	7,05
Running current	A	9,15	13,4	16,0	22,6
Heating capacity	kW	22,40	28,00	33,50	40,00
Power consumption (min./nom./max.)	kW	5,28	7,20	7,77	10,00
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SCOP		4,50	4,78	4,75	4,60
Running current	A	8,56	11,5	12,1	15,5
Airflow	m³/h	9900	10500	11700	11880
External static pressure	Pa	80	80	80	80
Sound pressure level (low/med/high)	dB(A)	53	55	58	58
Sound pressure level (low/med/high)	dB(A)	56	58	62	62
Sound power level	dB(A)	75	77	79	79
Sound power level	dB(A)	76	77	81	82
Compressor type		1x Twin-Rotary	1x Twin-Rotary	1x Twin-Rotary	1x Twin-Rotary
Liquid pipe diameter	mm (inch)	12,7 (½)	12,7 (½)	12,7 (½)	15,9 (5/8)
Suction gas pipe diameter	mm (inch)	19,1 (¾)	22,2 (7/8)	28,6 (1 1/8)	28,6 (1 1/8)
Outdoor temperature operating range (min.-max.)	°C	-15 / +52	-15 / +52	-15 / +52	-15 / +52
Outdoor temperature operating range (min.-max.)	°C	-25 / +15,5	-25 / +15,5	-25 / +15,5	-25 / +15,5
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Recommended fusing	A	3x 20	3x 32	3x 32	3x 40
Pipe length (max.)	m	500	500	500	500
Height difference (max.)	m	110	110	110	110
Refrigerant		R410A	R410A	R410A	R410A
Refrigerant charge	kg	6,00	6,00	6,00	6,00
Dimensions (HxWxD)	mm	1690 x 990 x 780			
Weight	kg	228	228	228	228
Price	€	12.725,-	13.295,-	14.520,-	17.420,-



OUTDOOR UNIT		MMY-MUP1601HT8P-E	MMY-MUP1801HT8P-E	MMY-MUP2001HT8P-E	MMY-MUP2201HT8P-E	MMY-MUP2401HT8P-E
Capacity code	HP	16	18	20	22	24
Cooling capacity	kW	45,00	50,40	56,00	61,50	67,00
Power consumption (min./nom./max.)	kW	14,06	15,90	18,01	20,43	24,19
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-	-
Energy efficiency SEER		7,71	7,68	7,62	7,23	6,87
Running current	A	21,6	24,4	27,7	31,4	37,1
Heating capacity	kW	45,00	50,40	56,00	61,50	67,00
Power consumption (min./nom./max.)	kW	11,94	12,54	14,93	16,18	18,98
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-	-
Energy efficiency SCOP		4,79	4,75	4,43	4,44	4,17
Running current	A	18,3	19,3	22,9	24,8	29,1
Airflow	m³/h	15300	16800	15900	16500	16500
External static pressure	Pa	80	80	80	80	80
Sound pressure level (low/med/high)	dB(A)	60	61	63	63	63
Sound pressure level (low/med/high)	dB(A)	63	67	67	67	67
Sound power level	dB(A)	83	84	86	86	86
Sound power level	dB(A)	86	89	90	90	90
Compressor type		1x Triple-Rotary	1x Triple-Rotary	1x Triple-Rotary	2x Twin-Rotary	2x Twin-Rotary
Liquid pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	19,1 (3/4)	19,1 (3/4)
Suction gas pipe diameter	mm (inch)	28,6 (1 1/8)	28,6 (1 1/8)	28,6 (1 1/8)	28,6 (1 1/8)	34,9 (1 3/8)
Outdoor temperature operating range (min.-max.)	°C	-15 / +52	-15 / +52	-15 / +52	-15 / +52	-15 / +52
Outdoor temperature operating range (min.-max.)	°C	-25 / +15,5	-25 / +15,5	-25 / +15,5	-25 / +15,5	-25 / +15,5
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Recommended fusing	A	3x 40	3x 50	3x 50	3x 63	3x 80
Pipe length (max.)	m	500	500	500	500	500
Height difference (max.)	m	110	110	110	110	110
Refrigerant		R410A	R410A	R410A	R410A	R410A
Refrigerant charge	kg	9,00	9,00	9,00	9,00	9,00
Dimensions (HxDxW)	mm	1690 x 1290 x 780				
Weight	kg	312	312	334	356	356
<b>Price</b>	<b>€</b>	<b>18.675,-</b>	<b>20.130,-</b>	<b>21.580,-</b>	<b>23.010,-</b>	<b>24.970,-</b>

# Combination tables SMMSu



OUTDOOR UNIT		MMY-MUP0801HT8P-E	MMY-MUP1001HT8P-E	MMY-MUP1201HT8P-E	MMY-MUP1401HT8P-E
Capacity code	HP	8	10	12	14
Combined units		-	-	-	-
Cooling capacity	kW	22,40	28,00	33,50	40,00
Heating capacity	kW	22,40	28,00	33,50	40,00
Connectable indoor units (max.)	Pce.	18	22	27	31



OUTDOOR UNIT		MMY-MUP1601HT8P-E	MMY-MUP1801HT8P-E	MMY-MUP2001HT8P-E	MMY-MUP2201HT8P-E	MMY-MUP2401HT8P-E
Capacity code	HP	16	18	20	22	24
Combined units		-	-	-	-	-
Cooling capacity	kW	45,00	50,40	56,00	61,50	67,00
Heating capacity	kW	45,00	50,40	56,00	61,50	67,00
Connectable indoor units (max.)	Pce.	36	40	45	49	54



OUTDOOR UNIT	MMY-UP2611HT8P-E	MMY-UP2811HT8P-E	MMY-UP3011HT8P-E	MMY-UP3211HT8P-E	MMY-UP3411HT8P-E	MMY-UP3611HT8P-E	MMY-UP3811HT8P-E
Capacity code	HP	26	28	30	32	34	36
Combined units		14 + 12	14 + 14	18 + 12	20 + 12	20 + 14	24 + 12
Cooling capacity	kW	73,50	80,00	83,90	89,50	96,00	100,50
Heating capacity	kW	73,50	80,00	83,90	89,50	96,00	100,50
Connectable indoor units (max.)	Pce.	58	63	64	65	66	67



OUTDOOR UNIT	MMY-UP4011HT8P-E	MMY-UP4211HT8P-E	MMY-UP4411HT8P-E	MMY-UP4611HT8P-E	MMY-UP4811HT8P-E	MMY-UP5011HT8P-E	MMY-UP5211HT8P-E
Capacity code	HP	40	42	44	46	48	50
Combined units		20 + 20	24 + 18	24 + 20	24 + 22	24 + 24	24 + 14 + 12
Cooling capacity	kW	112,00	117,40	123,00	128,50	134,00	140,50
Heating capacity	kW	112,00	117,40	123,00	128,50	134,00	140,50
Connectable indoor units (max.)	Pce.	69	70	71	72	73	74



OUTDOOR UNIT		MMY-UP5411HT8P-E	MMY-UP5611HT8P-E	MMY-UP5811HT8P-E	MMY-UP6011HT8P-E	MMY-UP6211HT8P-E	MMY-UP6411HT8P-E
Capacity code	HP	54	56	58	60	62	64
Combined units		20 + 20 + 14	24 + 20 + 12	24 + 20 + 14	24 + 24 + 12	24 + 24 + 14	24 + 20 + 20
Cooling capacity	kW	152,00	156,50	163,00	167,50	174,00	179,00
Heating capacity	kW	152,00	156,50	163,00	167,50	174,00	179,00
Connectable indoor units (max.)	Pce.	76	77	78	79	80	81



OUTDOOR UNIT		MMY-UP6611HT8P-E	MMY-UP6811HT8P-E	MMY-UP7011HT8P-E	MMY-UP7211HT8P-E	MMY-UP7411HT8P-E	MMY-UP7611HT8P-E
Capacity code	HP	66	68	70	72	74	76
Combined units		24 + 22 + 20	24 + 24 + 20	24 + 24 + 22	24 + 24 + 24	24 + 24 + 14 + 12	24 + 24 + 14 + 14
Cooling capacity	kW	184,50	190,00	195,50	201,00	207,50	214,00
Heating capacity	kW	184,50	190,00	195,50	201,00	207,50	214,00
Connectable indoor units (max.)	Pce.	82	83	84	85	86	87



OUTDOOR UNIT		MMY-UP7811HT8P-E	MMY-UP8011HT8P-E	MMY-UP8211HT8P-E	MMY-UP8411HT8P-E	MMY-UP8611HT8P-E	MMY-UP8811HT8P-E
Capacity code	HP	78	80	82	84	86	88
Combined units		24 + 20 + 20 + 14	24 + 24 + 20 + 12	24 + 24 + 20 + 14	24 + 24 + 24 + 12	24 + 24 + 24 + 14	24 + 24 + 20 + 20
Cooling capacity	kW	219,00	223,50	230,00	234,50	241,00	246,00
Heating capacity	kW	219,00	223,50	230,00	234,50	241,00	246,00
Connectable indoor units (max.)	Pce.	88	90	92	94	96	98



OUTDOOR UNIT		MMY-UP9011HT8P-E	MMY-UP9211HT8P-E	MMY-UP9411HT8P-E	MMY-UP9611HT8P-E	MMY-UP9811HT8P-E	MMY-UP10011HT8P-E
Capacity code	HP	90	92	94	96	98	100
Combined units		24 + 24 + 22 + 20	24 + 24 + 24 + 20	24 + 24 + 24 + 22	24 + 24 + 24 + 24	24+24+24+14+12	24+24+24+14+14
Cooling capacity	kW	251,50	257,00	262,50	268,00	274,50	281,00
Heating capacity	kW	251,50	257,00	262,50	268,00	274,50	281,00
Connectable indoor units (max.)	Pce.	100	102	104	106	108	110

# Combination tables SMMSu



OUTDOOR UNIT		MMY-UP10211HT8P-E	MMY-UP10411HT8P-E	MMY-UP10611HT8P-E	MMY-UP10811HT8P-E	MMY-UP11011HT8P-E
Capacity code	HP	102	104	106	108	110
Combined units		24 + 24 + 20 + 20 + 14	24 + 24 + 24 + 20 + 12	24 + 24 + 24 + 20 + 14	24 + 24 + 24 + 24 + 12	24 + 24 + 24 + 24 + 14
Cooling capacity	kW	286,00	290,50	297,00	301,50	308,00
Heating capacity	kW	286,00	290,50	297,00	301,50	308,00
Connectable indoor units (max.)	Pce.	112	114	116	118	120



OUTDOOR UNIT		MMY-UP11211HT8P-E	MMY-UP11411HT8P-E	MMY-UP11611HT8P-E	MMY-UP11811HT8P-E	MMY-UP12011HT8P-E
Capacity code	HP	112	114	116	118	120
Combined units		24 + 24 + 24 + 20 + 20	24 + 24 + 24 + 22 + 20	24 + 24 + 24 + 24 + 20	24 + 24 + 24 + 24 + 22	24 + 24 + 24 + 24 + 24
Cooling capacity	kW	313,00	318,50	324,00	329,50	335,00
Heating capacity	kW	313,00	318,50	324,00	329,50	335,00
Connectable indoor units (max.)	Pce.	122	124	126	128	128



## OUTDOOR UNITS COMBINATIONS SMMSu

OUTDOOR UNIT		MMY-UP2611HT8P-E	MMY-UP2811HT8P-E	MMY-UP3011HT8P-E	MMY-UP3211HT8P-E
Capacity code	HP	26	28	30	32
Combined units		14 + 12	14 + 14	18 + 12	20 + 12
Cooling capacity	kW 	73,50	80,00	83,90	89,50
Power consumption (min./nom./max.)	kW 	24,89	29,10	26,24	28,35
Partial load efficiency @ 80%/60%/40%	W/W 	-	-	-	-
Energy efficiency SEER		7,17	7,05	7,52	7,50
Heating capacity	kW 	73,50	80,00	83,90	89,50
Power consumption (min./nom./max.)	kW 	17,77	20,00	20,31	22,70
Partial load efficiency @ 80%/60%/40%	W/W 	-	-	-	-
Energy efficiency SCOP		4,67	4,60	4,75	4,55
Airflow	m³/h	11800 + 11700	2 x 11800	15900 + 11880	16500 + 11700
Liquid pipe diameter	mm (inch)	19,1 (¾)	19,1 (¾)	19,1 (¾)	19,1 (¾)
Suction gas pipe diameter	mm (inch)	34,9 (1 3/8)	34,9 (1 3/8)	34,9 (1 3/8)	34,9 (1 3/8)
Oil equalization pipe diameter	mm (inch)	-	-	-	-
Sound pressure level (low/med/high)	dB(A) 	61,5	64,2	63,0	64,5
Sound pressure level (low/med/high)	dB(A) 	65,5	65,5	68,5	68,5
Sound power level	dB(A) 	82,5	82,5	85,5	87,0
Sound power level	dB(A) 	85	85	90,0	91,0
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	2 x 228	2 x 228	334 + 228	356 + 228
<b>Price</b>	<b>€</b>	<b>31.940,-</b>	<b>34.840,-</b>	<b>34.650,-</b>	<b>36.100,-</b>

OUTDOOR UNIT		MMY-UP3411HT8P-E	MMY-UP3611HT8P-E	MMY-UP3811HT8P-E	MMY-UP4011HT8P-E
Capacity code	HP	34	36	38	40
Combined units		20 + 14	24 + 12	24 + 14	20 + 20
Cooling capacity	kW 	96,00	100,50	107,00	112,00
Power consumption (min./nom./max.)	kW 	32,56	34,53	38,74	36,02
Partial load efficiency @ 80%/60%/40%	W/W 	-	-	-	-
Energy efficiency SEER		7,38	7,01	6,93	7,62
Heating capacity	kW 	96,00	100,50	107,00	112,00
Power consumption (min./nom./max.)	kW 	24,93	26,75	28,98	29,86
Partial load efficiency @ 80%/60%/40%	W/W 	-	-	-	-
Energy efficiency SCOP		4,50	4,38	4,33	4,43
Airflow	m³/h	15900 + 11880	16500 + 11700	16500 + 11880	2 x 15900
Liquid pipe diameter	mm (inch)	19,1 (¾)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	34,9 (1 3/8)	41,3 (1 5/8)	41,3 (1 5/8)	41,3 (1 5/8)
Oil equalization pipe diameter	mm (inch)	-	-	-	-
Sound pressure level (low/med/high)	dB(A) 	64,5	64,5	64,5	66,5
Sound pressure level (low/med/high)	dB(A) 	68,5	68,5	68,5	70,5
Sound power level	dB(A) 	87,0	87,0	87,0	89,5
Sound power level	dB(A) 	91,0	91,0	91,0	93,5
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	334 + 228	356 + 228	356 + 228	334 + 334
<b>Price</b>	<b>€</b>	<b>39.000,-</b>	<b>39.490,-</b>	<b>42.390,-</b>	<b>43.160,-</b>

## OUTDOOR UNITS COMBINATIONS SMMSu

OUTDOOR UNIT		MMY-UP4211HT8P-E	MMY-UP4411HT8P-E	MMY-UP4611HT8P-E	MMY-UP4811HT8P-E
Capacity code	HP	42	44	46	48
Combined units		24 + 18	24 + 20	24 + 22	24 + 24
Cooling capacity	kW 	117,40	123,00	128,50	134,00
Power consumption (min./nom./max.)	kW 	40,09	42,20	44,62	48,38
Partial load efficiency @ 80%/60%/40%	W/W 	-	-	-	-
Energy efficiency SEER		7,22	7,21	7,04	6,87
Heating capacity	kW 	117,40	123,00	128,50	134,00
Power consumption (min./nom./max.)	kW 	31,52	33,91	35,16	37,96
Partial load efficiency @ 80%/60%/40%	W/W 	-	-	-	-
Energy efficiency SCOP		4,43	4,30	4,31	4,17
Airflow	m³/h	16500 + 16800	16500 + 15900	2 x 16500	2 x 16500
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	41,3 (1 5/8)	41,3 (1 5/8)	41,3 (1 5/8)	41,3 (1 5/8)
Oil equalization pipe diameter	mm (inch)	-	-	-	-
Sound pressure level (low/med/high)	dB(A) 	65,5	88,5	89,5	66,5
Sound pressure level (low/med/high)	dB(A) 	70,5	70,5	70,5	70,5
Sound power level	dB(A) 	88,5	88,5	88,5	89,5
Sound power level	dB(A) 	93,0	93,0	93,0	93,5
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	356 + 312	356 + 334	356 + 356	356 + 356
<b>Price</b>	<b>€</b>	<b>45.100,-</b>	<b>46.550,-</b>	<b>47.980,-</b>	<b>49.940,-</b>

OUTDOOR UNIT		MMY-UP5011HT8P-E	MMY-UP5211HT8P-E	MMY-UP5411HT8P-E	MMY-UP5611HT8P-E
Capacity code	HP	50	52	54	56
Combined units		24 + 14 + 12	24 + 14 + 14	20 + 20 + 14	24 + 20 + 12
Cooling capacity	kW 	140,50	147,00	152,00	156,50
Power consumption (min./nom./max.)	kW 	49,08	53,29	50,57	52,54
Partial load efficiency @ 80%/60%/40%	W/W 	-	-	-	-
Energy efficiency SEER		7,02	6,96	7,49	7,23
Heating capacity	kW 	140,50	147,00	152,00	156,50
Power consumption (min./nom./max.)	kW 	36,75	38,98	39,86	41,68
Partial load efficiency @ 80%/60%/40%	W/W 	-	-	-	-
Energy efficiency SCOP		4,44	4,41	4,47	4,41
Airflow	m³/h	16500 + 11880 + 11700	16500 + 2x 11880	2x 15900 + 11880	16500 + 15900 + 11700
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	41,3 (1 5/8)	41,3 (1 5/8)	41,3 (1 5/8)	41,3 (1 5/8)
Oil equalization pipe diameter	mm (inch)	-	-	-	-
Sound pressure level (low/med/high)	dB(A) 	66,5	65,5	67,0	67,0
Sound pressure level (low/med/high)	dB(A) 	70,5	69,5	71,0	71,0
Sound power level	dB(A) 	89,5	87,5	89,5	89,5
Sound power level	dB(A) 	93,5	91,5	93,5	93,5
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	356 + 2x 228	356 + 2x 228	2x 334 + 228	356 + 334 + 228
<b>Price</b>	<b>€</b>	<b>56.910,-</b>	<b>59.810,-</b>	<b>60.580,-</b>	<b>61.070,-</b>

## OUTDOOR UNITS COMBINATIONS SMMSu

OUTDOOR UNIT		MMY-UP5811HT8P-E	MMY-UP6011HT8P-E	MMY-UP6211HT8P-E	MMY-UP6411HT8P-E
Capacity code	HP	58	60	62	64
Combined units		24 + 20 + 14	24 + 24 + 12	24 + 24 + 14	24 + 20 + 20
Cooling capacity	kW	163,00	167,50	174,00	179,00
Power consumption (min./nom./max.)	kW	56,75	58,72	62,93	60,21
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SEER		7,19	6,95	6,29	7,34
Heating capacity	kW	163,00	167,50	174,00	179,00
Power consumption (min./nom./max.)	kW	43,91	45,73	47,96	48,84
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SCOP		4,37	4,30	4,27	4,34
Airflow	m³/h	16500 + 15900 + 11700	2x 16500 + 11700	2x 16500 + 11880	16500 + 2x 15900
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	41,3 (1 5/8)	41,3 (1 5/8)	44,5 (1 3/4)	44,5 (1 3/4)
Oil equalization pipe diameter	mm (inch)	-	-	-	-
Sound pressure level (low/med/high)	dB(A)	67,0	67,0	67,0	67,0
Sound pressure level (low/med/high)	dB(A)	71,0	71,0	71,0	71,0
Sound power level	dB(A)	89,5	89,5	89,5	89,5
Sound power level	dB(A)	93,5	93,5	93,5	93,5
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	356 + 334 + 228	2x 356 + 228	2x 356 + 228	356 + 2x 334
<b>Price</b>	<b>€</b>	<b>63.970,-</b>	<b>64.460,-</b>	<b>67.360,-</b>	<b>68.130,-</b>

OUTDOOR UNIT		MMY-UP6611HT8P-E	MMY-UP6811HT8P-E	MMY-UP7011HT8P-E	MMY-UP7211HT8P-E
Capacity code	HP	66	68	70	72
Combined units		24 + 22 + 20	24 + 24 + 20	24 + 24 + 22	24 + 24 + 24
Cooling capacity	kW	184,50	190,00	195,50	201,00
Power consumption (min./nom./max.)	kW	62,63	66,39	68,81	72,57
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SEER		7,21	7,09	6,98	6,87
Heating capacity	kW	184,50	190,00	195,50	201,00
Power consumption (min./nom./max.)	kW	50,09	52,89	54,14	56,94
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SCOP		4,35	4,26	4,26	4,17
Airflow	m³/h	2x 16500 + 15900	2x 16500 + 15900	3x 165000	3x 165000
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	44,5 (1 3/4)	44,5 (1 3/4)	44,5 (1 3/4)	44,5 (1 3/4)
Oil equalization pipe diameter	mm (inch)	-	-	-	-
Sound pressure level (low/med/high)	dB(A)	68,0	68,0	68,0	68,0
Sound pressure level (low/med/high)	dB(A)	72,0	72,0	72,0	72,0
Sound power level	dB(A)	91,0	91,0	91,0	91,0
Sound power level	dB(A)	95,0	95,0	95,0	95,0
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	2x 356 + 334	2x 356 + 334	3x 356	3x 356
<b>Price</b>	<b>€</b>	<b>69.560,-</b>	<b>71.520,-</b>	<b>72.950,-</b>	<b>74.910,-</b>

## OUTDOOR UNITS COMBINATIONS SMMSu

OUTDOOR UNIT		MMY-UP7411HT8P-E	MMY-UP7611HT8P-E	MMY-UP7811HT8P-E	MMY-UP8011HT8P-E
Capacity code	HP	74	76	78	80
Combined units		24 + 24 + 14 + 12	24 + 24 + 14 + 14	24 + 20 + 20 + 14	24 + 24 + 20 + 12
Cooling capacity	kW	207,50	214,00	219,00	223,50
Power consumption (min./nom./max.)	kW	73,27	77,48	74,76	76,73
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SEER		6,97	6,93	7,30	7,14
Heating capacity	kW	207,50	214,00	219,00	223,50
Power consumption (min./nom./max.)	kW	55,73	57,96	58,84	60,66
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SCOP		4,36	4,33	4,39	4,34
Airflow	m³/h	2x 16500 + 11880 + 11700	2x 16500 + 2x 11880	16500 + 2x 15900 + 11880	2x 16500 + 15900 + 11700
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	44,5 (1 3/4)	54,0 (2 1/8)	54,0 (2 1/8)	54,0 (2 1/8)
Oil equalization pipe diameter	mm (inch)	-	-	-	-
Sound pressure level (low/med/high)	dB(A)	68,0	67,5	68,5	68,5
Sound pressure level (low/med/high)	dB(A)	72,0	71,5	72,5	72,5
Sound power level	dB(A)	91,0	90,0	91,5	91,5
Sound power level	dB(A)	95,0	94,0	95,0	95,0
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	2x 356 + 2x 228	2x 356 + 2x 228	356 + 2x 334 + 228	2x 356 + 334 + 228
<b>Price</b>	<b>€</b>	<b>81.880,-</b>	<b>84.780,-</b>	<b>85.550,-</b>	<b>86.040,-</b>

OUTDOOR UNIT		MMY-UP8211HT8P-E	MMY-UP8411HT8P-E	MMY-UP8611HT8P-E	MMY-UP8811HT8P-E
Capacity code	HP	82	84	86	88
Combined units		24 + 24 + 20 + 14	24 + 24 + 24 + 12	24 + 24 + 24 + 14	24 + 24 + 20 + 20
Cooling capacity	kW	230,00	234,50	241,00	246,00
Power consumption (min./nom./max.)	kW	80,94	82,91	87,12	84,40
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SEER		7,10	6,95	6,91	7,21
Heating capacity	kW	230,00	234,50	241,00	246,00
Power consumption (min./nom./max.)	kW	62,89	64,71	66,94	67,82
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SCOP		4,32	4,26	4,25	4,30
Airflow	m³/h	2x 16500 + 15900 + 11880	3x 16500 + 11700	3x 16500 + 11880	2x 16500 + 2x 15900
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	54,0 (2 1/8)	54,0 (2 1/8)	54,0 (2 1/8)	54,0 (2 1/8)
Oil equalization pipe diameter	mm (inch)	-	-	-	-
Sound pressure level (low/med/high)	dB(A)	68,5	68,5	68,5	68,5
Sound pressure level (low/med/high)	dB(A)	72,5	72,5	72,5	72,5
Sound power level	dB(A)	91,5	91,5	91,5	91,5
Sound power level	dB(A)	95,0	95,0	95,0	95,0
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	2x 356 + 334 + 228	3x 356 + 228	3x 356 + 228	2x 356 + 2x 334
<b>Price</b>	<b>€</b>	<b>88.940,-</b>	<b>89.430,-</b>	<b>92.330,-</b>	<b>93.100,-</b>

## OUTDOOR UNITS COMBINATIONS SMMSu

OUTDOOR UNIT		MMY-UP9011HT8P-E	MMY-UP9211HT8P-E	MMY-UP9411HT8P-E	MMY-UP9611HT8P-E
Capacity code	HP	90	92	94	96
Combined units		24 + 24 + 22 + 20	24 + 24 + 24 + 20	24 + 24 + 24 + 22	24 + 24 + 24 + 24
Cooling capacity	kW	251,50	257,00	262,50	268,00
Power consumption (min./nom./max.)	kW	86,82	90,58	93,00	96,76
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SEER		7,12	7,03	6,95	6,87
Heating capacity	kW	251,50	257,00	262,50	268,00
Power consumption (min./nom./max.)	kW	69,07	71,87	73,12	75,92
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SCOP		4,30	4,24	4,24	4,17
Airflow	m³/h	3x 16500 + 15900	3x 16500 + 15900	4x 16500	4x 16500
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	54,0 (2 1/8)	54,0 (2 1/8)	54,0 (2 1/8)	54,0 (2 1/8)
Oil equalization pipe diameter	mm (inch)	-	-	-	-
Sound pressure level (low/med/high)	dB(A)	69.5	69.5	69.5	69.5
Sound pressure level (low/med/high)	dB(A)	73.5	73.5	73.5	73.5
Sound power level	dB(A)	92.5	92.5	92.5	92.5
Sound power level	dB(A)	96.5	96.5	96.5	96.5
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	3x 356 + 334	3x 356 + 334	4x 356	4x 356
<b>Price</b>	<b>€</b>	<b>94.530,-</b>	<b>96.490,-</b>	<b>97.920,-</b>	<b>99.880,-</b>

OUTDOOR UNIT		MMY-UP9811HT8P-E	MMY-UP10011HT8P-E	MMY-UP10211HT8P-E	MMY-UP10411HT8P-E
Capacity code	HP	98	100	102	104
Combined units		24+24+24+14+12	24+24+24+14+14	24 + 24 + 20 + 20 +14	24 + 24 + 24 + 20 + 12
Cooling capacity	kW	274,50	281,00	286,00	290,50
Power consumption (min./nom./max.)	kW	97,46	101,67	98,98	100,92
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SEER		6,95	6,94	7,20	7,08
Heating capacity	kW	274,50	281,00	286,00	290,50
Power consumption (min./nom./max.)	kW	74,71	76,94	77,82	79,64
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SCOP		4,31	4,30	4,34	4,30
Airflow	m³/h	3x 16500 + 11880 + 11700	3x 16500 + 2x 11880	2x 16500 + 2x 15900 + 11880	3x 16500 + 15900 + 11700
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	54,0 (2 1/8)	54,0 (2 1/8)	54,0 (2 1/8)	54,0 (2 1/8)
Oil equalization pipe diameter	mm (inch)	-	-	-	-
Sound pressure level (low/med/high)	dB(A)	69.5	69.0	69.5	69.5
Sound pressure level (low/med/high)	dB(A)	73.5	73.0	73.0	73.0
Sound power level	dB(A)	92.5	91.5	91.5	91.5
Sound power level	dB(A)	96.5	95.5	95.5	95.5
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	3x 356 + 2x 228	3x 356 + 2x 228	2x 356 + 2x 334 + 228	3x 356 + 334 + 228
<b>Price</b>	<b>€</b>	<b>106.850,-</b>	<b>109.750,-</b>	<b>110.520,-</b>	<b>111.010,-</b>

## OUTDOOR UNITS COMBINATIONS SMMSu

OUTDOOR UNIT		MMY-UP10611HT8P-E	MMY-UP10811HT8P-E	MMY-UP11011HT8P-E	MMY-UP11211HT8P-E
Capacity code	HP	106	108	110	112
Combined units		24 + 24 + 24 + 20 + 14	24 + 24 + 24 + 24 + 12	24 + 24 + 24 + 24 + 14	24 + 24 + 24 + 20 + 20
Cooling capacity	kW	297,00	301,50	308,00	313,00
Power consumption (min./nom./max.)	kW	105,13	107,10	111,31	108,59
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SEER		7,04	6,93	6,90	7,13
Heating capacity	kW	297,00	301,50	308,00	313,00
Power consumption (min./nom./max.)	kW	81,87	83,69	85,92	86,80
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SCOP		4,29	4,24	4,23	4,28
Airflow	m³/h	3x 16500 + 15900 + 11880	4x 16500 + 11700	4x 16500 + 11880	3x 16500 + 2x 15900
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	54,0 (2 1/8)	54,0 (2 1/8)	54,0 (2 1/8)	54,0 (2 1/8)
Oil equalization pipe diameter	mm (inch)	-	-	-	-
Sound pressure level (low/med/high)	dB(A)	69,5	69,5	69,5	69,5
Sound pressure level (low/med/high)	dB(A)	73,0	73,0	73,0	73,0
Sound power level	dB(A)	91,5	91,5	91,5	91,5
Sound power level	dB(A)	95,5	95,5	95,5	95,5
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	3x 356 + 334 + 228	4x 356 + 228	4x 356 + 228	3x 356 + 2x 334
<b>Price</b>	<b>€</b>	<b>113.910,-</b>	<b>114.400,-</b>	<b>117.300,-</b>	<b>118.070,-</b>

OUTDOOR UNIT		MMY-UP11411HT8P-E	MMY-UP11611HT8P-E	MMY-UP11811HT8P-E	MMY-UP12011HT8P-E
Capacity code	HP	114	116	118	120
Combined units		24 + 24 + 24 + 22 + 20	24 + 24 + 24 + 24 + 20	24 + 24 + 24 + 24 + 22	24 + 24 + 24 + 24 + 24
Cooling capacity	kW	318,50	324,00	329,50	335,00
Power consumption (min./nom./max.)	kW	111,01	114,77	117,19	120,95
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SEER		7,07	7,00	6,93	6,87
Heating capacity	kW	318,50	324,00	329,50	335,00
Power consumption (min./nom./max.)	kW	88,05	90,85	92,10	94,90
Partial load efficiency @ 80%/60%/40%	W/W	-	-	-	-
Energy efficiency SCOP		4,28	4,22	4,23	4,17
Airflow	m³/h	4x 16500 + 15900	4x 16500 + 15900	5x 16500	5x 16500
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	54,0 (2 1/8)	54,0 (2 1/8)	54,0 (2 1/8)	54,0 (2 1/8)
Oil equalization pipe diameter	mm (inch)	-	-	-	-
Sound pressure level (low/med/high)	dB(A)	70,0	70,0	70,0	70,0
Sound pressure level (low/med/high)	dB(A)	74,0	74,0	74,0	74,0
Sound power level	dB(A)	93,0	93,0	93,0	93,0
Sound power level	dB(A)	97,0	97,0	97,0	97,0
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	4x 356 + 334	4x 356 + 334	5x 356	5x 356
<b>Price</b>	<b>€</b>	<b>119.500,-</b>	<b>121.460,-</b>	<b>122.890,-</b>	<b>124.850,-</b>

# MiNi SMMS Single Fan Outdoor units

- Ultra-compact outdoor unit for up to 10 indoor units
- SEER efficiency values up to 8,08 – SCOP efficiency values up to 5,36
- Controls local wired or infrared, central, and / or via BMS



OUTDOOR UNIT		MCY-MHP0406HT-E	MCY-MHP0506HT-E1
Cooling capacity	kW	12,10	14,00
Power consumption (min./nom./max.)	kW	3,24	3,94
Energy efficiency EER	W/W	3,73	3,23
Energy efficiency SEER		8,08	7,77
Running current	A	13,8	17,9
Heating capacity	kW	12,50	16,00
Power consumption (min./nom./max.)	kW	2,83	3,86
Energy efficiency COP	W/W	4,42	4,00
Energy efficiency SCOP		3,83	3,88
Running current	A	12,80	17,50
Airflow	m³/h	4020	4260
Outdoor temperature operating range (min.-max.)	°C	-5 / +46	-5 / +46
Outdoor temperature operating range (min.-max.)	°C	-20 / +15	-20 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50
Sound pressure level (low/med/high)	dB(A)	54	54
Sound pressure level (low/med/high)	dB(A)	57	58
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)
Pipe length (max.)	m	90	90
Height difference (max.)	m	15/15	15/15
Connectable indoor units (max.)	Pce.	8	10
Compressor type		1x Twin-Rotary	1x Twin-Rotary
Refrigerant		R410A	R410A
Refrigerant charge	kg	3,30	3,30
Dimensions (HxWxD)	mm	910 x 990 x 390	910 x 990 x 390
Weight	kg	100	100
<b>Price</b>	<b>€</b>	<b>5.115,-</b>	<b>5.210,-</b>

# MiNi SMMSe Outdoor units

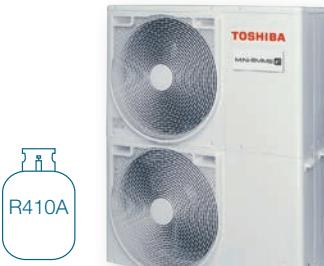
- Compact outdoor unit for up to 13 indoor units
- SEER efficiency values up to 9,68 – SCOP efficiency values up to 7,19
- Controls local wired or infrared, central, and / or via BMS



## MiNi SMMSe – 1-phase

OUTDOOR UNIT		MCY-MHP0404HS-E	MCY-MHP0504HS-E	MCY-MHP0604HS-E
Cooling capacity	kW	12,10	14,00	15,50
Power consumption (min./nom./max.)	kW	2,83	3,50	4,29
Energy efficiency EER	W/W	4,28	4,00	3,61
Energy efficiency SEER		9,42	9,23	9,68
Running current	A	13,00	15,90	19,20
Heating capacity	kW	12,50	16,00	18,00
Power consumption (min./nom./max.)	kW	2,59	3,75	4,31
Energy efficiency COP	W/W	4,83	4,27	4,18
Energy efficiency SCOP		4,17	4,24	4,37
Running current	A	12,00	17,00	19,30
Airflow	m³/h	5660	5820	6050
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46
Outdoor temperature operating range (min.-max.)	°C	-20 / +15	-20 / +15	-20 / +15
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Sound pressure level (low/med/high)	dB(A)	49	50	51
Sound pressure level (low/med/high)	dB(A)	52	53	54
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	19,1 (3/4)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (max.)	m	180	180	180
Height difference (max.)	m	20/30	20/30	20/30
Connectable indoor units (max.)	Pce.	8	10	13
Compressor type		1x Twin-Rotary	1x Twin-Rotary	1x Twin-Rotary
Refrigerant		R410A	R410A	R410A
Refrigerant charge	kg	6,40	6,40	6,40
Dimensions (HxWxD)	mm	1235 x 990 x 390	1235 x 990 x 390	1235 x 990 x 390
Weight	kg	127	127	127
<b>Price</b>	<b>€</b>	<b>5.910,-</b>	<b>6.045,-</b>	<b>6.595,-</b>

