



Model: EMT6144U  
Code: 872HA67

**embraco** POWER IN.  
CHANGE ON

Type:	On-off
Voltage [V] / Frequency [Hz] / Phases	220-240 V 50 Hz 1 ~
Refrigerant:	R-290
Application:	MBP

Motor type:	CSIR
Starting torque:	HST
HP:	1/4-
Displacement:	4.5 cm <sup>3</sup>

### OPERATING CONDITION : ARI HBP

Evaporation Temp.	7.2 °C	Return Temp.	18.3 °C	Superheating	11.1 K
Condensing Temp.	54.4 °C	Liquid Temp.	54.4 °C	Subcooling	0.0 K

<b>Cooling capacity</b>	<b>Power consumption</b>	<b>Mass flow rate</b>	<b>Efficiency</b>
542.30 W	232.03 W	7.73 kg/h	2.34 W/W

### APPLICATION

Evaporating temperature range:	-20 to 10 °C	Cooling type:	Static
Permanent operating temperature (peak) :	55 (60) °C	Air Flow	--
Expansion device:	Capillary tube or Expansion valve	Maximum motor temperature:	130 °C

### ELECTRICAL DATA

Start winding resistance at 25°C (77°F):	0 Ω +/- 8%	Run winding resistance at 25°C (77°F):	0 Ω +/- 8%
FLA - full load amperage L/MBP [A] 50 Hz / 60 Hz:	- / -	LRA (A) 50 Hz / 60 Hz:	7.7 / -
		FLA - full load amperage HBP [A] 50 Hz / 60 Hz:	- / -

### MECHANICAL DATA

Bore:	21 mm	Stroke:	6.5 mm
		Displacement:	4.5 cm <sup>3</sup>

### OTHER INFORMATION

Weight:	7.8 kg	Oil charge:	180 ml
Lubricant type:	Polyolester ISO22	Nitrogen charge:	No

### EXTERNAL SETTINGS

-	Shape	Material	Diameter [mm]
Suction connector	Slanted 42°	Copper	6.10
Discharge connector	Straight	Copper	4.94
Process connector	Slanted 42°	Copper	6.10

Base plate:	European Standard	Tray holder:	Yes
-------------	-------------------	--------------	-----

### PERFORMANCES AT STANDARD CHECK-POINTS

Checkpoint	Cooling capacity	Power consumption	Gas flow rate	Cooling Efficiency	Heating capacity +/-	Heating Efficiency
	+/-5% W	+/-5% W	+/-5% kg/h	+/- 7% W/W	5%* W	+/- 7% W/W
ARI HBP	542.30	232.03	7.73	2.34	666.44	2.87
ARI MBP	344.02	185.78	4.90	1.85	443.70	2.39
ASHRAE CBP	371.25	195.81	4.25	1.90	478.73	2.44
ASHRAE HBP 32	695.97	232.31	7.30	3.00	821.76	3.54
ASHRAE HBP 46	618.20	232.32	7.22	2.66	744.26	3.20
CECOMAF HBP	515.60	228.48	6.71	2.26	639.99	2.80
EN12900 HBP**	558.45	215.02	6.88	2.60	674.98	3.14
EN12900 MBP**	343.98	171.51	3.95	2.01	437.50	2.55

\* Calculations performed considering isentropic compression and a housing loss of 10%. This is an estimated heat amount discarded in the discharge pipe and the condenser combined.

**CONDENSING TEMP. 35 °C****(SUBCOOLING : 0 K, RETURN TEMP.: 32 °C)**

Evaporating temperature °C	Cooling capacity	Power consumption	Gas flow rate	Cooling Efficiency	Heating capacity +/-	Heating Efficiency
	+/-5% W	+/-5% W	+/-5% kg/h	+/- 7% W/W	5% * W	+/- 7% W/W
-20.00	263.48	137.52	2.75	1.92	335.64	2.44
-15.00	322.75	145.37	3.38	2.22	400.40	2.75
-10.00	393.32	153.02	4.13	2.57	475.65	3.11
-5.00	476.81	160.14	5.04	2.98	562.59	3.51
0.00	574.69	166.27	6.11	3.46	662.21	3.98
5.00	688.51	170.85	7.37	4.03	775.48	4.54
10.00	820.01	173.19	8.86	4.73	903.53	5.22

**CONDENSING TEMP. 45 °C****(SUBCOOLING : 0 K, RETURN TEMP.: 32 °C)**

Evaporating temperature °C	Cooling capacity	Power consumption	Gas flow rate	Cooling Efficiency	Heating capacity +/-	Heating Efficiency
	+/-5% W	+/-5% W	+/-5% kg/h	+/- 7% W/W	5% * W	+/- 7% W/W
-20.00	230.31	150.31	2.62	1.53	309.55	2.06
-15.00	282.65	160.88	3.23	1.76	369.38	2.30
-10.00	343.98	171.51	3.95	2.01	437.50	2.55
-5.00	416.45	181.99	4.81	2.29	516.00	2.84
0.00	501.79	191.91	5.83	2.61	606.22	3.16
5.00	601.55	200.72	7.05	3.00	709.23	3.53
10.00	717.34	207.74	8.48	3.45	826.07	3.98

**CONDENSING TEMP. 55 °C****(SUBCOOLING : 0 K, RETURN TEMP.: 32 °C)**

Evaporating temperature °C	Cooling capacity	Power consumption	Gas flow rate	Cooling Efficiency	Heating capacity +/-	Heating Efficiency
	+/-5% W	+/-5% W	+/-5% kg/h	+/- 7% W/W	5% * W	+/- 7% W/W
-20.00	192.94	160.16	2.43	1.20	275.47	1.72
-15.00	241.55	173.95	3.05	1.39	334.73	1.92
-10.00	295.29	187.69	3.76	1.57	397.55	2.12
-5.00	357.44	201.51	4.58	1.77	467.95	2.32
0.00	430.28	215.24	5.55	2.00	548.26	2.55
5.00	515.60	228.48	6.71	2.26	639.99	2.80
10.00	615.01	240.63	8.08	2.56	744.26	3.09

**ELECTRICAL ACCESSORIES**

Kit:	1
Starter device:	CURRENT RELAY
Engineering code:	MTRP-0015
Run capacitor:	--
Starting capacitor:	43-53

**Thermal protector:** T0765/G6**Institutes approved for this electric kit:**

If purchased without electricals consult Embraco to verify the supplier of electricals approved for this compressor

**MECHANICAL ACCESSORIES**

Rubber damper:	Yes	Metal bushing:	Optional
----------------	-----	----------------	----------

