



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	
17.0	7.51	9.17	11.00											
20.0	7.35	8.99	10.85	12.90										
25.0	7.07	8.70	10.50	12.55	14.80	17.35								
30.0	6.78	8.39	10.20	12.20	14.45	16.90	19.65	20.80	22.70					
35.0	6.49	8.08	9.85	11.85	14.05	16.50	19.20	20.30	22.20	23.70	25.40			
40.0	6.22	7.78	9.52	11.45	13.65	16.05	18.70	19.85	21.60	23.20	24.90	28.40	32.20	
45.0	5.96	7.48	9.20	11.10	13.25	15.60	18.25	19.35	21.10	22.70	24.30	27.80	31.50	
50.0	5.72	7.21	8.89	10.75	12.85	15.20	17.75	18.90	20.60	22.10	23.70	27.10	30.80	
55.0	5.51	6.96	8.60	10.45	12.50	14.75	17.30	18.40	20.10	21.60	23.10	26.50	30.10	
60.0		6.74	8.34	10.15	12.15	14.35	16.85	17.90	19.55	21.00	22.60	25.90		
65.0			8.11	9.85	11.80	13.95	16.40	17.40	19.05	20.50	22.00			
67.0			8.03	9.75	11.70	13.85	16.20	17.25	18.85	20.30	21.80			

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	2.61	2.64	2.67										
20.0	2.75	2.79	2.81	2.84									
25.0	2.99	3.04	3.07	3.09	3.13	3.19							
30.0	3.23	3.30	3.35	3.38	3.40	3.45	3.51	3.55	3.62				
35.0	3.49	3.59	3.66	3.70	3.73	3.76	3.81	3.84	3.90	3.95	4.03		
40.0	3.78	3.92	4.01	4.07	4.11	4.15	4.19	4.21	4.26	4.30	4.36	4.51	4.72
45.0	4.10	4.29	4.42	4.50	4.56	4.61	4.65	4.67	4.71	4.74	4.79	4.91	5.09
50.0	4.48	4.72	4.89	5.01	5.10	5.16	5.21	5.23	5.26	5.29	5.33	5.42	5.57
55.0	4.91	5.21	5.43	5.60	5.72	5.80	5.86	5.89	5.92	5.95	5.98	6.07	6.19
60.0		5.78	6.07	6.28	6.43	6.55	6.63	6.66	6.71	6.74	6.78	6.86	
65.0			6.80	7.07	7.27	7.42	7.54	7.57	7.63	7.67	7.71		
67.0			7.12	7.41	7.64	7.81	7.93	7.98	8.04	8.08	8.12		

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	8.37	8.39	8.42										
20.0	8.56	8.58	8.60	8.62									
25.0	8.81	8.84	8.86	8.87	8.90	8.96							
30.0	9.04	9.08	9.10	9.12	9.14	9.17	9.23	9.27	9.33				
35.0	9.25	9.32	9.36	9.39	9.41	9.43	9.47	9.50	9.54	9.59	9.66		
40.0	9.48	9.59	9.66	9.70	9.73	9.76	9.79	9.81	9.84	9.88	9.93	10.07	10.27
45.0	9.75	9.91	10.02	10.09	10.14	10.18	10.21	10.23	10.26	10.29	10.33	10.44	10.61
50.0	10.10	10.31	10.47	10.58	10.66	10.72	10.77	10.79	10.82	10.85	10.89	10.97	11.11
55.0	10.54	10.81	11.03	11.19	11.31	11.40	11.47	11.50	11.54	11.56	11.60	11.69	11.81
60.0		11.44	11.73	11.95	12.11	12.24	12.35	12.39	12.44	12.48	12.53	12.62	
65.0			12.60	12.89	13.13	13.30	13.44	13.50	13.57	13.62	13.68		
67.0			13.00	13.33	13.59	13.80	13.95	14.01	14.09	14.15	14.21		

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	32.80	40.80	49.90											
20.0	32.30	40.30	49.40	59.80										
25.0	31.50	39.50	48.60	58.90	70.70	83.90								
30.0	30.60	38.60	47.70	58.00	69.70	82.90	97.70	104.00	114.00					
35.0	29.70	37.60	46.70	57.00	68.70	81.90	96.70	103.00	113.00	122.00	131.50			
40.0	28.80	36.70	45.70	56.00	67.70	80.80	95.60	102.00	112.00	121.00	130.00	150.50	172.50	
45.0	28.00	35.80	44.80	55.00	66.60	79.70	94.40	100.50	111.00	119.50	129.00	149.00	171.00	
50.0	27.30	35.00	43.90	54.10	65.60	78.60	93.20	99.50	109.50	118.50	127.50	147.50	169.50	
55.0	26.70	34.30	43.10	53.20	64.60	77.50	92.10	98.30	108.50	117.00	126.50	146.00	168.00	
60.0		33.80	42.50	52.40	63.70	76.60	91.00	97.20	107.00	116.00	125.00	144.50		
65.0			42.00	51.80	63.00	75.70	90.00	96.20	106.00	114.50	123.50			
67.0			41.80	51.60	62.80	75.40	89.60	95.80	105.50	114.00	123.50			

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