ECOSAN

DHW instant production unit with electronic modulating regulator

DESCRIPTION

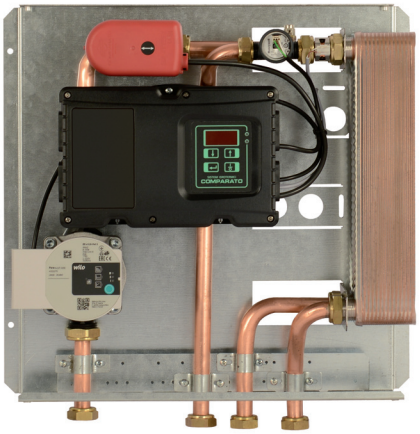
ECOSAN unit istantaneously produces DHW thanks to a heat exchanger which withdraws the energy from a puffer of technical water.

The control of the hot water delivery temperature is achieved by means of an electronic apparatus, with PID algorithm, which detects the instantaneous temperature thanks to the special probe, and acts on the system through the motorised 2-way modulating valve located on the primary circuit of the exchanger.

The domestic hot water supply temperature can be changed using the keypad and the relevant display.

When the production of domestic hot water is active, the unit electrically supplies a primary pump (optional) necessary for the circulation of the thermal heat transfer fluid inside the device itself.

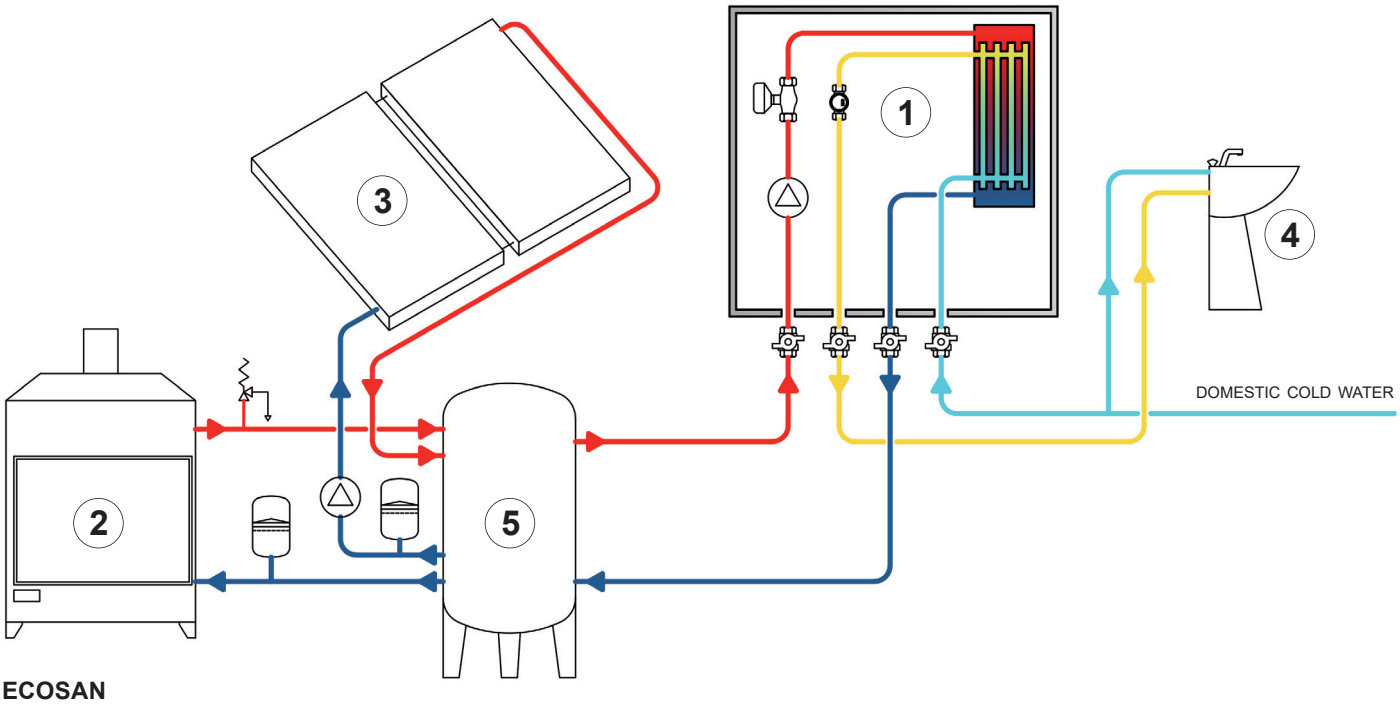
ECOSAN



SHELL

- Domestic hot water production
- 35 kW and 50 kW power
- Electronic adjustment
- Optional primary pump

