



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	3.36	4.21	5.23	6.45	7.88					
20.0	3.26	4.09	5.09	6.28	7.69					
25.0	3.09	3.90	4.86	6.00	7.36	8.93	9.63			
30.0	2.93	3.70	4.62	5.72	7.02	8.54	9.21	10.30	11.25	12.30
35.0	2.77	3.50	4.39	5.44	6.68	8.13	8.78	9.82	10.75	11.75
40.0	2.60	3.30	4.15	5.15	6.34	7.73	8.35	9.34	10.25	11.20
45.0		3.10	3.90	4.86	5.99	7.31	7.90	8.86	9.72	10.65
50.0		2.90	3.66	4.56	5.63	6.89	7.46	8.37	9.19	10.05
55.0			3.40	4.26	5.27	6.47	7.00	7.87	8.65	9.49
60.0				3.95	4.90	6.03	6.54	7.36	8.10	8.90
65.0				3.64	4.53	5.59	6.07	6.84	7.54	8.30
70.0					4.15	5.14	5.59	6.32	6.98	7.69
75.0					3.76	4.69	5.10	5.78	6.40	7.07

50 Hz

YH09K1E-TFD

R134a

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	0.99	1.02	1.04	1.06	1.08					
20.0	1.04	1.08	1.10	1.13	1.15					
25.0	1.15	1.18	1.22	1.25	1.28	1.30	1.31			
30.0	1.26	1.30	1.34	1.38	1.42	1.44	1.46	1.47	1.48	1.49
35.0	1.36	1.42	1.46	1.51	1.56	1.60	1.61	1.63	1.64	1.66
40.0	1.48	1.54	1.60	1.66	1.70	1.76	1.77	1.80	1.82	1.84
45.0		1.67	1.74	1.80	1.87	1.92	1.94	1.98	2.00	2.03
50.0		1.82	1.90	1.97	2.04	2.11	2.14	2.17	2.21	2.23
55.0			2.06	2.14	2.23	2.31	2.34	2.38	2.42	2.46
60.0				2.33	2.43	2.52	2.56	2.61	2.65	2.70
65.0				2.54	2.65	2.75	2.79	2.85	2.90	2.95
70.0					2.88	3.00	3.05	3.12	3.17	3.23
75.0					3.13	3.27	3.32	3.40	3.46	3.53

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	3.75	3.77	3.78	3.80	3.81					
20.0	3.79	3.81	3.83	3.84	3.86					
25.0	3.85	3.88	3.90	3.92	3.94	3.96	3.96			
30.0	3.92	3.95	3.98	4.01	4.04	4.06	4.07	4.08	4.09	4.09
35.0	4.00	4.04	4.08	4.11	4.14	4.18	4.19	4.20	4.22	4.23
40.0	4.09	4.13	4.18	4.22	4.27	4.31	4.33	4.35	4.37	4.38
45.0		4.24	4.30	4.35	4.41	4.46	4.48	4.51	4.54	4.56
50.0		4.36	4.43	4.50	4.57	4.64	4.66	4.70	4.73	4.76
55.0			4.59	4.67	4.75	4.84	4.87	4.91	4.95	4.99
60.0				4.86	4.96	5.06	5.10	5.15	5.20	5.25
65.0				5.08	5.19	5.31	5.36	5.42	5.48	5.54
70.0					5.45	5.59	5.65	5.73	5.79	5.86
75.0					5.75	5.90	5.97	6.06	6.14	6.22

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	19.65	24.10	29.50	35.70	42.80					
20.0	19.55	24.10	29.40	35.60	42.80					
25.0	19.40	23.90	29.30	35.50	42.60	50.80	54.40			
30.0	19.25	23.80	29.10	35.30	42.50	50.70	54.30	60.00	65.10	70.50
35.0	19.10	23.60	29.00	35.20	42.30	50.50	54.10	59.80	64.90	70.40
40.0	18.90	23.50	28.80	35.00	42.10	50.30	53.90	59.60	64.70	70.20
45.0		23.30	28.60	34.80	41.90	50.10	53.70	59.40	64.50	70.00
50.0		23.10	28.40	34.60	41.70	49.90	53.40	59.20	64.30	69.70
55.0			28.20	34.30	41.40	49.60	53.20	58.90	64.00	69.50
60.0				34.10	41.20	49.30	52.90	58.70	63.80	69.30
65.0				33.80	40.90	49.00	52.60	58.40	63.60	69.00
70.0					40.60	48.80	52.40	58.20	63.30	68.90
75.0					40.30	48.50	52.20	58.00	63.20	68.80

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
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	1430
Refrigerant's classification	A1

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