

ARCTIC AE



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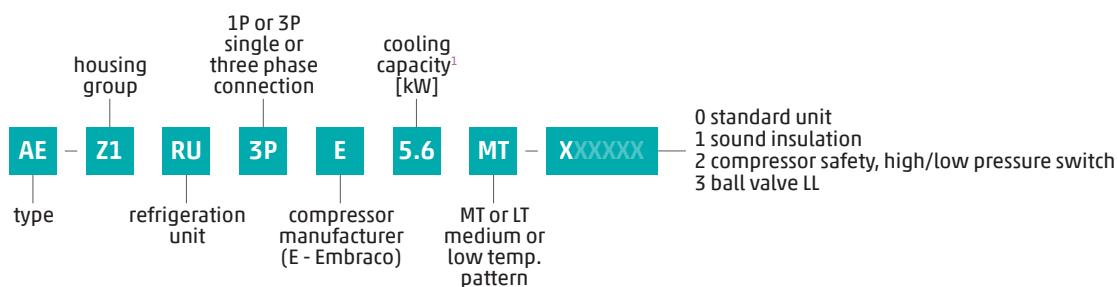
COMMERCIAL REFRIGERATION UNITS

- Ideal solution for medium-scale commercial refrigeration systems
- Suitable for larger commercial facilities
- Compact design allows for easy handling and installation in confined spaces
- Anti-corrosion construction ensures reliable operation in all climatic conditions
- Standard equipment includes components designed to enhance performance and increase energy efficiency
- Flexible installation options with floor stands or wall mounting brackets for easier on-site preparation

TABLE WITH OPTIONS

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

NOMENCLATURE

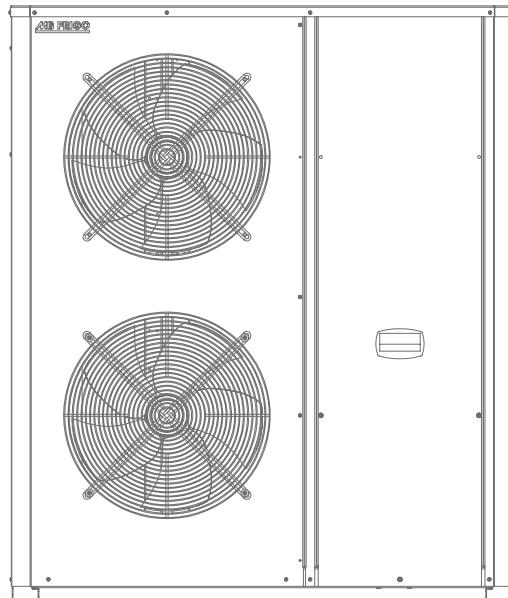
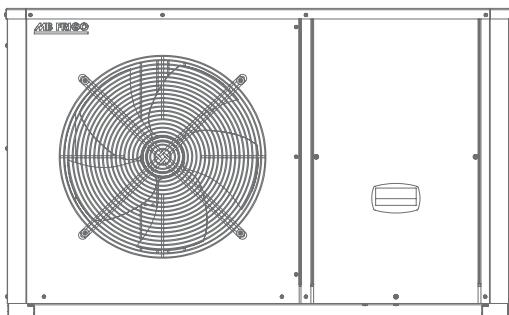


¹ Under conditions:

• MT Te/Ta = -10°C/+32°C
• LT Te/Ta = -30°C/+32°C
• superheat 10K
• subcooling 2K
• Te evaporation temperature
• Ta ambient temperature

REFRIGERATION UNITS

REFRIGERATION 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	ACCESSORIES
evaporation operating range for MT units from 10°C to 0°C	sound insulation
evaporation operating range for LT units from -30°C to -25°C	adjustable protective pressure switch of the HP/LP compressor
compact design with anti-corrosion protection	ball valve LL
simple installation	
refrigerant with low GWP (GWP = 1397)	
R449A	
ASSEMBLY ACCESSORIES	
	floor stand

TECHNICAL DATA

COOLING CAPACITY

Refrigeration unit MT MODEL	Compressor	Condensing unit			Connections	
		Cooling capacity [kW]		Te/Ta	øSL	øLL
		-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	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 LT MODEL	Compressor	Condensing unit			Connections	
		Cooling capacity [kW]		Te/Ta	øSL	øLL
		-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	42	12	

OPTION 8 (SPLIT UNIT)

POWER SUPPLY

Refrigeration unit MT MODEL	Condensing unit			I _{max} [A]	P _{max} [kW]		
	Compressor	Power supply	400 V/3~/50 Hz				
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		

