

MODEL
NT2180GK



APPROVALS



 **ENGINEERING CODE**
923HA04

 **APPROVED REFRIGERANT**
R-404A

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

 **STANDARD CONDITIONS**
EN12900

 **APPLICATION**
LBP

 **COOLING CAPACITY**
508 W (LBP)

 **EFFICIENCY**
1 W/W (LBP)

 **MOTOR TYPE**
CSIR

 **STARTING TORQUE**
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	20.44 cm ³
Compressor Cooling	Fan/NotControlled/220
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	220-240 V 50 Hz
Evaporating Temperature Range	-40 °C to -10 °C

Electrical Data

Motor type	CSIR
Starting Torque	HST
Start Winding Resistance	8.4 Ω at 25° C
Run Winding Resistance	1.9 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	17.4 Kg
Free Internal Volume	3.3 L

Electrical Components

	Description
Starting Device	Relay MTRPH-59*
Start Capacitor	130-156 Uf / 330 V
Motor Protection	T0748/G9

External Characteristics

Base Plate		Universal	
Tray Holder		No	
Height		234 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	508 W	509 W	13.61 kg/h	1 W/W

Test Condition: EN12900LBP, Fan/NotControlled/220, 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	400	438	10.15	0.91
-35	556	509	14.18	1.09
-30	738	578	18.93	1.28
-25	946	646	24.39	1.46
-20	1179	714	30.59	1.65
-15	1436	784	37.51	1.83
-10	1715	855	45.18	2.01

Test Condition: EN12900LBP, Fan/NotControlled/220, 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	436	516	12.63	0.85
-30	592	598	17.20	0.99
-25	772	683	22.57	1.13
-20	976	769	28.74	1.27
-15	1202	860	35.74	1.4
-10	1450	955	43.55	1.52

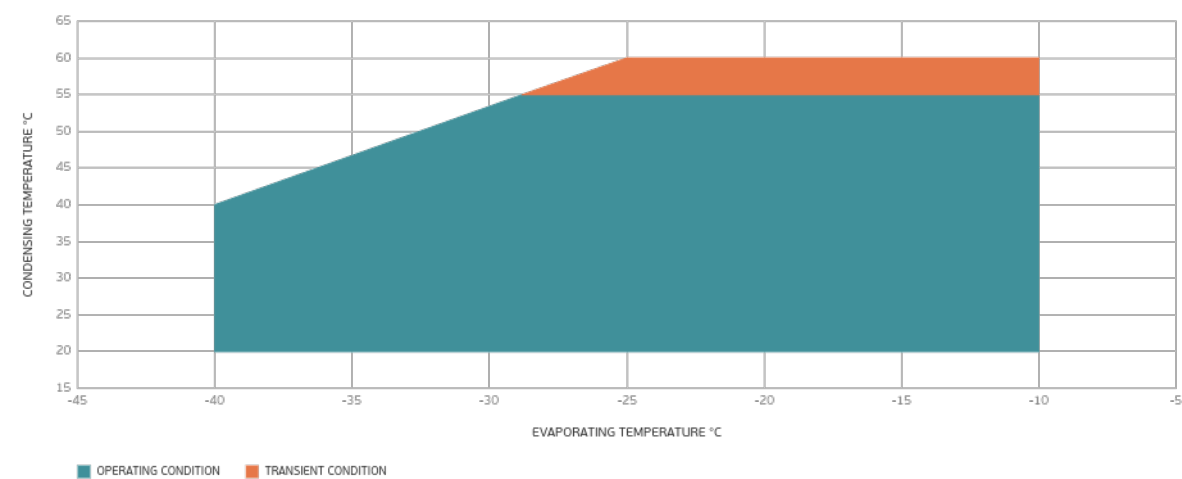
Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C , Subcooling OK. Data are an indication of performance based simulation.