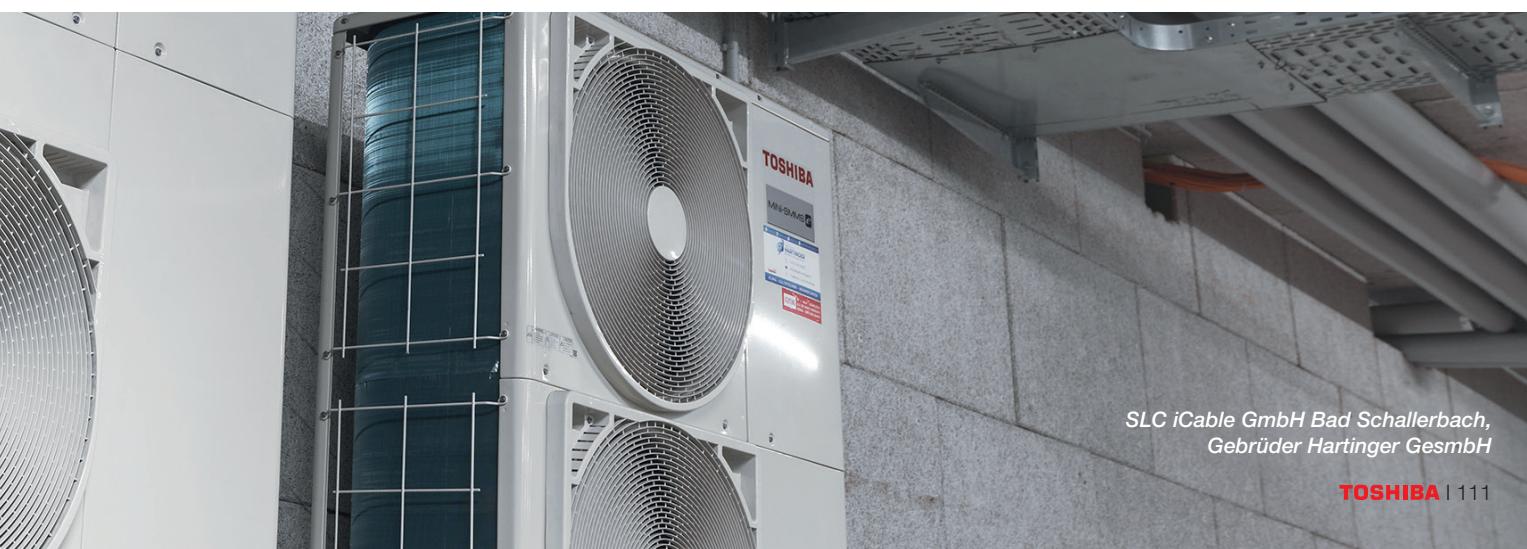




## MINI SMMSe – 3-phase

OUTDOOR UNIT		MCY-MHP0404HS8-E	MCY-MHP0504HS8-E	MCY-MHP0604HS8-E	MCY-MHP0806HS8-E	MCY-MHP1006HS8-E
Cooling capacity	kW	12,10	14,00	15,50	22,40	28,00
Power consumption (min./nom./max.)	kW	2,82	3,47	4,25	6,67	9,34
Energy efficiency EER	W/W	4,29	4,03	3,65	3,36	3,00
Energy efficiency SEER		-	-	-	8,09	7,40
Running current	A	4,50	5,40	6,70	10,6	14,5
Heating capacity	kW	12,50	16,00	18,00	22,40	28,00
Power consumption (min./nom./max.)	kW	2,57	3,72	4,27	5,20	7,00
Energy efficiency COP	W/W	4,86	4,40	4,22	4,31	4,00
Energy efficiency SCOP		4,19	4,25	4,38	4,50	4,38
Running current	A	4,20	5,80	6,60	8,2	10,9
Airflow	m³/h	5660	5820	6050	8460	8820
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46
Outdoor temperature operating range (min.-max.)	°C	-20 / +15,5	-20 / +15,5	-20 / +15,5	-20 / +15	-20 / +15
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Sound pressure level (low/med/high)	dB(A)	49	50	51	58	59
Sound pressure level (low/med/high)	dB(A)	52	53	54	59	60
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	19,1 (3/4)	19,1 (3/4)	22,2 (7/8)
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Pipe length (max.)	m	180	180	180	300	300
Height difference (max.)	m	20/30	20/30	20/30	30	30
Connectable indoor units (max.)	Pce.	8	10	13	12	16
Compressor type		1x Twin Rotary	1x Twin Rotary	1x Twin Rotary	Twin-Rotary	Twin-Rotary
Refrigerant		R410A	R410A	R410A	R410A	R410A
Refrigerant charge	kg	6,40	6,40	6,40	4,40	4,40
Dimensions (HxWxD)	mm	1235 x 990 x 390	1235 x 990 x 390	1235 x 990 x 390	1740 x 990 x 390	1740 x 990 x 390
Weight	kg	125	125	125	147	147
<b>Price</b>	<b>€</b>	<b>5.975,-</b>	<b>6.110,-</b>	<b>6.680,-</b>	<b>9.495,-</b>	<b>9.740,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
<b>RBM-PMV0361U-E</b>	PMV kit for indoor units, sizes 5 to 14 (SMMSu)	290,-
<b>RBM-PMV0363E</b>	PMV kit for indoor units, sizes 5 to 14 (SMMSe)	280,-
<b>RBM-PMV0901U-E</b>	PMV kit for indoor units, sizes 15 to 27 (SMMSu)	330,-
<b>RBM-PMV0903E</b>	PMV kit for indoor units, sizes 15 to 27 (SMMSe)	320,-



SLC iCable GmbH Bad Schallerbach,  
Gebrüder Hartinger GesmbH

# SMMSe

## LowRef Outdoor units

- 2-pipe stand-alone outdoor units with 8, 10 or 12 HP
- 50 % lower factory charge; about 30 % reduced system refrigerant charge
- Combinations not possible



OUTDOOR UNIT		MMY-SAP0806HT8P-E*	MMY-SAP1006HT8P-E*
Capacity code	HP	8	10
Cooling capacity	kW	22,40	28,00
Power consumption (min./nom./max.)	kW	5,54	7,91
Partial load efficiency @ 80%/60%/40%	W/W	4,97/5,96/6,59	4,47/5,60/6,66
Energy efficiency SEER		6,32	6,18
Running current	A	8,80	12,40
Heating capacity	kW	25,00	31,50
Power consumption (min./nom./max.)	kW	5,66	7,59
Partial load efficiency @ 80%/60%/40%	W/W	5,52/6,28/6,41	5,20/5,85/6,00
Energy efficiency SCOP		3,79	3,81
Running current	A	9,00	11,90
Airflow	m³/h	9700	9700
External static pressure	Pa	60	60
Sound pressure level (low/med/high)	dB(A)	55	57
Sound pressure level (low/med/high)	dB(A)	56	58
Sound power level	dB(A)	74,0	74,0
Sound power level	dB(A)	74,0	74,0
Compressor type		2x Twin-Rotary	2x Twin-Rotary
Liquid pipe diameter	mm (inch)	12,7 (½)	12,7 (½)
Suction gas pipe diameter	mm (inch)	19,1 (¾)	22,2 (7/8)
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46
Outdoor temperature operating range (min.-max.)	°C	-25 / +25	-25 / +25
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50
Recommended fusing	A	3x 20	3x 20
Pipe length (max.)	m	300	300
Height difference (max.)	m	40/70	40/70
Refrigerant		R410A	R410A
Refrigerant charge	kg	5,70	5,70
Dimensions (HxWxD)	mm	1830 x 990 x 780	1830 x 990 x 780
Weight	kg	227	227
<b>Price</b>	<b>€</b>	<b>9.135,-</b>	<b>9.605,-</b>

\* While stocks last.

# SMMSe

## Outdoor units

- 2-pipe outdoor unit for up to 64 indoor units with continuous heating function
- SEER efficiency values up to 6,11 – SCOP efficiency values up to 4,82
- Controls local wired or infrared, central, and / or via BMS



OUTDOOR UNIT		MMY-MAP0806HT8P-E*	MMY-MAP1006HT8P-E*	MMY-MAP1606HT8P-E*	MMY-MAP2206HT8P-E*
Capacity code	HP	8	10	16	22
Cooling capacity	kW	22,40	28,00	45,00	61,50
Power consumption (min./nom./max.)	kW	5,54	7,69	14,29	23,21
Partial load efficiency @ 80%/60%/40%	W/W	4,97/5,96/6,59	4,47/5,60/6,66	4,01/5,06/6,27	3,49/4,64/6,10
Energy efficiency SEER		6,11	6,06	5,29	5,04
Running current	A	8,79	12,10	22,40	35,60
Heating capacity	kW	25,00	31,50	50,00	64,00
Power consumption (min./nom./max.)	kW	5,53	7,41	12,89	17,10
Partial load efficiency @ 80%/60%/40%	W/W	5,52/6,28/6,41	5,20/5,85/6,00	4,63/5,33/5,60	4,38/4,87/5,26
Energy efficiency SCOP		3,64	3,53	3,70	4,82
Running current	A	8,77	11,60	20,20	26,50
Airflow	m³/h	9700	9700	12600	18500
External static pressure	Pa	60	60	40	40
Sound pressure level (low/med/high)	dB(A)	55	57	62	61
Sound pressure level (low/med/high)	dB(A)	56	58	64	62
Sound power level	dB(A)	74	74	81,0	83,0
Sound power level	dB(A)	74	74	83,0	84,0
Compressor type		2x Twin Rotary	2x Twin Rotary	2x Twin Rotary	2x Twin Rotary
Liquid pipe diameter	mm (inch)	12,7 (½)	12,7 (½)	15,9 (5/8)	19,1 (¾)
Suction gas pipe diameter	mm (inch)	19,1 (¾)	22,2 (7/8)	28,6 (1 1/8)	28,6 (1 1/8)
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46	-15 / +46
Outdoor temperature operating range (min.-max.)	°C	-25 / +25	-25 / +25	-25 / +25	-25 / +25
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Recommended fusing	A	3x 20	3x 20	3x 32	3x 50
Pipe length (max.)	m	1000	1000	1000	1000
Height difference (max.)	m	90	90	90	90
Refrigerant		R410A	R410A	R410A	R410A
Refrigerant charge	kg	11,50	11,50	11,50	11,50
Dimensions (HxWxD)	mm	1830 x 990 x 780	1830 x 990 x 780	1830 x 1210 x 780	1830 x 1600 x 780
Weight	kg	242	242	300	371
<b>Price</b>	<b>€</b>	<b>10.545,-</b>	<b>11.065,-</b>	<b>15.555,-</b>	<b>19.105,-</b>

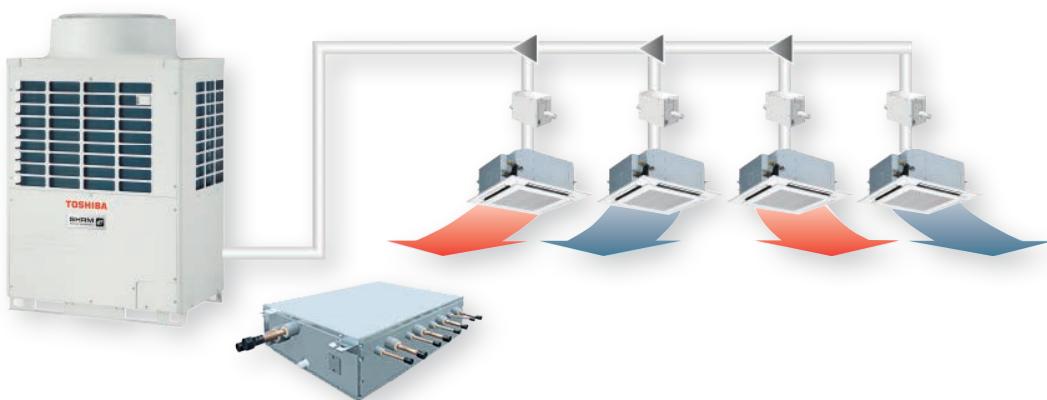
\* While stocks last.

# SHRMe Outdoor units

- 3-pipe heat recovery outdoor unit for up to 64 indoor units
- SEER efficiency values up to 6,07 – SCOP efficiency values up to 5,27
- Controls local wired or infrared, central and / or via BMS



OUTDOOR UNIT		MMY-MAP0806FT8P-E	MMY-MAP1006FT8P-E	MMY-MAP1206FT8P-E	MMY-MAP1406FT8P-E
Capacity code	HP	8	10	12	14
Cooling capacity	kW	22,40	28,00	33,50	40,00
Power consumption (min./nom./max.)	kW	5,96	7,98	9,77	12,74
Partial load efficiency @ 80%/60%/40%	W/W	5,0 - 6,6 - 7,4	4,7 - 6,3 - 7,2	4,4 - 5,5 - 6,8	4,0 - 6,4 - 6,3
Energy efficiency SEER		6,07	6,03	5,94	5,61
Running current	A	9,44	12,49	15,46	19,92
Heating capacity	kW	22,40	28,00	33,50	40,00
Power consumption (min./nom./max.)	kW	5,40	7,05	8,70	10,50
Partial load efficiency @ 80%/60%/40%	W/W	5,1 - 5,8 - 5,9	4,9 - 5,5 - 5,6	4,6 - 5,2 - 5,5	4,7 - 5,3 - 5,4
Energy efficiency SCOP		3,64	3,53	3,71	3,57
Running current	A	8,57	11,06	13,80	16,47
Airflow	m³/h	9700	9700	12200	12200
External static pressure	Pa	60	50	50	40
Sound pressure level (low/med/high)	dB(A)	59	59	60	62
Sound pressure level (low/med/high)	dB(A)	61	61	62	64
Sound power level	dB(A)	80,0	80,0	80,0	81,0
Sound power level	dB(A)	82,0	82,0	82,0	83,0
Compressor type		2x Twin-Rotary	2x Twin-Rotary	2x Twin-Rotary	2x Twin-Rotary
Liquid pipe diameter	mm (inch)	12,7 (½)	12,7 (½)	12,7 (½)	12,7 (½)
Suction gas pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	28,6 (1 1/8)	28,6 (1 1/8)
Hot gas pipe diameter	mm (inch)	19,1 (¾)	19,1 (¾)	19,1 (¾)	22,2 (7/8)
Oil equalization pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46	-15 / +46
Outdoor temperature operating range (min.-max.)	°C	-25 / +25	-25 / +25	-25 / +25	-25 / +25
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Recommended fusing	A	3x 20	3x 20	3x 25	3x 32
Pipe length (max.)	m	300	300	300	300
Height difference (max.)	m	90	90	90	90
Refrigerant		R410A	R410A	R410A	R410A
Refrigerant charge	kg	11,00	11,00	11,00	11,00
Dimensions (HxWxD)	mm	1830 x 990 x 780	1830 x 990 x 780	1830 x 1210 x 780	1830 x 1210 x 780
Weight	kg	263	263	316	316
<b>Price</b>	<b>€</b>	<b>13.730,-</b>	<b>15.055,-</b>	<b>20.430,-</b>	<b>21.505,-</b>



## SHRMe Outdoor units

OUTDOOR UNIT		MMY-MAP1606FT8P-E	MMY-MAP1806FT8P-E	MMY-MAP2006FT8P-E
Capacity code	HP	16	18	20
Cooling capacity	kW	45,00	50,40	56,00
Power consumption (min./nom./max.)	kW	13,93	16,00	18,60
Partial load efficiency @ 80%/60%/40%	W/W	4,2 - 5,5 - 7,0	4,3 - 6,0 - 7,3	3,7 - 4,6 - 5,7
Energy efficiency SEER		5,72	5,89	5,64
Running current	A	21,81	25,10	29,18
Heating capacity	kW	45,00	50,40	56,00
Power consumption (min./nom./max.)	kW	12,20	13,73	15,91
Partial load efficiency @ 80%/60%/40%	W/W	4,4 - 5,1 - 5,3	4,3 - 4,8 - 5,2	4,1 - 4,6 - 5,0
Energy efficiency SCOP		3,50	3,69	3,59
Running current	A	19,14	21,49	24,68
Airflow	m³/h	17300	17300	17900
External static pressure	Pa	40	40	40
Sound pressure level (low/med/high)	dB(A)	61	61	61
Sound pressure level (low/med/high)	dB(A)	62	62	62
Sound power level	dB(A)	83,0	83,0	83,0
Sound power level	dB(A)	84,0	84,0	84,0
Compressor type		2x Twin-Rotary	2x Twin-Rotary	2x Twin-Rotary
Liquid pipe diameter	mm (inch)	19,1 (¾)	19,1 (¾)	19,1 (¾)
Suction gas pipe diameter	mm (inch)	28,6 (1 1/8)	28,6 (1 1/8)	28,6 (1 1/8)
Hot gas pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Oil equalization pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Outdoor temperature operating range (min.-max.)	°C	-15 / +46	-15 / +46	-15 / +46
Outdoor temperature operating range (min.-max.)	°C	-25 / +25	-25 / +25	-25 / +25
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Recommended fusing	A	3x 32	3x 40	3x 40
Pipe length (max.)	m	300	300	300
Height difference (max.)	m	90	90	90
Refrigerant		R410A	R410A	R410A
Refrigerant charge	kg	11,00	11,00	11,00
Dimensions (HxWxD)	mm	1830 x 1600 x 780	1830 x 1600 x 780	1830 x 1600 x 780
Weight	kg	377	377	377
Price	€	23.360,-	25.080,-	26.275,-

## Refrigerant flow boxes - single port - series 3 (standard functions)

ACCESSORIES	NUMBER OF PORTS (PCE.)	CONNECTABLE CAPACITY (KW)	MAX. CONNECTABLE INDOOR UNITS (PCE.)	DIMENSIONS (HXWXD) (MM)	WEIGHT (KG)	PRICE €
<b>RBM-Y1123FE</b>	1	1,7 - 11,2	5	190 x 250 x 160	5	950,-
<b>RBM-Y1803FE</b>	1	11,2 - 18,0	10	190 x 250 x 160	5	980,-
<b>RBM-Y2803FE</b>	1	18,0 - 28,0	10	200 x 377 x 200	8	1.650,-
<b>RBC-FSEX15</b>						180,-

## Refrigerant flow boxes - single port - series 4 with integrated subcooler

ACCESSORIES	NUMBER OF PORTS (PCE.)	CONNECTABLE CAPACITY (KW)	MAX. CONNECTABLE INDOOR UNITS (PCE.)	DIMENSIONS (HXWXD) (MM)	WEIGHT (KG)	PRICE €
<b>RBM-Y1124FE</b>	1	1,7 - 11,2	5	180 x 425 x 300	12	1.640,-
<b>RBM-Y1804FE</b>	1	11,2 - 18,0	10	180 x 425 x 300	12	1.765,-
<b>RBM-Y2804FE</b>	1	18,0 - 28,0	10	180 x 495 x 350	17	2.905,-

## Refrigerant flow boxes - multi-port - with integrated subcooler

ACCESSORIES	NUMBER OF PORTS (PCE.)	CONNECTABLE CAPACITY (KW)	MAX. CONNECTABLE INDOOR UNITS (PCE.)	DIMENSIONS (HXWXD) (MM)	WEIGHT (KG)	PRICE €
<b>RBM-Y1801F4PE</b>	4	1,7 - 18,0	10	215 x 730 x 567	38	4.470,-
<b>RBM-Y1801F6PE</b>	6	1,7 - 18,0	10	215 x 1050 x 567	53	6.645,-

# Combination tables SHRMe



OUTDOOR UNIT		MMY-MAP0806FT8P-E	MMY-MAP1006FT8P-E	MMY-MAP1206FT8P-E	MMY-MAP1406FT8P-E	MMY-MAP1606FT8P-E	MMY-MAP1806FT8P-E	MMY-MAP2006FT8P-E
Capacity code	HP	8	10	12	14	16	18	20
Combined units		-	-	-	-	-	-	-
Cooling capacity	kW	22,40	28,00	33,50	40,00	45,00	50,40	56,00
Heating capacity	kW	22,40	28,00	33,50	40,00	45,00	50,40	56,00
Connectable indoor units (max.)	Pce.	18	22	27	31	36	40	41



OUTDOOR UNIT		MMY-AP2216FT8P-E	MMY-AP2416FT8P-E	MMY-AP2616FT8P-E	MMY-AP2816FT8P-E	MMY-AP3016FT8P-E	MMY-AP3216FT8P-E
Capacity code	HP	22	24	26	28	30	32
Combined units		12 + 10	14 + 10	14 + 12	14 + 14	16 + 14	18 + 14
Cooling capacity	kW	61,50	68,00	73,50	80,00	85,00	90,40
Heating capacity	kW	61,50	68,00	73,50	80,00	85,00	90,40
Connectable indoor units (max.)	Pce.	49	54	58	63	64	64



OUTDOOR UNIT		MMY-AP3416FT8P-E	MMY-AP3616FT8P-E	MMY-AP3816FT8P-E	MMY-AP4016FT8P-E	MMY-AP4216FT8P-E
Capacity code	HP	34	36	38	40	42
Combined units		18 + 16	18 + 18	20 + 18	20 + 20	14 + 14 + 14
Cooling capacity	kW	95,40	100,80	106,40	112,00	120,00
Heating capacity	kW	95,40	100,80	106,40	112,00	120,00
Connectable indoor units (max.)	Pce.	64	64	64	64	64



OUTDOOR UNIT		MMY-AP4416FT8P-E	MMY-AP4616FT8P-E	MMY-AP4816FT8P-E	MMY-AP5016FT8P-E	MMY-AP5216FT8P-E	MMY-AP5416FT8P-E
Capacity code	HP	44	46	48	50	52	54
Combined units		16 + 14 + 14	18 + 14 + 14	18 + 16 + 14	18 + 18 + 14	18 + 18 + 16	18 + 18 + 18
Cooling capacity	kW	125,00	130,40	135,40	140,80	145,80	151,20
Heating capacity	kW	125,00	130,40	135,40	140,80	145,80	151,20
Connectable indoor units (max.)	Pce.	64	64	64	64	64	64

## OUTDOOR UNIT COMBINATIONS SHRMe

OUTDOOR UNIT		MMY-AP2216FT8P-E	MMY-AP2416FT8P-E	MMY-AP2616FT8P-E
Capacity code	HP	22	24	26
Combined units		12 + 10	14 + 10	14 + 12
Cooling capacity	kW 	61,50	68,00	73,50
Power consumption (min./nom./max.)	kW 	17,71	20,66	22,45
Partial load efficiency @ 80%/60%/40%	W/W 	4,4 - 5,7 - 7,5	4,2 - 5,3 - 7,0	4,2 - 5,3 - 6,5
Energy efficiency SEER		5,99	5,81	5,77
Heating capacity	kW 	61,50	68,00	73,50
Power consumption (min./nom./max.)	kW 	15,75	17,55	19,20
Partial load efficiency @ 80%/60%/40%	W/W 	4,7 - 5,3 - 5,6	4,7 - 5,4 - 5,5	4,6 - 5,3 - 5,5
Energy efficiency SCOP		3,63	3,56	3,63
Airflow	m³/h	12200+9700	12200+9700	2x 12200
Liquid pipe diameter	mm (inch)	19,1 (¾)	19,1 (¾)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	34,9 (1 3/8)	34,9 (1 3/8)	34,9 (1 3/8)
Hot gas pipe diameter	mm (inch)	28,6 (1 1/8)	28,6 (1 1/8)	28,6 (1 1/8)
Oil equalization pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Sound pressure level (low/med/high)	dB(A) 	63,0	64,0	64,5
Sound pressure level (low/med/high)	dB(A) 	65,0	66,0	66,5
Sound power level	dB(A) 	83,5	84,0	84,0
Sound power level	dB(A) 	85,5	86,0	86,0
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	316+263	316+263	2x 316
<b>Price</b>	<b>€</b>	<b>35.485,-</b>	<b>36.560,-</b>	<b>41.935,-</b>

OUTDOOR UNIT		MMY-AP2816FT8P-E	MMY-AP3016FT8P-E	MMY-AP3216FT8P-E
Capacity code	HP	28	30	32
Combined units		14 + 14	16 + 14	18 + 14
Cooling capacity	kW 	80,00	85,00	90,40
Power consumption (min./nom./max.)	kW 	25,40	26,60	27,80
Partial load efficiency @ 80%/60%/40%	W/W 	4,0 - 5,1 - 6,3	4,1 - 5,3 - 6,7	4,0 - 5,2 - 6,5
Energy efficiency SEER		5,61	5,67	5,77
Heating capacity	kW 	80,00	85,00	90,40
Power consumption (min./nom./max.)	kW 	21,00	22,70	24,40
Partial load efficiency @ 80%/60%/40%	W/W 	4,7 - 5,3 - 5,4	4,5 - 5,2 - 5,4	4,4 - 5,0 - 5,3
Energy efficiency SCOP		3,57	3,54	3,58
Airflow	m³/h	2x 12200	17300+12200	17300+12200
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	34,9 (1 3/8)	34,9 (1 3/8)	34,9 (1 3/8)
Hot gas pipe diameter	mm (inch)	28,6 (1 1/8)	28,6 (1 1/8)	28,6 (1 1/8)
Oil equalization pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Sound pressure level (low/med/high)	dB(A) 	66,5	65,0	65,0
Sound pressure level (low/med/high)	dB(A) 	67,5	66,5	66,5
Sound power level	dB(A) 	84,5	85,5	85,5
Sound power level	dB(A) 	86,5	87,0	87,0
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	2x 316	377+316	377+316
<b>Price</b>	<b>€</b>	<b>43.010,-</b>	<b>44.865,-</b>	<b>46.585,-</b>

## OUTDOOR UNIT COMBINATIONS SHRMe

OUTDOOR UNIT		MMY-AP3416FT8P-E	MMY-AP3616FT8P-E	MMY-AP3816FT8P-E
Capacity code	HP	34	36	38
Combined units		18 + 16	18 + 18	20 + 18
Cooling capacity	kW	95,40	100,80	106,40
Power consumption (min./nom./max.)	kW	29,90	32,00	34,60
Partial load efficiency @ 80%/60%/40%	W/W	4,1 - 5,4 - 6,9	4,4 - 5,6 - 7,3	3,9 - 4,9 - 6,1
Energy efficiency SEER		5,81	5,89	5,76
Heating capacity	kW	95,40	100,80	106,40
Power consumption (min./nom./max.)	kW	25,90	27,40	29,60
Partial load efficiency @ 80%/60%/40%	W/W	4,3 - 4,9 - 5,2	4,3 - 4,8 - 5,2	4,2 - 4,7 - 5,1
Energy efficiency SCOP		3,55	3,59	3,59
Airflow	m³/h	2x 17300	2x 17300	17900 + 17300
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	34,9 (1 3/8)	41,3 (1 5/8)	41,3 (1 5/8)
Hot gas pipe diameter	mm (inch)	28,6 (1 1/8)	34,9 (1 3/8)	34,9 (1 3/8)
Oil equalization pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Sound pressure level (low/med/high)	dB(A)	64,5	64,5	64,5
Sound pressure level (low/med/high)	dB(A)	65,5	65,5	65,5
Sound power level	dB(A)	86,5	86,4	86,5
Sound power level	dB(A)	87,5	87,5	87,5
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	2x 377	2x 377	2x 377
<b>Price</b>	<b>€</b>	<b>48.440,-</b>	<b>50.160,-</b>	<b>51.355,-</b>

OUTDOOR UNIT		MMY-AP4016FT8P-E	MMY-AP4216FT8P-E	MMY-AP4416FT8P-E
Capacity code	HP	40	42	44
Combined units		20 + 20	14 + 14 + 14	16 + 14 + 14
Cooling capacity	kW	112,00	120,00	125,00
Power consumption (min./nom./max.)	kW	37,20	38,10	39,30
Partial load efficiency @ 80%/60%/40%	W/W	3,7 - 4,6 - 5,7	4,0 - 5,1 - 6,3	4,1 - 5,2 - 6,5
Energy efficiency SEER		5,64	5,61	5,65
Heating capacity	kW	112,00	120,00	125,00
Power consumption (min./nom./max.)	kW	31,80	31,50	33,20
Partial load efficiency @ 80%/60%/40%	W/W	4,1 - 4,6 - 5,0	4,7 - 5,3 - 5,4	4,6 - 5,2 - 5,4
Energy efficiency SCOP		3,59	3,57	3,55
Airflow	m³/h	2x 17900	3x 12200	17300 + 12200 + 12200
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	41,3 (1 5/8)	41,3 (1 5/8)	41,3 (1 5/8)
Hot gas pipe diameter	mm (inch)	34,9 (1 3/8)	34,9 (1 3/8)	34,9 (1 3/8)
Oil equalization pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Sound pressure level (low/med/high)	dB(A)	64,5	67,0	66,5
Sound pressure level (low/med/high)	dB(A)	65,5	69,0	68,5
Sound power level	dB(A)	86,5	86,0	87,0
Sound power level	dB(A)	87,5	88,0	88,5
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	2x 377	3x 316	377+316+316
<b>Price</b>	<b>€</b>	<b>52.550,-</b>	<b>64.515,-</b>	<b>66.370,-</b>

OUTDOOR UNIT		MMY-AP4616FT8P-E	MMY-AP4816FT8P-E	MMY-AP5016FT8P-E
Capacity code	HP	46	48	50
Combined units		18 + 14 + 14	18 + 16 + 14	18 + 18 + 14
Cooling capacity	kW	130,40	135,40	140,80
Power consumption (min./nom./max.)	kW	41,40	41,70	43,80
Partial load efficiency @ 80%/60%/40%	W/W	4,0 - 5,1 - 6,5	4,1 - 5,3 - 6,7	4,0 - 5,2 - 6,6
Energy efficiency SEER		5,72	5,77	5,83
Heating capacity	kW	130,40	135,40	140,80
Power consumption (min./nom./max.)	kW	34,70	36,60	38,10
Partial load efficiency @ 80%/60%/40%	W/W	4,5 - 5,1 - 5,3	4,4 - 5,0 - 5,3	4,4 - 4,9 - 5,2
Energy efficiency SCOP		3,58	3,56	3,59
Airflow	m³/h	17300 + 12200 + 12200	17300 + 17300 + 12200	17300 + 17300 + 12200
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	41,3 (1 5/8)	41,3 (1 5/8)	41,3 (1 5/8)
Hot gas pipe diameter	mm (inch)	34,9 (1 3/8)	34,9 (1 3/8)	34,9 (1 3/8)
Oil equalization pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Sound pressure level (low/med/high)	dB(A)	66,5	66,5	66,5
Sound pressure level (low/med/high)	dB(A)	68,5	68,0	68,0
Sound power level	dB(A)	87,0	87,5	87,5
Sound power level	dB(A)	88,5	88,5	88,5
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Weight	kg	377+316+316	377+377+316	377+377+316
<b>Price</b>	<b>€</b>	<b>68.090,-</b>	<b>69.945,-</b>	<b>71.665,-</b>

OUTDOOR UNIT		MMY-AP5216FT8P-E	MMY-AP5416FT8P-E
Capacity code	HP	52	54
Combined units		18 + 18 + 16	18 + 18 + 18
Cooling capacity	kW	145,80	151,20
Power consumption (min./nom./max.)	kW	45,90	48,00
Partial load efficiency @ 80%/60%/40%	W/W	4,1 - 5,4 - 6,8	4,4 - 5,7 - 7,2
Energy efficiency SEER		5,84	5,89
Heating capacity	kW	145,80	151,20
Power consumption (min./nom./max.)	kW	39,60	41,10
Partial load efficiency @ 80%/60%/40%	W/W	4,3 - 4,9 - 5,2	4,3 - 4,8 - 5,2
Energy efficiency SCOP		3,56	3,59
Airflow	m³/h	3x 17300	3x 17300
Liquid pipe diameter	mm (inch)	22,2 (7/8)	22,2 (7/8)
Suction gas pipe diameter	mm (inch)	41,3 (1 5/8)	41,3 (1 5/8)
Hot gas pipe diameter	mm (inch)	34,9 (1 3/8)	34,9 (1 3/8)
Oil equalization pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)
Sound pressure level (low/med/high)	dB(A)	66,0	66,0
Sound pressure level (low/med/high)	dB(A)	67,0	67,0
Sound power level	dB(A)	88,0	88,0
Sound power level	dB(A)	89,0	89,0
Power supply	V/Ph+N/Hz	380-415/3/50	380-415/3/50
Weight	kg	3x 377	3x 377
<b>Price</b>	<b>€</b>	<b>73.520,-</b>	<b>75.240,-</b>

# Power consumption + fuse protection

TYPE	Running current (max.)	Running current (nom.)	Power consumption (min./nom./max.)	Power consumption (min./nom./max.)	Recommended fusing	Power supply	Recommended power supply line type	Communication line
	A	A	kW	kW	A	V/Ph+N/Hz		
<b>SMMSu</b>								
MMY-MUP0801HT8P-E	17	9,20 / 8,60	5,64	5,28	3x 20	380-415/3/50	H07RN-F 5G4,0	YSLCY 2x1,5
MMY-MUP1001HT8P-E	23	13,40 / 11,50	8,36	7,20	3x 32	380-415/3/50	H07RN-F 5G4,0	YSLCY 2x1,5
MMY-MUP1201HT8P-E	27	16,00 / 12,10	10,34	7,77	3x 32	380-415/3/50	H07RN-F 5G4,0	YSLCY 2x1,5
MMY-MUP1401HT8P-E	31	22,60 / 15,50	14,55	10,00	3x 40	380-415/3/50	H07RN-F 5G4,0	YSLCY 2x1,5
MMY-MUP1601HT8P-E	34	21,60 / 18,30	14,06	11,94	3x 40	380-415/3/50	H07RN-F 5G6,0	YSLCY 2x1,5
MMY-MUP1801HT8P-E	38	24,40 / 19,30	15,90	12,54	3x 50	380-415/3/50	H07RN-F 5G6,0	YSLCY 2x1,5
MMY-MUP2001HT8P-E	40	27,70 / 22,90	18,01	14,93	3x 50	380-415/3/50	H07RN-F 5G6,0	YSLCY 2x1,5
MMY-MUP2201HT8P-E	57	31,40 / 24,80	20,43	16,18	3x 63	380-415/3/50	H07RN-F 5G6,0	YSLCY 2x1,5
MMY-MUP2401HT8P-E	60	37,10 / 29,10	24,19	18,98	3x 80	380-415/3/50	H07RN-F 5G10,0	YSLCY 2x1,5
<b>MiNi SMMS Single Fan</b>								
MCY-MHP0406HT-E	26,5	13,80 / 12,80	3,24	2,83	20	220-240/1/50	H07RN-F 3G2,5	YSLCY 2x1,5
MCY-MHP0506HT-E1	28,0	17,90 / 17,50	3,94	3,86	25	220-240/1/50	H07RN-F 3G4,0	YSLCY 2x1,5
<b>MiNi SMMSe 1-phase</b>								
MCY-MHP0404HS-E	23,5	13,00 / 12,00	2,83	2,59	20	220-240/1/50	H07RN-F 3G2,5	YSLCY 2x1,5
MCY-MHP0504HS-E	26,5	15,90 / 17,00	3,50	3,75	20	220-240/1/50	H07RN-F 3G2,5	YSLCY 2x1,5
MCY-MHP0604HS-E	28,0	19,20 / 19,30	4,29	4,31	25	220-240/1/50	H07RN-F 3G4,0	YSLCY 2x1,5
<b>MiNi SMMSe 3-phase</b>								
MCY-MHP0404HS8-E	12,5	4,50 / 4,20	2,82	2,57	3x 16	380-415/3/50	H07RN-F 5G1,5	YSLCY 2x1,5
MCY-MHP0504HS8-E	12,5	5,40 / 5,80	3,47	3,72	3x 16	380-415/3/50	H07RN-F 5G1,5	YSLCY 2x1,5
MCY-MHP0604HS8-E	12,5	6,70 / 6,60	4,25	4,27	3x 16	380-415/3/50	H07RN-F 5G1,5	YSLCY 2x1,5
MCY-MHP0806HS8-E	-	10,60 / 8,20	6,67	5,20	3x 20	380-415/3/50	H07RN-F 5G4,0	YSLCY 2x1,5
MCY-MHP1006HS8-E	-	14,50 / 10,90	9,34	7,00	3x 25	380-415/3/50	H07RN-F 5G4,0	YSLCY 2x1,5
<b>SMMSe LowRef</b>								
MMY-SAP0806HT8P-E*	20,5	8,79 / 8,96	5,54	5,66	3x 20	380-415/3/50	H07RN-F 5G2,5	YSLCY 2x1,5
MMY-SAP1006HT8P-E*	21,5	12,40 / 11,90	7,91	7,59	3x 20	380-415/3/50	H07RN-F 5G4,0	YSLCY 2x1,5
<b>SMMSe</b>								
MMY-MAP0806HT8P-E*	20,5	8,79 / 8,77	5,54	5,53	3x 20	380-415/3/50	H07RN-F 5G2,5	YSLCY 2x1,5
MMY-MAP1006HT8P-E*	21,5	12,10 / 11,60	7,69	7,41	3x 20	380-415/3/50	H07RN-F 5G2,5	YSLCY 2x1,5
MMY-MAP1606HT8P-E*	35,8	22,40 / 20,20	14,29	12,89	3x 32	380-415/3/50	H07RN-F 5G6,0	YSLCY 2x1,5
MMY-MAP2206HT8P-E*	49,3	35,6 / 26,5	23,21	17,10	3x 50	380-415/3/50	H07RN-F 5G10,0	YSLCY 2x1,5
<b>SHRMe</b>								
MMY-MAP0806FT8P-E	21,5	9,44 / 8,57	5,96	5,40	3x 20	380-415/3/50	H07RN-F 5G2,5	YSLCY 2x1,5
MMY-MAP1006FT8P-E	26,1	12,49 / 11,06	7,98	7,05	3x 20	380-415/3/50	H07RN-F 5G2,5	YSLCY 2x1,5
MMY-MAP1206FT8P-E	31,0	15,46 / 13,80	9,77	8,70	3x 25	380-415/3/50	H07RN-F 5G4,0	YSLCY 2x1,5
MMY-MAP1406FT8P-E	35,8	19,92 / 16,47	12,74	10,50	3x 32	380-415/3/50	H07RN-F 5G6,0	YSLCY 2x1,5
MMY-MAP1606FT8P-E	40,7	21,81 / 19,14	13,93	12,20	3x 32	380-415/3/50	H07RN-F 5G6,0	YSLCY 2x1,5
MMY-MAP1806FT8P-E	44,9	25,10 / 21,49	16,00	13,73	3x 40	380-415/3/50	H07RN-F 5G6,0	YSLCY 2x1,5
MMY-MAP2006FT8P-E	49,3	29,18 / 24,68	18,60	15,91	3x 40	380-415/3/50	H07RN-F 5G6,0	YSLCY 2x1,5

