

Air cooler for refrigerated cabinets and small commercial applications

# VM/VV/VD 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

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

requirements

## Customized solutions...

## Quality Made in Germany



**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

#### **OUR MARKETS**







Logistics









Marine





HVAC

Refrigeration

Process

Energy

Offshore

Heat recovery

#### LOCATIONS

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#### **COMPANY DEVELOPMENT**

2022 –	Plant III goes into operation
2021 –	Optimized fin system for CO2 deep-freeze applications
2020 –	Expansion of production capacity at Plant II
2015 -	Own foothold in Asia
2008 –	New warehouse and logistics centre opened
2006 –	Upgrade to EC ventilator technology
1998 —	Increased performance due to inner finned tubes
1996 —	CO <sub>2</sub> evaporator for Supermarket refrigeration
1968 —	Development of air conditioning units
1958 —	Manufacture of the first high- performance evaporator
1946 —	Walter Roller founds the company

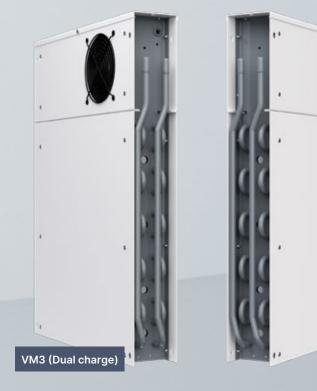
### VM

### 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,...

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#### **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

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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

#### 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



#### 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

#### 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



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## VD

### CABINET AIR COOLER FOR CEILING MOUNTING

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.



#### **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

#### 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

#### Easy assembly

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



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

#### **Corrosion protection**

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

### 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).



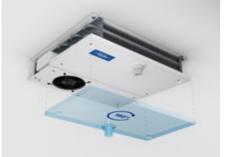
#### MAXIMUM CORROSION PROTECTION

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



#### **REMOVABLE FAN PANEL**

Allows easy accessibility for maintenance and cleaning.



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#### 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



### **USE WITH CO2**

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



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

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

#### **STAINLESS STEEL DESIGN**

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

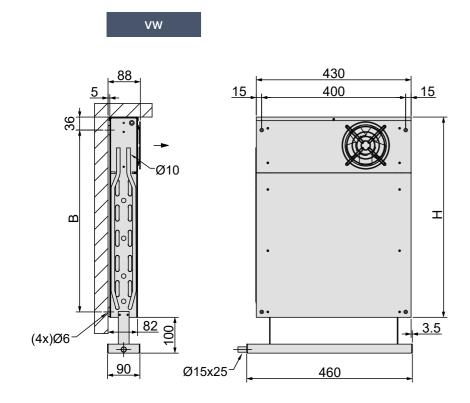
#### **MS HEATING RODS**

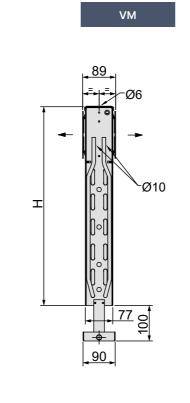
For coil defrosting to be retrofitted.

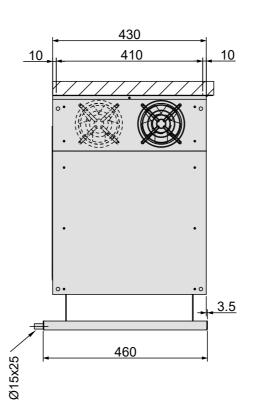
#### ADDITIONAL DRIP PAN

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

## Capacities, Dimensions & Weights



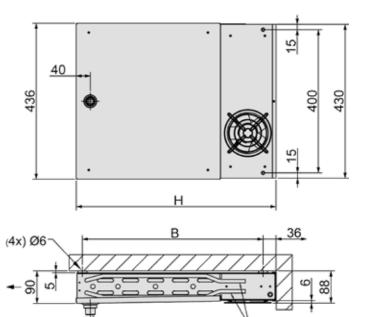




		Capacity Q <sub>0</sub> Capacity Q <sub>0</sub> R744 R454C**		)	Energy efficiency class	Energy efficiency class	Surface	Air flow	Tube volumes			per fan (Operating values at 230V, 50/60Hz)						Sound pressure	Dimensions		Weights	
		t <sub>o</sub> = -5 °C DT1 = 9 K kW	t <sub>o</sub> = -5 °C DT1 = 9 K Taupunkt kW	t <sub>o</sub> = -5 °C DT1 = 9 K Mittelpunkt kW	R744 kW	R404A kW	m²	m³/h	HFC	СОІ		No. Stk.	Fan Ø mm	Voltage V, Hz	Power input W	Fan type	Air throw m	dB(A)	Height H	Width B	HFC kg	COI kg
									dm³	dm³												
1-3	Fin spacing:	4,4 mm																				
VW1EC	0,265	0,341	0,275	0,353	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	0,313	0,415	0,329	0,422	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	0,443	0,558	0,467	0,598	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	0,313	0,415	0,329	0,422	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	0,443	0,558	0,467	0,598	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	0,268	0,344	0,278	0,356	А	A	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	0,315	0,417	0,330	0,424	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	0,453	0,570	0,478	0,613	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.

VD



Ablauf 3/4"

\* Average sound pressure level at 3 m distance \*\* No MS heating rods available as accessories!

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## 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





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