



Minimum Evaporating Temp. With:

- 10 K Suction Superheat
- Maximum Evaporating Temperature

Suction Superheat 11.1K

Liquid Subcooling 8.3K

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	8.50	10.20	12.20	14.50	17.15										
20.0	8.44	10.15	12.15	14.45	17.05	20.00									
25.0	8.32	10.05	12.05	14.30	16.85	19.80	23.00								
30.0	8.17	9.89	11.85	14.10	16.65	19.50	22.70	26.30	27.80	30.30					
35.0	7.99	9.70	11.65	13.85	16.35	19.15	22.30	25.80	27.30	29.70	31.80	34.10	38.90		
40.0	7.80	9.49	11.40	13.55	16.00	18.75	21.80	25.30	26.80	29.10	31.20	33.30	38.00	43.10	
45.0		9.24	11.10	13.25	15.60	18.30	21.30	24.60	26.10	28.40	30.40	32.50	37.10	42.10	
50.0		8.96	10.80	12.85	15.15	17.80	20.70	23.90	25.30	27.60	29.50	31.60	36.00	40.90	
55.0			10.45	12.45	14.70	17.20	20.00	23.20	24.50	26.70	28.60	30.60	34.90	39.60	
60.0				12.00	14.15	16.60	19.30	22.40	23.70	25.80	27.60	29.50	33.70	38.30	
65.0					13.60	15.95	18.55	21.50	22.80	24.80	26.50	28.40			
68.0					13.25	15.55	18.10	21.00	22.20	24.20					

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	3.23	3.32	3.40	3.46	3.53									
20.0	3.42	3.51	3.60	3.68	3.74	3.80								
25.0	3.75	3.86	3.96	4.05	4.13	4.19	4.26							
30.0	4.12	4.25	4.36	4.46	4.55	4.63	4.70	4.76	4.78	4.82				
35.0	4.52	4.67	4.80	4.92	5.02	5.11	5.19	5.26	5.29	5.32	5.35	5.38	5.44	
40.0	4.98	5.14	5.29	5.43	5.54	5.65	5.74	5.82	5.85	5.90	5.93	5.96	6.03	6.09
45.0		5.68	5.85	6.00	6.13	6.25	6.36	6.45	6.49	6.54	6.58	6.62	6.69	6.75
50.0		6.28	6.47	6.64	6.80	6.94	7.06	7.17	7.21	7.26	7.31	7.35	7.43	7.51
55.0			7.17	7.37	7.54	7.70	7.84	7.97	8.01	8.08	8.13	8.18	8.27	8.36
60.0				8.18	8.38	8.56	8.72	8.86	8.92	8.99	9.05	9.11	9.22	9.32
65.0					9.32	9.52	9.70	9.87	9.93	10.00	10.10	10.15		
68.0					9.93	10.15	10.35	10.50	10.60	10.70				

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	10.14	10.18	10.22	10.25	10.28									
20.0	10.24	10.29	10.33	10.37	10.41	10.44								
25.0	10.41	10.48	10.54	10.60	10.65	10.70	10.74							
30.0	10.63	10.73	10.81	10.89	10.95	11.01	11.07	11.12	11.14	11.17				
35.0	10.91	11.03	11.14	11.24	11.33	11.41	11.48	11.55	11.57	11.61	11.64	11.67	11.72	
40.0	11.27	11.42	11.56	11.69	11.80	11.90	11.99	12.07	12.10	12.15	12.18	12.22	12.28	12.35
45.0		11.91	12.08	12.24	12.37	12.50	12.61	12.72	12.76	12.81	12.85	12.90	12.98	13.05
50.0		12.51	12.72	12.91	13.08	13.23	13.37	13.50	13.54	13.61	13.66	13.72	13.81	13.90
55.0			13.49	13.71	13.91	14.10	14.27	14.42	14.48	14.56	14.63	14.69	14.81	14.92
60.0				14.67	14.92	15.14	15.34	15.53	15.60	15.70	15.78	15.85	15.99	16.12
65.0					16.09	16.35	16.59	16.81	16.90	17.01	17.11	17.20		
68.0					16.87	17.16	17.43	17.67	17.77	17.90				

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	35.80	43.60	52.70	63.50	76.00										
20.0	35.80	43.70	52.90	63.70	76.30	90.90									
25.0	35.80	43.80	53.10	64.00	76.70	91.30	108.00								
30.0	35.60	43.70	53.10	64.10	76.80	91.40	108.50	128.00	136.50	150.50					
35.0	35.40	43.50	52.90	63.90	76.60	91.30	108.50	128.00	136.50	150.50	163.00	176.50	206.00		
40.0	35.00	43.10	52.60	63.50	76.20	90.90	108.00	127.50	136.00	150.00	162.50	176.00	206.00	240.00	
45.0		42.70	52.10	63.00	75.60	90.20	107.00	126.50	135.00	149.00	161.50	175.00	205.00	240.00	
50.0		42.00	51.40	62.20	74.70	89.20	106.00	125.00	134.00	147.50	160.00	173.50	204.00	238.00	
55.0			50.50	61.20	73.50	87.80	104.50	123.50	132.00	146.00	158.00	171.50	202.00	237.00	
60.0				60.00	72.10	86.20	102.50	121.50	130.00	143.50	156.00	169.00	199.00	234.00	
65.0					70.40	84.30	100.50	119.00	127.50	141.00	153.00	166.50			
68.0					69.30	83.00	98.90	117.50	125.50	139.00					

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m <sup>3</sup> /h	14.7
Length/Width, mm	239/244
Height, mm	443
Net Weight, kg	43.5
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 (8.5)
Sound Pressure @ 1m (HT), dBA	63
Sound Power (HT), dBA	74
Sound Conditions (HT, Temperatures:	-7 / 50 / 3 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	1
Max. Low Side Internal Free Volume, l	5.5
Max. High Side Internal Free Volume, l	0.6
Max. Internal Free Volume, l	6.10
High Side PS gauge, bar	47
Low Side PS gauge, bar	28
Low Side TS Max., °C	50
Low Side TS Min., °C	-35
High Side TS Max., °C	150
High Side TS Min., °C	-35
Refrigerant's GWP	2088
Refrigerant's classification	A1

50 Hz

ZHI23K1P-TFM

R410A Dew Point

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

Maximum Operating Current, A	18.6
Locked Rotor Current, A	128
Winding Resistance, ohm	1.38
Default Enclosure Class	IP 21 (IEC 34)

**ACCESSORIES INCLUDED****ACCESSORIES OPTIONAL****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