



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	5.00	6.27	7.79	9.61	11.75					
20.0	4.86	6.10	7.59	9.36	11.45					
25.0	4.61	5.81	7.24	8.95	10.95	13.30	14.35			
30.0	4.37	5.52	6.89	8.53	10.45	12.70	13.75	15.35	16.80	18.35
35.0	4.12	5.22	6.54	8.11	9.96	12.10	13.10	14.65	16.05	17.55
40.0	3.87	4.92	6.18	7.68	9.44	11.50	12.45	13.95	15.25	16.70
45.0		4.62	5.82	7.24	8.92	10.90	11.80	13.20	14.50	15.85
50.0		4.32	5.45	6.80	8.39	10.25	11.10	12.45	13.70	15.00
55.0			5.07	6.35	7.86	9.64	10.45	11.70	12.90	14.15
60.0				5.89	7.31	8.99	9.75	10.95	12.05	13.25
65.0				5.42	6.75	8.34	9.04	10.20	11.25	12.35
70.0					6.19	7.67	8.33	9.41	10.40	11.45
75.0					5.61	6.98	7.60	8.61	9.54	10.55

50 Hz

YH13K1E-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	1.42	1.46	1.50	1.52	1.55					
20.0	1.50	1.55	1.59	1.62	1.66					
25.0	1.65	1.70	1.76	1.80	1.84	1.87	1.88			
30.0	1.80	1.86	1.92	1.98	2.03	2.07	2.09	2.11	2.13	2.14
35.0	1.96	2.03	2.11	2.17	2.23	2.29	2.31	2.34	2.36	2.38
40.0	2.12	2.21	2.30	2.38	2.45	2.52	2.55	2.58	2.61	2.64
45.0		2.40	2.50	2.60	2.68	2.77	2.80	2.84	2.88	2.92
50.0		2.61	2.72	2.83	2.93	3.03	3.07	3.12	3.17	3.21
55.0			2.96	3.08	3.20	3.32	3.36	3.43	3.48	3.53
60.0				3.35	3.49	3.62	3.68	3.75	3.81	3.87
65.0				3.64	3.80	3.95	4.01	4.10	4.17	4.24
70.0					4.14	4.31	4.38	4.48	4.56	4.64
75.0					4.50	4.69	4.77	4.88	4.97	5.07

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	5.33	5.35	5.38	5.40	5.42					
20.0	5.38	5.41	5.44	5.46	5.48					
25.0	5.47	5.51	5.54	5.57	5.60	5.62	5.63			
30.0	5.57	5.62	5.66	5.70	5.73	5.77	5.78	5.79	5.81	5.82
35.0	5.68	5.74	5.79	5.84	5.89	5.93	5.95	5.97	5.99	6.01
40.0	5.80	5.87	5.94	6.00	6.07	6.13	6.15	6.18	6.21	6.23
45.0		6.03	6.11	6.19	6.27	6.35	6.38	6.42	6.46	6.49
50.0		6.20	6.31	6.41	6.51	6.61	6.64	6.70	6.74	6.79
55.0			6.53	6.66	6.78	6.90	6.94	7.01	7.07	7.13
60.0				6.93	7.08	7.23	7.28	7.37	7.44	7.51
65.0				7.25	7.43	7.60	7.67	7.77	7.85	7.94
70.0					7.81	8.02	8.10	8.22	8.32	8.41
75.0					8.25	8.48	8.58	8.72	8.83	8.95

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	29.30	36.00	43.90	53.20	63.90					
20.0	29.10	35.90	43.80	53.00	63.70					
25.0	28.90	35.70	43.60	52.90	63.50	75.80	81.10			
30.0	28.70	35.50	43.40	52.60	63.30	75.50	80.90	89.40	97.10	105.00
35.0	28.50	35.20	43.20	52.40	63.10	75.30	80.60	89.20	96.80	105.00
40.0	28.20	35.00	42.90	52.10	62.80	75.00	80.30	88.90	96.50	104.50
45.0		34.70	42.70	51.90	62.50	74.70	80.00	88.60	96.20	104.50
50.0		34.40	42.40	51.50	62.10	74.30	79.70	88.20	95.80	104.00
55.0			42.00	51.20	61.80	73.90	79.30	87.80	95.50	103.50
60.0				50.80	61.40	73.50	78.90	87.40	95.10	103.00
65.0				50.40	60.90	73.10	78.50	87.00	94.70	103.00
70.0					60.50	72.70	78.10	86.70	94.40	102.50
75.0					60.10	72.30	77.70	86.40	94.20	102.50

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	16.7
Length/Width, mm	255/261
Height, mm	442
Net Weight, kg	39.1
Gross Weight, kg	41.6
Stub Suction, inch	7/8
Stub Discharge, inch	1/2
Oil Quantity, l	1.89
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	65
Sound Power (MT), dBA	76
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
Max. Low Side Internal Free Volume, l	6.4
Max. High Side Internal Free Volume, l	0.6
Max. Internal Free Volume, l	7.00
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	12.9
Locked Rotor Current, A	74
Winding Resistance, ohm	2.47
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

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