



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													
	-30.0	-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	7.07	8.50	10.15	12.00	14.10									
20.0	6.95	8.39	10.05	11.90	14.00	16.35								
25.0	6.74	8.19	9.82	11.65	13.75	16.05	18.65							
30.0	6.51	7.96	9.60	11.45	13.50	15.75	18.30	21.10	22.30	24.20				
35.0	6.27	7.72	9.34	11.15	13.20	15.45	17.95	20.70	21.90	23.70	25.30	27.00	30.60	
40.0	6.00	7.45	9.06	10.85	12.85	15.05	17.50	20.20	21.30	23.20	24.70	26.40	29.90	33.80
45.0		7.15	8.75	10.50	12.50	14.65	17.05	19.65	20.80	22.60	24.10	25.70	29.10	32.90
50.0		6.82	8.41	10.15	12.05	14.20	16.50	19.10	20.20	21.90	23.40	25.00	28.30	31.90
55.0			8.03	9.74	11.65	13.70	15.95	18.45	19.50	21.20	22.60	24.10	27.40	30.90
60.0				9.29	11.15	13.15	15.35	17.75	18.80	20.40	21.80	23.20	26.40	29.80
65.0					10.55	12.50	14.65	16.95	17.95	19.50	20.80	22.20		
68.0					10.25	12.15	14.20	16.50	17.45	18.95				

50 Hz

ZHI18K1P-TFM

R410A Dew Point

Cond °C	Power, kW													
	-30.0	-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	2.80	2.79	2.78	2.77	2.77									
20.0	2.98	2.98	2.97	2.96	2.95	2.95								
25.0	3.29	3.30	3.30	3.29	3.28	3.27	3.27							
30.0	3.63	3.66	3.67	3.67	3.66	3.65	3.63	3.63	3.63	3.63				
35.0	4.00	4.06	4.09	4.10	4.10	4.08	4.06	4.04	4.04	4.04	4.03	4.03	4.03	4.05
40.0	4.41	4.50	4.56	4.59	4.60	4.59	4.57	4.55	4.54	4.52	4.51	4.50	4.49	4.50
45.0		5.01	5.09	5.15	5.18	5.18	5.17	5.14	5.13	5.11	5.09	5.08	5.05	5.03
50.0		5.58	5.71	5.79	5.84	5.87	5.87	5.84	5.83	5.81	5.79	5.77	5.73	5.69
55.0			6.41	6.54	6.62	6.67	6.68	6.67	6.66	6.64	6.62	6.60	6.54	6.49
60.0				7.39	7.51	7.59	7.62	7.63	7.62	7.61	7.59	7.56	7.51	7.44
65.0					8.55	8.66	8.72	8.74	8.74	8.74	8.72	8.70		
68.0					9.16	9.28	9.36	9.39	9.41	9.40				

Cond °C	Current at 400 V, A													
	-30.0	-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	8.05	8.03	8.01	8.00	8.00									
20.0	8.27	8.26	8.24	8.22	8.21	8.22								
25.0	8.61	8.61	8.60	8.58	8.56	8.55	8.55							
30.0	8.95	8.97	8.97	8.96	8.94	8.92	8.91	8.90	8.90	8.91				
35.0	9.30	9.35	9.38	9.38	9.37	9.35	9.32	9.30	9.29	9.28	9.28	9.28	9.29	
40.0	9.70	9.79	9.85	9.87	9.87	9.85	9.83	9.80	9.78	9.76	9.75	9.73	9.71	9.71
45.0		10.31	10.39	10.45	10.47	10.48	10.46	10.42	10.41	10.38	10.36	10.33	10.29	10.25
50.0		10.93	11.07	11.15	11.21	11.23	11.23	11.20	11.18	11.15	11.13	11.10	11.04	10.98
55.0			11.89	12.03	12.12	12.17	12.18	12.17	12.16	12.13	12.10	12.07	11.99	11.92
60.0				13.09	13.23	13.31	13.35	13.35	13.34	13.32	13.29	13.26	13.20	13.10
65.0					14.59	14.71	14.78	14.80	14.80	14.80	14.78	14.74		
68.0					15.43	15.57	15.65	15.68	15.70	15.69				

Cond °C	Suction Mass Flow, g/s													
	-30.0	-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	30.40	37.00	44.80	53.80	64.30									
20.0	30.10	36.80	44.60	53.70	64.30	76.40								
25.0	29.60	36.40	44.30	53.50	64.10	76.30	90.30							
30.0	28.90	35.90	43.90	53.10	63.80	76.00	90.00	106.00	113.00	124.50				
35.0	28.20	35.30	43.40	52.70	63.30	75.60	89.60	105.50	112.50	124.00	134.50	145.00	169.50	
40.0	27.40	34.50	42.70	52.00	62.70	75.00	89.00	105.00	112.00	123.50	133.50	144.50	169.00	197.00
45.0		33.60	41.80	51.20	61.90	74.20	88.20	104.50	111.50	122.50	133.00	144.00	168.00	196.50
50.0		32.60	40.90	50.30	61.00	73.20	87.20	103.00	110.50	121.50	132.00	142.50	167.00	195.50
55.0			39.70	49.10	59.80	72.00	86.00	102.00	109.00	120.50	130.50	141.50	166.00	194.50
60.0				47.80	58.40	70.60	84.50	100.50	107.50	118.50	129.00	140.00	164.50	193.00
65.0					56.80	68.90	82.70	98.50	105.50	116.50	127.00	138.00		
68.0						55.90	67.90	81.70	97.50	104.50	115.50			

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m <sup>3</sup> /h	11.7
Length/Width, mm	249/245
Height, mm	443
Net Weight, kg	40.9
Stub Suction, inch	7/8
Stub Discharge, inch	1/2
Stub Injection, inch	1/2
Oil Quantity, l	1.89
Oil type (original charge)	POE RL32-3MAF
Oil type (approved oils)	POE RL32-3MAF
Base mounting (hole dia), mm	190 x 190 (8.5)
Sound Pressure @ 1m (HT), dBA	66
Sound Power (HT), dBA	77
Sound Conditions (HT, Temperatures:	-7 / 50 / 3 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	1
Max. Internal Free Volume, l	5.30
High Side PS gauge, bar	46
Low Side PS gauge, bar	28
Refrigerant's GWP	2088
Refrigerant's classification	A1

50 Hz

ZHI18K1P-TFM

R410A Dew Point

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

Maximum Operating Current, A	16
Locked Rotor Current, A	101
Winding Resistance, ohm	1.79
Default Enclosure Class	IP 21 (IEC 34)

### **ACCESSORIES INCLUDED**

Discharge Temperature Protection	Internal Thermodisk
Mounting Grommets	Standard

### **ACCESSORIES OPTIONAL**

Crankcase Heater	70 W External
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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>
TFM	380-420 V / 3~ / 50 Hz	400		Y	1.00