



Minimum Evaporating Temp. With:

- 20 K Suction Superheat      — 20 K Suction Superheat Liquid injection
- 20 °C Suction Gas Return Liquid injection
- Maximum Evaporating Temperature      | Voltage limit -5% above -7°C

Suction Return Temperature 18.3°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
4.0	4.65	6.04	7.69	9.57	11.70	13.95	16.45				
5.0	4.68	6.07	7.73	9.61	11.70	14.00	16.50				
10.0	4.91	6.32	7.99	9.89	12.00	14.30	16.80	19.40			
15.0	5.03	6.46	8.14	10.05	12.15	14.45	16.90	19.50	22.20		
20.0	5.08	6.51	8.19	10.10	12.15	14.45	16.85	19.45	22.10	24.90	
25.0	5.07	6.49	8.14	10.00	12.10	14.30	16.70	19.25	21.90	24.60	25.70
30.0	5.01	6.40	8.03	9.87	11.90	14.10	16.45	18.90	21.50	24.10	25.20
35.0	4.92	6.28	7.86	9.65	11.65	13.75	16.05	18.45	20.90	23.50	24.60
40.0	4.81	6.12	7.66	9.39	11.30	13.35	15.60	17.90	20.30	22.80	23.80
45.0		5.95	7.43	9.09	10.95	12.90	15.05	17.25	19.60	22.00	
50.0							14.45	16.60	18.80		

Cond °C	Power, kW										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
4.0	1.71	1.92	2.19	2.51	2.89	3.33	3.82				
5.0	1.73	1.94	2.20	2.51	2.89	3.32	3.80				
10.0	1.92	2.10	2.33	2.60	2.92	3.29	3.70	4.17			
15.0	2.15	2.33	2.53	2.78	3.05	3.37	3.72	4.11	4.55		
20.0	2.41	2.60	2.80	3.02	3.27	3.54	3.85	4.18	4.55	4.95	
25.0	2.70	2.90	3.11	3.33	3.57	3.82	4.09	4.38	4.69	5.02	5.16
30.0	3.00	3.24	3.47	3.71	3.94	4.19	4.43	4.69	4.96	5.24	5.36
35.0	3.32	3.60	3.88	4.14	4.39	4.64	4.88	5.12	5.36	5.60	5.70
40.0	3.63	3.98	4.31	4.61	4.90	5.16	5.41	5.65	5.87	6.09	6.18
45.0		4.38	4.77	5.13	5.46	5.76	6.03	6.28	6.51	6.72	
50.0							6.73	7.01	7.25		

Cond °C	Current at 400 V, A										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
4.0	5.62	5.81	6.06	6.38	6.75	7.17	7.63				
5.0	5.62	5.81	6.06	6.37	6.73	7.14	7.59				
10.0	5.71	5.87	6.09	6.35	6.65	7.00	7.37	7.77			
15.0	5.88	6.03	6.22	6.45	6.71	7.00	7.32	7.64	7.98		
20.0	6.09	6.25	6.45	6.67	6.91	7.16	7.43	7.70	7.97	8.24	
25.0	6.35	6.54	6.76	6.99	7.23	7.47	7.71	7.95	8.17	8.38	8.45
30.0	6.64	6.89	7.14	7.40	7.66	7.91	8.15	8.37	8.56	8.73	8.78
35.0	6.95	7.28	7.60	7.91	8.20	8.48	8.73	8.95	9.14	9.28	9.33
40.0	7.29	7.71	8.11	8.49	8.84	9.16	9.45	9.69	9.89	10.03	10.07
45.0		8.17	8.67	9.14	9.57	9.96	10.29	10.58	10.80	10.96	
50.0							11.26	11.60	11.87		

Cond °C	Suction Mass Flow, g/s										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
4.0	20.60	26.30	33.40	42.00	52.20	64.10	77.70				
5.0	20.50	26.20	33.40	42.00	52.20	64.10	77.70				
10.0	19.85	25.70	33.00	41.80	52.10	64.10	77.80	93.40			
15.0	19.45	25.50	32.80	41.70	52.20	64.20	78.00	93.70	111.00		
20.0	19.25	25.40	32.80	41.80	52.30	64.40	78.30	93.90	111.50	131.00	
25.0	19.25	25.40	32.90	41.90	52.40	64.60	78.50	94.10	111.50	131.00	139.50
30.0	19.30	25.50	33.00	42.00	52.60	64.70	78.60	94.20	111.50	131.00	139.50
35.0	19.35	25.60	33.10	42.10	52.60	64.70	78.50	94.10	111.50	131.00	139.00
40.0	19.40	25.60	33.10	42.00	52.40	64.50	78.20	93.70	111.00	130.50	138.50
45.0		25.40	32.90	41.70	52.10	64.00	77.60	93.00	110.00	129.50	
50.0							76.70	91.90	109.00		

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m <sup>3</sup> /h	21.4
Length/Width, mm	246/257
Height, mm	452
Net Weight, kg	39.5
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1 1/4
Rotalock Injection, inch	1
Oil Quantity, l	1.89
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	190 x 190 (19)
Sound Pressure @ 1m (LT), dBA	70
Sound Power (LT), dBA	81
Sound Conditions (LT, Temperatures: Evap./Cond./Suction at freq./speed)	-35 / 40 / 20 °C at 50 Hz
PED Category	1
Max. Internal Free Volume, l	5.70
High Side PS gauge, bar	28.8
Low Side PS gauge, bar	21
Refrigerant's GWP	1397
Refrigerant's classification	A1

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

Maximum Operating Current, A	16
Locked Rotor Current, A	102
Winding Resistance, ohm	1.72
Default Enclosure Class	IP 54 (IEC 34)

**ACCESSORIES INCLUDED**

Discharge Temperature Protection	Discharge line thermostat
Mounting Grommets	Standard

**ACCESSORIES OPTIONAL**

Crankcase Heater	70 W External
Liquid Injection	DTC Valve
Oil Control System	ALCO Trax-Oil OM3
Rotalock valves	suction and discharge

**MOTOR OPTIONS**

<b>Motor Code</b>	<b>Power Supply</b>	<b>Nominal Voltage, V</b>	<b>Start Connection</b>	<b>DOL Connection</b>	<b>Amps Factor</b>
TFD	380-420 V / 3~ / 50 Hz	400		Y	1.00
TF5	200-220 V / 3~ / 50 Hz	200		Y	2.09
TFD	460 V / 3~ / 60 Hz	460		Y	1.04
TF5	200-230 V / 3~ / 60 Hz	230		Y	2.09