

VRF MULTIFUNCTIONAL AIR-CONDITIONING SYSTEMS

Flexible system solution for large buildings and building storeys



Issue 2021



REMKO – THE SYSTEM PROVIDER

About REMKO

REMKO is a globally active company for heating and air-conditioning technology. Our highly efficient product range comprises hot air heating systems, dehumidifiers, air-conditioning systems and air-conditioners, as well as future-looking heat pumps. Since 1976, we have grown consistently with the requirements of our customers as a medium-sized company. Extensive experience, innovative product development and reliable service are our strengths when it comes to needs-based solutions in the areas of heating, air-conditioning and dehumidifying.

Services

With our CheckServ offering and a well-developed network of qualified expert partners, we guarantee competent consultation and reliable support. From planning to installation and subsequent maintenance, we are available to our customers as a reliable contact partner at all times. If a malfunction occurs, our emergency service team is happy to help.

Our quality claim

With our products, we do not orient ourselves on existing solutions, but rather we develop and implement our own innovative technical concepts. In the process, our high quality standards for our products has been the foundation of REMKO's success for over 40 years. In cooperation with recognised testing institutes, all REMKO products are tested on our in-house test stands according to the latest European standards. Certificates confirm our sustainable quality assurance system.

Spare part service

In addition to accessory articles, REMKO offers spare parts for all its products that the customer can order conveniently online. The spare part search can also be used to find spare parts for older models. The quickest possible delivery is naturally part of the service provided by REMKO.

