

# MR | MRE

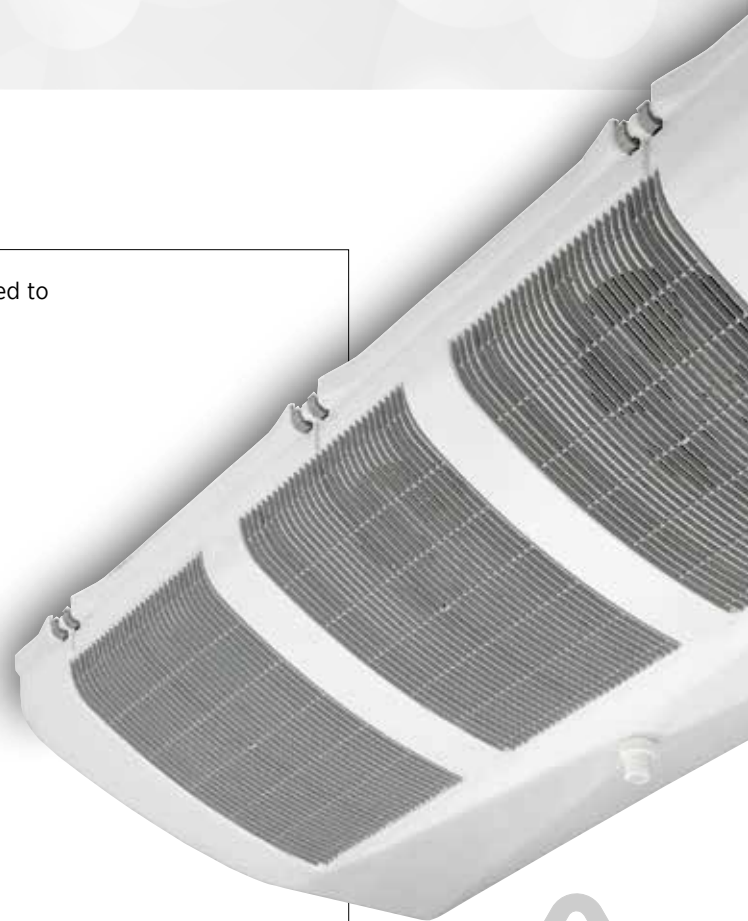
Ceiling unit cooler  
Commercial range



- # **Compact and streamlined design** for perfect integration in small spaces and optimization of the storage area.
- # **Easy installation and maintenance** with easy access to all components.
- # **Harmonious integration** into the environment thanks to the aesthetic design.
- # **Robust unit** with polyester coil protection.

## VENTILATION

- # Motor fan 50-60 Hz, Ø 200 mm, protected by a closed casing, connected to terminal box (except MR 75/65).



## CASING

Recyclable ABS casing, guaranteeing:

- # High resistance to thermal and mechanical shocks.
- # Perfect hygiene as a result of the rounded corners that eliminate retention zones.
- # No sharp edges for increased safety.

### OPTIONS

#### DMP

Expansion valve fitted

#### EEC

Unit cooler completely assembled in the factory with:

- Expansion valve
- Solenoid valve
- Pipework equipped with a ball valve (role of the siphon performed by the manifold).

Save time during installation by choosing these additional options.

## DEFROST

- # Electric heater in a notch under the coil, helping to dissipate heat evenly.
- # Recovery of condensate through an intermediate drain pan before evacuation to the large condensate connection (Ø 1" G).

### OPTIONS

**THD**  
(MRE)

For cold rooms at negative temperatures, single pole reversing thermostat for defrost end at +12 °C (±3 K) and delayed ventilation restart at +2 °C (±3 K).  
Supplied with a probe and a fixing bracket.

**EIU**

Light electric defrost.

**E1K**

Light electric defrost.

**KIT TO INSTALL**

|     |              |            |    |     |               |
|-----|--------------|------------|----|-----|---------------|
|     | +10          | +2         | -5 | -10 | -25°C         |
| ta1 | MR ... R / L | +E1K   EIU |    |     | MRE ... E / C |

Select your coil treatment to extend your unit cooler's lifespan!  
Contact us.