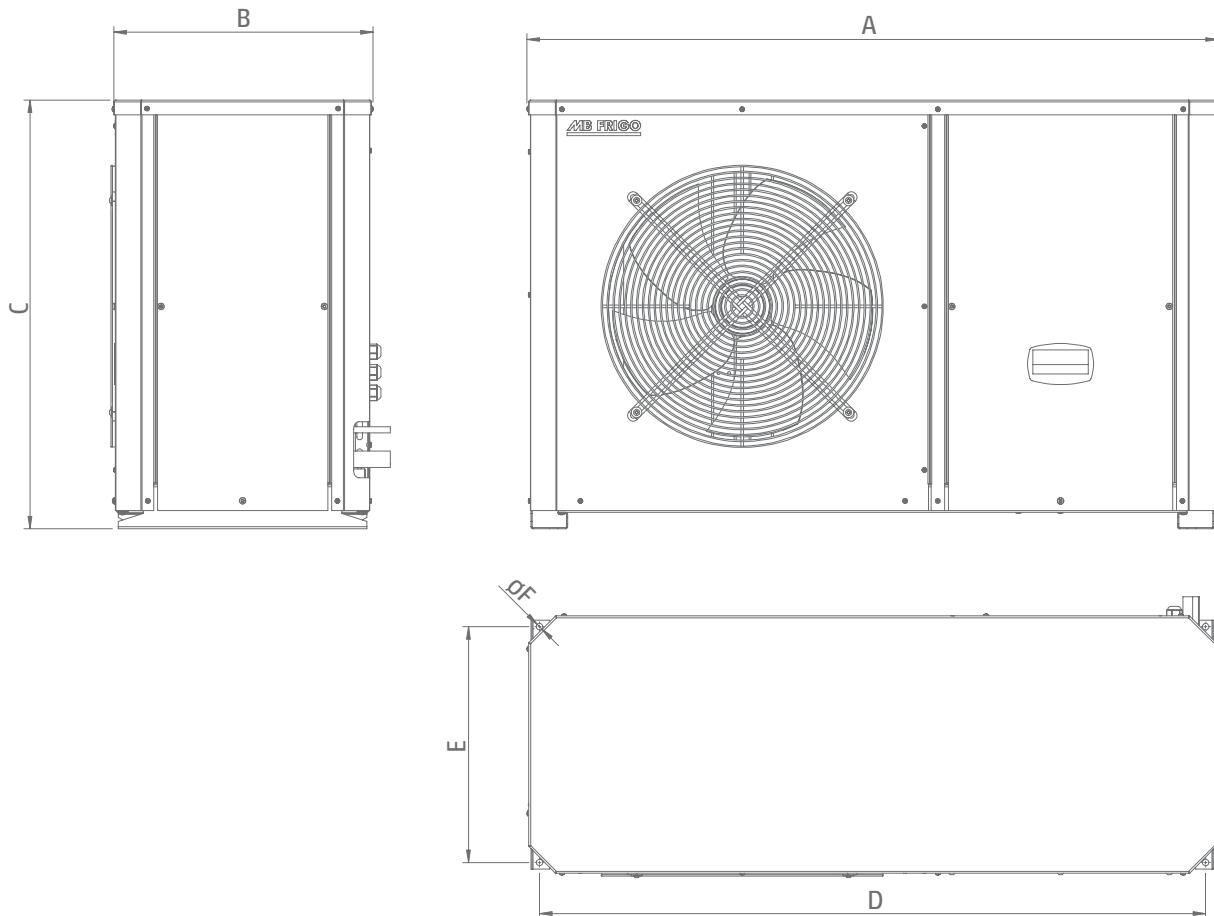
Refrigeration unit LT MODEL	Condensing unit			I _{max} [A]	P _{max} [kW]		
	Compressor	Power supply	400 V/3~/50 Hz				
AE-Z1RU3PE3.6LT	SE2017GS		400 V/3~/50 Hz	12	1.6		
AE-Z1RU3PE4.3LT	SE2020GS		400 V/3~/50 Hz	14	1.8		
AE-Z2RU3PE5.4LT	SE2023GS		400 V/3~/50 Hz	19	2.4		
AE-Z2RU3PE6.3LT	SE2028GS		400 V/3~/50 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		

Under conditions:

- superheat 10K
- Te evaporation temperature
- subcooling 2K
- Ta ambient temperature
- øSL suction line
- øLL liquid line
- I_{max} maximum electric current
- P_{max} maximum electrical power

