

MVA

Multisplit reversible Heat Pumps
Variable refrigerant flow system (VRF)
Cooling Capacity from 12,1kW to 246kW
Heating Capacity from 14,0kW to 276kW
For systems with 2 and 3 pipes

OUTDOOR UNITS

MVAS



MVAS1201S
 MVAS1401S
 MVAS1601S
 MVAS1201T
 MVAS1401T
 MVAS1601T
 MVAS2242T
 MVAS2802T
 MVAS3351T



MVAM



MVAM2241T
 MVAM2801T
 MVAM3351T
 MVAM4001T
 MVAM4501T
 MVAM5041T
 MVAM5601T
 MVAM6151T



MVAMHR

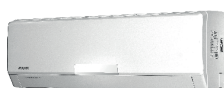


MVAMHR2240T
 MVAMHR2800T
 MVAMHR3350T
 MVAMHR4000T
 MVAMHR4500T

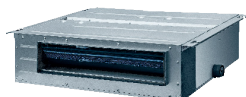


Exchange module
MEB (Required Accessory)

INDOOR UNITS



MVA_W



MVA_D - MVA_DH



MVA_CS - MVA_C - MVA_CB



MVA_WS



MVA_F



MVA_FS



(Cold Plasma Generator)



MVA_C1



MVA_V



WLRC



WRC

Wired panel (Soft Touch) and
 Remote Control as Standard
 on all Indoor Units



Golden Fin - Anti-Corrosion Protection

Outdoor units equipped with special Heat Transfer Coils with Anti-Corrosion Protection Golden Fin.

The aluminium-manganese (Al-Mn) fins of the coils are coated with a special layer of Epoxy Resin, which gives it a typical golden colour, and a further hydrophilic layer.

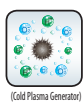


Base electric heater

To avoid possible formation of ice and facilitate disposal of condensate during heating operation.

STANDARD ON MVAS OUTDOOR UNITS

MVAS1201S - MVAS1401S - MVAS1601S
 MVAS1201T - MVAS1401T - MVAS1601T



Cold Plasma Generator - Air Ionizer

This device is able to reduce pollutants, decomposing their molecules using electrical charges, causing the water molecules in the air to split into positive and negative ions. These ions neutralise the molecules in the gaseous pollutants, obtaining products normally present in clean air. The device is able to eliminate 90% of the bacteria. The result is clean, ionized air, free of foul odours.

Available only for MVA_FS Indoor Unit



MVAS Outdoor Units also with Single Indoor Duct-Type Units

STANDARD OUTDOOR UNITS

MVAS2242T - MVAS2802T

COMPATIBLE INDOOR UNITS

MVA2240DH
 MVA2800DH

CHARACTERISTICS

OUTDOOR UNITS

MVAS (STANDARD)

- Standard outdoor unit available in 9 sizes with nominal cooling capacity from 12,1kW to 33,5kW .
- From 1 to 16 connectible Indoor Units.
- Total maximum length of the refrigerant lines up to 300 m.
- Base Electric Heater as standard for sizes: MVAS1201S-1401S-1601S e MVAS1201T-1401T-1601T

MVAM (MODULAR)

- Modular outdoor units available in 8 base modules with nominal cooling capacity from 22,4kW to 61,50kW .
- From 1 to 80 connectible Indoor Units.
- Total maximum length of the refrigerant lines up to 1000 m.
- Modular system: Base modules that can be combined (max. 4) for a total of 33 recommended combinations, with cooling capacity values from 68.0kW to 246.0kW.

MVAMHR (MODULAR c/w 3 PIPES)

- Modular outdoor units available in 5 base modules with nominal cooling capacity from 22,4kW to 45kW .
- From 1 to 80 connectible Indoor Units.
- Total maximum length of the refrigerant lines up to 1000 m.
- Modular system: Base modules that can be combined (max. 4) for a total of 24 recommended combinations, with cooling capacity values from 50,4kW to 180,0kW .
- Possibility of managing Hot or Cold modes independently and simultaneously MVAMHR 3-pipe Outdoor Units must be interfaced with two dual pipe MVA series Indoor Units using the Exchange Module (MEB) available with one, two, four or eight branches.

MEB: compulsory accessory for 3-pipe systems.

For All Modular Outdoor Units

- Management optimised over operating time of the compressors under partial loads
- Emergency operation, in the event of problems with the compressors or fans, allows operation of the system with a reduced number of compressors and/or fans for a limited time.
- Channelled Air Delivery from OPA (default) to 82Pa of Effective Static Head set via dip switches.

For cooling line connections, refer to the accessories section -Refnet Joints

INDOOR UNITS

- WALL

MVA_W: Wall for wall mounting (220-240V ~ 50Hz)
MVA_WS: Wall for wall mounting (208-230V ~ 60Hz)

- 4-way CASSETTE

Cassette for suspended ceiling installation, subdivided into the following configurations:

MVA_CS: Cassette 600 x 600 (Mandatory accessory GL40S).
MVA_C: Cassette 840 x 840 (Mandatory accessory GL40).
MVA_CB: Cassette 910 x 910 (Mandatory accessory GL40B).

- 1-way CASSETTE

MVA_C1: Cassette (Mandatory accessory - GLC1)

- FLOOR CEILING

MVA_F: Floor Ceiling for floor or ceiling installation.
MVA_FS: Console for floor mounting.
Air Ionizer (Cold Plasma Generator).

- DUCT

MVA_D: Low Hydraulic Head Duct for horizontal ceiling mounting.
MVA_DH: High Hydraulic Head Duct for ducted horizontal ceiling mounting.

- COLUMN

- MVA_V: Column for installations in large areas.

GENERAL FEATURES:

- Refrigerant gas R410A.
- Total Capacity connected to the Outdoor Units between 50% and 135% of the rated capacity of the selected configuration.
- Indoor Units fitted with electronic expansion valve on board.
- WRC (Soft Touch) Wired panel for wall mounting, standard on all Indoor Units. It can manage a single Indoor Unit or can be used to manage a set of Indoor Units (up to a maximum of 16) with the same settings.
- WLRC infrared remote control, standard on all Indoor Units.
- DC Inverter compressors were selected to maximise efficiencies, reduce consumption, minimise pickup power input, to have efficient control of the oil return and accurate control of the room temperature and humidity.
- Outdoor units fitted with fans with continuous variable speed inverter motor.
- Microprocessor control.
- In the MVA system the chiller connections were made using braze welded Y-joints and F-joints (provided as a mandatory accessory), ensuring flexibility in the installation and full compliance with safety standards, as well as a lower environmental impact due to the absence of leaks.
- Extremely quiet operation.
- Auto-Restart function active by default, can be deactivated.
- Standard condensate control device; allows cooling operation with low outside temperatures.
- Serial communication in CANBUS protocol.
- Easy installation thanks to non-polarised serial connections and the self-addressing function of the indoor units.

CONTROL SYSTEMS



Control Systems Compatible with all Systems

REFNET JOINTS

Outdoor units

MVAM - 2-pipe system

RNYM01

MVAHR - 3-pipe system

RNYMHR
RNYHR

Indoor units

RNY (Y-Type)

RNY11

RNY12

RNY21

RNY31

RNY41

RNF (F-Type)

RNF14

RNF18

RNF18B



RNY



RNF

Advantages of the modular system

The compact dimensions of the MVA series ensure easy transport to the destination site. The units can be transferred easily to the roofs of buildings without requiring cranes but using lifts.

The modules are easy to install and link together from the cooling point of view, thanks to the connections with dedicated Refnet joints.

Modularity is essential as it also allows high-capacity systems to be created in a quick, simple way.

Hot / Cold modes are independent and simultaneous (only for MVAMHR units)

In 3-Pipe Units, Hot or Cold modes can be managed **Independently and Simultaneously**.