## COILS

- # Aluminium fins with 4.23 or 6.35 mm spacing and sinusoidal profile.
- # Combined with copper tubes with a grooved internal structure, the coils are very efficient and compact.
- # Completely covered with polyester protection as standard.
- # Versions available:
  - Multi-refrigerant HFCs/A2L,
  - CO2 (60 or 80 bar).
  - WCO (glycol water, coolant).

# MR<sub>(A)</sub> 75<sub>(B)</sub> R<sub>(C)</sub>

- (A) MR = positive temperature without defrost  
MRE = negative temperature with defrost
- (B) Model
- (C) Fin spacing: R = 4.23 mm (positive) E = 4.23 mm (negative)  
L = 6.35 mm (positive) C = 6.35 mm (negative)

The MR | MRE is available with CO<sub>2</sub>, A2Ls, HFCs and glycol water. For more information, please consult our software.

## MR | MRE

 4.23 mm

| CONDITIONS          | REFRIGERANTS                 | MR ... R |
|---------------------|------------------------------|----------|
| SC2 (1)             | CO <sub>2</sub> - 60 bar (2) | W        |
|                     | R449A                        | W        |
| Connections<br>HFCs | Inlet (3)                    | Ø ODF    |
|                     | Outlet (3)                   | Ø ODF    |

| 75           | 110          | 135          | 160          | 180          | 210          | 270          |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 600          | 930          | 1240         | 1440         | 1740         | 1970         | 2630         |
| 700          | 1060         | 1340         | 1600         | 1920         | 2170         | 2760         |
| 1/2"<br>12mm | 1/2"<br>12mm | 1/2"<br>12mm | D 1/2" *     | D 1/2" *     | D 1/2" *     | D 1/2" *     |
| 3/8"<br>10mm | 3/8"<br>10mm | 3/8"<br>10mm | 1/2"<br>12mm | 1/2"<br>12mm | 1/2"<br>12mm | 1/2"<br>12mm |

| CONDITIONS          | REFRIGERANTS                 | MRE ... E |
|---------------------|------------------------------|-----------|
| SC3 (1)             | CO <sub>2</sub> - 60 bar (2) | W         |
|                     | R449A                        | W         |
| SC4 (1)             | CO <sub>2</sub> - 60 bar (2) | W         |
|                     | R449A                        | W         |
| Connections<br>HFCs | Inlet (3)                    | Ø ODF     |
|                     | Outlet (3)                   | Ø ODF     |

| 75           | 110          | 135          | 160          | 180          | 210          | 270          |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 510          | 800          | 1060         | 1210         | 1470         | 1650         | 2190         |
| 520          | 770          | 1050         | 1190         | 1420         | 1660         | 2230         |
| 410          | 640          | 860          | 990          | 1200         | 1350         | 1790         |
| 410          | 580          | 830          | 940          | 1120         | 1310         | 1780         |
| 1/2"<br>12mm | 1/2"<br>12mm | D 1/2" *     | D 1/2" *     | D 1/2" *     | D 1/2" *     | D 1/2" *     |
| 3/8"<br>10mm | 3/8"<br>10mm | 1/2"<br>12mm | 1/2"<br>12mm | 1/2"<br>12mm | 5/8"<br>16mm | 3/4"<br>18mm |

|   |               |                   |
|---|---------------|-------------------|
| Surface area  |               | m <sup>2</sup>    |
| Circuit volume                                      |               | dm <sup>3</sup>   |
| Airflow   |               | m <sup>3</sup> /h |
| Fan 230V/1/50-60Hz<br>1,500 rpm                     | Air throw (4) | m                 |
|   | Ø 200 mm      | Nb                |
|   |               | W max             |
|   | 230 V/1/50 Hz | A max (5)         |
| Electric defr.<br>MR > option EIK<br>MRE > standard |               | Nb                |
|   | 230 V/1/50 Hz | W                 |
|   |               | A                 |
| Net weight  |               | kg                |

