MODEL
EMT2121U

APPROVALS

ENGINEERING CODE
513300293

APPROVED REFRIGERANT
R-290

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
ASHRAE

APPLICATION
LBP

COOLING CAPACITY
256 W (LBP)

EFFICIENCY
1.42 W/W (LBP)

MOTOR TYPE
CSIR

STARTING TORQUE
LST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	5.56 cm^3
Compressor Cooling	Fan/Controled/220
Expansion Device	Capillary Tube
Horse Power	1/3 hp
Power Supply	220-240 V 50 Hz
Evaporating Temperature Range	-45 °C to -10 °C

Electrical Data

Motor type	CSIR
Starting Torque	LST
Locked Rotor Amperage (LRA)	26.7 A
Rated Load Amperage (RLA) at 60 Hz	3 A

Mechanical Data

Oil Charge	180 ml
Oil Type Configuration	ESTER
Oil Type Viscosity	ISO22
Weight	7.8 Kg

Electrical Components

	Description
Starting Device	Relay | MTRP-0015*
Start Capacitor	43-53 Uf / 330 V
Motor Protection	4TM276NFBYY-53

External Characteristics

Tray Holder	Yes

Connector	Internal Diameter	Shape
Suction	6.2 mm	Slanted 40? up + 45? to Back/Copper
Discharge	4.9 mm	Slanted 0? up + 24? to Back/Copper
Process	6.2 mm	Slanted 40? up + 45? to Back/Copper

PERFORMANCE

Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Current	Gas Flow Rate	Efficiency
54.40°C	-23.30°C	256 W	181 W	1.25 A	2.57 kg/h	1.42 W/W

Test Condition: ASHRAELBP32, Fan/Controled/220, 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
-45	116	102	1.6	1.17	1.14
-40	151	110	0.95	1.52	1.37
-35	198	122	0.79	1.99	1.62
-30	254	136	0.92	2.57	1.87
-25	318	151	1.12	3.23	2.11
-20	388	166	1.18	3.95	2.35
-15	462	178	0.9	4.73	2.6
-10	539	188	0.06	5.53	2.87
-5	615	193	6.34	3.2	
0	689	191	7.15	3.6	
5	760	183	7.93	4.16	
10	824	165	8.67	4.99	

Test Condition: ASHRAELBP32, Fan/Controled/220, 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
-45	103	104	1.57	1.04	0.99
-40	130	115	0.95	1.31	1.13
-35	169	130	0.82	1.71	1.3
-30	219	147	0.96	2.21	1.49
-25	278	166	1.17	2.82	1.67
-20	343	185	1.24	3.49	1.86
-15	414	202	0.95	4.23	2.05
-10	487	217	0.1	5.00	2.25
-5	561	227	5.79	2.48	
0	634	231	6.58	2.75	
5	705	229	7.35	3.08	
10	770	218	8.09	3.54	

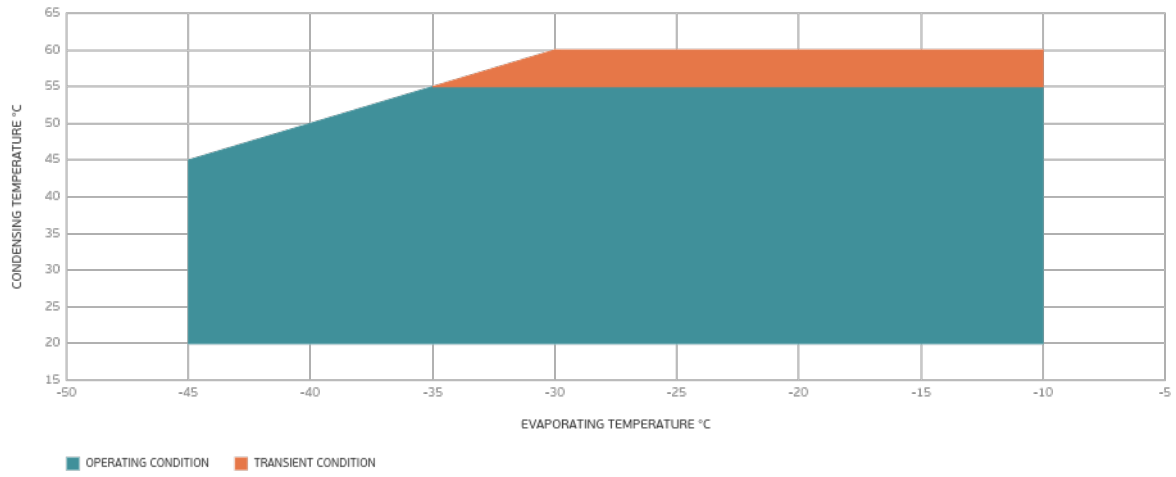
Test Condition: ASHRAELBP32, Fan/Controled/220, Return Gas 32.2°C, Ambient 32.2°C , Liquid 32.2°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Condensing Temperature 55°C