TECHNICAL DATA

CONDENSING UNIT - DESIGN GROUP Z1

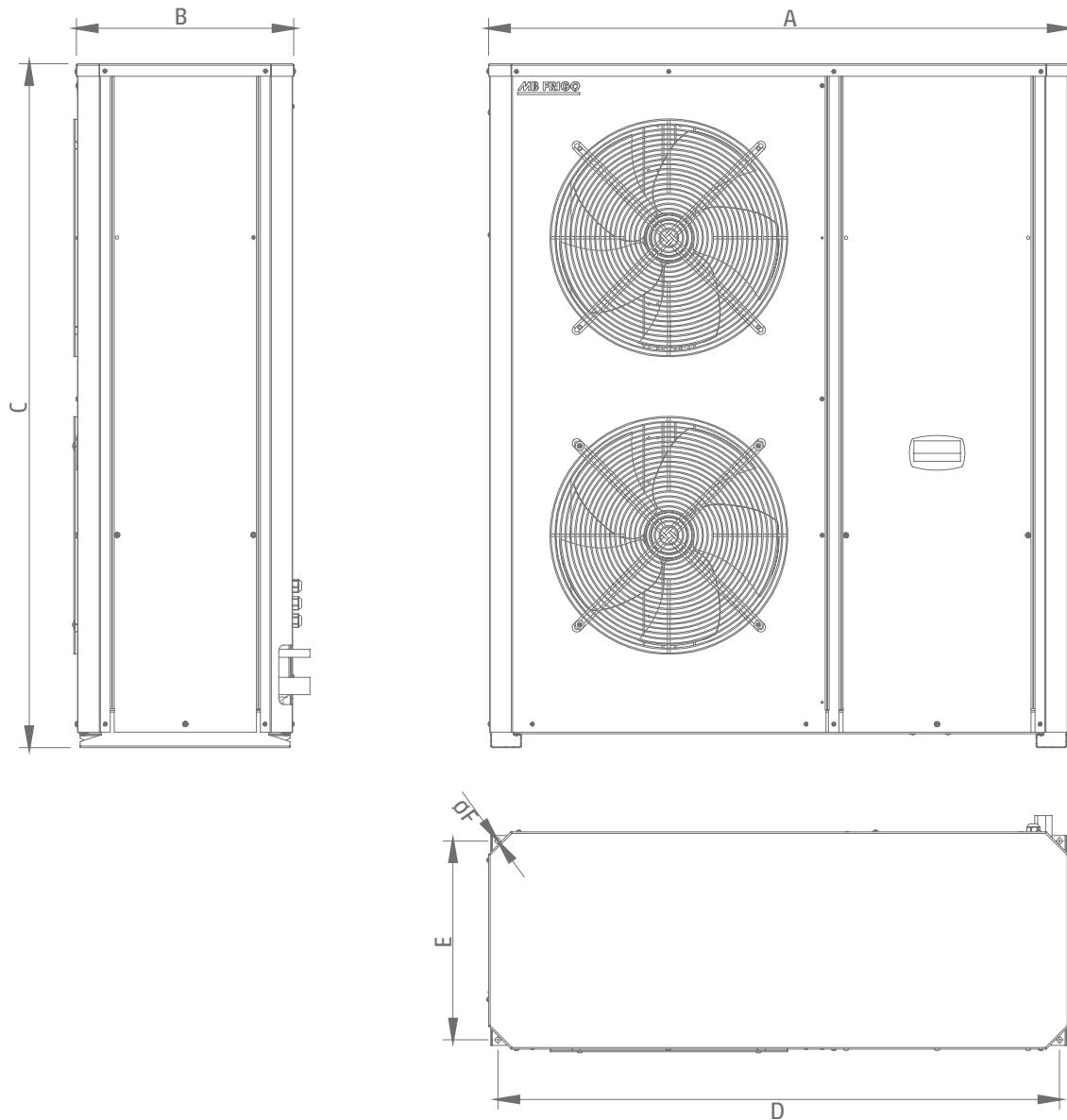


Refrigeration unit MODEL	DIMENSIONS (mm)						WEIGHT ^a (kg)
	A	B	C	D	E	F	
AE-Z1RU3PE5.6MT	1170	438	729	1133	400	11	117
AE-Z1RU3PE6.5MT	1170	438	729	1133	400	11	117
AE-Z1RU3PE3.6LT	1170	438	729	1133	400	11	117
AE-Z1RU3PE4.3LT	1170	438	729	1133	400	11	117

^a Units weights include housing for outdoor application, power supply and protection. Weights are approximate and are subject to change.

TECHNICAL DATA

CONDENSING UNIT - DESIGN GROUP Z2



Refrigeration unit MODEL	DIMENSIONS (mm)						WEIGHT ^a (kg)
	A	B	C	D	E	F	
AE-Z2RU3PE8.0MT	1170	458	1380	1133	400	11	171
AE-Z2RU3PE9.5MT	1170	458	1380	1133	400	11	178
AE-Z2RU3PE11.5MT	1170	458	1380	1133	400	11	178
AE-Z2RU3PE5.4LT	1170	458	1380	1133	400	11	171
AE-Z2RU3PE6.3LT	1170	458	1380	1133	400	11	171
AE-Z2RU3PE7.3LT	1170	458	1380	1133	400	11	178
AE-Z2RU3PE8.2LT	1170	458	1380	1133	400	11	178

^a Units weights include housing for outdoor application, power supply and protection. Weights are approximate and are subject to change.