

# ARCTIC AE

REFRIGERATION UNITS



## ARCTIC AE

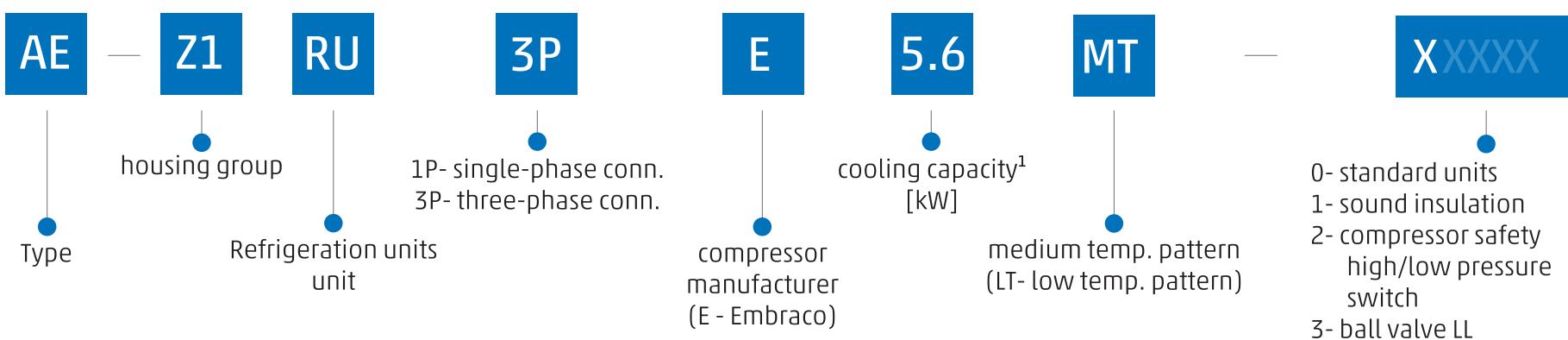
commercial refrigeration units

Arctic AE refrigeration units are the ideal solution for use in commercial refrigeration, large-scale system. The compact design ensures easier handling and installation in small spaces. Installation is applicable in all climate conditions thanks to its corrosion resistant design. The standard equipment includes elements that improve the operation of the refrigeration unit and enable greater energy efficiency. Easier on-site preparation thanks to floor stands or wall mounting brackets.

# ► NOMENCLATURE AND OPTIONS

**ARCTIC AE**

## ► NOMENCLATURE:



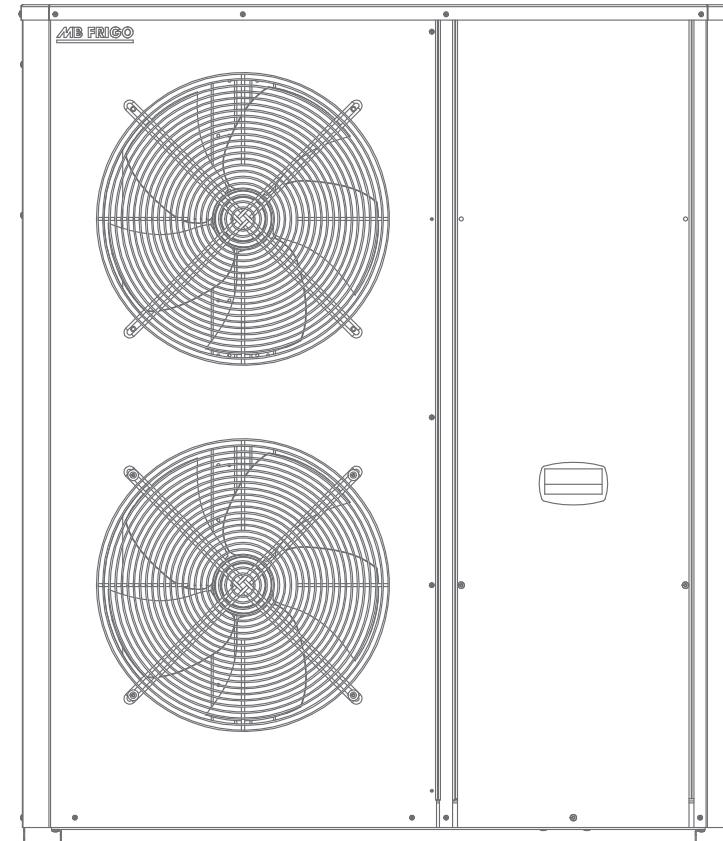
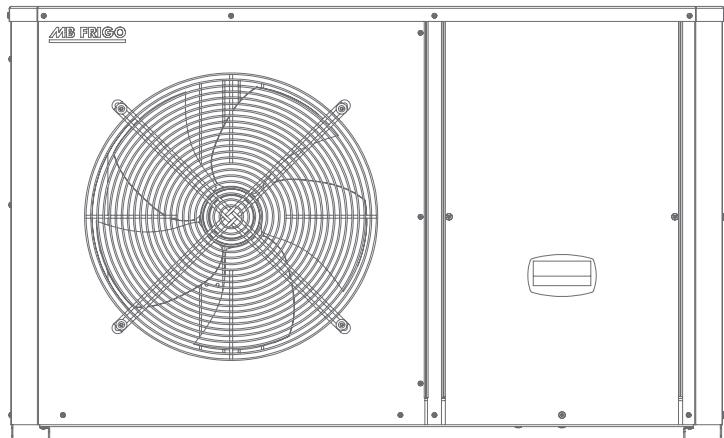
## ► TABLE WITH OPTIONS

