



Air cooler for refrigerated cabinets and small commercial applications

# VM/VVD EC plus

HFC | CO<sub>2</sub> | A2L | A3



AIR COOLERS, AIR CONDITIONERS AND HEAT EXCHANGERS OF THE HIGHEST QUALITY

#### **OUR PRODUCTS**



High-performance air cooler for cooling and deep-freezing

requirements in commercial and industrial refrigeration



Customized heat exchangers for your system-specific requirements



Fan coils for tailored and demanding air conditioning solutions in building engineering

Customized solutions...

Quality Made in Germany

#### **LOCATIONS**

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#### **ABOUT ROLLER**

We develop and produce at the locations in Gerlingen our innovative air coolers. We can develop solutions for individual applications with you.

Either as standard or customized as a system solution.

Walter Roller offers with its broad product range of heat exchangers and air coolers for a wide performance range and every application in refrigeration technology the optimal solution.

...for your refrigeration requirements

Your partner for more than 75 years

#### **COMPANY DEVELOPMENT**

Plant III goes into operation

2021 Optimized fin system for CO<sub>2</sub> deep-freeze applications

2020 Expansion of production capacity at Plant II

Own foothold in Asia 2015

New warehouse and logistics

centre opened

Upgrade to EC ventilator technology

Increased performance due to inner finned tubes

CO<sub>2</sub> evaporator for

Supermarket refrigeration

Development of air conditioning units

Manufacture of the first high-

performance evaporator

Walter Roller founds the company

#### **OUR MARKETS**



HVAC





Logistics





Process



Energy



Marine



Offshore

Heat recovery

Refrigeration

# VM

# DUAL CHARGE REFRIGERATED CABINET AIR COOLER FOR CENTRAL MOUNTING

In commercial refrigerators, refrigerated cabinets and counters, every mm<sup>3</sup> available space matters. The compact air coolers VW and VM can be placed perfectly between the door openings of refrigerated cabinets due to their extremely narrow dimensions.

The EC fans used as standard make operation particularly efficient.

The standard dip coating of the evaporator block is ideal as corrosion protection for mixed storage of open foods such as salad, marinades,...

# VM3 (Dual charge)





#### **Application area**

- Air cooler for use in commercial refrigeration cabinets
- Cooling capacity from 0.35 to 0.54 kW
- Homogeneous cold air distribution in the cabinet due to dual-direction air flow
- Suitable for normal and deep-freeze operation down to 0 °C

#### Heat exchanger

- Compact pipe system with low pipe volume, also for use with CO<sub>2</sub> up to PS 80 bar
- Corrosion protection as standard
- Retrofittable block defrosting with MS heating rods

#### Fans

- High efficient EC fans as standard
- Axial fans for effective cold distribution in the cabinet
- Operating temperature down to -20 °C

#### Easy assembly

- Easy mounting in the post of commercial cabinets
- Good accessibility due to removable fan panel
- Powder-coated aluminum drip tray (optional)
- Fans wired on junction box



4

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#### WALL MOUNTED CABINET AIR COOLER

In gastronomy, the catering industry, the requirements for air coolers are as varied as the food and beverage offered. In large kitchens, restaurants, bars and cake shops, drinks, ice cream, marinades, meals and their ingredients must be hygienically chilled.

Because the doors are frequently opened, the cooling equipment is subject to significant temperature fluctuations. This means that high-performance cooling is required. Furniture air cooler from Roller guarantee reliable, efficient cooling of food, even under extremely difficult conditions.



#### **Application area**

- Air coolers for use in commercial cabinets
- Cooling capacity from 0.35 to 0.54 kW
- Particularly narrow design (only 88 mm) with airflow on one side
- Normal cooling operation suitable up to 0 °C

#### Fans

- High-performance, energy-saving
   EC fans as standard
- Axial fans for effective cold distribution in the refrigerated cabinet
- Operating temperature down to -20 °C

#### Heat exchanger

- Heat exchanger completely coated for maximum corrosion protection even with acidic products
- Retrofittable block defrosting with MS heating rods

#### Casing

- Corrosion resistant aluminum casing
- Edge-enclosing, scratch-resistant powder coating

#### **Installation & Maintenance**

- Low depth (88 mm) with single-sided airflow
- Good accessibility due to removable fan panel
- Drip tray made of powder-coated aluminum (optional)
- Fans wired on junction box







Due to its flat and robust design, the VD is suitable for all cooling spots that are subject to special requirements. With an even air distribution, it ensures a stable cabinet temperature and withstands the highest hygiene requirements due to its corrosion resistance.

