



Minimum Evaporating Temp. With:

- 10 K Suction Superheat
- 5 K Suction Superheat
- Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW											
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0
17.0	5.12	6.48	8.12									
20.0	4.92	6.26	7.86	9.77								
25.0	4.60	5.89	7.43	9.26	11.40	13.95						
30.0	4.29	5.53	7.01	8.76	10.85	13.25	16.05	17.25				
35.0	3.99	5.17	6.59	8.26	10.25	12.55	15.20	16.40	18.25	19.95	21.80	
40.0	3.69	4.82	6.17	7.76	9.63	11.80	14.35	15.50	17.30	18.90	20.60	24.50
45.0	3.40	4.47	5.75	7.25	9.02	11.10	13.50	14.55	16.30	17.85	19.50	23.10
50.0		4.13	5.33	6.74	8.41	10.35	12.65	13.65	15.25	16.75	18.30	21.80
55.0			4.91	6.23	7.79	9.62	11.75	12.70	14.25	15.60	17.10	20.40
60.0				5.71	7.16	8.86	10.85	11.75	13.20	14.50	15.90	18.95
65.0					6.52	8.10	9.95	10.80	12.10	13.35	14.65	
67.0						7.79	9.58	10.40	11.70	12.85	14.15	

50 Hz

ZH38K4E-PFZ

R407C Dew Point

Cond °C	Power, kW											
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0
17.0	1.96	2.02	2.07									
20.0	2.08	2.13	2.18	2.23								
25.0	2.25	2.33	2.38	2.43	2.49	2.58						
30.0	2.43	2.52	2.59	2.64	2.70	2.78	2.89	2.95				
35.0	2.59	2.73	2.82	2.89	2.95	3.01	3.10	3.15	3.24	3.32	3.43	
40.0	2.76	2.94	3.07	3.16	3.23	3.30	3.38	3.41	3.49	3.56	3.64	3.87
45.0	2.92	3.16	3.33	3.46	3.55	3.63	3.70	3.74	3.80	3.86	3.94	4.12
50.0		3.39	3.61	3.78	3.91	4.00	4.09	4.13	4.18	4.24	4.30	4.47
55.0			3.91	4.13	4.30	4.43	4.53	4.57	4.64	4.69	4.75	4.90
60.0				4.51	4.73	4.90	5.03	5.08	5.15	5.21	5.27	5.42
65.0					5.20	5.42	5.59	5.65	5.74	5.81	5.88	
67.0						5.64	5.83	5.90	5.99	6.07	6.14	

Cond °C	Current at 230 V, A											
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0
17.0	11.16	11.30	11.38									
20.0	11.62	11.80	11.92	12.02								
25.0	12.29	12.58	12.77	12.91	13.06	13.28						
30.0	12.89	13.30	13.58	13.79	13.98	14.21	14.51	14.67				
35.0	13.48	14.02	14.41	14.70	14.95	15.20	15.51	15.66	15.93	16.19	16.51	
40.0	14.08	14.78	15.30	15.69	16.01	16.31	16.64	16.79	17.05	17.30	17.59	18.32
45.0	14.76	15.63	16.29	16.80	17.21	17.58	17.94	18.10	18.36	18.61	18.89	19.57
50.0		16.62	17.44	18.09	18.61	19.05	19.47	19.64	19.92	20.17	20.44	21.10
55.0			18.79	19.59	20.23	20.77	21.26	21.46	21.76	22.02	22.30	22.95
60.0				21.35	22.14	22.80	23.38	23.60	23.93	24.21	24.51	25.17
65.0					24.37	25.16	25.85	26.11	26.48	26.80	27.12	
67.0						26.22	26.95	27.22	27.62	27.95	28.28	

Cond °C	Suction Mass Flow, g/s											
	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0
17.0	27.20	33.90	41.90									
20.0	26.80	33.60	41.50	50.80								
25.0	26.20	32.90	40.90	50.20	61.00	73.40						
30.0	25.50	32.30	40.30	49.60	60.30	72.70	86.80	92.90				
35.0	24.90	31.70	39.70	48.90	59.60	71.90	86.00	92.10	102.00	110.50	120.00	
40.0	24.30	31.10	39.10	48.30	58.90	71.10	85.10	91.20	101.00	109.50	119.00	139.00
45.0	23.70	30.50	38.50	47.60	58.20	70.30	84.20	90.30	100.00	108.50	118.00	138.00
50.0		29.90	37.80	46.90	57.40	69.50	83.30	89.30	99.00	107.50	117.00	137.00
55.0			37.20	46.20	56.70	68.60	82.40	88.40	98.00	106.50	116.00	136.00
60.0				45.50	55.90	67.80	81.40	87.40	97.00	105.50	114.50	135.00
65.0					55.10	66.90	80.50	86.50	96.10	104.50	114.00	
67.0						66.60	80.10	86.10	95.70	104.50	113.50	

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m <sup>3</sup> /h	14.4
Length/Width, mm	247/241
Height, mm	438
Net Weight, kg	38
Gross Weight, kg	41
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, POE MOBIL EAL Arctic 22 CC
Base mounting (hole dia), mm	190 x 190 (8.5)
Sound Pressure @ 1m (HT), dBA	63
Sound Power (HT), dBA	74
Sound Power with Sound Shell (HT), dBA	67
Sound Conditions (HT, Temperatures:	-7 / 50 / 3 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	1
Max. Low Side Internal Free Volume, l	6.0
Max. High Side Internal Free Volume, l	0.6
Max. Internal Free Volume, l	6.60
High Side PS gauge, bar	32
Low Side PS gauge, bar	22.6
Low Side TS Max., °C	50
Refrigerant's GWP	1774
Refrigerant's classification	A1

50 Hz

ZH38K4E-PFZ

R407C Dew Point

**COMPRESSOR ELECTRICAL DATA (220-240 V / 1~ / 50 Hz)**

Maximum Operating Current, A	31.1
Locked Rotor Current, A	150
Winding Resistance, ohm	0.42/1.92 (R/S)
Default Enclosure Class	IP 21 (IEC 34)

**ACCESSORIES INCLUDED**

Mounting Grommets	Standard
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**ACCESSORIES OPTIONAL**

Crankcase Heater	70 W External
Discharge Temperature Protection	Discharge line thermostat

**MOTOR OPTIONS**

<i>Motor Code</i>	<i>Power Supply</i>	<i>Nominal Voltage, V</i>	<i>Start Connection</i>	<i>DOL Connection</i>	<i>Amps Factor</i>
PFZ	220-240 V / 1~ / 50 Hz	230		PSC	1.00