

APPROVALS



**ENGINEERING CODE**  
959QA51

**APPROVED REFRIGERANT**  
R-404A

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

**STANDARD CONDITIONS**  
ASHRAE

**APPLICATION**  
LBP

**COOLING CAPACITY**  
657 W

**EFFICIENCY**  
1.32 W/W

**MOTOR TYPE**  
CSIR

**STARTING TORQUE**  
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	12.11 cm <sup>3</sup>
Compressor Cooling	Fan
Fan Air Flow	520 m <sup>3</sup> /h
Expansion Device	Capillary Tube or Expansion Valve
Horse Power	3/4 hp
Max Condensing Pressure Operating	24.71 bar
Max Condensing Pressure Peak	27.71 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	27.95 Ω at 25° C
Run Winding Resistance	5.11 Ω at 25° C
Locked Rotor Amperage (LRA)	18 A

## Mechanical Data

Maximum Recommended Refrigerant Charge	350 g
Oil Charge	350 ml
Oil Type Configuration	Polyolester
Oil Type Viscosity	ISO22
Pressurization	Dry air charge
Weight	11.5 Kg
Free Internal Volume	2.1 L

## Electrical Components

	Description
Start Capacitor	64-77 7F / 330V
Starting Device	Current relay   MTRP-49-65
Motor Protection	External 3/4" T0964/G6

## 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	657 W	499 W	3.02 A	15.17 kg/h	1.32 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	313	290	2.46	7.14	1.08
-35	409	333	2.55	9.39	1.23
-30	533	377	2.67	12.28	1.41
-25	684	423	2.8	15.83	1.62
-20	862	470	2.95	20.07	1.83
-15	1068	519	3.12	25.02	2.06
-10	1301	569	3.31	30.69	2.29

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	379	345	2.57	8.66	1.1
-30	499	397	2.71	11.47	1.26
-25	645	451	2.87	14.91	1.43
-20	817	509	3.07	18.99	1.61
-15	1015	569	3.29	23.73	1.78
-10	1238	632	3.53	29.16	1.96

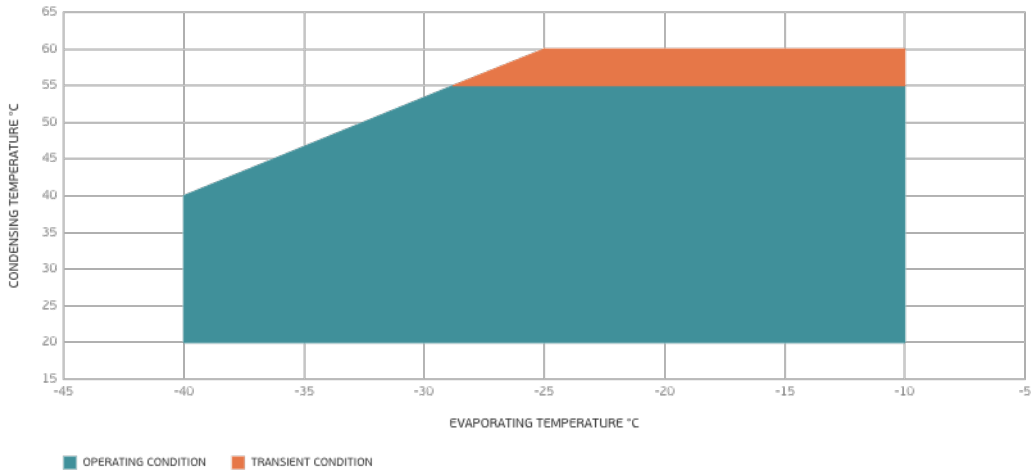
Test Condition: ASHRAE, Fan, LBP. Data in accordance to ASHRAE guideline polynomial curve.