BASIC EQUIPMENT	EQUIPMENT	NOTE
	<ul style="list-style-type: none"> <li>hermetic scroll compressor</li> <li>protective housing for outdoor installation</li> <li>crankcase heater</li> <li>vibration dampeners</li> <li>electrical cabinet</li> <li>air cooled condenser with EC fan</li> <li>liquid receiver</li> <li>safety valve</li> <li>fixed high/low pressure switch</li> <li>fan speed controller</li> <li>DTC valve for cooling the compressor head (only in LT version)</li> </ul>	<ul style="list-style-type: none"> <li>when choosing a refrigeration unit, in addition to its name please also specify the number of the option</li> <li>e.g. unit AE - Z1RU3PT5.6MT - 0; standard unit</li> <li>e.g. unit AE - Z1RU3PT5.6MT - 12; with sound insulation and adjustable protective pressure switch of the HP/LP compressor</li> </ul>
OPTION	EQUIPMENT	NOTE
OPTION 1	<ul style="list-style-type: none"> <li>sound insulation</li> </ul>	<ul style="list-style-type: none"> <li>Side walls of the "engine room" are insulated</li> </ul>
OPTION 2	<ul style="list-style-type: none"> <li>compressor safety high/low pressure switch</li> </ul>	<ul style="list-style-type: none"> <li>With option 2, the fixed pressure switch from the standard unit is not installed.</li> </ul>
OPTION 3	<ul style="list-style-type: none"> <li>ball valve LL</li> </ul>	<ul style="list-style-type: none"> <li>ball valve on the liquid line</li> </ul>

<sup>1</sup> under the following conditions:

- MTT e/Ta = -10 C/+32 C
- LTT e/Ta = -30 C/+32 C
- superheat 10K
- subcooling 2K
- Te evaporation temperature
- Ta ambient temperature

## ► CONDENSING UNIT outside the cold room

**STANDARD UNIT:**

- scroll compressor
- protective housing for outdoor installation
- electrical cabinet
- crankcase heater
- vibration dampeners
- air cooled condenser with EC fan
- liquid receiver
- safety valve
- fixed high/low pressure switch
- fan speed controller
- DTC valve for cooling of the compressor head (only in LT version)

**FEATURES:**

- evaporation operating range for MT units from -10°C to 0°C
- evaporation operating range for LT units from -30°C to -25°C
- compact design with anti-corrosion protection
- simple installation
- refrigerant with low GWP (GWP = 1397) R449A

**ACCESSORIES (see table with options):**

- sound insulation
- adjustable protective pressure switch of the HP/LP compressor
- ball valve LL

**ASSEMBLY ACCESSORIES:**

- floor stands

# ► TECHNICAL DATA

**ARCTIC AE**

## ► COOLING CAPACITY:

Refrigeration unit MT MODEL	Compressor	Condensing unit			Connections	
		Cooling capacity [kW]		te/ta		
		-10°C/+32°C	-5°C/+32°C			
AE-Z1RU3PE5.6MT	SE6026GS	5.6	6.6	22	10	
AE-Z1RU3PE6.5MT	SE6030GS	6.5	7.7	22	10	
AE-Z2RU3PE8.0MT	SE3036GS	8.0	9.6	28	12	
AE-Z2RU3PE9.5MT	SE6043GS	9.5	11.4	28	12	
AE-Z2RU3PE11.5MT	SE6053GS	11.5	13.7	28	16	

