



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	4.72	5.79	7.02											
20.0	4.69	5.78	7.02	8.44										
25.0	4.63	5.73	6.99	8.41	10.05	11.85								
30.0	4.54	5.65	6.91	8.34	9.95	11.75	13.80	14.70	16.10					
35.0	4.43	5.54	6.80	8.21	9.81	11.60	13.65	14.50	15.90	17.10	18.40			
40.0	4.30	5.41	6.65	8.05	9.63	11.40	13.40	14.25	15.60	16.80	18.05	20.80	23.80	
45.0	4.17	5.26	6.48	7.86	9.40	11.15	13.10	13.95	15.25	16.45	17.70	20.40	23.30	
50.0	4.03	5.09	6.29	7.63	9.13	10.80	12.70	13.55	14.85	16.00	17.20	19.85	22.70	
55.0	3.89	4.92	6.07	7.37	8.83	10.45	12.30	13.10	14.35	15.50	16.65	19.20	22.00	
60.0		4.73	5.84	7.09	8.49	10.05	11.85	12.60	13.85	14.90	16.05	18.50		
65.0			5.60	6.79	8.13	9.64	11.35	12.10	13.25	14.30	15.40			
67.0			5.50	6.66	7.98	9.46	11.15	11.85	13.00	14.00	15.10			

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	1.61	1.64	1.67										
20.0	1.72	1.76	1.79	1.82									
25.0	1.92	1.97	2.01	2.03	2.05	2.07							
30.0	2.13	2.19	2.24	2.27	2.29	2.32	2.34	2.35	2.36				
35.0	2.36	2.44	2.49	2.53	2.57	2.59	2.61	2.62	2.64	2.65	2.67		
40.0	2.62	2.71	2.78	2.83	2.87	2.90	2.93	2.94	2.95	2.97	2.99	3.03	3.09
45.0	2.90	3.01	3.10	3.16	3.21	3.25	3.29	3.30	3.32	3.33	3.35	3.39	3.44
50.0	3.23	3.36	3.46	3.54	3.60	3.65	3.69	3.70	3.72	3.74	3.76	3.80	3.85
55.0	3.59	3.74	3.86	3.96	4.04	4.10	4.15	4.17	4.19	4.21	4.23	4.27	4.32
60.0		4.17	4.31	4.43	4.53	4.60	4.67	4.69	4.72	4.75	4.77	4.81	
65.0			4.82	4.96	5.08	5.17	5.25	5.28	5.32	5.34	5.37		
67.0			5.05	5.20	5.32	5.42	5.50	5.53	5.57	5.61	5.64		

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	4.28	4.31	4.34										
20.0	4.40	4.43	4.46	4.48									
25.0	4.60	4.65	4.68	4.70	4.72	4.75							
30.0	4.82	4.88	4.92	4.96	4.98	5.00	5.03	5.04	5.07				
35.0	5.07	5.15	5.21	5.25	5.28	5.31	5.33	5.34	5.37	5.39	5.41		
40.0	5.35	5.46	5.53	5.59	5.63	5.66	5.69	5.71	5.73	5.75	5.77	5.83	5.91
45.0	5.68	5.81	5.91	5.99	6.05	6.09	6.13	6.14	6.16	6.18	6.21	6.26	6.33
50.0	6.07	6.23	6.36	6.46	6.53	6.59	6.64	6.65	6.68	6.70	6.72	6.78	6.84
55.0	6.52	6.71	6.87	6.99	7.09	7.17	7.23	7.26	7.29	7.31	7.34	7.40	7.46
60.0		7.27	7.46	7.62	7.75	7.85	7.93	7.96	8.00	8.03	8.07	8.12	
65.0			8.15	8.34	8.50	8.63	8.73	8.77	8.82	8.86	8.90		
67.0			8.45	8.66	8.83	8.97	9.09	9.13	9.19	9.23	9.27		

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	20.70	25.80	31.80											
20.0	20.60	25.90	32.00	39.10										
25.0	20.50	25.80	32.00	39.20	47.50	57.10								
30.0	20.30	25.70	31.90	39.20	47.50	57.10	68.10	72.90	80.50					
35.0	20.00	25.40	31.70	38.90	47.30	56.80	67.70	72.50	80.20	87.00	94.30			
40.0	19.60	25.10	31.30	38.50	46.80	56.30	67.20	71.90	79.50	86.30	93.50	109.00	127.00	
45.0	19.20	24.60	30.80	38.00	46.20	55.60	66.30	71.00	78.50	85.20	92.30	108.00	125.50	
50.0	18.75	24.10	30.30	37.30	45.40	54.70	65.30	69.90	77.30	83.90	90.90	106.50	123.50	
55.0	18.30	23.60	29.60	36.50	44.50	53.50	63.90	68.50	75.80	82.30	89.20	104.50	121.50	
60.0		23.00	28.90	35.60	43.40	52.20	62.40	66.90	74.00	80.40	87.10	102.00		
65.0			28.10	34.60	42.20	50.80	60.70	65.00	72.00	78.20	84.80			
67.0			27.80	34.20	41.60	50.20	59.90	64.20	71.10	77.20	83.80			

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	68
Sound Power (HT), dBA	79
Sound Power with Sound Shell (HT), dBA	71
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

50 Hz

ZH13KVE-TFD

R407C Dew Point

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