<https://www.remko.de/ersatzteil-suche/>



AIR-CONDITIONING

Air-Conditioners
Cold Water Air-Conditioning Systems



HEAT

Mobile Hot Air Heating Systems
Stationary Hot Air Heating Systems



NEW ENERGIES

Heat pumps
Modular power houses



DEHUMIDIFICATION

Dehumidifiers
High-Performance Fans



AIR CLEANING

Air purifier



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VRF MULTIFUNCTIONAL AIR-CONDITIONING SYSTEMS

Flexible system solution for large buildings and building storeys

The flexible air-conditioning system for sophisticated construction projects

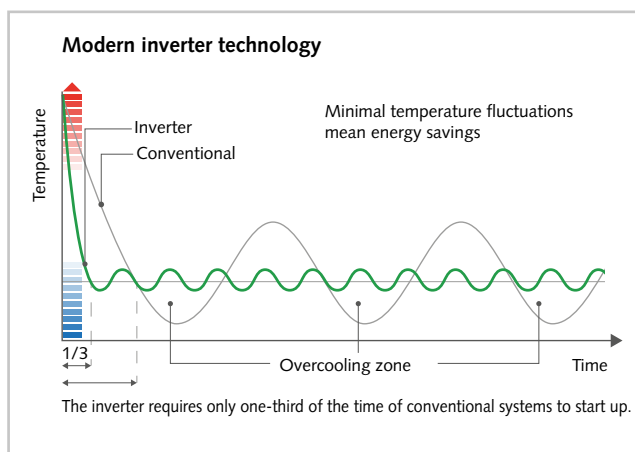
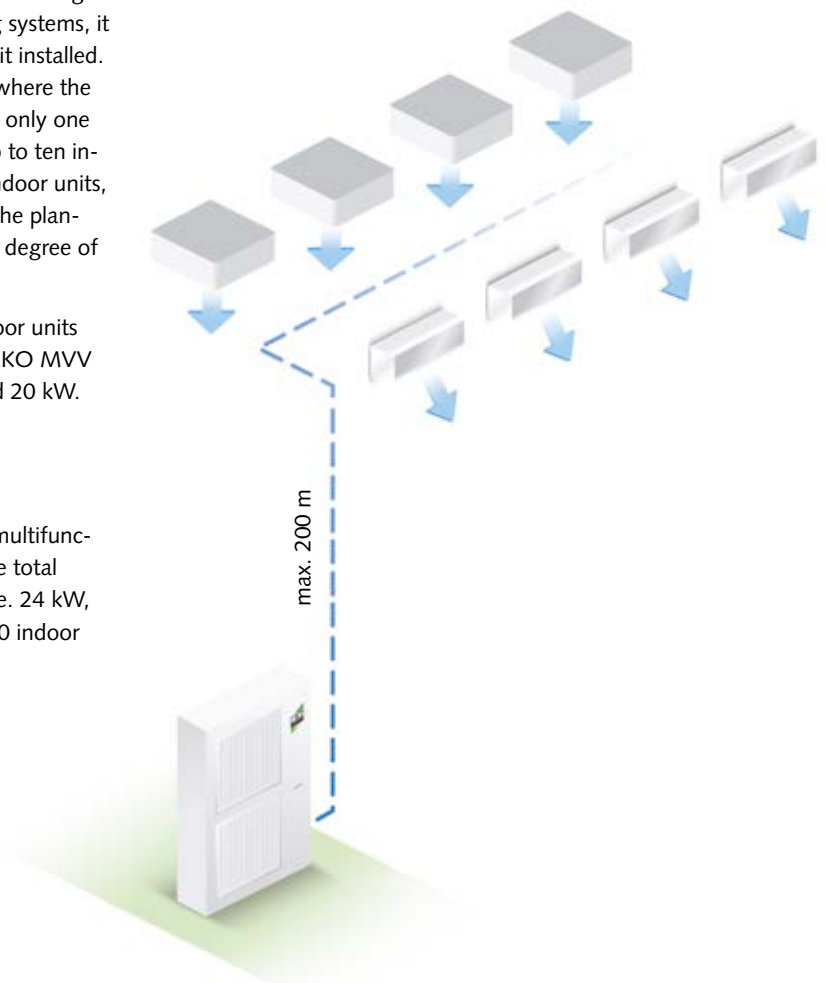
For the realisation of complex air-conditioning concepts, REMKO offers an efficient and flexible system solution in the form of the VRF multifunctional air-conditioning system of the MVV series. During the operation of conventional single-split air-conditioning systems, it is necessary to install an outdoor unit for every indoor unit installed. Greater area and line requirements are the result. This is where the VRF multifunctional air-conditioning system begins. With only one efficient outdoor inverter unit, the system can operate up to ten indoor units. For the cooling and heating operation of all indoor units, only 2 refrigerant lines must be installed. This minimises the planning effort, costs, and time. You thus achieve the highest degree of efficiency and flexibility.

With the REMKO MCC-1 multi-central controller, all indoor units can also be controlled extensively and centrally. The REMKO MVV series is available in cooling outputs 12 kW, 15.5 kW, and 20 kW.

Double power ahead!

In case more output is required, REMKO offers the VRF multifunctional air-conditioning system DUO. With this system, the total output and number of indoor units to be operated double. 24 kW, 31 kW, or 40 kW cooling output guarantees that up to 20 indoor units can be operated at once.

- Maximum refrigerant line length 200 m
- Cooling or heating of up to 20 rooms
- Easy installation of the 2-pipe technology
- Efficient inverter technology
- Centralised control of all indoor units
- Up to 40 kW cooling capacity available in Duo mode