Refrigeration unit MT MODEL	Compressor	Condensing unit			Connections	
		Cooling capacity [kW]		te/ta		
		-30°C/+32°C	-25°C/+32°C			
AE-Z1RU3PE3.6LT	SE2017GS	3.6	4.3	28	10	
AE-Z1RU3PE4.3LT	SE2020GS	4.3	5.2	28	10	
AE-Z2RU3PE5.4LT	SE2023GS	5.4	6.5	28	10	
AE-Z2RU3PE6.3LT	SE2028GS	6.3	7.6	28	10	
AE-Z2RU3PE7.3LT	SE2031GS	7.3	8.9	42	12	
AE-Z2RU3PE8.2LT	SE2039GS	8.2	10.0	42	12	

- Te evaporation temperature
- Ta ambient temperature
- Pmax maximum electrical power
- Imax maximum electric current
- φ SL suction line
- φ LL liquid line

- WORKING CONDITIONS:
- superheat 10K
  - subcooling 2K

## ► POWER SUPPLY:

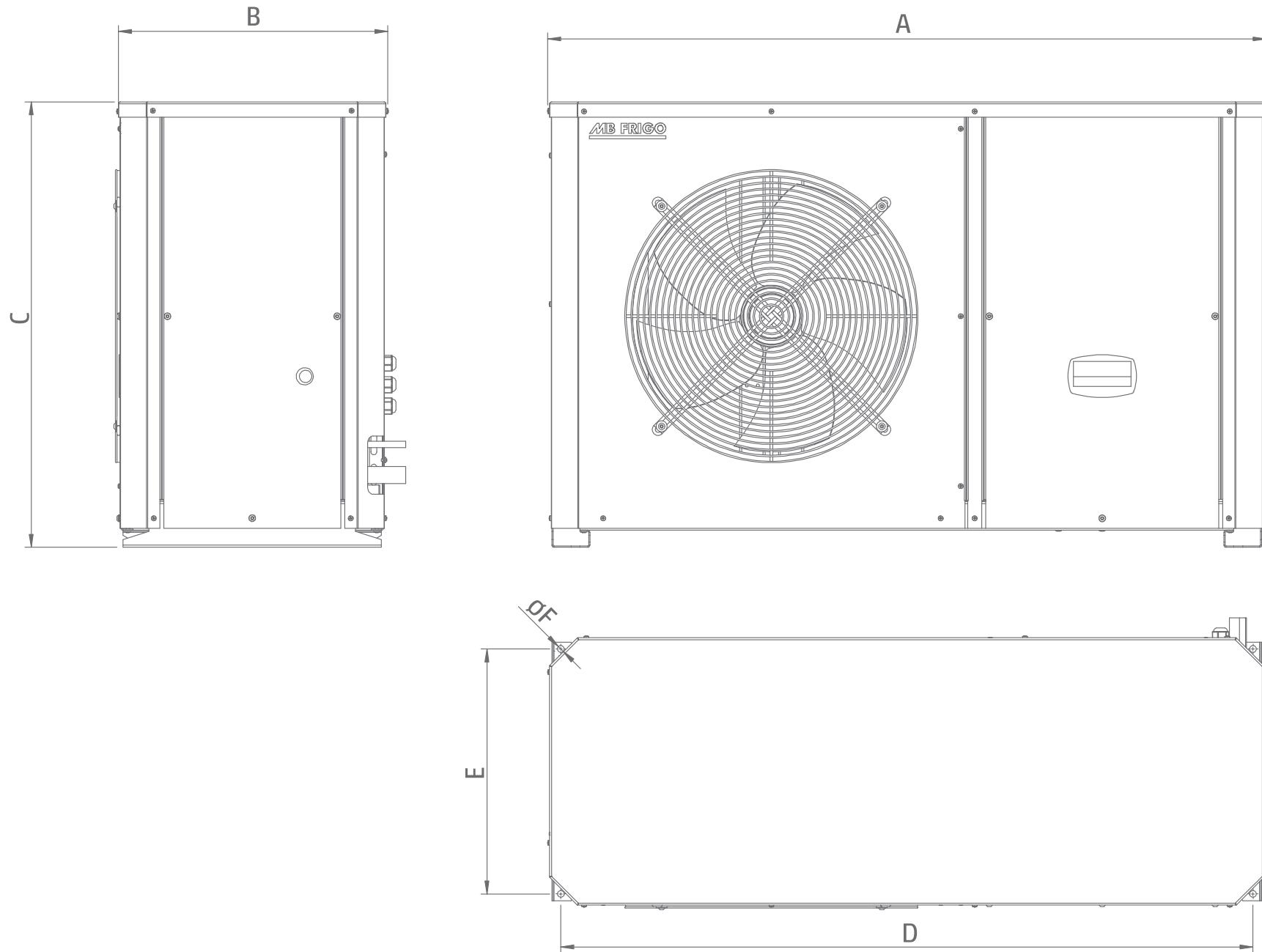
Refrigeration unit MT MODEL	Condensing unit			I <sub>max</sub> [A]	P <sub>max</sub> [kW]
	Compressor	Power supply			
AE-Z1RU3PE5.6MT	SE6026GS	400 V/3~/50 Hz	11	4.3	
AE-Z1RU3PE6.5MT	SE6030GS	400 V/3~/50 Hz	12	4.6	
AE-Z2RU3PE8.0MT	SE3036GS	400 V/3~/50 Hz	14	5.6	
AE-Z2RU3PE9.5MT	SE6043GS	400 V/3~/50 Hz	16	6.5	
AE-Z2RU3PE11.5MT	SE6053GS	400 V/3~/50 Hz	19	7.8	

