



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return
- 10 K Suction Superheat
- Maximum Evaporating Temperature

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	5.97	7.22	8.79	10.75	13.10	15.90					
15.0	5.50	6.75	8.30	10.20	12.45	15.15	18.30				
20.0	5.08	6.33	7.84	9.66	11.85	14.40	17.40	20.80			
25.0		5.93	7.40	9.15	11.20	13.65	16.45	19.75	23.50		
30.0			6.97	8.64	10.60	12.90	15.55	18.60	22.20	26.20	27.90
35.0			6.55	8.13	9.98	12.10	14.60	17.45	20.80	24.50	26.20
40.0				7.61	9.33	11.30	13.60	16.25	19.30	22.80	24.30
45.0				7.05	8.65	10.50	12.60	15.05	17.85	21.00	22.40
50.0					7.92	9.59	11.50	13.70	16.25	19.20	20.50
55.0					7.15	8.65	10.35	12.35	14.60	17.25	18.40
60.0						7.63	9.14	10.90	12.90	15.25	16.25

50 Hz

ZS56K4E-TWD

R404A Dew Point

Cond °C	Power, kW										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	2.77	2.84	2.94	3.07	3.26	3.52					
15.0	2.95	3.04	3.15	3.28	3.45	3.68	3.97				
20.0	3.13	3.26	3.38	3.52	3.68	3.89	4.15	4.48			
25.0		3.48	3.64	3.79	3.95	4.15	4.38	4.67	5.04		
30.0			3.90	4.08	4.26	4.45	4.67	4.94	5.26	5.66	5.84
35.0			4.18	4.39	4.59	4.79	5.01	5.25	5.55	5.90	6.06
40.0				4.71	4.94	5.16	5.38	5.62	5.89	6.21	6.36
45.0				5.03	5.31	5.56	5.79	6.04	6.30	6.59	6.72
50.0					5.69	5.97	6.24	6.49	6.75	7.03	7.15
55.0					6.07	6.40	6.70	6.98	7.25	7.52	7.64
60.0						6.84	7.19	7.50	7.78	8.07	8.18

Cond °C	Current at 400 V, A										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	8.90	8.91	8.94	9.02	9.15	9.38					
15.0	9.06	9.11	9.16	9.23	9.35	9.54	9.82				
20.0	9.20	9.30	9.38	9.47	9.59	9.76	10.00	10.34			
25.0		9.48	9.61	9.72	9.85	10.02	10.24	10.54	10.94		
30.0			9.84	10.00	10.15	10.32	10.54	10.81	11.17	11.63	11.86
35.0			10.07	10.29	10.48	10.67	10.89	11.15	11.48	11.90	12.09
40.0				10.59	10.84	11.06	11.30	11.56	11.87	12.25	12.43
45.0				10.91	11.22	11.50	11.76	12.03	12.34	12.71	12.87
50.0					11.63	11.97	12.28	12.58	12.89	13.25	13.41
55.0					12.06	12.48	12.84	13.19	13.53	13.89	14.04
60.0						13.02	13.46	13.86	14.24	14.62	14.77

Cond °C	Suction Mass Flow, g/s										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	33.20	40.30	49.20	60.40	74.00	90.40					
15.0	31.90	39.30	48.50	59.70	73.40	89.70	109.00				
20.0	30.80	38.50	47.80	59.20	72.90	89.20	108.50	131.50			
25.0		37.80	47.30	58.80	72.50	88.80	108.00	130.50	157.50		
30.0			46.90	58.50	72.10	88.30	107.50	130.00	156.50	187.50	201.00
35.0			46.50	58.10	71.80	87.80	106.50	129.00	155.50	186.00	200.00
40.0				57.70	71.30	87.20	106.00	128.00	154.00	184.50	198.50
45.0				57.20	70.70	86.40	105.00	126.50	152.50	183.00	196.50
50.0					69.90	85.30	103.50	125.00	150.50	181.00	194.50
55.0					68.70	84.00	102.00	123.00	148.50	178.50	192.50
60.0						82.30	99.90	121.00	146.00	176.00	190.00

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m <sup>3</sup> /h	20.9
Length/Width, mm	316/357
Height, mm	525
Net Weight, kg	100
Rotalock Suction, inch	1 3/4
Rotalock Discharge, inch	1 1/4
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 (22.4)
Sound Pressure @ 1m (MT), dBA	72
Sound Power (MT), dBA	83
Sound Power with Sound Shell (MT), dBA	71
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
PED Category	2
Max. Internal Free Volume, l	19.8
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	3922
Refrigerant's classification	A1

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

Maximum Operating Current, A	15.4
Locked Rotor Current, A	99
Winding Resistance, ohm	1.41
Default Enclosure Class	IP 54 (IEC 34)

### **ACCESSORIES INCLUDED**

Mounting Grommets	Standard
Discharge Temperature Protection	Internal Thermistor

### **ACCESSORIES OPTIONAL**

Sound Attenuation	Sound Shell (10dBA)
Rotalock valves	suction and discharge
Crankcase Heater	49 W External
Oil Control System	ALCO Trax-Oil OM3
Mounting Grommets	Hard Mounts for Paralleling

### **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
TWC	200 V / 3~ / 50 Hz	200		Y	2.09
TWE	500 V / 3~ / 50 Hz	500		Y	0.80
TWR	220-240 V / 3~ / 50 Hz	230		Y	1.73
TWD	460 V / 3~ / 60 Hz	460		Y	1.04
TWC	208-230 V / 3~ / 60 Hz	230		Y	2.09
TWE	575 V / 3~ / 60 Hz	575		Y	0.80
TW7	380 V / 3~ / 60 Hz	380		Y	1.26