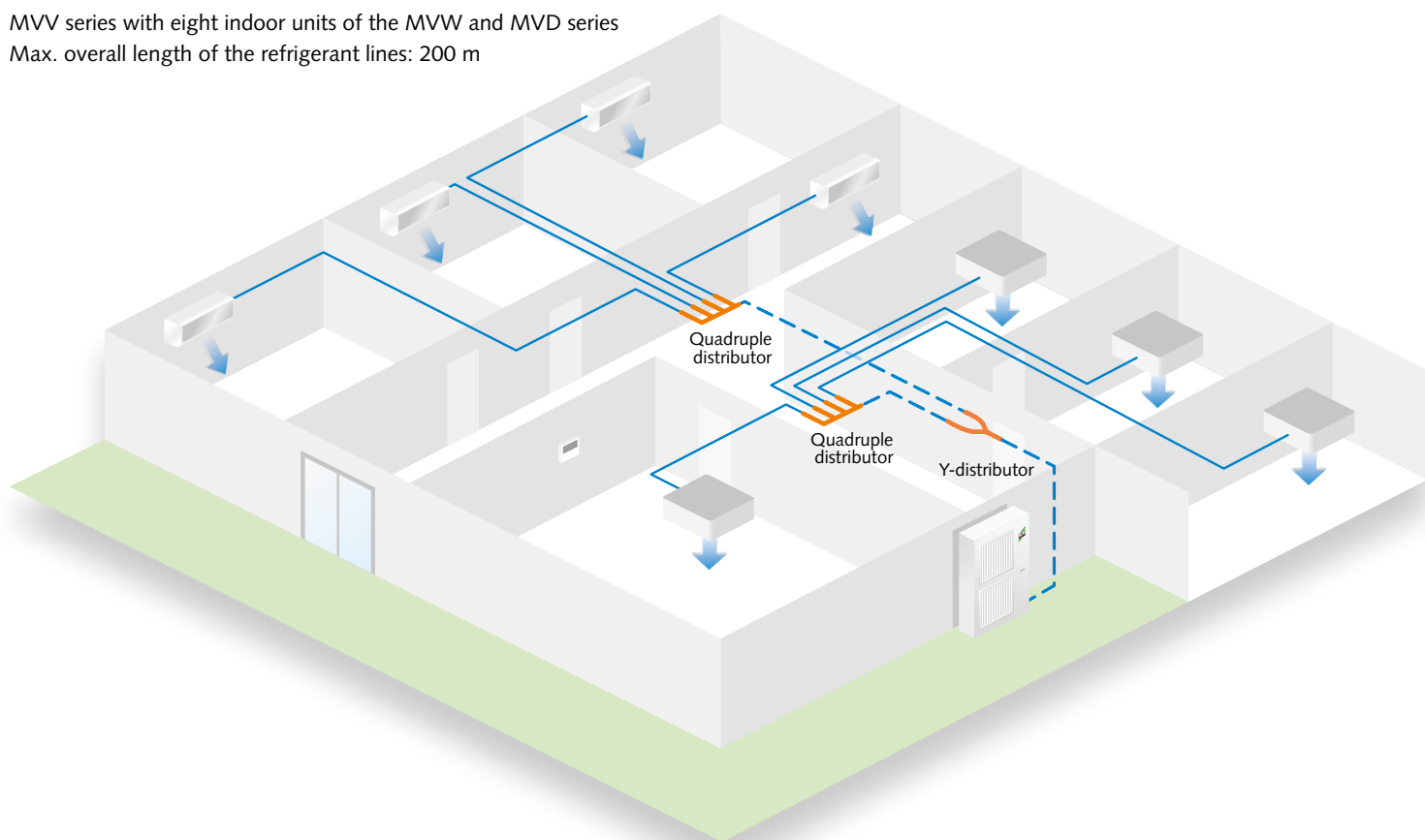
Reduce energy consumption through better efficiency

The REMKO MVV series inverter technology works extremely efficiently. If the room temperature increases, the inverter adapts precisely to the required cooling capacity. This results in only minimal temperature fluctuations and thus longer full load cooling. This not only saves on energy costs, but also prevents unnecessary start-up sounds.

VRF MULTIFUNCTIONAL AIR-CONDITIONING SYSTEMS

Installation example of the MVV series

MVV series with eight indoor units of the MVW and MVD series
Max. overall length of the refrigerant lines: 200 m



Refrigerant distributor

REMKO offers efficient and high-quality refrigerant distributors and pipes for the best possible distribution of the cooling and heating outputs. These distributors and pipes can be flexibly combined and thus permit the optimum design of the pipeline lengths and pipe dimensions. The indoor units of the MVW and MVD series can be directly connected to the respective distributor. With the accessory sets, an assembly of the entire system with all required components is possible without a problem.

Legend

- **Main line**
Refrigerant line to the outdoor unit and between the refrigerant distributors, consisting of the fluid and suction line
- **Auxiliary line**
Refrigerant line to the indoor unit, consisting of the fluid and suction line



Y-distributor



Quadruple distributor



REMKO SMART-CONTROL TOUCH SC-1

The smart controller for your air-conditioning system

REMKO Smart-Control Touch enables the control of all air-conditioners in your home. Operation is possible from the central controller or using the mobile Smart-Web function from anywhere.

Using the intuitive user interface, time programs can be set for individual units or groups. In the process, the individual nomenclature provides the necessary overview. The Smart-Control Touch controller is integrated into your in-house Wi-Fi network. In connection with REMKO Smart-Web, all settings, such as reaching or changing the current room temperature, can be carried out conveniently using the mobile telephone or tablet.