MVAMHR 3-pipe Outdoor Units must be interfaced with two dual pipe MVA series Indoor Units using the **Exchange Module (MEB)** available with one, two, four or eight branches.

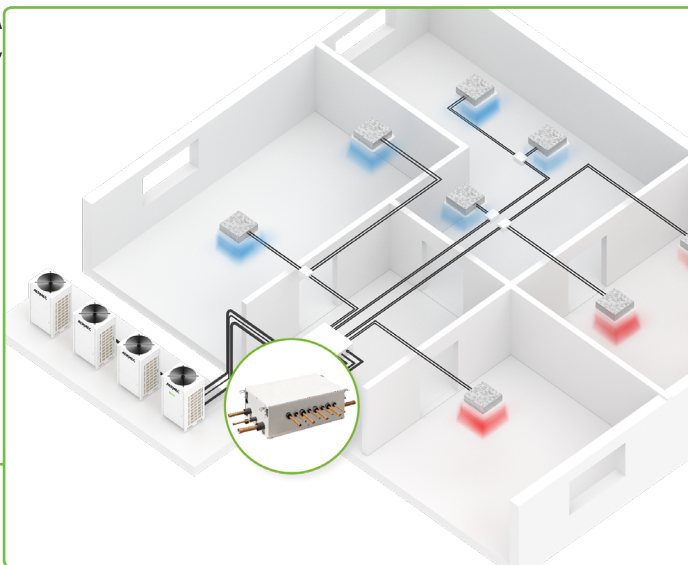


MEB: compulsory accessory for 3-pipe systems.

The MVAM HR VRF heat recovery system heats and cools at the same time with one single circuit. MVAM HR recovers the heat produced during cooling and uses it to heat certain rooms cost-free, maximising energy efficiency and reducing energy costs.

Ideal for tertiary and commercial sector buildings, it connects up to 4 outdoor units (maximum cooling capacity 180 kW) and 1-80 indoor units of different versions.

For hotel owners, this means perfect comfort for guests, who can freely choose between cooling or heating. For offices, it means the ideal conditions in the work context, regardless of exposure to the sun or the type of use.



ACCESSORIES

MVASZC

Simplified Centralised Control (4,3" touch screen display), which can be used to manage up to 32 Indoor Units distributed across a maximum of 16 Systems.

AHUKIT

Available in 5 sizes, the kit is intended to be combined with a cooling and/or heating direct expansion coil at R410A on an air conditioning unit, not supplied as an MVA component but functionally connected to an MVA system, having appropriate dimensions.

AHUKIT and the air conditioning unit connected to it are intended to condition recirculated and/or returning fresh air within operating limits, with adjustment of the temperature of the intake ambient air.

CC2

Centralised Control (7" touch screen display), which can be used to manage up to 255 Indoor Units distributed across a maximum of 16 Systems.

WRC

Wired Soft-Touch panel this Accessory is supplied as standard with all Indoor Units; it is also possible to purchase an additional WRC Wired Panel to control a single Indoor Unit or set of Indoor Units (up to a maximum of 16), with the same settings from two separate locations.

WRC1

Simplified control wired panel for Indoor Units equipped with an Integrated External Contact. This panel is particularly suitable for hotel applications. It can control a single Indoor Unit or a set of Indoor Units (up to a maximum of 16) with the same settings from two separate locations.

USBDC

This kit includes a CANBUS to ModBUS converter and the VRF Debugger software. It was related to meet the needs of after sales service or authorised technicians who must carry out control and debugging procedures on the MVA range.

MODBUSGW

This accessory allows you to manage up to 16 MVA systems (with a maximum total of 128 indoor units), making a serial Modbus available for supervision with an external BMS.

BACNETGW

This accessory allows you to manage up to 16 MVA systems (with a maximum total of 255 indoor units), making a Serial BACnet available for supervision with an external BMS.

Air delivery and recovery grille for indoor Cassette-type units.

Mandatory accessory

Grille Model	Cassette Indoor Unit			4-WAY	1-WAY	Dimensions	Weight
	MVA_CS	MVA_C	MVA_CB			LxHxW (mm)	kg
GL40S	●	-	-	●	-	670 x 670 x 50	3,5
GL40	-	●	-	●	-	950 x 950 x 60	7
GL40B	-	-	●	●	-	1040 x 1040 x 65	8
GLC1	-	-	-	-	●	1200 x 460 x 55	4,2

ACCESSORIES

REFNET JOINTS - Connection between Modular Outdoor Units

Y-joints for cooling connection between 2 Outdoor Units in Modular Systems. **Mandatory Accessory for Modular Systems.**

A modular system made up of n base modules requires n-1 Y-joints.

MVAM - 2-pipe system

RNYM01

Accessory comprising 2 Y-joints, one for the liquid line and one for the discharge line.

MVAHR - 3-pipe system

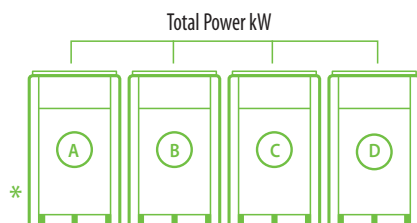
RNYMHR

Accessory comprising 3 Y-joints - one for the liquid line and two for the gas lines (one high pressure and the other low pressure).

CODE	TYPE	Outdoor Unit Combinations Sum of powers kW	
		≥	≤
RNYMHR10	Y	50,4	96
RNYMHR20	Y	96	-

Number of REFNET Kits needed per system

* Total Modules (A+B+C+D) no.	Sum of Powers (kW)	REFNET	no. of kits needed
1	50,4 <	-	-
2	≥ 50,4 - 96 ≤	RNYMHR10	1
3	≥ 50,4 - 96 ≤	RNYMHR10	2
3	>96	RNYMHR20	2
4	>96	RNYMHR20	3

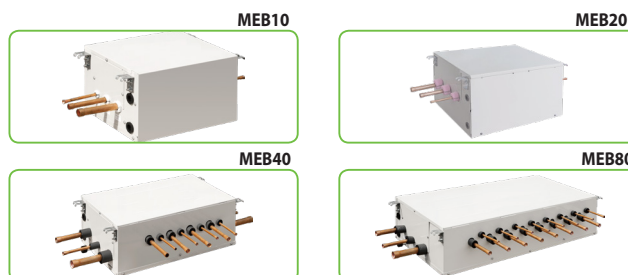


MEB

Exchange module with one, two, four or eight branches (each single branch can manage heating or cooling mode independently of the others, but simultaneously) for interfacing the MVAMHR 3-pipe outdoor units with the MVA 2-pipe indoor units:

Code	Branches no.	Maximum cooling capacity that can be managed (per single branch) (kW)	Total Power Managed by MEB (kW)	Connect- ible indoor units n° MAX
MEB10	1	14,2	-	6
MEB20	2	14,2	-	6
MEB40	4	14,2	45 ≤	6
MEB80	8	14,2	68 ≤	6

In order to connect indoor units with a capacity higher than 14kW, you must use two branches joined into one by means of a suitable RNY kit, and ensure the right setting of the dip-switches on the distribution box



CONNECTION BETWEEN MODULAR OUTDOOR UNITS AND MEB (EXCHANGE MODULE)

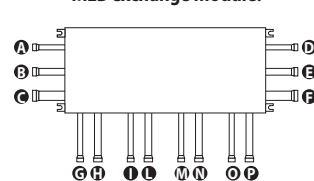
RNYHR

Accessory for connecting outdoor units with the MEB exchange module.

Comprises three Y-joints - one for the liquid line and two for the gas lines (one high pressure and the other low pressure).

