



Minimum Evaporating Temp. With:	
— 10 K Suction Superheat	— 20 K Suction Superheat
— 35 °C Suction Gas Return	— 5 K Suction Superheat Wet Injection OEM envelope
— Maximum Evaporating Temperature	— 5 K Suction Superheat

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
10.0	12.20	14.80	17.85	21.30	25.20	29.60								
15.0	12.15	14.85	17.95	21.50	25.40	29.80	34.70							
20.0	12.00	14.80	17.95	21.50	25.50	29.90	34.80	40.20						
25.0	11.75	14.60	17.85	21.50	25.50	29.90	34.70	40.00	42.30	45.80				
30.0	11.40	14.35	17.60	21.20	25.20	29.60	34.50	39.70	42.00	45.50	48.50	51.70		
35.0	10.95	13.95	17.25	20.90	24.90	29.20	34.00	39.20	41.40	44.90	47.80	51.00	57.60	
40.0	10.45	13.45	16.75	20.40	24.40	28.70	33.40	38.50	40.70	44.10	47.00	50.00	56.50	63.40
45.0		12.90	16.20	19.80	23.70	28.00	32.60	37.60	39.80	43.10	45.90	48.90	55.20	62.00
50.0			15.50	19.05	22.90	27.10	31.70	36.60	38.60	41.90	44.70	47.60	53.70	60.30
55.0				18.20	22.00	26.10	30.60	35.40	37.40	40.50	43.20	46.10	52.00	58.40
60.0					21.00	25.00	29.30	34.00	35.90	39.00	41.60	44.40	50.10	56.40
65.0						23.80	28.00	32.50	34.40	37.30	39.90	42.50		
68.0							22.90	27.10	31.50	33.40	36.30	38.80		

50 Hz

ZHI35K1P-TFD

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
10.0	4.32	4.28	4.21	4.10	3.92	3.65								
15.0	5.02	4.98	4.94	4.87	4.74	4.53	4.22							
20.0	5.66	5.63	5.60	5.56	5.48	5.34	5.10	4.75						
25.0	6.29	6.26	6.25	6.24	6.20	6.10	5.94	5.67	5.54	5.29				
30.0	6.95	6.91	6.91	6.92	6.92	6.87	6.77	6.59	6.48	6.29	6.10	5.86		
35.0	7.68	7.63	7.63	7.66	7.68	7.69	7.64	7.53	7.46	7.32	7.18	7.00	6.53	
40.0	8.52	8.45	8.45	8.48	8.54	8.58	8.59	8.55	8.51	8.42	8.32	8.19	7.83	7.32
45.0		9.41	9.40	9.44	9.51	9.59	9.65	9.67	9.66	9.62	9.56	9.48	9.23	8.83
50.0			10.55	10.55	10.65	10.75	10.85	10.95	10.95	10.95	10.95	10.90	10.75	10.50
55.0				11.90	12.00	12.15	12.30	12.40	12.45	12.50	12.50	12.50	12.45	12.30
60.0					13.60	13.75	13.90	14.10	14.15	14.25	14.30	14.35	14.40	14.30
65.0						15.65	15.85	16.05	16.15	16.25	16.35	16.45		
68.0						16.90	17.10	17.35	17.45	17.60	17.70			

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
10.0	13.64	13.43	13.16	12.82	12.39	11.85								
15.0	16.12	15.99	15.82	15.58	15.27	14.86	14.35							
20.0	17.86	17.80	17.71	17.57	17.36	17.07	16.68	16.19						
25.0	19.03	19.03	19.01	18.94	18.83	18.64	18.38	18.01	17.84	17.54				
30.0	19.80	19.84	19.87	19.88	19.84	19.75	19.59	19.34	19.22	19.00	18.79	18.54		
35.0	20.34	20.41	20.48	20.54	20.57	20.56	20.49	20.35	20.27	20.13	19.98	19.80	19.35	
40.0	20.81	20.89	21.00	21.10	21.18	21.24	21.25	21.20	21.17	21.08	20.99	20.87	20.56	20.13
45.0		21.46	21.58	21.71	21.84	21.95	22.03	22.06	22.06	22.04	21.99	21.93	21.74	21.43
50.0			22.39	22.54	22.70	22.86	22.99	23.09	23.12	23.15	23.15	23.14	23.05	22.87
55.0				23.75	23.95	24.14	24.32	24.48	24.53	24.60	24.64	24.67	24.67	24.60
60.0					25.72	25.93	26.14	26.35	26.42	26.53	26.60	26.67	26.76	26.78
65.0						28.42	28.66	28.90	28.99	29.13	29.23	29.33		
68.0						30.28	30.53	30.78	30.89	31.04	31.16			

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
10.0	52.30	65.00	80.00	97.90	118.50	143.00								
15.0	52.20	65.20	80.60	98.70	119.50	144.00	172.00							
20.0	51.70	65.10	80.80	99.00	120.00	144.50	172.50	204.00						
25.0	50.90	64.60	80.60	99.00	120.00	144.50	172.00	204.00	218.00	240.00				
30.0	49.70	63.80	80.00	98.50	119.50	144.00	171.50	203.00	216.00	238.00	258.00	279.00		
35.0	48.30	62.60	79.00	97.60	119.00	143.00	170.50	201.00	215.00	236.00	256.00	276.00	322.00	
40.0	46.60	61.10	77.60	96.40	117.50	141.50	169.00	199.50	213.00	234.00	253.00	273.00	318.00	369.00
45.0		59.20	75.90	94.70	116.00	140.00	166.50	197.00	210.00	231.00	250.00	270.00	314.00	364.00
50.0			73.70	92.50	113.50	137.50	164.00	194.50	207.00	228.00	247.00	266.00	310.00	359.00
55.0				90.00	111.00	134.50	161.00	191.00	204.00	225.00	243.00	262.00	305.00	353.00
60.0					108.00	131.50	158.00	187.00	200.00	220.00	238.00	258.00	300.00	347.00
65.0						127.50	154.00	183.00	195.50	216.00	234.00	253.00		
68.0							125.00	151.00	180.00	192.50	213.00	230.00		

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	22.1
Length/Width, mm	280/284
Height, mm	568
Net Weight, kg	63
Stub Suction, inch	1 3/8
Stub Discharge, inch	7/8
Stub Injection, inch	5/8
Oil Quantity, l	3.38
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	67
Sound Power (HT), dBA	78
Sound Conditions (HT, Temperatures:	-7 / 50 / 3 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	2
Max. Internal Free Volume, l	19.8
High Side PS gauge, bar	53
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	32.5
Locked Rotor Current, A	174
Winding Resistance, ohm	0.83
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Enclosure Class	IP 54
Oil Charge	

ACCESSORIES OPTIONAL

Crankcase Heater	66 W External
Discharge Temp Protection	

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
TWD	380-420 V / 3~ / 50 Hz	400		Y	1.00
TFD	460 V / 3~ / 60 Hz	460		Y	1.04
TWD	460 V / 3~ / 60 Hz	460		Y	1.04