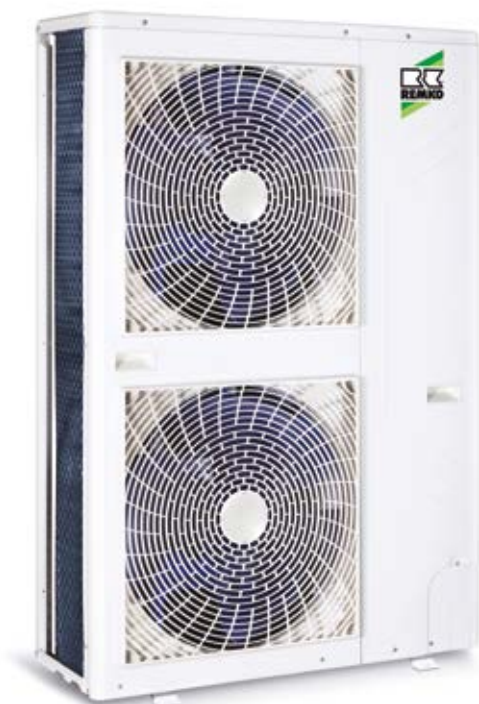
The smart controller offers you a multitude of setting options that simplify the air-conditioning of your home.



- Control of up to 64 indoor units
- Internet integration thanks to built-in Wi-Fi module or RJ45 network cable
- REMKO Smart-Web for mobile use – included
- Creation of time programs
- E-mail notification in case of a malfunction
- Automatic switchover from cooling to heating depending on the outdoor temperature

REMKO MVV SERIES

Outdoor units for cooling and heating



Wall-mounted units MVW series



Ceiling cassette MVD series



Wall chest MXV series



REMKO MVV SERIES

Efficient air-conditioning solutions for several rooms

The MVV series is an efficient inverter air-conditioning solution that lets you operate up to ten indoor units at once. You can thus combine wall-mounted units and ceiling cassettes according to your needs.

- Easy installation of the 2-pipe technology on the wall or in the suspended ceiling
- Automatic adjustment of the airflow in cooling and heating mode
- The outdoor units are filled with R410A refrigerant at the factory.
- Refrigerant injection via electronic expansion valves in the indoor units
- Microprocessor-controlled unit technology
- The cooling or heating of up to 20 rooms is possible.
- Max. refrigerant lines length 200 m
- With winter fan speed control for cooling and heating operation up to -15°C in the standard version

Technical data

Unit type	
Cooling capacity	kW
Heating capacity	kW
Refrigerant ⁴⁾	
Basic filling volume / CO ₂ equivalent	kg/t
Max. connected load (130%)	kW
Max. number of indoor units	
Energy efficiency rating for cooling ²⁾	
Energy efficiency class for heating ²⁾	
Annual cooling/heating energy consumption 500 h	kWh
Operating range, cooling	°C
Operating range, heating	°C
Refrigerant	
Basic filling volume of refrigerant ³⁾	kg
Max. air flow rate ³⁾	m ³ /h
Max. sound power ³⁾	dB(A)
Sound pressure level ^{1) 3)}	dB(A)
Voltage supply ³⁾	V/Ph/Hz
Cooling/heating power consumption ³⁾	kW
Refrigerant line up to the main line of the distributor	
Refrigerant line, max. length, per indoor unit	m
Refrigerant line, max. height between indoor units	m
Maximum height difference between outdoor unit and lower indoor unit	m
Total max. refrigerant line ³⁾	m
Dimensions - height/width/depth ³⁾	mm
Weight ³⁾	kg
Ref. no.	