### Condensing Temperature 55°C

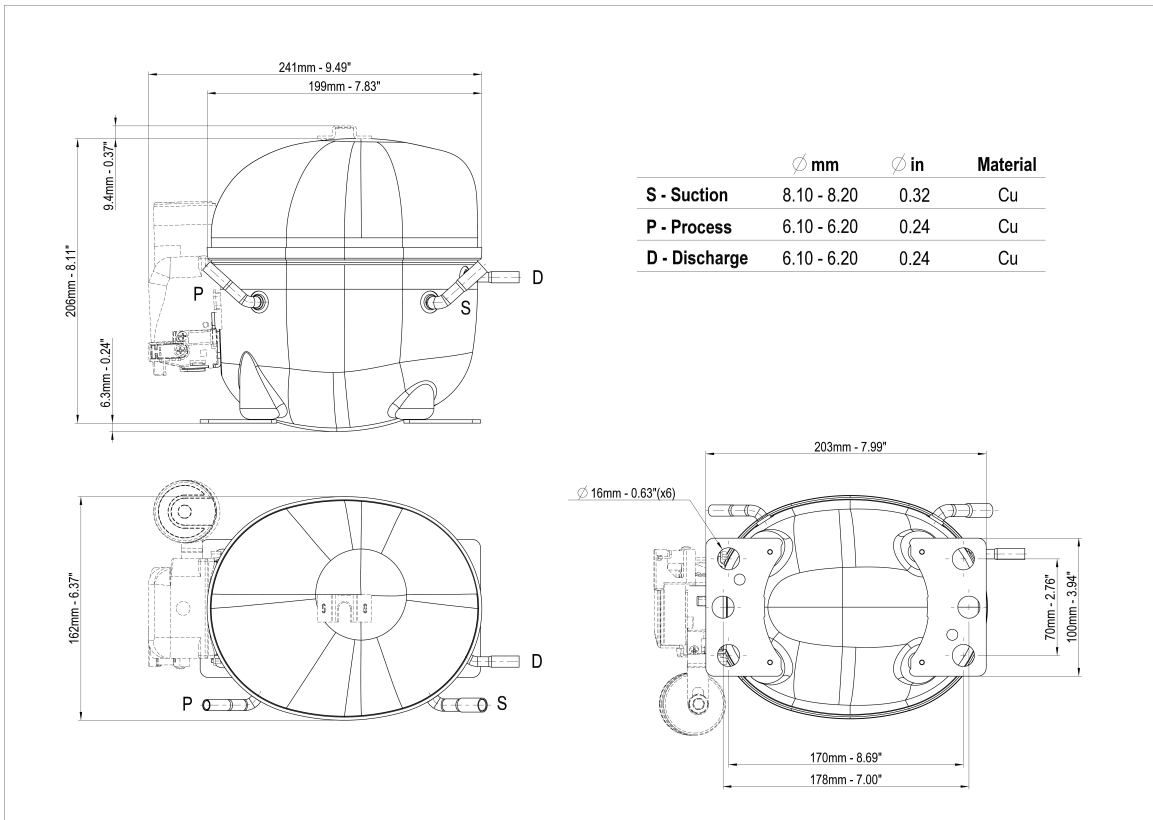
Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-30	460	413	2.74	10.54	1.11
-25	601	478	2.95	13.84	1.26
-20	766	547	3.19	17.74	1.4
-15	955	620	3.47	22.27	1.54
-10	1168	697	3.78	27.44	1.68

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

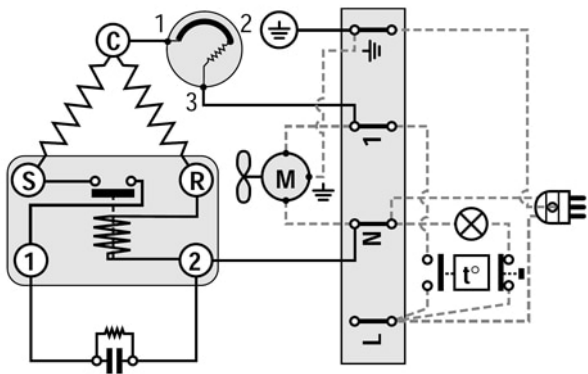
## Operating Envelope



## External Dimensions



Wiring Diagram



Assembly Instructions

