


Performance Data Sheet according to EU regulation 2015/1095

Model:	CPGU3QE-057-MT	Refrigerant:	R407A
Item	Symbol*	Value	Unit
Evaporating temperature	t	-10	°C
Annual electricity consumption	Q	71585	kWh/a
Seasonal energy performance ratio	SEPR	3.11	-
Point A: Parameters at full load and ambient temperature 32 °C			
Rated cooling capacity	P _A	29.83	kW
Rated power input	D _A	14.24	kW
Rated COP	COP _A	2.09	-
Point B: Parameters at part load and ambient temperature 25 °C			
Declared cooling capacity	P _B	32.73	kW
Declared power input	D _B	13.45	kW
Declared COP	COP _B	2.43	-
Point C: Parameters at part load and ambient temperature 15 °C			
Declared cooling capacity	P _C	36.80	kW
Declared power input	D _C	12.16	kW
Declared COP	COP _C	3.03	-
Point D: Parameters at part load and ambient temperature 5 °C			
Declared cooling capacity	P _D	28.69	kW
Declared power input	D _D	7.43	kW
Declared COP	COP _D	3.86	-
Other Items			
Capacity control	Fixed		
Degradation coefficient**	Cdc	0.25	-
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*Units taken from english version of COMMISSION REGULATION (EU) 2015/1095

**Cdc value applied as EN 13215:2016 ANNEX A

Unit Name	CPGU3QE-057-MT	
Refrigerant	R407A	
Section 1		
Variable capacity compressor	ZBD45KCE-TFD	Qty 0
Fixed capacity compressor 1	35-Q019	3
Fixed capacity compressor 2	ZB45KCE-TFD	0
Design Ambient	32°C	
SST	-10°C	
Suction Return	20°C	
Useful Superheat	30K	
Subcooling	0K	
% load at 5C	80%	
Section 2		
Variable capacity compressor	ZFD41K5E-TFD	Qty 0
Fixed capacity compressor 1	ZF18K4E-TFD	0
Fixed capacity compressor 2	ZF34K5E-TFD	0
Design Ambient	32°C	
SST	-35°C	
Suction Return	20°C	
Useful Superheat	55K	
Subcooling	0K	
% load at 5C	80%	
Condenser		
TD to mid point for given rejection (K)	10	BR
Rated heat rejection (kW)	27.8	2.78
Fan input (const)	2.78	
Design Calculations		
Section	1	2
Design Ambient	32°C	32°C
SST	-12°C	0°C
Suction Return	8°C	0°C
Useful Superheat	20K	0K
Subcooling	0K	0K
Condensing	42.85	42.85
Duty	27.29	
Compressor power input	10.92	
Total power input	13.70	
Compressor Current	19.60	

SEPR	3.11	Section 1 -10°C				SEPR	#DIV/0!	Section 2 -35°C			
	A	B	C	D		A	B	C	D		
Ambient	32	25	15	5	Ambient	32	25	15	5		
Refrigeration Load	29.83	28.28	26.07	23.86	Refrigeration Load						
Condense (Dew) °C 35-Q019	43.8 3 0	37.6 3 0	28.6 3 0	14.1 2 0	Condense (Dew) °C					Capacity equal to or above required value	
Duty kW	29.83	32.73	36.80	28.69	Duty kW					Capacity below required value	
Input kW	11.46	10.67	9.38	4.65	Input kW						
Fan power (allocation)	2.78	2.78	2.78	2.78	Fan power (allocation)						
Combined Input kW	14.24	13.45	12.16	7.43	Combined Input kW						
% Time operating	100%	53%	0%	65%	% Time operating						
COP	2.09	2.43	3.03	3.86	COP						
Condense (SDT) °C 35-Q019	- 2 0	32.8 2 0	23.5 2 0	11.1 1 0	Condense (SDT) °C					Capacity below required value	
Duty kW		23.28	26.03	14.74	Duty kW						
Input kW		6.67	5.72	2.15	Input kW						
Fan input		2.78	2.78	2.78	Fan input						
Combined Input kW		9.45	8.50	4.93	Combined Input kW						
% Time operating		47%	100%	35%	% Time operating						
COP		2.46	3.06	2.99	COP						