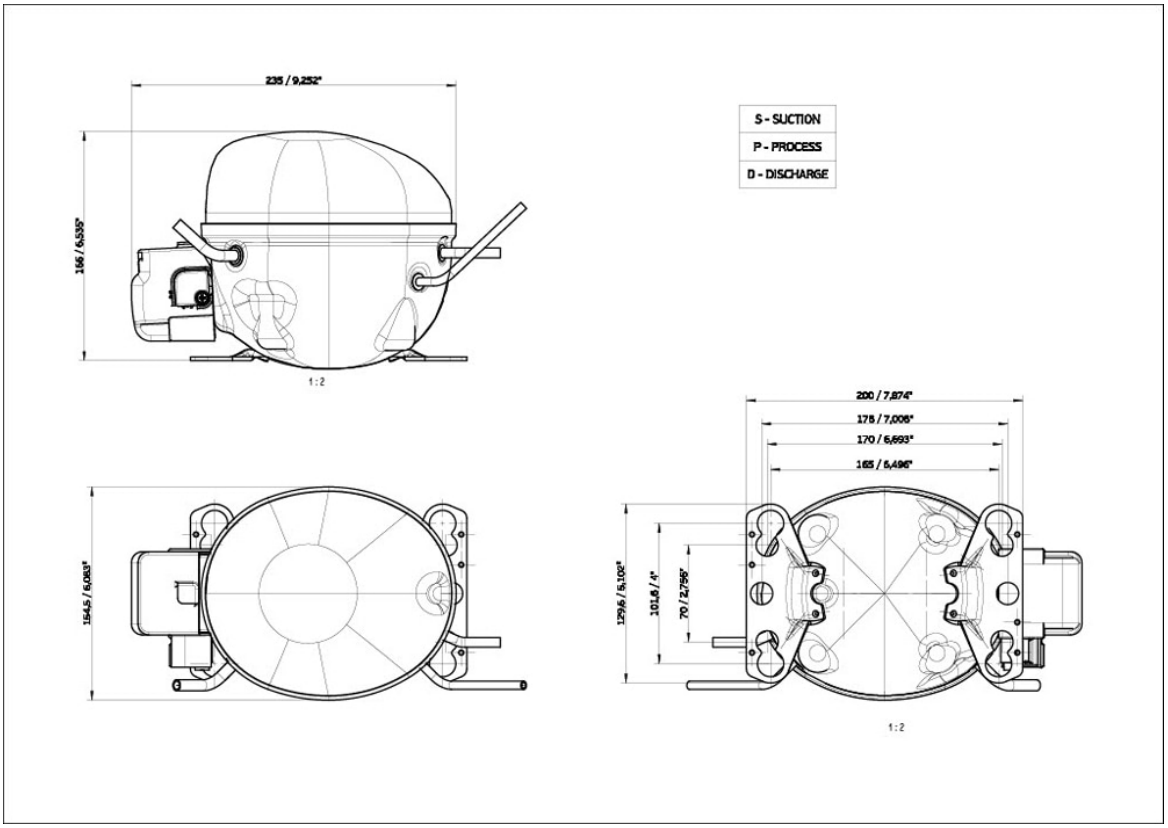
Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-45	95	105	1.54	0.96	0.91
-40	112	117	0.95	1.13	0.96
-35	142	132	0.83	1.43	1.07
-30	183	152	0.99	1.86	1.21
-25	235	172	1.2	2.38	1.36
-20	294	193	1.26	2.99	1.52
-15	359	213	0.96	3.66	1.68
-10	427	230	0.1	4.38	1.86
-5	497	244	5.13	2.04	
0	568	252	5.89	2.26	
5	636	253	6.63	2.51	
10	700	246	7.36	2.84	

Test Condition: ASHRAELBP32, Fan/Controled/220, 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



Wiring Diagram

SM28-4