




APPROVALS




 **ENGINEERING CODE**
513300160


 **APPROVED REFRIGERANT**
R-134a

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

 **STANDARD CONDITIONS**
ASHRAE

 **APPLICATION**
HBP

 **COOLING CAPACITY**
814 W (HBP)

 **EFFICIENCY**
2.21 W/W (HBP)

 **MOTOR TYPE**
CSIR

 **STARTING TORQUE**
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	7.96 cm ³
Compressor Cooling	Fan/NotControlled/220
Expansion Device	Capillary Tube or Expansion Valve
Horse Power	1/2 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	18.4 Ω at 25° C
Run Winding Resistance	10.9 Ω at 25° C
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	8.1 Kg

Electrical Components

	Description
Starting Device	Relay 213515005* MTRP-38*
Start Capacitor	53-64 Uf / 350 V
Motor Protection	MRA58169 T0318/G6

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	7.20°C	814 W	369 W	2.07 A	17.86 kg/h	2.21 W/W

Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Evaporation 7.20°C, Condensing 54.40°C, Ambient 35°C, Liquid 46.1°C, Subcooling 8.3K. 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
-15	299	381	1.46	7.82	0.78
-10	391	420	1.51	9.65	0.93
-5	508	460	1.58	11.97	1.1
0	648	502	1.66	14.76	1.29
5	809	547	1.77	18.00	1.48
10	989	594	1.9	21.65	1.66

Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. 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
-15	392	214	1.5	7.81	1.83
-10	488	239	1.57	9.76	2.04
-5	605	267	1.65	12.16	2.27
0	743	297	1.76	15.01	2.5
5	899	331	1.89	18.26	2.72
10	1071	368	2.04	21.90	2.91

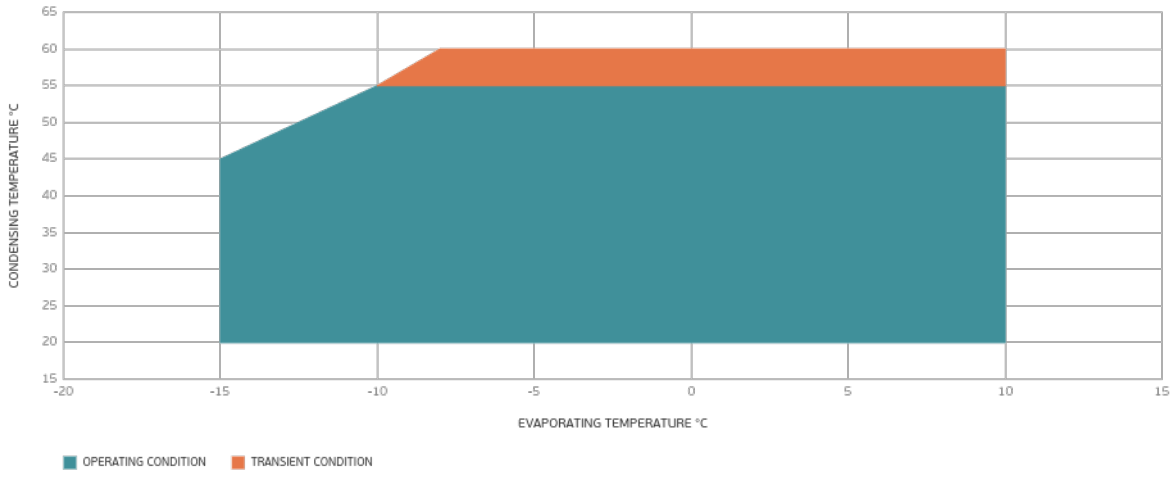
Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Condensing Temperature 55°C

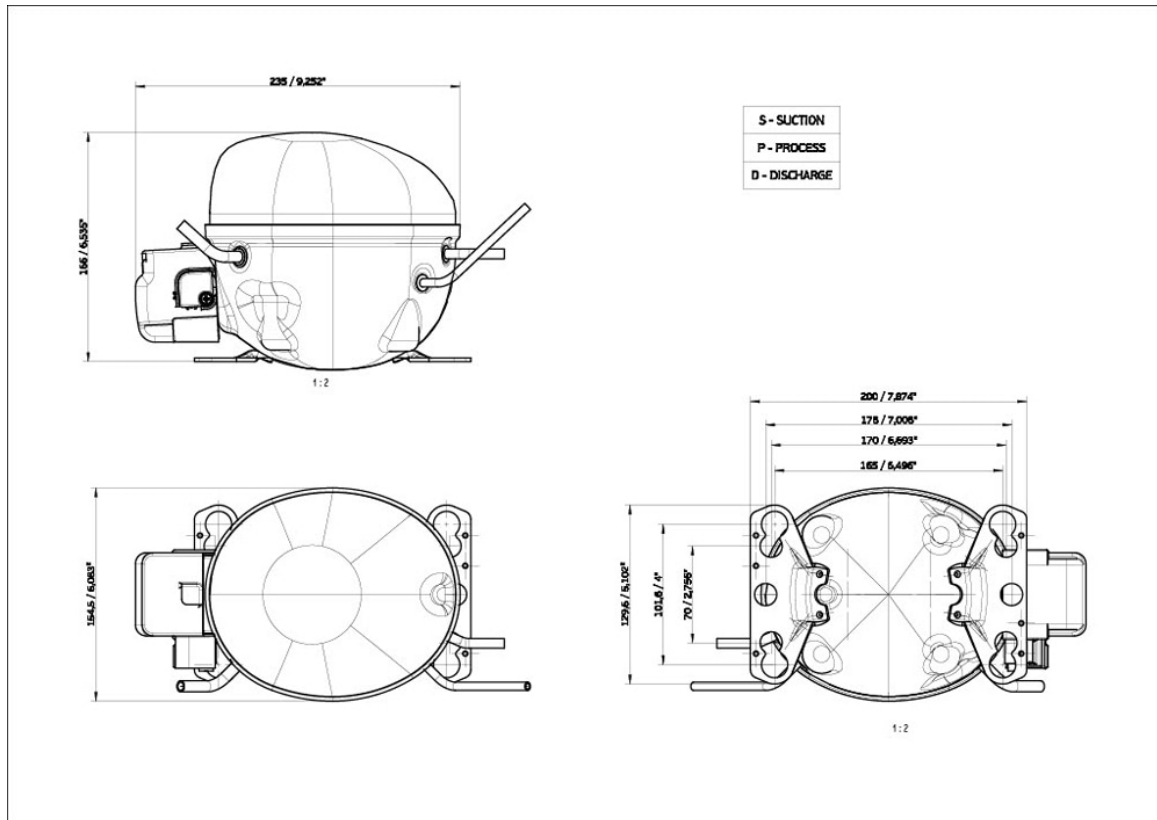
Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-15	315	228	1.54	6.85	1.38
-10	393	256	1.63	8.58	1.53
-5	490	288	1.73	10.75	1.7
0	604	323	1.86	13.31	1.87
5	733	362	2.01	16.25	2.03
10	875	406	2.19	19.55	2.16

Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Operating Envelope



External Dimensions



Wiring Diagram

SM28-4

