



APPROVALS



ENGINEERING CODE
513306230

APPROVED REFRIGERANT
R-134a

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
EN12900

APPLICATION
HBP

COOLING CAPACITY
644 W (HBP)

EFFICIENCY
2.3 W/W (HBP)

MOTOR TYPE
CSIR

STARTING TORQUE
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	6.76 cm ³
Compressor Cooling	Fan/NotControlled/220
Expansion Device	Capillary Tube or Expansion Valve
Horse Power	1/4 hp
Power Supply	220-240 V 50 Hz
Evaporating Temperature Range	-15 °C to 10 °C

Electrical Data

Motor type	CSIR
Starting Torque	HST
Start Winding Resistance	19.15 Ω at 25° C
Run Winding Resistance	11.3 Ω at 25° C
Rated Load Amperage (RLA) at 50 Hz	1.35 A

Mechanical Data

Oil Charge	180 ml
Oil Type Configuration	ESTER
Oil Type Viscosity	ISO22
Weight	7.75 Kg

Electrical Components

	Description
Start Capacitor	64-77 Uf / 330 V
Starting Device	Relay QL2-4.35 ***
Motor Protection	DRB180L61AXF

External Characteristics

Tray Holder	Yes	
Connector	Internal Diameter	Shape
Suction	6.1 mm	Slanted 42° up + 45° to Back/Copper
Discharge	4.94 mm	Slanted parallel BP+24° to Back/Copper
Process	6.1 mm	Slanted 45° up + 45° to Back/Copper

PERFORMANCE

Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Gas Flow Rate	Efficiency
50.00°C	5.00°C	644 W	280 W	16.21 kg/h	2.3 W/W

Test Condition: EN12900HBP, Fan/NotControlled/220, Return Gas 20°C, Evaporation 5.00°C, Condensing 50.00°C, Ambient 35°C, Liquid 50°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
-15	343	172	7.25	1.99
-10	430	188	9.14	2.29
-5	531	205	11.36	2.59
0	649	224	13.95	2.9
5	782	244	16.95	3.21
10	933	266	20.41	3.51

Test Condition: EN12900HBP, Fan/NotControlled/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
-15	299	181	6.93	1.64
-10	377	201	8.79	1.88
-5	468	221	10.99	2.12
0	574	243	13.55	2.36
5	694	266	16.51	2.61
10	829	292	19.93	2.84

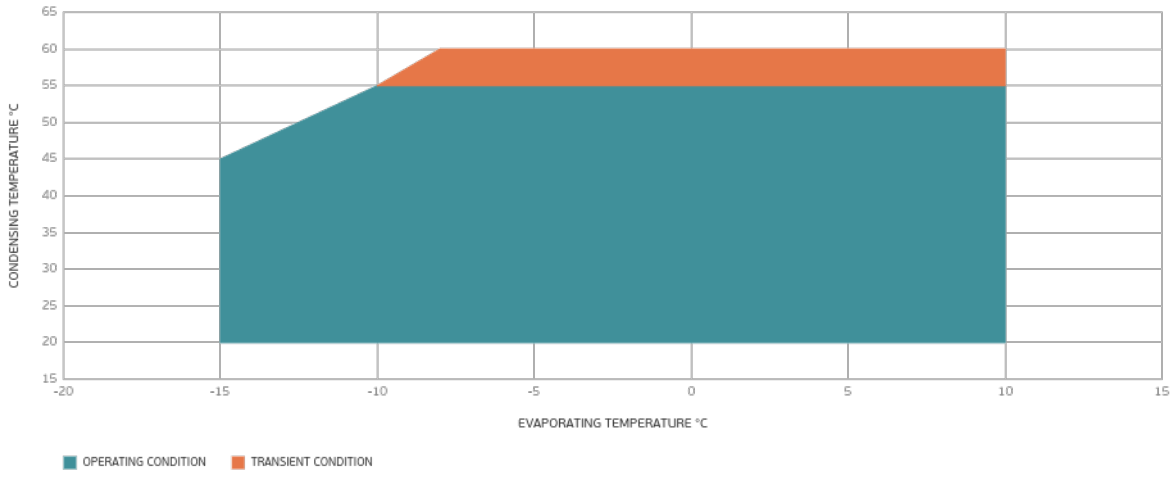
Test Condition: EN12900HBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C , Subcooling OK. Data are an indication of performance based simulation.

