



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								
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
27.0	11.25	14.00	17.15	20.80	25.00	29.80	32.00	35.30	38.30
30.0	10.80	13.50	16.60	20.10	24.20	28.90	30.90	34.20	37.10
35.0	10.00	12.65	15.65	19.05	22.90	27.30	29.20	32.30	35.00
40.0	9.05	11.65	14.60	17.90	21.60	25.70	27.60	30.40	33.00
45.0		10.55	13.45	16.60	20.20	24.10	25.80	28.50	30.90
50.0			12.10	15.20	18.60	22.40	24.00	26.50	28.80
55.0				13.65	16.90	20.50	22.00	24.40	26.60
60.0					15.00	18.45	19.85	22.10	24.10
65.0						16.05	17.40	19.55	21.40

50 Hz

ZPD103KCE-TFD

R410A Dew Point

Cond °C	Power, kW								
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
27.0	4.20	4.21	4.20	4.19	4.19	4.23	4.26	4.32	4.39
30.0	4.51	4.52	4.51	4.50	4.51	4.55	4.58	4.65	4.72
35.0	5.07	5.07	5.05	5.03	5.04	5.08	5.11	5.18	5.26
40.0	5.72	5.70	5.66	5.63	5.62	5.65	5.69	5.75	5.83
45.0		6.44	6.37	6.31	6.28	6.30	6.32	6.38	6.45
50.0			7.22	7.12	7.06	7.04	7.06	7.10	7.16
55.0				8.08	7.97	7.92	7.91	7.93	7.97
60.0					9.06	8.95	8.93	8.92	8.93
65.0						10.15	10.10	10.10	10.05

Cond °C	Current at 400 V, A								
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
27.0	10.19	10.20	10.17	10.15	10.14	10.17	10.20	10.28	10.36
30.0	10.50	10.51	10.49	10.47	10.47	10.52	10.55	10.63	10.73
35.0	11.08	11.08	11.06	11.03	11.04	11.10	11.14	11.23	11.33
40.0	11.81	11.78	11.74	11.70	11.69	11.74	11.78	11.87	11.97
45.0		12.65	12.57	12.50	12.47	12.50	12.53	12.61	12.70
50.0			13.60	13.49	13.41	13.40	13.42	13.48	13.55
55.0				14.69	14.56	14.49	14.49	14.52	14.57
60.0					15.96	15.82	15.79	15.78	15.80
65.0						17.42	17.36	17.30	17.29

Cond °C	Suction Mass Flow, g/s								
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5
27.0	62.40	76.50	92.80	111.50	132.50	156.50	167.00	183.50	198.50
30.0	61.80	76.10	92.40	111.00	132.00	156.00	166.00	182.50	197.50
35.0	60.10	75.00	91.60	110.00	131.00	154.50	165.00	181.00	195.50
40.0	57.60	73.10	90.20	109.00	130.00	153.50	163.50	179.50	194.00
45.0		70.30	88.10	107.50	129.00	152.50	162.50	178.50	192.50
50.0			85.00	105.00	127.00	151.00	161.00	177.00	191.00
55.0				102.00	124.50	149.00	159.00	175.50	189.50
60.0					121.00	146.00	157.00	173.50	188.00
65.0						143.00	154.00	171.00	186.00

### **COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, m³/h	16.8
Length/Width, mm	293/285
Height, mm	533
Net Weight, kg	60.8
Rotalock Suction, inch	1 3/4
Rotalock Discharge, inch	1 1/4
Stub Suction, inch	1 3/8
Stub Discharge, inch	7/8
Oil Quantity, l	3.25
Oil type (original charge)	POE RL32-3MAF
Oil type (approved oils)	POE RL32-3MAF
Base mounting (hole dia), mm	190 x 190 (0)
Sound Pressure @ 1m (HT), dBA	63
Sound Power (HT), dBA	74
Sound Conditions (HT, Temperatures:	7 / 54 / 18 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	2
Max. Internal Free Volume, l	13.3
High Side PS gauge, bar	45
Low Side PS gauge, bar	29.5
Low Side TS Max., °C	50
Low Side TS Min., °C	-35
Refrigerant's GWP	2088
Refrigerant's classification	A1

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

Maximum Operating Current, A	21
Locked Rotor Current, A	111
Winding Resistance, ohm	1.37
Default Enclosure Class	IP 21 (IEC 34)

### **ACCESSORIES INCLUDED**

Oil Service Valve	Schraeder Valve
Check Valve	Discharge Low Leak Check Valve
Enclosure Class	IP21
Mounting Grommets	Hard Mounts for Paralleling
Oil Charge	
Digital Control	Integrated Solenoid Valve

### **ACCESSORIES OPTIONAL**

<p>Crankcase Heater</p> <p>Mounting Grommets</p> <p>Discharge Temp Protection</p> <p>Digital Control</p> <p>Sound Attenuation</p> <p>Digital Control</p> <p>Adapter Kit</p>	<p>66 W External</p> <p>Rubber Grommet For Single</p> <p>Digital Valve Coil 230V</p> <p>Sound Shell (12dBA)</p> <p>Digital Valve Coil 24V</p> <p>R1"1/4 -B 1"1/8 For TPTL for Parallel Operation</p>
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### **MOTOR OPTIONS**

<i>Motor Code</i>	<i>Power Supply</i>	<i>Nominal Voltage, V</i>	<i>Start Connection</i>	<i>DOL Connection</i>	<i>Amps Factor</i>
TFD	380-420 V / 3~ / 50 Hz	400		Y	1.00
TFD	460 V / 3~ / 60 Hz	460		Y	1.04