CABINET AIR COOLER FOR CEILING MOUNTING





#### **Application area**

- Air coolers for use in commercial cabinets
- Cooling capacity from 0.35 to 0.54 kW
- Particularly flat design (only 90 mm) for maximum use of room height
- Normal cooling operation suitable up to 0 °C

#### **Energy efficiency**

- Powerful EC fans for maximum efficiency
- Axial fans for effective cold distribution in the refrigerated cabinet
- Highest heat transfer with compact dimensions
- Operating temperature down to -20 °C

#### Heat exchanger

- Compact pipe system with low pipe volume, also for use with CO<sub>2</sub> up to PS 80 bar
- Air intake from below via the fan with horizontal discharge
- Retrofittable block defrosting with MS heating rods

#### **Corrosion protection**

- Corrosion-resistant aluminum housing with impact and scratchresistant powder coating
- Heat exchanger completely coated for maximum corrosion protection even with acidic products

#### Easy assembly

- Hygienically optimized condensate drainage
- Removable drip trays
- The drip tray can be turned 180°

# Features at a glance



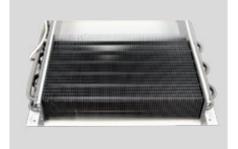
#### HIGH PERFORMANCE EC FAN

For efficient operation. The fan is installed plane to the housing.



## TERMINAL BOX FOR INDIVIDUAL ELECTRICAL CONNECTION

Fans pre-wired on terminal box with increased IP protection (fan with IP65).



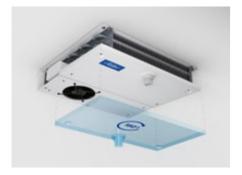
#### MAXIMUM CORROSION PROTECTION

Even when acidic foods are being chilled, thanks to fully coated heat exchanger.



#### **REMOVABLE FAN PANEL**

Allows easy accessibility for maintenance and cleaning.



#### FLEXIBLE INSTALLATION OF THE DRIP PAN

The drip tray can be turned 180° (VD) and offers more installation flexibility in the refrigerated cabinet.



#### MORE STORAGE SPACE

Extremely narrow casing depth of only 90 mm in all capacity sizes.



#### USE WITH CO<sub>2</sub>

Compact pipe system with low pipe volume for use with CO<sub>2</sub> up to PS 80 bar.

Operating pressure for HFC and A2L/A3 version: 25 bar



#### STAINLESS STEEL DESIGN

Stainless steel housing with brushed surface for increased corrosion protection (option).



#### **MS HEATING RODS**

For coil defrosting to be retrofitted.

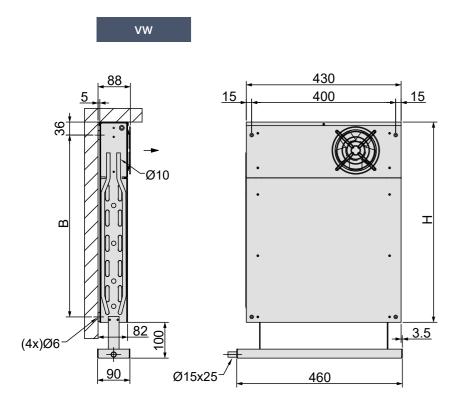


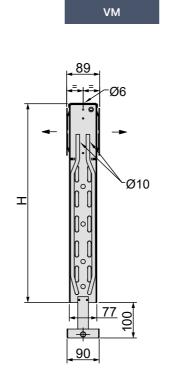
#### **ADDITIONAL DRIP PAN**

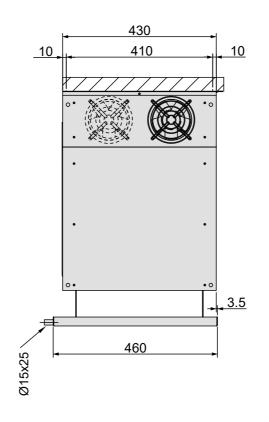
With drain nozzles for draining condensation in a targeted manner (VW and VM).

