



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	9.71	12.05	14.75	17.85	21.50	25.70	27.50	30.50	33.10
30.0	9.33	11.60	14.25	17.30	20.80	24.80	26.60	29.40	32.00
35.0	8.68	10.90	13.45	16.35	19.65	23.50	25.20	27.80	30.20
40.0	7.96	10.10	12.55	15.35	18.50	22.10	23.70	26.20	28.50
45.0		9.26	11.65	14.30	17.30	20.70	22.20	24.50	26.70
50.0			10.60	13.15	16.00	19.20	20.60	22.80	24.80
55.0				11.85	14.55	17.60	18.90	21.00	22.80
60.0					13.00	15.85	17.05	19.00	20.70
65.0						13.80	14.95	16.70	18.30

50 Hz

ZPD91KCE-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	3.71	3.75	3.78	3.79	3.78	3.72	3.69	3.61	3.53
30.0	3.97	4.00	4.04	4.06	4.07	4.03	4.00	3.95	3.88
35.0	4.43	4.45	4.48	4.52	4.54	4.53	4.52	4.49	4.44
40.0	4.95	4.95	4.98	5.01	5.05	5.06	5.06	5.04	5.02
45.0		5.53	5.54	5.57	5.60	5.63	5.63	5.63	5.62
50.0			6.18	6.20	6.22	6.25	6.26	6.27	6.27
55.0				6.92	6.94	6.96	6.97	6.98	6.99
60.0					7.76	7.77	7.78	7.79	7.79
65.0						8.70	8.70	8.70	8.71

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	8.49	8.52	8.56	8.58	8.56	8.45	8.38	8.24	8.08
30.0	8.75	8.77	8.81	8.85	8.84	8.77	8.72	8.60	8.47
35.0	9.20	9.20	9.24	9.29	9.31	9.28	9.25	9.17	9.07
40.0	9.73	9.70	9.73	9.78	9.82	9.82	9.81	9.76	9.69
45.0		10.31	10.31	10.35	10.40	10.42	10.42	10.39	10.35
50.0			11.02	11.04	11.08	11.11	11.12	11.11	11.09
55.0				11.88	11.90	11.94	11.95	11.95	11.94
60.0					12.91	12.93	12.94	12.95	12.94
65.0						14.12	14.13	14.13	14.13

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	53.90	65.90	79.70	95.70	114.00	134.50	144.00	158.50	171.50
30.0	53.30	65.50	79.30	95.20	113.50	134.00	143.00	157.50	170.00
35.0	52.20	64.60	78.60	94.50	112.50	133.00	142.00	156.00	168.50
40.0	50.60	63.40	77.70	93.60	111.50	132.00	140.50	155.00	167.50
45.0		61.70	76.30	92.50	110.50	131.00	139.50	153.50	166.00
50.0			74.30	90.90	109.00	129.50	138.00	152.00	164.50
55.0				88.60	107.00	128.00	136.50	150.50	163.00
60.0					104.50	125.50	134.50	148.50	161.00
65.0						122.50	132.00	146.50	159.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	14.7
Length/Width, mm	246/252
Height, mm	481
Net Weight, kg	41.5
Stub Suction, inch	7/8
Stub Discharge, inch	3/4
Oil Quantity, l	1.77
Oil type (original charge)	POE RL32-3MAF
Oil type (approved oils)	POE RL32-3MAF
Base mounting (hole dia), mm	190 x 190 (19)
Sound Pressure @ 1m (HT), dBA	69
Sound Power (HT), dBA	80
Sound Conditions (HT, Temperatures:	7 / 54 / 18 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	1
Max. Internal Free Volume, l	5.90
High Side PS gauge, bar	43
Low Side PS gauge, bar	28
Refrigerant's GWP	2088
Refrigerant's classification	A1

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

Maximum Operating Current, A	16.2
Locked Rotor Current, A	101
Winding Resistance, ohm	1.79
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Enclosure Class	IP21
Mounting Grommets	Rubber Grommet For Single
Oil Charge	
Oil Service Valve	Schraeder Valve
Digital Control	Separated Solenoid Valve

ACCESSORIES OPTIONAL

Crankcase Heater	90 W External
Discharge Temp Protection	
Mounting Grommets	Hard Mounts for Paralleling
Adapter Kit	R1"1/4 -B 1"1/8 For TPTL for
Sound Attenuation	Parallel Operation
Valve Coil	Sound Shell (12dBA)
Valve Coil	220V
Solenoid Valve Kit	24V AC
Solenoid Valve Kit	220 V Ac 12" lead Length
Digital Tubing Kit	24 V Ac 12" lead Length
Digital Tubing Kit	220 V 0.3m Brazed
	24 V 0.3m Brazed

MOTOR OPTIONS

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