

MODEL
NEU2178U

embraco
Nidec



APPROVALS




 **ENGINEERING CODE**
8630A44

 **APPROVED REFRIGERANT**
R-290

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

 **STANDARD CONDITIONS**
EN12900

 **APPLICATION**
LBP

 **COOLING CAPACITY**
510 W (LBP)

 **EFFICIENCY**
1.27 W/W (LBP)

 **MOTOR TYPE**
CSCR

 **STARTING TORQUE**
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	18.7 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	CSCR
Starting Torque	HST
Start Winding Resistance	10.43 Ω at 25° C
Run Winding Resistance	4.97 Ω at 25° C

Mechanical Data

Maximum Recommended Refrigerant Charge	150 g
Oil Charge	350 ml
Oil Type Configuration	ESTER
Oil Type Viscosity	ISO22
Pressurization	Without dry air charge
Weight	11.6 Kg
Free Internal Volume	2.6 L

Electrical Components

	Description
CSR / CSIR Box	YES
Run Capacitor	12.5
Starting Device	RVA6M3C-114
Start Capacitor	108-130 Uf / 330 V
Motor Protection	USP-Y01-83

External Characteristics

Base Plate	Universal	
Tray Holder	No	
Height	206 mm	
Connector	Internal Diameter	Shape
Suction	8.1 mm	Slanted 42°/Copper
Discharge	6.45 mm	Straight/Copper
Process	6.45 mm	Slanted 42°/Copper

PERFORMANCE

Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Current	Gas Flow Rate	Efficiency
40.00°C	-35.00°C	510 W	401 W	1.98 A	5.79 kg/h	1.27 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 OK. Data in accordance to EN 12900:2013

and AHRI 540:2015 polynomial equation and uncertainty guidance.

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	411	339	1.7	4.50	1.21
-35	532	392	1.92	5.84	1.36
-30	682	444	2.15	7.51	1.54
-25	862	495	2.38	9.52	1.74
-20	1071	547	2.61	11.88	1.96
-15	1310	597	2.84	14.60	2.19
-10	1578	647	3.08	17.67	2.44

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-35	462	416	2.04	5.56	1.11
-30	592	474	2.28	7.15	1.25
-25	749	534	2.54	9.08	1.4
-20	933	598	2.82	11.35	1.56
-15	1143	663	3.11	13.98	1.72
-10	1379	731	3.42	16.97	1.89

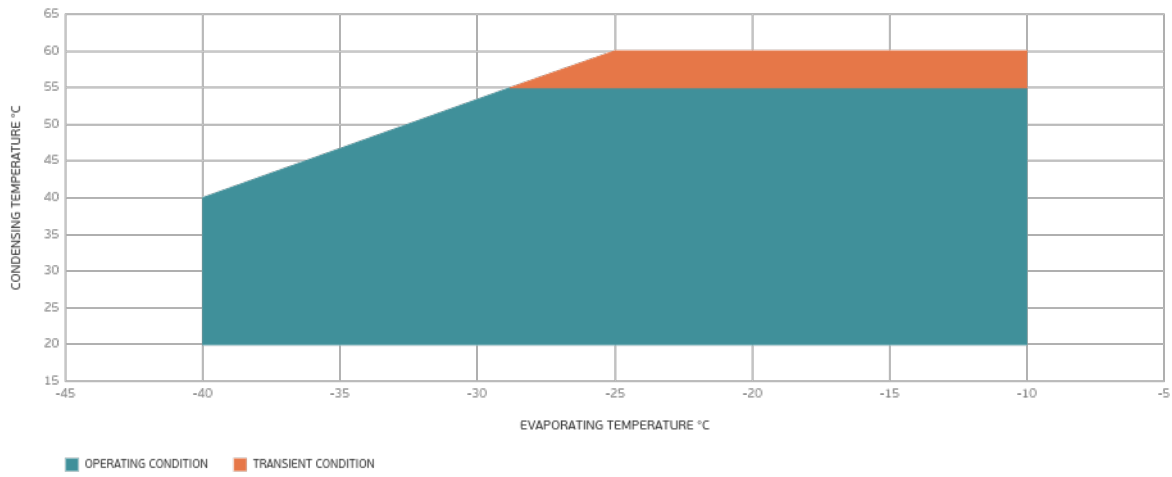
Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Condensing Temperature 55°C

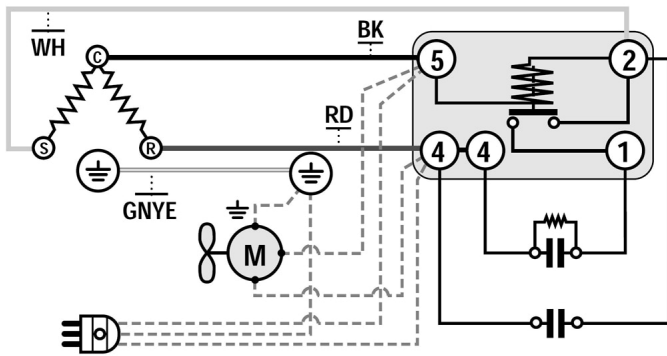
Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-30	500	499	2.39	6.72	1
-25	633	567	2.7	8.55	1.12
-20	791	641	3.03	10.73	1.23
-15	971	720	3.39	13.25	1.35
-10	1175	805	3.78	16.14	1.46

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Operating Envelope



Wiring Diagram



Assembly Instructions

