



APPROVALS



 **ENGINEERING CODE**
513300285

 **APPROVED REFRIGERANT**
R-134a

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

 **STANDARD CONDITIONS**
ASHRAE

 **APPLICATION**
HBP

 **COOLING CAPACITY**
434 W (HBP)

 **EFFICIENCY**
2.64 W/W (HBP)

 **MOTOR TYPE**
CSIR

 **STARTING TORQUE**
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	4.15 cm ³
Compressor Cooling	Fan/Controlled/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	17.5 Ω at 25° C
Run Winding Resistance	16.6 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	7.8 Kg

Electrical Components

	Description
Starting Device	Relay 213515004* MTRP-0036*
Motor Protection	4TM730KFBYY-53
Start Capacitor	64-77 Uf / 328 V

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	434 W	164 W	1 A	9.60 kg/h	2.64 W/W

Test Condition: ASHRAEHBP46, Fan/Controlled/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	251	96	0.8	4.63	2.61
-10	319	104	0.82	5.90	3.06
-5	401	112	0.84	7.45	3.58
0	496	119	0.86	9.26	4.16
5	604	126	0.88	11.33	4.79
10	723	132	0.91	13.66	5.5

Test Condition: ASHRAEHBP46, Fan/Controlled/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	203	102	0.81	4.04	1.99
-10	256	112	0.84	5.13	2.29
-5	324	123	0.87	6.51	2.64
0	405	134	0.9	8.17	3.03
5	497	144	0.93	10.10	3.45
10	601	154	0.96	12.29	3.92

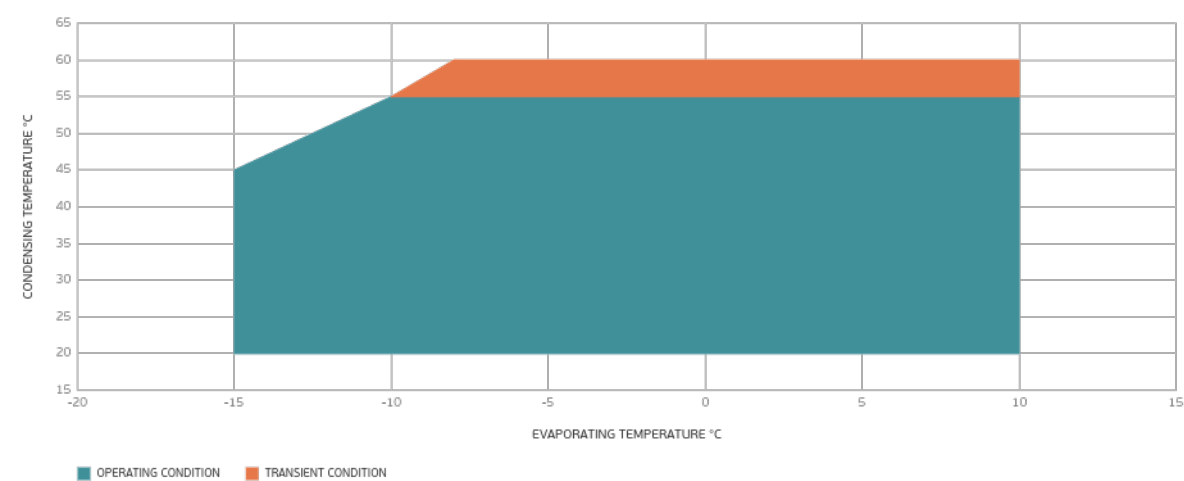
Test Condition: ASHRAEHBP46, Fan/Controlled/220, Return Gas 35°C, Ambient 35°C , Subcooling 8.3K. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Condensing Temperature 55°C

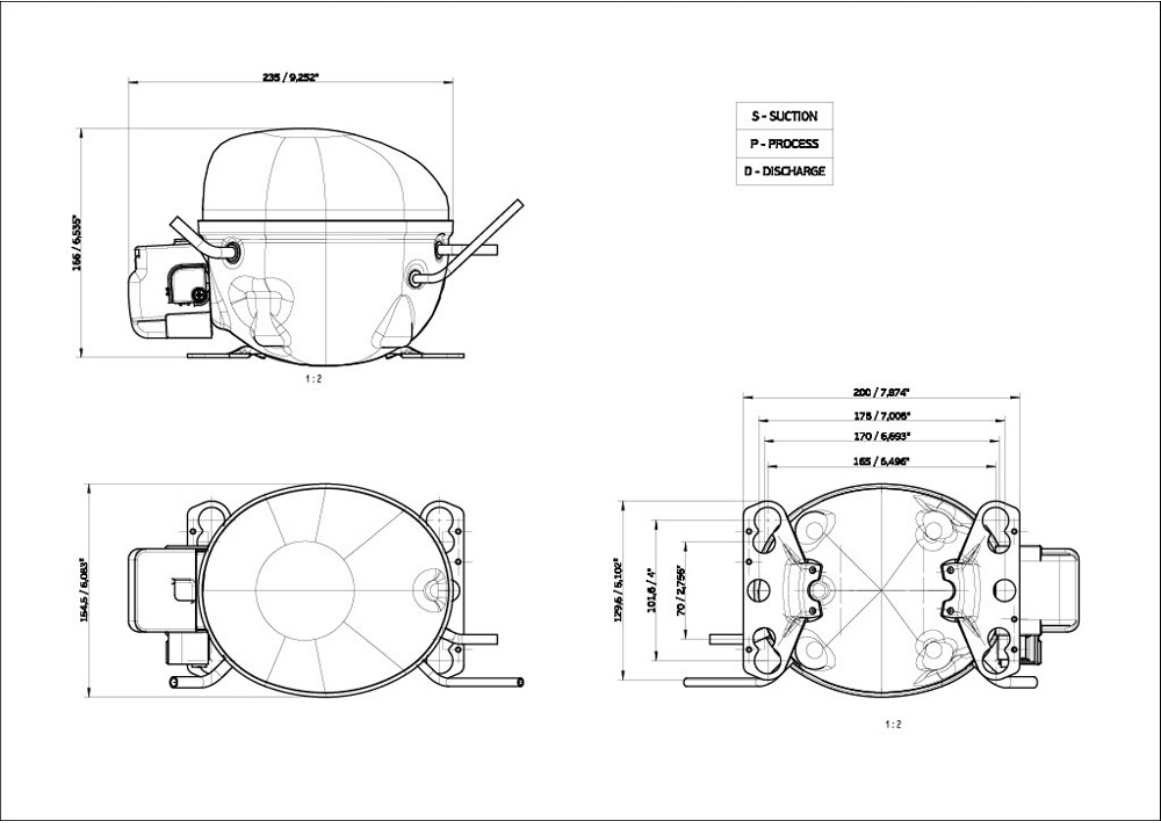
Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-15	159	109	0.83	3.45	1.46
-10	198	121	0.86	4.32	1.64
-5	250	133	0.9	5.49	1.88
0	315	146	0.94	6.94	2.16
5	391	158	0.99	8.67	2.47
10	478	170	1.03	10.68	2.8

Test Condition: ASHRAEHBP46, Fan/Controlled/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