# Sound data

TYPE	Sound power level	Sound power level	Sound power level (night operation)	Sound pressure level (low/med/high)	Sound pressure level (low/med/high)	Sound pressure level (night operation)
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
<b>SMMSu</b>						
MMY-MUP0801HT8P-E	75	76	-	53	56	50
MMY-MUP1001HT8P-E	77	77	-	55	58	50
MMY-MUP1201HT8P-E	79	81	-	58	62	50
MMY-MUP1401HT8P-E	79	82	-	58	62	53
MMY-MUP1601HT8P-E	83	86	-	60	63	53
MMY-MUP1801HT8P-E	84	89	-	61	67	54
MMY-MUP2001HT8P-E	86	90	-	63	67	54
MMY-MUP2201HT8P-E	86	90	-	63	67	54
MMY-MUP2401HT8P-E	86	90	-	63	67	54
<b>MiNi SMMS Single Fan</b>						
MCY-MHP0406HT-E	73,0	74,0	-	54	57	50 / 50
MCY-MHP0506HT-E1	73,0	73,0	-	54	58	50 / 50
<b>MiNi SMMSe 1-phase</b>						
MCY-MHP0404HS-E	66	69	62 / 65	49	52	46 / 48
MCY-MHP0504HS-E	68	70	62 / 65	50	53	46 / 48
MCY-MHP0604HS-E	68	71	65 / 65	51	54	47 / 49
<b>MiNi SMMSe 3-phase</b>						
MCY-MHP0404HS8-E	66,0	67,0	62 / 65	49	52	46 / 48
MCY-MHP0504HS8-E	68,0	69,0	62 / 65	50	53	46 / 48
MCY-MHP0604HS8-E	68,0	70,0	65 / 65	51	54	47 / 49
MCY-MHP0806HS8-E	75	75	67 / 67	58	59	50 / 50
MCY-MHP1006HS8-E	77	77	67 / 67	59	60	50 / 50
<b>SMMSe LowRef</b>						
MMY-SAP0806HT8P-E*	74,0	74,0	-	55	56	51 / 51
MMY-SAP1006HT8P-E*	74,0	74,0	-	57	58	51 / 51
<b>SMMSe</b>						
MMY-MAP0806HT8P-E*	74	74	-	55	56	50 / 50
MMY-MAP1006HT8P-E*	74	74	-	57	58	50 / 50
MMY-MAP1606HT8P-E*	81,0	83,0	-	62	64	53 / 53
MMY-MAP2206HT8P-E*	83,0	84,0	-	61	62	54 / 54
<b>SHRMe</b>						
MMY-MAP0806FT8P-E	80,0	82,0	-	59	61	50 / 50
MMY-MAP1006FT8P-E	80,0	82,0	-	59	61	50 / 50
MMY-MAP1206FT8P-E	80,0	82,0	-	60	62	53 / 53
MMY-MAP1406FT8P-E	81,0	83,0	-	62	64	53 / 53
MMY-MAP1606FT8P-E	83,0	84,0	-	61	62	54 / 54
MMY-MAP1806FT8P-E	83,0	84,0	-	61	62	54 / 54
MMY-MAP2006FT8P-E	83,0	84,0	-	61	62	54 / 54

**Sound pressure Night Operation:** with sound reduction module, see external control options.

# VRF INDOOR UNITS: OVERVIEW

## HIGH WALL UNITS

### HIGH WALL UNIT

Cooling: 0,9 | 1,7 | 2,2 | 2,8 | 3,6 | 4,5 | 5,6 | 7,1 | 8,0 | 9,0 | 10,0  
all current VRF outdoor units

Page 124, 126



## CEILING UNITS

### CEILING UNIT

Cooling: 4,5 | 5,6 | 7,1 | 8,0 | 11,2 | 14,0 | 16,0  
all current VRF outdoor units

Page 128

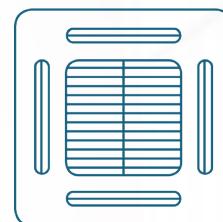


## CASSETTE UNITS

### 60x60 SLIM CASSETTE

Cooling: 1,7 | 2,2 | 2,8 | 3,6 | 4,5 | 5,6  
all current VRF outdoor units

Page 129



### 4-WAY STANDARD CASSETTE

Cooling: 2,8 | 3,6 | 4,5 | 5,6 | 7,1 | 8,0 | 9,0 | 11,2 | 14,0 | 16,0  
all current VRF outdoor units

Page 130

### 4-WAY SMART CASSETTE

Cooling: 2,8 | 3,6 | 4,5 | 5,6 | 7,1 | 8,0 | 9,0 | 11,2 | 14,0 | 16,0  
all SMMSu outdoor units

Page 132

### 2-WAY CASSETTE

Cooling: 2,2 | 2,8 | 3,6 | 4,5 | 5,6 | 7,1 | 8,0 | 9,0 |  
11,2 | 14,0 | 16,0  
all current VRF outdoor units

Page 134

### 1-WAY FLAT CASSETTE

Cooling: 0,9 | 1,7 | 2,2 | 2,8 | 3,6  
all current VRF outdoor units

Page 136

### 1-WAY CASSETTE

Cooling: 4,5 | 5,6 | 7,1  
all current VRF outdoor units

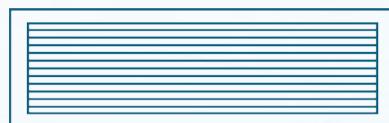
Page 139

## KANALGERÄTE

### STANDARD DUCT UNIT

Cooling: 1,7 | 2,2 | 2,8 | 3,6 | 4,5 | 5,6 | 7,1 | 8,0 | 9,0 | 11,2 | 14,0 | 16,0  
all current VRF outdoor units

Page 140



### SSD SUPER SLIM DUCT UNIT

Cooling: 0,9 | 1,7 | 2,2 | 2,8 | 3,6 | 4,5 | 5,6 | 7,1 | 8,0  
all current VRF outdoor units

Page 142

## SLIM DUCT UNIT

Cooling: 2,2 | 3,6 | 5,6 | 7,1 | 8,0  
all current VRF outdoor units

Page 144



## HIGH PRESSURE DUCT UNIT

Cooling: 5,6 | 7,1 | 8,0 | 11,2 | 14,0 | 16,0 | 22,4 | 28,0  
all current VRF outdoor units

Page 146

## FRESH AIR DUCT UNIT SMMSe

Cooling: 14,0 | 22,4 | 28,0  
for SMMSu and SMMSe Systems (except sizes 112 & 128 – exclusively for SMMSu)

Page 148

## FRESH AIR DUCT UNIT SMMSu

Cooling: 14,0 | 22,4 | 28,0  
for SMMSu and SMMSe Systems (except sizes 112 & 128 – exclusively for SMMSu)

Page 150

## FLOOR STANDING

### CONSOLE

Cooling: 2,2 | 2,8 | 3,6 | 4,5 | 5,6  
all current VRF outdoor units

Page 153



### CHASSIS

Cooling: 2,2 | 2,8 | 3,6 | 4,5 | 5,6 | 7,1  
all current VRF outdoor units

Page 154

## FLOOR STANDING

Cooling: 4,5 | 5,6 | 7,1 | 8,0 | 11,2 | 14,0 | 16,0  
all current VRF outdoor units

Page 155

## SPECIAL SOLUTIONS

### DX-KIT Exhaust air control

Cooling: 4,5 – 28,0  
all SMMSe Standard

Page 156



### DX-KIT 0 – 10 V control capacity

Cooling: 16,0 | 22,4 | 28,0  
for SMMSe Standard 8 PS + 10 PS (not LowRef)

Page 156

### VN HEXE Air / Air heat exchanger

Cooling: 4,1 | 6,5 | 8,2  
for MiNi SMMSe, SMMSe Standard, SHRMe

Page 158, 160

### HOT WATER MODULE MT (2&3 pipes)

Cooling: 8,0 | 16,0  
for SMMSe, SHRMe

Page 162

### HOT WATER MODULE HT (3 pipes)

Cooling: 14,0  
for SHRMe

Page 163

# High wall unit

- Compact all-rounder for all applications
- Whisper-quiet 5-speed fan – up to 25 dB(A)
- For SMMSu and SMMSe systems
- (except size 003 – exclusively for SMMSu)



INDOOR UNIT		MMK-UP0031HP-E	MMK-UP0051HP-E	MMK-UP0071HP-E	MMK-UP0091HP-E	MMK-UP0121HP-E	MMK-UP0151HP-E
Cooling capacity	kW	0,90	1,70	2,20	2,80	3,60	4,50
Heating capacity	kW	1,30	1,90	2,50	3,20	4,00	5,00
Airflow	m³/h	270/370/455	270/370/455	270/385/480	270/395/510	270/410/540	550/690/840
Sound pressure level (low/med/high)	dB(A)	25/29/33	25/29/33	25/30/35	25/31/36	25/32/37	32/36/40
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	12,7 (½)
Condensate pipe diameter	mm	16	16	16	16	16	16
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,013	0,013	0,015	0,016	0,017	0,028
Dimensions (HxWxD)	mm	293 x 798 x 230	320 x 1050 x 250				
Weight	kg	11	11,0	11,0	11,0	11,0	16,0
Price	€	980,-	1.005,-	1.030,-	1.040,-	1.050,-	1.165,-

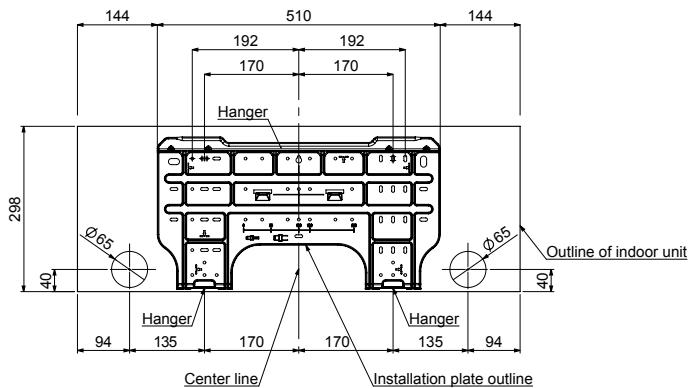
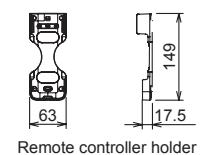
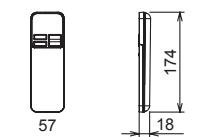
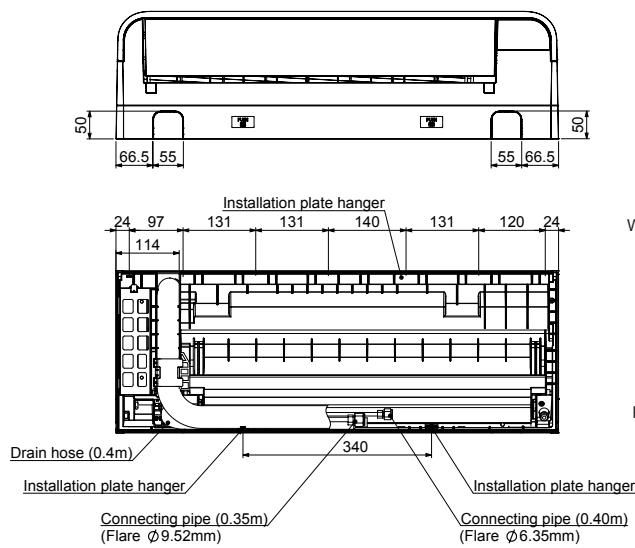
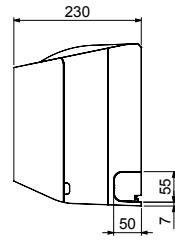
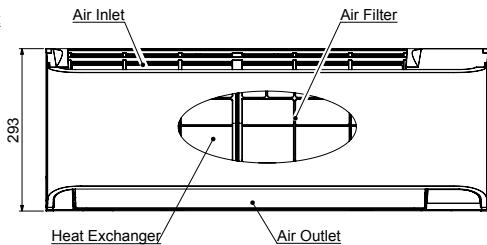
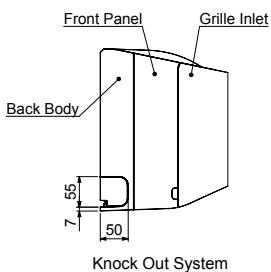
INDOOR UNIT		MMK-UP0181HP-E	MMK-UP0241HP-E	MMK-UP0271HP-E	MMK-UP0301HP-E	MMK-UP0361HP-E
Cooling capacity	kW	5,60	7,10	8,00	9,00	10,00
Heating capacity	kW	6,30	8,00	9,00	10,00	11,20
Airflow	m³/h	550/720/900	600/900/1200	800/1000/1200	1100/1300/1500	1250/1350/1650
Sound pressure level (low/med/high)	dB(A)	32/37/41	33/39/45	39/41/45	41/44/48	43/45/50
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,8 (5/8)	15,8 (5/8)	15,8 (5/8)
Condensate pipe diameter	mm	16	16	16	16	16
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,032	0,050	0,034	0,054	0,066
Dimensions (HxWxD)	mm	320 x 1050 x 250	320 x 1050 x 250	350 x 1200 x 280	350 x 1200 x 280	350 x 1200 x 280
Weight	kg	16,0	16,0	21	21	21
Price	€	1.190,-	1.205,-	1.430,-	1.495,-	1.575,-

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	
818F0036	IAQ filter strips		40,-
818F0023	Active carbon-catechin filter strips		27,-
818F0050	Ultra-pure 2,5 filter strips		40,-
818F0072	Ultra-Fresh filter strips		35,-

All optional control options can be found from page 169.

## HIGH WALL UNIT

Indoor Unit



# High wall unit with external PMV-Kit

- Series E1 without built-in injection valve
- Especially for noise-sensitive applications
- Must be installed in conjunction with the PMV kit without exception!
- For SMMSu and SMMSe systems (except size 003 – exclusively for SMMSu)



INDOOR UNIT SMMSu	MMK-UP0031HPL-E	MMK-UP0051HPL-E	MMK-UP0071HPL-E	MMK-UP0091HPL-E
Cooling capacity	kW	0,90	1,70	2,20
Heating capacity	kW	1,30	1,90	2,50
Airflow	m³/h	270/370/455	270/370/455	270/385/480
Sound pressure level (low/med/high)	dB(A)	25/29/33	25/29/33	25/30/35
Liquid pipe diameter	mm (inch)	6,4 (1/4)	6,4 (1/4)	6,4 (1/4)
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Condensate pipe diameter	mm	16	16	16
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,013	0,013	0,015
Dimensions (HxWxD)	mm	293 x 798 x 230	293 x 798 x 230	293 x 798 x 230
Weight	kg	11	11,0	11,0
Price	€	<b>850,-</b>	<b>885,-</b>	<b>905,-</b>
				<b>920,-</b>

INDOOR UNIT SMMSu	MMK-UP0121HPL-E	MMK-UP0151HPL-E	MMK-UP0181HPL-E	MMK-UP0241HPL-E
Cooling capacity	kW	3,60	4,50	5,60
Heating capacity	kW	4,00	5,00	6,30
Airflow	m³/h	270/410/540	550/690/840	550/720/900
Sound pressure level (low/med/high)	dB(A)	25/32/37	32/36/40	32/37/41
Liquid pipe diameter	mm (inch)	6,4 (1/4)	6,4 (1/4)	6,4 (1/4)
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	12,7 (1/2)	12,7 (1/2)
Condensate pipe diameter	mm	16	16	16
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,017	0,028	0,032
Dimensions (HxWxD)	mm	293 x 798 x 230	320 x 1050 x 250	320 x 1050 x 250
Weight	kg	11,0	16,0	16,0
Price	€	<b>930,-</b>	<b>1.040,-</b>	<b>1.060,-</b>
				<b>1.085,-</b>

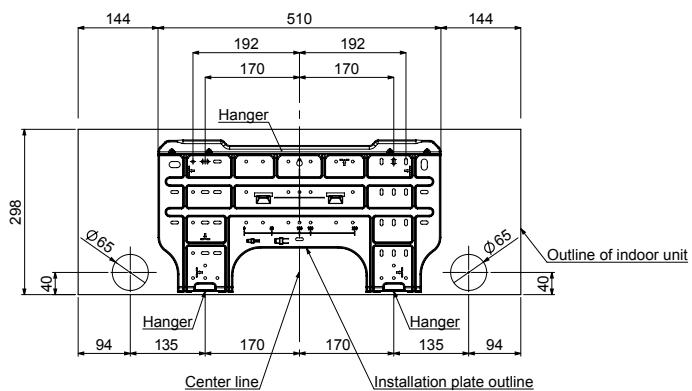
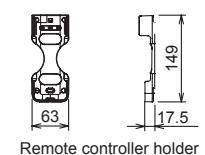
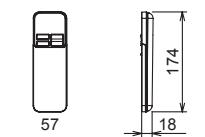
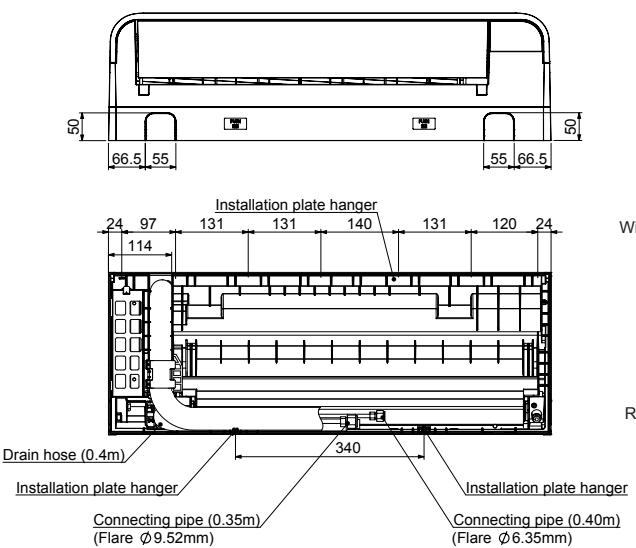
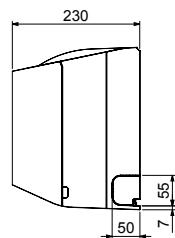
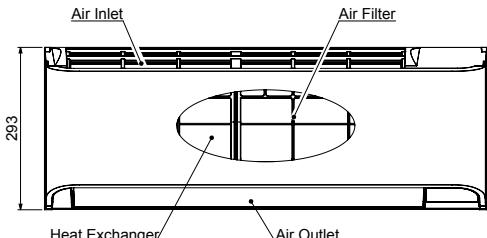
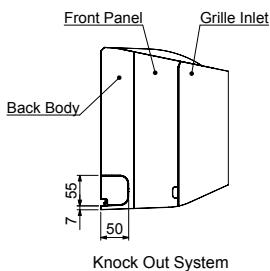
ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	
RBM-PMV0361U-E	PMV kit for indoor units, sizes 5 to 14 (SMMSu)		<b>290,-</b>
RBM-PMV0901U-E	PMV kit for indoor units, sizes 15 to 27 (SMMSu)		<b>330,-</b>
818F0036	IAQ filter strips		<b>40,-</b>
818F0023	Active carbon-catechin filter strips		<b>27,-</b>
818F0050	Ultra-pure 2.5 filter strips		<b>40,-</b>
818F0072	Ultra-Fresh filter strips		<b>35,-</b>

\* While stocks last.

All optional control options can be found from page 169.

## HIGH WALL UNIT

Indoor Unit



# Ceiling unit



- Attractive design for optimal air distribution
  - Optional board for external control, alarms and messages
  - High air throw
  - For SMMSu and SMMSe systems

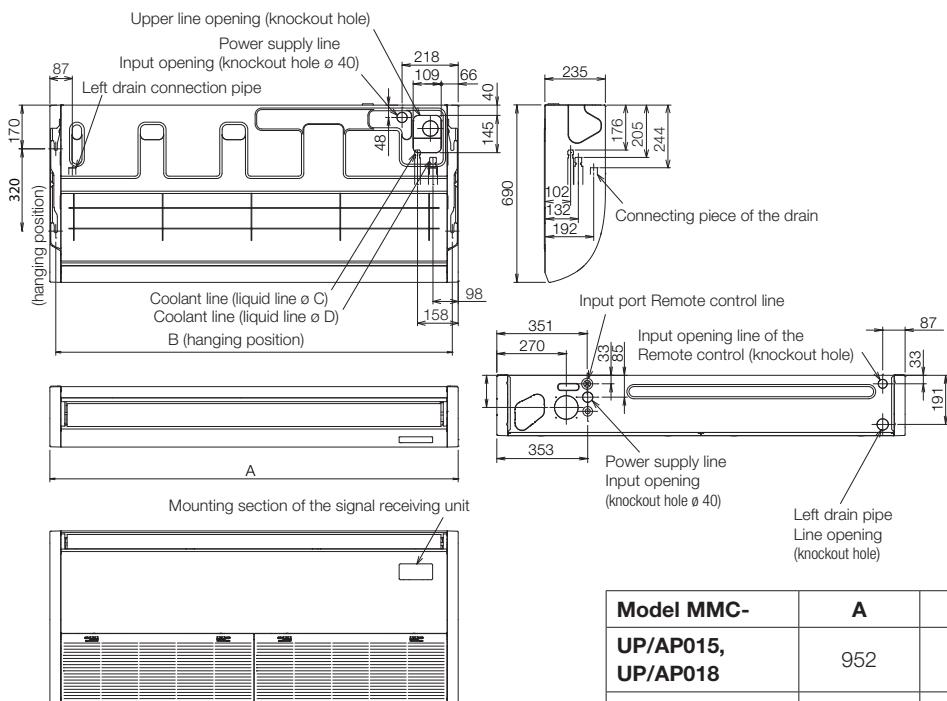
INDOOR UNIT SMMS-u		MMC-UP0151HP-E	MMC-UP0181HP-E	MMC-UP0241HP-E	MMC-UP0271HP-E	MMC-UP0361HP-E	MMC-UP0481HP-E	MMC-UP0561HP-E
INDOOR UNIT SMMS-e		MMC-AP0188HP-E*						MMC-AP0568HP-E*
Cooling capacity	kW	4,50	5,60	7,10	8,00	11,20	14,00	16,00
Heating capacity	kW	5,00	6,30	8,00	9,00	12,50	16,00	18,00
Airflow	m <sup>3</sup> /h	540/690/840	540/720/960	750/1020/1440	750/1020/1440	1020/1350/1860	1200/1530/1860	1260/1650/2040
Sound pressure level (low/med/high)	dB(A)	28/34/36	28/35/37	29/36/41	29/36/41	32/38/44	35/41/44	36/42/46
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	12,7 (½)	12,7 (½)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Condensate pipe diameter	mm	VP20 (20/26)	VP20 (20/26)	VP20 (20/26)	VP20 (20/26)	VP20 (20/26)	VP20 (20/26)	VP20 (20/26)
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,033	0,034	0,067	0,067	0,083	0,083	0,111
Dimensions (HxWxD)	mm	235 x 950 x 690	235 x 950 x 690	235 x 1270 x 690	235 x 1270 x 690	235 x 1586 x 690	235 x 1586 x 690	235 x 1586 x 690
Weight	kg	24	24	30	30	39	39	39
<b>Price</b>	<b>€</b>	<b>1.675,-</b>	<b>1.755,-</b>	<b>1.855,-</b>	<b>1.995,-</b>	<b>2.190,-</b>	<b>2.450,-</b>	<b>2.570,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
<b>TCB-DP31CE</b>	Drain pump, discharge head 600 mm, measured from lower edge of unit	405,-
<b>TCB-KP13CE</b>	Elbow-kit (required for drain pump), RAV: Sizes 4 + 5 / VRF: Sizes 15 + 18	95,-
<b>TCB-PCUC2E</b>	Control board for external control, alarms and messages	185,-
<b>TCB-KP24CPE</b>	Elbow-kit, ISO14093 certified flares (required for drain pump), RAV: Sizes 8 + 16 / VRF: Sizes 24 to 56	145,-
<b>TCB-FF101URE2</b>	Spigot flange for fresh air connection Ø 100 mm	75,-

\* While stocks last.

All optional control options can be found from page 169.

MMC-UP0151HP-E to MMC-UP0561HP-E / MMC-AP0158HP-E to AP0568HP-E



<b>Model MMC-</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<b>UP/AP015, UP/AP018</b>	952	906	Ø 6,4	Ø 12,7
<b>UP/AP024, UP/AP027</b>	1269	1223		
<b>UP/AP036 to UP/AP056</b>	1586	1540	Ø 9,5	Ø 15,9

# 60x60 Slim Cassette

- 360° air distribution in Euro grid with unit height of only 256 mm
- Extended energy saving via presence sensor option
- Condensate pump integrated (850 mm); prepared for external fresh air supply
- For SMMSu and SMMSe systems
- ➔ Required accessories: remote control + panel

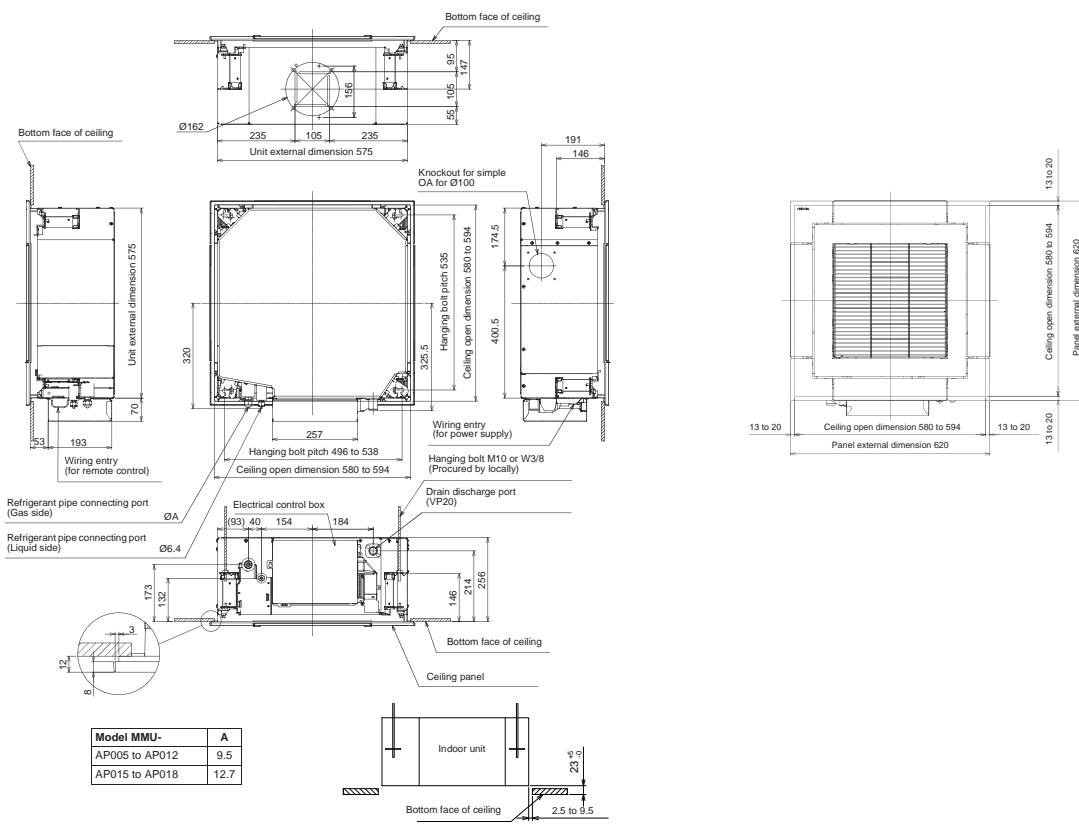


INDOOR UNIT SMMS-u		MMU-UP0051MH-E	MMU-UP0071MH-E	MMU-UP0091MH-E	MMU-UP0121MH-E	MMU-UP0151MH-E	MMU-UP0181MH-E
Cooling capacity	kW	1,70	2,20	2,80	3,60	4,50	5,60
Heating capacity	kW	1,90	2,50	3,20	4,00	5,00	6,30
Airflow	m³/h	365-430	378/552	378/570	402/594	468/660	522/840
Sound pressure level (low/med/high)	dB(A)	29/30/32	29/33/37	29/33/38	30/34/38	31/35/40	34/39/47
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	12,7 (½)	12,7 (½)
Condensate pipe diameter	mm	VP20 (20/26)					
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,016	0,023	0,025	0,027	0,030	0,052
Dimensions (HxWxD)	mm	256 x 575 x 575					
Weight	kg	15,0+2,5	15,0+2,5	15,0+2,5	15,0+2,5	15,0+2,5	15,0+2,5
Panel dimensions (HxWxD)	mm	12 x 620 x 620					
Panel weight	kg	2,5	2,5	2,5	2,5	2,5	2,5
Price	€	1.350,-	1.395,-	1.520,-	1.575,-	1.660,-	1.720,-

ACCESSORIES	DESCRIPTION	PRICE €
RBC-UM21PG(W)-E	Panel for 60x60 slim cassette	405,-
RBC-AXU31UM-E	Infrared remote control + receiver kit for installation in 60x60 slim cassette (SMMSu)	165,-
TCB-SIR41UM-E	Occupancy sensor kit for installation in 60x60 slim cassette	120,-
TCB-FF101URE2	Spigot flange for fresh air connection Ø 100 mm	75,-
TCB-PCUC2E	Control board for external control, alarms and messages	185,-

All optional control options can be found from page 169.

## 60x60 SLIM CASSETTE



# 4-Way Standard cassette

- 360° air distribution or direct air flow
- Individually adjustable draft-free air distribution
- Condensate pump integrated (850 mm); prepared for external fresh air supply
- For SMMSu and SMMSe systems
- ➔ Required accessories: remote control + panel



INDOOR UNIT SMMS-u	MMU-UP0091HP-E	MMU-UP0121HP-E	MMU-UP0151HP-E	MMU-UP0181HP-E	MMU-UP0241HP-E
INDOOR UNIT SMMS-e		MMU-AP0124HP1-E*	MMU-AP0154HP1-E*		
Cooling capacity	kW	2,80	3,60	4,50	5,60
Heating capacity	kW	3,20	4,00	5,00	6,30
Airflow	m³/h	680/730/800	680/730/800	790/830/930	800/920/1250
Sound pressure level (low/med/high)	dB(A)	27/29/30	30/29/27	27/29/31	27/29/32
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	12,7 (½)	12,7 (½)
Condensate pipe diameter	mm	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,021	0,021	0,023	0,026
Dimensions (HxWxD)	mm	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840
Weight	kg	18	18	20	20
Panel dimensions (HxWxD)	mm	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950
Panel weight	kg	4	4	4	4
<b>Price</b>	<b>€</b>	<b>1.495,-</b>	<b>1.540,-</b>	<b>1.610,-</b>	<b>1.730,-</b>

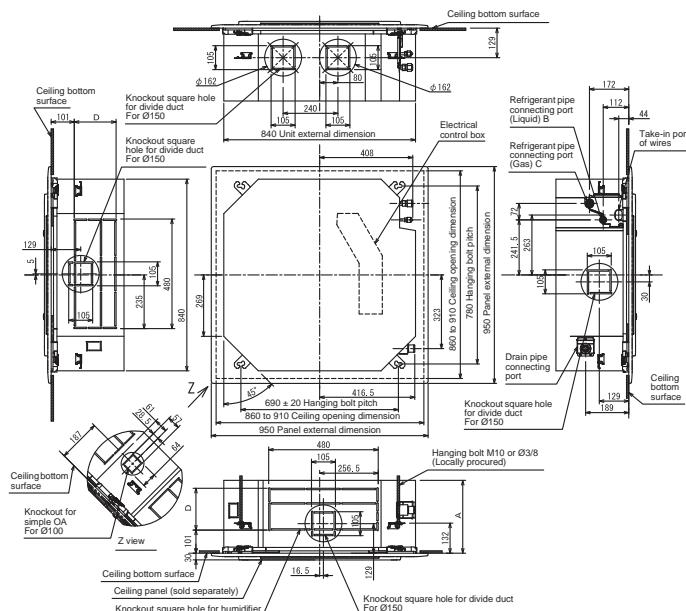
INDOOR UNIT SMMS-u	MMU-UP0271HP-E	MMU-UP0301HP-E	MMU-UP0361HP-E	MMU-UP0481HP-E	MMU-UP0561HP-E
INDOOR UNIT SMMS-e		MMU-AP0274HP1-E*		MMU-AP0484HP1-E*	MMU-AP0564HP1-E*
Cooling capacity	kW	8,00	9,00	11,20	14,00
Heating capacity	kW	9,00	10,00	12,50	16,00
Airflow	m³/h	800/920/1290	850/1100/1320	1070/1430/1970	1130/1430/2130
Sound pressure level (low/med/high)	dB(A)	28/31/35	38/33/30	32/38/43	33/38/46
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Condensate pipe diameter	mm	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,036	0,043	0,088	0,112
Dimensions (HxWxD)	mm	256 x 840 x 840	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840
Weight	kg	20	20	25	25
Panel dimensions (HxWxD)	mm	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950
Panel weight	kg	4	4	4	4
<b>Price</b>	<b>€</b>	<b>1.830,-</b>	<b>1.925,-</b>	<b>2.255,-</b>	<b>2.485,-</b>
					<b>2.590,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
RBC-U32PGP-E	Panel for wide airflow (SMMS-u)	365,-
RBC-U31PGP(W)-E	Panel for wide airflow (SMMSe)	365,-
RBC-U31PGP(W)-E	Panel for straight airflow (SMMSe)	385,-
RBC-U33P-E	FLAT Panel - pure white, for 4-way standard cassette (from summer 2022)	365,-
RBC-AXU33UP-E	Infrared remote control + receiver kit for installation in FLAT Panel 4-way standard cassette (from summer 2022)	220,-
TCB-FF101URE2	Spigot flange for fresh air connection Ø 100 mm	75,-
TCB-PLFC1UPE	PM 2.5 Filterset (before dustfilter), compatible to RBC-U32PGP-E and RBC-U31PGP(W)-E	20,-
TCB-SIR33UP-E	Occupancy sensor kit for installation in FLAT Panel (from summer 2022)	125,-
TCB-EAPC1UHP-E	PURE Plasmafilter kit for installation in FLAT Panel 4-way standard cassette (from summer 2022)	TBC
TCB-PLFC1UPE	PM 2.5 Filterset (before dustfilter), compatible to RBC-U32PGP-E and RBC-U31PGP(W)-E	20,-

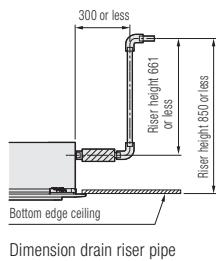
\* While stocks last.

All optional control options can be found from page 169.