¹⁾ At a distance of 1 m in open air ²⁾ In combination with MVW



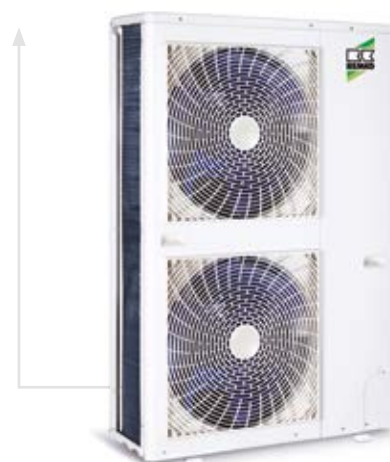
MVV 1200 DC	MVV 1600 DC	MVV 2000 DC	MVV 1200 DC Duo	MVV 1600 DC Duo	MVV 2000 DC Duo
12.0 (5.76-12.43)	15.5 (7.75-16.33)	20.0 (9.23-21.53)	2x 12.0 (5.76-12.43)	2x 15.5 (7.75-16.33)	2x 20.0 (9.23-21.53)
13.5 (6.00-15.53)	18.6 (8.30-20.13)	23.3 (10.52-25.43)	2x 13.5 (6.00-15.53)	2x 18.6 (8.30-20.13)	2x 23.3 (10.52-25.43)
R410A	R410A	R410A	R410A	R410A	R410A
3.3/6.89	3.9/8.14	4.8/10.02	2x 3.3/6.89	2x 3.9/8.14	2x 4.8/10.02
15.6	20.2	26.0	2x 15.6	2x 20.2	2x 26.0
7	8	10	2x 7	2x 8	2x 10
A	A	B	A	A	B
A	A	A	A	A	A
1870/1820	2355/2480	3295/3090	2x 1870/1820	2x 2355/2480	2x 3295/3090
-15°C to +48°C	-15°C to +48°C	-15°C to +48°C	-15°C to +48°C	-15°C to +48°C	-15°C to +48°C
-15°C to +27°C	-15°C to +27°C	-15°C to +27°C	-15°C to +27°C	-15°C to +27°C	-15°C to +27°C
R410A	R410A	R410A	R410A	R410A	R410A
3.3	3.9	4.8	2 x 3,3	2 x 3,9	2 x 4,8
6000	6000	10800	6000	6000	10800
66	65	70	66	65	70
58	57	59	58	57	59
400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50
3.74 / 3.64	4.71 / 4.96	6.59 / 6.18	3.74 / 3.64	4.71 / 4.96	6.59 / 6.18
3/8 / 5/8	3/8 / 3/4	3/8 / 3/4	3/8 / 5/8	3/8 / 3/4	3/8 / 3/4
60	60	60	60	60	60
8	8	8	8	8	8
30	30	30	30	30	30
200	200	200	200	200	200
1295/900/315	1327/900/320	1560/1120/415	1295/900/315	1327/900/320	1560/1120/415
95.0	102.0	137.0	95.0	102.0	137.0
1623600	1623605	1623610	1623615	1623620	1623625

³⁾ Specified per outdoor unit

⁴⁾ GWP = 2088

REMKO MVD SERIES

Ceiling cassettes for cooling and heating



REMKO MVD SERIES

The optically discreet room air-conditioning solution

Due to its flat design and its whisper-quiet operation, the MVD series inverter air-conditioning solution is ideal for use in the office. Thanks to the latest inverter technology from REMKO, the ceiling cassettes operate particularly reliably and efficiently.



MVD 702-1002

- Compact dimensions in European grid format (up to MVD 452)
- Low-noise appliance operation thanks to 7-stage DC motor
- Removable air filter
- Air outlet with swing function
- Programmable 24-hour timer function
- With infrared remote control in the standard version
- Microprocessor-controlled unit technology
- Built-in condensate pump (maximum pump head of 500 mm)
- 360° air outlet (up to MVD 452)
- Fresh air connection
- Alarm contact, contact for ext. release

Accessories

- Refrigerant lines
- Cabled remote control KFB-4
- REMKO Smart-Control Touch SC-1
- MCC-1 multi-central controller
- Distributor sets



