



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	15.10	18.60	22.60											
20.0	14.95	18.45	22.50	27.10										
25.0	14.70	18.15	22.20	26.80	32.00	38.00								
30.0	14.40	17.85	21.80	26.30	31.50	37.40	44.00	46.80	51.40					
35.0	14.10	17.50	21.40	25.80	30.90	36.70	43.10	45.90	50.30	54.20	58.40			
40.0	13.80	17.15	21.00	25.30	30.30	35.80	42.10	44.90	49.20	53.00	57.00	65.70	75.30	
45.0	13.55	16.80	20.50	24.70	29.50	35.00	41.10	43.70	47.90	51.60	55.50	64.00	73.30	
50.0	13.25	16.40	20.00	24.10	28.80	34.00	39.90	42.50	46.50	50.10	53.90	62.00	71.00	
55.0	13.00	16.05	19.50	23.50	27.90	33.00	38.70	41.10	45.00	48.40	52.10	60.00	68.70	
60.0		15.70	19.00	22.80	27.00	31.90	37.30	39.70	43.40	46.70	50.20	57.80		
65.0			18.50	22.10	26.10	30.70	35.90	38.10	41.70	44.90	48.20			
67.0			18.30	21.80	25.80	30.30	35.30	37.50	41.00	44.10	47.40			

50 Hz

ZH40KVE-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	5.28	5.45	5.62										
20.0	5.61	5.79	5.97	6.14									
25.0	6.16	6.36	6.56	6.75	6.95	7.16							
30.0	6.73	6.96	7.18	7.39	7.61	7.84	8.08	8.18	8.34				
35.0	7.33	7.60	7.85	8.10	8.34	8.59	8.85	8.96	9.13	9.28	9.44		
40.0	7.99	8.30	8.60	8.88	9.16	9.44	9.73	9.85	10.05	10.20	10.35	10.70	11.10
45.0	8.71	9.08	9.43	9.77	10.10	10.40	10.75	10.85	11.05	11.25	11.40	11.80	12.20
50.0	9.53	9.97	10.40	10.75	11.15	11.50	11.85	12.00	12.25	12.45	12.65	13.05	13.45
55.0	10.45	10.95	11.45	11.90	12.30	12.75	13.15	13.35	13.60	13.80	14.00	14.45	14.95
60.0		12.10	12.65	13.15	13.65	14.15	14.60	14.80	15.10	15.35	15.60	16.10	
65.0			14.00	14.60	15.20	15.75	16.25	16.50	16.80	17.10	17.35		
67.0			14.60	15.25	15.85	16.45	17.00	17.25	17.60	17.85	18.15		

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	11.96	12.14	12.32										
20.0	12.34	12.53	12.72	12.92									
25.0	12.98	13.19	13.41	13.63	13.85	14.10							
30.0	13.64	13.90	14.15	14.40	14.65	14.92	15.20	15.32	15.51				
35.0	14.35	14.66	14.96	15.25	15.55	15.85	16.16	16.30	16.50	16.69	16.88		
40.0	15.14	15.52	15.88	16.23	16.57	16.92	17.28	17.43	17.66	17.86	18.07	18.51	19.00
45.0	16.04	16.50	16.93	17.35	17.75	18.16	18.58	18.75	19.01	19.23	19.46	19.95	20.48
50.0	17.08	17.63	18.14	18.64	19.12	19.60	20.09	20.28	20.58	20.83	21.09	21.62	22.20
55.0	18.28	18.92	19.53	20.12	20.69	21.26	21.82	22.04	22.39	22.66	22.95	23.56	24.21
60.0		20.42	21.14	21.84	22.49	23.15	23.80	24.06	24.45	24.78	25.12	25.81	
65.0			22.99	23.80	24.58	25.35	26.08	26.38	26.83	27.21	27.59		
67.0			23.80	24.66	25.50	26.31	27.11	27.42	27.90	28.28	28.68		

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	69.70	87.20	108.00										
20.0	69.30	86.90	107.50	132.00									
25.0	68.60	86.30	107.00	131.00	159.00	191.50							
30.0	67.90	85.60	106.00	130.00	158.00	190.00	227.00	243.00	269.00				
35.0	67.30	84.90	105.50	129.00	157.00	188.50	225.00	241.00	267.00	290.00	314.00		
40.0	66.70	84.20	104.50	128.00	155.50	187.00	223.00	239.00	264.00	287.00	311.00	364.00	423.00
45.0	66.30	83.60	103.50	127.00	154.00	185.00	221.00	236.00	261.00	284.00	308.00	360.00	418.00
50.0	66.00	83.10	103.00	126.00	152.50	183.00	218.00	234.00	258.00	280.00	304.00	355.00	413.00
55.0	65.90	82.70	102.00	124.50	151.00	181.00	216.00	231.00	255.00	277.00	300.00	351.00	407.00
60.0		82.50	101.50	123.50	149.00	179.00	213.00	228.00	252.00	273.00	296.00	346.00	
65.0			101.00	122.50	147.50	176.50	210.00	225.00	248.00	269.00	291.00		
67.0			101.00	122.50	147.00	176.00	209.00	223.00	247.00	267.00	290.00		

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m <sup>3</sup> /h	35.5
Length/Width, mm	368/321
Height, mm	532
Net Weight, kg	95
Gross Weight, kg	101
Stub Suction, inch	1 3/8
Stub Discharge, inch	7/8
Oil Quantity, l	4.14
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	71
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	17.4
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

ZH40KVE-TWD

R407C Dew Point

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

Maximum Operating Current, A	30
Locked Rotor Current, A	167
Winding Resistance, ohm	0.83
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

### **ACCESSORIES OPTIONAL**

Sound Attenuation	Sound Shell (10dBA)
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### **MOTOR OPTIONS**

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