## 4-WAY STANDARD CASSETTE

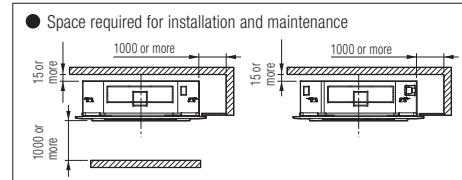


(mm)				
Model MMU-	A	B	C	D
UP009 to UP012	256	Ø6.4	Ø9.5	120
UP015 to UP018	256	Ø6.4	Ø12.7	120
UP024 to UP030	256	Ø9.5	Ø15.9	120
UP036 to UP056	319	Ø9.5	Ø15.9	183



Dimension drain riser pipe

\* Picture shows panel RBC-U31PGP(W)-E



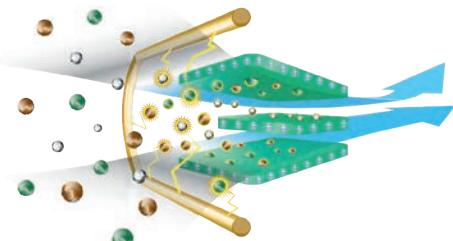
(Unit: mm)

**Panel RBC-U32PGP-E  
for SMMSu**

The special lamella shape guarantees perfect air distribution in a 360° radius.

**Panel RBC-U33P-E  
for SMMSu**

Flat design panel in pure white with option for plasma filter and presence sensor.



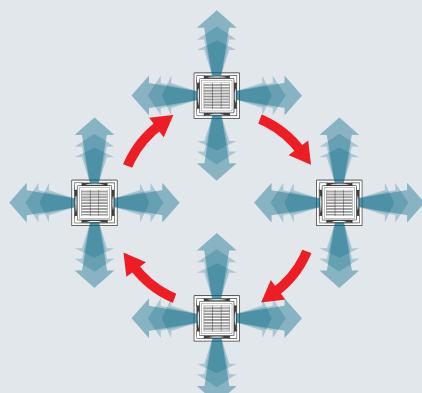
1) Standard oscillation



2) Diametrically opposite oscillation



3) All around alternating oscillation



# 4-Way SMART Cassette

- Not in stock – delivery time on request
  - 4-way high efficiency design for high performance
  - Advanced energy saving via presence sensor option
  - Condensate pump integrated (850 mm); prepared for external fresh air supply
- Required accessories: remote control + panel



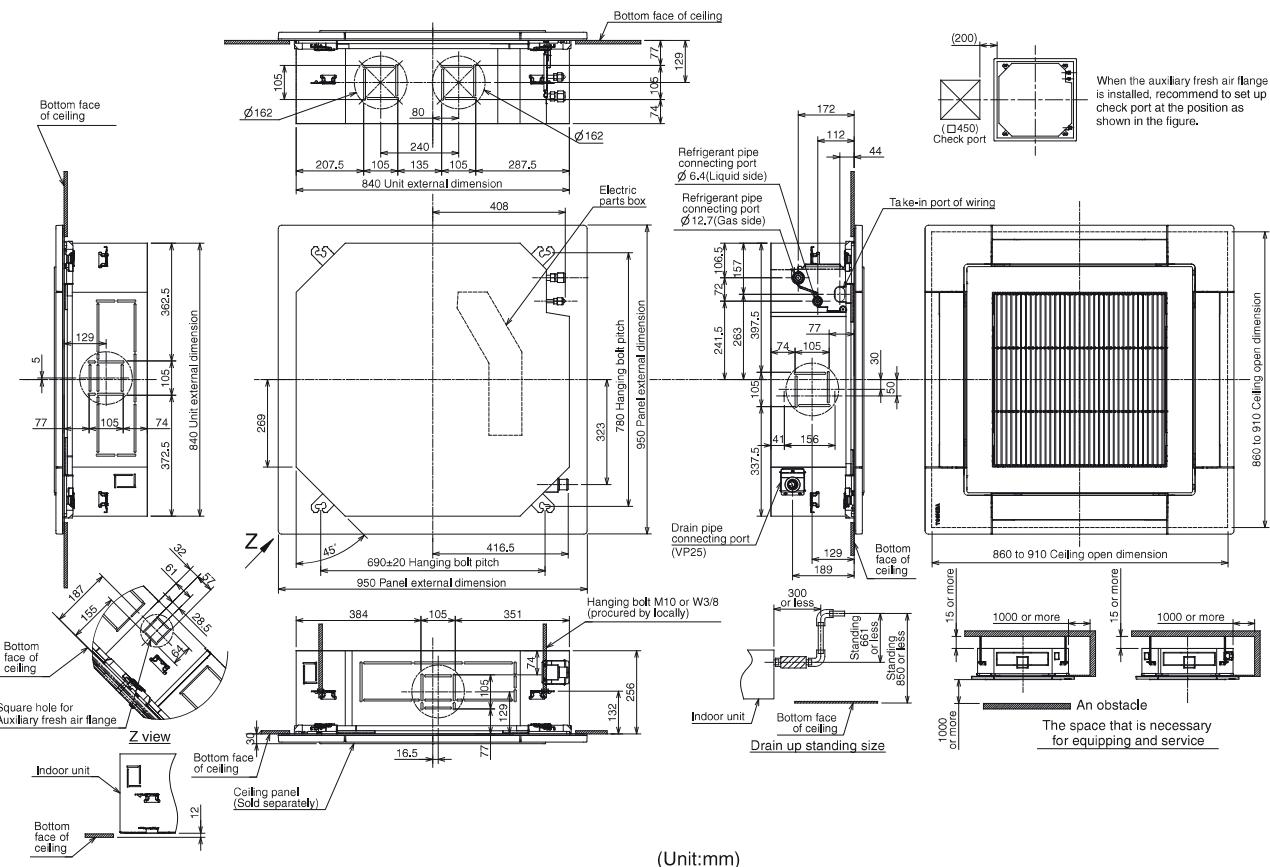
INDOOR UNIT		MMU-UP0091H-E	MMU-UP0121H-E	MMU-UP0151H-E	MMU-UP0181H-E	MMU-UP0241H-E
Cooling capacity	kW	2,80	3,60	4,50	5,60	7,10
Heating capacity	kW	3,20	4,00	5,00	6,30	8,00
Airflow	m³/h	708/738/768/792/846	708/738/768/792/846	800/860/920/960/1060	940/1040/1100/1160/1260	1120/1210/1300/1440/1580
Sound pressure level (low/med/high)	dB(A)	26/28/30	26/28/30	28/30/32	31/33/36	35/37/41
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	12,7 (½)	12,7 (½)	15,9 (5/8)
Condensate pipe diameter	mm	25	25	25	25	25
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,02	0,02	0,018	0,026	0,042
Dimensions (HxWxD)	mm	256 x 840 x 840	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
Weight	kg	18	18	25	25	25
Panel dimensions (HxWxD)	mm	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950
Panel weight	kg	5,0	5,0	5,0	5,0	5,0
<b>Price</b>	<b>€</b>	<b>1.855,-</b>	<b>2.030,-</b>	<b>2.270,-</b>	<b>2.415,-</b>	<b>2.510,-</b>

INDOOR UNIT		MMU-UP0271H-E	MMU-UP0301H-E	MMU-UP0361H-E	MMU-UP0481H-E	MMU-UP0561H-E
Cooling capacity	kW	8,00	9,00	11,20	14,00	16,00
Heating capacity	kW	9,00	10,00	12,50	16,00	18,00
Airflow	m³/h	1250/1320/1380/1590/1770	1400/1450/1520/1770/1940	1260/1356/1596/1848/2184	1368/1470/1740/1998/2262	1404/1512/1782/2034/2262
Sound pressure level (low/med/high)	dB(A)	35/37/42	37/39/44	32/38/45	33/39/46	35/40/46
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Condensate pipe diameter	mm	25	25	25	25	25
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,054	0,068	0,125	0,135	0,137
Dimensions (HxWxD)	mm	319 x 840 x 840				
Weight	kg	25	25	25	25	25
Panel dimensions (HxWxD)	mm	30 x 950 x 950				
Panel weight	kg	5,0	5,0	5,0	5,0	5,0
<b>Price</b>	<b>€</b>	<b>2.555,-</b>	<b>2.625,-</b>	<b>2.725,-</b>	<b>2.870,-</b>	<b>3.095,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
RBC-U41PG(W)-E	Panel for smart cassette	395,-
RBC-AXU41U-E	Infrared remote control + receiver kit for installation in VRF TU2C Smart Cassette	290,-
TCB-SIR41U-E	Occupancy sensor kit for installation in smart cassette	120,-
TCB-GFC1603UE	Fresh air filter	265,-
TCB-SP1603UE	Spacer frame for lowering the panel by 70 mm	200,-
TCB-BC1603UE	Air discharge direction kit for blocking of up to three discharge sides	70,-
TCB-FF101URE2	Spigot flange for fresh air connection Ø 100 mm	75,-

All optional control options can be found from page 169.

## 4-WAY SMART CASSETTE



## 2-Way cassette

- 2-sided, draft-free air distribution
- Condensate pump integrated (850 mm); prepared for external fresh air supply
- For SMMSu and SMMSe systems
- ➔ Required accessories: remote control + panel



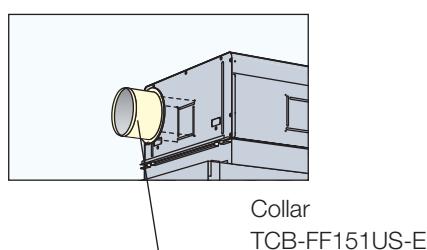
INDOOR UNIT SMMS-u	MMU-UP0071WH-E	MMU-UP0091WH-E	MMU-UP0121WH-E	MMU-UP0151WH-E	MMU-UP0181WH-E
INDOOR UNIT SMMS-e	MMU-AP0072WH1*	MMU-AP0092WH1*	MMU-AP0122WH1*	MMU-AP0152WH1*	
Cooling capacity	kW	2,20	2,80	3,60	4,50
Heating capacity	kW	2,50	3,20	4,00	5,00
Airflow	m³/h	450/498/558	450/498/558	450/498/558	450/534/600
Sound pressure level (low/med/high)	dB(A)	30/32/34	30/32/34	30/32/34	30/33/35
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	12,7 (½)
Condensate pipe diameter	mm	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,029	0,029	0,029	0,03
Dimensions (HxWxD)	mm	295 x 815 x 570			
Weight	kg	19	19	19	26
Panel dimensions (HxWxD)	mm	20 x 1050 x 680	20 x 1050 x 680	20 x 1050 x 680	20 x 1415 x 680
Panel weight	kg	10	10	10	14
<b>Price</b>	<b>€</b>	<b>1.720,-</b>	<b>1.805,-</b>	<b>1.840,-</b>	<b>1.900,-</b>
					<b>1.945,-</b>

INDOOR UNIT SMMS-u	MMU-UP0241WH-E	MMU-UP0271WH-E	MMU-UP0301WH-E	MMU-UP0361WH-E	MMU-UP0481WH-E	MMU-UP0561WH-E
INDOOR UNIT SMMS-e	MMU-AP0242WH1*	MMU-AP0272WH1*	MMU-AP0362WH1*	MMU-AP0482WH1*	MMU-AP0562WH1*	
Cooling capacity	kW	7,10	8,00	9,00	11,20	14,00
Heating capacity	kW	8,00	9,00	10,00	12,50	16,00
Airflow	m³/h	738/840/1050	738/840/1050	780/900/1260	1182/1434/1740	1230/1482/1800
Sound pressure level (low/med/high)	dB(A)	33/35/38	33/35/38	34/37/40	36/39/42	37/40/43
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Condensate pipe diameter	mm	VP25 (25/32)				
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,054	0,054	0,064	0,073	0,088
Dimensions (HxWxD)	mm	345 x 1180 x 570	345 x 1180 x 570	345 x 1180 x 570	345 x 1600 x 570	345 x 1600 x 570
Weight	kg	26	26	26	36	36
Panel dimensions (HxWxD)	mm	20 x 1415 x 680	20 x 1415 x 680	20 x 1415 x 680	20 x 1835 x 680	20 x 1835 x 680
Panel weight	kg	14	14	14	14	14
<b>Price</b>	<b>€</b>	<b>2.080,-</b>	<b>2.155,-</b>	<b>2.305,-</b>	<b>2.795,-</b>	<b>3.050,-</b>
						<b>3.370,-</b>

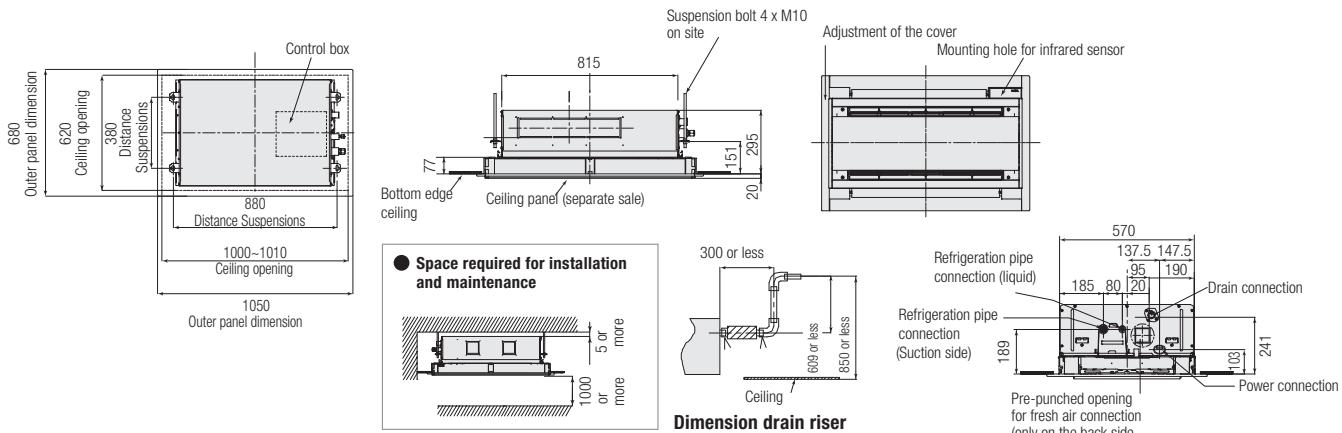
ACCESSORIES	DESCRIPTION	PRICE €
RBC-UW283PG(W)-E	Panel for sizes 7 to 15	515,-
RBC-UW803PG(W)-E	Panel for sizes 18 to 30	685,-
RBC-UW1403PG(W)-E	Panel for sizes 36 to 56	790,-
TCB-FF151US-E	Spigot flange for fresh air connection Ø 150 mm	75,-

\* While stocks last.

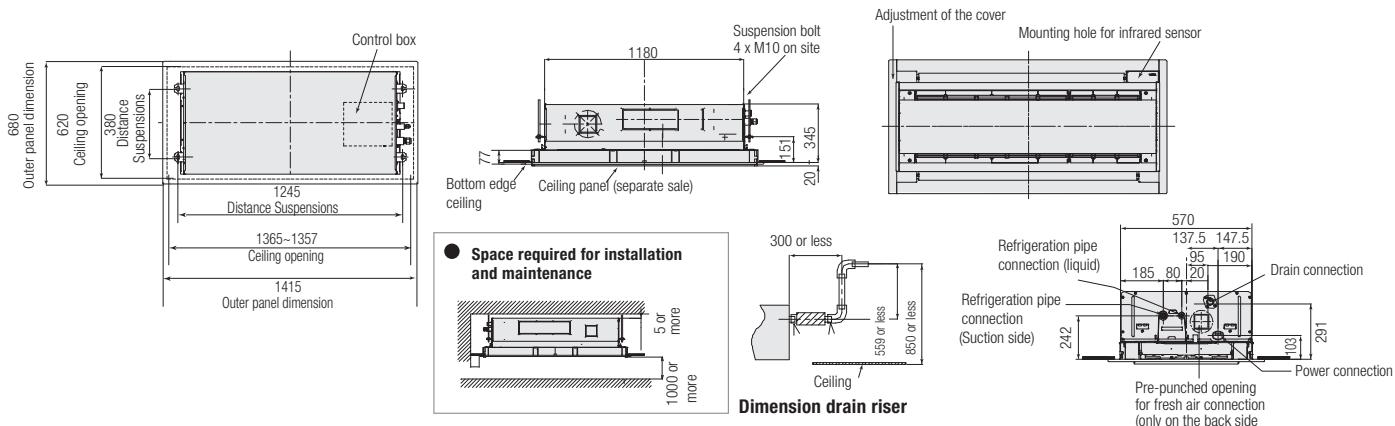
All optional control options can be found from page 169.



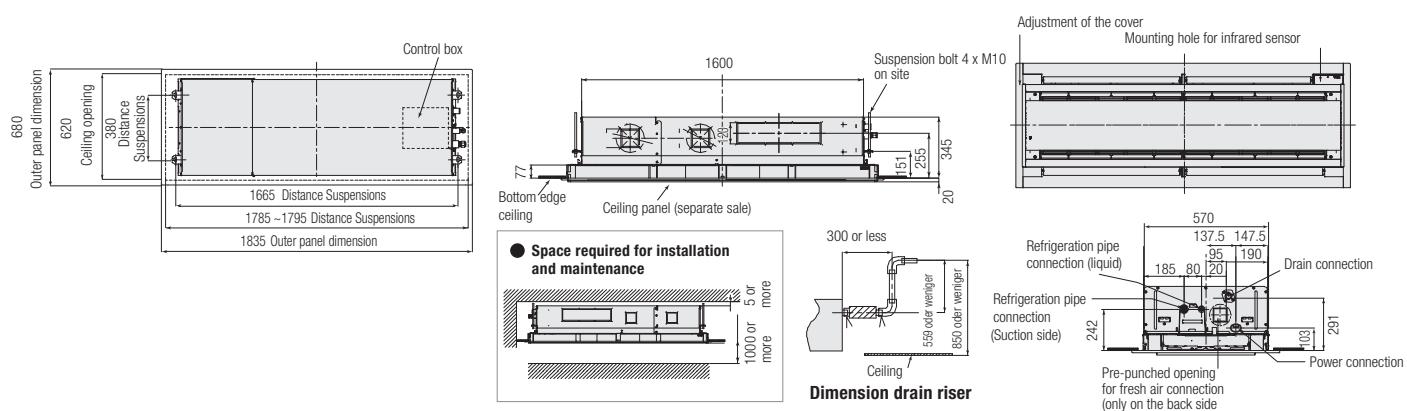
## MMU-UP0071HW-E to MMU-UP0151WH-E / MMU-AP0072WH1 to AP0152WH1



## MMU-UP0181WH-E to MMU-UP0301WH-E / MMU-AP0182WH1 to AP0302WH1



## MMU-UP0361WH-E to MMU-UP0561WH-E / MMU-AP0362WH1 to AP0562WH1



# 1-Way FLAT cassette

- 1-sided directional, draft-free air distribution
- Ultra-flat 30 mm design panel with presence sensor option
- Plasma filter with Ionisator optional
- Lowest installation height of only 150 mm
- Condensate pump integrated
- For SMMSu and SMMSe systems (except sizes 003 – exclusively for SMMSu)

→ Required accessories: remote control + panel



INDOOR UNIT		MMU-UP0031YHP-E	MMU-UP0051YHP-E	MMU-UP0071YHP-E	MMU-UP0091YHP-E	MMU-UP0121YHP-E
Cooling capacity	kW	0,90	1,70	2,20	2,80	3,60
Heating capacity	kW	1,30	1,90	2,50	3,20	4,00
Airflow	m³/h	270/370/480	270/370/480	270/390/500	290/410/520	290/420/540
Sound pressure level (low/med/high)	dB(A)	25/33/37	25/33/37	25/34/38	26/35/39	26/36/40
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Condensate pipe diameter	mm	VP25 (25/32)				
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,015	0,015	0,017	0,018	0,018
Dimensions (HxWxD)	mm	150 x 990 x 450				
Weight	kg	14+4	14+4	14+4	14+4	14+4
Panel dimensions (HxWxD)	mm	30 x 1220 x 530				
Panel weight	kg	4	4	4	4	4
<b>Price</b>	<b>€</b>	<b>1.935,-</b>	<b>1.960,-</b>	<b>1.985,-</b>	<b>2.005,-</b>	<b>2.040,-</b>

INDOOR UNIT		MMU-UP0151YHP-E	MMU-UP0181YHP-E	MMU-UP0241YHP-E	MMU-UP0271YHP-E
Cooling capacity	kW	4,50	5,60	7,10	8,00
Heating capacity	kW	5,00	6,30	8,00	9,00
Airflow	m³/h	500/630/700	500/650/800	600/760/940	720/860/1000
Sound pressure level (low/med/high)	dB(A)	33/36/39	33/37/40	37/42/46	41/44/47
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	12,7 (½)	12,7 (½)	15,8 (5/8)	15,8 (5/8)
Condensate pipe diameter	mm	25	25	25	25
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,025	0,027	0,042	0,05
Dimensions (HxWxD)	mm	150 x 1180 x 450			
Weight	kg	-	-	-	-
Panel dimensions (HxWxD)	mm	30 x 1410 x 530			
Panel weight	kg	-	-	-	-
<b>Price</b>	<b>€</b>	<b>1.845,-</b>	<b>2.065,-</b>	<b>2.170,-</b>	<b>2.250,-</b>

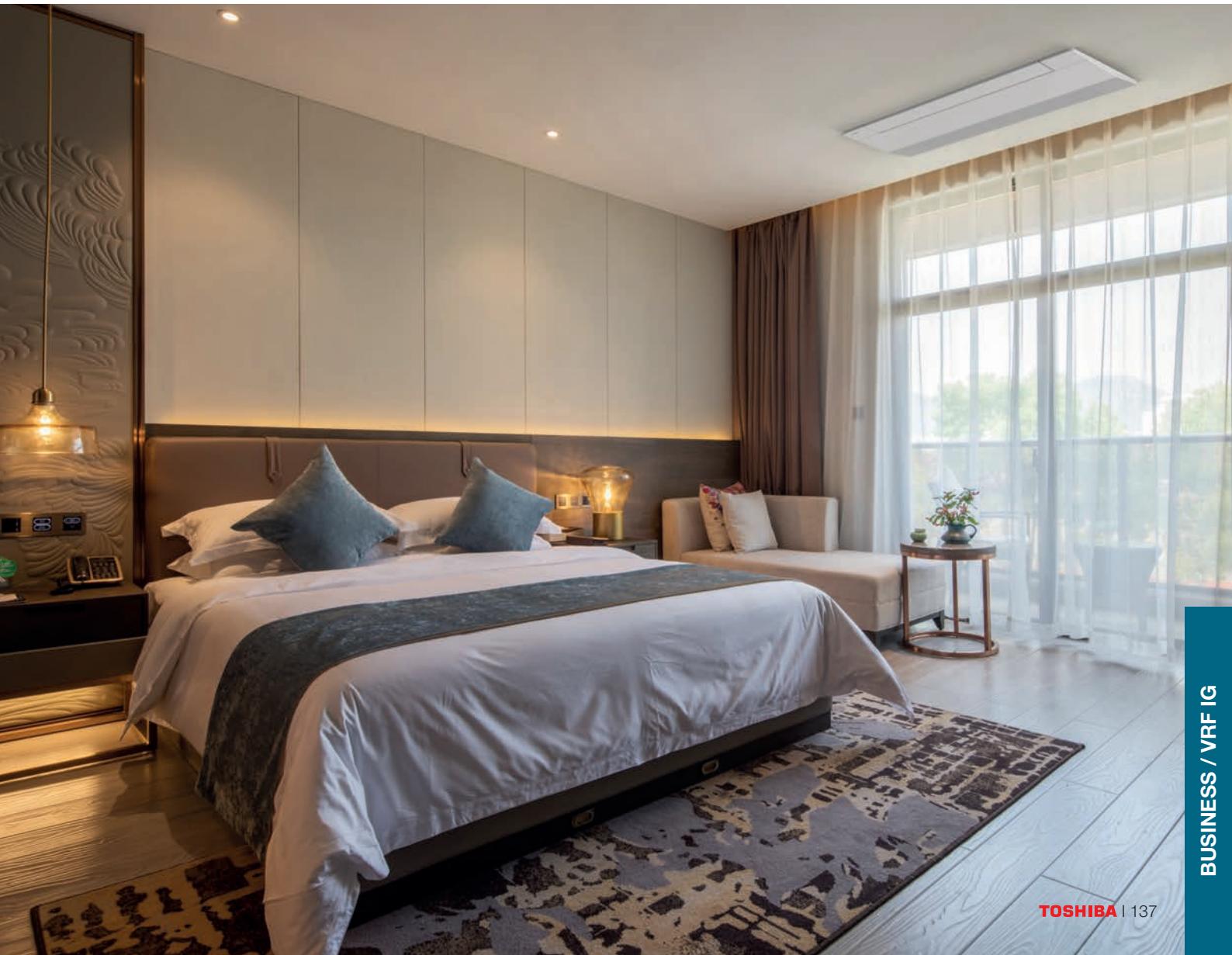
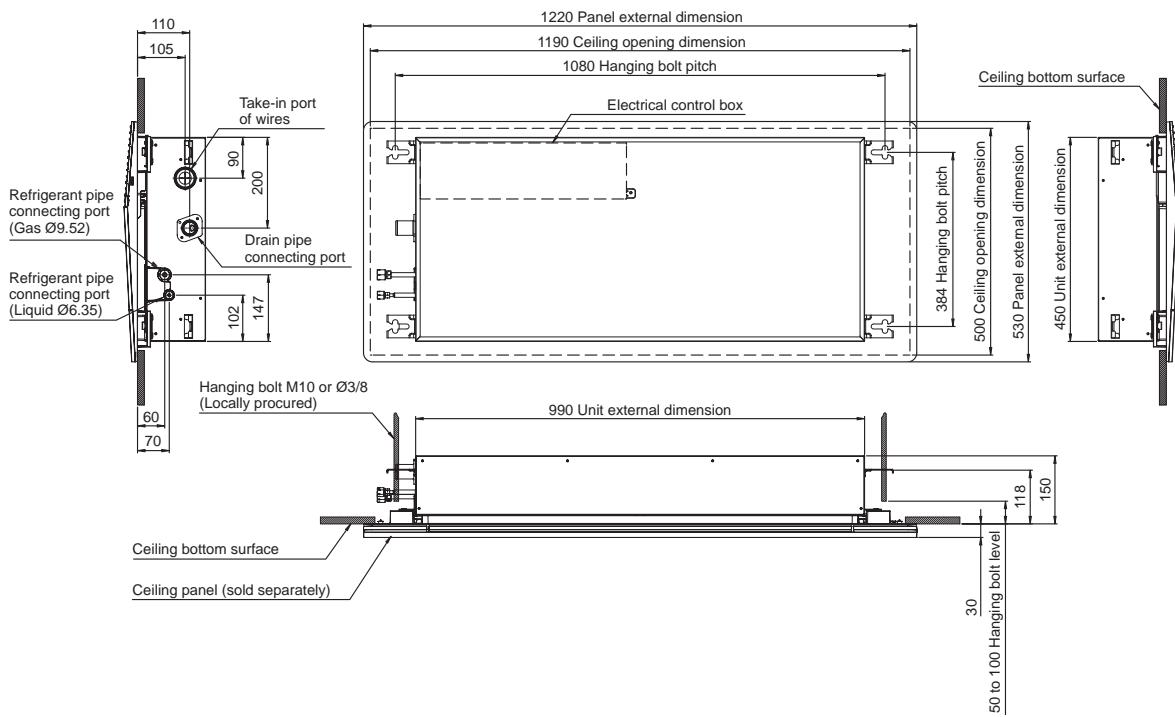
ACCESSORIES	DESCRIPTION	PRICE €
RBC-UY32P-E	Panel for sizes 3 to 12	560,-
RBC-UY42P-E	Panel for size 15 to 27	585,-
RBC-AX33UYP-E	Infrared remote control + receiver kit for installation in 1-way cassette (SMMSu)	80,-
TCB-EAPC1UYHPE	Ozone air purifier for 1-way cassette (SMMSu)	300,-
TCB-SIR41UYP-E	Occupancy sensor kit for installation in 1-way cassette (SMMSu)	120,-

All optional control options can be found from page 169.



**1-Way FLAT cassette sizes 15 to 27  
from SUMMER 2022 available.**

## 1-WAY FLAT CASSETTE





Oberndorfer GmbH Völkermarkt,  
Klötzl Vertriebs GmbH

# 1-Way cassette

- 1-sided, draft-free air distribution
- Condensate pump integrated; prepared for external fresh air supply  
→ Required accessories: remote control + panel



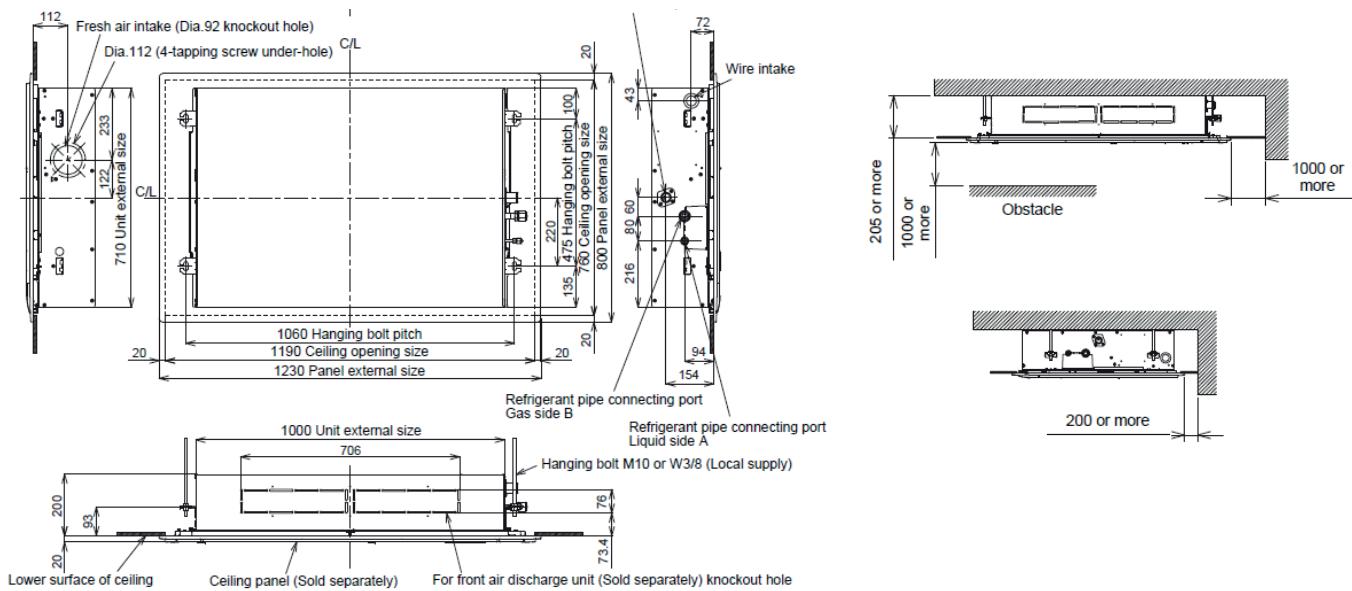
INDOOR UNIT SMMS-u	MMU-UP0151SH-E	MMU-UP0181SH-E	MMU-UP0241SH-E
INDOOR UNIT SMMS-e	MMU-AP0154SH1-E*	MMU-AP0244SH1-E*	
Cooling capacity	kW	4,50	5,60
Heating capacity	kW	5,00	6,30
Airflow	m³/h	630/690/750	660/720/780
Sound pressure level (low/med/high)	dB(A)	32/35/37	34/36/38
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)
Suction gas pipe diameter	mm (inch)	12,7 (½)	12,7 (½)
Condensate pipe diameter	mm	VP25 (25/32)	VP25 (25/32)
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,042	0,046
Dimensions (HxWxD)	mm	200 x 1000 x 710	200 x 1000 x 710
Weight	kg	21+4	21+4
Panel dimensions (HxWxD)	mm	20 x 1230 x 800	20 x 1230 x 800
Panel weight	kg	5,5	5,5
<b>Price</b>	<b>€</b>	<b>1.900,-</b>	<b>2.125,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
RBC-US21PGE	Panel for sizes 15 to 24	560,-
TCB-FF101URE2	Spigot flange for fresh air connection Ø 100 mm	75,-

\* While stocks last.

All optional control options can be found from page 169.

## 1-WAY CASSETTE



# Standard duct unit

- Low installation height of only 275 mm
- External static pressure up to 120 Pa, air filter integrated
- Condensate pump integrated (850 mm); prepared for external fresh air supply
- For SMMSu and SMMSe systems (except size 005 – exclusively for SMMSu)



INDOOR UNIT SMMS-u	MMD-UP0051BHP-E	MMD-UP0071BHP-E	MMD-UP0091BHP-E	MMD-UP0121BHP-E	MMD-UP0151BHP-E	MMD-UP0181BHP-E
INDOOR UNIT SMMS-e	MMD-AP0076BHP1-E*					
Cooling capacity	kW	1,70	2,20	2,80	3,60	4,50
Heating capacity	kW	1,90	2,50	3,20	4,00	5,00
Airflow	m³/h	360/450/540	360/450/540	390/480/570	390/480/570	540/660/920
Sound pressure level (low/med/high)	dB(A)	29/26/23	23/26/29	23/26/30	23/26/30	25/29/33
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	12,7 (½)
Condensate pipe diameter	mm	VP25 (25/32)				
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,055	0,038	0,043	0,043	0,062
External static pressure	Pa	30/40/50/65/80/ 100/120	30/40/50/65/80/ 100/120	30/40/50/65/80/ 100/120	30/40/50/65/80/ 100/120	30/40/50/65/80/ 100/120
Dimensions (HxWxD)	mm	275 x 700 x 750				
Weight	kg	23	23	23	23	23
Price	€	<b>1.410,-</b>	<b>1.430,-</b>	<b>1.445,-</b>	<b>1.470,-</b>	<b>1.520,-</b>
						<b>1.565,-</b>

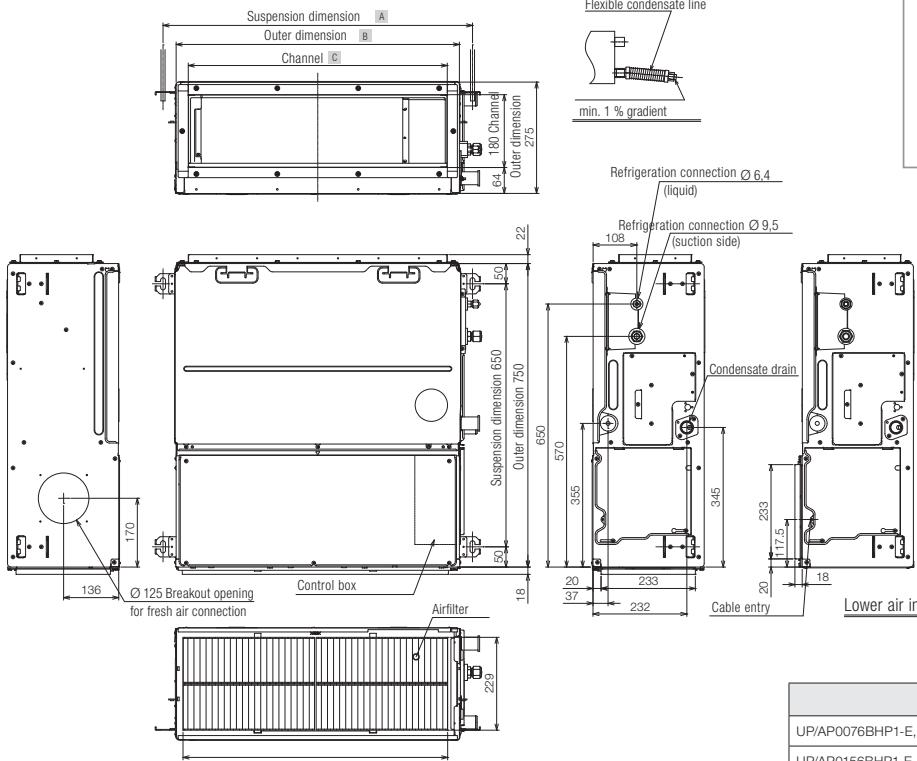
INDOOR UNIT SMMS-u	MMD-UP0241BHP-E	MMD-UP0271BHP-E	MMD-UP0301BHP-E	MMD-UP0361BHP-E	MMD-UP0481BHP-E	MMD-UP0561BHP-E
INDOOR UNIT SMMS-e	MMD-AP0276BHP1-E*					
Cooling capacity	kW	7,10	8,00	9,00	11,20	14,00
Heating capacity	kW	8,00	9,00	10,00	12,50	16,00
Airflow	m³/h	870/1090/1320	870/1090/1320	960/1200/1450	1380/1620/1920	1500/1920/2350
Sound pressure level (low/med/high)	dB(A)	27/31/36	27/31/36	27/31/36	33/36/40	33/36/40
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Condensate pipe diameter	mm	VP25 (25/32)				
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,077	0,077	0,094	0,172	0,198
External static pressure	Pa	30/40/50/65/80/ 100/120	30/40/50/65/80/ 100/120	30/40/50/65/80/ 100/120	30/40/50/65/80/ 100/120	30/40/50/65/80/ 100/120
Dimensions (HxWxD)	mm	275 x 1000 x 750	275 x 1000 x 750	275 x 1000 x 750	275 x 1400 x 750	275 x 1400 x 750
Weight	kg	30	30	30	40	40
Price	€	<b>1.745,-</b>	<b>1.820,-</b>	<b>1.985,-</b>	<b>2.165,-</b>	<b>2.330,-</b>
						<b>2.570,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
<b>TCB-SF56C6BPE</b>	Connection flange (2 x Ø 200 mm) RAV: Size 5 / VRF: Sizes 5 to 18	<b>155,-</b>
<b>TCB-SF80C6BPE</b>	Connection flange (3 x Ø 200 mm) RAV: Size 8 / VRF: Sizes 24 to 30	<b>185,-</b>
<b>TCB-SF160C6BPE</b>	Connection flange (4 x Ø 200 mm) RAV: Sizes 11 to 16 / VRF: Sizes 36 to 56	<b>235,-</b>
<b>TCB-FF101URE2</b>	Spigot flange for fresh air connection Ø 100 mm	<b>75,-</b>

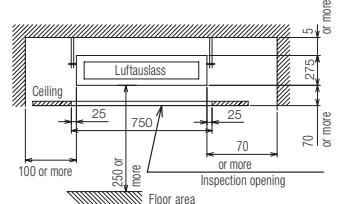
\* While stocks last.

