


MODEL


EMC3117U

embraco




 **ENGINEERING CODE**
711VA52

 **APPROVED REFRIGERANT**
R-290

 **POWER SUPPLY**
220-240 V 50 Hz

 **STANDARD CONDITIONS**
ASHRAE

 **APPLICATION**
L/MBP

 **COOLING CAPACITY**
197 W

 **EFFICIENCY**
1.81 W/W

 **MOTOR TYPE**
RSCR

 **STARTING TORQUE**
LST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	3.97 cm ³
Compressor Cooling	Fan
Fan Air Flow	270 m ³ /h
Expansion Device	Capillary Tube
Horse Power	1/5 hp
Max Condensing Pressure Operating	18.07 bar
Max Condensing Pressure Peak	20.17 bar
Power Supply	220-240 V 50 Hz
Evaporating Temperature Range	-35 °C to 5 °C

Electrical Data

Motor type	RSCR
Starting Torque	LST
Start Winding Resistance	14.75 Ω at 25° C
Run Winding Resistance	19.97 Ω at 25° C
Locked Rotor Amperage (LRA)	4.8 A

Mechanical Data

Maximum Recommended Refrigerant Charge	150 g
Oil Charge	150 ml
Oil Type Configuration	Polyolester
Oil Type Viscosity	ISO10
Pressurization	Light vacuum
Weight	8.5 Kg
Free Internal Volume	1.5 L

Electrical Components

	Description
CSR / CSIR Box	
Starting Device	PTC PTC 230V
Motor Protection	External 3/4" AE13FHY8

External Characteristics

Base Plate	European	
Tray Holder	No	
Height	171 mm	
Connector	Internal Diameter	Shape
Suction	6.1 mm	Slanted 42°
Discharge	4.9 mm	Straight
Process	6.1 mm	Slanted 46°

PERFORMANCE

Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Current	Gas Flow Rate	Efficiency
54.40°C	-23.30°C	197 W	109 W	0.51 A	2.00 kg/h	1.81 W/W

Test Condition: ASHRAE, Fan, Return Gas 32.2°C, Evaporation -23.30°C, Condensing 54.40°C, Ambient 32.2°C, Liquid 32.2°C. Data in accordance to ASHRAE guideline polynomial curve.

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	129	76	0.36	1.29	1.7
-30	163	85	0.4	1.64	1.92
-25	204	93	0.44	2.07	2.19
-20	254	101	0.48	2.58	2.5
-15	311	109	0.51	3.18	2.86
-10	377	116	0.54	3.87	3.26
-5	451	122	0.56	4.66	3.69
0	534	128	0.58	5.54	4.16
5	624	134	0.59	6.51	4.66

Test Condition: ASHRAE, Fan, L/MBP. Data in accordance to ASHRAE guideline polynomial curve.

Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-35	122	78	0.37	1.22	1.57
-30	153	89	0.42	1.54	1.72
-25	193	100	0.47	1.95	1.93
-20	241	110	0.51	2.45	2.18
-15	297	121	0.56	3.04	2.46
-10	362	130	0.6	3.71	2.77
-5	435	140	0.64	4.49	3.11
0	516	149	0.68	5.35	3.46
5	606	158	0.72	6.32	3.84

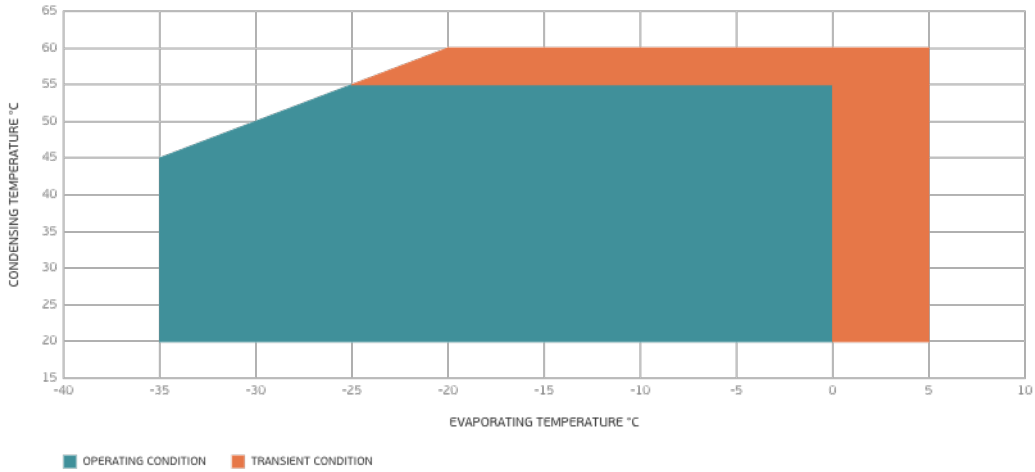
Test Condition: ASHRAE, Fan, L/MBP. Data in accordance to ASHRAE guideline polynomial curve.