CODE	TYPE	Outdoor Unit Combinations Sum of powers kW	
		≥	≤
RNYHR10	Y	-	5
RNYHR20	Y	5	22.4
RNYHR30	Y	22.4	28
RNYHR40	Y	28	68
RNYHR50	Y	68	96
RNYHR60	Y	96	135
RNYHR70	Y	135	-

MEB exchange module:



Cooling connection	Description
A	Liquid (left side)
B	Gas (high pressure) (left side)
C	Gas (low pressure) (left side)
D	Liquid (right side)
E	Gas (high pressure) (right side)
F	Gas (low pressure) (right side)
G	Liquid (branch 1)
H	Gas (branch 1)
I	Liquid (branch 2)
L	Gas (branch 2)
M	Liquid (branch 3)
N	Gas (branch 3)
O	Liquid (branch 4)
P	Gas (branch 4)

JOINTS for connection between Indoor Units

RNY

Accessory made up of two Y-joints, one for the liquid line and one for the discharge line.

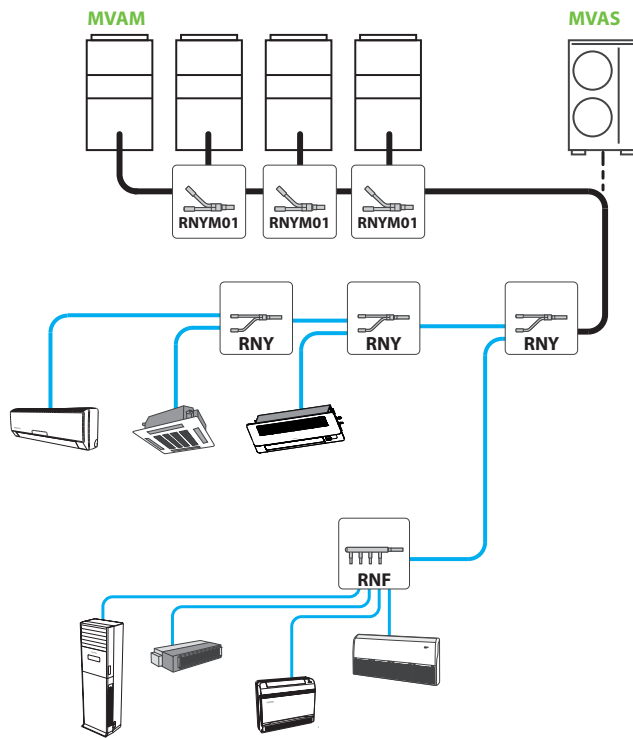
RNF

Accessory made up of two F-joints, one for the liquid line and one for the discharge line.

CODE	SYSTEM TYPE		TYPE	Total power (down-line)		Maximum 1-Way Connectable Power	no. of Connectable Indoor Units
	2 PIPES	3 PIPES		>	≤		
RNY11	●	●	Y	-	20kW	-	-
RNY12	●	●		20kW	30kW	-	-
RNY21	●			30kW	70kW	-	-
RNY31	●			70kW	135kW	-	-
RNY41	●			135kW	-	-	-
RNF14	●		F	-	40kW	16kW	from 2 to 4
RNF18	●			-	68kW	16kW	from 4 to 8
RNF18B	●			68kW	-	16kW	from 4 to 8

EXAMPLE OF COOLING CONNECTION

2



MVAS - MVAM

2-pipe system
Cold or Hot operation

■ Cooling mode

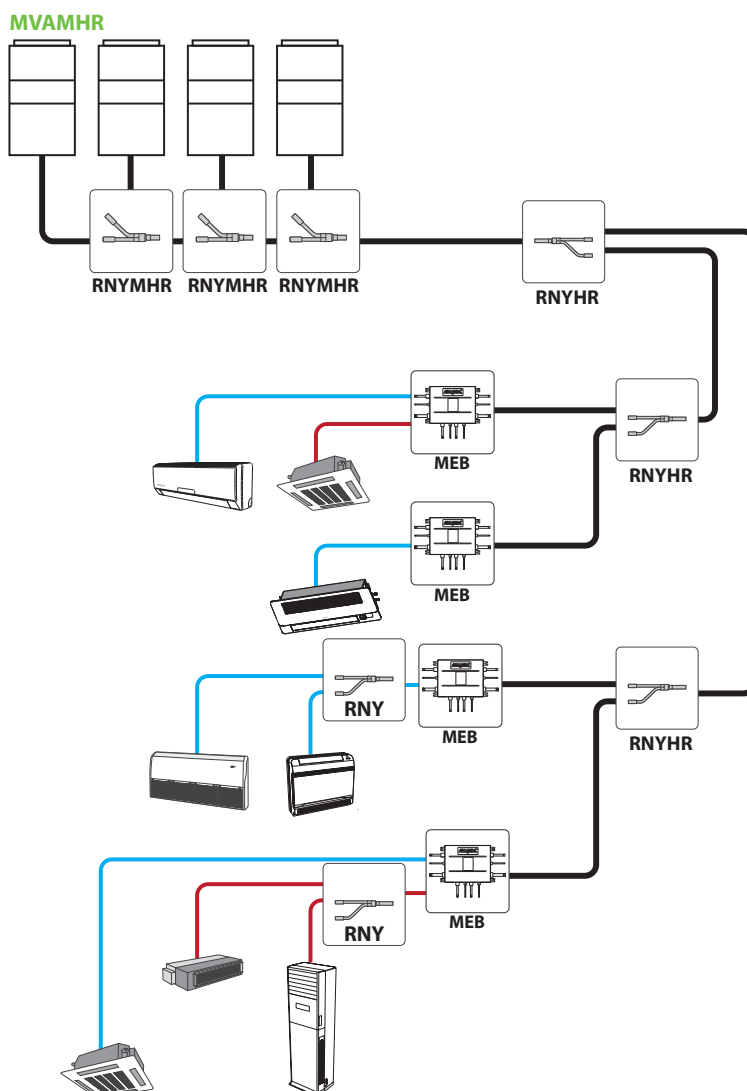
Maximum Total length of Cooling Lines
MVAS: 300m
MVAM: 1000m

When dimensioning the cooling lines, exclusively refer to the technical manual.

A modular system made up of n Base Modules requires n-1 Y-joints.

Code	Type	Number of joints included in a Single Kit
RNYM01	Y	2 (Liquid / Gas)
RNY	Y	2 (Liquid / Gas)
RNF	F	2 (Liquid / Gas)

3



MVAMHR

3-pipe system
Cold or Hot operation
Simultaneous Cold and Hot operation

■ Cooling mode
■ Heating mode

Maximum Total length of Cooling Lines
MVAMHR: 1000m

When dimensioning the cooling lines, exclusively refer to the technical manual.

A modular system made up of n Base Modules requires n-1 Y-joints.

Code	Type	Number of joints included in a Single Kit
RNYMHR	Y	3 (Liquid / High Pressure Gas / Low Pressure Gas)
RNYHR	Y	3 (Liquid / High Pressure Gas / Low Pressure Gas)
RNY	Y	2 (Liquid / Gas)
RNF	F	2 (Liquid / Gas)

MVAS - Connectable Units

MVAS	Power Cooling Nominal (kW)	N° Min Unit Indoor	N° Max Unit Indoor
1201S	12,1	2	7
1401S	14	2	8
1601S	16	2	9
1201T	12,1	2	7
1401T	14	2	8
1601T	16	2	9
2242T	22,4	1	13
2802T	28	1	17
3351T	33,5	2	20

MVAS Outdoor Units with Single Indoor Duct-Type Units

MVAS	Nominal Cooling Capacity (kW)	Number of Indoor Units	Compatible Indoor Unit
2242T	22,4	1	MVA2240DH
2802T	28,0	1	MVA2800DH

