

VRF MULTIFUNCTIONAL AIR-CONDITIONING SYSTEMS



***Flexible system solution for large
buildings and building storeys
Cooling and heating***

VRF MULTIFUNCTIONAL AIR-CONDITIONING SYSTEMS

Flexible system solution for large buildings and building storeys



REMKO MVV

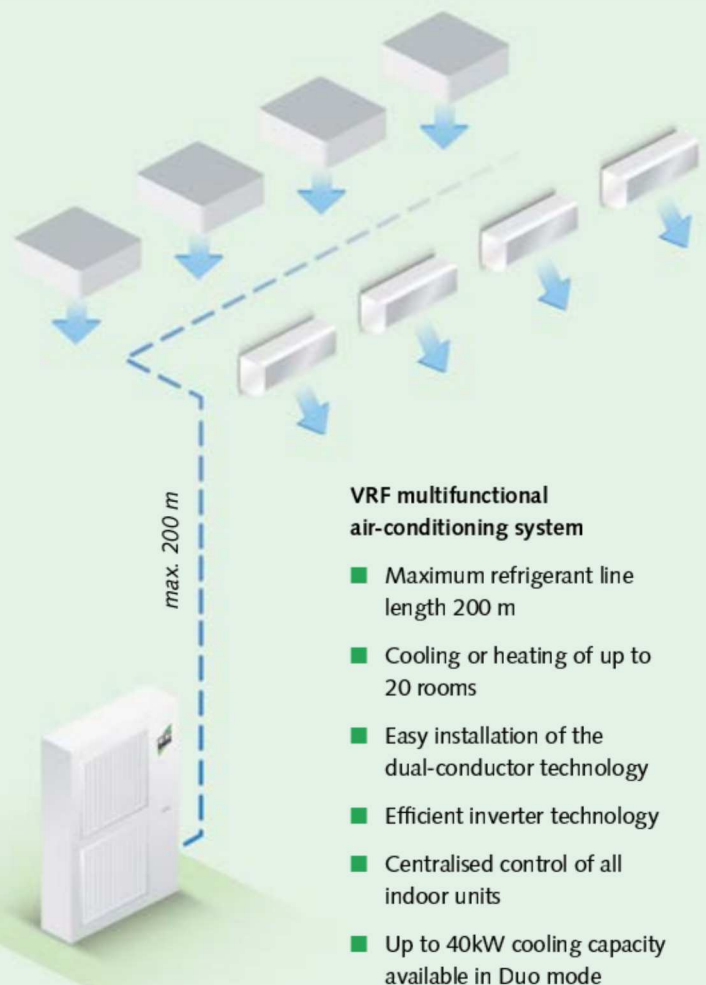
The flexible air-conditioning system for sophisticated construction projects

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 section, 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 capacities 12 kW, 15.5 kW and 20 kW.

Double power ahead!

In case more capacity 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 capacity guarantees that up to 20 indoor units can be operated at once.

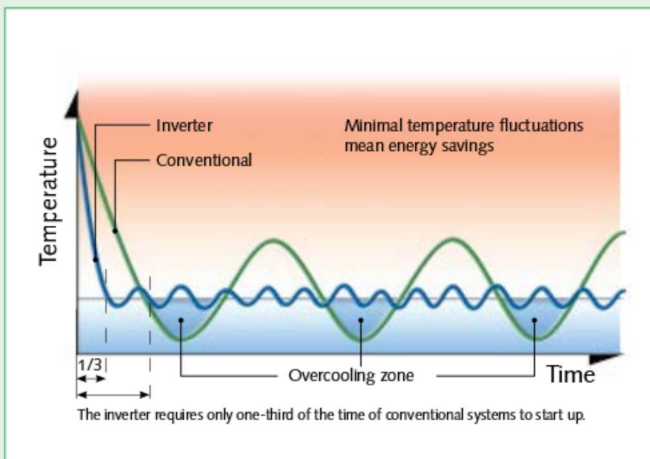




Reduce energy consumption through greater efficiency

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.

Modern inverter technology



For better well-being

Heat and humid air reduce human performance and concentration. Once the room temperature reaches 22°C, your productivity drops by 5%, and then drops a further 5% with every Celsius degree increase. In addition, humidity plays a decisive role. This is because we find the air humid and oppressive at temperatures around 25°C and a humidity of 60 to 70 percent.

Don't let hot summer temperatures limit your productivity and comfort.



