

MODEL
NT2178GK



APPROVALS



 **ENGINEERING CODE**
922EN04

 **APPROVED REFRIGERANT**
R-404A

 **POWER SUPPLY**
200-240 V 50 Hz

 **STANDARD CONDITIONS**
EN12900

 **APPLICATION**
LBP

 **COOLING CAPACITY**
457 W (LBP)

 **EFFICIENCY**
0.97 W/W (LBP)

 **MOTOR TYPE**
CSIR

 **STARTING TORQUE**
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	17.39 cm ³
Compressor Cooling	Fan/NotControlled/200
Fan Air Flow	520 m ³ /h
Expansion Device	Capillary Tube or Expansion Valve
Horse Power	1 hp
Max Condensing Pressure Operating	24.71 bar
Max Condensing Pressure Peak	27.71 bar
Power Supply	200-240 V 50 Hz / 230 V 60 Hz
Evaporating Temperature Range	-40 °C to -10 °C

Electrical Data

Motor type	CSIR
Starting Torque	HST
Start Winding Resistance	8.8 Ω at 25° C
Run Winding Resistance	2.3 Ω at 25° C

Mechanical Data

Maximum Recommended Refrigerant Charge	800 g
Oil Charge	450 ml
Oil Type Configuration	ESTER
Oil Type Viscosity	ISO22
Pressurization	Dry air charge
Weight	17 Kg
Free Internal Volume	3.3 L

Electrical Components

	Description
Start Capacitor	88-108 Uf / 330 V
Starting Device	Relay MTRPH55-59*
Motor Protection	T0590/G6

External Characteristics

Base Plate		Universal	
Tray Holder		No	
Height		220 mm	
Connector	Internal Diameter		Shape
Suction	9.6 mm	Vertical/Copper	
Discharge	6.42 mm	Vertical/Copper	
Process	6.42 mm	Vertical/Copper	

PERFORMANCE

Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Gas Flow Rate	Efficiency
40.00°C	-35.00°C	457 W	469 W	12.27 kg/h	0.97 W/W

Test Condition: EN12900LBP, Fan/NotControlled/200, Return Gas 20°C, Evaporation -35.00°C, Condensing 40.00°C, Ambient 35°C , Liquid 40°C, Subcooling 0K. 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
-40	370	402	9.39	0.92
-35	497	472	12.68	1.05
-30	658	540	16.85	1.22
-25	849	605	21.86	1.4
-20	1068	666	27.69	1.6
-15	1312	723	34.28	1.81
-10	1579	775	41.61	2.04

Test Condition: EN12900LBP, Fan/NotControlled/200, 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
-35	390	474	11.29	0.82
-30	522	556	15.17	0.94
-25	680	637	19.89	1.07
-20	862	717	25.40	1.2
-15	1065	795	31.67	1.34
-10	1287	871	38.66	1.48

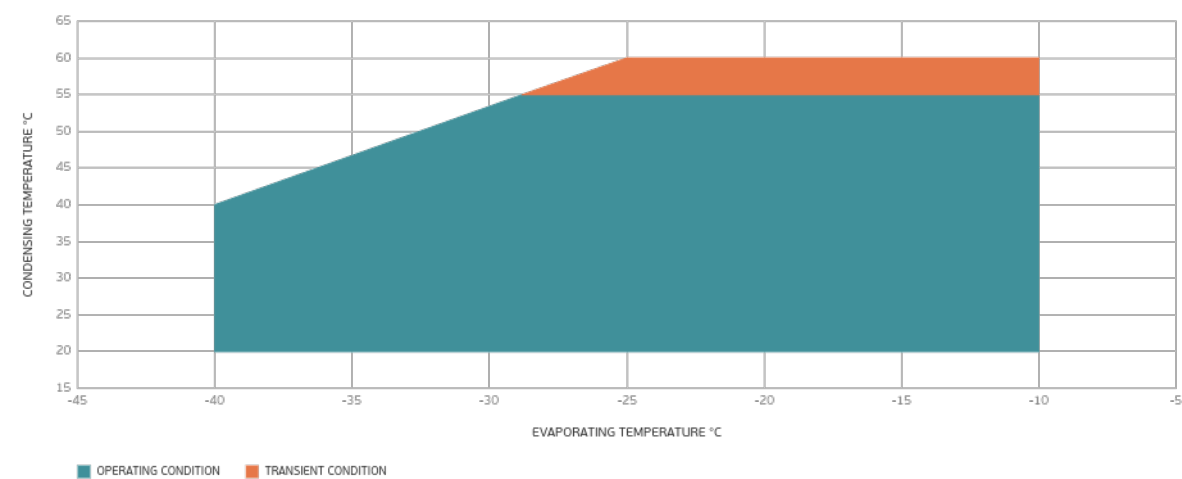
Test Condition: EN12900LBP, Fan/NotControlled/200, Return Gas 20°C, Ambient 35°C , Subcooling OK. Data are an indication of performance based simulation.

