



Minimum Evaporating Temp. With:

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

Suction Superheat 11.1K

Liquid Subcooling 8.3K

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	3.59	4.49	5.57	6.87	8.38					
20.0	3.49	4.38	5.44	6.70	8.19					
25.0	3.33	4.18	5.21	6.43	7.87	9.54	10.30			
30.0	3.17	3.99	4.98	6.15	7.54	9.15	9.87	11.05	12.05	13.15
35.0	3.00	3.80	4.75	5.87	7.20	8.76	9.45	10.55	11.55	12.65
40.0	2.84	3.60	4.51	5.59	6.87	8.36	9.02	10.10	11.05	12.10
45.0		3.40	4.27	5.30	6.52	7.96	8.59	9.62	10.55	11.55
50.0		3.20	4.03	5.01	6.18	7.55	8.15	9.14	10.05	11.00
55.0			3.78	4.72	5.83	7.13	7.71	8.65	9.50	10.40
60.0				4.42	5.47	6.71	7.26	8.16	8.97	9.85
65.0				4.11	5.11	6.28	6.81	7.66	8.44	9.27
70.0					4.74	5.85	6.35	7.16	7.90	8.69
75.0					4.37	5.42	5.89	6.66	7.35	8.11

50 Hz

YH09K1E-PFJ

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	1.02	1.04	1.07	1.09	1.10					
20.0	1.07	1.11	1.14	1.16	1.18					
25.0	1.17	1.22	1.25	1.28	1.31	1.33	1.34			
30.0	1.27	1.32	1.38	1.42	1.45	1.48	1.48	1.50	1.51	1.52
35.0	1.38	1.44	1.50	1.55	1.60	1.64	1.65	1.66	1.68	1.69
40.0	1.49	1.57	1.64	1.70	1.76	1.80	1.82	1.84	1.86	1.88
45.0		1.70	1.78	1.86	1.92	1.98	2.00	2.03	2.05	2.07
50.0		1.84	1.94	2.02	2.10	2.17	2.19	2.23	2.26	2.28
55.0			2.11	2.20	2.29	2.37	2.40	2.45	2.48	2.51
60.0				2.40	2.50	2.59	2.63	2.68	2.71	2.75
65.0				2.61	2.72	2.83	2.87	2.92	2.97	3.01
70.0					2.96	3.08	3.12	3.19	3.24	3.29
75.0					3.21	3.35	3.40	3.47	3.53	3.59

Cond °C	Current at 230 V, A									
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
17.0	8.51	8.61	8.68	8.74	8.78					
20.0	8.69	8.80	8.89	8.97	9.02					
25.0	8.99	9.13	9.25	9.35	9.43	9.50	9.51			
30.0	9.31	9.48	9.63	9.76	9.87	9.96	9.99	10.03	10.06	10.08
35.0	9.65	9.85	10.04	10.20	10.35	10.47	10.51	10.57	10.61	10.65
40.0	10.01	10.25	10.48	10.68	10.86	11.02	11.07	11.15	11.21	11.26
45.0		10.69	10.96	11.20	11.42	11.61	11.68	11.78	11.86	11.93
50.0		11.17	11.48	11.76	12.03	12.26	12.35	12.48	12.57	12.66
55.0			12.05	12.38	12.69	12.97	13.08	13.23	13.35	13.46
60.0				13.06	13.42	13.75	13.88	14.06	14.20	14.33
65.0				13.80	14.21	14.60	14.74	14.96	15.12	15.28
70.0					15.09	15.53	15.69	15.94	16.13	16.32
75.0					16.04	16.54	16.73	17.00	17.23	17.44

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	19.55	24.00	29.30	35.50	42.60					
20.0	19.45	23.90	29.20	35.40	42.60					
25.0	19.30	23.80	29.10	35.30	42.40	50.60	54.20			
30.0	19.15	23.70	29.00	35.10	42.30	50.40	54.00	59.70	64.80	70.20
35.0	19.00	23.50	28.80	35.00	42.10	50.30	53.80	59.50	64.60	70.00
40.0	18.85	23.40	28.70	34.80	41.90	50.10	53.60	59.30	64.40	69.80
45.0		23.20	28.50	34.60	41.70	49.80	53.40	59.10	64.20	69.60
50.0		23.00	28.30	34.40	41.50	49.60	53.20	58.90	64.00	69.40
55.0			28.10	34.20	41.20	49.40	52.90	58.60	63.70	69.10
60.0				33.90	41.00	49.10	52.60	58.40	63.50	68.90
65.0				33.60	40.70	48.80	52.40	58.10	63.20	68.70
70.0					40.40	48.50	52.10	57.90	63.00	68.50
75.0					40.10	48.30	51.90	57.70	62.90	68.50

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, POE MOBIL EAL Arctic 22 CC
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 (220-240 V / 1~ / 50 Hz)

Maximum Operating Current, A	23.5
Locked Rotor Current, A	114
Winding Resistance, ohm	0.59/1.67 (R/S)
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Crankcase Heater	49/ 53 W External
Mounting Parts	Rubber

ACCESSORIES OPTIONAL

MOTOR OPTIONS

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
PFJ	220-240 V / 1~ / 50 Hz	230		PSC	1.00
PFJ	265 V / 1~ / 60 Hz	265		PSC	0.75