VRF MULTIFUNCTIONAL AIR-CONDITIONING SYSTEMS

The centralised control system for all indoor units



REMKO MCC-1

The centralized control system for all indoor units

The MCC-1 multi-central controller is the perfect central control point for the VRF multifunctional air-conditioning systems of REMKO.

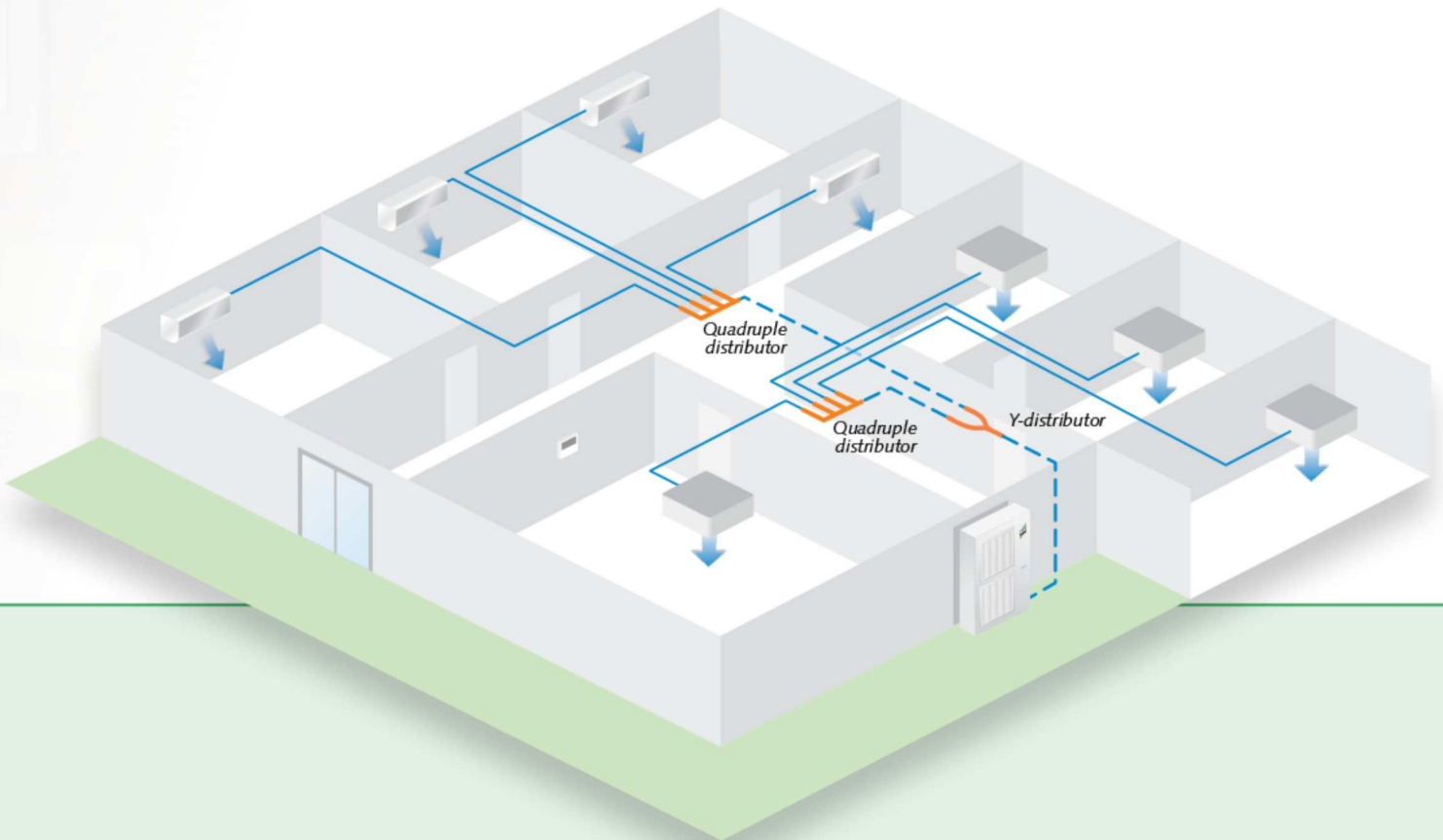
The cabled remote control lets the user control up to 64 indoor units individually. By opening the protective cover, you can access the easy-to-survey control panel. Using the control panel, functions like operating times, service parameters, temperatures and so on can be controlled or read individually for each indoor unit.

