



Minimum Evaporating Temp. With:

■ 10 K Suction Superheat

■ Maximum Evaporating Temperature

Drive Frequency Range 55 - 360 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	3.74	4.41	5.25	6.27	7.48	8.91										
20.0	3.46	4.14	4.99	6.00	7.21	8.62	10.25	12.15								
25.0	3.19	3.89	4.73	5.74	6.93	8.32	9.93	11.75	13.85	14.75	16.20	17.50	18.85			
30.0	2.95	3.64	4.48	5.47	6.65	8.01	9.58	11.40	13.40	14.30	15.70	16.95	18.30	21.10		
35.0	2.73	3.41	4.24	5.21	6.35	7.68	9.22	10.95	12.95	13.80	15.20	16.40	17.70	20.50	23.60	
40.0	2.53	3.20	4.00	4.95	6.06	7.35	8.83	10.55	12.45	13.30	14.60	15.80	17.05	19.75	22.80	26.10
45.0	2.35	3.00	3.77	4.68	5.75	6.99	8.43	10.05	11.90	12.75	14.00	15.15	16.35	19.00	21.90	25.10
50.0	2.19	2.81	3.55	4.42	5.44	6.63	8.00	9.57	11.35	12.15	13.35	14.45	15.65	18.15	21.00	24.10
55.0	2.05	2.64	3.33	4.16	5.12	6.25	7.56	9.05	10.75	11.50	12.70	13.75	14.85	17.30	20.00	23.00
60.0	1.93	2.48	3.13	3.90	4.80	5.86	7.09	8.51	10.15	10.85	11.95	13.00	14.05	16.35	18.95	21.80
65.0		2.34	2.93	3.64	4.48	5.46	6.61	7.94	9.47	10.15	11.20	12.15	13.20	15.40	17.90	20.60
70.0			2.75	3.38	4.15	5.05	6.11	7.35	8.78	9.41	10.40	11.30	12.30	14.40	16.75	19.40
75.0			2.58	3.14	3.82	4.63	5.60	6.74	8.07	8.65	9.60	10.45	11.35	13.35	15.55	
80.0						4.21	5.08	6.12	7.34	7.88	8.75	9.54	10.40	12.25		
82.0							4.88	5.87	7.04	7.56	8.41	9.18	10.00			

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	1.61	1.62	1.64	1.64	1.63	1.62										
20.0	1.66	1.69	1.72	1.73	1.74	1.74	1.72	1.70								
25.0	1.72	1.77	1.81	1.84	1.86	1.88	1.88	1.86	1.84	1.84	1.82	1.80	1.78			
30.0	1.80	1.87	1.92	1.97	2.01	2.03	2.04	2.05	2.04	2.03	2.02	2.00	1.98	1.94		
35.0	1.90	1.99	2.06	2.12	2.17	2.21	2.23	2.24	2.24	2.24	2.23	2.22	2.21	2.18	2.13	
40.0	2.02	2.13	2.21	2.29	2.35	2.40	2.44	2.46	2.47	2.47	2.47	2.46	2.46	2.43	2.39	2.33
45.0	2.16	2.28	2.38	2.47	2.55	2.61	2.66	2.70	2.72	2.72	2.73	2.72	2.72	2.70	2.67	2.62
50.0	2.32	2.46	2.58	2.68	2.77	2.85	2.91	2.95	2.98	2.99	3.00	3.00	3.00	2.99	2.96	2.92
55.0	2.50	2.65	2.78	2.90	3.01	3.10	3.17	3.23	3.27	3.28	3.29	3.30	3.30	3.30	3.28	3.24
60.0	2.69	2.86	3.01	3.15	3.26	3.36	3.45	3.52	3.57	3.59	3.61	3.62	3.62	3.63	3.61	3.58
65.0		3.09	3.26	3.41	3.54	3.65	3.75	3.83	3.89	3.91	3.94	3.95	3.96	3.97	3.97	3.94
70.0			3.52	3.69	3.83	3.96	4.07	4.16	4.23	4.25	4.29	4.31	4.32	4.34	4.34	4.32
75.0			3.81	3.99	4.15	4.29	4.41	4.51	4.59	4.62	4.65	4.68	4.70	4.72	4.73	
80.0						4.63	4.76	4.88	4.97	5.00	5.04	5.07	5.09	5.13		
82.0							4.91	5.03	5.12	5.16	5.20	5.23	5.26			