| 75   | 110  | 135  | 160  | 180  | 210  | 270  |
|------|------|------|------|------|------|------|
| 3,4  | 3,7  | 6,1  | 6,0  | 8,0  | 10,1 | 13,4 |
| 0,6  | 0,6  | 1,0  | 1,0  | 1,4  | 1,7  | 2,3  |
| 290  | 650  | 580  | 880  | 880  | 870  | 1160 |
| 3,0  | 3,7  | 3,5  | 4,1  | 4,1  | 4,0  | 4,5  |
| 1    | 2    | 2    | 3    | 3    | 3    | 4    |
| 38   | 76   | 76   | 114  | 114  | 114  | 152  |
| 0,24 | 0,48 | 0,48 | 0,72 | 0,72 | 0,72 | 0,96 |
| 1    | 1    | 1    | 1    | 1    | 1    | 1    |
| 400  | 440  | 730  | 960  | 960  | 1200 | 1600 |
| 1,8  | 2,0  | 3,3  | 4,4  | 4,4  | 5,5  | 7,3  |
| 3    | 8    | 10   | 15   | 15   | 15   | 20   |

- (1) Standard conditions:  
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K  
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K  
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
- (2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
- (3) ODF: female to receive the tube of the same diameter.
- (4) Residual air speed: 0.25 m/s.
- (5) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.

\* Distributor: Ø 1/2" male to solder. Connecting piece supplied for solder expansion valve Ø 12 mm.



# MRE<sup>(A)</sup> 65<sup>(B)</sup> C<sup>(C)</sup>

- (A) **MR** = positive temperature without defrost  
**MRE** = negative temperature with defrost  
 (B) Model  
 (C) Fin spacing: **R** = 4.23 mm (positive) **E** = 4.23 mm (negative)  
**L** = 6.35 mm (positive) **C** = 6.35 mm (negative)

The MR | MRE is available with CO<sub>2</sub>, A2Ls, HFCs and glycol water. For more information, please consult our software.

## MR | MRE

6.35 mm

| CONDITIONS          | REFRIGERANTS                 | MR ... L |
|---------------------|------------------------------|----------|
| SC2 (1)             | CO <sub>2</sub> - 60 bar (2) | W        |
|                     | CO <sub>2</sub> - 80 bar     | W        |
|                     | R449A                        | W        |
| Connections<br>HFCs | Inlet (3)                    | Ø ODF    |
|                     | Outlet (3)                   | Ø ODF    |

|  | 65           | 100          | 120          | 140          | 170          | 190          | 250          |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  | 540          | 780          | 1130         | 1290         | 1560         | 1780         | 2390         |
|  | 470          | 680          | 1010         | -            | 1430         | 1640         | 2220         |
|  | 620          | 880          | 1230         | 1380         | 1690         | 1940         | 2550         |
|  | 1/2"<br>12mm | 1/2"<br>12mm | 1/2"<br>12mm | D 1/2" *     | D 1/2" *     | D 1/2" *     | D 1/2" *     |
|  | 3/8"<br>10mm | 3/8"<br>10mm | 3/8"<br>10mm | 1/2"<br>12mm | 1/2"<br>12mm | 1/2"<br>12mm | 1/2"<br>12mm |

| CONDITIONS          | REFRIGERANTS                 | MRE ... C |
|---------------------|------------------------------|-----------|
| SC3 (1)             | CO <sub>2</sub> - 60 bar (2) | W         |
|                     | CO <sub>2</sub> - 80 bar     | W         |
|                     | R449A                        | W         |
| SC4 (1)             | CO <sub>2</sub> - 60 bar (2) | W         |
|                     | CO <sub>2</sub> - 80 bar     | W         |
|                     | R449A                        | W         |
| Connections<br>HFCs | Inlet (3)                    | Ø ODF     |
|                     | Outlet (3)                   | Ø ODF     |