In the process, up to four switching times can be programmed for each calendar day. To prevent access to unauthorised persons, the buttons, operating modes or remote controls of the indoor units can be optionally locked.



- Centralised control of a maximum of 64 indoor units
- Individual calendar entries possible for all units
- Polling of operating and service statuses
- Setting of all functions like fan speeds, heating, cooling and set values
- Up to four programs possible for each calendar day
- Extensive locking possibilities

**Installation example of the 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 capacity. 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 (see page 13), 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

VRF MULTIFUNCTIONAL AIR-CONDITIONING SYSTEMS

MVV 1200-2000 DC series Cooling or heating



Wall units
MVW series



Ceiling cassette
MVD series

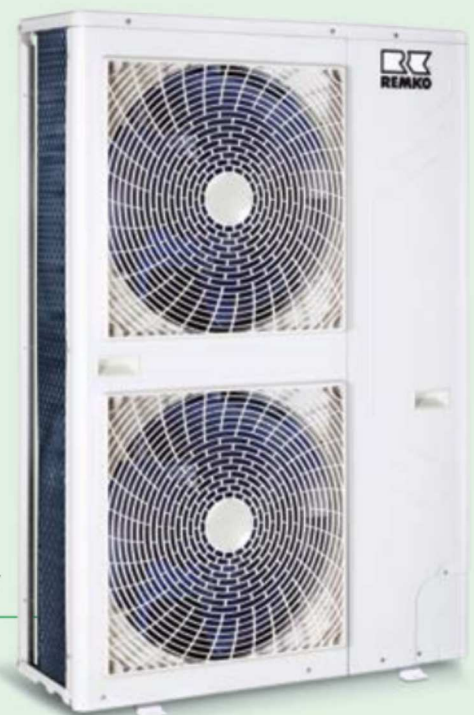


REMKO MVV

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 dual-conductor technology on the wall or in the suspended ceiling
 - Inverter technology saves on energy costs. This translates to maximum comfort, as temperature fluctuations in exiting air are reduced to a minimum.
 - Automatic adjustment of the air flow in cooling and heating mode
 - The outdoor units are filled with R 410A refrigerant at the factory
 - Refrigerant injection via electronic expansion valves in the indoor units
 - Microprocessor-controlled device technology
 - The cooling or heating of up to 20 rooms is possible.
 - Long refrigerant line length, max. 200 m
 - With winter fan speed control for cooling and heating operation up to -15°C in the standard version
 - Condensate drip tray including oil separator
- Accessories (see page 12)**
- Refrigerant lines
 - Wall and floor brackets



Outdoor unit
MVV series
1200-2000 DC

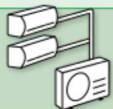


Technical data

Outdoor components	MVV 1200 DC	MVV 1600 DC	MVV 2000 DC	MVV 1200 DC DUO	MVV 1600 DC DUO	MVV 2000 DC DUO
Cooling capacity	kW 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)
Heating capacity	kW 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)
Max. connected load (130%)	kW 15.6	20.2	26.0	2 x 15.6	2 x 20.2	2 x 26.0
Max. number of indoor units	7	8	10	2 x 7	2 x 8	2 x 10
Energy efficiency class for cooling ²⁾	A	A	B	A	A	B
Energy efficiency class for heating ²⁾	A	A	A	A	A	A
Annual cooling/heating energy consumption 500 h	kWh 1870/1820	2355/2480	3295/3090	2x 1870/1820	2x 2355/2480	2x 3295/3090
Operating range, cooling	°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 +48°C
Operating range, heating	°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
Refrigerant	R 410A	R 410A	R 410A	R 410A	R 410A	R 410A
Basic filling volume of refrigerant ³⁾	kg 3.3	3.9	4.8	2 x 3.3	2 x 3.9	2 x 4.8
Max. air flow rate ³⁾	m ³ /h 6000	6000	10800	6000	6000	10800
Max. sound power ³⁾	dB(A) 66	65	70	66	65	70
Sound pressure level ³⁾	dB(A) 58	57	59	58	57	59
Voltage supply ³⁾	V/Hz 400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50
Cooling/heating power consumption ³⁾	kW 3.74 / 3.64	4.71 / 4.96	6.59 / 6.18	3.74 / 3.64	4.71 / 4.96	6.59 / 6.18
Refrigerant line up to the main line of the distributor	3/8 / 9/8	3/8 / 3/4	3/8 / 3/4	3/8 / 5/8	3/8 / 3/4	3/8 / 3/4
Refrigerant line max. length, per indoor unit	m 60	60	60	60	60	60
Refrigerant line, max. height between indoor units	m 8	8	8	8	8	8
Maximum height difference between outdoor and bottom indoor units	m 30	30	30	30	30	30
Total max. refrigerant line ³⁾	m 200	200	200	200	200	200
Dimensions - height/width/depth ³⁾	mm 1295/900/315	1327/900/320	1560/1120/415	1295/900/315	1327/900/320	1560/1120/415
Weight ³⁾	kg 95	102	137	95	102	137
Outdoor components - cooling and heating	MVV 1200 DC	MVV 1600 DC	MVV 2000 DC	MVV 1200 DC DUO	MVV 1600 DC DUO	MVV 2000 DC DUO
Ref. no.	1623600	1623605	1623610	1623615	1623620	1623625

