MODEL
EMC3130U

APPROVALS

ENGINEERING CODE
513301693

APPROVED REFRIGERANT
R-290

POWER SUPPLY
115-127 V 60 Hz

STANDARD CONDITIONS
ASHRAE

APPLICATION
L/MBP

COOLING CAPACITY
411 W (LBP)

EFFICIENCY
1.69 W/W (LBP)

MOTOR TYPE
RSCR

STARTING TORQUE
LST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	6.92 cm³
Compressor Cooling	Fan/NotControled/115
Expansion Device	Capillary Tube
Horse Power	1/3 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	7.36 Ω at 25° C
Run Winding Resistance	2.34 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
Motor Protection	4TM771RFBZZ-53
Run Capacitor	20

External Characteristics

Tray Holder	No

Connector	Internal Diameter	Shape
Suction	6.5 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	-23.30°C	411 W	243 W	2.27 A	4.18 kg/h	1.69 W/W

Test Condition: ASHRAELBP32, Fan/NotControled/115, Return Gas 32.2°C, Evaporation -23.30°C, Condensing 54.40°C, Ambient 32.2°C , Liquid 32.2°C, Subcooling 22.2K. 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	266	168	1.64	2.69	1.58
-30	338	188	1.8	3.42	1.79
-25	423	208	1.97	4.30	2.03
-20	524	227	2.14	5.33	2.3
-15	640	245	2.29	6.54	2.61
-10	773	262	2.44	7.94	2.95
-5	924	276	2.56	9.54	3.35
0	1094	288	2.66	11.35	3.8

Test Condition: ASHRAELBP32, Fan/NotControled/115, Return Gas 32.2°C, Ambient 32.2°C , Liquid 32.2°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	249	175	1.7	2.52	1.43
-30	320	199	1.89	3.24	1.61
-25	404	224	2.1	4.10	1.8
-20	503	249	2.3	5.11	2.02
-15	617	273	2.51	6.30	2.26
-10	747	296	2.7	7.67	2.52
-5	895	317	2.88	9.23	2.82
0	1061	337	3.04	11.01	3.15

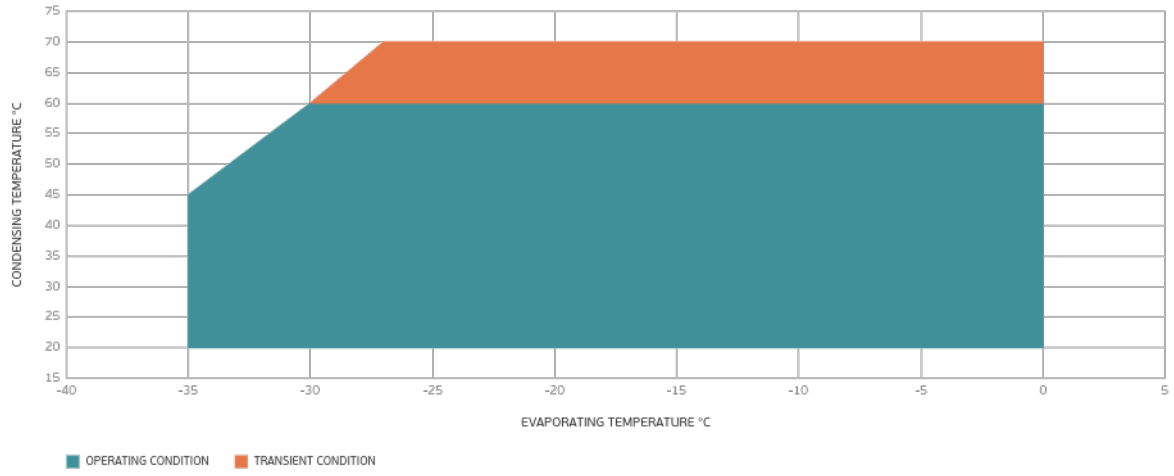
Test Condition: ASHRAELBP32, Fan/NotControled/115, Return Gas 32.2°C, Ambient 32.2°C , Liquid 32.2°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Condensing Temperature 55°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-35	227	176	1.73	2.29	1.28
-30	296	205	1.95	2.99	1.45
-25	378	234	2.19	3.84	1.62
-20	475	263	2.44	4.83	1.8
-15	587	293	2.69	5.99	2
-10	715	322	2.94	7.33	2.22
-5	860	350	3.18	8.87	2.45
0	1023	377	3.41	10.61	2.71

Test Condition: ASHRAELBP32, Fan/NotControled/115, Return Gas 32.2°C, Ambient 32.2°C , Liquid 32.2°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Operating Envelope



External Dimensions