



Minimum Evaporating Temp. With:

- 20 K Suction Superheat
- 20 °C Suction Gas Return
- 0 °C Suction Gas Return
- Maximum Evaporating Temperature

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Additional restrictions, please see application guidelines

50 Hz

6MJ-45X

R513A

Cond °C	Cooling Capacity, kW												
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
10.0	35.50	44.20	55.00	68.20									
15.0	33.50	42.00	52.40	65.10	80.20								
20.0	31.60	39.70	49.80	61.90	76.30	93.20							
25.0	29.60	37.40	47.00	58.60	72.30	88.40	107.00						
30.0	27.60	35.10	44.30	55.30	68.30	83.50	101.00	109.00	121.50	132.50			
35.0	25.60	32.80	41.50	51.80	64.10	78.50	95.00	102.50	114.00	124.50	136.00		
40.0	23.60	30.40	38.60	48.40	59.90	73.40	88.90	95.80	106.50	116.50	127.00		
45.0	21.70	28.10	35.70	44.90	55.60	68.20	82.70	89.10	99.30	108.50	118.00		
50.0	19.65	25.70	32.80	41.30	51.30	62.90	76.30	82.30	91.70	100.00	109.00		
55.0		23.30	29.90	37.80	46.90	57.60	69.90	75.30	84.00	91.80	100.00		
60.0		20.90	27.00	34.10	42.50	52.20	63.40	68.40	76.30	83.40	90.90		
65.0			24.00	30.50	38.00	46.70	56.80	61.30	68.40	74.80	81.60		
70.0			21.00	26.80	33.50	41.20	50.20	54.10	60.40	66.10	72.10		
75.0				23.10	28.90	35.60	43.40	46.90	52.40	57.30	62.60		
80.0				19.30	24.30	30.00	36.70	39.60	44.30	48.50	53.00		
85.0					19.60	24.40	29.80	32.20	36.10	39.60	43.30		

Cond °C	Power, kW												
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
10.0	9.40	9.97	10.30	10.40									
15.0	10.10	10.90	11.45	11.80	11.85								
20.0	10.75	11.70	12.50	13.10	13.40	13.40							
25.0	11.25	12.45	13.45	14.25	14.85	15.20	15.15						
30.0	11.70	13.05	14.30	15.35	16.20	16.85	17.15	17.20	17.10	16.95			
35.0	12.10	13.60	15.05	16.35	17.50	18.40	19.00	19.20	19.35	19.35	19.30		
40.0	12.35	14.05	15.70	17.25	18.60	19.80	20.80	21.10	21.40	21.60	21.70		
45.0	12.55	14.40	16.25	18.05	19.65	21.10	22.40	22.80	23.40	23.80	24.10		
50.0	12.65	14.70	16.75	18.70	20.60	22.30	23.90	24.50	25.20	25.80	26.30		
55.0		14.90	17.10	19.30	21.40	23.50	25.30	26.00	26.90	27.70	28.30		
60.0		15.00	17.40	19.80	22.20	24.50	26.60	27.40	28.60	29.50	30.30		
65.0			17.60	20.20	22.80	25.40	27.80	28.70	30.10	31.10	32.10		
70.0			17.70	20.50	23.40	26.10	28.90	29.90	31.40	32.70	33.80		
75.0				20.70	23.80	26.80	29.80	31.00	32.70	34.10	35.40		
80.0				20.90	24.10	27.40	30.70	32.00	33.90	35.40	36.90		
85.0					24.40	27.90	31.40	32.80	34.90	36.60	38.30		

Additional restrictions, please see application guidelines

50 Hz

6MJ-45X

R513A

Cond °C	Current at 400 V, A												
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
10.0	28.00	28.49	28.79	28.80									
15.0	28.59	29.27	29.81	30.11	30.09								
20.0	29.12	30.01	30.79	31.39	31.70	31.65							
25.0	29.61	30.69	31.72	32.60	33.25	33.58	33.50						
30.0	30.04	31.31	32.58	33.75	34.74	35.46	35.81	35.83	35.71	35.46			
35.0	30.40	31.87	33.37	34.83	36.16	37.26	38.04	38.24	38.41	38.42	38.30		
40.0	30.69	32.35	34.09	35.84	37.50	38.98	40.19	40.58	41.04	41.31	41.45		
45.0	30.91	32.75	34.73	36.76	38.75	40.61	42.25	42.82	43.58	44.10	44.51		
50.0	31.03	33.06	35.28	37.59	39.92	42.15	44.22	44.97	46.02	46.79	47.47		
55.0		33.28	35.74	38.33	40.98	43.59	46.08	47.02	48.35	49.38	50.32		
60.0		33.40	36.09	38.96	41.94	44.93	47.84	48.96	50.58	51.86	53.07		
65.0			36.33	39.48	42.78	46.15	49.48	50.78	52.69	54.22	55.69		
70.0			36.45	39.88	43.51	47.25	51.00	52.48	54.68	56.46	58.20		
75.0				40.16	44.11	48.22	52.39	54.05	56.53	58.57	60.56		
80.0				40.31	44.58	49.05	53.64	55.49	58.25	60.54	62.79		
85.0					44.91	49.75	54.75	56.78	59.82	62.36	64.88		

