



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	5.02	6.34	7.93										
20.0	4.87	6.16	7.72	9.59									
25.0	4.60	5.86	7.37	9.18	11.30	13.80							
30.0	4.33	5.54	7.01	8.75	10.80	13.20	16.00	17.25					
35.0	4.05	5.23	6.63	8.30	10.25	12.60	15.25	16.45	18.35	20.10	21.90		
40.0	3.78	4.90	6.24	7.83	9.72	11.95	14.50	15.65	17.45	19.10	20.90	24.70	
45.0	3.50	4.57	5.84	7.35	9.15	11.25	13.70	14.80	16.55	18.10	19.80	23.50	
50.0		4.23	5.43	6.86	8.55	10.55	12.85	13.90	15.55	17.05	18.65	22.20	
55.0			5.01	6.35	7.94	9.81	12.00	13.00	14.55	16.00	17.50	20.90	
60.0				5.82	7.30	9.06	11.10	12.05	13.55	14.85	16.30	19.50	
65.0					6.65	8.28	10.20	11.05	12.45	13.70	15.05		
67.0						7.96	9.82	10.65	12.00	13.25	14.55		

50 Hz

ZH38K4E-TFD

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	1.68	1.74	1.82									
20.0	1.78	1.86	1.93	2.01								
25.0	1.98	2.06	2.14	2.22	2.31	2.43						
30.0	2.18	2.29	2.37	2.45	2.53	2.64	2.78	2.84				
35.0	2.39	2.52	2.62	2.71	2.79	2.89	3.01	3.07	3.17	3.26	3.37	
40.0	2.61	2.77	2.89	2.99	3.08	3.18	3.29	3.34	3.42	3.51	3.60	3.83
45.0	2.84	3.03	3.18	3.30	3.40	3.50	3.60	3.65	3.73	3.80	3.89	4.09
50.0		3.30	3.48	3.63	3.75	3.86	3.97	4.01	4.08	4.15	4.23	4.41
55.0			3.81	3.99	4.13	4.25	4.37	4.41	4.49	4.55	4.62	4.78
60.0				4.36	4.54	4.68	4.81	4.86	4.93	5.00	5.07	5.22
65.0					4.97	5.14	5.29	5.35	5.43	5.49	5.56	
67.0						5.34	5.50	5.55	5.64	5.71	5.78	

Cond °C	Current at 400 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	4.43	4.49	4.55									
20.0	4.54	4.60	4.66	4.74								
25.0	4.72	4.80	4.87	4.95	5.05	5.17						
30.0	4.92	5.03	5.11	5.19	5.29	5.40	5.56	5.63				
35.0	5.14	5.27	5.38	5.48	5.57	5.68	5.82	5.89	6.01	6.12	6.25	
40.0	5.37	5.55	5.69	5.80	5.91	6.02	6.15	6.21	6.32	6.42	6.53	6.81
45.0	5.62	5.84	6.02	6.17	6.29	6.41	6.54	6.60	6.70	6.79	6.89	7.14
50.0		6.17	6.39	6.57	6.72	6.86	7.00	7.06	7.15	7.24	7.33	7.56
55.0			6.80	7.02	7.20	7.37	7.52	7.58	7.68	7.76	7.85	8.07
60.0				7.51	7.74	7.93	8.10	8.17	8.27	8.36	8.46	8.66
65.0					8.32	8.55	8.76	8.84	8.95	9.04	9.14	
67.0						8.82	9.04	9.12	9.24	9.34	9.44	

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	26.70	33.20	40.90									
20.0	26.50	33.00	40.80	49.90								
25.0	26.20	32.80	40.60	49.80	60.40	72.70						
30.0	25.80	32.40	40.30	49.50	60.20	72.50	86.60	92.80				
35.0	25.30	32.10	40.00	49.20	59.90	72.20	86.40	92.50	102.50	111.00	120.50	
40.0	24.90	31.60	39.50	48.80	59.50	71.80	86.00	92.20	102.00	111.00	120.00	140.50
45.0	24.40	31.20	39.10	48.30	59.00	71.30	85.50	91.70	101.50	110.50	119.50	140.00
50.0		30.70	38.60	47.80	58.40	70.70	84.90	91.10	101.00	110.00	119.00	139.50
55.0			38.00	47.10	57.70	70.00	84.10	90.30	100.50	109.00	118.50	139.00
60.0				46.40	57.00	69.20	83.30	89.60	99.50	108.50	118.00	138.50
65.0					56.20	68.40	82.50	88.70	98.70	107.50	117.00	
67.0						68.00	82.20	88.40	98.40	107.50	117.00	

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /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	66
Sound Power (HT), dBA	77
Sound Power with Sound Shell (HT), dBA	69
Sound Conditions (HT, Temperatures: Evap./Cond./Suction at freq./speed)	-7 / 50 / 3 °C at 50 Hz
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-TFD

R407C Dew Point

COMPRESSOR ELECTRICAL DATA (380-420 V / 3~ / 50 Hz)

Maximum Operating Current, A	10.1
Locked Rotor Current, A	64
Winding Resistance, ohm	2.47
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Mounting Grommets	Standard
-------------------	----------

ACCESSORIES OPTIONAL

Crankcase Heater	70 W External
Discharge Temperature Protection	Discharge line thermostat

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
TFR	220-240 V / 3~ / 50 Hz	230		Y	1.73
TFD	460 V / 3~ / 60 Hz	460		Y	1.04