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	5.93	5.78	5.65	5.54	5.45	5.39										
20.0	6.07	5.98	5.90	5.83	5.78	5.75	5.72	5.72								
25.0	6.27	6.24	6.22	6.20	6.19	6.19	6.19	6.20	6.21	6.21	6.23	6.24	6.25			
30.0	6.54	6.58	6.62	6.65	6.68	6.71	6.74	6.76	6.79	6.79	6.81	6.82	6.82	6.84		
35.0	6.89	6.99	7.09	7.18	7.25	7.32	7.37	7.42	7.45	7.46	7.48	7.49	7.49	7.50	7.49	
40.0	7.30	7.48	7.64	7.78	7.90	8.01	8.09	8.16	8.21	8.23	8.24	8.25	8.26	8.25	8.23	8.19
45.0	7.79	8.04	8.26	8.46	8.63	8.78	8.90	8.99	9.06	9.08	9.10	9.11	9.12	9.11	9.07	9.01
50.0	8.34	8.67	8.96	9.22	9.44	9.63	9.79	9.91	10.00	10.02	10.05	10.07	10.07	10.06	10.01	9.93
55.0	8.97	9.37	9.73	10.05	10.33	10.57	10.76	10.92	11.03	11.06	11.10	11.12	11.12	11.11	11.05	10.95
60.0	9.66	10.15	10.58	10.97	11.30	11.59	11.83	12.01	12.15	12.19	12.23	12.26	12.27	12.26	12.19	12.08
65.0		11.00	11.51	11.96	12.36	12.69	12.97	13.20	13.36	13.41	13.46	13.50	13.51	13.50	13.43	13.31
70.0			12.51	13.03	13.49	13.88	14.21	14.47	14.66	14.72	14.79	14.83	14.85	14.85	14.78	14.64
75.0			13.58	14.18	14.70	15.15	15.52	15.82	16.05	16.12	16.20	16.25	16.28	16.29	16.22	
80.0						16.50	16.93	17.27	17.53	17.62	17.71	17.77	17.81	17.83		
82.0							17.51	17.87	18.15	18.24	18.34	18.41	18.45			

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	11.20	12.95	15.15	17.75	20.80	24.40										
20.0	10.75	12.65	14.95	17.65	20.80	24.50	28.60	33.30								
25.0	10.35	12.35	14.75	17.55	20.80	24.50	28.80	33.50	38.80	41.00	44.60	47.70	51.00			
30.0	10.00	12.10	14.55	17.45	20.80	24.60	28.90	33.70	39.00	41.30	44.90	48.10	51.40	58.50		
35.0	9.70	11.85	14.40	17.35	20.70	24.60	28.90	33.80	39.20	41.50	45.20	48.40	51.70	58.90	66.70	
40.0	9.45	11.70	14.30	17.30	20.70	24.60	29.00	33.90	39.30	41.70	45.30	48.60	51.90	59.20	67.00	75.50
45.0	9.26	11.55	14.15	17.20	20.70	24.60	29.00	33.90	39.40	41.80	45.50	48.70	52.10	59.40	67.30	75.90
50.0	9.15	11.45	14.10	17.15	20.60	24.50	29.00	33.90	39.40	41.80	45.50	48.80	52.20	59.50	67.40	76.10
55.0	9.13	11.45	14.05	17.10	20.60	24.50	28.90	33.90	39.40	41.70	45.50	48.70	52.20	59.50	67.50	76.20
60.0	9.24	11.50	14.10	17.10	20.50	24.40	28.80	33.70	39.20	41.60	45.30	48.60	52.10	59.40	67.50	76.30
65.0		11.70	14.20	17.15	20.50	24.30	28.70	33.60	39.00	41.40	45.10	48.40	51.90	59.30	67.40	76.20
70.0			14.45	17.25	20.50	24.20	28.50	33.30	38.80	41.10	44.80	48.10	51.60	59.00	67.20	76.10
75.0			14.90	17.50	20.60	24.20	28.30	33.10	38.40	40.80	44.50	47.80	51.20	58.70	66.90	
80.0						24.20	28.20	32.80	38.10	40.40	44.10	47.40	50.90	58.40		
82.0							28.10	32.70	38.00	40.30	44.00	47.30	50.80			

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	12.8
Length/Width, mm	251/228
Height, mm	413
Net Weight, kg	28
Stub Suction, inch	7/8
Stub Discharge, inch	3/4
Drive Frequency Range, Hz	55 - 360
Compressor Speed Range, 1/min	1100 - 7200
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	19
Winding Resistance, ohm	0.41/0.41/0.41 (T1-T2/T2-T3/T3-T1)
Default Enclosure Class	Not Available

ACCESSORIES INCLUDED**ACCESSORIES OPTIONAL**

50 1/s

YHV072HG-4X9

R290

MOTOR OPTIONS

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
4X9	380-420 V / 3~ / 50 Hz	400	Y		1.00