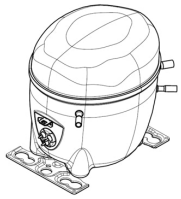
MODEL
# FFI12HBX



**APPROVALS**

**ENGINEERING CODE**
513200349

**APPROVED REFRIGERANT**
R-134a

**POWER SUPPLY**
220 V 60 Hz

**STANDARD CONDITIONS**
EN12900

**APPLICATION**
L/M/HBP

**COOLING CAPACITY**
165 W (LBP)

**EFFICIENCY**
0.75 W/W (LBP)

**MOTOR TYPE**
CSIR

**STARTING TORQUE**
HST

DATA

## General Data

| | |
|---|---|
| **Type** | Hermetic reciprocating |
| **Technology Type** | On-Off |
| **Displacement** | 11.14 $cm^3$ |
| **Compressor Cooling** | Fan/NotControled/220 |
| **Expansion Device** | Capillary Tube or Expansion Valve |
| **Horse Power** | 1/3 hp |
| **Power Supply** | 220 V 60 Hz |
| **Evaporating Temperature Range** | -35 °C to 15 °C |

## Electrical Data

| | |
|---|---|
| **Motor type** | CSIR |
| **Starting Torque** | HST |
| **Start Winding Resistance** | 14.55 Ω at 25° C |
| **Run Winding Resistance** | 4.69 Ω at 25° C |

## Mechanical Data

| | |
|---|---|
| **Oil Charge** | 280 ml |
| **Oil Type Configuration** | ESTER |
| **Oil Type Viscosity** | ISO22 |
| **Weight** | 11.46 Kg |

## Electrical Components

| | Description |
|---|---|
| **Starting Device** | Relay \| 213516485* |
| **Motor Protection** | B143-110 MST40AIZ-5590 |
| **Start Capacitor** | 64-77 124-149 Uf / 250 V |

## External Characteristics

| | |
|---|---|
| **Tray Holder** | No |

| Connector | Internal Diameter | Shape |
|---|---|---|
| **Suction** | 8.2 mm | Slanted/Copper |
| **Discharge** | 6.5 mm | Slanted/Copper |
| **Process** | 6.5 mm | Slanted/Copper |

PERFORMANCE

## Rated Points

| Condensing Temperature | Evaporating Temperature | Cooling Capacity | Power Consumption | Gas Flow Rate | Efficiency |
|---|---|---|---|---|---|
| 40.00°C | -35.00°C | 166 W | 220 W | 3.63 kg/h | 0.75 W/W |

Test Condition: EN12900LBP, Fan/NotControled/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 |
|---|---|---|---|---|
| -35 | 142 | 242 | 2.96 | 0.58 |
| -30 | 208 | 271 | 4.38 | 0.77 |
| -25 | 292 | 299 | 6.16 | 0.98 |
| -20 | 397 | 326 | 8.39 | 1.22 |
| -15 | 527 | 352 | 11.15 | 1.49 |
| -10 | 683 | 378 | 14.54 | 1.81 |
| -5 | 868 | 403 | 18.63 | 2.16 |
| 0 | 1086 | 427 | 23.52 | 2.55 |
| 5 | 1339 | 450 | 29.30 | 2.98 |
| 10 | 1631 | 472 | 36.05 | 3.46 |
| 15 | 1964 | 493 | 43.86 | 3.99 |

Test Condition: EN12900LBP, 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 | 166 | 208 | 3.80 | 0.8 |
| -30 | 228 | 242 | 5.25 | 0.94 |
| -25 | 305 | 278 | 7.02 | 1.1 |
| -20 | 399 | 314 | 9.21 | 1.27 |
| -15 | 514 | 351 | 11.91 | 1.46 |
| -10 | 652 | 389 | 15.20 | 1.68 |
| -5 | 817 | 428 | 19.17 | 1.91 |
| 0 | 1011 | 468 | 23.91 | 2.16 |
| 5 | 1238 | 508 | 29.50 | 2.43 |
| 10 | 1499 | 550 | 36.04 | 2.73 |
| 15 | 1798 | 592 | 43.60 | 3.04 |

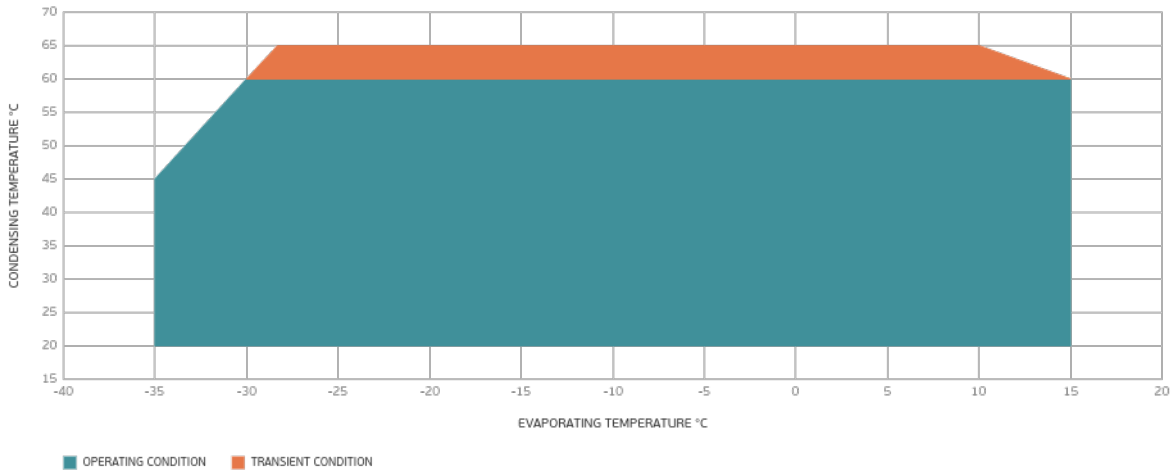
Test Condition: EN12900LBP, Fan/NotControled/220, Return Gas 20°C, Ambient 35°C , Subcooling 0K. Data are an indication of performance based simulation.

Condensing Temperature 55°C

| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|---|---|---|---|---|
| -35 | 125 | 200 | 3.19 | 0.63 |
| -30 | 183 | 239 | 4.68 | 0.77 |
| -25 | 253 | 280 | 6.46 | 0.9 |
| -20 | 336 | 324 | 8.64 | 1.04 |
| -15 | 438 | 371 | 11.29 | 1.18 |
| -10 | 559 | 420 | 14.51 | 1.33 |
| -5 | 704 | 472 | 18.38 | 1.49 |
| 0 | 875 | 526 | 22.98 | 1.67 |
| 5 | 1075 | 582 | 28.41 | 1.85 |
| 10 | 1307 | 642 | 34.76 | 2.04 |
| 15 | 1573 | 703 | 42.10 | 2.24 |

Test Condition: EN12900LBP, Fan/NotControled/220, Return Gas 20°C, Ambient 35°C , Subcooling 0K. Data are an indication of performance based simulation.

## Operating Envelope



## External Dimensions