

# Electa-ECOS-T

## MHAITI 104÷110 + IUT 06-10

Cooling capacity 3,1÷6,5 kW  
Heating capacity 4÷9,5 kW  
Capacity DHW 185 l



### Features

**Efficient and eco-friendly range in R32**

**Energy class A+++**

**Temperature of the produced water up to 60°C**

**Domestic hot water production from -25°C to +45°C outdoor air**

**Floor indoor unit complete with circulator, expansion tank, 3-way valve, DHW tank and electrical resistance.**

**Touch-screen control panel.**

**APP for managing the unit via smartphone (iOS and Android)**

**Tax incentives\***



**Two-section reversible air-water heat pumps with integrated tank for domestic hot water. Range with hermetic rotary DC Inverter compressors and R32 refrigerant gas.**

### Construction features

IUT indoor unit

Indoor unit for floor installation:

- Structure: made of galvanised and painted steel plate.
- Water side heat exchanger: adequately insulated stainless steel plates, complete with antifreeze heater.
- Pump unit complete with: EC circulator, automatic air vent valve, safety valve (3 bar), flow switch, expansion tank (10 l), pressure gauge, water filter.
- 3-way valve for the production of domestic hot water.
- Supplementary electrical resistance, system side.
- Domestic hot water buffer tank, complete with water temperature probe, anode and electrical resistance (3 kW).

- Control: electronic with microprocessor and touch-screen control panel for integrated management of the heat pump and the heating system, according to the various requirements relating to the use of the energy sources:
  - Domestic hot water production.
  - Rapid heating function for domestic hot water.
  - Anti-legionella cycle function, with activation timer.
  - Auxiliary or supplementary heat source management.
  - Operation in silent mode with timer.
  - Weekly and daily time bands.
  - Holiday mode and antifreeze function.
  - Power consumption limiting function.
- 2-way on/off valve management for shutting off a part of the system, in heating or cooling mode.

– Management through room thermostat, as an alternative to the touch-screen panel.

– Unit activation from external contact (remote ON/OFF).

• Unit complete with:

– Outdoor temperature probe for set-point compensation.

– Remote ambient air temperature probe, for managing the unit according to the ambient set-point.

– Communication cable between outdoor and indoor units.

• RS485 interface for serial communication with other devices (Modbus RTU protocol).

• iOS and Android APP for managing the unit via smartphone and tablet.

MHAITI outdoor unit

• Compressor: hermetic, twin rotary DC Inverter with steam injection, complete with thermal protection and casing heater

• Expansion valve: electronic.

• Cooling circuit with economiser

• Air side heat exchanger: finned coil with copper pipes and aluminium-manganese fins with Golden Fin anti-corrosion treatment in epoxy resin and hydrophilic treatment.

• Fan: axial type impeller with DC brushless motors, equipped with internal thermal protection, accident protection grilles and proportional electronic device for continuous fan rotation speed regulation.

• Structure: made of galvanised and painted steel plate RAL9002, complete with condensate drain pan and unit base antifreeze heater.

KPRE – Wiring for RS485 serial connection to the touch-screen panel.

## Models

MHAITI+IUT: 2-section air-water heat pump.

## Separately supplied accessories

KSA – Rubber anti-vibration mounts.

## Technical data

MHAITI outdoor unit		104	106	108	110
IUT indoor unit		06	06	10	10
❶ Heating capacity	kW	4,0	5,9	8,0	9,5
❶ Absorbed power	kW	1,02	1,51	2,14	2,64
❶ C.O.P.		3,92	3,91	3,74	3,60
❷ Heating capacity	kW	4,0	6,0	8,0	9,5
❷ Absorbed power	kW	0,78	1,20	1,70	2,07
❷ C.O.P.		5,13	5,00	4,71	4,59
❸ Cooling capacity	kW	3,2	4,1	5,3	6,5
❸ Absorbed power	kW	0,94	1,28	1,73	2,27
❸ E.E.R.		3,42	3,20	3,06	2,86
❹ Cooling capacity	kW	3,8	5,8	7,0	8,5
❹ Absorbed power	kW	0,82	1,32	1,75	2,24
❹ E.E.R.		4,63	4,40	4,00	3,79
❺ Sound pressure (external unit)	dB(A)	37	37	41	42
❻ Available circulator head	kPa	73	70	66	58
DHW tank capacity	l	185	185	185	185
Electrical supply	V-ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50
Internal unit electrical resistance	kW	2 x 1,5	2 x 1,5	2 x 3,0	2 x 3,0
Refrigeration lines max Height difference / length	m / m	20 / 15	20 / 15	25 / 15	25 / 15
<b>DIMENSIONS AND WEIGHTS</b>					
MHAITI outdoor unit		104	106	108	110
L – Width	mm	975	975	980	980
H – Height	mm	702	702	788	788
P – Depth	mm	396	396	427	427
Weight	kg	55	55	82	82
IUT indoor unit		06	06	10	10
L – Width	mm	600	600	600	600
H – Height	mm	1750	1750	1750	1750
P – Depth	mm	600	600	600	600
Empty weight	kg	209	209	209	209
<b>ENERGY PERFORMANCE</b>					
MHAITI		104	106	108	110
IUT		06	06	10	10
<b>AMBIENT HEATING – Average application temperature 55°C</b>					
❸ Pdesignh (EN 14825)	kW	5	5	7	8
❸ SCOP (EN 14825)		3,27	3,25	3,31	3,25
❹ ηs	%	128	127	129	127
❹ Energy class		A++	A++	A++	A++
<b>WATER HEATING</b>					
Load profile		L	L	L	L
❺ ηwh	%	101	101	89	89
❺ Energy class		A	A	A	A

Data at the following conditions:

- ❶ Air: 7°C D.B. – 6°C W.B. – Water: 40/45°C.
- ❷ Air: 7°C D.B. – 6°C W.B. – Water: 30/35°C.
- ❸ Air: 35°C D.B. – Water: 12/7°C.
- ❹ Air: 35°C D.B. – Water: 23/18°C.
- ❺ In open field (Q = 2) at 5 m from the unit.
- ❻ Weight refers to the most complete set up.  
Performance according to EN 14511
- ❸ In Average climatic conditions.
- ❹ Seasonal energy efficiency: ambient heating in Average climate (EU Regulations No.811/2013 and No.813/2013 – class between D and A+++)
- ❺ Water heating energy efficiency in average climatic conditions (+7°C). (Regulations (EU) No.812/2013 and No.814/2013 – class between F and A+)



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