All optional control options can be found from page 169.

## STANDARD DUCT UNIT



● Space required for installation and maintenance



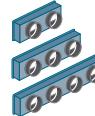
(Unit: mm)

Model	MMD-	A	B	C	D
UP/AP0076BHP1-E, UP/AP0096BHP1-E, UP/AP0126BHP1-E		765	700	640	654
UP/AP0156BHP1-E, UP/AP0186BHP1-E		765	700	640	654
UP/AP0246BHP1-E, UP/AP0276BHP1-E, UP/AP0306BHP1-E		1065	1000	940	935.5
UP/AP0366BHP1-E, UP/AP0486BHP1-E, UP/AP0566BHP1-E		1465	1400	1340	1349

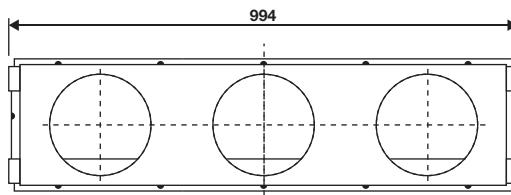
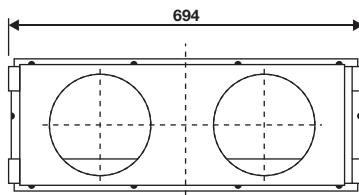
## STANDARD DUCT UNIT

The following connecting flanges are available for standard duct units:

Flange	combinable
TCB-SF56C6BPE	MMD-UP/AP0076/0096/0126/0156/0186BHP1-E
TCB-SF80C6BPE	MMD-UP/AP0246/0276/0306BHP1-E
TCB-SF160C6BPE	MMD-UP/AP0366/0486/0566BHP1-E

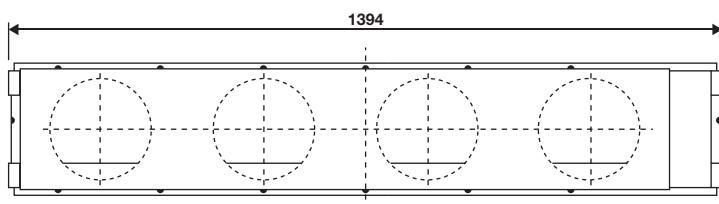


Outer Dimensions

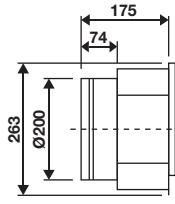


TCB-SF56C6BPE

TCB-SF80C6BPE



TCB-SF160C6BPE



(Unit: mm)

# SSD Super slim duct unit

- Lowest installation height of only 210 mm
- Lightweight and quiet, with compact dimensions
- Air filter & condensate pump (350 mm) integrated



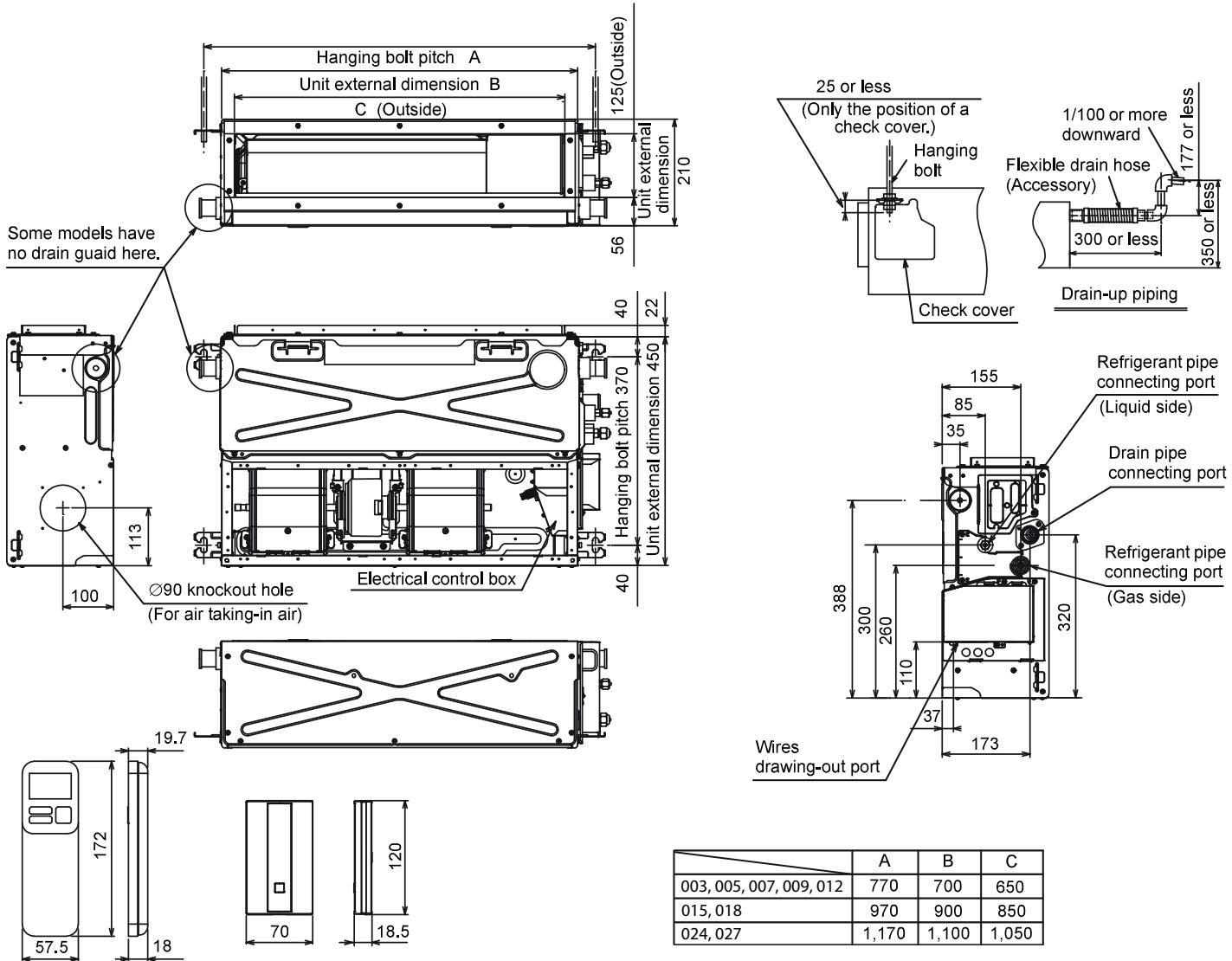
INDOOR UNIT	MMD-UP0031SPHY-E	MMD-UP0051SPHY-E	MMD-UP0071SPHY-E	MMD-UP0091SPHY-E	MMD-UP0121SPHY-E
Cooling capacity	kW	0,90	1,70	2,20	2,80
Heating capacity	kW	1,00	1,90	2,50	3,20
Airflow	m³/h	410/380/360	450/410/380	540/470/400	570/500/430
Sound pressure level (low/med/high)	dB(A)	25/26/27/28/29	26/27/28/29/30	26/28/29/30/31	26/28/29/31/32
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Condensate pipe diameter	mm	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,018	0,02	0,026	0,029
External static pressure	Pa	10/20/30/40/50	10/20/30/40/50	10/20/30/40/50	10/20/30/40/50
Dimensions (HxWxD)	mm	210 x 700 x 450			
Weight	kg	16	16	16	16
<b>Price</b>	<b>€</b>	<b>1.075,-</b>	<b>1.095,-</b>	<b>1.125,-</b>	<b>1.150,-</b>
					<b>1.205,-</b>

INDOOR UNIT	MMD-UP0151SPHY-E	MMD-UP0181SPHY-E	MMD-UP0241SPHY-E	MMD-UP0271SPHY-E
Cooling capacity	kW	4,50	5,60	7,10
Heating capacity	kW	5,00	6,30	8,00
Airflow	m³/h	690/640/550	780/750/660	1080/950/860
Sound pressure level (low/med/high)	dB(A)	28/29/30/31/33	29/31/32/33/34	30/32/33/35/36
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	12,7 (½)	12,7 (½)	15,9 (5/8)
Condensate pipe diameter	mm	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,035	0,044	0,067
External static pressure	Pa	10/20/30/40/50	10/20/30/40/50	10/20/30/40/50
Dimensions (HxWxD)	mm	210 x 900 x 450	210 x 900 x 450	210 x 1100 x 450
Weight	kg	18	18	21
<b>Price</b>	<b>€</b>	<b>1.255,-</b>	<b>1.330,-</b>	<b>1.430,-</b>
				<b>1.540,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
TCB-FF101URE2	Spigot flange for fresh air connection Ø 100 mm	75,-

All optional control options can be found from page 169.

## SSD SUPER SLIM DUCT UNIT



# Slim duct unit

- Lowest installation height of only 210 mm
- External static pressure up to 120 Pa, air filter integrated
- Condensate pump integrated (850 mm); prepared for external fresh air supply

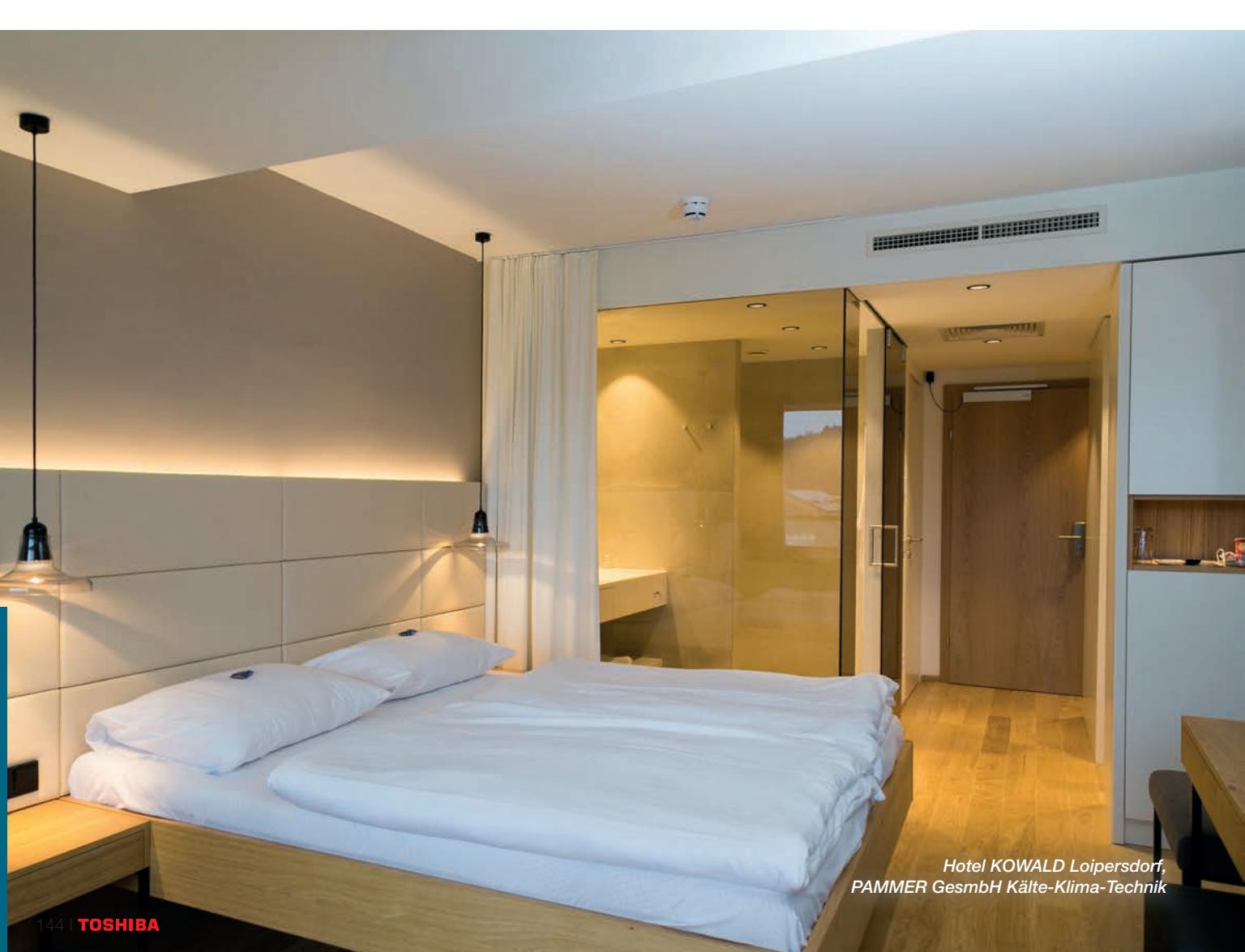


INDOOR UNIT SMMS-e	MMD-AP0074SPH1-E*	MMD-AP0124SPH1-E*	MMD-AP0244SPH1-E*	MMD-AP0274SPH1-E*
Cooling capacity	kW	2,20	3,60	7,10
Heating capacity	kW	2,50	4,00	8,00
Airflow	m³/h	400/470/540	450/520/600	900/1000/1080
Sound pressure level (low/med/high)	dB(A)	24/26/28	25/27/29	33/36/38
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	15,9 (5/8)
Condensate pipe diameter	mm	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,039	0,043	0,105
External static pressure	Pa	6/16/31/46	5/15/30/45	2/12/22/42
Dimensions (HxWxD)	mm	210 x 845 x 645	210 x 845 x 645	210 x 1140 x 645
Weight	kg	21	21	29
<b>Price</b>	<b>€</b>	<b>1.010,-</b>	<b>1.085,-</b>	<b>1.295,-</b>

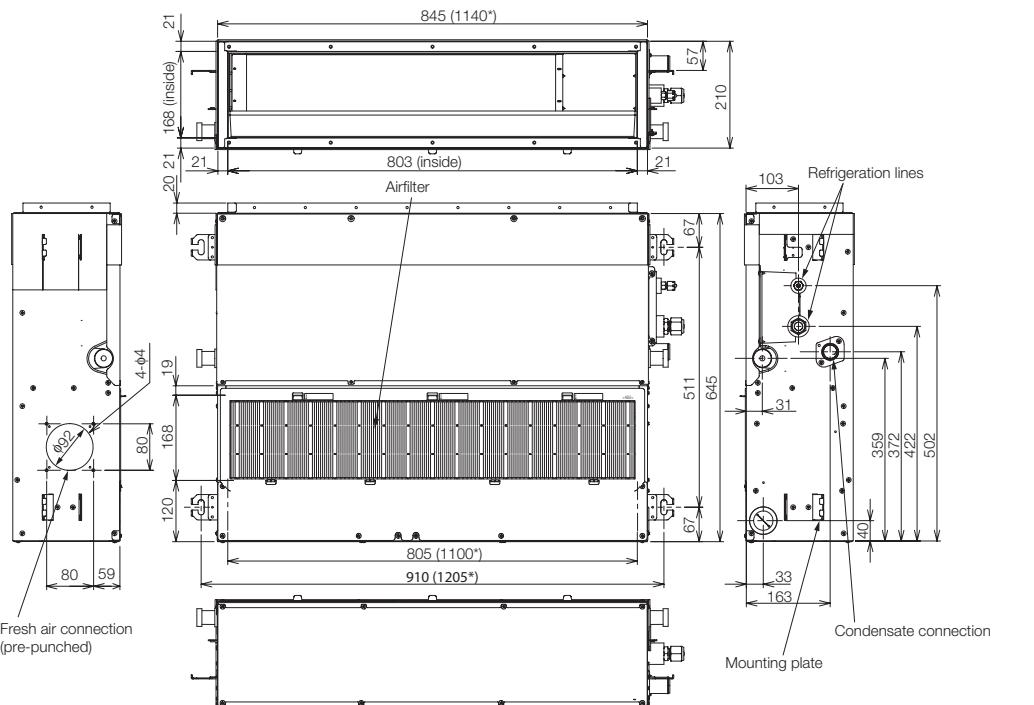
ACCESSORIES	DESCRIPTION	PRICE €
TCB-FF101URE2	Spigot flange for fresh air connection Ø 100 mm	75,-

\* While stocks last.

All optional control options can be found from page 169.

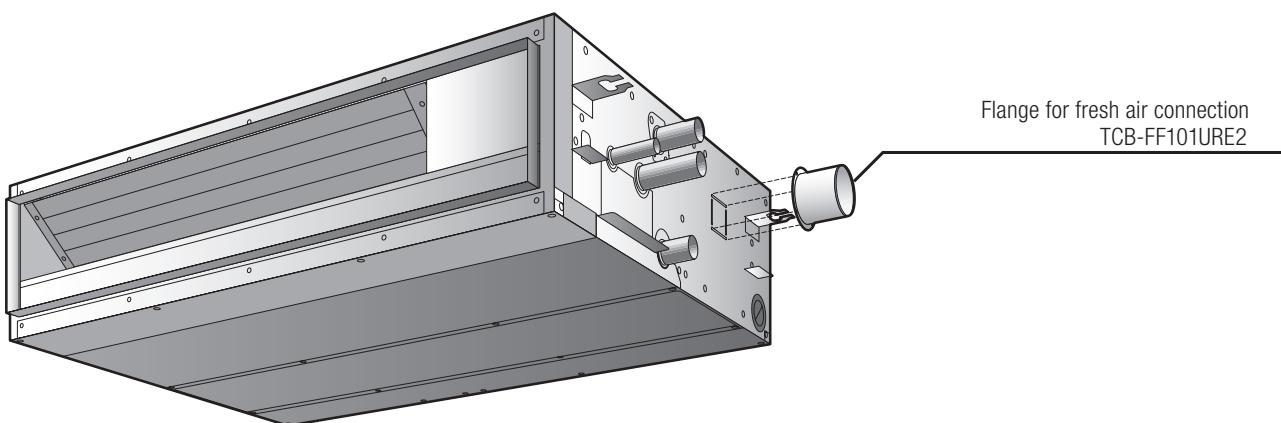
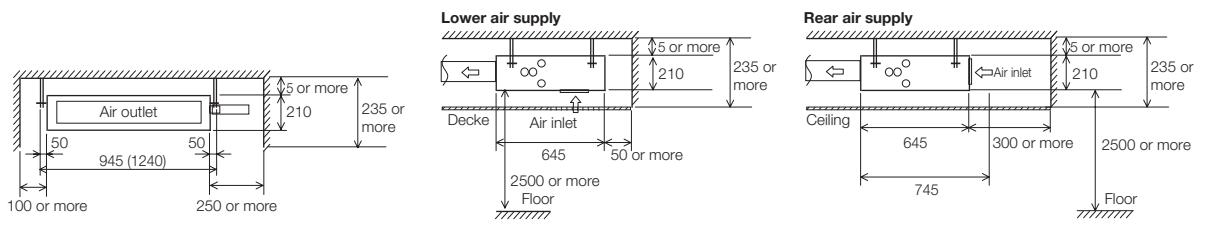


## SLIM DUCT UNIT



Model MMD-
AP0056SPH1-E
AP0074SPH1-E
AP0094SPH1-E
AP0124SPH1-E
AP0184SPH1-E
AP0244SPH1-E
AP0274SPH1-E

(Unit: mm)

**● Space required for installation and maintenance**

# High pressure duct unit

- Highest air performance with most compact design
- Adjustable external static pressure up to 250 Pa
- Integrated condensate pump (850 mm, up to size 56)
- For SMMSu and SMMSe systems



INDOOR UNIT SMMS-u	MMD-UP0181HP-E	MMD-UP0241HP-E	MMD-UP0271HP-E	MMD-UP0361HP-E
INDOOR UNIT SMMS-e				MMD-AP0366HP1-E*
Cooling capacity	kW	5,60	7,10	8,00
Heating capacity	kW	6,30	8,00	9,00
Airflow	m³/h	900/990/1100	960/1050/1200	1200/1350/1500
Sound pressure level (low/med/high)	dB(A)	31/33/37	31/34/38	38/41/43
Liquid pipe diameter	mm (inch)	6,4 (¼)	9,5 (3/8)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	12,7 (½)	15,9 (5/8)	15,9 (5/8)
Condensate pipe diameter	mm	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,125	0,140	0,190
External static pressure	Pa	50/75/100/125/150/175/200	50/75/100/125/150/175/200	50/75/100/125/150/175/200
Dimensions (HxWxD)	mm	298 x 1000 x 750	298 x 1000 x 750	298 x 1000 x 750
Weight	kg	34	34	34
Price	€	<b>2.320,-</b>	<b>2.535,-</b>	<b>2.640,-</b>
				<b>2.760,-</b>

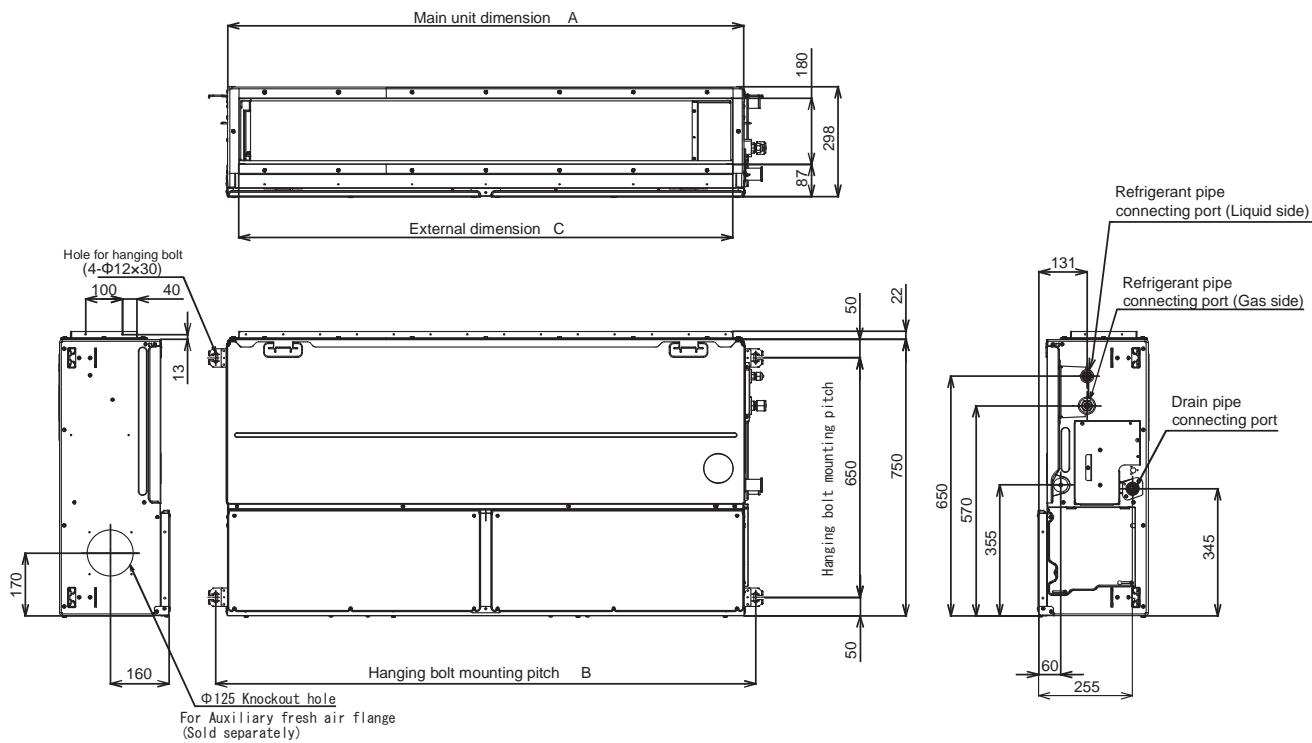
INDOOR UNIT SMMS-u	MMD-UP0481HP-E	MMD-UP0561HP-E	MMD-UP0721HP-E	MMD-UP0961HP-E
INDOOR UNIT SMMS-e	MMD-AP0486HP1-E*	MMD-AP0566HP1-E*		
Cooling capacity	kW	14,00	16,00	22,40
Heating capacity	kW	16,00	18,00	25,00
Airflow	m³/h	1695/1880/2340	1920/2340/2760	2500/3200/3800
Sound pressure level (low/med/high)	dB(A)	38/41/44	41/44/46	36/40/44
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	12,7 (½)
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)	22,2 (7/8)
Condensate pipe diameter	mm	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,300	0,400	0,540
External static pressure	Pa	50/75/100/125/150/175/200	50/75/100/125/150/175/200	50/83/117/150/183/217/250
Dimensions (HxWxD)	mm	298 x 1400 x 750	298 x 1400 x 750	448 x 1400 x 900
Weight	kg	43	43	97
Price	€	<b>2.890,-</b>	<b>3.105,-</b>	<b>6.320,-</b>
				<b>6.595,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
<b>TCB-DP40DP-E</b>	Drain pump, RAV: 22 + 28 / VRF: 72 + 96	<b>445,-</b>
<b>TCB-LK801D-E</b>	Long Life Airfilter kit, for model sizes 18, 24 + 27	<b>75,-</b>
<b>TCB-LK1401D-E</b>	Long Life Airfilter kit, for model sizes 36, 48 + 56	<b>105,-</b>
<b>TCB-LK2801DP-E</b>	Long Life Airfilter kit, for model sizes RAV: 22 + 28 / VRF: 72 + 96	<b>155,-</b>

\* While stocks last.

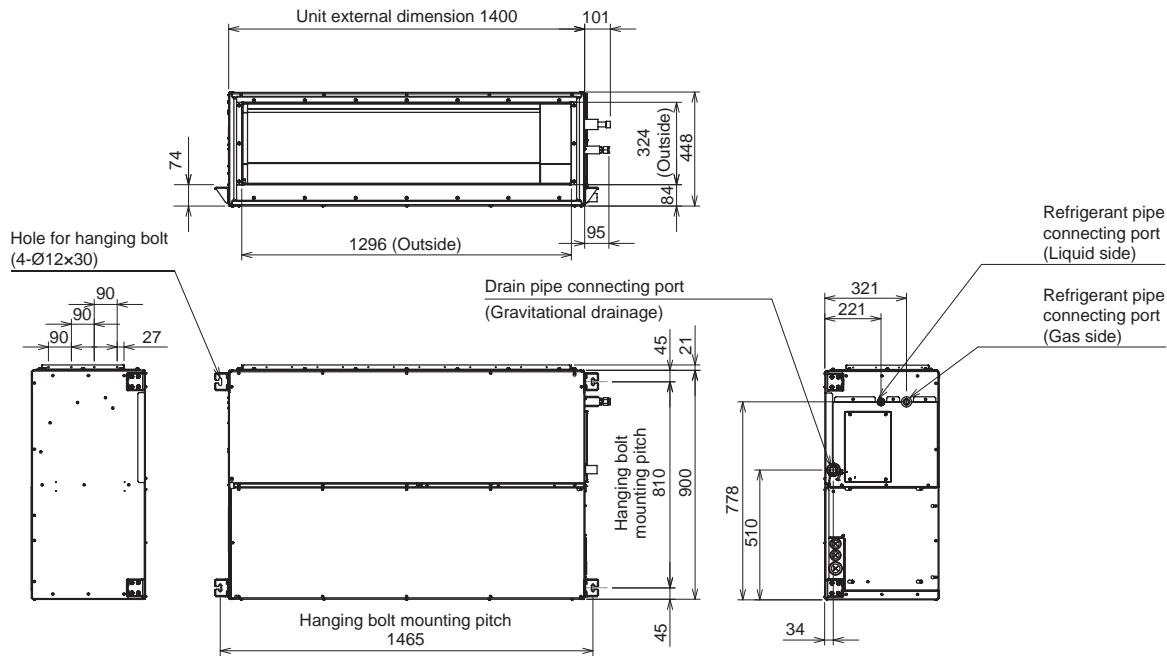
All optional control options can be found from page 169.

HIGH PRESSURE DUCT UNIT MMD-UP0181HP-E – MMD-UP0561HP-E /  
MMD-AP0186HP1-E – MMD-AP0566HP1-E



Unit dimension	A	B	C	D
UP018 ~ 027 type	1000	1065	940	500
UP0 36~ 056 type	1400	1465	1340	700

HIGH PRESSURE DUCT UNIT MMD-UP0721HP-E – MMD-UP0961HP-E1 /  
MMD-AP0726HP-E – MMD-AP0966HP-E



# Fresh air duct unit SMMSe

- For additional fresh air supply up to 100 %.
- Preheating and pre-cooling function
- Can be used in combination with other indoor units
- For SMMSu and SMMSe systems (except sizes 112 & 128 – exclusively for SMMSu)



INDOOR UNIT SMMSu	MMD-AP0481HFE*	MMD-AP0721HFE*	MMD-AP0961HFE*
Cooling capacity kW	14,00	22,40	28,00
Heating capacity kW	8,90	13,90	17,40
Airflow m³/h	1080	1680	2100
Sound pressure level (low/med/high) dB(A)	41/43/45	44/45/46	44/45/46
Liquid pipe diameter mm (inch)	9,5 (3/8)	12,7 (1/2)	12,7 (1/2)
Suction gas pipe diameter mm (inch)	15,9 (5/8)	22,2 (7/8)	22,2 (7/8)
Condensate pipe diameter mm	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)
Power supply V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.) kW	0,28	0,45	0,52
External static pressure Pa	170/210/230	140/165/180	160/190/205
Dimensions (HxWxD) mm	492 x 892 x 1262	492 x 1392 x 1262	492 x 1392 x 1262
Weight kg	93	144	144
<b>Price €</b>	<b>3.205,-</b>	<b>6.465,-</b>	<b>6.800,-</b>

\* While stocks last.

All optional control options can be found from page 169.

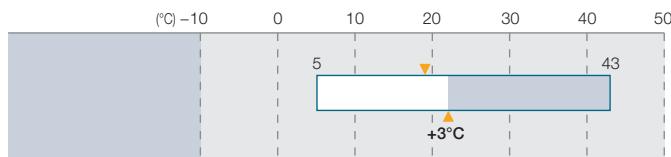
## Nominal conditions:

Cooling: Outdoor temperature 33°C TK / 28°C FK, setpoint temperature 18°C

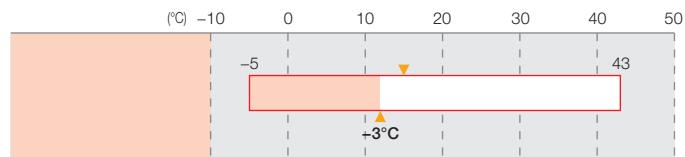
Heating: outdoor temperature 0°C TK / -2,9°C FK, setpoint temperature 25°C

Cooling line: length 7,5 m / height 0 m

## COOLING

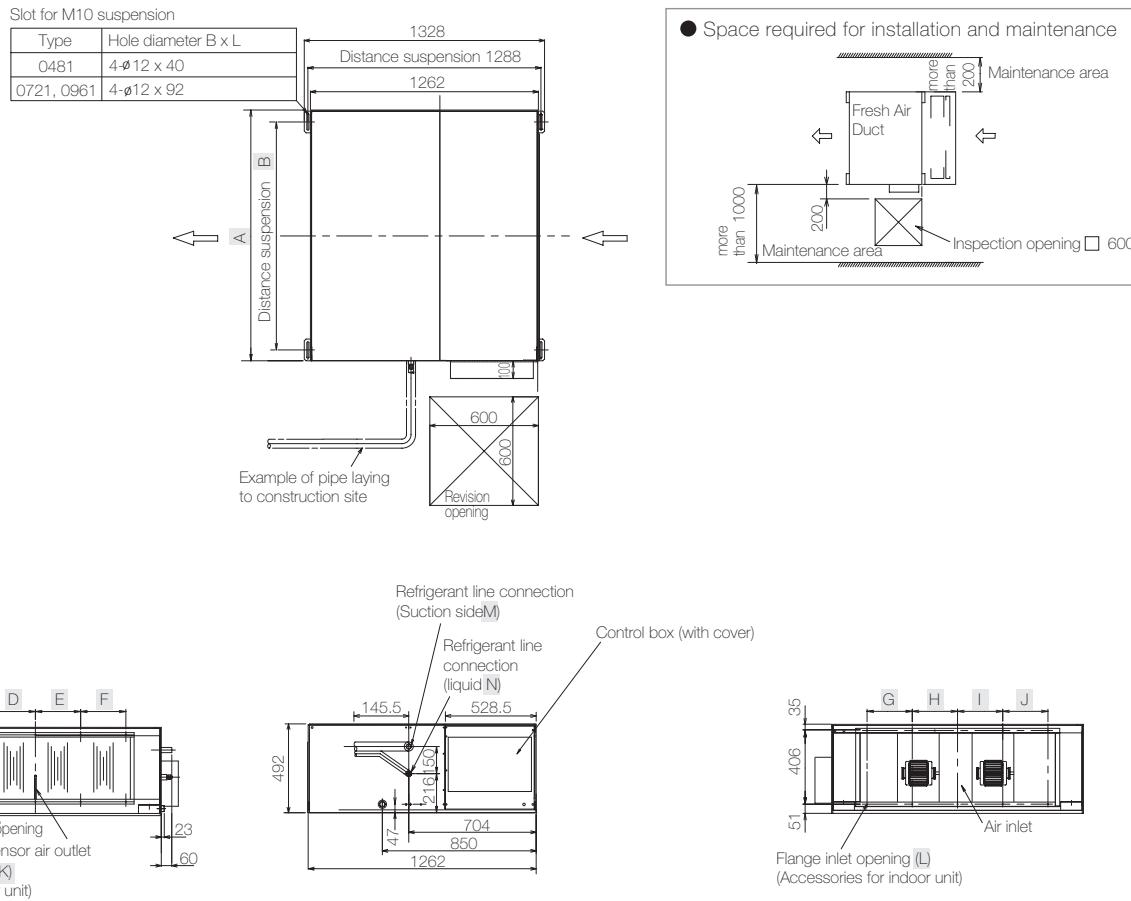


## HEATING



## FRESH AIR DUCT UNIT SMMSe

### MMD-AP0481HFE / MMD-AP0721HFE / MMD-AP0961HFE



MODEL	MMD-	A	B	C	D	E	F	G	H	I	J	K	L	M	N
AP0481HFE		892	810	215	107.5	107.5	215	-	250	250	-	8-M6	6-M6	Ø 15.9 bördel	Ø 9.5 bördel
AP0721HFE, AP0961HFE		1392	1260	250	250	250	250	250	250	250	250	10-M6	10-M6	Ø 22.2 löt	Ø 12.7 bördel

# Fresh air duct unit SMMSSu

- Compact and lightweight chassis
- Line-up up to 40 kW
- Intake air temperature from -10 to +46°C
- For SMMSSu and SMMSe systems (except sizes 112 & 128 – exclusively for SMMSSu)



INDOOR UNIT SMMSSu	MMD-UP0481HFP-E	MMD-UP0721HFP-E1	MMD-UP0961HFP-E1	MMD-UP1121HFP-E1	MMD-UP1281HFP-E1
Cooling capacity	kW	14,00	22,40	28,00	33,50
Heating capacity	kW	8,90	13,90	17,40	20,80
Airflow	m³/h	760/930/1080	1200/1440/1680	1470/1800/2100	1770/2130/2520
Sound pressure level (low/med/high)	dB(A)	31/32/35/37/38	33/35/36/37/38	33/35/36/38/39	34/36/37/39/40
Liquid pipe diameter	mm (inch)	9,5 (3/8)	12,7 (1/2)	12,7 (1/2)	15,9 (5/8)
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	22,2 (7/8)	22,2 (7/8)	28,6 (1 1/8)
Condensate pipe diameter	mm	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)	VP25 (25/32)
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,11	0,16	0,20	0,250
External static pressure	Pa	50/75/100/125/150/175/200	50/75/100/125/150/175/200	50/75/100/125/150/175/200	50/75/100/125/150/175/200
Dimensions (HxWxD)	mm	327 x 1430 x 750	477 x 1430 x 900	477 x 1430 x 900	477 x 1430 x 900
Weight	kg	44	99	99	99
Price	€	<b>3.560,-</b>	<b>7.180,-</b>	<b>7.550,-</b>	<b>8.075,-</b>
					<b>8.650,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
TCB-DP40DFP-E	Drain pump	445,-

\* While stocks last.

