



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	3.66	4.61	5.77	7.17	8.84					
20.0	3.54	4.46	5.59	6.96	8.58					
25.0	3.34	4.22	5.29	6.59	8.14	9.97	10.80			
30.0	3.14	3.97	4.99	6.22	7.69	9.43	10.20	11.45	12.60	13.85
35.0	2.94	3.73	4.68	5.84	7.23	8.87	9.61	10.80	11.90	13.05
40.0	2.75	3.48	4.37	5.45	6.76	8.31	9.00	10.15	11.15	12.25
45.0		3.23	4.06	5.07	6.28	7.73	8.38	9.45	10.40	11.45
50.0		2.99	3.75	4.68	5.80	7.15	7.76	8.75	9.66	10.65
55.0			3.44	4.29	5.32	6.56	7.13	8.05	8.89	9.81
60.0				3.90	4.83	5.97	6.49	7.34	8.12	8.97
65.0				3.51	4.34	5.37	5.84	6.62	7.34	8.12
70.0					3.86	4.77	5.20	5.90	6.55	7.26
75.0					3.37	4.17	4.55	5.17	5.76	6.40

50 Hz YH09K1E-TFD R513A

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	1.07	1.11	1.14	1.18	1.22					
20.0	1.13	1.17	1.20	1.24	1.28					
25.0	1.25	1.28	1.32	1.36	1.40	1.43	1.44			
30.0	1.38	1.41	1.45	1.48	1.52	1.56	1.58	1.60	1.62	1.64
35.0	1.52	1.56	1.60	1.64	1.68	1.72	1.73	1.76	1.78	1.80
40.0	1.68	1.72	1.76	1.80	1.84	1.88	1.90	1.92	1.95	1.97
45.0		1.89	1.94	1.98	2.03	2.07	2.09	2.12	2.14	2.17
50.0		2.08	2.13	2.18	2.23	2.29	2.31	2.34	2.36	2.39
55.0			2.35	2.41	2.46	2.52	2.54	2.57	2.60	2.63
60.0				2.65	2.71	2.77	2.79	2.83	2.86	2.89
65.0				2.91	2.97	3.04	3.07	3.11	3.14	3.18
70.0					3.26	3.34	3.37	3.41	3.45	3.49
75.0					3.57	3.65	3.69	3.74	3.78	3.82

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	3.79	3.81	3.84	3.87	3.89					
20.0	3.83	3.86	3.88	3.91	3.94					
25.0	3.91	3.94	3.97	3.99	4.02	4.05	4.06			
30.0	4.01	4.04	4.07	4.10	4.13	4.16	4.17	4.19	4.21	4.22
35.0	4.12	4.15	4.19	4.22	4.25	4.29	4.30	4.32	4.34	4.36
40.0	4.25	4.29	4.33	4.36	4.40	4.44	4.45	4.48	4.50	4.52
45.0		4.45	4.49	4.53	4.57	4.62	4.63	4.66	4.68	4.70
50.0		4.62	4.67	4.72	4.77	4.82	4.84	4.87	4.90	4.92
55.0			4.88	4.94	4.99	5.05	5.07	5.11	5.14	5.17
60.0				5.18	5.25	5.31	5.34	5.38	5.41	5.45
65.0				5.46	5.54	5.61	5.64	5.69	5.73	5.76
70.0					5.86	5.94	5.98	6.03	6.07	6.12
75.0					6.21	6.31	6.35	6.41	6.46	6.51

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	24.60	30.30	37.10	45.10	54.50					
20.0	24.50	30.20	36.90	45.00	54.30					
25.0	24.30	29.90	36.70	44.60	53.90	64.60	69.40			
30.0	24.00	29.70	36.30	44.20	53.40	64.10	68.80	76.30	83.00	90.10
35.0	23.90	29.40	36.00	43.80	52.90	63.40	68.10	75.50	82.20	89.30
40.0	23.70	29.20	35.60	43.30	52.30	62.70	67.30	74.60	81.30	88.30
45.0		28.90	35.30	42.80	51.60	61.80	66.40	73.70	80.20	87.20
50.0		28.70	34.90	42.20	50.80	60.90	65.40	72.60	79.10	86.00
55.0			34.50	41.60	50.00	59.90	64.30	71.40	77.80	84.70
60.0				41.10	49.20	58.80	63.10	70.10	76.40	83.20
65.0				40.50	48.30	57.70	61.90	68.70	74.90	81.60
70.0					47.50	56.50	60.60	67.30	73.40	80.00
75.0					46.70	55.30	59.30	65.80	71.80	78.30

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:	-10 / 45 / 20 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
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	631
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