



Minimum Evaporating Temp. With:

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

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW									
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
17.0	3.37	4.20	5.21	6.43	7.88					
20.0	3.26	4.07	5.06	6.25	7.66					
25.0	3.08	3.86	4.81	5.94	7.29	8.88	9.59			
30.0	2.89	3.64	4.54	5.63	6.91	8.43	9.10	10.20	11.15	12.25
35.0	2.71	3.41	4.27	5.30	6.52	7.96	8.60	9.64	10.60	11.60
40.0	2.52	3.19	3.99	4.96	6.12	7.48	8.09	9.08	9.97	10.90
45.0		2.96	3.71	4.62	5.71	6.99	7.56	8.50	9.34	10.25
50.0		2.72	3.42	4.27	5.28	6.48	7.02	7.90	8.69	9.55
55.0			3.13	3.91	4.85	5.97	6.47	7.29	8.03	8.84
60.0				3.54	4.40	5.44	5.90	6.66	7.36	8.11
65.0				3.17	3.95	4.89	5.32	6.02	6.66	7.36
70.0					3.49	4.34	4.73	5.37	5.96	6.60
75.0					3.01	3.77	4.12	4.70	5.23	5.82

50 Hz

YH09K1E-TFD

R1234yf

Cond °C	Power, kW									
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
17.0	1.12	1.19	1.26	1.32	1.38					
20.0	1.16	1.22	1.28	1.34	1.40					
25.0	1.24	1.30	1.35	1.40	1.46	1.52	1.54			
30.0	1.33	1.38	1.44	1.49	1.54	1.60	1.62	1.65	1.68	1.70
35.0	1.44	1.49	1.54	1.60	1.65	1.70	1.72	1.76	1.78	1.81
40.0	1.56	1.62	1.67	1.72	1.78	1.84	1.86	1.89	1.92	1.94
45.0		1.76	1.82	1.87	1.93	1.99	2.01	2.05	2.08	2.11
50.0		1.92	1.98	2.04	2.10	2.17	2.20	2.24	2.27	2.31
55.0			2.15	2.23	2.30	2.37	2.41	2.45	2.49	2.53
60.0				2.43	2.51	2.60	2.64	2.69	2.73	2.78
65.0				2.65	2.75	2.85	2.89	2.95	3.00	3.05
70.0					3.00	3.11	3.16	3.23	3.29	3.35
75.0					3.26	3.40	3.45	3.53	3.60	3.67

Cond °C	Current at 400 V, A									
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
17.0	3.88	3.93	3.97	4.02	4.06					
20.0	3.91	3.95	3.99	4.03	4.07					
25.0	3.96	4.00	4.03	4.07	4.11	4.15	4.17			
30.0	4.02	4.06	4.10	4.13	4.17	4.21	4.23	4.26	4.28	4.30
35.0	4.10	4.14	4.18	4.22	4.26	4.30	4.32	4.35	4.37	4.39
40.0	4.19	4.24	4.28	4.32	4.37	4.42	4.44	4.47	4.49	4.52
45.0		4.35	4.40	4.45	4.51	4.56	4.59	4.62	4.65	4.68
50.0		4.49	4.55	4.61	4.67	4.74	4.77	4.81	4.84	4.88
55.0			4.72	4.79	4.87	4.95	4.98	5.03	5.07	5.11
60.0				5.00	5.09	5.18	5.22	5.28	5.33	5.38
65.0				5.24	5.35	5.46	5.50	5.57	5.63	5.69
70.0					5.63	5.77	5.82	5.90	5.97	6.04
75.0					5.95	6.11	6.17	6.27	6.35	6.43

Cond °C	Suction Mass Flow, g/s									
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
17.0	24.70	30.10	36.40	43.90	52.50					
20.0	24.70	30.10	36.40	43.90	52.50					
25.0	24.60	30.00	36.40	43.80	52.40	62.30	66.60			
30.0	24.50	29.90	36.30	43.80	52.40	62.20	66.50	73.40	79.50	85.90
35.0	24.40	29.80	36.20	43.60	52.20	62.00	66.30	73.20	79.30	85.70
40.0	24.30	29.70	36.10	43.50	52.00	61.80	66.10	72.90	79.00	85.40
45.0		29.60	35.90	43.30	51.70	61.50	65.70	72.50	78.60	85.00
50.0		29.50	35.70	43.00	51.40	61.10	65.30	72.10	78.10	84.60
55.0			35.60	42.70	51.00	60.60	64.80	71.60	77.60	84.00
60.0				42.40	50.60	60.10	64.30	71.00	77.00	83.40
65.0				42.00	50.10	59.50	63.60	70.30	76.30	82.60
70.0					49.50	58.80	62.90	69.50	75.50	81.90
75.0					49.00	58.10	62.20	68.80	74.80	81.10

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	11.4
Length/Width, mm	253/248
Height, mm	417
Net Weight, kg	28.5
Stub Suction, inch	7/8
Stub Discharge, inch	1/2
Oil Quantity, l	1.45
Oil type (original charge)	POE RL32-3MAF
Oil type (approved oils)	POE RL32-3MAF
Base mounting (hole dia), mm	190 x 190 (19)
Sound Pressure @ 1m (MT), dBA	60
Sound Power (MT), dBA	71
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
PED Category	II
Max. Low Side Internal Free Volume, l	4.8
Max. High Side Internal Free Volume, l	0.5
Max. Internal Free Volume, l	5.30
High Side PS gauge, bar	38
Low Side PS gauge, bar	23.5
Low Side TS Max., °C	50
Low Side TS Min., °C	-35
High Side TS Max., °C	150
High Side TS Min., °C	-35
Refrigerant's GWP	4
Refrigerant's classification	A2L

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

Maximum Operating Current, A	8.8
Locked Rotor Current, A	50
Winding Resistance, ohm	3.88
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED**ACCESSORIES OPTIONAL**

Crankcase Heater	70 W External
Discharge Temperature Protection	Discharge line thermostat
Mounting Grommets	Standard
Oil Control System	ALCO Trax-Oil OM3

MOTOR OPTIONS

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
TFD	380-420 V / 3~ / 50 Hz	400		Y	1.00
TFD	460 V / 3~ / 60 Hz	460		Y	1.04