Condensing Temperature 55°C

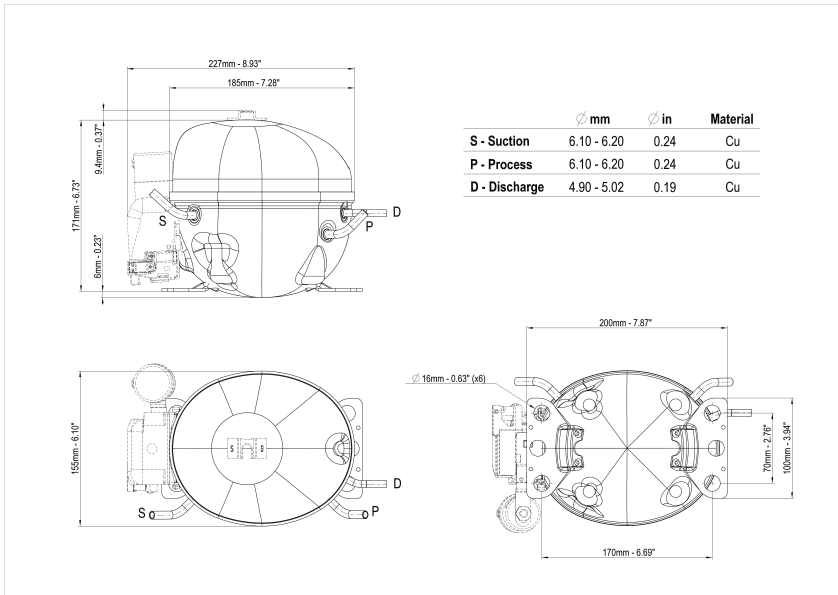
Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-25	182	105	0.49	1.84	1.74
-20	228	118	0.55	2.31	1.93
-15	282	131	0.6	2.88	2.15
-10	345	144	0.66	3.54	2.4
-5	416	156	0.72	4.29	2.66
0	496	169	0.78	5.14	2.94
5	584	181	0.84	6.09	3.23

Test Condition: ASHRAE, Fan, L/MBP. Data in accordance to ASHRAE guideline polynomial curve.

Operating Envelope

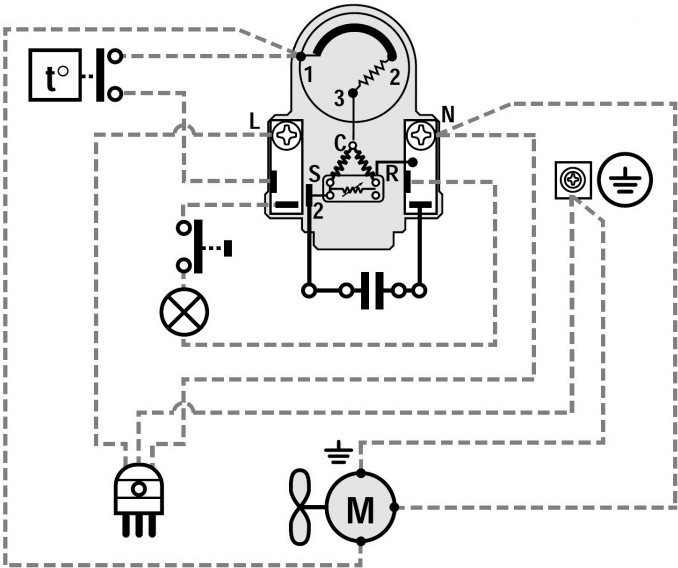


External Dimensions



	mm	in	Material
S - Suction	6.10 - 6.20	0.24	Cu
P - Process	6.10 - 6.20	0.24	Cu
D - Discharge	4.90 - 5.02	0.19	Cu

Wiring Diagram



Assembly Instructions