Condensing Temperature 55°C

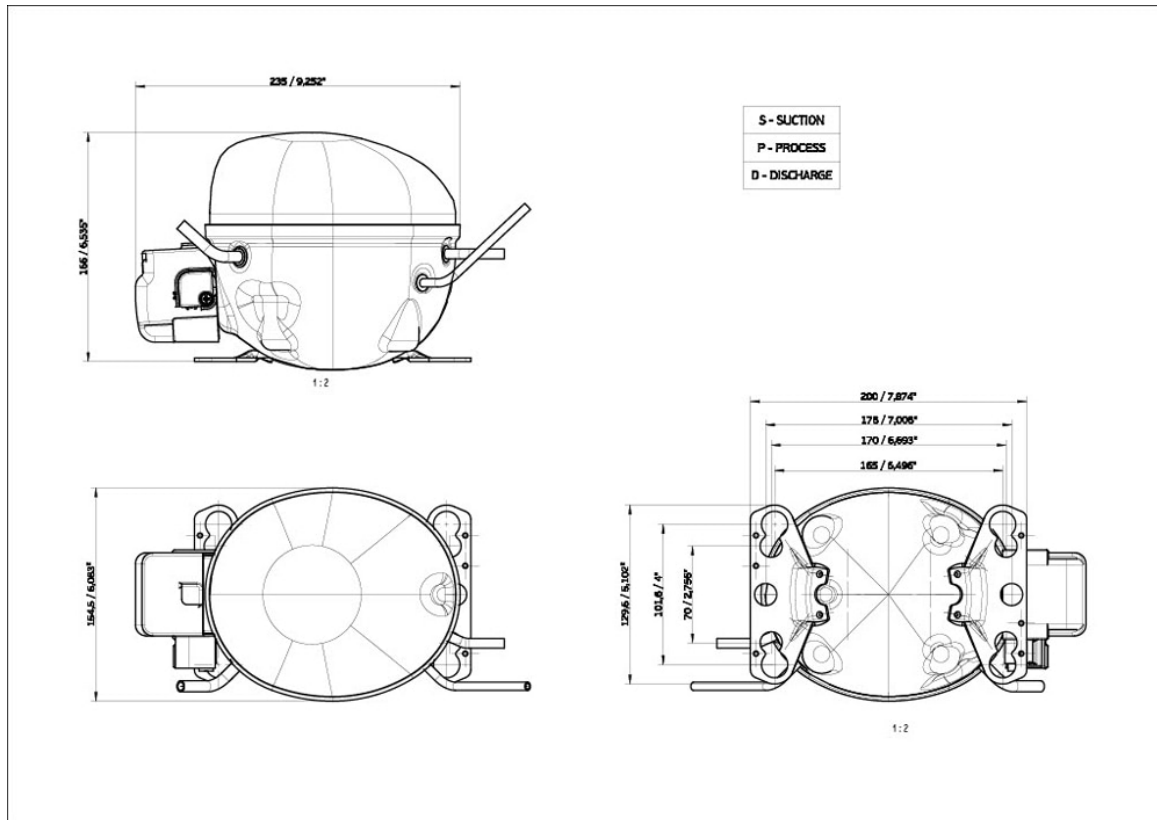
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-15	252	192	6.51	1.31
-10	322	214	8.35	1.5
-5	403	237	10.51	1.7
0	496	261	13.04	1.9
5	602	287	15.97	2.1
10	721	314	19.34	2.29

Test Condition: EN12900HBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C , Subcooling OK. Data are an indication of performance based simulation.

Operating Envelope



External Dimensions



Wiring Diagram