Refrigeration unit MT MODEL	Condensing unit			I <sub>max</sub> [A]	P <sub>max</sub> [kW]
	Compressor	Power supply			
AE-Z1RU3PE3.6LT	SE2017GS	400 V/3~/50 Hz	12	1.6	
AE-Z1RU3PE4.3LT	SE2020GS	400 V/3~/50 Hz	14	1.8	
AE-Z2RU3PE5.4LT	SE2023GS	400 V/3~/50 Hz	19	2.4	
AE-Z2RU3PE6.3LT	SE2028GS	400 V/3~/50 Hz	21	2.8	
AE-Z2RU3PE7.3LT	SE2031GS	400 V/3~/50 Hz	24	3.1	
AE-Z2RU3PE8.2LT	SE2039GS	400 V/3~/50 Hz	27	3.4	

- T<sub>e</sub> evaporation temperature
- T<sub>a</sub> ambient temperature
- P<sub>max</sub> maximum electrical power
- I<sub>max</sub> maximum electric current
- Ø SL suction line
- Ø LL liquid line

WORKING CONDITIONS:  
 • superheat 10K  
 • subcooling 2K

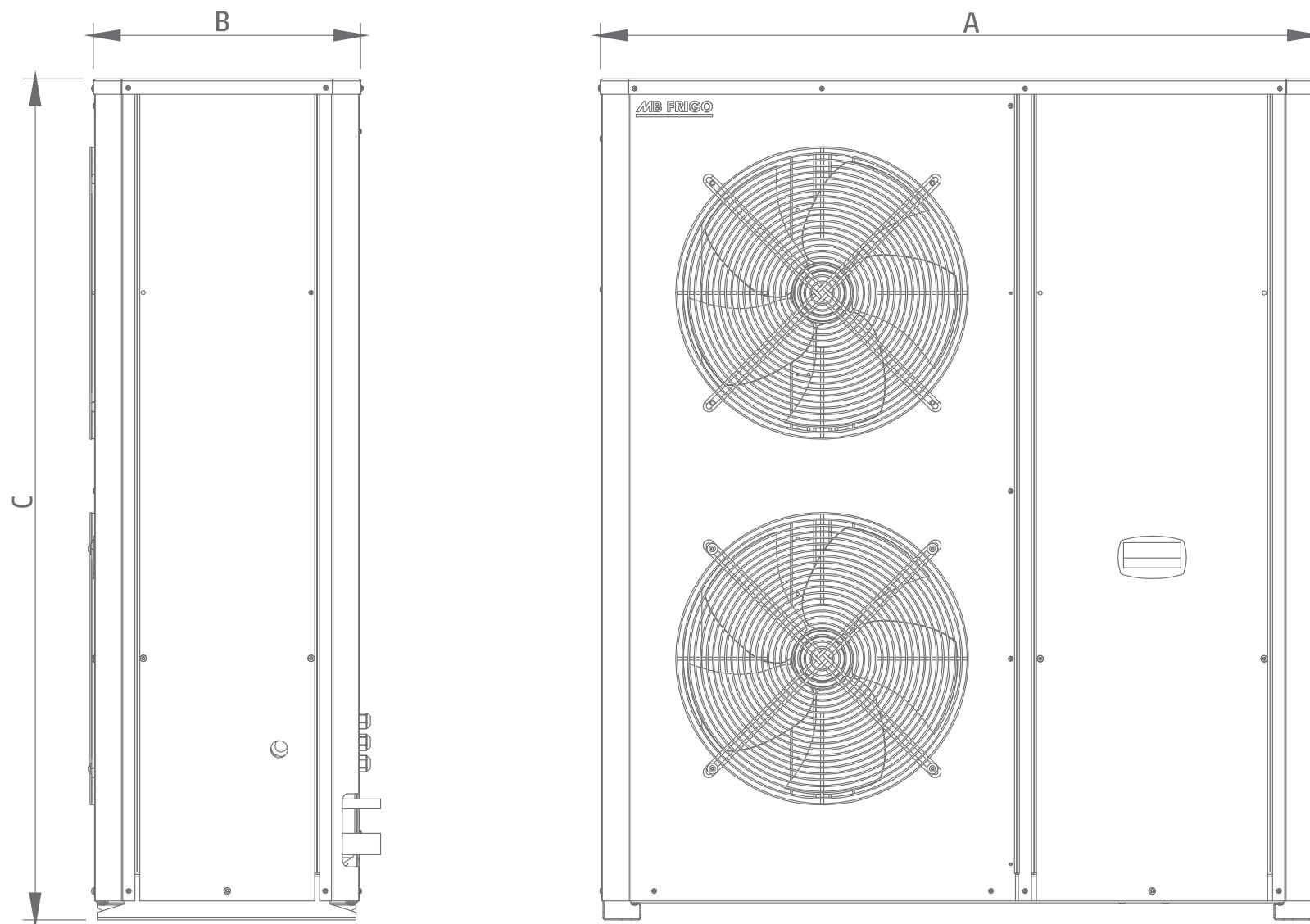
## ► CONDENSING UNIT • design group Z1



Housing group	Dimensions [mm]						Weight <sup>4</sup> [kg]
	A	B	C	D	E	F	
AE-Z1RU3PE5.6MT	1170	438	729	1133	400	11	117
AE-Z1RU3PE6.5MT	1170	438	729	1133	400	11	117
AE-Z1RU3PE3.6LT	1170	438	729	1133	400	11	117
AE-Z1RU3PE4.3LT	1170	438	729	1133	400	11	117

<sup>4</sup> Units weights include housing for outdoor application, power supply and protection. Weights are approximate and are subject to change.