MVAM - Recommended configurations

Rated Cooling Capacity	MVAM Combination				Connectable indoor units	
	Module				Number	
(kW)	(A)	(B)	(C)	(D)	MINIMUM ⁽¹⁾	MAXIMUM ⁽²⁾
Base Module	22,40	2241T	---	---	1	13
	28,00	2801T	---	---	1	16
	33,50	3351T	---	---	1	19
	40,00	4001T	---	---	1	23
	45,00	4501T	---	---	1	26
	50,40	5041T	---	---	1	29
Combinations	56,00	5601T	---	---	1	33
	61,50	6151T	---	---	2	36
	68,00	2801T	4001T	---	2	39
	73,00	2801T	4501T	---	2	43
	78,40	2801T	5041T	---	2	46
	84,00	2801T	5601T	---	2	50
	89,50	2801T	6151T	---	2	53
	95,00	3351T	6151T	---	2	56
	101,50	4001T	6151T	---	2	59
	106,50	4501T	6151T	---	2	63
	111,90	5041T	6151T	---	3	64
	117,50	5601T	6151T	---	3	64
	123,00	6151T	6151T	---	3	64
	129,00	2801T	4501T	5601T	3	64

MVAM - Permitted Configurations

Rated Cooling Capacity	MVAM Combination				Connectable indoor units	
	Module				Number	
(kW)	(A)	(B)	(C)	(D)	MINIMUM ⁽¹⁾	MAXIMUM ⁽²⁾
50,40	2241T	2801T	---	---	1	29
56,00	2801T	2801T	---	---	1	33
61,50	2801T	3351T	---	---	2	36
78,50	3351T	4501T	---	---	2	46
85,00	4001T	4501T	---	---	2	50
90,00	4501T	4501T	---	---	2	53
96,00	2801T	2801T	4001T	---	2	56
101,00	2801T	2801T	4501T	---	2	59
106,50	2801T	3351T	4501T	---	3	63
113,00	2801T	4001T	4501T	---	3	64
118,00	2801T	4501T	4501T	---	3	64

Rated Cooling Capacity	MVAM Combination				Connectable indoor units	
	Module				Number	
	(kW)	(A)	(B)	(C)	(D)	MINIMUM ⁽¹⁾ MAXIMUM ⁽²⁾
Combinations	134.50	2801T	4501T	6151T	---	3 64
	140.00	3351T	4501T	6151T	---	3 66
	145.50	2801T	5601T	6151T	---	3 69
	151.00	2801T	6151T	6151T	---	3 71
	156.50	3351T	6151T	6151T	---	3 74
	163.00	4001T	6151T	6151T	---	3 77
	168.00	4501T	6151T	6151T	---	4 80
	173.40	5041T	6151T	6151T	---	4 80
	179.00	5601T	6151T	6151T	---	4 80
	184.50	6151T	6151T	6151T	---	4 80
	190.50	2801T	4501T	5601T	6151T	4 80
	195.90	2801T	5041T	5601T	6151T	4 80
	201.50	2801T	5601T	5601T	6151T	4 80
	207.00	2801T	5601T	6151T	6151T	4 80
	212.50	2801T	6151T	6151T	6151T	4 80
	218.00	3351T	6151T	6151T	6151T	4 80
	224.50	4001T	6151T	6151T	6151T	5 80
	229.50	4501T	6151T	6151T	6151T	5 80
	234.90	5041T	6151T	6151T	6151T	5 80
	240.50	5601T	6151T	6151T	6151T	5 80
	246.00	6151T	6151T	6151T	6151T	5 80

Rated Cooling Capacity	MVAM Combination				Connectable indoor units	
	Module				Number	
(kW)	(A)	(B)	(C)	(D)	MINIMUM ⁽¹⁾	MAXIMUM ⁽²⁾
123,50	3351T	4501T	4501T	---	3	64
130,00	4001T	4501T	4501T	---	3	64
135,00	4501T	4501T	4501T	---	3	64
141,00	2801T	2801T	4001T	4501T	3	66
146,00	2801T	2801T	4501T	4501T	3	69
151,50	2801T	3351T	4501T	4501T	3	71
158,00	2801T	4001T	4501T	4501T	3	74
163,00	2801T	4501T	4501T	4501T	3	77
168,50	3351T	4501T	4501T	4501T	4	80
175,00	4001T	4501T	4501T	4501T	4	80
180,00	4501T	4501T	4501T	4501T	4	80

MVAMHR - Configurations

Rated Cooling Capacity	MVAM Combination				Connectable indoor units	
	Module				Number	
(kW)	(A)	(B)	(C)	(D)	MINIMUM ⁽¹⁾	MAXIMUM ⁽²⁾
Base Module	22,40	2240T	---	---	1	13
	28,00	2800T	---	---	1	16
	33,50	3350T	---	---	1	19
	40,00	4000T	---	---	1	23
	45,00	4500T	---	---	1	26
	50,40	2240T	2800T	---	1	29
Combinations	56,00	2800T	2800T	---	1	33
	61,50	2800T	3350T	---	2	36
	68,00	2800T	4000T	---	2	39
	73,00	2800T	4500T	---	2	43
	78,50	3350T	4500T	---	2	46
	85,00	4000T	4500T	---	2	50
	90,00	4500T	4500T	---	2	53
	96,00	2800T	2800T	4000T	2	56
	101,00	2800T	2800T	4500T	2	59

	Rated Cooling Capacity	MVAM Combination				Connectable indoor units	
		Module				Number	
	(kW)	(A)	(B)	(C)	(D)	MINIMUM ⁽¹⁾	MAXIMUM ⁽²⁾
Combinations	106,50	2800T	3350T	4500T	---	3	63
	113,00	2800T	4000T	4500T	---	3	64
	118,00	2800T	4500T	4500T	---	3	64
	123,50	3350T	4500T	4500T	---	3	64
	130,00	4000T	4500T	4500T	---	3	64
	135,00	4500T	4500T	4500T	---	3	64
	141,00	2800T	2800T	4000T	4500T	3	66
	146,00	2800T	2800T	4500T	4500T	3	69
	151,50	2800T	3350T	4500T	4500T	3	71
	158,00	2800T	4000T	4500T	4500T	3	74
	163,00	2800T	4500T	4500T	4500T	3	77
	168,50	3350T	4500T	4500T	4500T	4	80
	175,00	4000T	4500T	4500T	4500T	4	80
	180,00	4500T	4500T	4500T	4500T	4	80

Modular system achieved by combining 2 to 4 base modules.
Connections between base modules must be made on installation.

(1) the sum of powers for indoor units may never be less than 50% of the rated cooling capacity of the outdoor unit (or the sum of units) selected;

(2) the sum of powers for indoor units may never be more than 135% of the rated cooling capacity of the outdoor unit (or the sum of units) selected;

Outdoor Units Technical Data

2-PIPE SYSTEM

Outdoor units	MVAS	1201S	1401S	1601S	1201T	1401T	1601T	2242T	2802T	3351T
Cooling Capacity (Nominal)	kW	12,10	14,00	16,00	12,10	14,00	16,00	22,4	28,0	33,5
Input power (Nominal)	kW	3,03	3,59	4,75	3,03	3,59	4,75	6,12	7,78	9,57
Input Current (Nominal)	A	-	-	-	-	-	-	10,90	13,90	17,10
EER	W/W	3,99	3,90	3,37	3,99	3,90	3,37	3,66	3,60	3,50
Heating Capacity (Nominal)	kW	14,00	16,50	18,00	14,00	16,50	18,00	24,0	30,0	35,0
Input power (Nominal)	kW	3,27	3,95	4,65	3,27	3,95	4,65	4,90	6,12	7,14
Input Current (Nominal)	A	-	-	-	-	-	-	8,80	10,90	12,80
COP	W/W	4,28	4,18	3,87	4,28	4,18	3,87	4,90	4,90	4,90
Rated Input Power (1)	kW	-	-	-	-	-	-	9,6	12,5	13,7
Rated Input Current (1)		30,4	33,7	36,3	11,1	12,0	12,5	17,2	22,4	24,5
Refrigerant Gas	Type / GWP	R410A / 2088kgCO2eq								
Refrigerant Charge	kg	3,3	3,3	3,3	3,30	3,30	3,30	5,5	7,1	8,0
Compressors	DC Inverter	1	1	1	1	1	1	1	1	1
Nominal Air Flow Rate	m³/h	6000	6300	6600	6000	6300	6600	8000	11000	11000
Maximum Total Length of Lines	m	300	300	300	300	300	300	300	300	300
Fans	no.	2	2	2	2	2	2	2	2	2
Sound pressure (2)	dB(A)	57	58	58	57	58	58	63	65	65
Chiller Connections	Ø liquid	mm (inch)	9,52(3/8")	9,52(3/8")	9,52(3/8")	9,52(3/8")	9,52(3/8")	19,05 (3/4")	22,2 (7/8")	25,4 (1")
	Ø gas	mm (inch)	15,9(5/8")	15,9(5/8")	19,05(3/4")	15,9(5/8")	15,9(5/8")	19,05(3/4")	9,52 (3/8")	12,7 (1/2")
	Type		Flared	Flared	Flared	Flared	Flared	To be soldered	To be soldered	To be soldered
Power Supply		208-230V ~ 60Hz					380-415V 3N ~ 60Hz			