|  | 65           | 100          | 120          | 140          | 170          | 190          | 250          |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  | 460          | 670          | 960          | 1090         | 1320         | 1500         | 2000         |
|  | 410          | 590          | 870          | -            | 1210         | 1390         | 1850         |
|  | 450          | 610          | 900          | 1040         | 1260         | 1460         | 1950         |
|  | 370          | 540          | 780          | 890          | 1080         | 1230         | 1640         |
|  | 320          | 450          | 690          | -            | 970          | 1120         | 1480         |
|  | 350          | 490          | 720          | 820          | 1000         | 1170         | 1590         |
|  | 1/2"<br>12mm | 1/2"<br>12mm | D 1/2" *     | D 1/2" *     | D 1/2" *     | D 1/2" *     | D 1/2" *     |
|  | 3/8"<br>10mm | 3/8"<br>10mm | 1/2"<br>12mm | 1/2"<br>12mm | 1/2"<br>12mm | 5/8"<br>16mm | 3/4"<br>18mm |

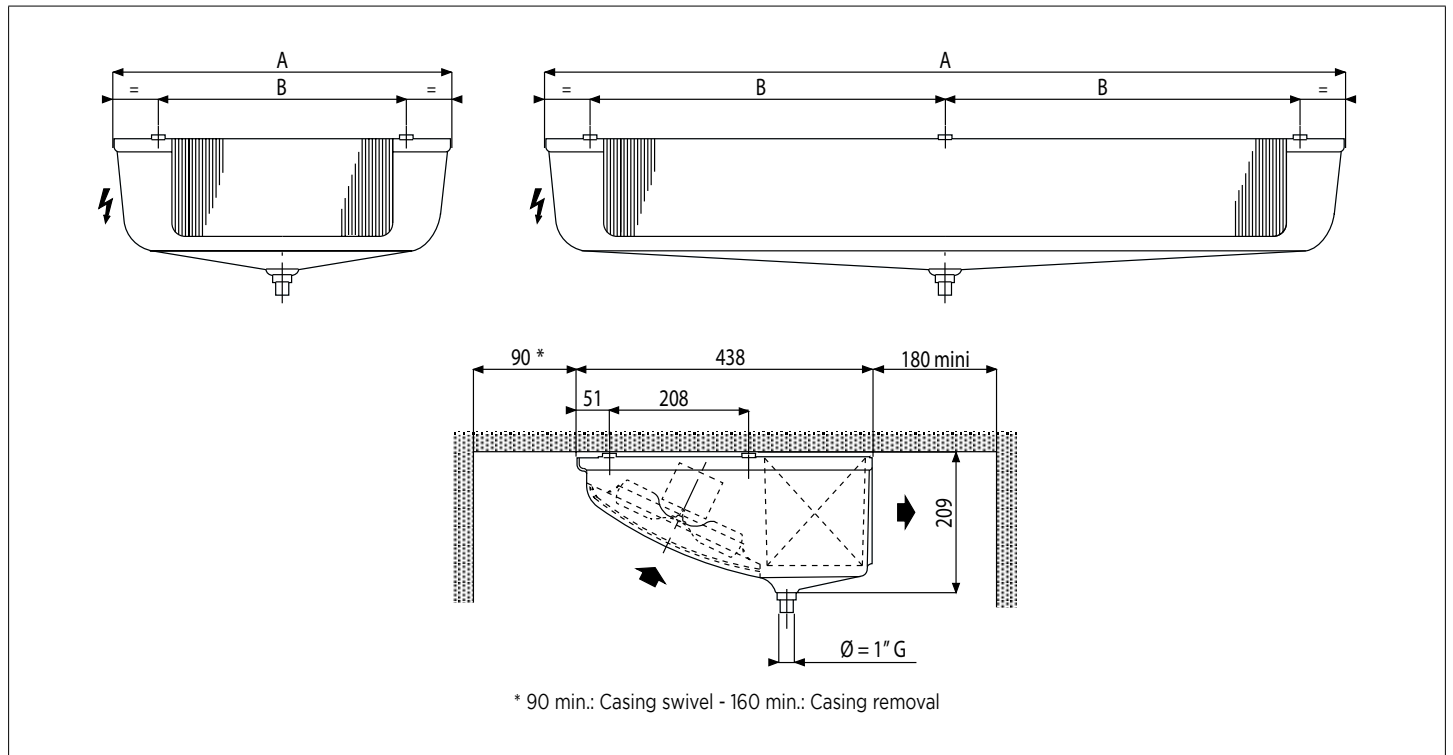
|                                   |               |                   |
|-----------------------------------|---------------|-------------------|
| Surface area                      |               | m <sup>2</sup>    |
| Circuit volume                    |               | dm <sup>3</sup>   |
| Airflow                           |               | m <sup>3</sup> /h |
| Fan 230 V/1/50-60 Hz<br>1,500 rpm | Air throw (4) | m                 |
|                                   | Ø 200 mm      | Nb                |
|                                   | 230 V/1/50 Hz | W max             |
|                                   |               | A max (5)         |
| Electric defr.                    |               | Nb                |
| MR > option EIK                   | 230 V/1/50 Hz | W                 |
| MRE > standard                    |               | A                 |
| Net weight (6)                    |               | kg                |

