



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	8.08	9.93	12.05											
20.0	8.07	9.96	12.15	14.60										
25.0	7.99	9.95	12.15	14.70	17.50	20.70								
30.0	7.85	9.85	12.10	14.65	17.50	20.70	24.20	25.70	28.10					
35.0	7.66	9.69	11.95	14.50	17.30	20.50	24.00	25.50	27.90	30.00	32.20			
40.0	7.45	9.48	11.75	14.25	17.05	20.20	23.60	25.10	27.50	29.50	31.70	36.40	41.50	
45.0	7.22	9.24	11.45	13.95	16.70	19.75	23.10	24.60	26.90	28.90	31.00	35.60	40.60	
50.0	7.00	8.98	11.15	13.60	16.25	19.25	22.50	23.90	26.20	28.10	30.20	34.60	39.50	
55.0	6.80	8.71	10.85	13.15	15.75	18.60	21.80	23.20	25.30	27.20	29.20	33.50	38.20	
60.0		8.46	10.50	12.70	15.20	17.90	21.00	22.30	24.30	26.10	28.00	32.10		
65.0			10.15	12.25	14.60	17.20	20.10	21.30	23.20	25.00	26.80			
67.0			10.00	12.05	14.35	16.85	19.70	20.90	22.80	24.50	26.30			

50 Hz

ZH24KVE-TWD

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	3.21	3.32	3.39										
20.0	3.41	3.53	3.61	3.67									
25.0	3.75	3.90	4.00	4.07	4.12	4.16							
30.0	4.08	4.27	4.40	4.49	4.55	4.60	4.65	4.67	4.72				
35.0	4.43	4.65	4.82	4.93	5.01	5.08	5.13	5.16	5.20	5.24	5.29		
40.0	4.79	5.06	5.27	5.41	5.52	5.60	5.67	5.70	5.75	5.79	5.83	5.95	6.11
45.0	5.17	5.50	5.75	5.94	6.08	6.19	6.27	6.31	6.36	6.40	6.45	6.56	6.72
50.0	5.59	5.98	6.28	6.52	6.70	6.83	6.95	6.99	7.04	7.09	7.15	7.27	7.42
55.0	6.05	6.49	6.86	7.15	7.37	7.55	7.69	7.74	7.81	7.87	7.93	8.06	8.21
60.0		7.07	7.49	7.84	8.11	8.33	8.51	8.57	8.66	8.73	8.80	8.95	
65.0			8.20	8.61	8.94	9.21	9.43	9.50	9.61	9.70	9.78		
67.0			8.50	8.94	9.29	9.58	9.82	9.90	10.00	10.10	10.20		

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	9.87	9.94	9.99										
20.0	10.04	10.12	10.18	10.21									
25.0	10.33	10.44	10.51	10.56	10.59	10.61							
30.0	10.62	10.76	10.86	10.93	10.98	11.01	11.04	11.06	11.08				
35.0	10.93	11.11	11.25	11.35	11.42	11.47	11.51	11.52	11.55	11.57	11.60		
40.0	11.26	11.50	11.69	11.82	11.92	12.00	12.05	12.07	12.11	12.13	12.16	12.23	12.33
45.0	11.64	11.94	12.18	12.37	12.51	12.61	12.69	12.72	12.76	12.80	12.83	12.91	13.01
50.0	12.06	12.44	12.74	12.99	13.17	13.32	13.44	13.48	13.53	13.58	13.62	13.71	13.82
55.0	12.55	13.00	13.38	13.69	13.93	14.13	14.29	14.34	14.42	14.48	14.54	14.65	14.77
60.0		13.65	14.10	14.48	14.79	15.05	15.26	15.33	15.43	15.51	15.59	15.73	
65.0			14.93	15.39	15.78	16.10	16.37	16.47	16.60	16.70	16.80		
67.0			15.29	15.79	16.21	16.56	16.86	16.96	17.11	17.22	17.34		

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	37.40	46.60	57.50										
20.0	37.40	47.00	58.10	71.10									
25.0	37.20	47.20	58.80	72.10	87.40	105.00							
30.0	36.80	47.10	58.90	72.50	88.10	106.00	126.50	135.50	149.50				
35.0	36.20	46.70	58.70	72.40	88.10	106.00	126.50	135.50	149.50	162.50	176.00		
40.0	35.40	46.10	58.20	71.90	87.70	105.50	126.00	135.00	149.00	162.00	175.50	205.00	237.00
45.0	34.70	45.30	57.40	71.10	86.80	104.50	125.00	133.50	148.00	160.50	173.50	203.00	235.00
50.0	33.90	44.50	56.40	70.00	85.50	103.00	123.00	132.00	146.00	158.00	171.50	200.00	232.00
55.0	33.30	43.70	55.40	68.70	83.90	101.00	121.00	129.50	143.00	155.50	168.50	196.50	228.00
60.0		43.00	54.30	67.30	82.10	99.00	118.00	126.50	140.00	152.00	164.50	192.50	
65.0			53.40	65.90	80.10	96.50	115.00	123.50	136.50	148.00	160.50		
67.0			53.00	65.30	79.30	95.50	114.00	122.00	135.00	146.50	158.50		

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	20.9
Length/Width, mm	368/321
Height, mm	525
Net Weight, kg	93
Gross Weight, kg	100
Stub Suction, inch	1 3/8
Stub Discharge, inch	7/8
Oil Quantity, l	4
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	220 x 220 (8.5)
Sound Pressure @ 1m (HT), dBA	72
Sound Power (HT), dBA	83
Sound Power with Sound Shell (HT), dBA	73
Sound Conditions (HT, Temperatures:	-7 / 50 / 3 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	2
Max. Internal Free Volume, l	17.0
High Side PS gauge, bar	32
Low Side PS gauge, bar	22.6
Low Side TS Max., °C	50
Low Side TS Min., °C	-35
Refrigerant's GWP	1774
Refrigerant's classification	A1

50 Hz

ZH24KVE-TWD

R407C Dew Point

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

Maximum Operating Current, A	18.3
Locked Rotor Current, A	99
Winding Resistance, ohm	1.41
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

ACCESSORIES OPTIONAL

Sound Attenuation	Sound Shell (10dBA)
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MOTOR OPTIONS

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
TWD	380-420 V / 3~ / 50 Hz	400		Y	1.00