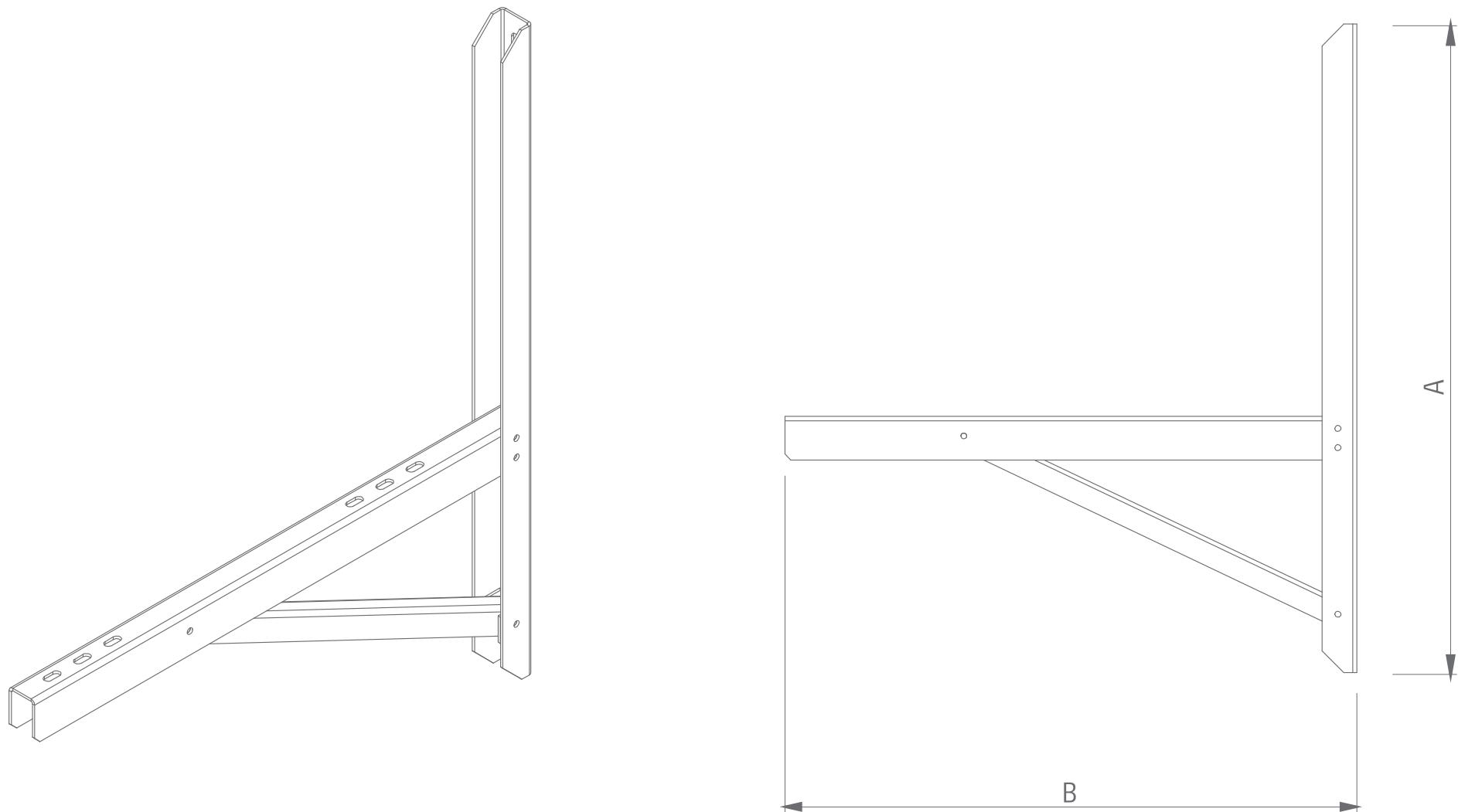
## ► CONDENSING UNIT • design group Z2



Housing group	Dimensions [mm]						Weight <sup>4</sup> [kg]
	A	B	C	D	E	F	
AE-Z2RU3PE8.0MT	1170	438	1380	1133	400	11	171
AE-Z2RU3PE9.5MT	1170	438	1380	1133	400	11	178
AE-Z2RU3PE11.5MT	1170	438	1380	1133	400	11	178
AE-Z2RU3PE5.4LT	1170	438	1380	1133	400	11	171
AE-Z2RU3PE6.3LT	1170	438	1380	1133	400	11	171
AE-Z2RU3PE7.3LT	1170	438	1380	1133	400	11	178
AE-Z2RU3PE8.2LT	1170	438	1380	1133	400	11	178

<sup>4</sup> Units weight includes protective housing, power supply and protection. Weights indicated are approximate and are subject to change.

