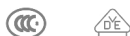


MODEL
NT2180U



APPROVALS



 **ENGINEERING CODE**
843AA04

 **APPROVED REFRIGERANT**
R-290

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

 **STANDARD CONDITIONS**
EN12900

 **APPLICATION**
LBP

 **COOLING CAPACITY**
557 W (LBP)

 **EFFICIENCY**
1.14 W/W (LBP)

 **MOTOR TYPE**
CSIR

 **STARTING TORQUE**
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	22.37 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	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	8.4 Ω at 25° C
Run Winding Resistance	1.9 Ω at 25° C

Mechanical Data

Maximum Recommended Refrigerant Charge	150 g
Oil Charge	450 ml
Oil Type Configuration	ESTER
Oil Type Viscosity	ISO22
Pressurization	Without dry air charge
Weight	18 Kg
Free Internal Volume	3.3 L

Electrical Components

	Description
Start Capacitor	43-53 Uf / 330 V
Starting Device	Relay MTRPH-59*
Motor Protection	T0624/G6

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	557 W	487 W	6.37 kg/h	1.14 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	450	419	4.92	1.07
-35	585	482	6.42	1.21
-30	757	544	8.33	1.39
-25	966	605	10.66	1.6
-20	1210	666	13.41	1.82
-15	1488	725	16.58	2.05
-10	1801	784	20.17	2.3

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	493	495	5.94	1
-30	642	568	7.75	1.13
-25	821	642	9.95	1.28
-20	1031	717	12.55	1.44
-15	1270	792	15.53	1.6
-10	1537	868	18.91	1.77

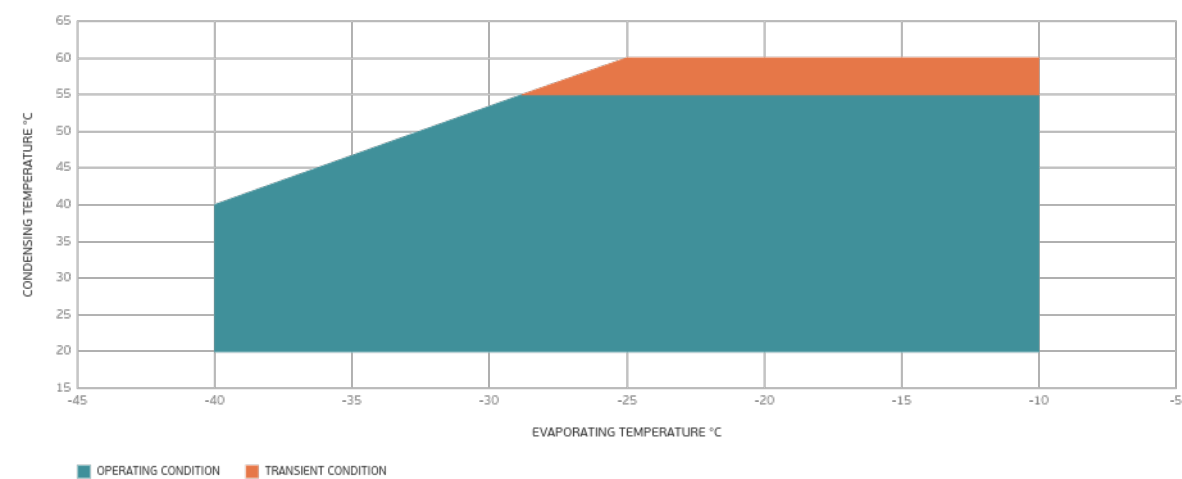
Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C , Subcooling OK. Data are an indication of performance based simulation.