Accessories see page 12

¹⁾ At a distance of 1 m in open air ²⁾ In combination with MVW ³⁾ Specified per outdoor unit



Multifunctional air-conditioning system



Cooling and heating



Inverter technology



Integrated winter fan speed control

VRF CEILING CASSETTES

MVD 220-450 series *Cooling or heating*



REMKO MVD

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, this ceiling-mounted cassette unit operates particularly reliably and efficiently.

- Compact dimensions in European grid format
 - Low-noise appliance operation
 - Removable air filter
 - Air discharge with swing function
 - Programmable 24-hour timer function
 - With infrared remote control in standard design
 - Microprocessor-controlled device technology
 - Installed condensate pump
 - Including soldered fitting for connection to the distributor
 - 360° air outlet
- Accessories (see page 12)**
- Refrigerant lines
 - Cabled remote control KFB-2
 - MCC-1 multi-central controller
 - Distributor sets



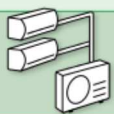


Technical data

Indoor units		MVD 220	MVD 280	MVD 360	MVD 450
Cooling capacity ²⁾	kW	2.2	2.8	3.6	4.5
Heating capacity ²⁾	kW	2.4	3.2	4.0	5.0
Usage area (room size) approx.	m ³	70	90	110	140
Operating range	°C	17-30	17-30	17-30	17-30
Air flow rate per speed setting	m ³ /h	315/415/525	315/415/525	410/520/610	410/520/610
Sound pressure level per speed setting ¹⁾	dB(A)	24/34/36	24/34/36	29/36/42	29/36/42
Voltage supply	V/Hz	230/1~/50Hz	230/1~/50Hz	230/1~/50Hz	230/1~/50Hz
Refrigerant connection for fluid line	Inch	1/4	1/4	1/4	1/4
Refrigerant connection, suction pipe	Inch	1/2	1/2	1/2	1/2
Condensate drain connection Ø	mm	25	25	25	25
Dimensions - height/width/depth	mm	265/575/575	265/575/575	265/575/575	265/575/575
Weight	kg	16	18	19	22
Indoor units - cooling and heating		MVD 220	MVD 280	MVD 360	MVD 450
Ref. no.		1623550	1623555	1623560	1623565

Accessories (see page 12)

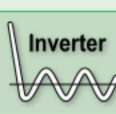
¹⁾ At a distance of 1 m in open air ²⁾ In combination with MVV



Multisplit
air-conditioning
system



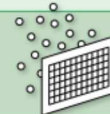
Cooling and
heating



Inverter
technology



Infrared
remote control



Integrated
filter system



Automatic restart after
power failure

VRF WALL-MOUNTED UNITS

MVW 220-560 series Cooling or heating



REMKO MVW

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 flat-screen design, the appliances can be easily integrated into any working and living situation. For the last optical finish, the three decorative covers are available in white, silver and anthracite.