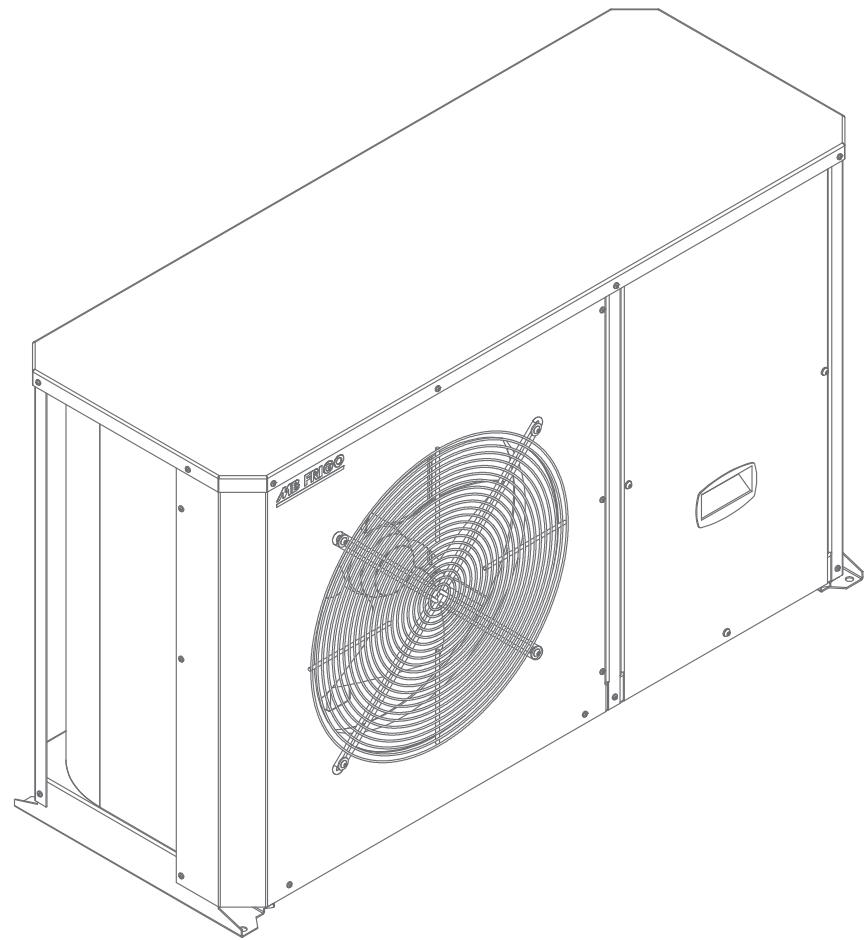
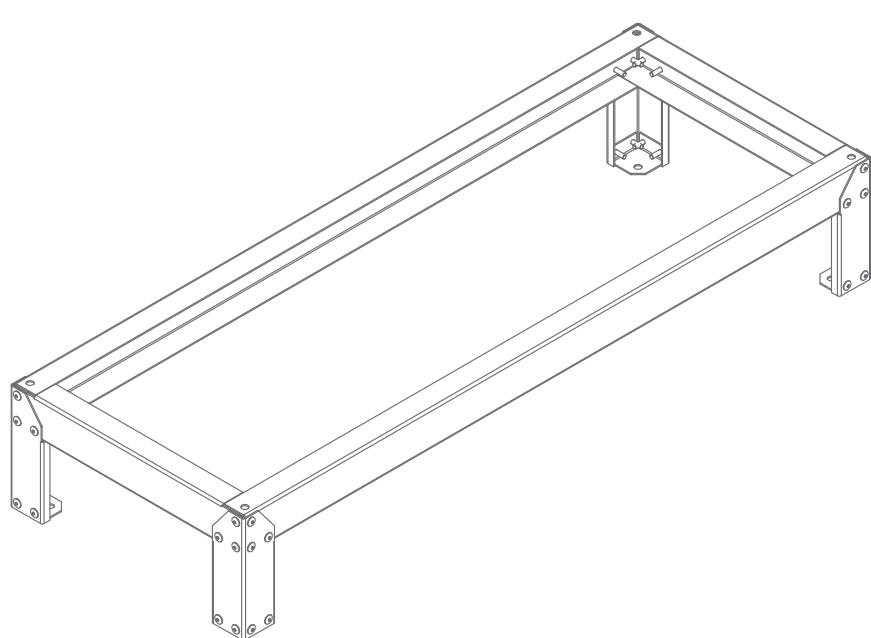
## ► MOUNTING BRACKETS



Housing group	Name	A	B	Slots
Z1andZ2	Bracket for conditioning unit (AE- Z1, Z2) 656 mm, painted sheet metal	744	656	ø9x20