Condensing Temperature 55°C

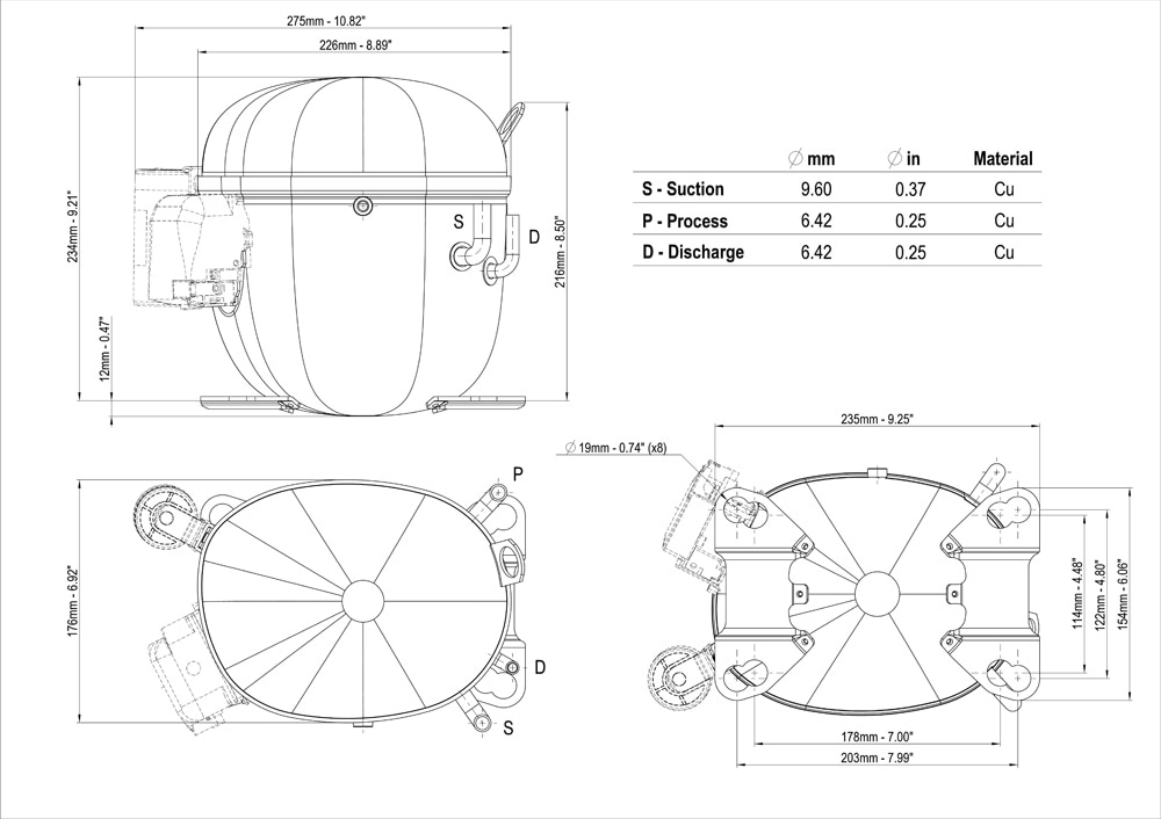
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-30	459	611	15.67	0.75
-25	607	708	20.86	0.86
-20	776	810	26.93	0.96
-15	967	918	33.89	1.05
-10	1179	1032	41.75	1.14

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C , Subcooling OK. Data are an indication of performance based simulation.

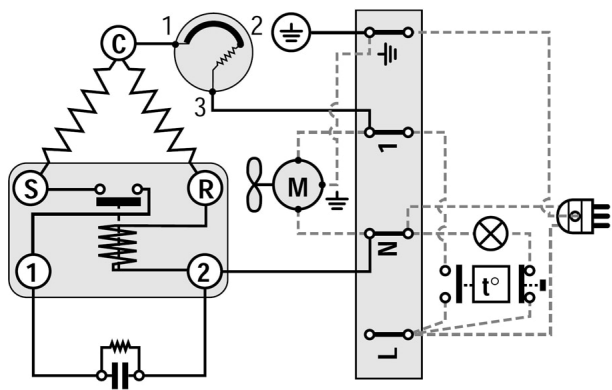
Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

