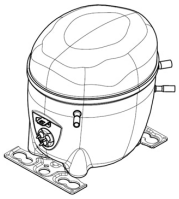
MODEL

FFI12HBK



APPROVALS

ENGINEERING CODE
513200387

APPROVED REFRIGERANT
R-134a

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
EN12900

APPLICATION
L/M/HBP

COOLING CAPACITY
1010 W (HBP)

EFFICIENCY
2.18 W/W (HBP)

MOTOR TYPE
RSIR/CSIR

STARTING TORQUE
LST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	11.14 cm^3
Compressor Cooling	Fan/NotControled/220
Expansion Device	Capillary Tube
Horse Power	1/3 hp
Power Supply	220-240 V 50 Hz
Evaporating Temperature Range	-35 °C to 15 °C

Electrical Data

Motor type	RSIR/CSIR
Starting Torque	LST
Start Winding Resistance	29.9 Ω at 25° C
Run Winding Resistance	5.7 Ω at 25° C
Locked Rotor Amperage (LRA)	26.7 A
Rated Load Amperage (RLA) at 60 Hz	3 A

Mechanical Data

Oil Charge	280 ml
Oil Type Configuration	ESTER
Oil Type Viscosity	ISO22
Weight	10.9 Kg

Electrical Components

	Description
Starting Device	Relay | 213516035 213516043*
Motor Protection	4TM757KFBYY-53 5TM 757KFBYY-53 CP4TMF210N52A2 DRB210N52A*F MRP40APN-5590 MRP40APN-5598
Start Capacitor	88-108 Uf / 220 V

External Characteristics

Tray Holder	No

Connector	Internal Diameter	Shape
Suction	8.2 mm	Straight/Copper
Discharge	6.5 mm	Straight/Copper
Process	6.5 mm	Straight/Copper

PERFORMANCE

Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Gas Flow Rate	Efficiency
50.00°C	5.00°C	1011 W	464 W	25.27 kg/h	2.18 W/W

Test Condition: EN12900HBP, Fan/NotControled/220, Return Gas 20°C, Evaporation 5.00°C, Condensing 50.00°C, Ambient 35°C , Liquid 50°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
-35	127	220	3.89	0.58
-30	182	241	5.08	0.76
-25	258	262	6.70	0.99
-20	357	283	8.77	1.26
-15	477	305	11.32	1.57
-10	619	325	14.38	1.9
-5	784	346	17.96	2.26
0	970	367	22.09	2.64
5	1178	388	26.80	3.04
10	1409	408	32.11	3.45
15	1662	429	38.05	3.88

Test Condition: EN12900HBP, Fan/NotControled/220, Return Gas 20°C, Ambient 35°C , Subcooling 0K. 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	150	184	3.42	0.81
-30	199	212	4.60	0.94
-25	268	242	6.20	1.11
-20	355	272	8.23	1.31
-15	462	303	10.71	1.52
-10	588	335	13.69	1.76
-5	733	368	17.17	1.99
0	898	401	21.18	2.24
5	1081	435	25.76	2.49
10	1285	470	30.91	2.73
15	1507	506	36.67	2.98