Condensing Temperature 55°C

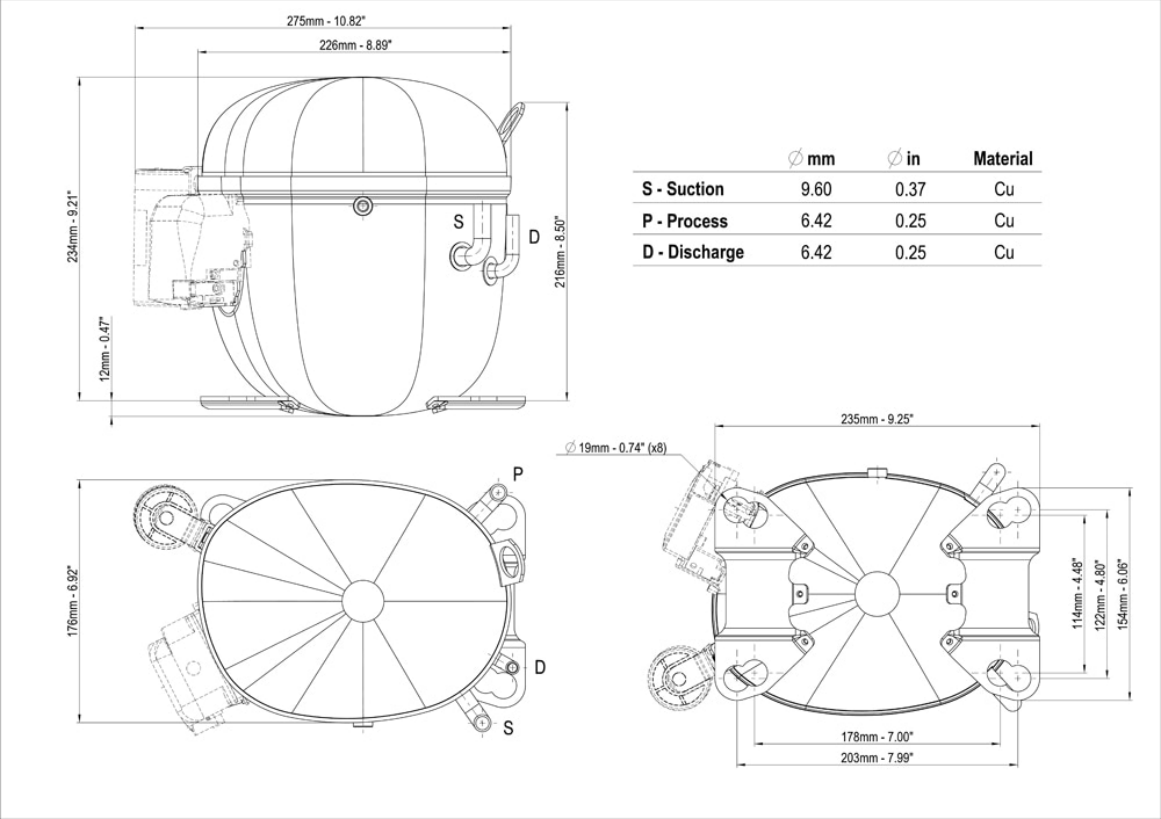
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-30	513	581	6.90	0.88
-25	665	666	8.97	1
-20	841	752	11.41	1.12
-15	1042	841	14.22	1.24
-10	1265	932	17.38	1.36

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

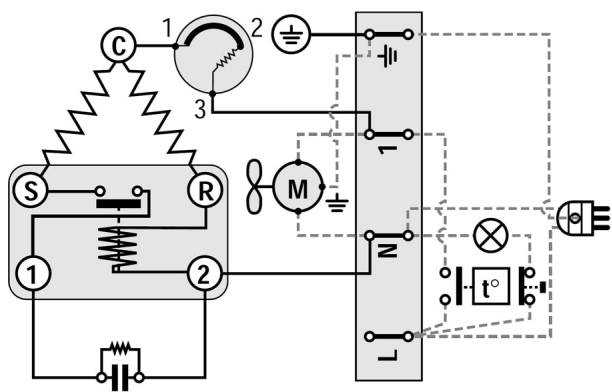
Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

