



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	12.75	15.55	18.75											
20.0	12.55	15.35	18.50	22.10										
25.0	12.25	14.95	18.10	21.70	25.70	30.30								
30.0	11.90	14.60	17.70	21.20	25.10	29.60	34.60	36.70	40.10					
35.0	11.55	14.25	17.25	20.70	24.60	28.90	33.80	35.90	39.20	42.10	45.20			
40.0	11.25	13.85	16.85	20.20	24.00	28.20	33.00	35.00	38.20	41.10	44.10	50.50	57.60	
45.0	10.90	13.50	16.40	19.70	23.40	27.50	32.10	34.10	37.30	40.00	43.00	49.20	56.10	
50.0	10.60	13.10	15.95	19.15	22.80	26.80	31.30	33.20	36.30	39.00	41.80	47.90	54.60	
55.0	10.25	12.75	15.50	18.65	22.10	26.10	30.40	32.30	35.30	37.90	40.60	46.50	53.00	
60.0		12.35	15.05	18.10	21.50	25.30	29.50	31.30	34.20	36.70	39.40	45.10		
65.0			14.60	17.55	20.80	24.50	28.60	30.30	33.10	35.50	38.10			
67.0			14.45	17.35	20.60	24.20	28.20	29.90	32.60	35.00	37.60			

50 Hz

ZH33KVE-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	4.28	4.38	4.46										
20.0	4.55	4.67	4.75	4.81									
25.0	4.99	5.14	5.26	5.35	5.41	5.43							
30.0	5.43	5.63	5.79	5.91	6.00	6.06	6.08	6.08	6.06				
35.0	5.90	6.14	6.35	6.52	6.65	6.74	6.80	6.81	6.82	6.81	6.80		
40.0	6.40	6.70	6.96	7.17	7.35	7.49	7.59	7.61	7.65	7.66	7.67	7.65	7.60
45.0	6.94	7.31	7.62	7.90	8.13	8.32	8.46	8.51	8.57	8.60	8.63	8.66	8.65
50.0	7.55	7.98	8.36	8.70	8.99	9.24	9.44	9.51	9.59	9.66	9.71	9.78	9.82
55.0	8.23	8.73	9.18	9.59	9.95	10.25	10.50	10.60	10.75	10.80	10.90	11.00	11.10
60.0		9.57	10.10	10.55	11.00	11.40	11.70	11.85	12.00	12.10	12.25	12.40	
65.0			11.15	11.70	12.20	12.65	13.05	13.20	13.40	13.55	13.70		
67.0			11.60	12.15	12.70	13.20	13.65	13.80	14.00	14.20	14.35		

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	11.03	11.12	11.19										
20.0	11.31	11.43	11.51	11.57									
25.0	11.78	11.94	12.06	12.15	12.20	12.22							
30.0	12.27	12.47	12.64	12.77	12.86	12.92	12.93	12.92	12.90				
35.0	12.78	13.05	13.27	13.46	13.60	13.70	13.76	13.77	13.77	13.76	13.74		
40.0	13.35	13.68	13.98	14.23	14.43	14.59	14.70	14.73	14.77	14.79	14.79	14.77	14.70
45.0	13.99	14.41	14.78	15.10	15.38	15.61	15.78	15.84	15.91	15.96	15.99	16.02	16.01
50.0	14.72	15.23	15.69	16.11	16.46	16.77	17.02	17.11	17.23	17.31	17.37	17.47	17.52
55.0	15.56	16.16	16.73	17.24	17.69	18.09	18.43	18.55	18.71	18.83	18.94	19.10	19.23
60.0		17.24	17.92	18.52	19.08	19.57	20.01	20.17	20.39	20.56	20.71	20.98	
65.0			19.28	19.99	20.66	21.27	21.82	22.02	22.30	22.52	22.73		
67.0			19.87	20.64	21.36	22.01	22.61	22.82	23.13	23.38	23.60		

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	58.50	72.60	88.80										
20.0	57.90	71.90	88.10	107.00									
25.0	56.90	70.80	86.90	105.50	127.00	151.50							
30.0	55.90	69.70	85.70	104.00	125.50	149.50	177.50	189.50	209.00				
35.0	54.90	68.60	84.50	102.50	123.50	148.00	175.50	187.50	207.00	224.00	242.00		
40.0	53.90	67.60	83.30	101.50	122.00	146.00	173.50	185.50	204.00	221.00	239.00	279.00	323.00
45.0	53.00	66.60	82.20	100.00	121.00	144.50	171.50	183.50	202.00	219.00	237.00	276.00	320.00
50.0	52.10	65.60	81.10	98.90	119.50	143.00	169.50	181.50	200.00	217.00	234.00	273.00	316.00
55.0	51.30	64.70	80.10	97.70	118.00	141.50	168.00	179.50	198.00	214.00	232.00	270.00	313.00
60.0		63.90	79.20	96.70	117.00	140.00	166.00	177.50	196.00	212.00	230.00	268.00	
65.0			78.40	95.70	115.50	138.50	164.50	176.00	194.00	210.00	227.00		
67.0			78.10	95.40	115.00	138.00	164.00	175.00	193.50	209.00	227.00		

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	29.0
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	70
Sound Power (HT), dBA	81
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	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

ZH33KVE-TWD

R407C Dew Point

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

Maximum Operating Current, A	24.2
Locked Rotor Current, A	127
Winding Resistance, ohm	1.02
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