MODEL
EMC3121U

APPROVALS

ENGINEERING CODE
513301722

APPROVED REFRIGERANT
R-290

POWER SUPPLY
115-127 V 60 Hz

STANDARD CONDITIONS
ASHRAE

APPLICATION
L/MBP

COOLING CAPACITY
605 W (MBP)

EFFICIENCY
2.54 W/W (MBP)

MOTOR TYPE
RSCR

STARTING TORQUE
LST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	5.19 cm³
Compressor Cooling	Fan/NotControled/115
Expansion Device	Capillary Tube
Horse Power	1/4 hp
Power Supply	115-127 V 60 Hz
Evaporating Temperature Range	-35 °C to 0 °C

Electrical Data

Motor type	RSCR
Starting Torque	LST
Start Winding Resistance	7.28 Ω at 25° C
Run Winding Resistance	3.09 Ω at 25° C
Locked Rotor Amperage (LRA)	26.7 A
Rated Load Amperage (RLA) at 60 Hz	3 A

Mechanical Data

Oil Charge	150 ml
Oil Type Configuration	ESTER
Oil Type Viscosity	ISO10
Weight	6.8 Kg

Electrical Components

	Description
Starting Device	PTC | 8EA14C3 QPS2-A4R7MD3
Run Capacitor	12
Motor Protection	4TM427NFBYY-53

External Characteristics

Tray Holder	No

Connector	Internal Diameter	Shape
Suction	8.2 mm	Straight/Copper
Discharge	6.5 mm	Straight/Copper
Process	6.5 mm	Straight/Copper

PERFORMANCE

Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Current	Gas Flow Rate	Efficiency
54.40°C	-6.70°C	605 W	238 W	2.16 A	6.23 kg/h	2.54 W/W

Test Condition: ASHRAELBP32, Fan/NotControled/115, Return Gas 35°C, Evaporation -6.70°C, Condensing 54.40°C, Ambient 35°C , Liquid 46.1°C, Subcooling 8.3K. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Performance Curve Data

Condensing Temperature 35°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-35	192	115	1.09	1.94	1.67
-30	250	130	1.23	2.53	1.92
-25	318	145	1.36	3.23	2.19
-20	397	160	1.49	4.04	2.48
-15	487	173	1.6	4.98	2.82
-10	590	184	1.7	6.05	3.21
-5	704	191	1.77	7.26	3.68
0	831	195	1.82	8.63	4.25

Test Condition: ASHRAELBP32, Fan/NotControled/115, Return Gas 35°C, Ambient 35°C , Liquid 46.1°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-35	172	117	1.11	1.74	1.47
-30	228	135	1.27	2.31	1.69
-25	295	154	1.43	2.99	1.91
-20	372	173	1.59	3.79	2.15
-15	462	191	1.75	4.71	2.42
-10	562	208	1.89	5.77	2.71
-5	676	222	2.02	6.97	3.04
0	802	234	2.13	8.32	3.43

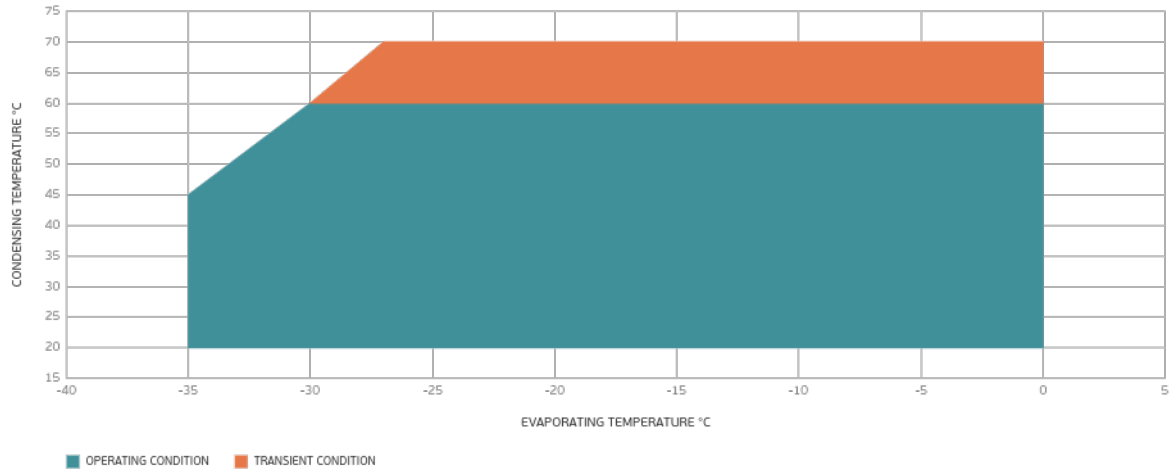
Test Condition: ASHRAELBP32, Fan/NotControled/115, Return Gas 35°C, Ambient 35°C , Liquid 46.1°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Condensing Temperature 55°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-35	150	116	1.11	1.51	1.3
-30	204	136	1.28	2.07	1.5
-25	269	158	1.47	2.73	1.7
-20	344	181	1.66	3.51	1.91
-15	432	203	1.86	4.41	2.12
-10	531	226	2.05	5.45	2.35
-5	643	246	2.23	6.63	2.61
0	767	265	2.41	7.96	2.9

Test Condition: ASHRAELBP32, Fan/NotControled/115, Return Gas 35°C, Ambient 35°C , Liquid 46.1°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Operating Envelope



External Dimensions