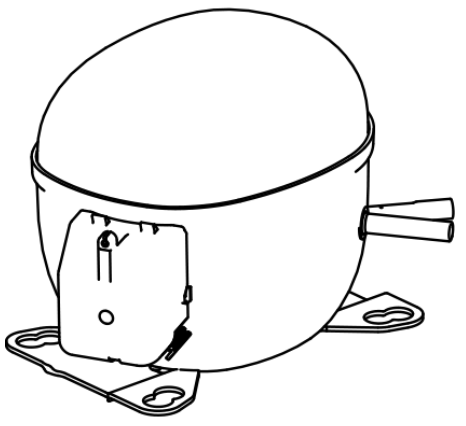
COMPRESSOR TECHNICAL DATA

NT2180U



ENGINEERING CODE
843PA04

REFRIGERANT
R-290

POWER SUPPLY
220-240 V 50 Hz

APPLICATION
LBP

MOTOR TYPE
CSIR

STANDARD
EN12900

COOLING CAPACITY
541 W

EFFICIENCY
1.11 W/W

DATA

GENERAL DATA

Model	NT2180U
Type	Hermetic Reciprocating
Technology	ON/OFF
Compressor Application	LBP
Expansion Device	Capillary Tube or Expansion Valve
Compressor Cooling	Fan/220
HP	1
Starting Torque	HST
Plant	SLOVAKIA

ELECTRICAL DATA

Start Winding Resistance	7.31 Ω at 25°C
Run Winding Resistance	2.87 Ω at 25°C
Locked Rotor Amperage (LRA) 50Hz	28 A

MECHANICAL DATA

Displacement	22.37 cm^3
Oil Charge	450 ml
Oil Type	AB
Oil Viscosity	ISO32
Weight	16.6 Kg

ELECTRICAL COMPONENTS

Start Capacitor	43-53 µf/330 V
CSR CSIR BOX	No
Starting Device Type	RELAY
Starting Device Description	MTRP-59*
Overload Protection	MRA38112-3259

EXTERNAL CHARACTERISTICS

Base Plate	UNI
Tray Holder	NO

Connector	Internal Diameter	Shape	Material
Suction	9.6 mm	VERTICAL	COPPER
Discharge	6.42 mm	VERTICAL	COPPER
Process	6.42 mm	VERTICAL	COPPER

PERFORMANCE

TESTED CONDITIONS

Tested Refrigerant	R-290
Tested Application	LBP
Tested Standard	EN12900
Tested Cooling	Fan
Tested Voltage	220 V
Tested Frequency	50 Hz
Max Refrigerant Charge	400 g
Refrigerant Temperature	Dew

RATED POINTS

Condensing Temperature °C	Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
40	-35	541	1.11	489	-	6.21

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data are an indication of performance based simulation.

PERFORMANCE CURVE

Condensing Temperature 35°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-40	450	1.07	419	-	4.92
-35	585	1.22	477	-	6.42
-30	757	1.40	541	-	8.33
-25	966	1.60	605	-	10.66
-20	1210	1.81	668	-	13.41
-15	1488	2.06	724	-	16.58
-10	1801	2.33	771	-	20.17

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data are an indication of performance based simulation.

PERFORMANCE CURVE

Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-40	376	0.87	432	-	4.52
-35	493	0.99	496	-	5.94
-30	642	1.13	569	-	7.75
-25	821	1.27	646	-	9.95
-20	1031	1.42	724	-	12.55
-15	1270	1.59	799	-	15.53
-10	1537	1.77	869	-	18.91

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data are an indication of performance based simulation.

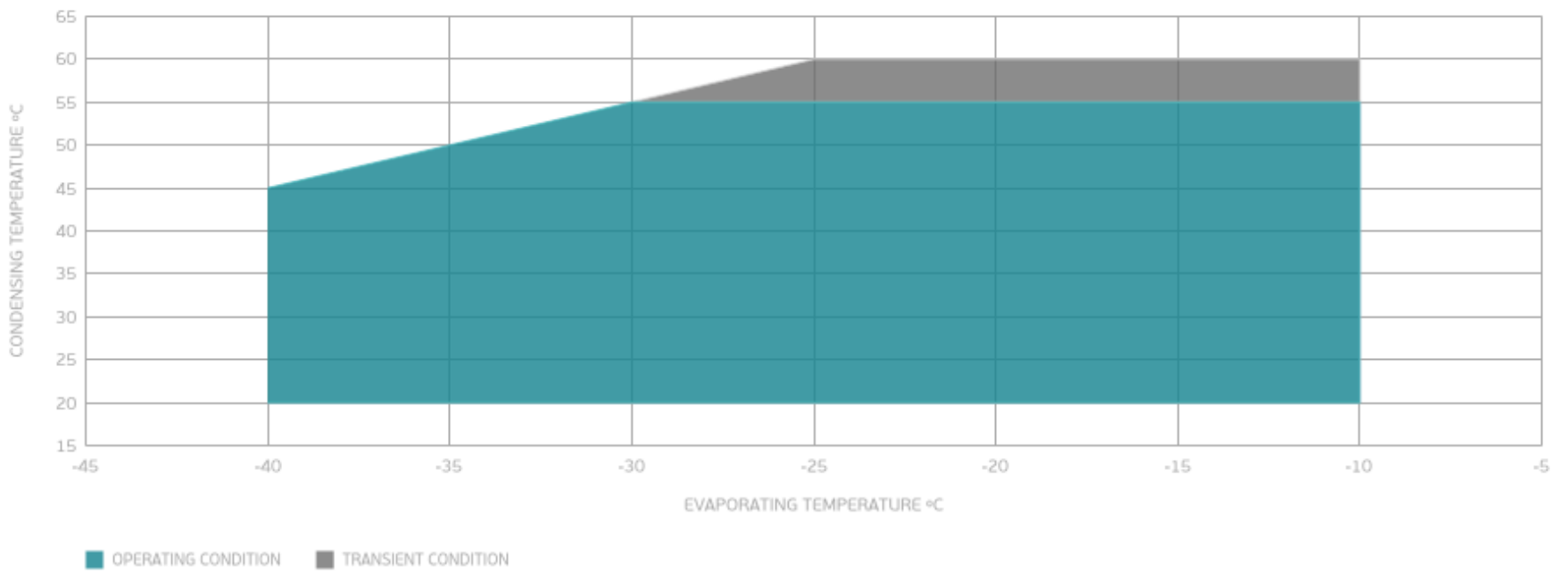
PERFORMANCE CURVE

Condensing Temperature 55°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-30	513	0.90	572	-	6.90
-25	665	1.01	660	-	8.97
-20	841	1.12	751	-	11.41
-15	1042	1.23	844	-	14.22
-10	1266	1.36	934	-	17.39

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data are an indication of performance based simulation.

ENVELOPE



EXTERNAL DIMENSIONS