



APPROVALS



ENGINEERING CODE
513300293

APPROVED REFRIGERANT
R-290

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
EN12900

APPLICATION
LBP

COOLING CAPACITY
173 W (LBP)

EFFICIENCY
1.41 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/Controlled/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	Gas Flow Rate	Efficiency
40.00°C	-35.00°C	173 W	122 W	1.99 kg/h	1.41 W/W

Test Condition: EN12900LBP, Fan/Controlled/220, Return Gas 20°C, Evaporation -35.00°C, Condensing 40.00°C, Ambient 35°C, Liquid 40°C, Subcooling OK. Data are an indication of performance based simulation.

Performance Curve Data

Condensing Temperature 35°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-45	111	102	1.22	1.08
-40	145	110	1.59	1.31
-35	190	122	2.08	1.55
-30	244	136	2.68	1.79
-25	306	151	3.38	2.02
-20	373	166	4.14	2.26
-15	445	178	4.96	2.5
-10	519	187	5.81	2.77
-5	594	192	6.67	3.09
0	668	191	7.53	3.51
5	740	182	8.38	4.07
10	807	164	9.18	4.91

Test Condition: EN12900LBP, Fan/Controlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-45	90	104	1.08	0.87
-40	113	115	1.36	0.99
-35	148	130	1.78	1.14
-30	192	147	2.32	1.3
-25	243	166	2.95	1.47
-20	301	185	3.66	1.63
-15	362	202	4.43	1.79
-10	426	216	5.25	1.97
-5	491	226	6.09	2.17
0	555	230	6.93	2.41
5	617	228	7.77	2.71
10	674	217	8.57	3.11

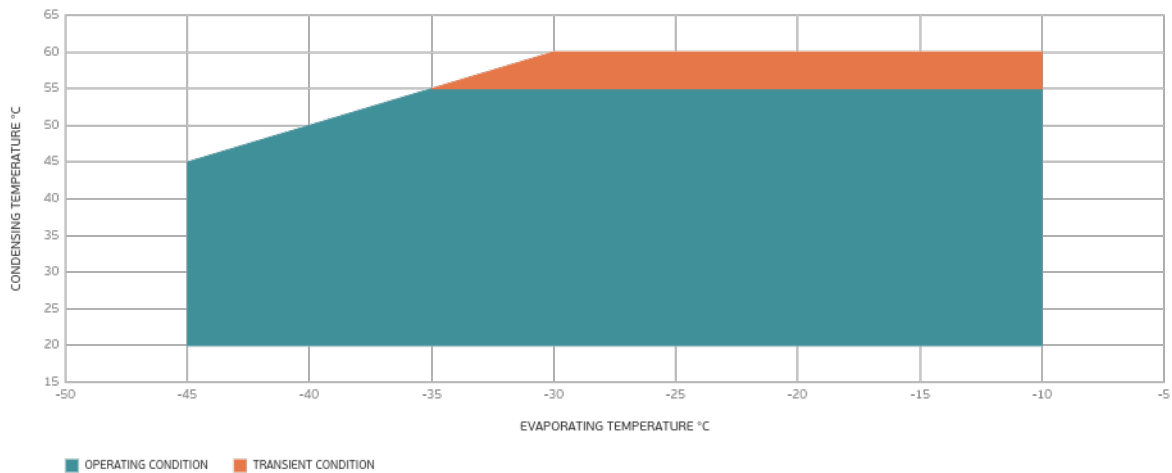
Test Condition: EN12900LBP, Fan/Controlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

Condensing Temperature 55°C

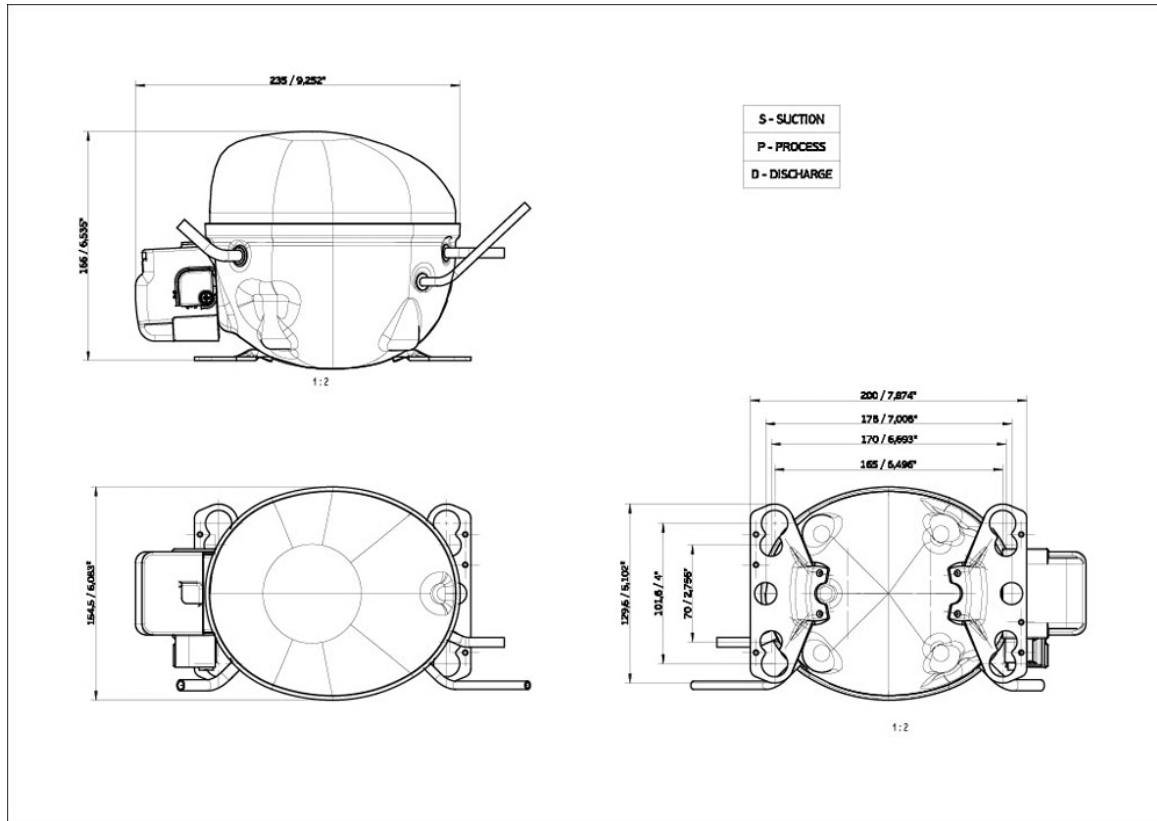
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-45	76	105	1.00	0.72
-40	88	117	1.18	0.75
-35	112	133	1.50	0.84
-30	144	152	1.94	0.95
-25	185	172	2.49	1.07
-20	231	193	3.13	1.2
-15	282	212	3.84	1.32
-10	335	230	4.60	1.46
-5	389	243	5.40	1.6
0	442	251	6.20	1.76
5	492	252	7.01	1.95
10	539	245	7.79	2.2

Test Condition: EN12900LBP, Fan/Controlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

Operating Envelope



External Dimensions



Wiring Diagram

SM28-4