Outdoor units	MVAM	2241T	2801T	3351T	4001T	4501T	5041T	5601T	6151T
Cooling Capacity (Nominal)	kW	22,40	28,00	33,50	40,00	45,00	50,40	56,00	61,50
Input power (Nominal)	kW	4,74	6,25	8,40	10,53	12,82	15,75	20,00	29,29
Input Current (Nominal)	A	8,47	11,17	15,02	18,82	22,92	28,15	35,75	52,35
EER	W/W	4,73	4,48	3,99	3,80	3,51	3,20	2,80	2,10
Heating Capacity (Nominal)	kW	25,00	31,50	37,50	45,00	50,00	56,50	63,00	69,00
Input power (Nominal)	kW	4,81	5,67	7,14	9,51	10,86	14,10	16,60	18,90
Input Current (Nominal)	A	8,60	10,14	12,76	17,00	19,41	25,20	29,67	33,78
COP	W/W	5,20	5,56	5,25	4,73	4,60	4,01	3,80	3,65
Rated Input Power (1)	kW	9	11,7	13,8	16,10	18,60	25,00	28,00	30,00
Rated Input Current (1)	A	16,1	20,9	24,6	28,8	33,2	44,7	50,0	53,6
Refrigerant Charge	Type / GWP	R410A / 2088kgCO2eq							
Filling coolant gas	kg	5,90	9,00	8,20	9,80	10,30	11,30	14,30	14,30
Compressors	DC Inverter	1	1	1	2	2	2	2	2
Nominal Air Flow Rate	m³/h	11400	11400	14000	14000	16000	16000	16000	16000
Maximum Total Length of Lines	m	1000	1000	1000	1000	1000	1000	1000	1000
Fans	n.	1	1	1	2	2	2	2	2
Sound pressure (2)	dB (A)	60	61	63	63	63	63	63	64
Chiller Connections	Ø liquid	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")
	Ø gas	mm (inch)	19,05 (3/4")	22,2 (7/8")	25,4 (1")	25,4 (1")	28,6 (1" 1/8)	28,6 (1" 1/8)	28,6 (1" 1/8)
	Ø oil balancing	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	Type		To be soldered	To be soldered	To be soldered	To be soldered	To be soldered	To be soldered	To be soldered
Power Supply		380-415V 3N ~ 60Hz							

3-PIPE SYSTEM

Outdoor units	MVAMHR	2240T	2800T	3350T	4000T	4500T
Cooling Capacity (Nominal)	kW	22,4	28,0	33,5	40,0	45,0
Total Power Input (Nominal)	kW	5,20	6,9	8,2	10,6	12,1
Input Current (Nominal)	A	9,3	12,3	14,7	18,9	21,6
EER	W/W	4,31	4,06	4,09	3,77	3,72
Heating Capacity (Nominal)	kW	25	31,5	37,5	45,0	50,0
Input power (Nominal)	kW	5,30	7,30	8,70	10,8	12,5
Input Current (Nominal)	A	9,5	13	15,6	19,3	22,3
COP	W/W	4,72	4,32	4,31	4,17	4,00
Rated Input Power (1)	kW	9,10	11,70	13,80	16,1	18,6
Rated Input Current (1)	A	16,3	20,9	24,7	28,8	33,2
Refrigerant Charge	Type / GWP	R410A / 2088kgCO2eq				
Filling coolant gas	kg	6,2	7,1	9,6	11,1	11,6
Compressors	DC Inverter	1	1	1	2	2
Nominal Air Flow Rate	m³/h	11400	11400	14000	14000	14000
Maximum Total Length of Lines	m	1000	1000	1000	1000	1000
Fans	n.	1	1	1	2	2
Sound pressure (2)	dB (A)	60	61	63	63	63
Chiller Connections	Ø Liquid	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")
	Ø Gas (high pressure)	mm (inch)	15,9(5/8")	19,05(3/4")	19,05(3/4")	22,2(7/8")
	Ø Gas (low pressure)	mm (inch)	19,05(3/4")	22,2(7/8")	25,4(1")	28,6(1"1/8)
	Type		To be soldered	To be soldered	To be soldered	To be soldered
Power Supply		380-415V 3N ~ 60Hz				

- Cooling (EN-14511)
Room air temperature 27°C D.B. / 19°C W.B. outside air temperature 35°C
- Heating (EN-14511)
Room air temperature 20°C D.B.; Outside air temperature 7°C d.b. / 6°C w.b.

(1) The Rated Input Power (Rated Input Current) is the Maximum Electrical Power (Maximum Electrical Current) absorbed by the system, according to EN-60335-1 and EN-60335-2-40

(2) Sound Pressure measured in a Semi Anechoic Chamber at 1m from the unit.

Indoor Units - Technical Data

WALL

Indoor units		MVA	220WS	280WS	360WS	450WS	500WS	560WS	630WS	710WS
Cooling Capacity		kW	2,20	2,80	3,60	4,50	5,00	5,60	6,30	7,10
Heating Capacity		kW	2,50	3,20	4,00	5,00	5,80	6,30	7,00	7,50
Nominal Input Power (1)		W	50	50	60	60	60	70	70	70
Nominal Air Flow Rate		m³/h	500	500	630	630	630	750	750	750
Sound Pressure (min.)		dB(A)	30	30	38	38	38	38	38	38
Sound Pressure (max.)		dB(A)	38	38	44	44	44	44	44	44
Chiller Connections	Ø liquid	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	Ø gas	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Power Supply			208-230V ~ 60Hz							

LOW-HEAD DUCT

Indoor units		MVA	220D	250D	280D	320D	360D	400D
Cooling Capacity		kW	2,20	2,50	2,80	3,20	3,60	4,00
Heating Capacity		kW	2,50	2,80	3,20	3,60	4,00	4,50
Nominal Input Power (1)		W	35	35	35	43	43	52
Nominal Air Flow Rate		m³/h	450	450	450	550	550	700
Nominal Effective Static Head (2)		Pa	30	30	30	30	30	30
Sound Pressure (min.)		dB(A)	25	25	25	27	27	28
Sound Pressure (max.)		dB(A)	31	31	31	32	32	33
Chiller Connections	Ø liquid	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
	Ø gas	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")
Power Supply			208-230V ~ 60Hz					

Indoor units		MVA	450D	500D	560D	630D	710D	800D
Cooling Capacity		kW	4,50	5,00	5,60	6,30	7,10	8,00
Heating Capacity		kW	5,00	5,60	6,30	7,10	8,00	9,00
Nominal Input Power (1)		W	52	52	99	99	105	140
Nominal Air Flow Rate		m³/h	700	700	1000	1000	1100	1100
Nominal Effective Static Head (2)		Pa	30	30	30	30	50	50
Sound Pressure (min.)		dB(A)	28	28	30	30	30	31
Sound Pressure (max.)		dB(A)	33	33	35	35	35	36
Chiller Connections	Ø liquid	mm (inch)	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	Ø gas	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")
Power Supply			208-230V ~ 60Hz					