All optional control options can be found from page 169.

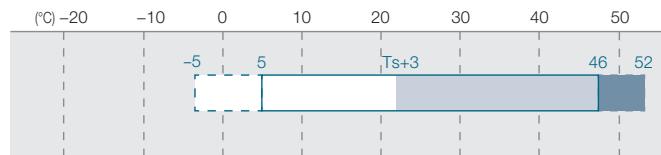
## Nominal conditions:

Cooling: Outdoor temperature 33°C TK / 28°C FK, setpoint temperature 18°C

Heating: outdoor temperature 0°C TK / -2,9°C FK, setpoint temperature 25°C

Cooling line: length 7,5 m / height 0 m

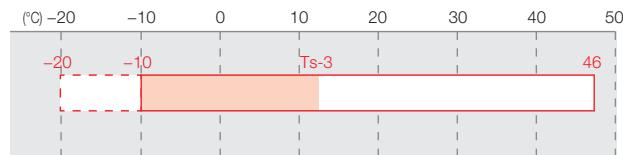
## COOLING



Requires pre-treatment of suction air to be 5°C or higher by the external heater.

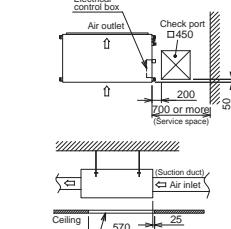
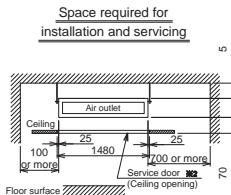
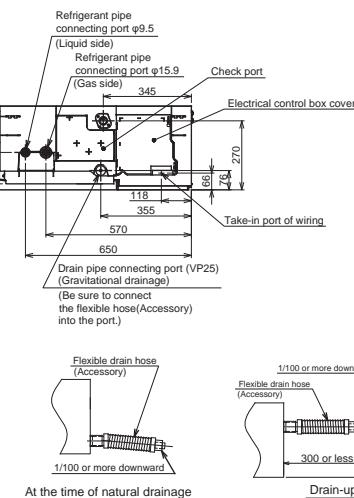
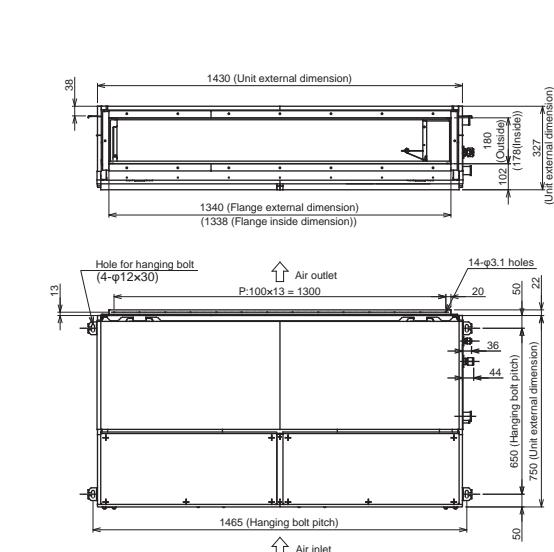
Operable but the adequate cooling performance will not be obtained.

## HEATING

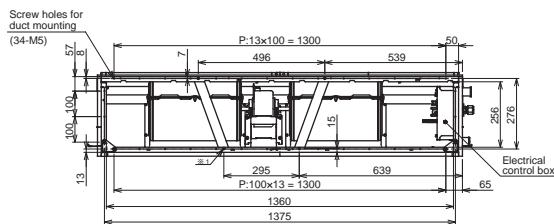


Requires pre-treatment of suction air to be -10°C or higher by the external heater.

## FRESH AIR DUCT UNIT SMMSu MMD-UP0481HFP-E

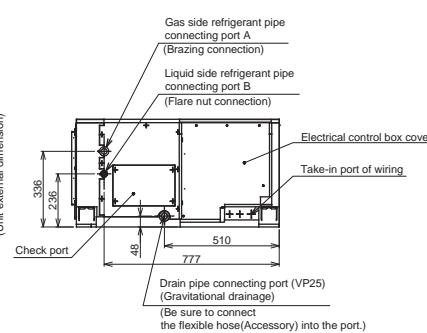
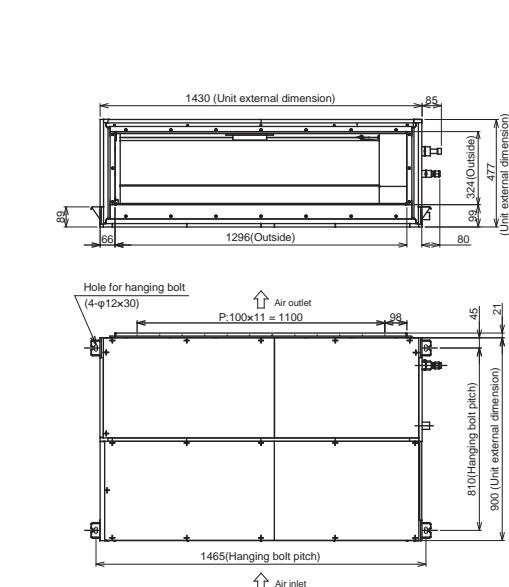


※2) If there are enough spaces under the unit (more than 1000mm), the service door (Ceiling opening) is not necessary.

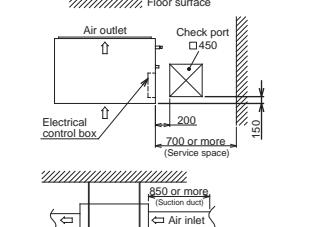
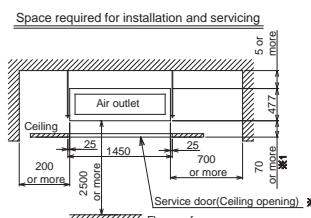


※1) When attached the duct at air inlet, make holes in the duct and do not interfere in it. The screw head (4 places) is convex.

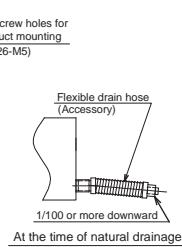
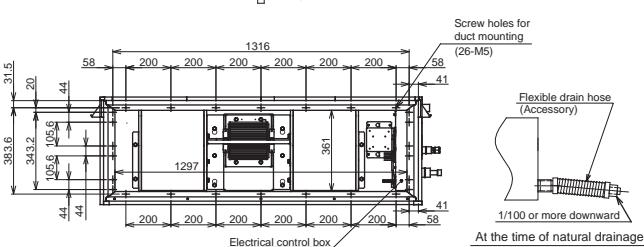
## FRESH AIR DUCT UNIT SMMSu MMD-UP0721HFP-E1 / MMD-UP0961HFP-E1 / MMD-UP1121HFP-E1 / MMD-UP1281HFP-E1



Model	Pipe size	Remarks
0721	A(Gas) $\varphi 22.2$	
0961	B(Liquid) $\varphi 12.7$	
1121	A(Gas) $\varphi 28.6$	Use the SOCKET(Accessory)
	B(Liquid) $\varphi 12.7$	
1281	A(Gas) $\varphi 28.6$	Use the SOCKET(Accessory)
	B(Liquid) $\varphi 15.9$	Use the LIQUID JOINT PIPE(Accessory)



※1) If there are enough spaces under the unit (more than 1000mm), the service door (Ceiling opening) is not necessary.





LAWYER - Proxauf Meyer Zeilinger Rechtsanwälte GmbH Innsbruck,  
EDMUND SPARER Klima & Kältetechnik GmbH

# Console

- Bi-Flow console with 2-sided air outlet & floor heating effect
- Very quiet operation due to radial fan
- For SMMSu and SMMSe systems



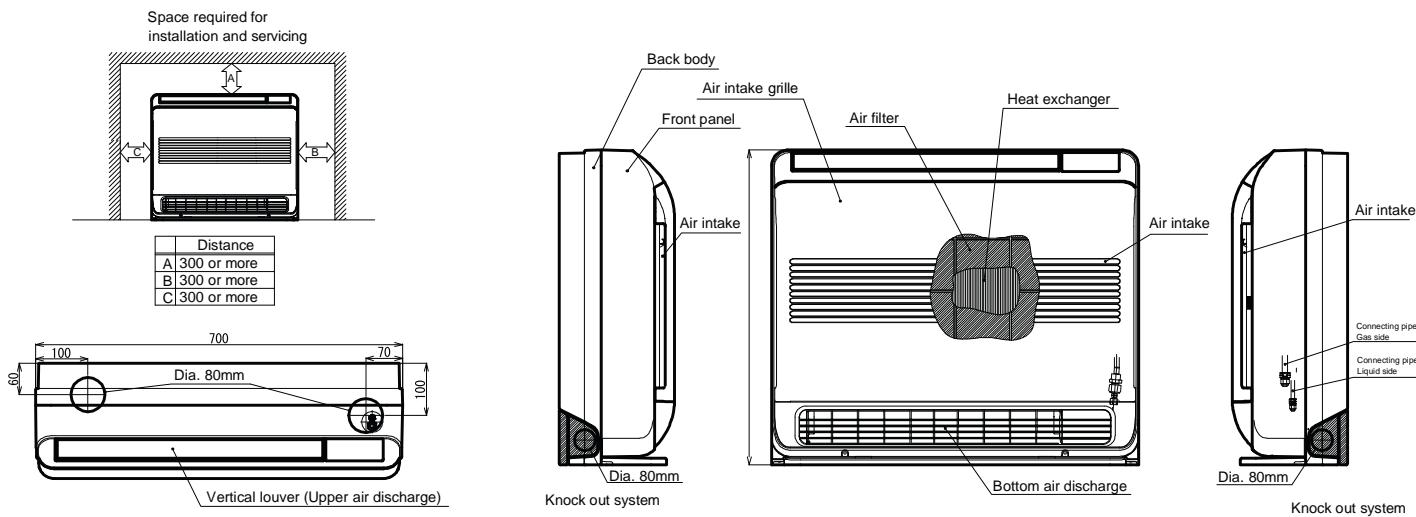
INDOOR UNIT SMMS-u	MML-UP0071NHP-E	MML-UP0091NHP-E	MML-UP0121NHP-E	MML-UP0151NHP-E	MML-UP0181NHP-E
INDOOR UNIT SMMS-e	MML-AP0074NH1-E*		MML-AP0154NH1-E*		MML-AP0184NH1-E*
Cooling capacity	kW	2,20	2,80	3,60	4,50
Heating capacity	kW	2,50	3,20	4,00	5,00
Airflow	m³/h	282/366/510	282/366/510	324/804/552	384/468/624
Sound pressure level (low/med/high)	dB(A)	26/32/38	26/32/38	29/34/40	31/37/43
Liquid pipe diameter	mm (inch)	6,4 (1/4)	6,4 (1/4)	6,4 (1/4)	6,4 (1/4)
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	12,7 (1/2)
Condensate pipe diameter	mm	16	16	16	16
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,021	0,021	0,025	0,034
Dimensions (HxWxD)	mm	600 x 700 x 220	600 x 700 x 220	600 x 700 x 220	600 x 700 x 220
Weight	kg	17	17	17	17
Price	€	1.445,-	1.530,-	1.625,-	1.730,-
					1.805,-

ACCESSORIES	DESCRIPTION	INCLUDED	PRICE €
Remote control	Infrared remote control included	✓	

\* While stocks last.

All optional control options can be found from page 169.

MML-UP0071NHP-E to MML-UP0181NHP-E / MML-AP0074NH1-E to AP0184NH1-E



# Chassis

- Console unit for individual trim
- No influence on the interior due to complete installation
- For SMMSu and SMMSe systems

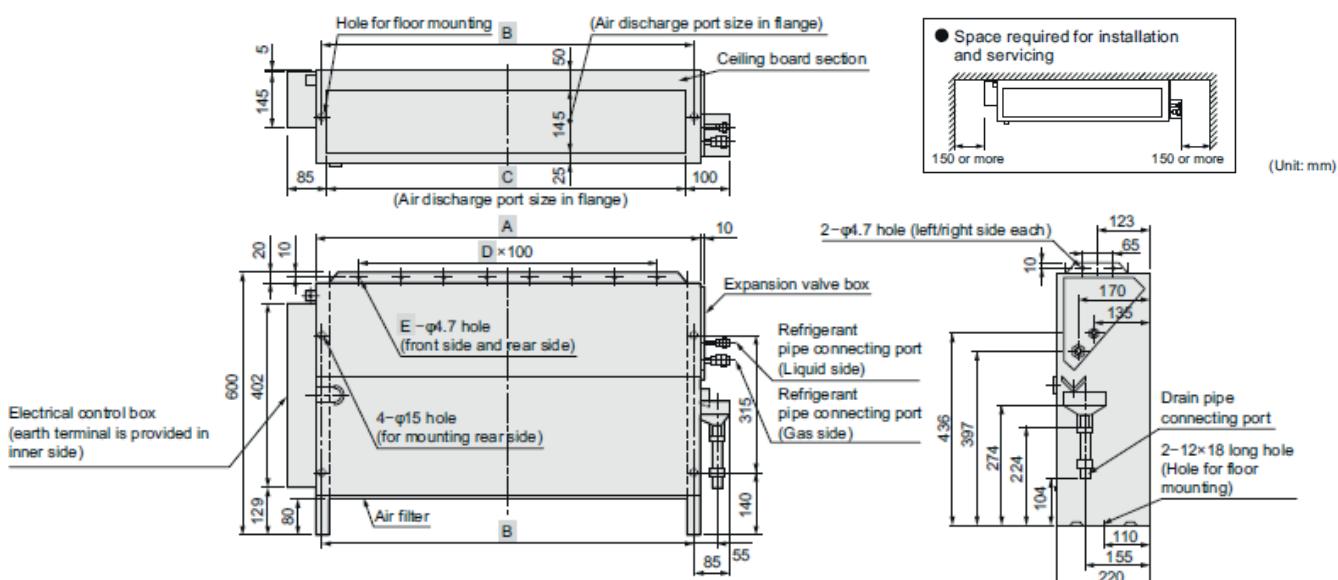


INDOOR UNIT	MML-UP0071BH-E	MML-UP0091BH-E	MML-UP0121BH-E	MML-UP0151BH-E	MML-UP0181BH-E	MML-UP0241BH-E
INDOOR UNIT	MML-AP0074BH1-E*		MML-AP0094BH1-E*		MML-AP0154BH1-E*	
Cooling capacity	kW	2,20	2,80	3,60	4,50	5,60
Heating capacity	kW	2,50	3,20	4,00	5,00	6,30
Airflow	m³/h	300/400/460	300/400/460	300/400/460	460/600/740	490/600/740
Sound pressure level (low/med/high)	dB(A)	32/34/36	32/34/36	32/34/36	32/34/36	32/34/36
Liquid pipe diameter	mm (inch)	6,4 (1/4)	6,4 (1/4)	6,4 (1/4)	6,4 (1/4)	6,4 (1/4)
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	12,7 (1/2)	12,7 (1/2)
Condensate pipe diameter	mm	VP20 (20/26)	VP20 (20/26)	VP20 (20/26)	VP20 (20/26)	VP20 (20/26)
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,056	0,056	0,056	0,090	0,090
Dimensions (HxWxD)	mm	600 x 745 x 220	600 x 745 x 220	600 x 745 x 220	600 x 1045 x 220	600 x 1045 x 220
Weight	kg	21	21	21	29	29
Price	€	<b>1.820,-</b>	<b>1.840,-</b>	<b>1.900,-</b>	<b>1.935,-</b>	<b>1.955,-</b>
						<b>2.010,-</b>

\* While stocks last.

All optional control options can be found from page 169.

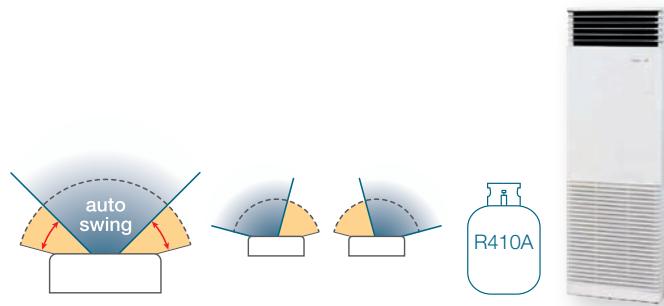
## MML-UP0071BH-E to MML-UP0241BH-E / MML-AP0074BH1-E to AP0244BH1-E



Model MML-	A	B	C	D	E
UP0071BH-E - 0121BH-E AP0074BH1-E - 0124BH1-E	610	580	550	4	5
UP0151BH-E - 0241BH-E AP0154BH1-E - 0244BH1-E	910	880	850	7	8

# Floor standing

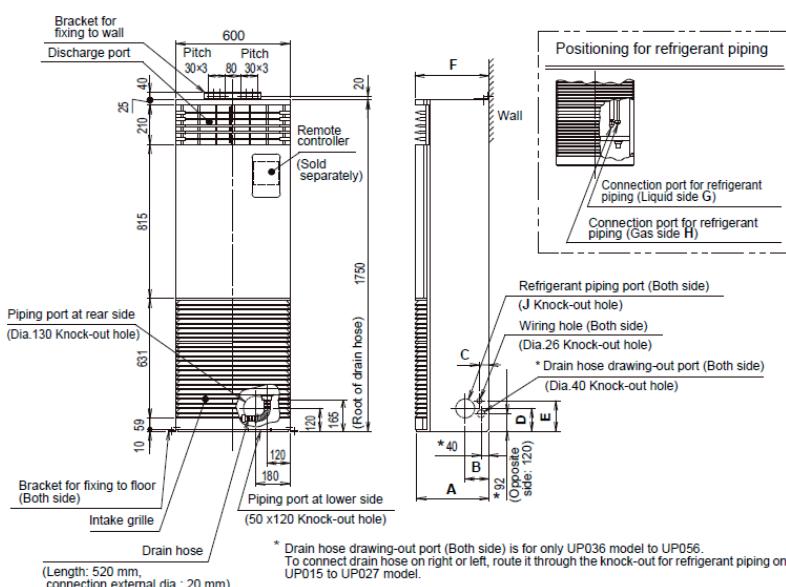
- Air outlet variable to the front or top
- Optional board for external control, alarms and messages
- Recess with cover for standard remote control
- Not in stock – delivery time on request



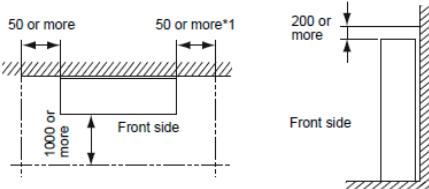
INDOOR UNIT		MMF-UP0151H-E	MMF-UP0181H-E	MMF-UP0241H-E	MMF-UP0271H-E	MMF-UP0361H-E	MMF-UP0481H-E	MMF-UP0561H-E
Cooling capacity	kW	4,50	5,60	7,10	8,00	11,20	14,00	16,00
Heating capacity	kW	5,00	6,30	8,00	9,00	12,50	16,00	18,00
Airflow	m³/h	660/780/900	660/780/900	840/990/1200	840/990/1200	1380/1620/1920	1560/1730/2160	1560/1730/2160
Sound pressure level (low/med/high)	dB(A)	37/42/46	37/42/46	39/45/49	39/45/49	41/46/51	44/49/54	44/49/54
Liquid pipe diameter	mm (inch)	6,4 (1/4)	6,4 (1/4)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	12,7 (1/2)	12,7 (1/2)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)	15,9 (5/8)
Condensate pipe diameter	mm	VP20 (20/26)						
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power consumption (min./nom./max.)	kW	0,055	0,055	0,089	0,089	0,135	0,160	0,160
Dimensions (HxWxd)	mm	1750 x 600 x 210	1750 x 600 x 390	1750 x 600 x 390	1750 x 600 x 390			
Weight	kg	46	46	47	47	62	62	62
Price	€	<b>2.665,-</b>	<b>2.705,-</b>	<b>2.820,-</b>	<b>2.835,-</b>	<b>3.050,-</b>	<b>3.070,-</b>	<b>3.095,-</b>

All optional control options can be found from page 169.

## MMF-UP0151H-E to UP0561H-E



Space required for installation and maintenance



Model MMF-	A	B	C	D	E	F	G	H	J
UP015, UP018	200	50	107	132	157	210	6,4	12,7	80
UP024, UP027							9,5	15,9	
UP036 to UP056	380	125	50	120	160	390			100

## DX-Kit Exhaust air control

- For exhaust air or room temperature control
- Direct evaporation kit consisting of control cabinet, PMV kit, all necessary sensors
- To be used in combination with ventilation systems and door air curtains
- Cable remote control included (only in master)



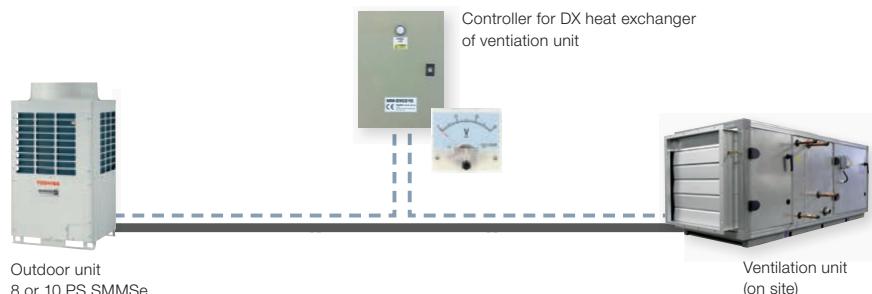
ACCESSORIES	DESCRIPTION	DIMENSIONS (HxWxD) (MM)	WEIGHT (KG)	PRICE €
<b>MM-DXC010</b>	Control unit (master)	400 x 300 x 150	7,6	<b>1.105,-</b>
<b>MM-DXC012</b>	Control unit (follower)	400 x 300 x 150	8,0	<b>855,-</b>
<b>MM-DXV080</b>	Valve kit up to 8 kW			<b>590,-</b>
<b>MM-DXV140</b>	Valve kit up to 14 kW			<b>590,-</b>
<b>MM-DXV280</b>	Valve kit up to 28 kW			<b>590,-</b>

## DX-Kit 0 – 10 V control capacity

- For supply air temperature control
- Direct evaporation kit consisting of control cabinet, PMV kit, all necessary sensors
- To be used in conjunction with ventilation systems and door air curtains
- Cable remote control required only for commissioning (not included)
- Compatible with 8 and 10 HP SMMSe outdoor units
- 1:1 solution – no other indoor units can be connected
- 0 – 10 volt signal from ventilation control required



ACCESSORIES	DESCRIPTION	DIMENSIONS (HxWxD) (MM)	WEIGHT (KG)	PRICE €
<b>RBC-DXC031</b>	Control unit for capacity control using 0-10 V signal	400 x 300 x 150		<b>1.385,-</b>
<b>MM-DXV141</b>	Valve kit for 11.2 kW, 14.0 kW and 16.0 kW			<b>335,-</b>
<b>MM-DXV281</b>	Valve kit for 22.4 kW and 28.0 kW			<b>335,-</b>



New **TOSHIBA DX-Kits**  
from **AUTUMN 2022 available.**

## DX-KIT EXHAUST AIR CONTROL

Combinable with: MiNi SMMS Single Fan, MiNi SMMSe; SMMSe, SHRMe  
Power & Combinations

POWER	CONTROL UNIT		PMV VENTILKIT			POWER NOM. (kW)	AIR VOLUME (m³/h)	VOLUME DX-REGISTER (dm³)	
POWER (PS)	MM-DXC010	MM-DXC012	MM-DXV080	MM-DXV140	MM-DXV280	KÜHLEN	HEIZEN	STD.	MIN.-STD.-MAX.
2	1			1		5,60	6,30	900	0,85 / 1,00 / 1,15
2,5	1			1		7,10	8,00	1125	1,06 / 1,25 / 1,44
3	1			1		8,00	9,00	1320	1,27 / 1,50 / 1,72
4	1			1		11,20	12,50	1600	1,70 / 2,00 / 2,30
5	1			1		14,00	16,00	2100	2,12 / 2,50 / 2,87
6	1			1		16,00	18,00	2800	2,55 / 3,00 / 3,45
8	1				1	22,40	25,00	3600	3,40 / 4,00 / 4,60
10	1				1	28,00	31,50	4200	4,25 / 5,00 / 5,75
12	1	1		2		33,50	37,50	5600	5,10 / 6,00 / 6,90
14	1	1		1	1	40,00	45,00	6400	5,95 / 7,00 / 8,05
16	1	1			2	45,00	50,00	7200	6,80 / 8,00 / 9,20
18	1	1			2	50,40	56,00	7800	7,65 / 9,00 / 10,35
20	1	1			2	56,00	63,00	8400	8,50 / 10,00 / 11,50
22	1	2		1	2	61,50	64,00	10000	9,35 / 11,00 / 12,65
24	1	2			3	67,00	75,00	10800	10,20 / 12,00 / 13,80
26	1	2			3	73,50	82,50	11400	11,05 / 13,00 / 14,95
28	1	2			3	78,50	87,50	12000	11,90 / 14,00 / 16,10
30	1	2			2	85,00	95,00	12600	12,75 / 15,00 / 17,25
32	1	3			4	90,00	100,00	14400	13,60 / 16,00 / 18,40
34	1	3			4	95,40	106,50	15000	14,45 / 17,00 / 19,55
36	1	3			4	101,00	113,00	15600	15,30 / 18,00 / 20,70
38	1	3			4	106,50	114,00	16200	16,15 / 19,00 / 21,85
40	1	4			4	112,00	126,00	16800	17,00 / 20,00 / 23,00
42	1	4			5	117,50	127,00	18600	17,85 / 21,00 / 24,15
44	1	4			5	123,00	128,00	19200	18,70 / 22,00 / 25,30
46	1	4			5	130,00	145,00	19800	19,55 / 23,00 / 26,45
48	1	4			5	135,00	150,00	20400	20,40 / 24,00 / 27,60
50	1	4			5	140,40	156,00	21000	21,25 / 25,00 / 28,75
52	1	4			6	146,00	163,00	22800	22,10 / 26,00 / 29,90
54	1	5			6	151,50	164,00	23400	22,95 / 27,00 / 31,05
56	1	5			6	157,00	176,00	24000	23,80 / 28,00 / 32,20
58	1	5			6	162,50	177,00	24600	24,65 / 29,00 / 33,35
60	1	5			6	168,00	178,00	25200	25,50 / 30,00 / 34,50

## DX-KIT 0 – 10 V CONTROL CAPACITY

Combinable with: exklusivly with SMMSe MMY-MAP0806HT8P-E and MMY-MAP1006HT8P-E  
Power & Combinations

POWER	CONTROL UNIT		PMV VENTILKIT			POWER NOM. (kW)	AIR VOLUME (m³/h)	VOLUME DX-REGISTER (dm³)
POWER (PS)	RBC-DXC031		MM-DXV141	MM-DXV281	KÜHLEN	HEIZEN	STD.	MIN.-STD.-MAX.
6	1		1		16,00	18,00	3300	1,70 / - / 3,20
8	1			1	22,40	25,00	4300	3,00 / - / 4,20
10	1			1	28,00	31,50	5000	3,00 / - / 5,40

Measurement conditions nominal capacity COOLING: indoor temperature +27°C DB / 19°C WB, outdoor temperature +35°C TK, at standard air volume.

Measurement conditions nominal capacity HEATING: indoor temperature +20°C DB, outdoor temperature +7°C DB / 6°C WB, at standard air volume.

SHRMe capacity is given as nominal cooling and maximum heating.

The standard airflow rate is a guide. The required capacity should determine the PMV valve kit selection.

Heating and cooling capacities are approximate. The individual design of the air handling unit and DX heat exchanger will affect on the actual system performance.

Please refer to the Installation Manual for application limits and allowable air conditions.

The pipe volume of the DX heat exchanger is to be designed in accordance with the Installation Manual; over/undershoots of +/- 10 % are permissible.

# Cross flow heat exchanger

- Air-to-air cross-flow heat exchanger for stand-alone operation
- Energy recovery up to 75 %
- Optional board for external control, alarms and messages



INDOOR UNIT		VN-M150HE	VN-M250HE	VN-M350HE	VN-M500HE	VN-M650HE	VN-M800HE	VN-M1000HE1	VN-M1500HE1	VN-M2000HE1
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Heat exchanger mode power consumption (min./nom./max.)	W	42/-/78	52/-/138	82/-/182	128/-/238	178/-/290	286/-/383	220/-/396	310/-/590	440/-/792
Airflow (min./nom./max.)	m³/h	110/150/150	155/250/250	210/350/350	390/500/500	520/650/650	700/800/800	700/1000/1000	1200/1500/1500	1400/2000/2000
External static pressure	Pa	47 - 102	28 - 98	65 - 125	62 - 150	61 - 107	76 - 158	70 - 105	80 - 140	70 - 105
Sound pressure level (low/med/high)	dB(A)	20/25,5/28	21/27/30	27/32/35	26/31/34	31/34/36	33,5/37/38,5	34,5/39,5/40,5	36/40/41,5	36,5/41,5/42,5
Sound pressure level (low/med/high)	dB(A)	20/25,5/28	21/27/30	27/32/35	26/31/34	31/34/36	33,5/37/38,5	33,0/37,0/38,0	36,0/40,0/41,0	36,5/40,5/41,5
Temperature exchange efficiency (min./nom./max.)	%	81,5/-/83,0	78,0/-/81,5	74,5/-/79,5	76,5/-/78,0	75,0/-/76,5	76,5/-/77,5	73,5/-/77,0	76,5/-/79,0	73,5/-/77,5
Enthalpy exchange efficiency (min./nom./max.)		74,5/-/76,0	70,0/-/74,0	65,0/-/71,5	72,0/-/73,5	69,5/-/71,5	71,0/-/71,5	68,5/-/71,5	71,0/-/73,5	68,5/-/72,0
Enthalpy exchange efficiency (min./nom./max.)	%	69,5/-/71,0	65,0/-/69,0	60,5/-/67,0	64,5/-/66,5	61,5/-/64,0	64,0/-/65,5	60,5/-/64,5	64,0/-/67,0	60,5/-/65,5
Dimensions (HxWxD)	mm	290 x 900 x 900	290 x 900 x 900	290 x 900 x 900	350 x 1140 x 1140	350 x 1140 x 1140	400 x 1189 x 1189	400 x 1189 x 1189	810 x 1189 x 1189	810 x 1189 x 1189
Air connections diameter	mm	100	150	150	200	200	250	250	250	250
Weight	kg	36	36	38	53	53	70	62	126	126
<b>Price</b>	<b>€</b>	<b>2.125,-</b>	<b>2.175,-</b>	<b>2.330,-</b>	<b>2.975,-</b>	<b>3.540,-</b>	<b>4.110,-</b>	<b>4.670,-</b>	<b>7.765,-</b>	<b>8.960,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
NRC-01HE	Wired remote control	145,-
NRB-1HE	Adapter for digital switching functions: On/Off, bypass, low/high (not for M1000HE1, M1500HE1, M2000HE1 & SMMSu)	145,-
TCB-PCUC2E	Control board for external control, alarms and messages	185,-

All optional control options can be found from page 169.

Filter efficiency degree: 82 %.

Outdoor temperature: -15°C ~ 43°C, 80 % relative humidity or less

Ambient temperature unit: -10°C ~ +40°C, 80 % relative humidity or less

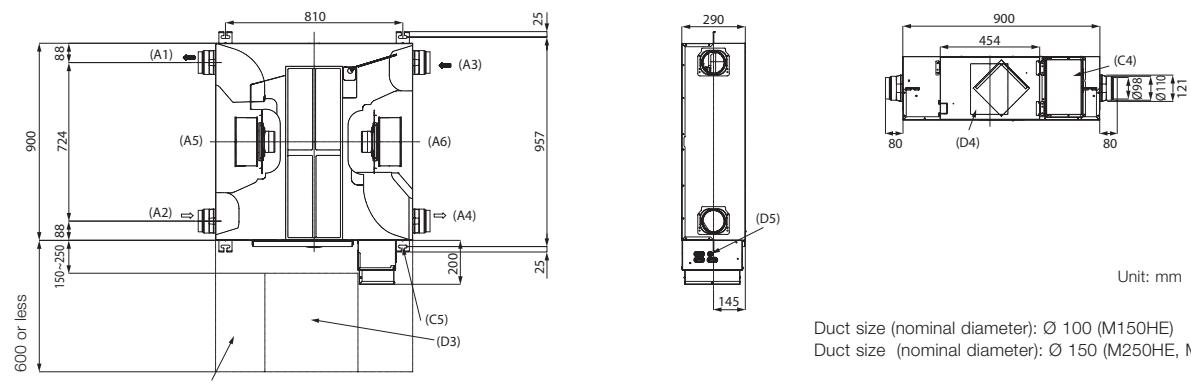
Exhaust air temperature: +5°C ~ +40°C, 80% relative humidity or less.

When the outside air temperature drops below -10°C, the unit will enter "Cold Operation" mode (cut off outside air supply / bypass mode).

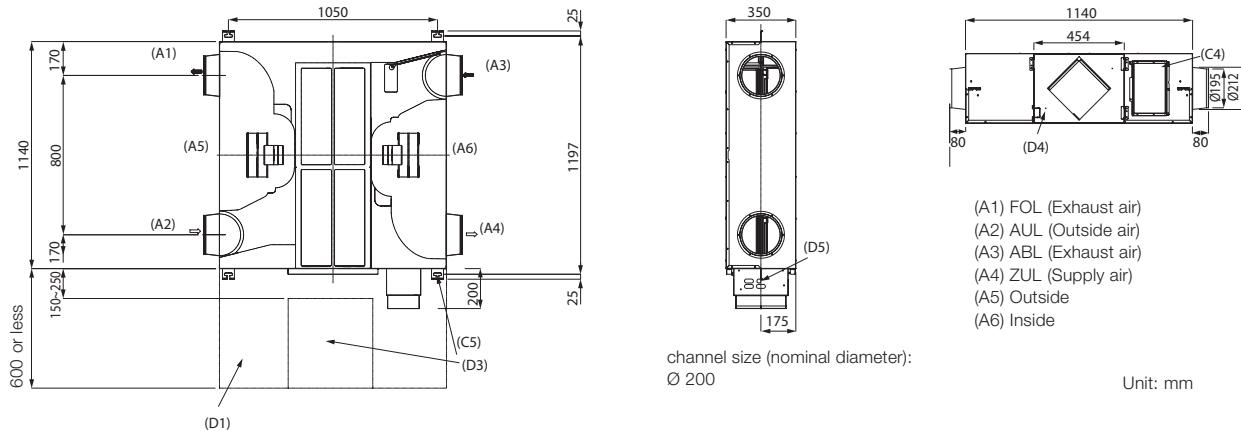
The unit cannot be operated below -15°C.

The fan for air supply stops, the fan for exhaust air can also be stopped by programming.