Condensing Temperature 55°C

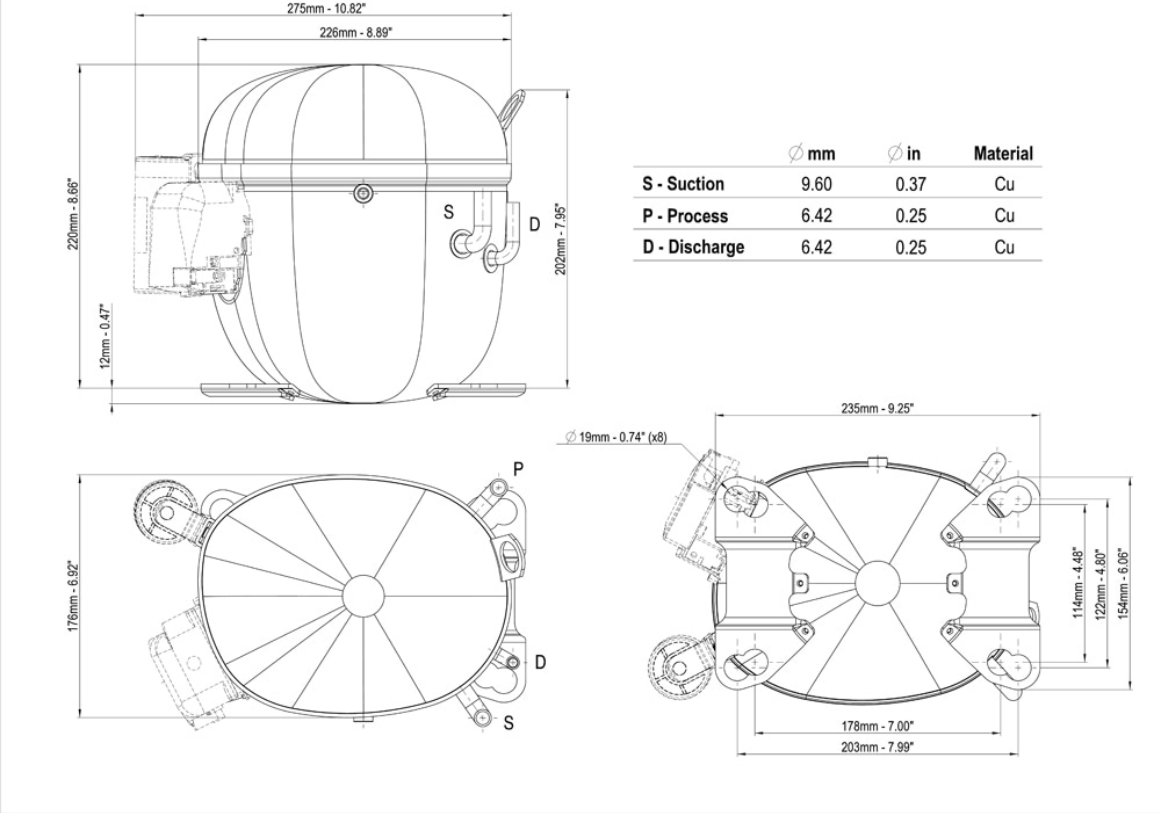
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-30	385	571	13.13	0.67
-25	509	666	17.50	0.76
-20	653	762	22.64	0.86
-15	815	859	28.53	0.95
-10	991	956	35.13	1.04

Test Condition: EN12900LBP, Fan/NotControlled/200, Return Gas 20°C, Ambient 35°C , Subcooling OK. Data are an indication of performance based simulation.

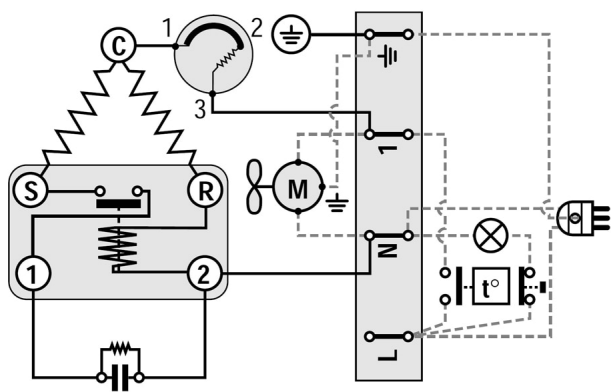
Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