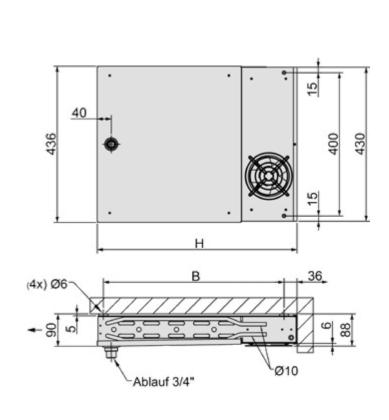
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# Capacities, Dimensions & Weights









Model	Capacity Q <sub>0</sub>	Capacity Q <sub>o</sub> R744	Capacity Q		Energy efficiency class R744	Energy efficiency class R404A	Surface	Air flow	Tube volu	ımes		per fan (Operating values at 230V, 50/60Hz)					Sound pressure	Dimensions		Weights		
	t <sub>o</sub> = -5 °C DT1 = 9 K	t <sub>o</sub> = -5 °C DT1 = 9 K	t <sub>o</sub> = -5 °C DT1 = 9 K Taupunkt	t <sub>o</sub> = -5 °C DT1 = 9 K Mittelpunkt					HFC	соі	N	No.	Fan	Voltage	Power input	Fan type	Air throw	level*	Height H	Width B	HFC	соі
VW/VM/VD	kW	kW	kW	kW	kW	kW	m²	m³/h	dm³	dm³	S	itk.	Ø mm	V, Hz	w		m	dB(A)	mm	mm	kg	kg
1-3	Fin spacing:	4,4 mm																				
VW 1 EC	0.262	0.361	0.368	0.290	А	А	2.42	145	0.37	0.32		1	120	230V, 50/60 Hz	4.4	EC	1	40	381	330	3.4	4
VW 2 EC	0.309	0.445	0.439	0.345	В	С	2.42	200	0.37	0.32		2	120	230V, 50/60 Hz	4.4	EC	1	43	381	330	4.1	5
VW 3 EC	0.438	0.583	0.624	0.491	А	В	4.1	180	0.66	0.56		2	120	230V, 50/60 Hz	4.4	EC	1	43	556	505	5.6	7
VM 2 EC	0.309	0.445	0.439	0.345	В	С	2.2	200	0.37	0.32		2	120	230V, 50/60 Hz	4.4	EC	1	42	381	-	4.1	5
VM 3 EC	0.438	0.583	0.624	0.491	А	В	4.1	180	0.66	0.56		2	120	230V, 50/60 Hz	4.4	EC	1	42	556	-	5.6	7
VD 1 EC	0.264	0.364	0.372	0.292	А	А	2.2	150	0.37	0.37		1	120	230V, 50/60 Hz	4.4	EC	1	37	383	330	3.4	4
VD 2 EC	0.311	0.446	0.441	0.347	В	С	2.2	205	0.37	0.37		2	120	230V, 50/60 Hz	4.4	EC	1	40	383	330	4.1	5
VD 3 EC	0.448	0.596	0.639	0.503	А	В	4.1	190	0.66	0.66		2	120	230V, 50/60 Hz	4.4	EC	1	40	558	505	5.6	7

 $The \ data in the \ above \ table \ are \ based \ on \ measurements \ with \ refrigerant \ R404A \ and \ operation \ of \ the \ fans \ at \ 50/60 \ Hz.$ 

<sup>\*</sup> Average sound pressure level at 3 m distance

<sup>\*\*</sup> No MS heating rods available as accessories!

# More Service. More Performance. More Partnership.



# ... IS NOT ONLY A PROMISE OF QUALITY FOR US

- Use of the highest quality materials from primarily German brand manufacturers
- Robust products with maximum energy efficiency and durability
- Fast processing times for shortest delivery times
- · Quality manufacturer with unusual flexibility
- Reliable spare parts supply at short notice
- 75 years of strong relationships with our customers



#### SHORT LEAD TIME GUARANTEED!

- The Roller Logistics Center stocks constantly air coolers for you!
- 2000 units in stock for you
- 3-5 days lead time on stock units
- 24 / 7 online stock information
- Well sorted spare parts store



- Precise design for your application
- 5+ languages to select from
- Large range of F-gas compliant refrigerants as well as refrigerant media
- Input of manual fluid data for calculation with own coolants possible
- Selection of different designs, materials, options and types of corrosion protection
- Price and delivery time for calculated air coolers
- Complete documentation for the selected unit
- · Quick calculation with just a few clicks
- Multiple filter function
- Optimised also for mobile devices, incl. optional app installation directly from the browser
- · Clear and intuitive user interface



Roller EasySelect can be found at:

www.WalterRoller.de/en

14 1



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