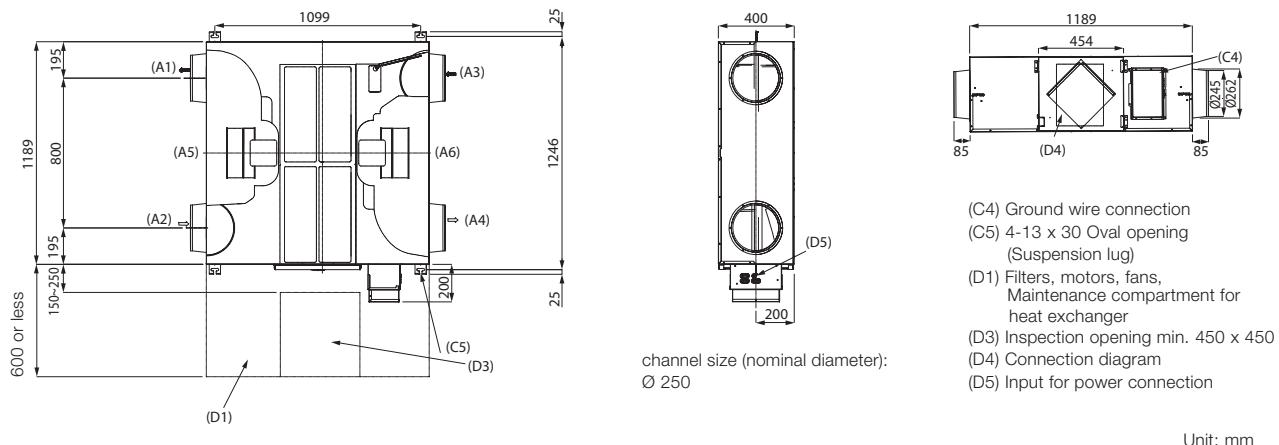
## CROSS FLOW HEAT EXCHANGER VN-M150HE TO M350HE



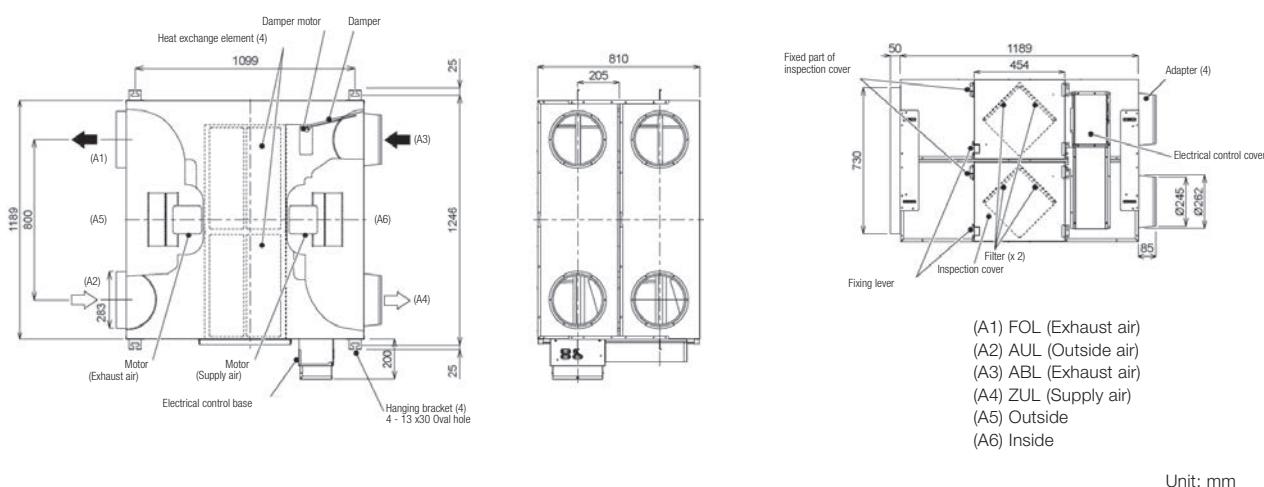
## VN-M500HE, M650HE



## VN-M800HE, M1000HE1



## VN-M1500HE1, M2000HE1



# Cross flow heat exchanger and direct expansion HEX with humidifier

- Air to Air cross flow heat exchanger with DX coil for heating + cooling.
- Energy recovery up to 75 %
- Not in stock – delivery time on request
- For SMMSu and SMMSe systems



INDOOR UNIT		MMD-VN502HEX1E	MMD-VN802HEX1E	MMD-VN1002HEX1E	MMD-VNK502HEX1E	MMD-VNK802HEX1E	MMD-VNK1002HEX1E
Cooling capacity	kW	4,10	6,56	8,25	4,10	6,56	8,25
Heating capacity	kW	5,53	8,61	10,92	5,53	8,61	10,92
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Temperature exchange efficiency (min./nom./max.)	%	70,5/-71,5	70/-72,5	65,5/-67,5	70,5/-71,5	70/-72,5	65,5/-67,5
Enthalpy exchange efficiency (min./nom./max.)	%	56,5/-57,5	56,0/-59,0	52,0/-54,0	56,5/-57,5	56,0/-59,0	52,0/-54,5
Enthalpy exchange efficiency (min./nom./max.)		68,5/-69,0	70,0/-73,0	66,0/-68,5	68,5/-69,0	70,0/-73,0	66,0/-68,5
Heat exchanger mode power consumption (min./nom./max.)	W	235/280/300	335/465/505	485/545/550	240/285/305	350/485/530	520/565/575
Running current	A	1,03/1,24/1,33	1,54/2,14/2,37	2,31/2,51/2,56	1,03/1,24/1,33	1,54/2,14/2,37	2,31/2,51/2,56
Running current	A	1,03/1,24/1,33	1,54/2,14/2,37	2,31/2,51/2,56	1,03/1,24/1,33	1,54/2,14/2,37	2,31/2,51/2,56
Airflow (min./nom./max.)	m³/h	440/500/500	640/800/800	820/950/950	440/500/500	640/800/800	820/950/950
External static pressure	Pa	105 - 120	100 - 120	105 - 135	85 - 95	85 - 105	90 - 115
Airflow limit	m³/h	440 - 500	640 - 800	820 - 950	440 - 500	640 - 800	820 - 950
Humidification capacity	kg/h	3,0	5,0	6,0	3,0	5,0	6,0
Humidification water pressure	bar	0,2 - 4,9	0,2 - 4,9	0,2 - 4,9	0,2 - 4,9	0,2 - 4,9	0,2 - 4,9
Sound pressure level (low/med/high)	dB(A)	34,5/36,5/37,5	38/40/41	40/42/43	33,5/35,5/36,5	38/39/40	39/41/42
Sound pressure level (low/med/high)	dB(A)	34,5/36,5/37,5	38/40/41	40/42/43	33,5/35,5/36,5	38/39/40	39/41/42
Liquid pipe diameter	mm (inch)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)	6,4 (¼)
Suction gas pipe diameter	mm (inch)	9,5 (3/8)	12,7 (½)	12,7 (½)	9,5 (3/8)	12,7 (½)	12,7 (½)
Condensate pipe diameter	mm	25	25	25	25	25	25
Water connection	Inch	1/2	1/2	1/2	1/2	1/2	1/2
Dimensions (HxWxD)	mm	430 x 1140 x 1690	430 x 1189 x 1739	430 x 1189 x 1739	430 x 1140 x 1690	430 x 1189 x 1739	430 x 1189 x 1739
Air connections diameter	mm	200	250	250	200	250	250
Weight	kg	84	100	101	91	111	112
<b>Price</b>	<b>€</b>	<b>5.365,-</b>	<b>6.440,-</b>	<b>7.505,-</b>	<b>7.135,-</b>	<b>9.595,-</b>	<b>11.115,-</b>

ACCESSORIES	DESCRIPTION	PRICE €
NRC-01HE	Wired remote control	145,-
TCB-DP31HEXE	Drain pump for all ventilation systems	850,-
NRB-1HE	Adapter for digital switching functions: On/Off, bypass, low/high (not for M1000HE1, M1500HE1, M2000HE1 & SMMSu)	145,-

All optional control options can be found from page 169.

Filter efficiency degree: 82 %.

Outdoor temperature: -15°C ~ 43°C, 80 % relative humidity or less

Ambient temperature unit: -10°C ~ +40°C, 80 % relative humidity or less

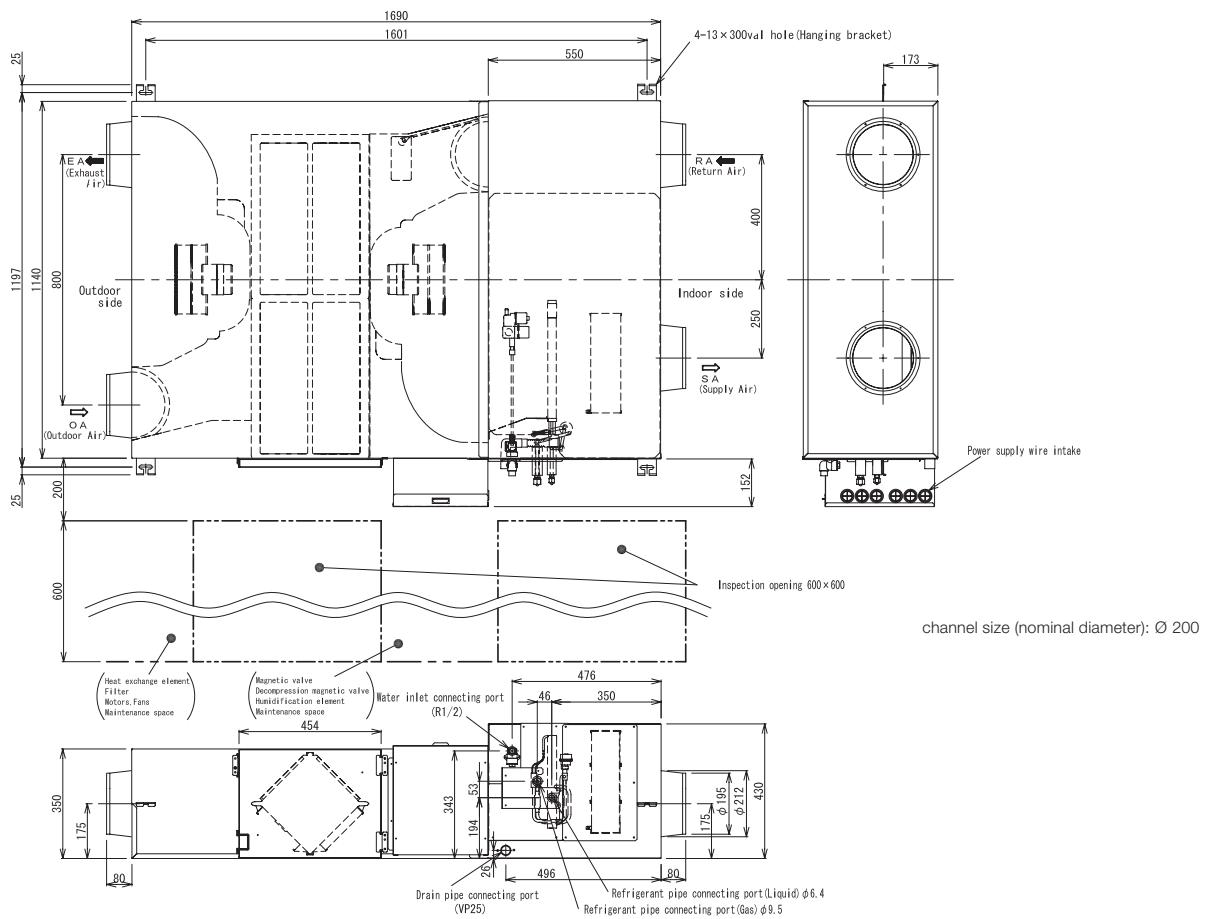
Exhaust air temperature: +5°C ~ +40°C, 80 % relative humidity or less.

When the outside air temperature drops below -10°C, the unit will enter "Cold Operation" mode (cut off outside air supply / bypass mode).

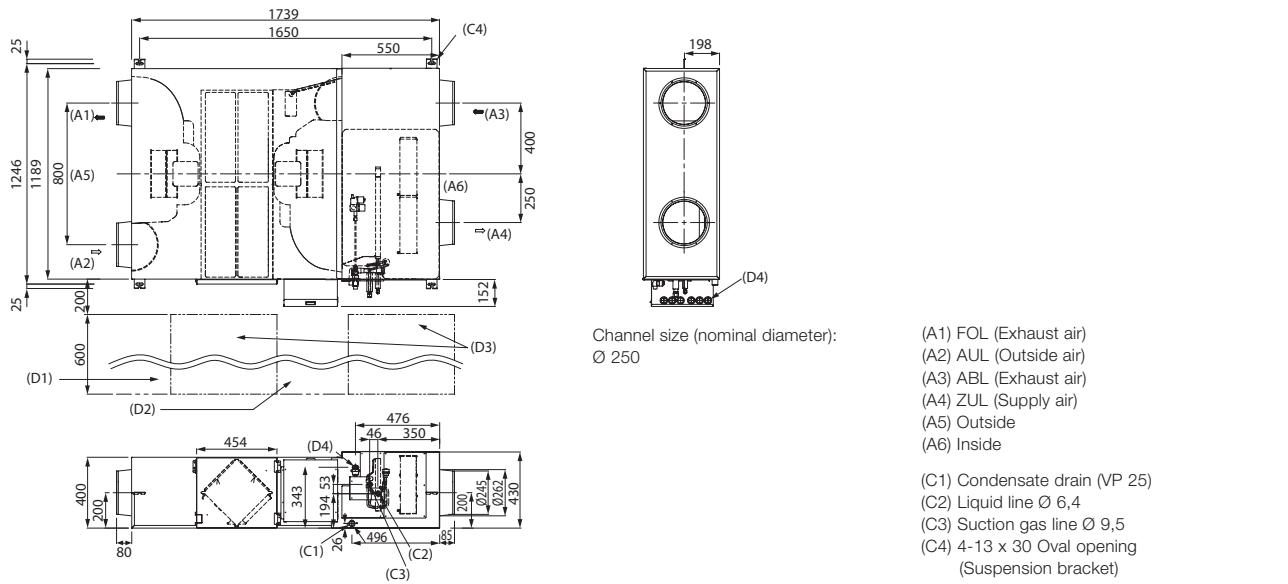
The unit cannot be operated below -15°C.

The fan for air supply stops, the fan for exhaust air can also be stopped by programming.

## CROSS FLOW HEAT EXCHANGER AND DIRECT EXPANSION HEX (WITH HUMIDIFIER) MMD-VN(K)502HEX1E



## MMD-VN(K)802HEX1E AND MMD-VN(K)1002HEX1E



### Attention

1. Channel size (nominal diameter Ø 250)
2. These dimensions do not take into account the thickness of the insulation layer on the unit housing.

## Hot water module MT (2&3 pipes)

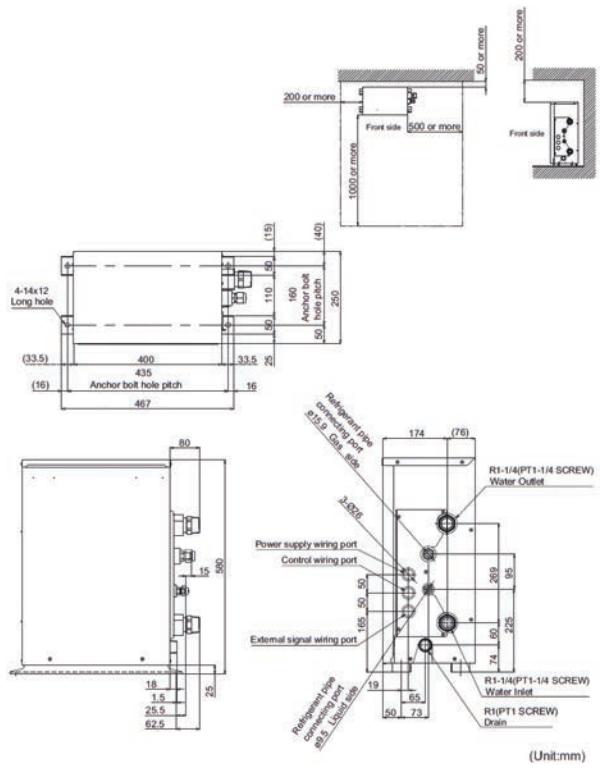
- Efficient preparation of hot water for space heating + domestic hot water
  - Hot water production up to +50°C
  - Compatible with SMMSe & SHRMe outdoor units, max. 50 % of total capacity



INDOOR UNIT SMMSu	MMW-UP0271LQ-E		MMW-UP0561LQ-E
INDOOR UNIT SMMSe	MMW-AP0271LQ-E*		MMW-AP0561LQ-E*
Heating capacity	kW	8,00	16,00
Power consumption (min./nom./max.)	kW	0,014	0,014
Running current	A	0,08	0,08
Sound pressure level (low/med/high)	dB(A)	25,0	27,0
Water flow rate (standard)	m³/h	1,37	2,75
Water flow rate (min.)	m³/h	1,17	2,33
Pressure loss (standard water flow rate)	bar	0,40	0,44
Operating range, indoor, DB (min.-max.)	°C	+5 / +32	+5 / +32
SMMS-e operating range, outdoor, DB (min.-max.)	°C	-25 / +21	-25 / +21
SMMS-e operating range, outdoor, WB (min.-max.)	°C	-25 / +19	-25 / +19
SHRM-e operating range, outdoor, DB (min.-max.)	°C	-25 / +40	-25 / +40
SHRM-e operating range, outdoor, WB (min.-max.)	°C	-25 / +28	-25 / +28
Water inlet operating range (min.-max.)	°C	+15 / +45	+15 / +45
Water outlet operating range (min.-max.)	°C	+25 / +50	+25 / +50
Water connection	Inch	1 ¼	1 ¼
Liquid pipe diameter	mm (inch)	9,5 (3/8)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	15,9 (5/8)	15,9 (5/8)
Condensate pipe diameter	mm	25	25
Power supply	V/Ph+N/Hz	220-240/1/50	220-240/1/50
Dimensions (HxWxD)	mm	580 x 400 x 250	580 x 400 x 250
Weight	kg	17,80	20,30
<b>Price</b>	<b>€</b>	<b>4.040,-</b>	<b>4.155,-</b>

\* While stocks last.

Nominal conditions: Inlet heat exchanger temperature 30°C, outlet temperature 35°C, outdoor temperature 7°C TK / 6°C FK

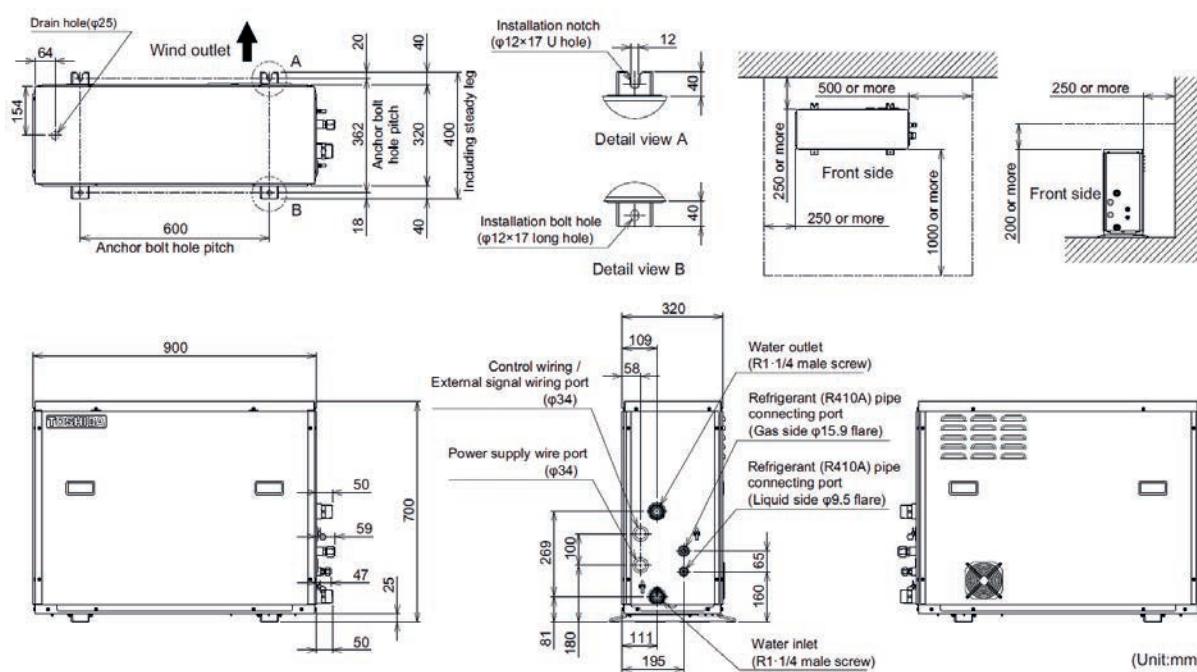


# Hot water module HT (3 pipes)

- Efficient preparation of hot water for space heating + domestic hot water
- Hot water preparation up to +82°C via cascade
- Compatible with SHRM-e outdoor units



INDOOR UNIT		MMW-AP0481CHQ-E
Heating capacity	kW	14,00
Power consumption (min./nom./max.)	kW	- / - / 4,15
Sound pressure level (low/med/high)	dB(A)	44,0
Water flow rate (standard)	m³/h	2,40
Water flow rate (min.)	m³/h	2,00
Pressure loss (standard water flow rate)	bar	0,15
SHRM-e operating range, outdoor, DB (min.-max.)	°C	-25 / +40
SHRM-e operating range, outdoor, WB (min.-max.)	°C	-25 / +28
Water outlet operating range (min.-max.)	°C	+50 / +82
Water connection	Inch	1 ¼
Liquid pipe diameter	mm (inch)	9,5 (3/8)
Suction gas pipe diameter	mm (inch)	15,9 (5/8)
Condensate pipe diameter	mm	15
Running current (max.)	A	17,50
Power supply	V/Ph+N/Hz	220-240/1/50
Recommended fusing	A	20
Cascade refrigerant		R134a
Cascade charge	kg	2,1
Dimensions (HxWxD)	mm	700 x 900 x 320
Weight	kg	100
Price	€	9.785,-





Carinthian Health Fund Klagenfurt,  
Klötzl Vertriebs GmbH

## SMMSu / SMMSe / MiNi SMMSe (2-pipes-system) branching



Y-branch (two per packaging unit)

ACCESSORIES	DESCRIPTION	CONNECTABLE CAPACITY (KW)	CONNECTABLE CAPACITY (HP)	PRICE €
<b>RBM-BY55E</b>	Y-branch for indoor units (2-pipe system)	< 18	< 6,4	120,-
<b>RBM-BY105E</b>	Y-branch for indoor units (2-pipe system)	18 - < 56	6,4 - < 20,2	135,-
<b>RBM-BY205E</b>	Y-branch for indoor units (2-pipe system)	56 - < 70,5	20,2 - < 25,2	230,-
<b>RBM-BY305E</b>	Y-branch for indoor units (2-pipe system)	≥ 70,5	≥ 25,2	290,-
<b>RBM-BY405E</b>	Y-branch for indoor units (2-pipe system) (SMMSu)	≥ 170	≥ 61,2	435,-

4/8-branch (two per packaging unit)

ACCESSORIES	DESCRIPTION	CONNECTABLE CAPACITY (KW)	CONNECTABLE CAPACITY (HP)	PRICE €
<b>RBM-HY1043E</b>	4-way branch for indoor units (2-pipe system)	< 40	< 14,2	275,-
<b>RBM-HY2043E</b>	4-way branch for indoor units (2-pipe system)	40 - < 70,5	14,2 - < 25,2	295,-
<b>RBM-HY1083E</b>	8-way branch for indoor units (2-pipe system)	< 40	< 14,2	435,-
<b>RBM-HY2083E</b>	8-way branch for indoor units (2-pipe system)	40 - < 70,5	14,2 - < 25,2	510,-

Connection kit (three per packaging unit)

ACCESSORIES	DESCRIPTION	CONNECTABLE CAPACITY (KW)	CONNECTABLE CAPACITY (HP)	PRICE €
<b>RBM-BT14E</b>	Y-connection kit for outdoor units (2-pipe system)	< 73	< 26	370,-
<b>RBM-BT24E</b>	Y-connection kit for outdoor units (2-pipe system)	> 73	> 26	420,-
<b>RBM-BT34E</b>	Y-connection kit for outdoor units (2-pipe system) (SMMSu)	≥ 128,5	≥ 46	660,-

## SHRMe (3-pipes-system) branching



Y-branch (three per packaging unit)

ACCESSORIES	DESCRIPTION	CONNECTABLE CAPACITY (KW)	CONNECTABLE CAPACITY (HP)	PRICE €
<b>RBM-BY55FE</b>	Y-branch for indoor units (3-pipe system)	< 18	< 6,4	165,-
<b>RBM-BY105FE</b>	Y-branch for indoor units (3-pipe system)	18 - < 40	6,4 - < 14,2	190,-
<b>RBM-BY205FE</b>	Y-branch for indoor units (3-pipe system)	40 - < 70,5	14,2 - < 25,2	265,-
<b>RBM-BY305FE</b>	Y-branch for indoor units (3-pipe system)	≥ 70,5	≥ 25,2	365,-

4/8-branch (three per packaging unit)

ACCESSORIES	DESCRIPTION	CONNECTABLE CAPACITY (KW)	CONNECTABLE CAPACITY (HP)	PRICE €
<b>RBM-HY1043FE</b>	4-way branch for indoor units (3-pipe system)	< 40	< 14,2	510,-
<b>RBM-HY2043FE</b>	4-way branch for indoor units (3-pipe system)	40 - < 70,5	14,2 - < 25,2	545,-
<b>RBM-HY1083FE</b>	8-way branch for indoor units (3-pipe system)	< 40	< 14,2	680,-
<b>RBM-HY2083FE</b>	8-way branch for indoor units (3-pipe system)	40 - < 70,5	14,2 - < 25,2	735,-

Connection kit (four per packaging unit)

ACCESSORIES	DESCRIPTION	CONNECTABLE CAPACITY (KW)	CONNECTABLE CAPACITY (HP)	PRICE €
<b>RBM-BT14FE</b>	Y-connection kit for outdoor units (3-pipe system)	< 73	< 26	370,-
<b>RBM-BT24FE</b>	Y-connection kit for outdoor units (3-pipe system)	> 73	> 26	435,-

# Wiring / Electrical Installation

## GENERAL

- Connect the power supply in accordance with the regulations of the local power company.
- For connection of indoor unit power supply and wiring of indoor and outdoor units, please refer to the installation manual of the indoor unit.
- Never apply voltage to U1/U2, U3/U4, U5/U6!
- Lay electrical cables so that no hot parts are touched!
- After connecting the junction box, remove the flap and fasten the cables with cable ties.
- Do not supply the indoor unit with voltage during evacuation.

## SUMMARY OF THE ELECTRICAL INSTALLATION

### OUTDOOR POWER CONNECTION

- Carry out the electrical installation according to the applicable standard.

### INDOOR POWER CONNECTION

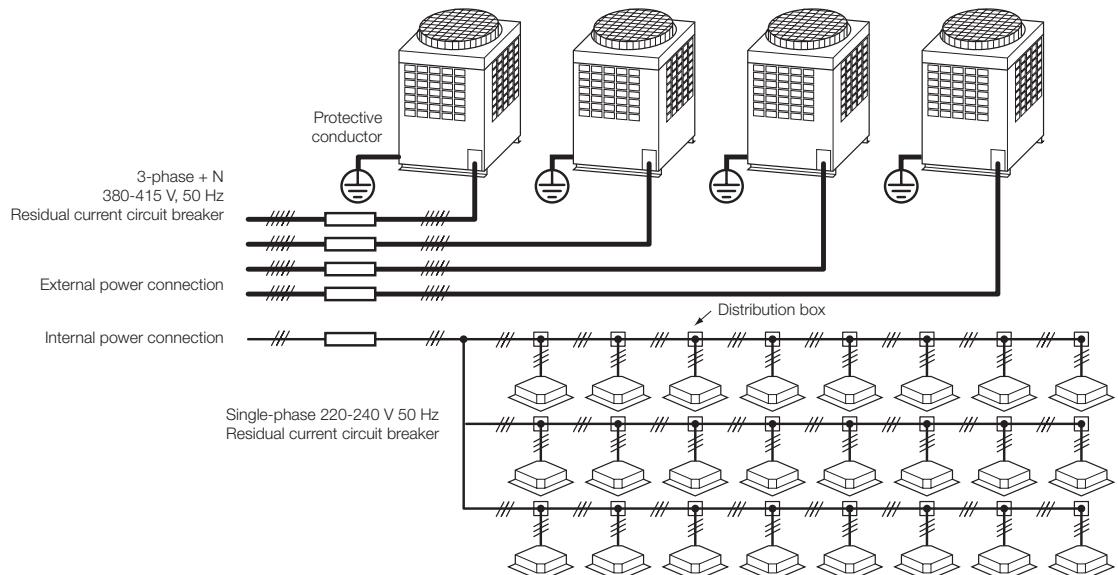
- For the electrical installation, refer to the total current total amperage of the indoor units.
- Wire cross-section depends on the length.

### CONTROL LINES

- Control lines:
  - Between outdoor and indoor units
  - Between indoor unit and remote, central control unit, building management system
- Cable cross sections depend on length

## ELECTRICAL SUPPLY LINES

- Line sizing must comply with local and national regulations.
- Determine the line size for the indoor unit according to the number of downstream indoor units.



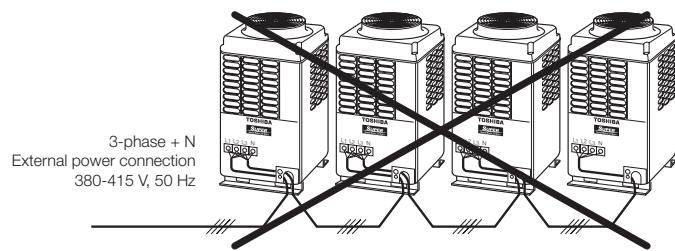
Designations of the bus connections correspond to SMMS / SMMSe.

For SMMSu systems applies:

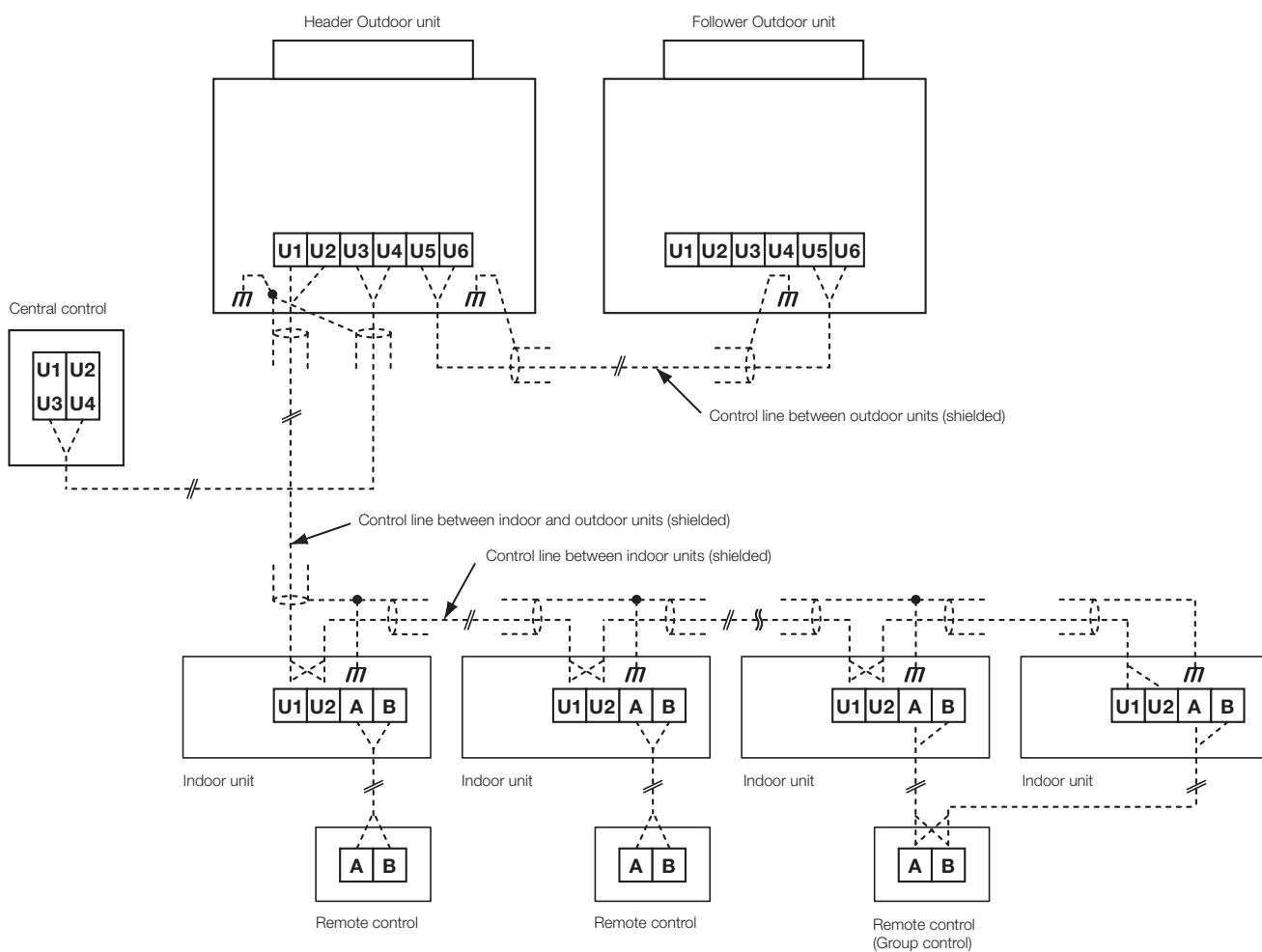
Outdoor unit -> indoor units: U1, U2 becomes Uv  
Central control: U3, U4 becomes Uh  
Outdoor unit -> outdoor unit: U5, U6 becomes Uc

## POWER SUPPLY OUTDOOR UNIT

- Power connection and fuse protection of each outdoor unit specify in accordance with the following specification:  
Cable in accordance with design 60245 IEC 6.
- When connecting outdoor units, do not stack electrical cables one on top of the other, but use junction box (L1, L2, L3, N).



## DESIGN OF BUS-CABLES

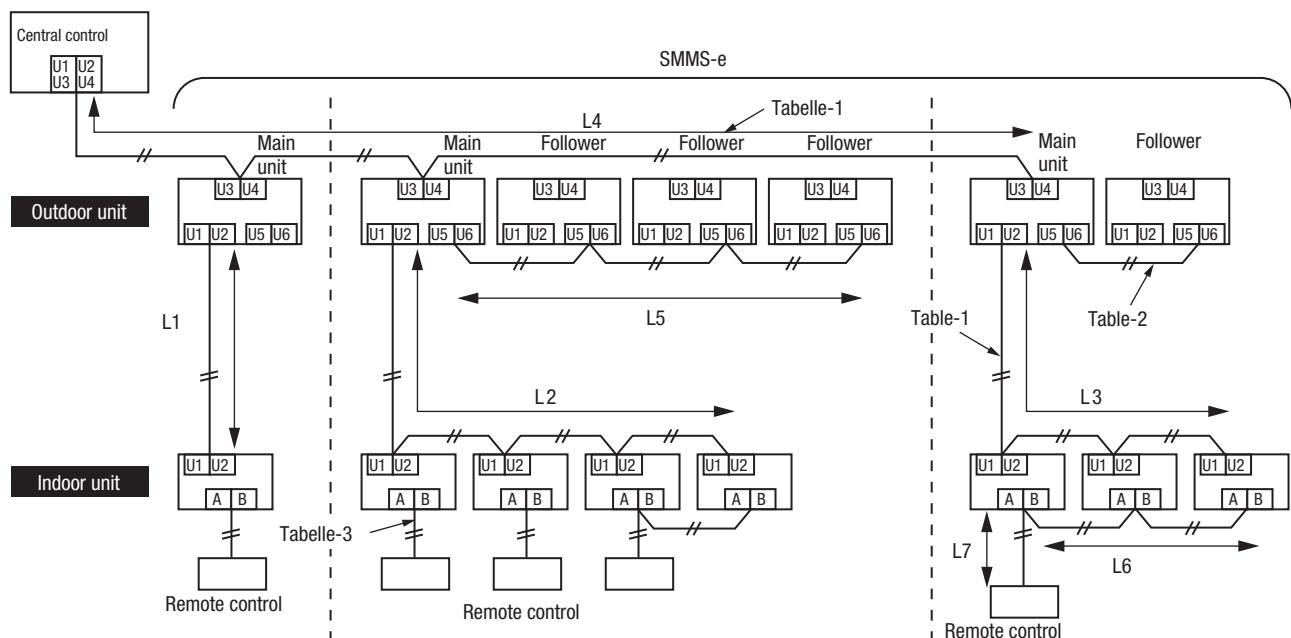


Designations of the bus connections correspond to SMMS / SMMSe.

