



Minimum Evaporating Temp. With:  
— 10 K Suction Superheat  
— Maximum Evaporating Temperature  
 Drive Frequency Range 55 - 275 Hz

Suction Superheat 11.1K

Compressor Speed 50 1/s

Liquid Subcooling 8.3K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW															
	-35.0	-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	30.0
15.0	3.43	4.24	5.18	6.29	7.57	9.06										
20.0	3.17	3.98	4.92	6.01	7.27	8.74	10.40	12.35								
25.0	2.94	3.74	4.66	5.73	6.97	8.40	10.05	11.95	14.10	15.00	16.50	17.85	19.25			
30.0	2.72	3.51	4.41	5.45	6.66	8.05	9.65	11.50	13.55	14.50	15.95	17.25	18.60	21.60		
35.0	2.51	3.29	4.17	5.18	6.35	7.70	9.25	11.00	13.05	13.95	15.35	16.60	17.95	20.90	24.10	
40.0	2.33	3.08	3.93	4.91	6.04	7.33	8.83	10.55	12.50	13.35	14.75	15.95	17.25	20.10	23.20	26.70
45.0	2.16	2.89	3.70	4.64	5.72	6.96	8.40	10.05	11.95	12.75	14.10	15.25	16.50	19.25	22.30	25.70
50.0	2.02	2.71	3.48	4.37	5.40	6.59	7.96	9.53	11.35	12.15	13.40	14.55	15.75	18.40	21.30	24.60
55.0	1.88	2.54	3.27	4.11	5.08	6.20	7.50	9.00	10.70	11.50	12.70	13.80	14.95	17.50	20.30	23.50
60.0	1.78	2.39	3.07	3.85	4.76	5.81	7.03	8.45	10.10	10.80	11.95	13.00	14.10	16.55	19.30	22.40
65.0			2.88	3.60	4.43	5.41	6.55	7.88	9.43	10.10	11.20	12.20	13.25	15.60	18.20	21.20
70.0				3.35	4.11	5.01	6.06	7.30	8.75	9.39	10.45	11.35	12.35	14.60	17.10	19.95
75.0					3.79	4.61	5.57	6.71	8.06	8.66	9.64	10.50	11.45	13.55	15.95	
80.0							5.08	6.12	7.37	7.93	8.83	9.66	10.55	12.55		

Cond °C	Power, kW															
	-35.0	-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	30.0
15.0	1.32	1.36	1.39	1.41	1.42	1.42										
20.0	1.44	1.50	1.54	1.56	1.58	1.59	1.58	1.57								
25.0	1.56	1.63	1.68	1.72	1.74	1.76	1.76	1.76	1.74	1.73	1.71	1.69	1.67			
30.0	1.69	1.76	1.83	1.88	1.92	1.94	1.96	1.96	1.95	1.94	1.92	1.91	1.89	1.84		
35.0	1.82	1.90	1.98	2.05	2.10	2.13	2.16	2.17	2.17	2.16	2.15	2.14	2.13	2.08	2.03	
40.0	1.94	2.05	2.14	2.22	2.29	2.34	2.37	2.39	2.40	2.40	2.40	2.39	2.38	2.34	2.30	2.24
45.0	2.08	2.21	2.31	2.41	2.48	2.55	2.60	2.63	2.65	2.66	2.66	2.66	2.65	2.63	2.59	2.53
50.0	2.23	2.37	2.49	2.60	2.70	2.77	2.84	2.89	2.92	2.93	2.94	2.94	2.94	2.93	2.90	2.86
55.0	2.38	2.54	2.68	2.81	2.92	3.02	3.10	3.16	3.21	3.22	3.24	3.25	3.25	3.25	3.24	3.20
60.0	2.54	2.72	2.88	3.03	3.16	3.27	3.37	3.45	3.51	3.53	3.56	3.58	3.59	3.60	3.60	3.58
65.0			3.10	3.27	3.42	3.55	3.66	3.76	3.84	3.87	3.90	3.93	3.95	3.98	3.99	3.98
70.0				3.52	3.69	3.84	3.98	4.09	4.19	4.23	4.27	4.31	4.34	4.38	4.40	4.41
75.0					3.98	4.16	4.31	4.45	4.57	4.61	4.67	4.71	4.75	4.81	4.85	
80.0							4.68	4.83	4.97	5.02	5.09	5.14	5.19	5.27		

