




APPROVALS




 **ENGINEERING CODE**
863NA51

 **APPROVED REFRIGERANT**
R-290


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

 **STANDARD CONDITIONS**
ASHRAE

 **APPLICATION**
LBP

 **COOLING CAPACITY**
579 W

 **EFFICIENCY**
1.31 W/W

 **MOTOR TYPE**
CSIR

 **STARTING TORQUE**
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	13.54 cm ³
Compressor Cooling	Fan
Fan Air Flow	520 m ³ /h
Expansion Device	Capillary Tube or Expansion Valve
Horse Power	1/2 hp
Max Condensing Pressure Operating	18.07 bar
Max Condensing Pressure Peak	20.17 bar
Power Supply	220-240 V 50 Hz
Evaporating Temperature Range	-40 °C to -10 °C

Electrical Data

Motor type	CSIR
Starting Torque	HST
Start Winding Resistance	19.29 Ω at 25° C
Run Winding Resistance	5.98 Ω at 25° C
Locked Rotor Amperage (LRA)	19.5 A

Mechanical Data

Maximum Recommended Refrigerant Charge	150 g
Oil Charge	350 ml
Oil Type Configuration	Polyolester
Oil Type Viscosity	ISO22
Pressurization	Without dry air charge
Weight	11.3 Kg
Free Internal Volume	2.1 L

Electrical Components

	Description
Start Capacitor	64-77 7F / 330V
Starting Device	Current relay MTRP-0029-65
Motor Protection	External 3/4" MSP30APK-3259

External Characteristics

Base Plate	European	
Tray Holder	No	
Height	206 mm	
Connector	Internal Diameter	Shape
Suction	8.1 mm	Slanted 42°
Discharge	6.1 mm	Straight
Process	6.1 mm	Slanted 42°

PERFORMANCE

Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Current	Gas Flow Rate	Efficiency
54.40°C	-23.30°C	579 W	440 W	2.82 A	5.91 kg/h	1.31 W/W

Test Condition: ASHRAE, Fan, Return Gas 32.2°C, Evaporation -23.30°C, Condensing 54.40°C, Ambient 32.2°C, Liquid 32.2°C. Data in accordance to ASHRAE guideline polynomial curve.

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
-40	275	268	2.37	2.78	1.02
-35	366	305	2.45	3.71	1.2
-30	481	341	2.54	4.88	1.41
-25	608	377	2.64	6.18	1.61
-20	739	413	2.75	7.53	1.79
-15	862	448	2.87	8.81	1.92
-10	967	482	2.99	9.93	2.01

Test Condition: ASHRAE, Fan, LBP. Data in accordance to ASHRAE guideline polynomial curve.

Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-35	336	317	2.47	3.41	1.06
-30	452	358	2.57	4.59	1.26
-25	593	401	2.7	6.04	1.48
-20	750	446	2.84	7.65	1.68
-15	912	492	3	9.33	1.85
-10	1069	540	3.18	10.98	1.98

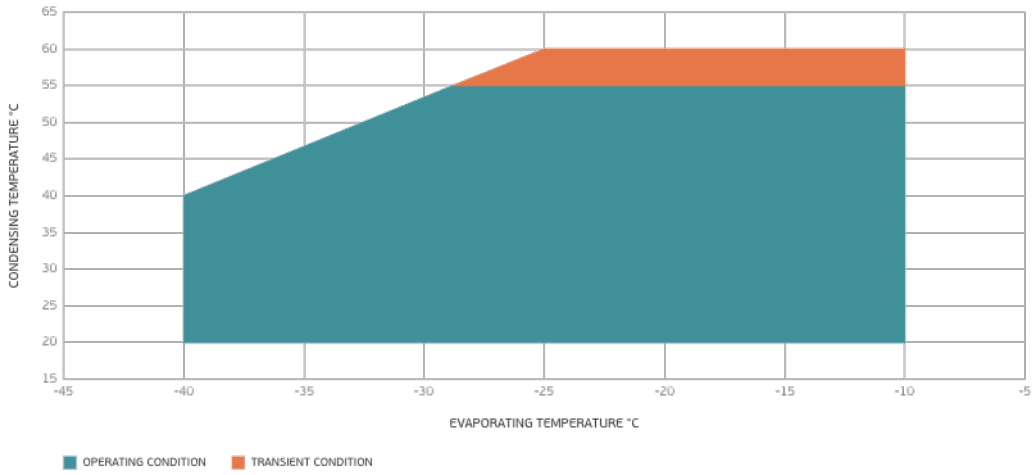
Test Condition: ASHRAE, Fan, LBP. Data in accordance to ASHRAE guideline polynomial curve.

