



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	4.74	5.83	7.07										
20.0	4.72	5.81	7.07	8.50									
25.0	4.65	5.77	7.03	8.47	10.10	11.95							
30.0	4.56	5.68	6.95	8.39	10.00	11.85	13.90	14.80	16.20				
35.0	4.46	5.58	6.84	8.27	9.88	11.70	13.75	14.60	16.00	17.25	18.55		
40.0	4.33	5.44	6.70	8.11	9.70	11.50	13.50	14.35	15.75	16.95	18.25	21.00	24.00
45.0	4.20	5.29	6.53	7.91	9.47	11.25	13.20	14.05	15.40	16.60	17.85	20.50	23.50
50.0	4.06	5.13	6.33	7.69	9.21	10.90	12.85	13.65	15.00	16.15	17.35	20.00	23.00
55.0	3.92	4.96	6.12	7.43	8.91	10.55	12.45	13.25	14.50	15.65	16.85	19.45	22.30
60.0		4.78	5.90	7.16	8.58	10.20	12.00	12.75	14.00	15.10	16.25	18.75	
65.0			5.67	6.87	8.23	9.77	11.50	12.25	13.45	14.50	15.60		
67.0			5.57	6.75	8.08	9.59	11.30	12.05	13.20	14.25	15.35		

50 Hz

ZH13KVE-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	1.57	1.61	1.64										
20.0	1.68	1.72	1.76	1.78									
25.0	1.87	1.92	1.96	1.98	2.01	2.03							
30.0	2.08	2.14	2.18	2.22	2.24	2.27	2.29	2.30	2.32				
35.0	2.30	2.37	2.43	2.47	2.50	2.53	2.55	2.56	2.58	2.60	2.61		
40.0	2.54	2.63	2.70	2.75	2.80	2.83	2.86	2.87	2.88	2.90	2.91	2.95	3.01
45.0	2.81	2.92	3.01	3.07	3.12	3.16	3.20	3.21	3.23	3.24	3.26	3.30	3.35
50.0	3.11	3.24	3.35	3.43	3.49	3.54	3.58	3.60	3.62	3.64	3.66	3.70	3.74
55.0	3.45	3.60	3.73	3.83	3.91	3.97	4.02	4.04	4.07	4.09	4.11	4.15	4.20
60.0		4.01	4.15	4.27	4.37	4.45	4.51	4.54	4.57	4.59	4.62	4.66	
65.0			4.63	4.77	4.89	4.99	5.06	5.09	5.13	5.16	5.19		
67.0			4.84	4.99	5.11	5.22	5.30	5.33	5.37	5.41	5.44		

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	4.19	4.22	4.25										
20.0	4.30	4.34	4.37	4.39									
25.0	4.49	4.54	4.57	4.60	4.63	4.65							
30.0	4.69	4.76	4.81	4.84	4.87	4.90	4.93	4.94	4.96				
35.0	4.93	5.01	5.07	5.12	5.15	5.18	5.21	5.22	5.25	5.27	5.29		
40.0	5.19	5.30	5.38	5.44	5.49	5.52	5.55	5.57	5.59	5.61	5.63	5.68	5.75
45.0	5.50	5.63	5.73	5.81	5.88	5.92	5.96	5.98	6.00	6.02	6.04	6.09	6.15
50.0	5.86	6.02	6.15	6.25	6.33	6.40	6.45	6.47	6.49	6.52	6.54	6.59	6.65
55.0	6.27	6.47	6.63	6.76	6.86	6.95	7.01	7.04	7.07	7.10	7.12	7.18	7.24
60.0		6.99	7.18	7.35	7.48	7.58	7.67	7.70	7.74	7.78	7.81	7.87	
65.0			7.82	8.02	8.18	8.31	8.43	8.46	8.52	8.56	8.60		
67.0			8.10	8.31	8.49	8.63	8.76	8.80	8.86	8.90	8.95		

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	20.60	25.70	31.70										
20.0	20.50	25.70	31.80	38.90									
25.0	20.40	25.70	31.90	39.00	47.30	56.80							
30.0	20.20	25.60	31.80	39.00	47.30	56.80	67.70	72.40	80.10				
35.0	19.90	25.30	31.50	38.70	47.00	56.50	67.40	72.10	79.70	86.50	93.70		
40.0	19.50	24.90	31.20	38.30	46.60	56.00	66.80	71.50	79.00	85.80	92.90	108.50	126.00
45.0	19.10	24.50	30.70	37.80	46.00	55.30	66.00	70.60	78.10	84.70	91.80	107.50	124.50
50.0	18.70	24.00	30.10	37.10	45.20	54.40	64.90	69.50	76.90	83.40	90.40	105.50	123.00
55.0	18.25	23.50	29.50	36.30	44.20	53.30	63.60	68.10	75.30	81.80	88.70	103.50	120.50
60.0		22.90	28.70	35.50	43.20	52.00	62.10	66.50	73.60	79.90	86.60	101.50	
65.0			28.00	34.50	42.00	50.50	60.40	64.70	71.60	77.80	84.30		
67.0			27.70	34.10	41.40	49.90	59.60	63.90	70.70	76.80	83.30		

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	11.7
Length/Width, mm	244/241
Height, mm	438
Net Weight, kg	38
Gross Weight, kg	41
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	69
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	4.30
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	10
Locked Rotor Current, A	74
Winding Resistance, ohm	2.47
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