Indoor units		MVA	900D	1000D	1120D	1250D	1400D
Cooling Capacity		kW	9,00	10,00	11,20	12,50	14,00
Heating Capacity		kW	10,00	11,20	12,50	14,00	16,00
Nominal Input Power (1)		W	209	209	209	230	230
Nominal Air Flow Rate		m³/h	1500	1500	1700	2000	2000
Nominal Effective Static Head (2)		Pa	50	50	50	50	50
Sound Pressure (min.)		dB(A)	32	32	32	37	37
Sound Pressure (max.)		dB(A)	40	40	40	42	42
Chiller Connections	Ø liquid	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	Ø gas	mm (inch)	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Power Supply			208-230V ~ 60Hz				

HIGH-HEAD DUCT

Indoor units		MVA	560DH	630DH	710DH	800DH	900DH	1000DH
Cooling Capacity		kW	5,60	6,30	7,10	8,00	9,00	10,00
Heating Capacity		kW	6,30	7,10	8,00	9,00	10,00	11,20
Nominal Input Power (1)		W	120	120	130	130	200	200
Nominal Air Flow Rate		m³/h	1000	1000	1000	1000	1700	1700
Nominal Effective Static Head (2)		Pa	100	100	100	100	100	100
Sound Pressure (min.)		dB(A)	36	36	37	37	42	42
Sound Pressure (max.)		dB(A)	44	44	45	45	46	46
Chiller Connections	Ø liquid	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	Ø gas	mm (inch)	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Power Supply			208-230V ~ 60Hz					

Indoor units		MVA	1120DH	1250DH	1400DH	1600DH	2240DH	2800DH
Cooling Capacity		kW	11,20	12,50	14,00	16,00	22,40	28,00
Heating Capacity		kW	12,50	14,00	16,00	17,00	25,00	31,00
Nominal Input Power (1)		W	200	220	220	350	800	900
Nominal Air Flow Rate		m³/h	1700	2000	2000	2050	4000	4400
Nominal Effective Static Head (2)		Pa	100	100	100	150	150	150
Sound Pressure (min.)		dB(A)	42	42	44	46	49	50
Sound Pressure (max.)		dB(A)	46	48	48	48	54	55
Chiller Connections	Ø liquid	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	Ø gas	mm (inch)	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	19,05(3/4")	19,05(3/4")	22,2 (7/8")
Power Supply			208-230V ~ 60Hz					

SMALL 4-WAY CASSETTE

Indoor units		MVA	220CS	280CS	360CS	450CS	500CS	560CS
Cooling Capacity		kW	2,20	2,80	3,60	4,50	5,00	5,60
Heating Capacity		kW	2,50	3,20	4,00	5,00	5,60	6,30
Nominal Input Power (1)		W	35	35	35	45	45	45
Nominal Air Flow Rate		m³/h	600	600	600	700	700	700
Sound Pressure (min.)		dB(A)	35	35	35	38	38	38
Sound Pressure (max.)		dB(A)	41	41	41	45	45	45
Chiller Connections	Ø liquid	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")
	Ø gas	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")
Power Supply			208-230V ~ 60Hz					

Indoor UNITS - Technical Data

4-WAY CASSETTE									
Indoor units		MVA	280C	360C	450C	500C	560C	630C	710C
Cooling Capacity		kW	2,80	3,60	4,50	5,00	5,60	6,30	7,10
Heating Capacity		kW	3,20	4,00	5,00	5,60	6,30	7,10	8,00
Nominal Input Power (1)		W	48	48	48	50	59	59	68
Nominal Air Flow Rate		m³/h	750	750	750	830	1000	1000	1180
Sound Pressure (min.)		dB(A)	31	31	31	31	32	32	33
Sound Pressure (max.)		dB(A)	36	36	36	36	37	37	38
Chiller Connections	Ø liquid	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	Ø gas	mm (inch)	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Power Supply			208-230V ~ 60Hz						
Indoor units		MVA	800C	900C	1000C	1120C	1250C	1400C	1600CB
Cooling Capacity		kW	8,00	9,00	10,00	11,20	12,50	14,00	16,00
Heating Capacity		kW	9,00	10,00	11,20	12,50	14,00	16,00	17,50
Nominal Input Power (1)		W	68	98	98	110	110	110	130
Nominal Air Flow Rate		m³/h	1180	1500	1500	1700	1860	1860	2100
Sound Pressure (min.)		dB(A)	33	35	35	36	38	38	42
Sound Pressure (max.)		dB(A)	38	40	40	41	43	43	47
Chiller Connections	Ø liquid	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	Ø gas	mm (inch)	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Power Supply			208-230V ~ 60Hz						

1-WAY CASSETTE							
Indoor units		MVA	220C1	280C1	360C1	450C1	500C1
Cooling Capacity		kW	2,20	2,80	3,60	4,50	5,00
Heating Capacity		kW	2,50	3,20	4,00	5,00	5,60
Nominal Input Power (1)		W	30	30	30	30	30
Nominal Air Flow Rate		m³/h	600	600	600	830	830
Sound Pressure (min.)		dB(A)	28	28	28	30	30
Sound Pressure (max.)		dB(A)	36	36	36	40	40
Chiller Connections	Ø liquid	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
	Ø gas	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")
Power Supply			208-230V ~ 60Hz				

CONSOLE							
Indoor units		MVA	220FS	280FS	360FS	450FS	500FS
Cooling Capacity		kW	2,20	2,80	3,60	4,50	5,00
Heating Capacity		kW	2,50	3,20	4,00	5,00	5,50
Nominal Input Power (1)		W	15	15	20	40	40
Nominal Air Flow Rate		m³/h	400	400	480	680	680
Sound Pressure (min.)		dB(A)	27	27	32	39	39
Sound Pressure (max.)		dB(A)	38	38	40	46	46
Chiller Connections	Ø liquid	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
	Ø gas	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")
Power Supply			208-230V ~ 60Hz				

FLOOR CEILING							
Indoor units		MVA	280F	360F	500F	630F	710F
Cooling Capacity		kW	2,80	3,60	5,00	6,30	7,10
Heating Capacity		kW	3,60	4,00	5,60	7,10	8,00
Nominal Input Power (1)		W	40	40	50	75	75
Nominal Air Flow Rate		m³/h	650	650	950	1400	1400
Sound Pressure (min.)		dB(A)	32	32	33	39	39
Sound Pressure (max.)		dB(A)	36	36	42	44	44
Chiller Connections	Ø liquid	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")
	Ø gas	mm (inch)	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")
Power Supply			208-230V ~ 60Hz				

Indoor units		MVA	900F	1120F	1250F	1400F
Cooling Capacity		kW	9,00	11,20	12,50	14,00
Heating Capacity		kW	11,20	12,50	14,00	16,00
Nominal Input Power (1)		W	140	160	160	160
Nominal Air Flow Rate		m³/h	1600	2000	2000	2000
Sound Pressure (min.)		dB(A)	43	42	45	45
Sound Pressure (max.)		dB(A)	50	51	52	52
Chiller Connections	Ø liquid	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	Ø gas	mm (inch)	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Power Supply			208-230V ~ 60Hz			

COLUMN				
Indoor units		MVA	1000V	1400V
Cooling Capacity		kW	10,00	14,00
Heating Capacity		kW	11,00	15,00
Nominal Input Power (1)		W	200	200
Nominal Air Flow Rate		m³/h	1600	1600
Sound Pressure (min.)		dB(A)	46	46
Sound Pressure (max.)		dB(A)	50	50
Chiller Connections	Ø liquid	mm (inch)	9,52 (3/8")	9,52 (3/8")
	Ø gas	mm (inch)	15,9 (5/8")	15,9 (5/8")
Power Supply			208-230V ~ 60Hz	

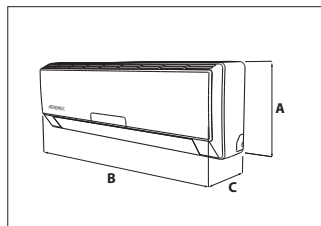
- Cooling (EN-14511)**
Room air temperature 27°C D.B. / 19°C W.B.
outside air temperature 35°C

Heating (EN-14511)
Room air temperature 20°C D.B.;
Outside air temperature 7°C d.b. / 6°C w.b.
- (1) The *Rated Input Power* is the *Maximum Electrical Power* absorbed by the Indoor Unit, according to EN-60335-1 and EN-60335-2-40

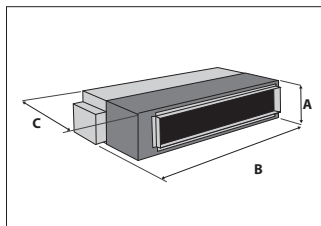
(2) *Nominal Effective Static Head* calculated at maximum speed.

