

MODEL

**EMIS30HHR**




## APPROVALS




 **ENGINEERING CODE**  
513305019


 **APPROVED REFRIGERANT**  
R-134a


 **POWER SUPPLY**  
220 V 50 Hz

 **STANDARD CONDITIONS**  
ASHRAE

 **APPLICATION**  
L/M/HBP

 **COOLING CAPACITY**  
314 W (HBP)

 **EFFICIENCY**  
2.14 W/W (HBP)

 **MOTOR TYPE**  
RSIR

 **STARTING TORQUE**  
LST

## DATA

## General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	3 cm <sup>3</sup>
Compressor Cooling	Fan/NotControlled/220
Expansion Device	Capillary Tube
Horse Power	1/10 hp
Power Supply	220 V 50 Hz / 220 V 60 Hz
Evaporating Temperature Range	-35 °C to 15 °C

## Electrical Data

Motor type	RSIR
Starting Torque	LST
Start Winding Resistance	35.3 $\Omega$ at 25° C
Run Winding Resistance	29 $\Omega$ at 25° C
Rated Load Amperage (RLA) at 50 Hz	1.35 A

## Mechanical Data

Oil Charge	160 ml
Oil Type Configuration	ESTER
Oil Type Viscosity	ISO22
Weight	6.77 Kg

## Electrical Components

	Description
Starting Device	Relay   213514016
Motor Protection	4TM718MFBYY-53

## External Characteristics

Tray Holder	No	
Connector	Internal Diameter	Shape
Suction	6.5 mm	Straight/Copper
Discharge	4.94 mm	Slanted/Copper
Process	6.5 mm	Straight/Copper

## PERFORMANCE

## Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Gas Flow Rate	Efficiency
54.40°C	7.20°C	314 W	146 W	6.95 kg/h	2.14 W/W

Test Condition: ASHRAEHP46, Fan/NotControlled/220, Return Gas 35°C, Evaporation 7.20°C, Condensing 54.40°C, Ambient 35°C, Liquid 46.1°C, Subcooling 8.3K. 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	49	67	0.89	0.73
-30	67	73	1.23	0.92
-25	90	79	1.66	1.13
-20	119	86	2.20	1.38
-15	154	93	2.84	1.66
-10	196	99	3.62	1.98
-5	245	104	4.54	2.36
0	302	107	5.63	2.83
5	368	108	6.90	3.41
10	443	107	8.36	4.15
15	527	102	10.04	5.16

Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. 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	38	66	0.74	0.58
-30	55	72	1.09	0.76
-25	76	80	1.51	0.95
-20	102	89	2.03	1.15
-15	134	98	2.67	1.37
-10	171	106	3.43	1.61
-5	216	115	4.33	1.88
0	268	123	5.40	2.18
5	327	129	6.65	2.54
10	395	133	8.08	2.97
15	472	135	9.73	3.49

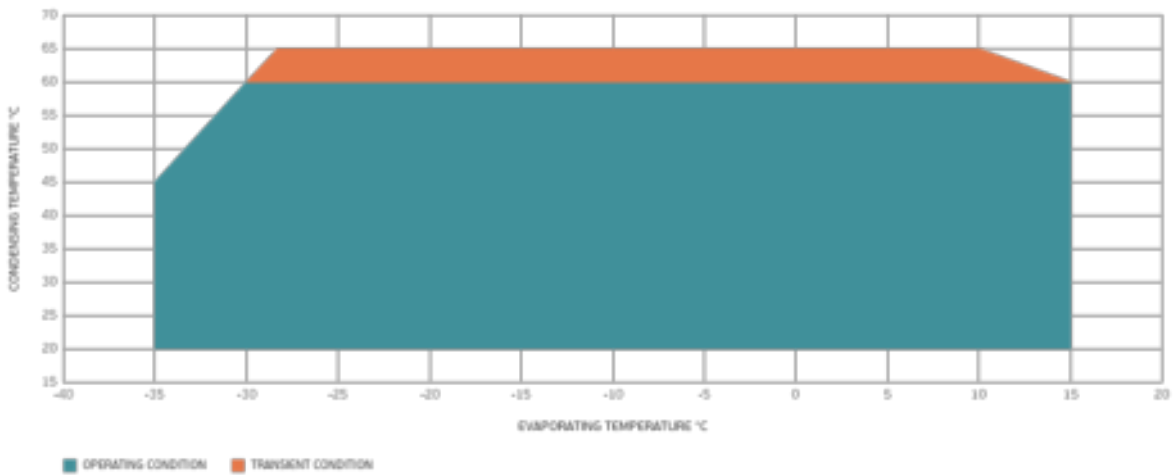
Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

## Condensing Temperature 55°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-35	26	65	0.56	0.4
-30	41	71	0.89	0.58
-25	60	79	1.31	0.77
-20	84	88	1.82	0.95
-15	112	99	2.44	1.14
-10	146	110	3.18	1.33
-5	186	121	4.07	1.53
0	232	132	5.11	1.75
5	285	143	6.33	1.99
10	346	152	7.74	2.28
15	415	159	9.36	2.6

Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

## Operating Envelope



## External Dimensions