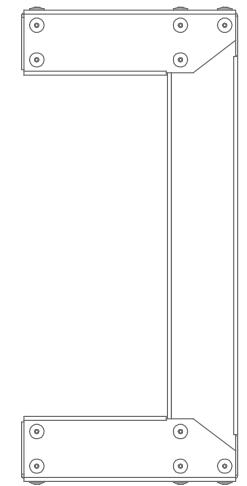
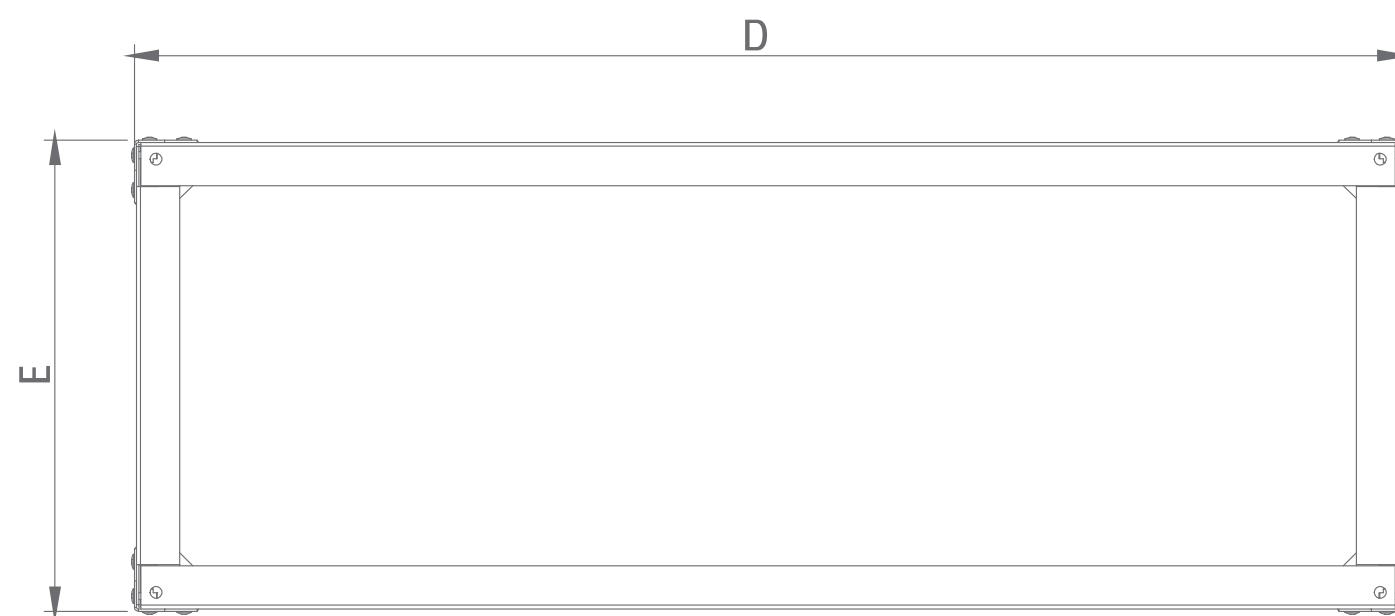
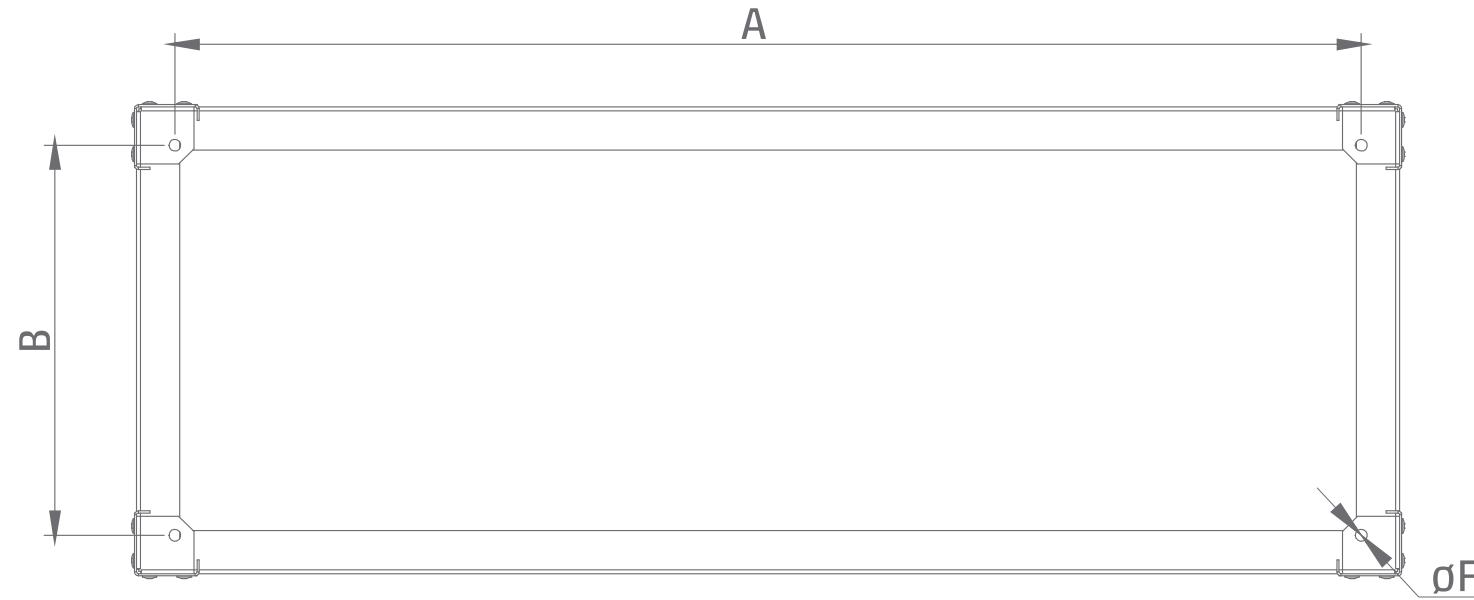
Dimensions are expressed in millimetres (mm).

## ► FLOOR STANDS



Housing group	A	B	C	D	E	F
Z1 i Z2	1098	361	200	1173	436	11

Dimensions are expressed in millimetres (mm).



Dimensions are expressed in millimetres (mm).