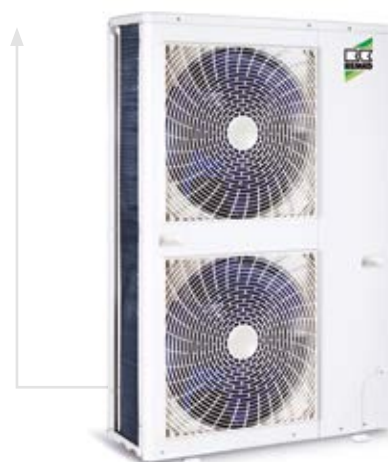
Technical data

Unit type		MVD 222	MVD 282	MVD 362	MVD 452	MVD 702	MVD 1002
Cooling capacity	kW	2.2	2.8	3.6	4.5	7.1	10.0
Heating capacity	kW	2.5	3.2	4.0	5.0	8.0	11.1
Usage area (room size) approx.	m ³	70	90	110	140	230	320
Operating range	°C/% rel. hum.	17-30/35-65	17-30/35-65	17-30/35-65	17-30/35-65	17-30/35-65	17-30/35-65
Air volume flow rate (min.-max.)	m ³ /h	405-576	405-576	400-604	400-604	748-1200	1034-1596
Sound pressure level (min.-max.)	dB(A)	22-35	22-35	28-41	28-41	34-45	41-47
Voltage supply	V/Ph/Hz	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50
Refrigerant connection for fluid line	Inch	1/4	1/4	1/4	1/4	3/8	3/8
Refrigerant connection, suction pipe	Inch	1/2	1/2	1/2	1/2	5/8	5/8
Condensate drain connection Ø	mm	25	25	25	25	32	32
Dimensions (L/W ²⁾ /H)	mm	570/630/260	570/630/260	570/630/260	570/630/260	840/840/230	840/840/300
Dimensions of unit cover (L/W/H)	mm	647/647/50	647/647/50	647/647/50	647/647/50	950/950/54.5	950/950/54.5
Weight	kg	20.5	20.5	21.7	21.7	28.2	32.5
Ref. no.		1623552	1623557	1623562	1623567	1623572	1623577

¹⁾ Distance of 1 m in the open air ²⁾ Including pc board housing (60 mm)

REMKO MVW SERIES

Wall-mounted units for cooling or heating



REMKO MVW SERIES

Designer wall-mounted units for every room situation

The wall-mounted units of the MVW series heat, cool, filter, and dehumidify the humid room air. Through the modern design, the appliances can be easily integrated into any working and living situation.

- Low-noise appliance operation thanks to 7-stage DC motor
- Easy wall installation
- Display integrated into unit cover
- Programmable 24-hour timer function
- With infrared remote control in the standard version
- Automatic adjustment of the airflow in cooling and heating mode
- Microprocessor-controlled unit technology
- Alarm contact, contact for ext. release

Accessories

- Refrigerant lines
- Condensation pump
- Cabled remote control KFB-4
- REMKO Smart-Control Touch SC-1
- MCC-1 multi-central controller



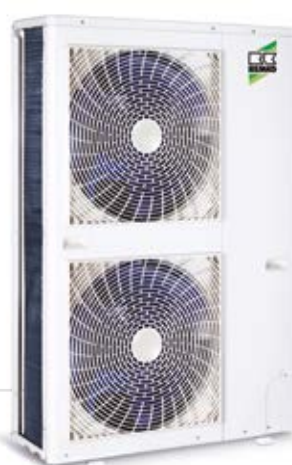
Technical data

Unit type		MVW 222	MVW 282	MVW 362	MVW 452	MVW 562
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6
Heating capacity	kW	2.4	3.2	4.0	5.0	6.3
Usage area (room size) approx.	m³	70	90	110	140	180
Operating range	°C/% rel. hum.	17-30/35-65	17-30/35-65	17-30/35-65	17-30/35-65	17-30/35-65
Air volume flow rate (min.-max.)	m³/h	356-422	316-417	488-656	424-594	574-747
Sound pressure level (min.-max.)	dB(A)	29-31	29-31	30-33	31-35	34-38
Voltage supply	V/Ph/Hz	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50
Refrigerant connection for fluid line	Inch	1/4	1/4	1/4	1/4	3/8
Refrigerant connection, suction pipe	Inch	1/2	1/2	1/2	1/2	5/8
Condensate drain connection Ø	mm	16	16	16	16	16
Dimensions - height/width/depth	mm	280/835/203	280/835/203	315/990/223	315/990/223	315/990/223
Weight	kg	8.4	9.5	11.4	12.8	12.8
Ref. no.		1623504	1623509	1623514	1623519	1623525

¹⁾ Distance of 1m in open air

REMKO MXV SERIES

Wall chests for cooling and heating



REMKO MXV SERIES

Reduce energy consumption through better efficiency

Compact chest units are extremely versatile. For renovations, for example, they are suitable for the exchange of radiator heating elements.

