



Minimum Evaporating Temp. With:

10 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	25.0
20.0	3.92	4.97	6.24	7.77	9.59	11.75							
25.0	3.71	4.72	5.95	7.42	9.16	11.25	13.65						
30.0	3.50	4.47	5.65	7.06	8.74	10.70	13.05	14.05	15.70				
35.0	3.28	4.22	5.35	6.70	8.30	10.20	12.40	13.40	15.00	16.45	17.95		
40.0	3.07	3.97	5.04	6.33	7.86	9.67	11.80	12.75	14.25	15.65	17.10	20.40	
45.0	2.85	3.71	4.73	5.96	7.41	9.14	11.15	12.05	13.50	14.85	16.25	19.40	22.90
50.0	2.63	3.45	4.42	5.58	6.96	8.60	10.50	11.40	12.75	14.05	15.35	18.35	21.80
55.0	2.41	3.19	4.10	5.20	6.50	8.05	9.87	10.70	12.00	13.20	14.50	17.35	20.60
60.0		2.92	3.78	4.81	6.03	7.49	9.21	9.98	11.25	12.35	13.60	16.30	19.45
65.0			3.45	4.41	5.55	6.92	8.54	9.26	10.45	11.50	12.65	15.25	18.25
70.0				4.01	5.07	6.34	7.85	8.53	9.64	10.65	11.75	14.20	
75.0				3.59	4.57	5.75	7.15	7.79	8.82	9.77	10.80		

50 Hz

ZH45K4E-TFD

R134a

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	25.0
20.0	1.48	1.54	1.58	1.63	1.66	1.70							
25.0	1.63	1.69	1.74	1.80	1.84	1.88	1.92						
30.0	1.78	1.84	1.91	1.97	2.03	2.08	2.12	2.14	2.16				
35.0	1.92	2.00	2.08	2.16	2.22	2.29	2.34	2.37	2.40	2.42	2.44		
40.0	2.08	2.17	2.27	2.35	2.43	2.51	2.58	2.61	2.64	2.67	2.70	2.75	
45.0	2.25	2.36	2.46	2.56	2.66	2.75	2.83	2.87	2.91	2.95	2.98	3.05	3.11
50.0	2.43	2.55	2.67	2.78	2.90	3.00	3.10	3.14	3.20	3.24	3.29	3.37	3.44
55.0	2.62	2.76	2.89	3.03	3.15	3.28	3.40	3.44	3.51	3.56	3.61	3.71	3.81
60.0		2.98	3.14	3.29	3.43	3.57	3.71	3.76	3.84	3.90	3.96	4.08	4.19
65.0			3.40	3.57	3.73	3.89	4.05	4.11	4.20	4.27	4.34	4.48	4.61
70.0				3.87	4.05	4.24	4.41	4.48	4.58	4.67	4.75	4.91	
75.0				4.20	4.40	4.61	4.80	4.88	5.00	5.09	5.19		

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	25.0
20.0	4.86	4.89	4.93	4.96	4.99	5.01							
25.0	4.96	5.00	5.05	5.09	5.13	5.16	5.19						
30.0	5.07	5.13	5.18	5.23	5.28	5.33	5.37	5.38	5.40				
35.0	5.19	5.26	5.33	5.40	5.46	5.52	5.58	5.60	5.63	5.65	5.67		
40.0	5.33	5.42	5.50	5.59	5.67	5.74	5.82	5.84	5.88	5.91	5.94	6.00	
45.0	5.49	5.59	5.69	5.80	5.90	5.99	6.08	6.12	6.17	6.21	6.25	6.32	6.39
50.0	5.66	5.78	5.91	6.03	6.15	6.27	6.39	6.43	6.49	6.55	6.60	6.69	6.78
55.0	5.86	6.00	6.15	6.30	6.44	6.59	6.72	6.78	6.86	6.92	6.98	7.10	7.21
60.0		6.25	6.42	6.60	6.77	6.93	7.10	7.16	7.26	7.33	7.41	7.56	7.69
65.0			6.72	6.93	7.12	7.32	7.51	7.59	7.70	7.79	7.88	8.06	8.23
70.0				7.29	7.52	7.75	7.97	8.06	8.19	8.30	8.40	8.61	
75.0				7.70	7.96	8.22	8.47	8.57	8.73	8.85	8.97		

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	25.0	
20.0	24.00	29.80	36.70	44.80	54.30	65.30								
25.0	23.80	29.60	36.50	44.70	54.10	65.10	77.60							
30.0	23.50	29.40	36.30	44.40	53.90	64.80	77.40	82.80	91.60					
35.0	23.20	29.10	36.10	44.20	53.70	64.60	77.10	82.60	91.30	99.10	107.50			
40.0	22.90	28.90	35.80	44.00	53.40	64.30	76.80	82.30	91.00	98.80	107.00	125.00		
45.0	22.50	28.60	35.60	43.70	53.10	64.00	76.50	81.90	90.70	98.50	107.00	125.00	145.00	
50.0	22.20	28.30	35.30	43.40	52.80	63.60	76.10	81.60	90.30	98.10	106.50	124.50	145.00	
55.0	21.80	27.90	34.90	43.00	52.40	63.20	75.70	81.20	89.90	97.80	106.00	124.50	144.50	
60.0		27.50	34.60	42.60	52.00	62.80	75.30	80.80	89.50	97.40	105.50	124.00	144.50	
65.0			34.10	42.20	51.60	62.40	74.90	80.30	89.10	97.00	105.50	124.00	144.50	
70.0				41.80	51.20	62.00	74.40	79.90	88.80	96.70	105.00	123.50		
75.0				41.40	50.70	61.60	74.10	79.60	88.50	96.50	105.00			

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	64
Sound Power (HT), dBA	75
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	1430
Refrigerant's classification	A1

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

Maximum Operating Current, A	11.8
Locked Rotor Current, A	74
Winding Resistance, ohm	2.74
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

ACCESSORIES OPTIONAL

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