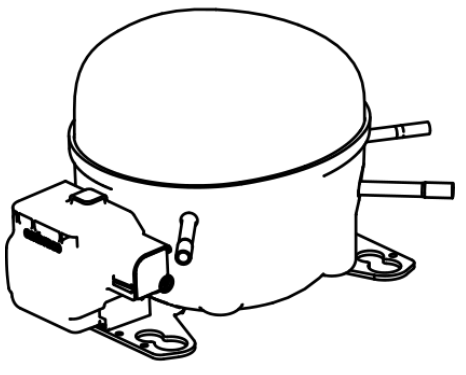
COMPRESSOR TECHNICAL DATA

VEMC7C



ENGINEERING CODE
513906044

REFRIGERANT
R-600a

POWER SUPPLY
220-240 V 50-60 Hz

APPLICATION
LBP

MOTOR TYPE
BPM

STANDARD
ASHRAE

COOLING CAPACITY (4500 RPM)
179 W

EFFICIENCY (4500 RPM)
1.81 W/W

DATA

GENERAL DATA

Model	VEMC7C
Type	Hermetic Reciprocating
Technology	VCC
Compressor Application	LBP
Expansion Device	Capillary Tube
Compressor Cooling	Static/220
HP	1/6
Starting Torque	LST
Plant	CHINA

ELECTRICAL DATA

Start Winding Resistance	8.1 Ω at 25°C
Run Winding Resistance	8.1 Ω at 25°C

MECHANICAL DATA

Displacement	7.23 cm^3
Oil Charge	210 ml
Oil Type	ALQUILB
Oil Viscosity	ISO5
Weight	7.8 Kg

ELECTRICAL COMPONENTS

CSR CSIR BOX	No
Starting Device Type	INVERTER
Starting Device Description	CF02D01 M 0.0 X VCC32456XXXX
Overload Protection	VCC32456XXXXX
Inverter	CF02D01 M 0.0 X VCC32456XXXX
Inverter Description	CF02D01 M 0.0 X VCC32456XXXX

EXTERNAL CHARACTERISTICS

Base Plate	SMALL EUEM
Tray Holder	YES

Connector	Internal Diameter	Shape	Material
Suction	6.1 mm	SLANTED 40° UP + 0° TO BACK	COPPER
Discharge	5.1 mm	SLANTED 42° UP + 24° TO BACK	COPPER
Process	6 mm	SLANTED 42º UP + 45° TO BACK	COPPER(OD)

PERFORMANCE

TESTED CONDITIONS

Tested Refrigerant	R-600a
Tested Application	LBP
Tested Standard	ASHRAE
Tested Cooling	Static
Tested Voltage	220 V
Refrigerant Temperature	Dew

Performance on Compressor Speed: 1200 RPM

RATED POINTS

Condensing Temperature °C	Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
54.4	-23.3	47	1.8	26	0.2	0.51

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 35ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-35	27	1.73	16	0.12	0.29
-30	37	2.00	19	0.14	0.40
-25	50	2.31	22	0.17	0.54
-20	65	2.66	25	0.19	0.70
-15	83	3.07	27	0.21	0.90
-10	105	3.56	29	0.23	1.13

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 45ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-35	23	1.45	16	0.12	0.25
-30	34	1.71	20	0.15	0.36
-25	47	1.98	24	0.18	0.50
-20	62	2.26	27	0.21	0.66
-15	80	2.59	31	0.24	0.86
-10	101	2.96	34	0.26	1.09

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 55ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-30	29	1.45	20	0.15	0.31
-25	42	1.70	25	0.19	0.45
-20	57	1.96	29	0.23	0.62
-15	75	2.23	34	0.26	0.81
-10	97	2.53	38	0.29	1.04

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

Performance on Compressor Speed: 1600 RPM

RATED POINTS

Condensing Temperature °C	Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
54.4	-23.3	64	1.87	34	0.25	0.69

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 35ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-35	37	1.79	20	0.15	0.39
-30	50	2.06	24	0.18	0.54
-25	67	2.36	28	0.21	0.72
-20	87	2.71	32	0.24	0.94
-15	111	3.12	36	0.27	1.20
-10	139	3.61	39	0.29	1.50

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 45ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-35	32	1.53	21	0.16	0.34
-30	46	1.78	26	0.19	0.49
-25	63	2.04	31	0.23	0.67
-20	83	2.32	36	0.27	0.89
-15	107	2.64	40	0.31	1.15
-10	135	3.01	45	0.34	1.45

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 55ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-30	41	1.53	26	0.19	0.44
-25	57	1.77	32	0.24	0.62
-20	77	2.02	38	0.29	0.83
-15	101	2.29	44	0.33	1.09
-10	129	2.59	50	0.38	1.39

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

Performance on Compressor Speed: 2000 RPM

RATED POINTS

Condensing Temperature °C	Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
54.4	-23.3	81	1.9	43	0.32	0.87

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 35ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-35	46	1.83	25	0.19	0.50
-30	64	2.10	30	0.23	0.69
-25	85	2.40	35	0.26	0.91
-20	110	2.74	40	0.30	1.18
-15	140	3.14	45	0.33	1.51
-10	175	3.62	48	0.36	1.89

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 45ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-35	41	1.55	26	0.19	0.44
-30	58	1.81	32	0.24	0.63
-25	79	2.07	38	0.29	0.85
-20	104	2.35	45	0.33	1.12
-15	134	2.66	50	0.38	1.45
-10	169	3.03	56	0.42	1.83