Cond °C	Suction Mass Flow, g/s												
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
10.0	188.50	235.00	294.00	365.00									
15.0	185.00	232.00	291.00	362.00	447.00								
20.0	181.50	228.00	287.00	358.00	443.00	543.00							
25.0	177.00	224.00	283.00	353.00	438.00	538.00	654.00						
30.0	172.50	220.00	278.00	348.00	432.00	531.00	647.00	698.00	781.00	856.00			
35.0	168.00	215.00	273.00	343.00	426.00	524.00	638.00	689.00	771.00	846.00	926.00		
40.0	163.00	210.00	268.00	337.00	419.00	516.00	629.00	679.00	761.00	834.00	914.00		
45.0	158.00	205.00	262.00	330.00	412.00	507.00	619.00	669.00	749.00	822.00	900.00		
50.0	152.00	199.50	256.00	323.00	403.00	498.00	608.00	657.00	737.00	809.00	886.00		
55.0		193.00	249.00	316.00	394.00	487.00	596.00	644.00	723.00	794.00	870.00		
60.0		186.50	242.00	307.00	385.00	476.00	583.00	630.00	708.00	778.00	853.00		
65.0			234.00	298.00	374.00	463.00	568.00	615.00	691.00	760.00	835.00		
70.0			225.00	288.00	362.00	450.00	553.00	599.00	673.00	741.00	815.00		
75.0				276.00	349.00	435.00	536.00	581.00	654.00	721.00	794.00		
80.0				264.00	335.00	419.00	518.00	563.00	636.00	702.00	774.00		
85.0					323.00	406.00	505.00	549.00	622.00	689.00	761.00		

Additional restrictions, please see application guidelines

### **COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Number of cylinders	6
Displacement @ 50 Hz, m <sup>3</sup> /h	135
Bore/Stroke, mm	75.7/57.5
Length/Width, mm	725/547
Height, mm	450
Net Weight, kg	223
Suction, inch	2 1/8
Discharge, inch	1 5/8
Oil Quantity, l	3.3
Oil type (original charge)	POE RL32-3MAF
Oil type (approved oils)	POE RL32-3MAF, POE MOBIL EAL Arctic 22 CC
Base mounting (hole dia), mm	381 x 305 (18)
Sound Pressure @ 1m (MT), dBA	72
Sound Power (MT), dBA	83
Sound Power with Sound Shell (MT), dBA	68
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
High Side PS gauge, bar	32.5
Low Side PS gauge, bar	22.5
Refrigerant's GWP	631
Refrigerant's classification	A1

### **COMPRESSOR ELECTRICAL DATA (380-420 V / 3~ / 50 Hz)**

Maximum Operating Current, A	81.5
Locked Rotor Current, A	321
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

Oil Pressure Switch (-P)	OPS2 Sensor
Mounting Parts	Spring
CoreSense Protection (-P)	Motor protection
Copeland Compressor Electronic (-N)	Oil pressure, motor and discharge line temperature protection; advanced diagnostics features and power measurement

Additional restrictions, please see application guidelines

### ACCESSORIES OPTIONAL

Check Valve	For unloaded start operation
Mounting Parts	Rubber
Adapter Kit	For Parallel Operation
Additional Cooling	70 W Vertical Air Flow Fan
Crankcase Heater	100 W Internal
Sound Attenuation	Sound Shell
Digital Modulation	33-100 %
Capacity Control	Capacity Steps 67/33 %
Oil Pressure Switch	OPS2 Electronic Switch
Copeland Compressor Electronic module	Modbus extension module

### MOTOR OPTIONS

<i>Motor Code</i>	<i>Power Supply</i>	<i>Nominal Voltage, V</i>	<i>Start Connection</i>	<i>DOL Connection</i>	<i>Amps Factor</i>
AWM	380-420 V / 3~ / 50 Hz	400	YY/Y	Y	1.00
EWL	220-240 V / 3~ / 50 Hz	230	Y/DELTA	DELTA	1.73
EWL	380-420 V / 3~ / 50 Hz	400		Y	1.00
EWM	380-420 V / 3~ / 50 Hz	400	Y/DELTA	DELTA	1.00
AWR	220-240 V / 3~ / 50 Hz	230	YY/Y	Y	1.73
AWY	500-550 V / 3~ / 50 Hz	525	YY/Y	Y	0.76
EWK	220-240 V / 3~ / 60 Hz	230	Y/DELTA	DELTA	2.10
EWK	380-420 V / 3~ / 60 Hz	380		Y	1.20
EWD	440-480 V / 3~ / 60 Hz	460	Y/DELTA	DELTA	1.00
AWC	208-230 V / 3~ / 60 Hz	230	YY/Y	Y	2.19
AWX	380 V / 3~ / 60 Hz	380	YY/Y	Y	1.20
AWD	440-480 V / 3~ / 60 Hz	460	YY/Y	Y	1.00

Additional restrictions, please see application guidelines