



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	5.95	7.53	9.43										
20.0	5.76	7.32	9.18	11.40									
25.0	5.45	6.95	8.75	10.90	13.40	16.30							
30.0	5.13	6.58	8.31	10.35	12.75	15.60	18.85	20.30					
35.0	4.80	6.19	7.85	9.81	12.15	14.85	17.95	19.35	21.60	23.60	25.70		
40.0	4.46	5.80	7.38	9.26	11.45	14.05	17.05	18.40	20.50	22.50	24.50	29.10	
45.0	4.12	5.39	6.90	8.69	10.80	13.25	16.15	17.40	19.45	21.30	23.30	27.60	
50.0		4.98	6.41	8.10	10.10	12.45	15.20	16.40	18.35	20.10	22.00	26.20	
55.0			5.90	7.50	9.38	11.60	14.20	15.35	17.20	18.90	20.70	24.70	
60.0				6.88	8.64	10.75	13.20	14.30	16.05	17.65	19.35	23.20	
65.0					7.89	9.84	12.15	13.15	14.85	16.35	17.95		
67.0						9.48	11.70	12.70	14.35	15.80	17.40		

50 Hz

ZH45K4E-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	2.11	2.18	2.25									
20.0	2.23	2.31	2.39	2.47								
25.0	2.45	2.55	2.63	2.71	2.80	2.90						
30.0	2.68	2.79	2.90	2.99	3.08	3.18	3.30	3.35				
35.0	2.91	3.06	3.18	3.29	3.39	3.50	3.61	3.66	3.75	3.83	3.91	
40.0	3.15	3.33	3.48	3.62	3.74	3.85	3.97	4.02	4.11	4.18	4.26	4.45
45.0	3.40	3.62	3.81	3.97	4.11	4.24	4.38	4.43	4.51	4.59	4.67	4.85
50.0		3.93	4.15	4.35	4.52	4.67	4.82	4.88	4.97	5.05	5.13	5.31
55.0			4.52	4.75	4.96	5.14	5.31	5.38	5.48	5.56	5.65	5.83
60.0				5.19	5.43	5.65	5.85	5.93	6.04	6.13	6.23	6.42
65.0					5.94	6.20	6.43	6.52	6.65	6.75	6.86	
67.0						6.43	6.68	6.77	6.91	7.02	7.13	

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	5.90	5.94	6.00									
20.0	5.99	6.05	6.11	6.17								
25.0	6.17	6.24	6.32	6.39	6.47	6.57						
30.0	6.36	6.47	6.56	6.65	6.74	6.84	6.97	7.03				
35.0	6.57	6.72	6.84	6.95	7.06	7.17	7.30	7.36	7.45	7.54	7.64	
40.0	6.81	7.00	7.16	7.30	7.44	7.57	7.70	7.76	7.86	7.95	8.04	8.26
45.0	7.07	7.31	7.52	7.70	7.86	8.02	8.18	8.24	8.35	8.44	8.53	8.75
50.0		7.66	7.92	8.15	8.35	8.54	8.72	8.80	8.91	9.01	9.11	9.34
55.0			8.36	8.64	8.89	9.12	9.34	9.43	9.56	9.67	9.78	10.02
60.0				9.19	9.50	9.77	10.03	10.14	10.29	10.41	10.54	10.79
65.0					10.16	10.49	10.80	10.92	11.10	11.24	11.38	
67.0						10.80	11.13	11.26	11.44	11.60	11.75	

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	31.70	39.50	48.70									
20.0	31.40	39.30	48.50	59.30								
25.0	31.00	38.90	48.20	59.00	71.50	85.90						
30.0	30.50	38.50	47.80	58.60	71.10	85.50	102.00	109.00				
35.0	30.00	38.00	47.30	58.20	70.70	85.10	101.50	109.00	120.50	130.50	141.50	
40.0	29.40	37.40	46.80	57.70	70.20	84.70	101.00	108.50	120.00	130.50	141.50	165.00
45.0	28.70	36.80	46.20	57.10	69.60	84.10	100.50	108.00	119.50	130.00	141.00	165.00
50.0		36.10	45.50	56.40	69.00	83.50	100.00	107.50	119.00	129.50	140.50	164.50
55.0			44.80	55.70	68.30	82.80	99.40	107.00	118.50	129.00	140.00	164.50
60.0				54.80	67.50	82.00	98.80	106.00	118.00	128.50	140.00	164.50
65.0					66.70	81.30	98.20	105.50	117.50	128.50	139.50	
67.0						81.00	98.00	105.50	117.50	128.50	139.50	

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	17.1
Length/Width, mm	250/246
Height, mm	438
Net Weight, kg	40
Gross Weight, kg	42
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	67
Sound Power (HT), dBA	78
Sound Power with Sound Shell (HT), dBA	70
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

ZH45K4E-TFD

R407C Dew Point

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

Maximum Operating Current, A	11.8
Locked Rotor Current, A	74
Winding Resistance, ohm	2.47
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

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