Sound Pressure measured in *Chamber Semi anechoic* a 1m from the front.
- All *Cooling Connections* for *Indoor Units* are *Flared Type* except for Models MVA2240DH and MVA2800DH which are *Soldered Type*

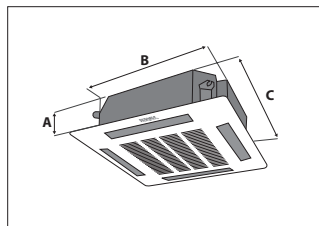
Indoor Unit Weights and Dimensions



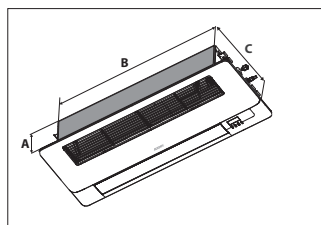
MVA_W - MVA_WS



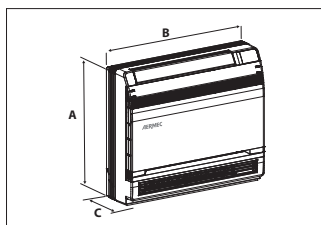
MVA_D - MVA_DH



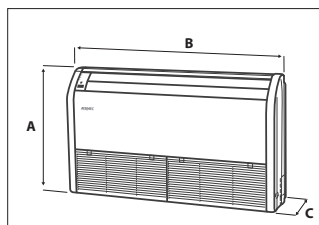
MVA_CS - MVA_C - MVA_CB



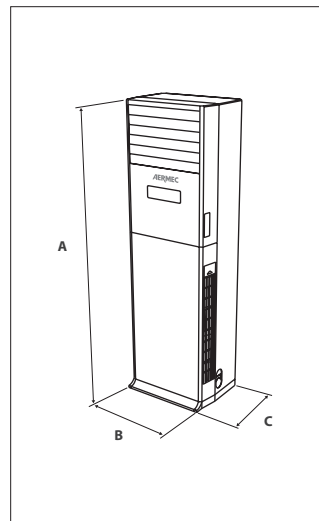
MVA_C1



MVA_FS



MVA_F



MVA_V

MVA_W	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVA220W	275	843	180	10
MVA280W	275	843	180	10
MVA360W	298	940	200	12,5
MVA450W	298	940	200	12,5
MVA500W	298	940	200	12,5
MVA560W	319	1008	221	15
MVA630W	319	1008	221	15
MVA710W	319	1008	221	15

MVA_WS	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVA220WS	275	843	180	10
MVA280WS	275	843	180	10
MVA360WS	298	940	200	12,5
MVA450WS	298	940	200	12,5
MVA500WS	298	940	200	12,5
MVA560WS	319	1008	221	15
MVA630WS	319	1008	221	15
MVA710WS	319	1008	221	15

MVA_C1	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVA220C1	178	987	385	20
MVA280C1	178	987	385	20
MVA360C1	178	987	385	20
MVA450C1	178	987	385	21
MVA500C1	178	987	385	21

Grille dimensions GLC1 1200 x 460 x 55mm - 4,2kg

MVA_CS	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVA220CS	240	596	596	20,5
MVA280CS	240	596	596	20,5
MVA360CS	240	596	596	20,5
MVA450CS	240	596	596	20,5
MVA500CS	240	596	596	20,5
MVA560CS	240	596	596	20,5

Grille dimensions GL40S 670 x 670 x 50 mm - 3,5kg

MVA_C	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVA280C	190	840	840	25
MVA360C	190	840	840	25
MVA450C	190	840	840	25
MVA500C	190	840	840	25
MVA560C	240	840	840	30
MVA630C	240	840	840	30
MVA710C	240	840	840	30
MVA800C	240	840	840	30
MVA900C	320	840	840	35
MVA1000C	320	840	840	35
MVA1120C	320	840	840	35
MVA1250C	320	840	840	35
MVA1400C	320	840	840	35

Grille dimensions GL40 950 x 950 x 60 mm - 7kg

MVA_CB	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVA1600CB	293	910	910	45

Grille dimensions GL40B 1040 x 1040 x 65 mm - 8kg

MVA_FS	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVA220FS	600	700	215	16
MVA280FS	600	700	215	16
MVA360FS	600	700	215	16
MVA450FS	600	700	215	16
MVA500FS	600	700	215	16

MVA_F	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVA280F	700	1220	225	40
MVA360F	700	1220	225	40
MVA500F	700	1220	225	40
MVA630F	700	1420	245	50
MVA710F	700	1420	245	50
MVA900F	700	1700	245	50
MVA1120F	700	1700	245	60
MVA1250F	700	1700	245	60
MVA1400F	700	1700	245	60

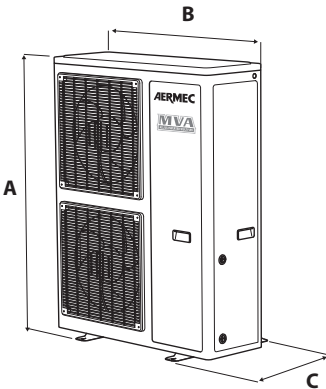
MVA_D	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVA220D	200	700	615	22
MVA250D	200	700	615	22
MVA280D	200	700	615	22
MVA320D	200	700	615	22
MVA360D	200	700	615	22
MVA400D	200	900	615	27
MVA450D	200	900	615	27
MVA500D	200	900	615	27
MVA560D	200	1100	615	31
MVA630D	200	1100	615	31
MVA710D	260	1200	655	31
MVA800D	260	1200	655	40
MVA900D	260	1340	655	46
MVA1000D	260	1340	655	46
MVA1120D	260	1340	655	46
MVA1250D	260	1340	655	47
MVA1400D	260	1340	655	47

MVA_DH	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVA560DH	268	1271	558	35
MVA630DH	268	1271	558	35
MVA710DH	268	1271	558	35
MVA800DH	268	1271	558	35
MVA900DH	290	1229	775	47
MVA1000DH	290	1229	775	47
MVA1120DH	290	1229	775	47
MVA1250DH	290	1229	775	47
MVA1400DH	290	1229	775	47
MVA1600DH	350	1340	750	60
MVA2240DH	327	1353	632	115
MVA2800DH	402	1563	706	115

MVA_V	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVA1000V	1870	580	400	54
MVA1400V	1870	580	400	57