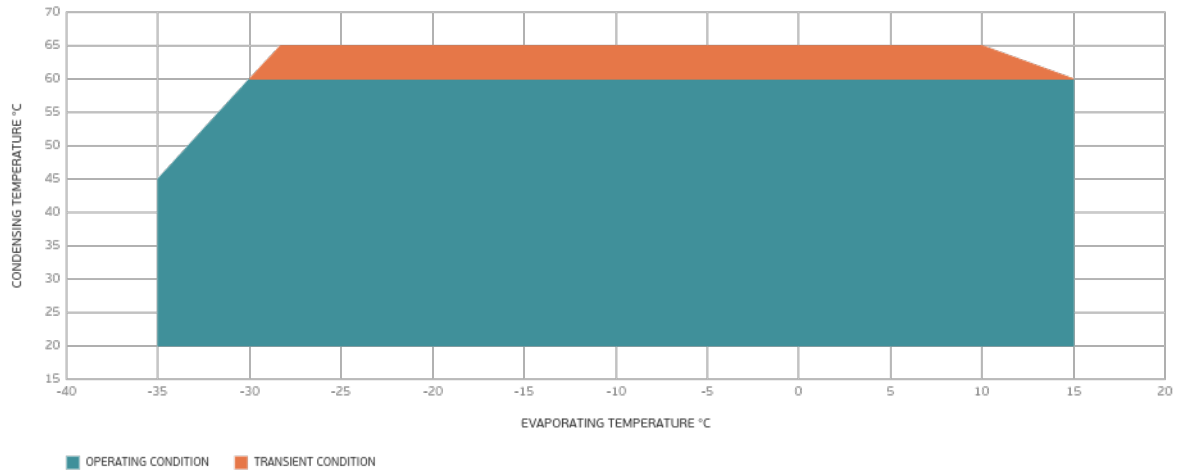
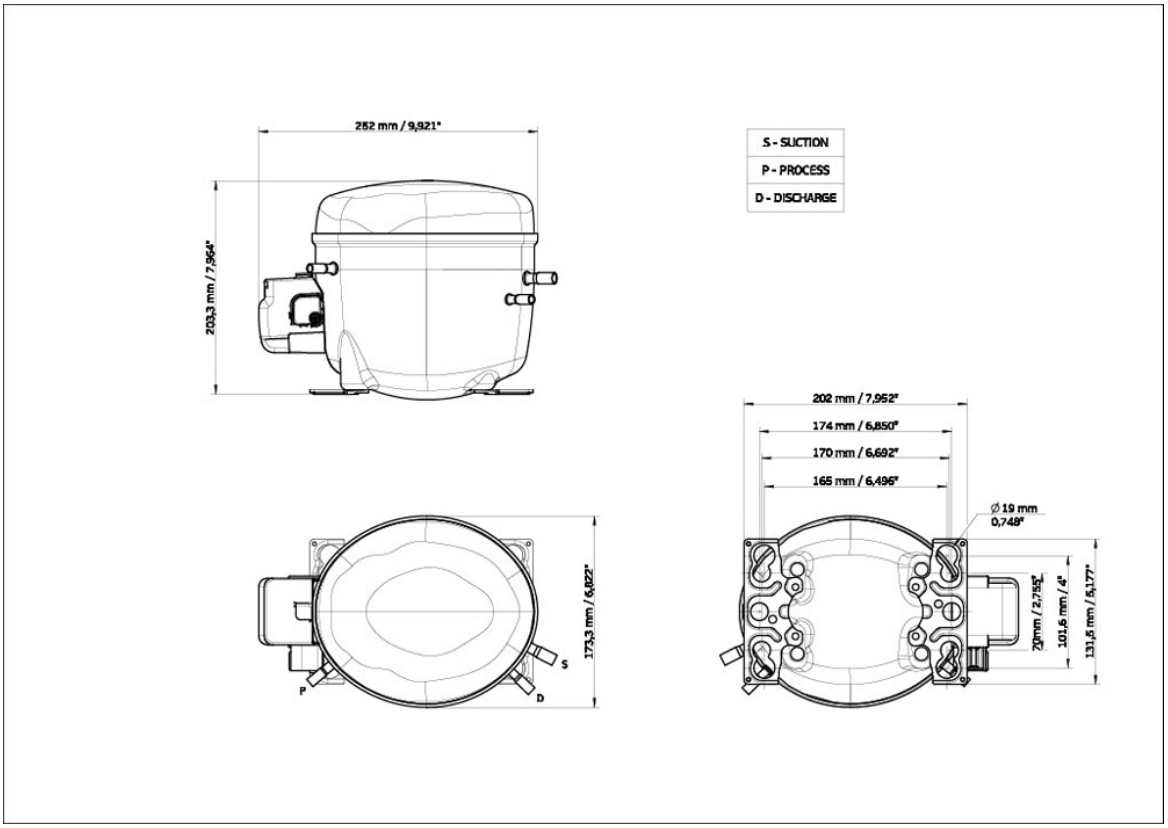
Test Condition: EN12900HBP, Fan/NotControled/220, Return Gas 20°C, Ambient 35°C , Subcooling 0K. Data are an indication of performance based simulation.

Condensing Temperature 55°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-35	120	183	3.03	0.66
-30	164	215	4.20	0.76
-25	224	249	5.77	0.9
-20	302	285	7.75	1.06
-15	395	323	10.17	1.22
-10	504	362	13.06	1.39
-5	631	403	16.44	1.56
0	773	446	20.33	1.73
5	933	490	24.77	1.9
10	1108	536	29.76	2.07
15	1301	584	35.35	2.23

Test Condition: EN12900HBP, Fan/NotControled/220, Return Gas 20°C, Ambient 35°C , Subcooling 0K. Data are an indication of performance based simulation.

Operating Envelope



External Dimensions