- Easy wall installation
 - Programmable 24-hour timer function
 - With infrared remote control in standard design
 - Automatic adjustment of the air flow in cooling and heating mode
 - Microprocessor-controlled device technology
 - Including soldered fitting for connection to the distributor
- Accessories (see page 12)**
- Refrigerant lines
 - Installed condensate pump
 - Cabled remote control KFB-2
 - MCC-1 multi-central controller



MVW wall-mounted unit with decorative cover in white



MVW wall-mounted unit with decorative cover in silver



MVW wall-mounted unit with decorative cover in anthracite

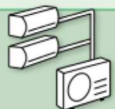


Technical data

Indoor units		MVW 220	MVW 280	MVW 360	MVW 450	MVW 560
Cooling capacity ²⁾	kW	2.2	2.8	3.6	4.5	5.6
Heating capacity ²⁾	kW	2.6	3.2	4.0	5.0	6.3
Usage area (room size) approx.	m ³	70	90	110	140	180
Operating range	°C	17-30	17-30	17-30	17-30	17-30
Air flow rate per speed setting	m ³ /h	430/480/520	430/480/520	430/480/520	630/755/860	755/860/925
Sound pressure level per speed setting ¹⁾	dB(A)	29/32/35	29/32/35	29/32/35	34/38/40	34/38/40
Voltage supply	V/Hz	230/1~/50Hz	230/1~/50Hz	230/1~/50Hz	230/1~/50Hz	230/1~/50Hz
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	290/915/210	290/915/210	290/915/210	315/1070/210	315/1070/210
Weight	kg	12	12	12	16	16
Indoor units - cooling and heating decorative cover in white		MVW 220	MVW 280	MVW 360	MVW 450	MVW 560
Ref. no.		1623500	1623505	1623510	1623515	1623520
decorative cover in silver						
Ref. no.		1623501	1623506	1623511	1623516	1623521
decorative cover in anthracite						
Ref. no.		1623502	1623507	1623512	1623517	1623522

Accessories (see page 12)

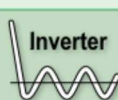
¹⁾ At a distance of 1 m in open air ²⁾ In combination with MVV



Multisplit air-conditioning system



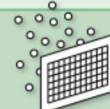
Cooling and heating



Inverter technology



Infrared remote control



Integrated filter system



Automatic restart after power failure

ACCESSORIES



Wall brackets

For model	Wall bracket	Ref. no.
MVV 1200-1600	WKM -560 Plus	1613154
MVV 1200-1600 DUO	2x WKM-560 Plus	1613295



Wall brackets

For model	Wall bracket	Ref. no.
MVV 2000	WKM-800 Plus	1613271
MVV 2000 DUO	2x WKM-800 Plus	1613274



Floor brackets

For model	Floor bracket	Ref. no.
MVV 1200-1600	BK-1000	1613174
MVV 1200-1600 DUO	2x BK-1000	1613294



Floor brackets

For model	Floor bracket	Ref. no.
MVV 2000	BK-1000 Plus	1613296
MVV 2000 DUO	2x BK-1000 Plus	1613297



Condensate drip tray including oil separator made of stainless steel for outdoor unit, including temperature-controlled condensate drainage heating, leaf guard grating and oil separator

For model series	Ref. no.
MVV 1200-1600, MVV 1200-1600 DUO	1613132



Condensate drip tray including oil separator made of stainless steel for outdoor unit, including oil separator

For model series	Ref. no.
MVV 2000, MVV 2000 DUO	260128



Refrigerant lines

For connecting the indoor unit to the outdoor unit.

	Refrigerant line	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



European flange adapter set

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

Unit type		Ref. no.
MVV 1200	Ø ⅜ - ⅝	1613101
MVV 1600	Ø ⅜ - ¾	1613102
MVV 2000	Ø ⅜ - ¾	1613102
MVV 1200 Duo	Ø 2x ⅜ - ⅝	1613103
MVV 1600 Duo	Ø 2x ⅜ - ¾	1613104
MVV 2000 Duo	Ø 2x ⅜ - ¾	1613104



Y-distributor set for fluid and suction line

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

For model	Ref. no.
REMKO VRF multifunctional air-conditioning system	1613095



Copper fittings, sleeves, individual For connecting the refrigerant lines and for the connection to the refrigerant distributor. (included in the scope of supply of the appliances and distributors)

	Refrigerant line	Ref. no.
Sleeves	Ø ¼	1613080
Sleeves	Ø ⅜	1613081
Sleeves	Ø ½	1613082
Sleeves	Ø ⅝	1613083
Sleeves	Ø ¾	1613084
Caps	Ø ⅜	1613091
Caps	Ø ½	1613092
Caps	Ø ⅝	1613093
Caps	Ø ¾	1613094



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)

	Refrigerant line	Ref. no.
Reduction sleeves	Ø ¾ - ⅝	1613085
Reduction sleeves	Ø ⅝ - ½	1613086
Reduction sleeves	Ø ⅝ - ⅜	1613087
Reduction sleeves	Ø ⅜ - ½	1613088
Reduction sleeves	Ø ⅜ - ¼	1613089
Reduction sleeves	Ø ¾ - ½	1613090



Quadruple distributor set for fluid and suction line for a maximum of four indoor units of the MVV/MVD series in a soldered design, incl. soldered fittings for connection to all outdoor and indoor units

For unit type	Ref. no.
REMKO VRF multifunctional air-conditioning system	1613096

ACCESSORIES



Condensate pumps

Condensate pump for air-conditioners for leading off condensate. With reservoir, alarm contact and connecting tubes in the standard version.