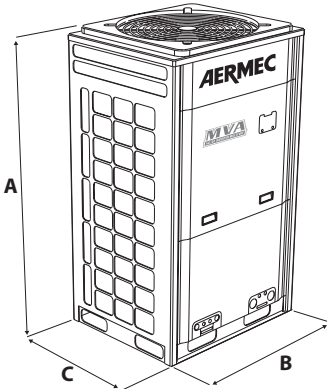
Outdoor Unit Weights and Dimensions

MVAS



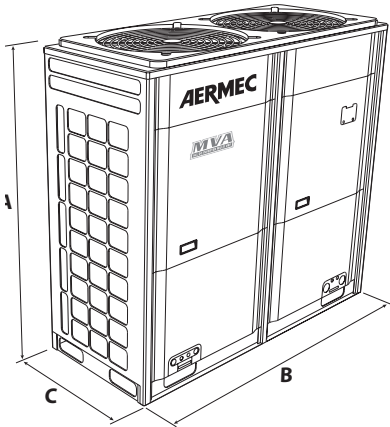
MVAS	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVAS1201S	1345	900	340	110
MVAS1401S	1345	900	340	110
MVAS1601S	1345	900	340	110
MVAS1201T	1345	900	340	120
MVAS1401T	1345	900	340	120
MVAS1601T	1345	900	340	120
MVAS2242T	1430	940	320	133
MVAS2802T	1615	940	460	166
MVAS3351T	1615	940	460	177

MVAM2241T
MVAM2801T



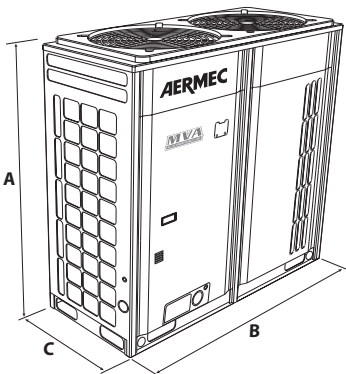
MVAM	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVAM2241T	1605	930	765	225
MVAM2801T	1605	930	765	225

MVAM3351T
MVAM4001T
MVAM4501T



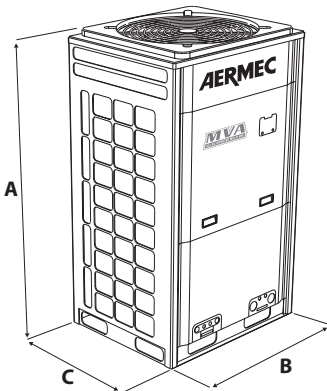
MVAM	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVAM3351T	1605	1340	765	285
MVAM4001T	1605	1340	765	360

MVAM4501T
MVAM5041T
MVAM5601T
MVAM6151T



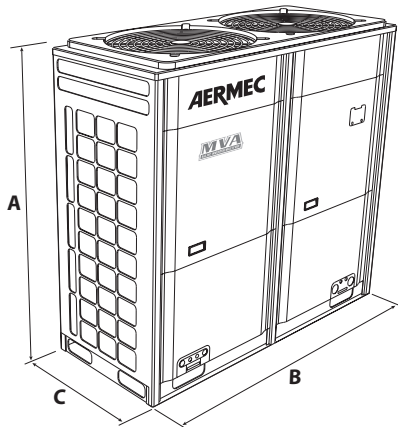
MVAM	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVAM4501T	1740	1340	765	360
MVAM5041T	1740	1340	765	360
MVAM5601T	1740	1340	765	385
MVAM6151T	1740	1340	765	385

MVAMHR2240T
MVAMHR2800T



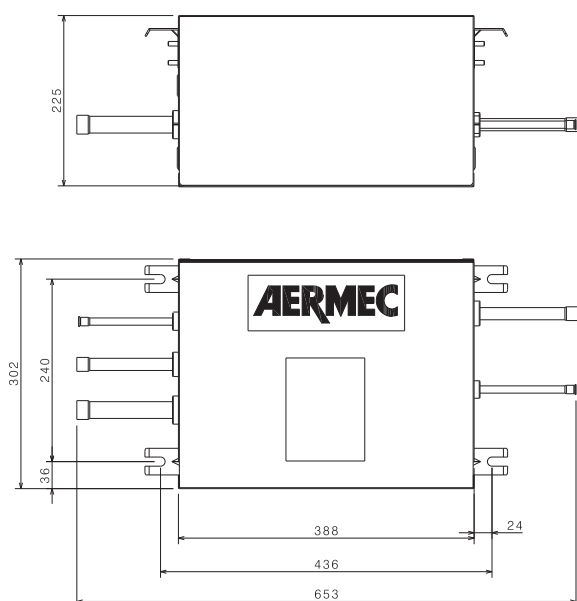
MVAM	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVAMHR2240T	1605	930	765	233
MVAMHR2800T	1605	930	765	233

MVAMHR3350T
MVAMHR4000T
MVAMHR4500T

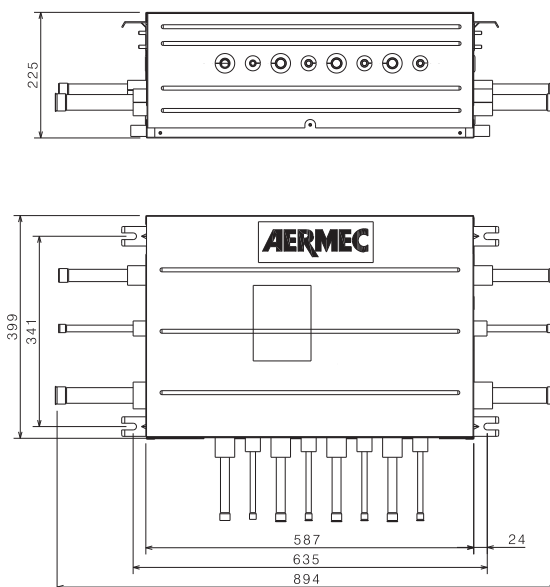


MVAM	A (mm)	B (mm)	C (mm)	Net Weight (kg)
MVAMHR3350T	1605	1340	765	302
MVAMHR4000T	1605	1340	765	346
MVAMHR4500T	1605	1340	765	346

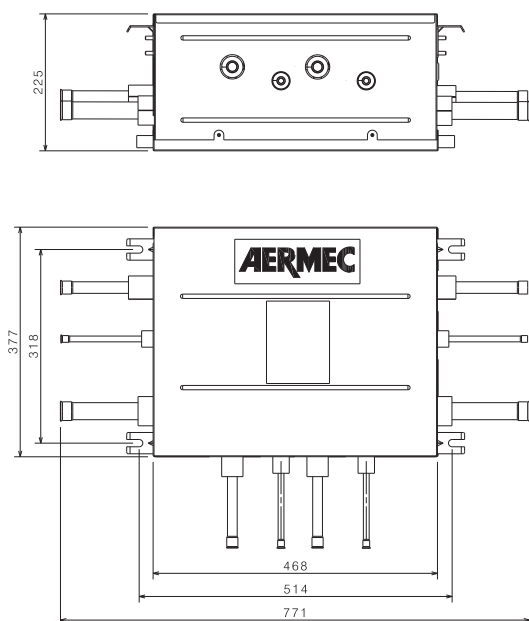
MEB exchange module - Dimensions & Weights:



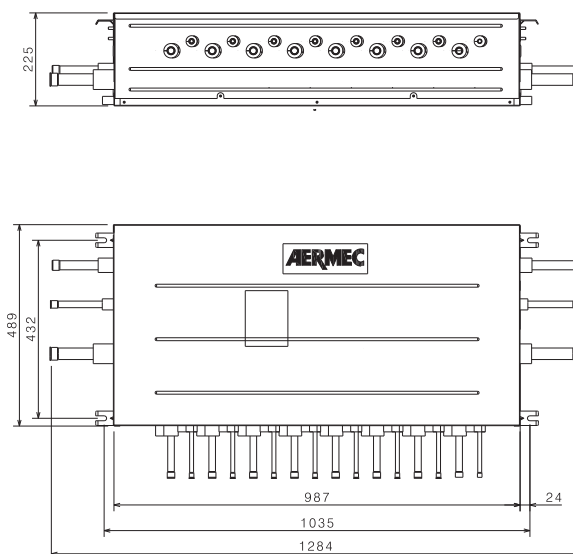
MEB10



MEB40



MEB20



MEB80