For SMMSu systems applies:

Outdoor unit -> indoor units: U1, U2 becomes Uv  
Central control U3, U4 becomes Uh  
Outdoor unit -> outdoor unit: U5, U6 becomes Uc

## COMMUNICATION WIRING RESTRICTION



### Control line between indoor and outdoor units (L1, L2, L3)

Wiring	2-pole line, no polarity
Type	shielded, flexible
Size/Length	1,25 mm <sup>2</sup> : up to 1.000 m / 2,0 mm <sup>2</sup> : up to 2.000 m (*)

### Control line between outdoor units (L5)

Wiring	2-pole line, no polarity
Type	shielded, flexible
Size/Length	1,25 mm <sup>2</sup> up to 2,0 mm <sup>2</sup> / up to 100 m (L5)

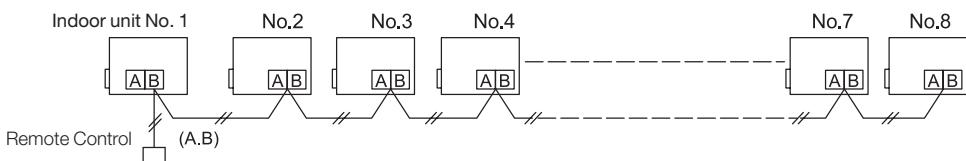
Remark (\*) : Total length of all control lines for all refrigerant circuits  
(L1 + L2 + L3 + L4)

### Remote control line (L6, L7)

Wiring	2-pole
Dimensions	0,5 mm <sup>2</sup> up to 2,0 mm <sup>2</sup>
	■ Up to 500 m (L6 + L7)
Size/Length	■ Up to 400 m for wireless remote control for group control. ■ Up to 200 m total length for control lines between indoor units (L6).

## GROUP CONTROL BY REMOTE CONTROL

- Group control of multiple indoor units (8 units) with one wired remote controller



Designations of the bus connections correspond to SMMS / SMMSe.

For SMMSu systems applies:

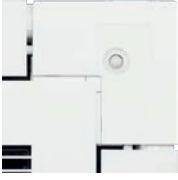
Outdoor unit -> indoor units: U1, U2 becomes Uv  
Central control U3, U4 becomes Uh  
Outdoor unit -> outdoor unit: U5, U6 becomes Uc

# Local wired remote controls

TYPE / DESCRIPTION	PRICE €
 <b>RBC-AS41E</b> Simplified wired remote control <ul style="list-style-type: none"> <li>• To control all main functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• DN codes cannot be set</li> </ul>	140,-
 <b>RBC-AMTU31-E</b> Standard Wired Remote Control <ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• 168 hour On/Off timer</li> <li>• DN codes can be set</li> </ul>	140,-
 <b>RBC-AMS41E</b> Wired remote control with integrated weekly timer <ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• Weekly timer integrated, 8 events/day, 6 parameters/event can be programmed</li> <li>• DN codes can be set</li> </ul>	145,-
 <b>RBC-ASCU11-E</b> Compact wired remote control <ul style="list-style-type: none"> <li>• Slimline version of standard wired remote control</li> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• Off timer</li> <li>• DN codes can be set</li> </ul>	100,-
 <b>RBC-AMSU51-ES</b> Comfort wired remote control with backlit display <ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• Weekly timer, soft keys, night operation, louver lock, key lock</li> <li>• Energy monitoring in conjunction with Super Digital Inverter outdoor units</li> <li>• DN codes can be set</li> </ul>	190,-
 <b>RBC-MTSC1</b> Local touch lite remote control <ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• Controlled via 4.5" color touch display</li> <li>• Personalized graphics for screen &amp; logo via upload (480x272)</li> <li>• DN codes can be set</li> <li>• Not a stock item - lead time on request</li> </ul>	475,-
 <b>TCB-TC41U-E</b> Remote Temperature Sensor <ul style="list-style-type: none"> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• When exact temperature measurement is not possible using the sensor in the indoor unit or in the wired remote control.</li> <li>• Takes priority over the unit and remote control sensor</li> </ul>	125,-

# Local infrared remote controls

TYPE / DESCRIPTION	PRICE €
	425,-
<b>RBC-AXU31-E</b> Infrared remote control with external receiver kit for all indoor units	
<ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Function range same as RBC-AMTU31-E (RBC-AMT32E), but wireless.</li> <li>• DN codes cannot be set</li> </ul>	
	325,-
<b>RBC-AXU31C-E</b> Infrared remote control + receiver kit for installation in ceiling unit	
<ul style="list-style-type: none"> <li>• also for 1 way cassette (Series SH)</li> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Function range same as RBC-AMTU31-E (RBC-AMT32E), but wireless.</li> <li>• DN codes cannot be set</li> </ul>	
	345,-
<b>RBC-AXU31UW-E</b> Infrared remote control + receiver kit for installation in 2-way cassette	
<ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units.</li> <li>• Function range same as RBC-AMTU31-E (RBC-AMT32E), but wireless.</li> <li>• DN codes cannot be set</li> </ul>	
	80,-
<b>RBC-AX33UYP-E</b> Infrared remote control + receiver kit for installation in 1-way cassette (SMMSu)	
<ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Function range same as RBC-AMTU31-E (RBC-AMT32E), but wireless.</li> <li>• DN codes cannot be set</li> </ul>	
	165,-
<b>RBC-AXU31UM-E</b> Infrared remote control + receiver kit for installation in 60x60 slim cassette (SMMSu)	
<ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> <li>• Function range same as RBC-AMTU31-E (RBC-AMT32E), but wireless.</li> <li>• DN codes cannot be set</li> </ul>	
	285,-
<b>RBC-AX41U(W)-E</b> Infrared remote control + receiver kit for installation in smart cassette	
<ul style="list-style-type: none"> <li>• To control all the functions of an indoor unit, or a group of up to 8 indoor units</li> <li>• Function range same as RBC-AMT32E, but wireless.</li> <li>• DN codes cannot be set</li> </ul>	
	220,-
<b>RBC-AXU33UP-E</b> Infrared remote control + receiver kit for installation in FLAT Panel 4-way standard cassette (from summer 2022)	

TYPE / DESCRIPTION	PRICE €
	120,-
<b>TCB-SIR41UM-E</b> Occupancy sensor kit for installation in 60x60 slim cassette <ul style="list-style-type: none"> <li>Automatic motion detection in room</li> <li>If no one is detected for 60 minutes, the indoor unit switches automatically into OFF or Standby mode</li> <li>Requires RBC-AMSU51-ES (RBC-AMS55E-ES) wired remote control</li> <li>Required for every cassette in the group in the case of group control</li> </ul>	120,-
	120,-
<b>TCB-SIR41U-E</b> Occupancy sensor kit for installation in smart cassette <ul style="list-style-type: none"> <li>Automatic motion detection in room</li> <li>If no one is detected for 60 minutes, the indoor unit switches automatically into OFF or Standby mode</li> <li>Requires RBC-AMS55E-ES wired remote control</li> <li>Required for every cassette in the group in the case of group control</li> </ul>	120,-
	125,-
<b>TCB-SIR33UP-E</b> Occupancy sensor kit for installation in FLAT Panel (from summer 2022)	125,-

## Mobile- / APP- / KNX® control options

TYPE / DESCRIPTION	PRICE €
	615,-
<b>RBC-Combi Control</b> Module to control the main functions via SMS or an app (SIM card required) <ul style="list-style-type: none"> <li>To control the main functions such as on/off, operating mode, temperature and fan speed, plus alarms in the event of a power blackout or when temperature is too high/too low</li> <li>Compatible with all indoor units that have a standard infrared remote control</li> <li>Free app for iOS or Android</li> </ul>	615,-
	340,-
<b>AP-IR-WIFI-1</b> WiFi module to control all functions of an indoor unit using an app on a cell phone <ul style="list-style-type: none"> <li>Temperature and humidity alarm configurable</li> <li>Compatible with all indoor units that have a standard infrared remote control</li> <li>WLAN and internet access required</li> <li>Free app for iOS or Android</li> <li>Not a stock item - lead time on request</li> <li>for cassette + duct unit only</li> </ul>	340,-
	480,-
<b>TO-RC-WIFI-1</b> WiFi module to control all functions of an indoor unit using an app or an internet browser <ul style="list-style-type: none"> <li>Compatible with all indoor units that have an A/B remote control bus</li> <li>WLAN and internet access required</li> <li>Free app for iOS or Android</li> </ul>	480,-
	505,-
<b>TO-RC-KNX-1i</b> Module for controlling all the functions of an indoor unit via the KNX® Bus. <ul style="list-style-type: none"> <li>Compatible with all indoor units that have an A/B remote control bus</li> <li>KNX® bus system required</li> </ul>	505,-

# Local control options

TYPE / DESCRIPTION	PRICE €
 <p><b>TCB-IFCB5-PE</b> External on/off PCB, window contact module</p> <ul style="list-style-type: none"> <li>• Potential-free contact for on/off and window contact input.</li> <li>• Remote ON/OFF function</li> </ul>	67,-
<p><b>TCB-PX100-PE</b> Casing for outdoor installation of window contact module for high-wall units</p> <ul style="list-style-type: none"> <li>• for high-wall units</li> </ul>	45,-
<p><b>TCB-PX30MUE</b> Casing for indoor installation for 4-way standard cassette</p> <ul style="list-style-type: none"> <li>• for 4-way standard cassette</li> </ul>	125,-
<p><b>TCB-PX40MUME</b> Casing for: PC board for external control, TCC link interface, window contact PC board for 60x60 slim cassette, 4-way standard cassette, SMART cassette</p> <ul style="list-style-type: none"> <li>• for 60x60 slim cassette, 4-way standard cassette, SMART cassette</li> </ul>	125,-
 <p><b>TCB-PCUC2E</b> Control board for external control, alarms and messages</p> <ul style="list-style-type: none"> <li>• Compatible with ceiling unit, high pressure duct unit series 4, 60x60 cassette, 4-way standard cassette, SMART cassette and VN-M heat exchanger</li> <li>• Connection to CN521</li> <li>• 3 analog inputs</li> <li>• 3 potential-free digital inputs/outputs</li> <li>• Input and output functions configurable via rotary switch</li> </ul>	185,-
<p><b>TCB-PX30MUE</b> Casing for indoor installation for 4-way standard cassette</p> <ul style="list-style-type: none"> <li>• for 4-way standard cassette</li> </ul>	125,-
<p><b>TCB-PX40MUME</b> Casing for: PC board for external control, TCC link interface, window contact PC board for 60x60 slim cassette, 4-way standard cassette, SMART cassette</p> <ul style="list-style-type: none"> <li>• for 60x60 slim cassette, 4-way standard cassette, SMART cassette</li> </ul>	125,-
 <p><b>TCB-IFCB-4E2</b> Operating, error signal, remote On/Off module</p> <ul style="list-style-type: none"> <li>• Operating and error signal output</li> <li>• Can be connected to the master unit of a group to handle the I/O control and error messages of up to 16 indoor units</li> <li>• For connecting to a CN61</li> <li>• Potential-free contact</li> </ul>	435,-
 <p><b>RBC-FDP3-PE</b> Analog Interface</p> <ul style="list-style-type: none"> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• Controls all main functions via 0-10V signals or fixed resistors</li> <li>• Operating and error signal output</li> <li>• Modbus connection possible</li> </ul>	700,-
 <p><b>RBC-FDP3-Modbus</b> Modbus Interface</p> <ul style="list-style-type: none"> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• Control of all main functions</li> <li>• Facilitates the addressing of up to 64 interfaces in an RS485 network to control multi-zone systems</li> <li>• Read out of all error codes possible</li> </ul>	495,-
 <p><b>TO-RC-BAC-1</b> BACnet® 1:1 interface</p> <ul style="list-style-type: none"> <li>• Compatible with all indoor units that have an A/B remote control bus</li> <li>• Control of all main functions</li> <li>• To control all the functions of an indoor unit, or a group of up to 16 indoor units</li> </ul>	650,-

# Central control options

TYPE / DESCRIPTION	PRICE €
	1.350,-
<b>TCB-SC640U-E</b> Central remote control	
<ul style="list-style-type: none"> <li>• To control up to 64 indoor units.</li> <li>• Control of all device functions</li> <li>• Weekly timer can be connected</li> <li>• Uses central addresses</li> </ul>	
	475,-
<b>TCB-EXS21TLE</b> Weekly timer	
<ul style="list-style-type: none"> <li>• Connection via local wired remote control, central remote control, or TCC Link network</li> <li>• Weekly timer or time switch mode</li> <li>• Week and public holiday functions, enable/block, group settings</li> <li>• Up to 8 groups each containing up to 64 indoor units</li> <li>• Uses central addresses</li> </ul>	
	3.035,-
<b>BMS-SM1281ETLE</b> Smart Manager with Energy Billing	
<ul style="list-style-type: none"> <li>• Controls up to 128 indoor units</li> <li>• Web interface for convenient PC control via browser</li> <li>• Additional control and energy-saving functions</li> <li>• Energy monitoring and billing (energy monitoring relay interface, locally provided pulse counter, Windows PC with Excel required)</li> <li>• Uses central addresses</li> <li>• Commissioning with "Setting File Creation" software</li> </ul>	
	5.270,-
<b>BMS-CT2560U-E</b> Smart Manager TOUCH with energy billing	
<ul style="list-style-type: none"> <li>• Controlled via 7" color touch screen</li> <li>• Controls up to 256 (128) indoor units</li> <li>• Function range same as Smart Manager</li> <li>• Direct connection of up to 8 pulse counters without energy monitoring relay interface*</li> <li>• Uses central addresses</li> <li>• Commissioning with "Setting File Creation" software</li> </ul>	
	885,-
<b>BMS-IFWH5E</b> Energy monitoring relay interface // OPTIONAL accessories - touch screen controller	
<ul style="list-style-type: none"> <li>• Required for use of the energy monitoring and billing functions</li> <li>• A maximum of 8 locally provided pulse counters can be connected to each interface</li> <li>• Power meter requirement: max. 10 pulses per kWh</li> </ul>	
	950,-
<b>BMS-IFDD03E</b> Digital In/Out relay interface // OPTIONAL accessories - touch screen controller	
<ul style="list-style-type: none"> <li>• Expansion with 8 inputs and 4 outputs</li> <li>• Not a stock item - lead time on request</li> </ul>	
	3.120,-
<b>TCB-TSC640-PY</b> Touch Screen Controller 64	
<ul style="list-style-type: none"> <li>• Controls up to 64 indoor units</li> <li>• Controlled via 7" color touch screen</li> <li>• Multilingual user interface</li> <li>• Building overview</li> <li>• Connected to U3/U4 via supplied gateway</li> <li>• TCS Net relay interface not required</li> <li>• No setting file required for commissioning</li> <li>• Additional control and energy-saving functions</li> <li>• Freely programmable time switch function</li> </ul>	

# Central control options

TYPE / DESCRIPTION	PRICE €
 <b>BMS-IWF0320E</b> Small central APP 32	2.085,-
<ul style="list-style-type: none"> <li>Controls up to 32 indoor units.</li> <li>Connection via TCC link</li> <li>Internet/intranet access required</li> <li>Free app for iOS or Android</li> </ul>	
 <b>BMS-CT5121E</b> Touch screen controller with energy billing	6.940,-
<ul style="list-style-type: none"> <li>Controls up to 512 indoor units</li> <li>Controlled via 12.1" multi-touch screen, resolution 1024x768</li> <li>Additional control and energy-saving functions</li> <li>Operation using locally provided Windows PC possible; max. 2 users at same time</li> <li>Requires a TCS Net relay interface (BMS-IFLSV4E) for each TCC Link line</li> <li>Energy monitoring and billing; requires energy monitoring relay interface (BMS-IFWH5E),</li> <li>locally provided pulse counter, Windows PC with Excel</li> <li>Not a stock item - lead time on request</li> </ul>	
 <b>BMS-IFLSV4E</b> TCS Net relay interface / REQUIRED accessories - touch screen controller	1.295,-
<ul style="list-style-type: none"> <li>Interface between RS485 and TCC Link protocol</li> <li>Connection of up to 64 indoor units/groups per interface</li> <li>Up to 12 interfaces can be connected</li> </ul>	



# BMS Systems

TYPE / DESCRIPTION	PRICE €
 <p><b>BMS-IFMB1280U-E</b> Modbus® Interface TU2C-Link</p> <ul style="list-style-type: none"> <li>Controls up to 128 indoor units</li> <li>To connect the TU2C-Link network to a locally provided Modbus® building management system</li> <li>Requires locally provided Modbus master (max. 10 interfaces/master)</li> </ul>	2.525,-
 <p><b>TO-AC-KNX-16</b> Module for controlling all the functions of up to 16 indoor units via the KNX® bus.</p> <ul style="list-style-type: none"> <li>Connection via TCC link</li> <li>KNX® bus system required</li> <li>Not a stock item - lead time on request</li> </ul> <p><b>KNX IntesisBox®</b></p>	3.345,-
 <p><b>TO-AC-KNX-64</b> Module for controlling all the functions of up to 64 indoor units via the KNX® bus.</p> <ul style="list-style-type: none"> <li>Connection via TCC link</li> <li>KNX® bus system required</li> <li>Not a stock item - lead time on request</li> </ul> <p><b>KNX IntesisBox®</b></p>	6.375,-
 <p><b>TCB-IFLN642TLE</b> LonWorks® Interface</p> <ul style="list-style-type: none"> <li>Controls up to 64 indoor units</li> <li>To connect the TCC Link network to a locally provided LonWorks® building control system</li> <li>Requires a LonWorks® network card to enable control from a PC</li> </ul>	2.065,-
 <p><b>BMS-IFBN640TLE</b> Small BACnet® Interface</p> <ul style="list-style-type: none"> <li>Controls up to 64 indoor units</li> <li>To connect the TCC Link network to a locally provided BACnet® building control system</li> <li>TCS Net relay interface not required</li> </ul>	2.140,-
 <p><b>BMS-IFBN1280U-E</b> Big BACnet® Interface TU2C-Link</p> <ul style="list-style-type: none"> <li>Controls up to 128 indoor units</li> <li>To connect the TU2C Link network to a locally provided BACnet® building control system</li> <li>TCS Net relay interface not required</li> </ul>	2.080,-
 <p><b>TCB-IFCB640TLE</b> Analog interface</p> <ul style="list-style-type: none"> <li>Controls up to 64 indoor units</li> <li>For connection to TCC link network</li> <li>Controls all main functions via 0-10V signals or fixed resistors</li> <li>Inputs: 8 analog, 2 digital</li> <li>Outputs: 5 analog, 5 digital</li> </ul>	2.735,-
 <p><b>Cool Master Net</b> Central controller with KNX® option</p> <ul style="list-style-type: none"> <li>Controls up to 64 indoor units – option up to 128</li> <li>For connection to TCC link network</li> <li>Interfaces via RS232 (ASCII), RS485 (MODBUS RTU), Ethernet (ASCII &amp; MODBUS IP)</li> <li>Small touch screen user interface</li> <li>Control via smartphone, tablet, or PC possible</li> <li>Free "Cool Remote" app for iOS or Android</li> <li>Not a stock item - lead time on request</li> </ul>	3.280,-
<p><b>CoolMaster License</b> Extended license to control up to 128 indoor units.</p>	980,-

# External control options

TYPE / DESCRIPTION	PRICE €
 <p><b>TCB-ACREDU2-E</b> Redundancy Box</p> <ul style="list-style-type: none"> <li>• Redundancy switchover unit for two indoor units (or groups) in the event of a fault</li> <li>• Operating hours-dependent switchover for two indoor units</li> <li>• Temperature-dependent activation of second system</li> <li>• Connection to CN61 of indoor units</li> <li>• Plug &amp; Play, temperature sensor included</li> <li>• LAN port, monitoring via web browser possible.</li> </ul>	1.750,-
 <p><b>TCB-PCM04E</b> Multifunction module (outdoor unit) 4 functions using 2 potential-free contact inputs; 1 function per module</p> <ul style="list-style-type: none"> <li>• Fan control during snowfall</li> <li>• External master On/Off</li> <li>• Night mode (noise reduction)</li> <li>• Operating mode priority heating/cooling</li> </ul>	120,-
 <p><b>TCB-PCDM4E</b> Current limiting/load shedding module (outdoor unit) 2 functions using 2 potential-free contact inputs</p> <ul style="list-style-type: none"> <li>• External On/Off</li> <li>• Power reduction 100%, 85%, 75%, 60%, 0% (stop)</li> </ul>	155,-
 <p><b>TCB-PCIN4E</b> Output module (outdoor unit) 4 functions using 3 potential-free contact outputs</p> <ul style="list-style-type: none"> <li>• Operating signal</li> <li>• Error notification</li> <li>• Operating time compressors 1 and 2</li> <li>• Output power in 8 stages (0 – over 95%)</li> </ul>	175,-
 <p><b>TCB-PSMT1E</b> Multi Tenant Kit</p>	350,-
 <p><b>TCB-KBCN32VEE</b> CN32 - DO: Control of an external fan</p>	5,15
 <p><b>TCB-KBCN60OPE</b> CN60 - DO: Operating signal cooling, heating, fan, defrost, thermo On</p>	10,30
 <p><b>TCB-KBCN61HAE</b> CN61 - DI/DO HA terminal: On/Off, enable/block, operating performance, alarm</p>	10,30
 <p><b>TCB-KBCN700AE</b> CN70 - DI: external alarm input</p>	5,15
 <p><b>TCB-KBCN73DEE</b> CN73 - DI: external thermo Off input</p>	5,15
 <p><b>TCB-KBCN80EXE</b> CN80 - DI: external alarm input</p>	5,15

## External control options

TYPE / DESCRIPTION	PRICE €
	410,-
<b>TCB-LD1</b> Control unit	
	900,-
<b>TCB-LDS1</b> Leak detection sensor, plastic	
	935,-
<b>TCB-LDS2</b> Leak detection sensor, steel	
	15,-
<b>TCB-LDSBB1</b> Casing, plastic for drywall	
	15,-
<b>TCB-LDSBB2</b> Casing, metal for wall	
	595,-
<b>TCB-AW17861</b> Isolation valve 12.7 mm	
	595,-
<b>TCB-AW17862</b> Isolation valve 15.9 mm	
	3.040,-
<b>TCB-LD2</b> Control unit	
	120,-
<b>TCB-PCM04E.</b> DI additional PCB	
	175,-
<b>TCB-PCIN4E.</b> DO additional PCB	
	900,-
<b>TCB-LDS1</b> Leak detection sensor, plastic	
	935,-
<b>TCB-LDS2</b> Leak detection sensor, steel	
	15,-
<b>TCB-LDSBB1</b> Casing, plastic for drywall	
	15,-
<b>TCB-LDSBB2</b> Casing, metal for wall	
	595,-
<b>TCB-AW17861</b> Isolation valve 12.7 mm	
	595,-
<b>TCB-AW17862</b> Isolation valve 15.9 mm	
	640,-
<b>TCB-AW17863</b> Isolation valve 19.0 mm	
	700,-
<b>TCB-AW17864</b> Isolation valve 22.2 mm	
	965,-
<b>TCB-AW17865</b> Isolation valve 28.6 mm	
	1.015,-
<b>TCB-AW17866</b> Isolation valve 34.9 mm	
	1.060,-
<b>TCB-AW17867</b> Isolation valve 41.3 mm	

# TOSHIBA Service Software

- Computer software for the service technician
- Display and record unit data: Unit on / off, cooling or heating mode, pulse motor valve
- Opening degree, temperature values, pressure values, compressor on / off, error codes.
- Consisting of: Adapter box, with cable to the unit, cable to the computer and CD-ROM.

TYPE	ADDITIONAL INFORMATION	PRICE €
TCB-DK01SS-E	Dyna Doctor hardware for RAS, ESTIA, RAV and VRF	2.235,-
TCB-SS1UU-E	Service link adapter SMMSu	2.545,-

Software for the Dyna Doc is available for download free of charge:  
[www.toshiba-aircondition.com](http://www.toshiba-aircondition.com)

- Partner Login      ■ Downloads
- Software           ■ Dyna Doctor



Hotel Gilbert Vienna,  
ICEBEAR Entfeuchtung & Klima GmbH

## Icons of unit characteristics



Refrigerant R32



WIFI ready  
Module not included!



Refrigerant R410A



Single Split configuration

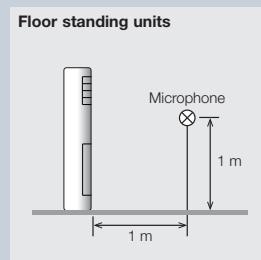
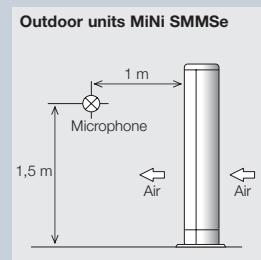
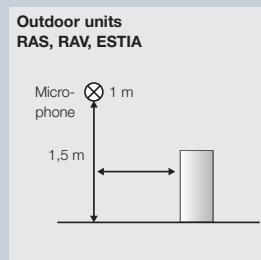
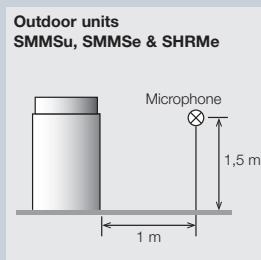
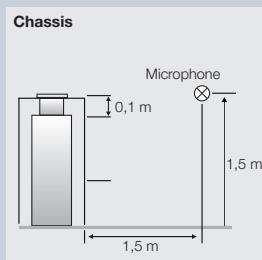
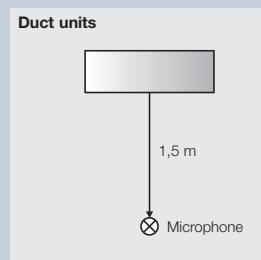
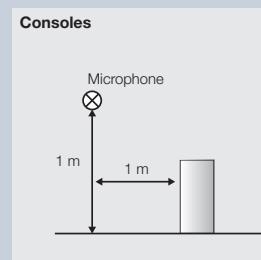
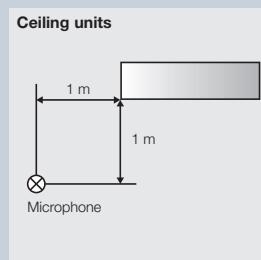
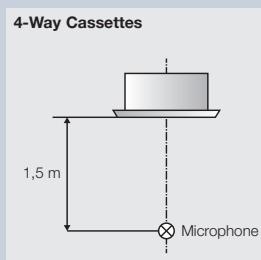
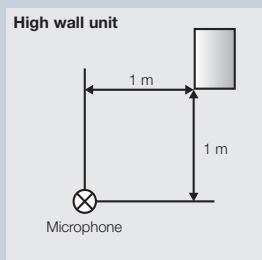


Refrigerant R32 or R410A (Bi-Ref)



Multi Split configuration

## Messuring arrangement for determining the sound pressure level



# Measurement conditions for TOSHIBA air conditioners & heat pumps

## Cooling

Outdoor temperature: +35°C dry bulb temperature  
Indoor temperature: +27°C dry bulb temperature / +19°C wet bulb temperature  
Humidity: 50 – 55 % r.h. (relative humidity)

## Heating

Outdoor temperature: +7°C dry bulb temperature / +6°C wet bulb temperature  
Indoor temperature: +20°C dry bulb temperature

## Refrigerant lines

Performance data for RAV and ESTIA at 7.5 m pipe length and 0 m height difference between indoor and outdoor unit. For VRF standard indoor units at 5,0 m main line, 2,5 m branch lines, 0 m height difference.

## Technical data, performance data and application limits

If available, the minimum, nominal and maximum values are specified, with intermediate steps if necessary. If only one value is given without special marking, it is the value at nominal conditions.

## Sound pressure level

For split systems measured according to measuring arrangement page "Messuring arrangement for determining the sound pressure level" on page 179.

Values are determined in a soundproof room according to JIS B8616; in installed condition, these values may be higher due to influence of external factors.

## Efficiencies and energy efficiencies

All efficiencies & data are documented in detail on [www.toshiba-aircondition.com](http://www.toshiba-aircondition.com) documented. Here you will also find the link to the Ecodesign website <http://ecodesign.toshiba-airconditioning.eu>. This contains all legally required information & data for Lot10, Lot21, Lot1, Lot2, Lot11 and Lot6 products.

For systems with different combination options, efficiencies are combination dependent. Efficiency values of RAS multi-outdoor units are measured at a specified combination indicated in the respective service manual.

## Fuse protection and supply line

Catalog specifications are recommended values. Dimensioning is the responsibility of the electrical installation company carrying out the work and must be carried out in accordance with regional regulations.

## Annual performance factor

The JAZ values given for ESTIA products correspond to the pre-calculation according to VDI 4650, at a standard outdoor temperature -12°C, heating limit temperature +15°C, flow temperature +30°C,  $\Delta T = 10\text{ K}$

## VRF outdoor units

Operating range, outdoor temperature with wind-protected installation and minimum system load of 50 % height difference (max.): Indoor units higher / lower

## Performance data for ESTIA products

### Split

Heating capacity and power consumption at compressor rated operating speed;  
Power consumption without water pump. Measured in accordance with EN 14511.  
0 m height difference between outdoor unit and Hydrobox / All-in-One.

### Domestic hot water Mono

COP efficiency, energy efficiency class, sound power and sound pressure measured in accordance with EN 16147.

### Hot water modules

Heating capacities at nominal conditions;  
MT Mid Temperature: water inlet temperature +30°C, water outlet temperature +35°C.  
HT High Temperature: temperature water inlet +60°C, water outlet +65°C.

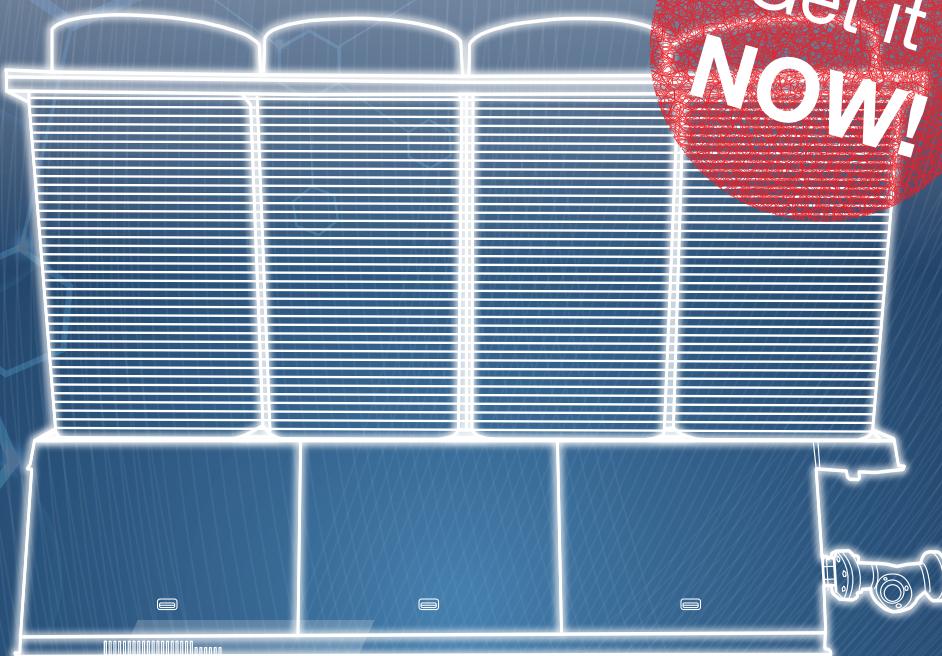
# Glossary

<b>Heat pump</b>	A <b>heat pump</b> is a system that produces useful heat from ambient temperature (about 75 %) and drive energy (about 25 %).
<b>Inverter technology</b>	<b>Inverter technology</b> is the load-adapted speed control of compressor(s) and possibly fan motor(s) of an outdoor unit.
<b>Efficiency</b>	<b>Efficiency</b> is the direct comparative value between electrical energy expended and heating/cooling capacity obtained.
<b>Seasonal efficiency</b>	See definition of "efficiency" viewed over a year.
<b>Full load</b>	<b>Full load</b> is an operating condition in which a machine can produce the maximum possible power output.
<b>Partial load</b>	<b>Partial load</b> is called the operating condition which is achieved by speed adjustment based on the required power demand of the room.
<b>Compressor</b>	A <b>compressor</b> is a component needed to compress the refrigerant.
<b>PWM, PAM</b>	The power voltage converted by the "inverter" can drive the compressor in two ways. Either <b>pulse width modulation</b> (high efficiency / PWM) is used for very efficient operation at part load or <b>pulse height modulation</b> (high power / PAM) is used for rapid attainment of the set point temperature.
<b>Sound power</b>	The <b>sound power</b> is an acoustic quantity that occurs at the actual sound source. It is expressed in dB(A).
<b>Sound pressure</b>	The <b>sound pressure</b> is the result of the sound power as a function of the distance to the sound source. It is measured in dB(A).
<b>Nominal power</b>	The device power at a given operating point.
<b>Maximum power</b>	The maximum device power at a given operating point.
<b>Electrical protection</b>	It interrupts an electrical circuit when the electrical current exceeds a specified amperage for a specified time or a short circuit or ground fault occurs at the electrical load.
<b>Refrigerant</b>	The refrigerant is a technical gas that serves as a medium within the system for transporting cooling and heating energy. Common refrigerants are currently R410A and R32, with the future moving towards R32. R32 has a lower global warming potential (GWP*), higher energy efficiency, and requires smaller charge quantities.
<b>GWP</b>	Stands for Global Warming Potential and refers to the global warming potential of the refrigerant relative to carbon dioxide (CO <sub>2</sub> ). The GWP of carbon dioxide was defined as 1 as a basis for the calculation. The GWP is 2.088 for refrigerant R410A and only 675 for R32.
<b>CO<sub>2</sub> equivalent</b>	The CO <sub>2</sub> equivalent is mandatory to be indicated on all outdoor units since 01 January 2017. It is the mathematical product of GWP and the total refrigerant charge of a system. The CO <sub>2</sub> equivalent is indicated in tons.
<b>HP (Horse Power)</b>	English power designation for HP (horsepower)



The REAL  
climate miracle

Get it  
**NOW!**



## CHILLER & HEATPUMP **UNIVERSAL SMART X**

THE NEW R32 DIMENSION OF COOLING & HEATING



[usx.toshiba-aircondition.com](http://usx.toshiba-aircondition.com)

# THE 8 SMART FEATURES

Even at first glance, the new Universal Smart X makes a competent impression. The TOSHIBA USX reaches the installation site in a compact, modular form with a concise X design. Combined side-by-side to save space, a total output of up to 25.600 kW can be achieved with up to 128 modules. Thanks to its modularity as well as its perfect part-load performance, the system can realize this enormous power in theoretically infinite gradations from 5 % of a single unit up to maximum capacity.

**The 8 Smart Features** show how the intelligent system design creates significant savings of area and energy resources as well as perfect reliability.



## WIDE OPERATION RANGE

The USX delivers heat and cold reliable all year round



## TWIN ROTARY COMPRESSOR – STEPLESS CONTROLLED 5 – 100 %

Energy-efficient control in the partial load range down to 5 % thanks to the proven toshiba twin rotary compressor



## OPERATIONAL RELIABILITY BY MODULAR DESIGN

Maximum reliability and redundancy through the 4 in 1 module concept



## ALL YEAR PROMPT DELIVERABLE FROM VIENNA WAREHOUSE

Standardized device configuration guarantees all year availability from warehouse Vienna



## 150 KW – 25,6 MW PERFORMANCE RANGE SCALED MODULAR

System performance heating and cooling up to 25.600 kW modular combined



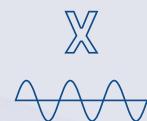
## SPACE SAVING X-FRAME CHASSIS DESIGN

The striking X-design optimizes the airflow and requires a smaller installation area than conventional systems



## WIFI CONNECTIVITY

Mobile system & energy monitoring via a simple app



## HIGH ELECTRIC POWER FACTOR

Lower investing and operating costs due to standard reduction of the electrical connection power

**TOSHIBA**

# We will advise you personally

## YOUR CERTIFIED TOSHIBA PARTNER

TOSHIBA specialist partner:



TOSHIBA is proud of its network of qualified specialist companies in the refrigeration and air conditioning industry. With a TOSHIBA air conditioning system, you not only get top product quality, you also receive professional advice, planning, installation and service. Rely on a perfect climate from a specialist!

### From small to huge

With the commercial applications for industry and trade, TOSHIBA covers the entire range. Contact your TOSHIBA specialist partner or visit our website for detailed information.



**For even more information: Visit our website!**

Further information about TOSHIBA products and sales partners can be found directly on our website: [www.toshiba-aircondition.com](http://www.toshiba-aircondition.com)