- Compact dimensions
- Automatic swing function
- Removable air filter
- Automatic restart after power failure
- Programmable 24-hour timer function
- With infrared remote control in the standard version

Accessories

- Refrigerant lines
- Distributor sets
- Cabled remote control
- MCC-1 multi-central controller
- Condensate pumps



Technical data

Unit type		MXV 221	MXV 361	MXV 451
Cooling capacity	kW	2.2	3.6	4.5
Heating capacity	kW	2.6	4.0	5.0
Usage area (room size) approx.	m ³	70	110	140
Operating range	°C/% rel. hum.	17-30/35-65	17-30/35-65	17-30/35-65
Air flow rate per speed setting	m ³ /h	229/345/430	229/430/510	400/512/660
Sound pressure level per speed setting ¹⁾	dB(A)	26/32/38	27/33/39	36/39/42
Voltage supply	V/Ph/Hz	230/1~/50	230/1~/50	230/1~/50
Refrigerant connection for fluid line	Inch	1/4	1/4	1/4
Refrigerant connection, suction pipe	Inch	1/2	1/2	1/2
Condensate drain connection	mm	22	22	22
Dimensions - height/width/depth	mm	600/700/210	600/700/210	600/700/210
Weight	kg	14.0	15.0	15.5
Ref. no.		1623640	1623650	1623660

¹⁾ Distance of 1m in open air

ACCESSORIES

VRF multifunctional air-conditioning systems



REMKO Smart-Control Touch SC-1

Central controller for indoor units with touch display including Wi-Fi function. Enables control by PC, smartphone or tablet.

For unit type	Ref. no.
MVD, MVW, MVV	1613261

Accessories for flush-mounted installation

Flush-mounted power supply unit	1613262
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Cabled remote control KFB-4

For convenient operation, cabled.

For unit type	Ref. no.
MVD/MVW/MXV	1613269



Floor brackets BK-1000 Plus

For unit type	Ref. no.
MVV 1200-1600	1613128
MVV 1200-1600 Duo (2x)	1613128



Wall bracket WKM-600

For unit type	Ref. no.
MVV 1200-1600	1613123
MVV 1200-1600 Duo (2x)	1613123



Wall bracket WKM-800

For unit type	Ref. no.
MVV 2000	1613124
MVV 2000 DUO (2x)	1613124



Floor brackets BK-1000 Plus S

For unit type	Ref. no.
MVV 2000	1613273
MVV 2000 Duo (2x)	1613273



Condensate pump KP-6U

For easy, low-maintenance mounting under wall-mounted air conditioners

For unit type	Ref. no.
MVW	1613064



Condensate pump KP-6

Only intended for vertical installation and removal of condensate through the ceiling in conjunction with wall-mounted units.

For device type	Ref. no.
MVW	1613251



Condensate pump KP-8

For air-conditioners for draining condensate. With reservoir, alarm contact, and connecting tubes in the standard version.

For unit type	Ref. no.
MVW/MXV	1613125



Refrigerant lines

For connecting the indoor and outdoor units.

		Ref. no.
25 m ring	Ø ¼	1613055
25 m ring	Ø ⅜	1613056
25 m ring	Ø ½	1613057
25 m ring	Ø ⅝	1613058
25 m ring	Ø ¾	1613059
Running metre	Ø ¼	1613070
Running metre	Ø ⅜	1613071
Running metre	Ø ½	1613072
Running metre	Ø ⅝	1613073
Running metre	Ø ¾	1613074



Condensate drip pan including oil separator

Made of aluminium for outdoor unit, including temperature-controlled condensate drainage heating, leaf guard grating, and oil separator.

For unit type	Ref. no.
MVV 1200-1600	1613232
MVV 1200-1600 Duo 2x	1613232



Condensate drip tray including oil separator

Made of stainless steel for outdoor unit.

For unit type	Ref. no.
MVV 2000	260128
MVV 2000 Duo 2x	260128



Condensate pump KP-5

Including condensate drip tray for removal of any occurring condensate water to higher drains.