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 55ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-30	52	1.56	33	0.25	0.56
-25	73	1.80	40	0.30	0.78
-20	98	2.05	48	0.36	1.05
-15	128	2.32	55	0.41	1.38
-10	163	2.61	62	0.47	1.76

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

Performance on Compressor Speed: 3000 RPM

RATED POINTS

Condensing Temperature °C	Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
54.4	-23.3	121	1.87	65	0.48	1.3

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 35ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-35	69	1.80	39	0.29	0.74
-30	95	2.04	46	0.35	1.02
-25	126	2.31	55	0.41	1.35
-20	163	2.61	62	0.47	1.75
-15	207	2.97	70	0.52	2.23
-10	259	3.41	76	0.57	2.80

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 45ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-35	62	1.56	40	0.30	0.66
-30	87	1.79	49	0.37	0.94
-25	118	2.02	59	0.44	1.27
-20	155	2.27	68	0.51	1.67
-15	199	2.55	78	0.58	2.15
-10	251	2.88	87	0.65	2.71

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 55ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-30	78	1.56	50	0.37	0.83
-25	109	1.78	61	0.45	1.17
-20	146	2.00	73	0.54	1.57
-15	190	2.24	85	0.63	2.05
-10	241	2.51	96	0.72	2.61

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

Performance on Compressor Speed: 4500 RPM

RATED POINTS

Condensing Temperature °C	Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
54.4	-23.3	179	1.81	99	0.72	1.93

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 35ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-35	103	1.74	59	0.44	1.10
-30	139	1.97	71	0.52	1.49
-25	183	2.21	83	0.60	1.96
-20	234	2.49	94	0.68	2.52
-15	296	2.82	105	0.76	3.19
-10	369	3.22	115	0.83	3.98

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 45ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-35	94	1.51	62	0.46	1.01
-30	130	1.73	75	0.55	1.39
-25	173	1.95	89	0.65	1.86
-20	225	2.17	104	0.75	2.42
-15	287	2.43	118	0.85	3.09
-10	359	2.73	132	0.95	3.88

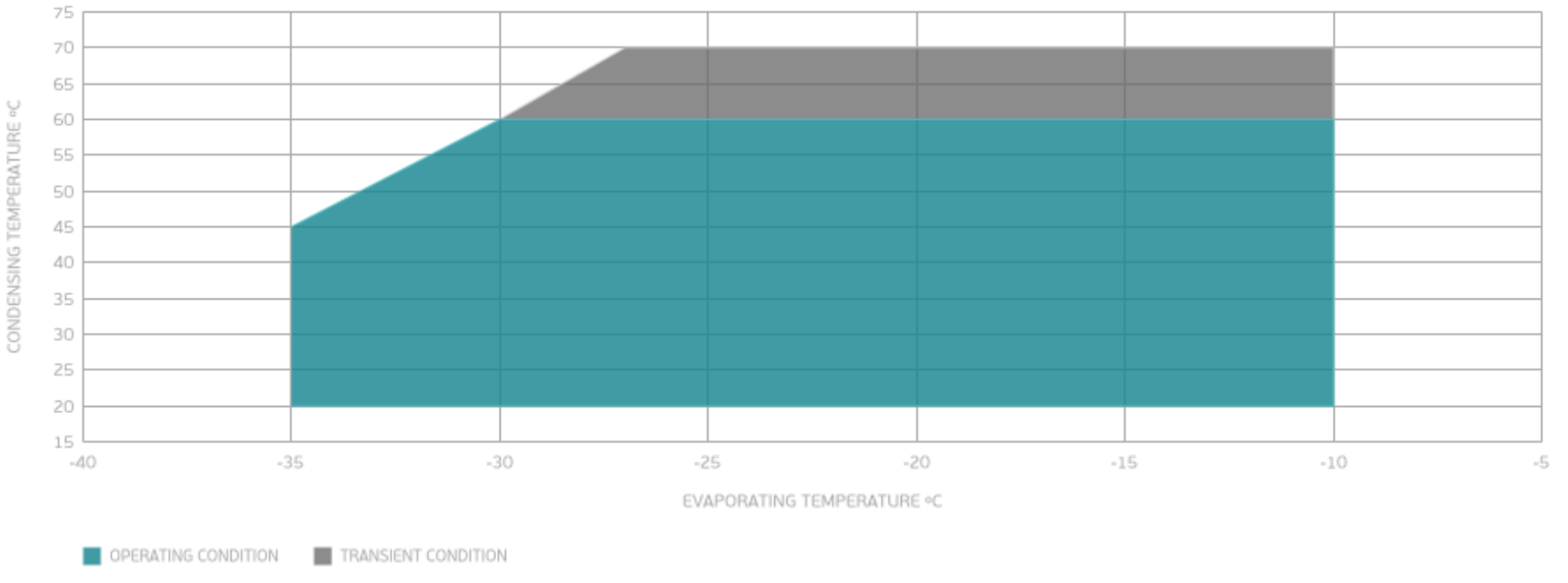
Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 55ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-30	119	1.51	79	0.57	1.27
-25	162	1.72	94	0.68	1.74
-20	214	1.93	111	0.80	2.30
-15	276	2.15	128	0.93	2.97
-10	348	2.40	145	1.05	3.76

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

ENVELOPE



EXTERNAL DIMENSIONS