- Compact, high-performance condensate pump, pump delivery: max. 10 l/h, pump head: max. 10 m
- Protection class IP 54
- Very low noise level, less than 22 dB(A)

For model series:	Condensate pump	Ref. no.
MVW	KP-8	1613125

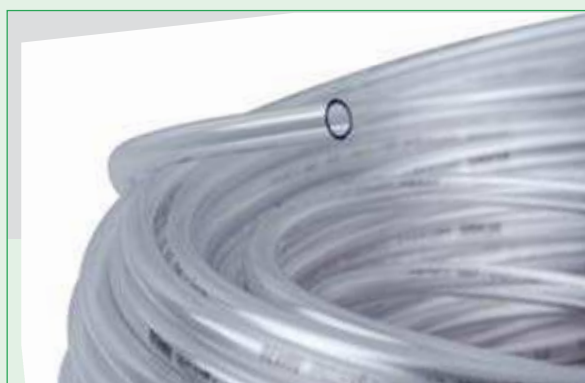


Kondensate pump KP-6 including cable duct for surface mounting

The kit is only intended for vertical installation and removal of condensate through the ceiling in conjunction with wall-mounted units. The cable duct is 80 cm long.

- Compact, high-performance condensate pump, pump delivery: max. 10 l/h, pump head: max. 10 m
- Protection class IP 54
- Very low noise level, less than 22 dB(A)
- Colour of cable duct: white
- Right or left side connection options available
- Kit is ready to mount, including cable duct, cover angle and vibration-damped pump bracket

For model series:	Condensate pump	Ref. no.
MVW	KP-6	1613050



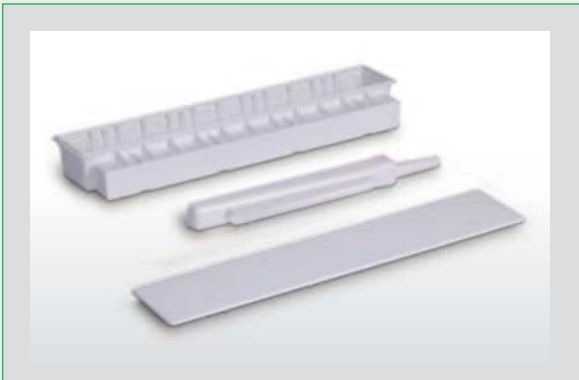
Condensate tube, loose, 6 mm Ø
Suited for connection to condensate pump KP-8 and KP-6. Max. length 20 m with a 10 m height difference

Length	Ref. no.
100 m	1613065
20 m	1613066
Running metre	1613067



Condensate tube, loose, 22 mm Ø

For model series	Length	Ref. no.
MVD	50 m	1613068
MVD	Running metre	1613069



Flush-mounted box
including condensate pan with condensate connection

- White plastic housing for flush mounting, including cover plate and condensate connection port
- Also ideally suited for the inclusion of an external condensate pump, such as the REMKO KP-8
- The condensate connection and pipe inlet can come from the left or the right side
- Dimensions:

Length	Indoor/outdoor 500/540 mm
Height	Indoor/outdoor 70/135 mm
Depth	Indoor/outdoor 45/55 mm

For model series:	Flush-mounted box	Ref. no.
MVW		1613051



Condensate hose, 16 mm Ø
Suited for 16 mm and 18 mm connection port. Ivory coloured

For model series	Length	Ref. no.
MVW	50 m	1613052
MVW	Running metre	1613053



Cleaning agent for room air-conditioners
Ready-for-use cleaning agent suitable for all REMKO room air-conditioners. For cleaning and disinfecting the evaporator in indoor units.

	Ref. no.
750 ml spray bottle	1613054

...and somewhere near you!

Take advantage of our experience and consulting services



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