Cond °C	Inverter Current at 400 V, A															
	-35.0	-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	30.0
15.0	4.30	4.30	4.29	4.26	4.22	4.17										
20.0	4.65	4.70	4.73	4.75	4.74	4.71	4.67	4.60								
25.0	5.00	5.10	5.18	5.24	5.27	5.28	5.26	5.22	5.15	5.12	5.07	5.01	4.95			
30.0	5.34	5.50	5.64	5.74	5.82	5.86	5.88	5.87	5.83	5.80	5.76	5.71	5.66	5.53		
35.0	5.70	5.92	6.11	6.27	6.39	6.48	6.53	6.55	6.54	6.53	6.50	6.46	6.42	6.30	6.16	
40.0	6.06	6.35	6.60	6.82	6.99	7.13	7.23	7.29	7.31	7.31	7.29	7.27	7.24	7.14	7.01	6.84
45.0	6.45	6.81	7.13	7.40	7.64	7.83	7.97	8.07	8.13	8.15	8.15	8.14	8.12	8.05	7.94	7.78
50.0	6.85	7.29	7.69	8.03	8.32	8.57	8.77	8.92	9.02	9.05	9.08	9.09	9.08	9.04	8.95	8.82
55.0	7.30	7.82	8.29	8.70	9.06	9.37	9.63	9.83	9.98	10.03	10.08	10.11	10.13	10.12	10.06	9.94
60.0	7.78	8.38	8.93	9.43	9.86	10.24	10.55	10.82	11.02	11.08	11.16	11.22	11.25	11.28	11.26	11.17
65.0			9.64	10.21	10.72	11.17	11.56	11.88	12.14	12.23	12.34	12.41	12.47	12.55	12.56	12.51
70.0				11.06	11.65	12.18	12.64	13.03	13.35	13.46	13.61	13.71	13.79	13.91	13.97	13.95
75.0					12.67	13.27	13.81	14.27	14.66	14.79	14.97	15.11	15.22	15.39	15.50	
80.0							15.07	15.61	16.07	16.23	16.45	16.62	16.76	16.99		

Cond °C	Suction Mass Flow, g/s															
	-35.0	-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	30.0
15.0	10.25	12.45	14.95	17.80	21.10	24.80										
20.0	9.87	12.15	14.75	17.65	21.00	24.80	29.10	33.90								
25.0	9.53	11.90	14.55	17.50	20.90	24.80	29.10	34.00	39.40	41.70	45.50	48.70	52.20			
30.0	9.21	11.65	14.35	17.40	20.80	24.70	29.10	34.00	39.50	41.80	45.60	48.90	52.30	59.80		
35.0	8.94	11.40	14.20	17.25	20.70	24.60	29.00	34.00	39.50	41.90	45.60	49.00	52.50	60.00	68.20	
40.0	8.71	11.25	14.05	17.15	20.60	24.60	29.00	33.90	39.50	41.90	45.70	49.00	52.50	60.10	68.40	77.50
45.0	8.54	11.10	13.90	17.05	20.50	24.50	28.90	33.90	39.40	41.80	45.70	49.00	52.50	60.20	68.50	77.70
50.0	8.43	11.05	13.85	16.95	20.50	24.40	28.80	33.80	39.40	41.80	45.60	49.00	52.50	60.20	68.60	77.90
55.0	8.41	11.00	13.80	16.90	20.40	24.30	28.70	33.70	39.20	41.60	45.50	48.90	52.40	60.10	68.60	78.00
60.0	8.50	11.10	13.85	16.90	20.30	24.20	28.60	33.50	39.10	41.50	45.30	48.70	52.30	60.00	68.60	78.10
65.0			13.95	16.95	20.30	24.10	28.40	33.30	38.90	41.30	45.10	48.50	52.10	59.90	68.60	78.20
70.0				17.10	20.30	24.00	28.30	33.10	38.60	41.00	44.90	48.30	51.90	59.80	68.60	78.30
75.0					20.40	24.00	28.20	32.90	38.40	40.80	44.70	48.10	51.80	59.70	68.60	
80.0							28.10	32.80	38.30	40.70	44.60	48.00	51.70	59.80		

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, m <sup>3</sup> /h	12.8
Length/Width, mm	252/229
Height, mm	414
Net Weight, kg	28
Stub Suction, inch	7/8
Stub Discharge, inch	3/4
Drive Frequency Range, Hz	55 - 275
Compressor Speed Range, 1/min	1100 - 5500
Oil Quantity, l	1.18
Oil type (original charge)	Zerol RFL 68EP
Oil type (approved oils)	Zerol RFL 68EP
Sound Pressure @ 1m (HT), dBA	59
Sound Power (HT), dBA	70
Sound Conditions (HT, Temperatures: Evap./Cond./Suction at freq./speed)	-7 / 50 / 3 °C at 60 Hz
PED Category	2
Max. Low Side Internal Free Volume, l	3.8
Max. High Side Internal Free Volume, l	0.6
Max. Internal Free Volume, l	4.40
High Side PS gauge, bar	42
Low Side PS gauge, bar	30
Low Side TS Max., °C	70
Low Side TS Min., °C	-35
High Side TS Max., °C	150
High Side TS Min., °C	-35
Refrigerant's GWP	3
Refrigerant's classification	A3

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

Maximum Operating Current, A	25
Winding Resistance, ohm	0.5/0.5/0.5 (T1-T2/T2-T3/T3-T1)
Default Enclosure Class	Not Available

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

50 1/s

YHV072RG-4X9

R290

**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>
4X9	380-420 V / 3~ / 50 Hz	400	Y		1.00