Condensing Temperature 55°C

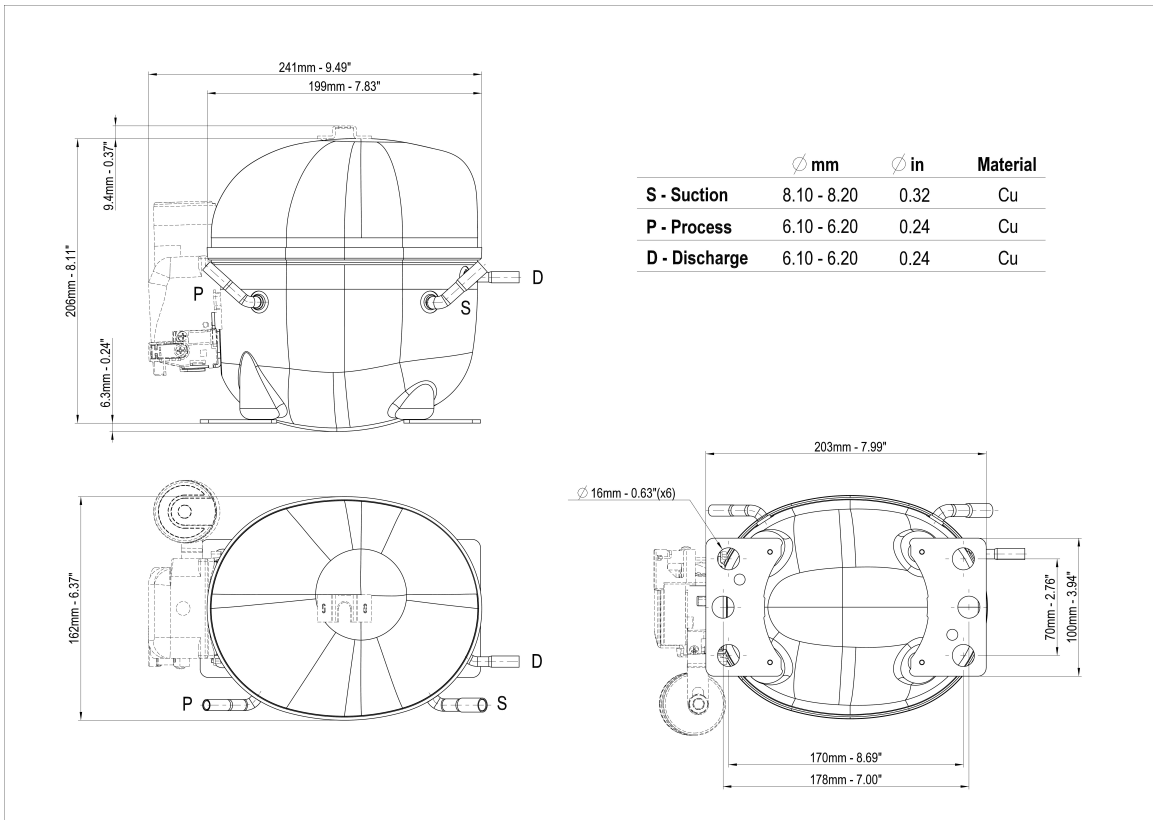
Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-30	396	375	2.61	4.04	1.06
-25	523	424	2.77	5.33	1.23
-20	678	478	2.95	6.92	1.42
-15	851	535	3.15	8.71	1.59
-10	1032	596	3.38	10.60	1.73

Test Condition: ASHRAE, Fan, LBP. Data in accordance to ASHRAE guideline polynomial curve.

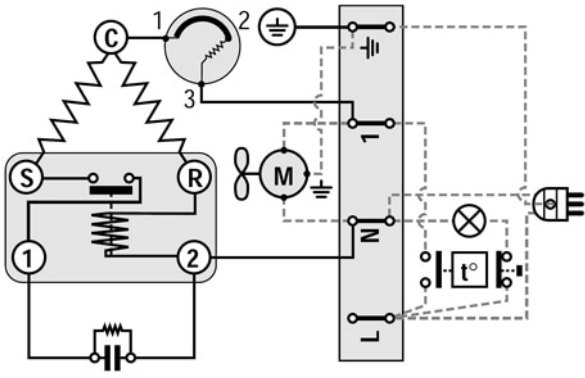
Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