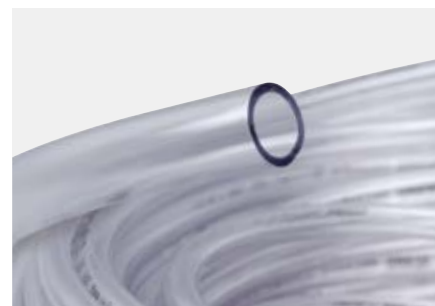
For unit type	Ref. no.
MVD	1613168



Condensate tube, separate

For connection to condensate pumps.

	Length	Ref. no.
KP-8, KP-6, KP-6U	100 m	1613065
	20 m	1613066
	Running metre	1613067
KP-5	Running metre	1613097



Condensate tube, loose, 22 mm Ø

For unit type	Length	Ref. no.
MVD	50 m	1613068
MVD	Running metre	1613069
Reduction piece 32 mm/22 mm		1613098
For MVD 702-1002		



Wall bushing

For the simplified laying of connecting lines through the masonry.

Refrigerant lines: max. Ø ½"

Condensate tubes: max. Ø 16 mm

For unit type	Ref. no.
MVD/MVW/MXV	1613063



Cleaning agent for air conditioners

Ready-for-use cleaning agent suitable for all REMKO air conditioners.

For cleaning and disinfecting the evaporator in indoor units.

	Ref. no.
750 ml spray bottle	1613054



Condensate tube, 16 mm Ø

Suitable for 16 and 18 mm connection ports, ivory-coloured.

For device type	Length	Ref. no.
MVW/MXV	50 m	1613052
MVW/MXV	Running metre	1613053

ACCESSORIES

VRF multifunctional air-conditioning systems



Copper fittings, sleeves, individual

For connecting the refrigerant lines and for the connection to the refrigerant distributor. (included in the scope of delivery of the units and distributors).

		Ref. no.
Sleeves	Ø 1/4	1613080
Sleeves	Ø 3/8	1613081
Sleeves	Ø 1/2	1613082
Sleeves	Ø 5/8	1613083
Sleeves	Ø 3/4	1613084
Caps	Ø 3/8	1613091
Caps	Ø 1/2	1613092
Caps	Ø 5/8	1613093
Caps	Ø 3/4	1613094



European flange adapter set

For the connection of the refrigerant line to the outdoor units MVV (included in the scope of supply of the units and distributors)

For unit type

		Ref. no.
MVV 1200	Ø 3/8-5/8	1613101
MVV 1600	Ø 3/8-3/4	1613102
MVV 2000	Ø 3/8-3/4	1613102
MVV 1200 Duo (2x)	Ø 3/8-5/8	1613103
MVV 1600 Duo (2x)	Ø 3/8-3/4	1613104
MVV 2000 Duo (2x)	Ø 3/8-3/4	1613104



Copper fittings, reduction sleeves, individual

For connecting the refrigerant lines and for the connection to the refrigerant distributor. (included in the scope of delivery of the appliances and distributors).

		Ref. no.
Reduction sleeves	Ø 3/4-5/8	1613085
Reduction sleeves	Ø 5/8-1/2	1613086
Reduction sleeves	Ø 5/8-3/8	1613087
Reduction sleeves	Ø 3/8-1/2	1613088
Reduction sleeves	Ø 3/8-1/4	1613089
Reduction sleeves	Ø 3/4-1/2	1613090



Y-distributor set for fluid and suction line

In soldered design, including soldered fittings for connection to all outdoor and indoor units.

	Ref. no.
VRF multifunctional air-conditioning system Price group 4	1613095
Connection per set Price group 10	1709



Quadruple distributor set for fluid and suction line

For a maximum of four indoor units in a soldered design, including soldered fittings for connection to all outdoor and indoor units.

	Ref. no.
VRF multifunctional air-conditioning system Price group 4	1613096
Connection per set Price group 10	1708



REMKO QUALITY WITH SYSTEMS

Climate | Heating | New energies

REMKO GmbH & Co. KG
Air-Conditioning and Heating Technology

Im Seelenkamp 12
32791 Lage

Phone +49 (0) 5232 606-0
Fax +49 (0) 5232 606-260

E-mail info@remko.de
Internet www.remko.de

Hotline within Germany
+49 (0) 5232 606-0

International hotline
+49 (0) 5232 606-130

