



Minimum Evaporating Temp. With:
— 10 K Suction Superheat
— Maximum Evaporating Temperature

Suction Superheat 11.1K

Liquid Subcooling 8.3K

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
17.0	7.55	9.22	11.10										
20.0	7.39	9.05	10.90	13.00									
25.0	7.11	8.75	10.60	12.65	14.90	17.45							
30.0	6.82	8.44	10.25	12.30	14.55	17.05	19.80	21.00	22.80				
35.0	6.54	8.13	9.92	11.90	14.15	16.60	19.35	20.50	22.30	23.90	25.60		
40.0	6.26	7.83	9.59	11.55	13.75	16.20	18.90	20.00	21.80	23.40	25.10	28.60	32.50
45.0	6.00	7.54	9.27	11.20	13.35	15.75	18.40	19.55	21.30	22.90	24.50	28.00	31.80
50.0	5.76	7.27	8.96	10.85	13.00	15.35	17.95	19.05	20.80	22.30	24.00	27.40	31.20
55.0	5.55	7.02	8.68	10.55	12.60	14.90	17.45	18.55	20.30	21.80	23.40	26.80	30.50
60.0		6.81	8.42	10.25	12.25	14.50	17.05	18.10	19.80	21.30	22.80	26.20	
65.0			8.21	9.97	11.95	14.15	16.60	17.65	19.30	20.80	22.30		
67.0			8.13	9.87	11.85	14.00	16.45	17.50	19.15	20.60	22.10		

50 Hz

ZH18KVE-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	25.0
17.0	2.55	2.59	2.61										
20.0	2.69	2.73	2.76	2.79									
25.0	2.92	2.97	3.00	3.03	3.07	3.12							
30.0	3.15	3.22	3.27	3.30	3.33	3.38	3.45	3.48	3.55				
35.0	3.40	3.50	3.57	3.61	3.65	3.68	3.74	3.77	3.82	3.87	3.94		
40.0	3.67	3.81	3.91	3.97	4.01	4.05	4.10	4.12	4.16	4.21	4.26	4.40	4.61
45.0	3.98	4.16	4.30	4.39	4.45	4.49	4.54	4.56	4.59	4.63	4.67	4.79	4.96
50.0	4.33	4.57	4.74	4.87	4.96	5.02	5.07	5.09	5.12	5.15	5.19	5.29	5.42
55.0	4.74	5.04	5.26	5.43	5.55	5.63	5.70	5.72	5.76	5.79	5.82	5.91	6.02
60.0		5.57	5.86	6.07	6.23	6.35	6.44	6.47	6.51	6.54	6.58	6.66	
65.0			6.54	6.81	7.02	7.18	7.29	7.33	7.39	7.43	7.47		
67.0			6.84	7.14	7.37	7.54	7.67	7.72	7.77	7.82	7.86		

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
17.0	8.18	8.21	8.25										
20.0	8.36	8.39	8.42	8.45									
25.0	8.60	8.64	8.67	8.69	8.73	8.79							
30.0	8.81	8.86	8.90	8.92	8.95	8.99	9.05	9.09	9.15				
35.0	9.01	9.09	9.14	9.17	9.20	9.23	9.28	9.30	9.35	9.40	9.46		
40.0	9.21	9.33	9.41	9.47	9.50	9.53	9.57	9.59	9.63	9.67	9.72	9.84	10.02
45.0	9.46	9.63	9.74	9.83	9.88	9.93	9.97	9.99	10.02	10.05	10.09	10.19	10.33
50.0	9.77	9.99	10.16	10.28	10.37	10.43	10.49	10.51	10.54	10.57	10.61	10.69	10.81
55.0	10.16	10.45	10.68	10.85	10.98	11.07	11.15	11.18	11.22	11.25	11.29	11.37	11.48
60.0		11.03	11.32	11.56	11.74	11.87	11.99	12.02	12.08	12.12	12.16	12.25	
65.0			12.13	12.43	12.67	12.86	13.02	13.07	13.14	13.20	13.25		
67.0			12.50	12.83	13.10	13.31	13.49	13.55	13.63	13.69	13.75		

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	25.0	
17.0	32.70	40.60	49.60											
20.0	32.20	40.10	49.20	59.50										
25.0	31.30	39.30	48.30	58.60	70.30	83.40								
30.0	30.50	38.40	47.40	57.70	69.40	82.50	97.20	103.50	113.50					
35.0	29.60	37.50	46.50	56.70	68.40	81.50	96.20	102.50	112.50	121.50	130.50			
40.0	28.70	36.50	45.50	55.70	67.30	80.40	95.00	101.50	111.50	120.00	129.50	149.50	171.50	
45.0	27.90	35.70	44.60	54.80	66.30	79.30	93.90	100.00	110.00	119.00	128.00	148.00	170.00	
50.0	27.20	34.90	43.70	53.80	65.30	78.20	92.70	99.00	109.00	117.50	127.00	146.50	168.50	
55.0	26.60	34.20	42.90	52.90	64.30	77.20	91.60	97.80	107.50	116.50	125.50	145.50	167.00	
60.0		33.60	42.30	52.20	63.40	76.20	90.50	96.70	106.50	115.00	124.50	144.00		
65.0			41.80	51.60	62.70	75.30	89.50	95.70	105.50	114.00	123.00			
67.0			41.60	51.40	62.50	75.00	89.20	95.30	105.00	113.50	122.50			

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	17.1
Length/Width, mm	244/241
Height, mm	438
Net Weight, kg	40
Gross Weight, kg	42
Stub Suction, inch	7/8
Stub Discharge, inch	1/2
Stub Injection, 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	65
Sound Power (HT), dBA	76
Sound Power with Sound Shell (HT), dBA	68
Sound Conditions (HT, Temperatures:	-7 / 50 / 3 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	1
Max. Internal Free Volume, l	4.10
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

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

Maximum Operating Current, A	14
Locked Rotor Current, A	101
Winding Resistance, ohm	1.8
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
TFM	380-420 V / 3~ / 50 Hz	400		Y	1.00
TFD	460 V / 3~ / 60 Hz	460		Y	1.04