|  | 65   | 100  | 120  | 140  | 170  | 190  | 250  |
|--|------|------|------|------|------|------|------|
|  | 2,3  | 2,5  | 4,2  | 4,2  | 5,6  | 7,0  | 9,3  |
|  | 0,6  | 0,6  | 1,0  | 1,0  | 1,4  | 1,7  | 2,3  |
|  | 310  | 660  | 620  | 960  | 960  | 930  | 1240 |
|  | 3,0  | 3,7  | 3,5  | 4,1  | 4,1  | 4,0  | 4,5  |
|  | 1    | 2    | 2    | 3    | 3    | 3    | 4    |
|  | 38   | 76   | 76   | 114  | 114  | 114  | 152  |
|  | 0,24 | 0,48 | 0,48 | 0,72 | 0,72 | 0,72 | 0,96 |
|  | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|  | 400  | 440  | 730  | 960  | 960  | 1200 | 1600 |
|  | 1,8  | 2,0  | 3,3  | 4,4  | 4,4  | 5,5  | 7,3  |
|  | 3    | 8    | 10   | 15   | 15   | 15   | 20   |

- (1) Standard conditions:  
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 SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K  
 SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K  
 (2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.  
 (3) ODF: female to receive the tube of the same diameter.  
 (4) Residual air speed: 0.25 m/s.  
 (5) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.  
 (6) Standard net weight - Specific net weight for CO2 80 bar: contact us.

\* Distributor: Ø 1/2" male to solder. Connecting piece supplied for solder expansion valve Ø 12 mm.





MR

MR ... R

4.23 mm

|   |    | 75  | 110 | 135 | 160  | 180  | 210  | 270  |
|---|----|-----|-----|-----|------|------|------|------|
| A | mm | 514 | 784 | 784 | 1174 | 1174 | 1174 | 1504 |
| B | mm | 326 | 596 | 596 | 493  | 493  | 493  | 658  |

MR ... L

6.35 mm

|   |    | 65  | 100 | 120 | 140  | 170  | 190  | 250  |
|---|----|-----|-----|-----|------|------|------|------|
| A | mm | 514 | 784 | 784 | 1174 | 1174 | 1174 | 1504 |
| B | mm | 326 | 596 | 596 | 493  | 493  | 493  | 658  |

MRE

MRE ... E

4.23 mm

|   |    | 75  | 110 | 135 | 160  | 180  | 210  | 270  |
|---|----|-----|-----|-----|------|------|------|------|
| A | mm | 514 | 784 | 784 | 1174 | 1174 | 1174 | 1504 |
| B | mm | 326 | 596 | 596 | 493  | 493  | 493  | 658  |

MRE ... C

6.35 mm

|   |    | 65  | 100 | 120 | 140  | 170  | 190  | 250  |
|---|----|-----|-----|-----|------|------|------|------|
| A | mm | 514 | 784 | 784 | 1174 | 1174 | 1174 | 1504 |
| B | mm | 326 | 596 | 596 | 493  | 493  | 493  | 658  |