EXAMPLE OF USE

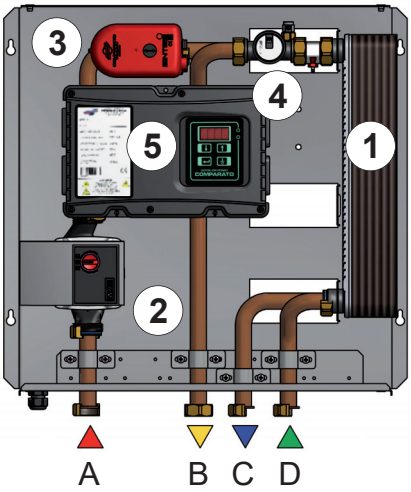


ECOSAN

1. ECOSAN
2. SOLID FUEL BOILER
3. THERMAL SOLAR SYSTEM
4. DOMESTIC UNITS
5. PUFFER

ECOSAN

COMPONENTS AND FLOWS

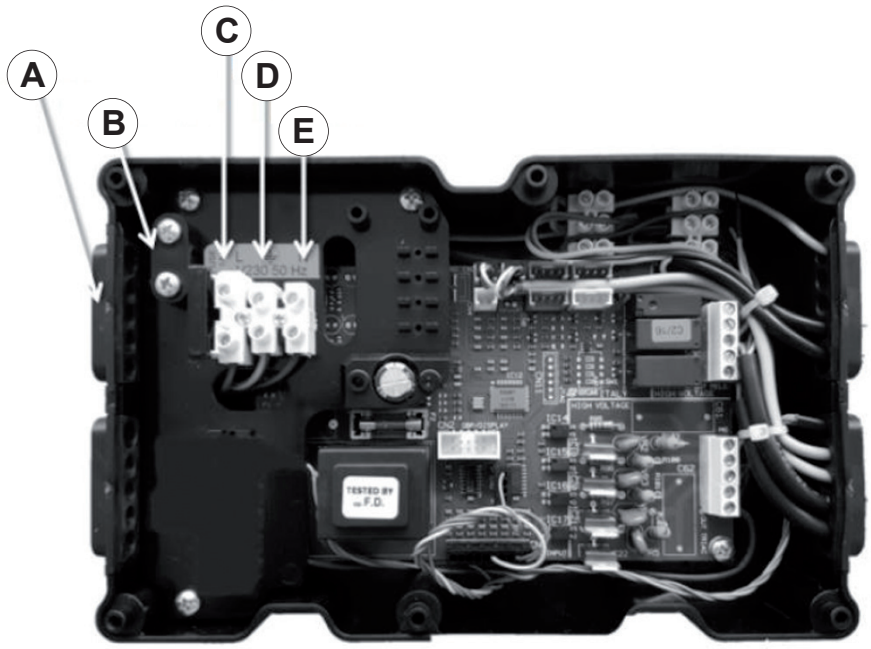


A : Flow from puffer
B : DHW outlet
C : Return to puffer
D : DHW outlet to utilities

1 : Plate exchanger
2 : System pump (optional)
3 : Motorised 2-way modulating SINTESI valve, domestic circuit
4 : Domestic flowmeter
5 : Control panel

ELECTRICAL CONNECTIONS

Electrical supply 230V 50Hz under magnetothermal switch.
Power supply always present (all models).



A. CABLE GLAND
B. CABLE CLIP
C. PHASE
D. EARTH
E. NEUTRAL

ECOSAN

TECHNICAL FEATURES

PRIMARY CIRCUIT	
Fluid type	water VDI 2035 - max glycol 30%
Max temperature	90°C
Max pressure	6 bar
Nominal rate	1,5 m³/h
Hydraulic characteristic Kvs	2,5 m³/h
DOMESTIC WATER CIRCUIT	
Fluid type	Max water hardness 15dGH
Max temperature	60°C
Max pressure	6 bar
Flow rate on / off	3,5 - 2,5 l/min
Max water flow	35 l/min
Hydraulic characteristic Kvs	2,2 m³/h
PIPING	
Material	copper
Size	Ø18
HYDRAULIC CONNECTIONS	
Material	brass
Size	G3/4"M
HYDRAULIC SUPPORT	
Material	galvanised metal sheet
SHELL	
Material	black sheet metal
Colour (optional)	white RAL 9010 powder-coated
POWER SUPPLY	
Voltage	230V ± 10%
Frequency	50 Hz
Power consumption without pump	10 W
Power consumption with pump	60 W

CHARACTERISTICS OF EXCHANGERS

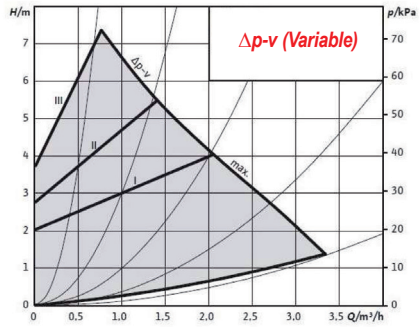
HEAT EXCHANGER WITH RATED POWER 35 KW	
PRIMARY	
Inlet temperature	70°C
Outlet temperature	40°C
Flow rate	1,0 m³/h
SECONDARY DHW	
Inlet temperature	10°C
Outlet temperature	45°C
Flow rate	14,5 l/min
HEAT EXCHANGER WITH RATED POWER 50 KW	
PRIMARY	
Inlet temperature	70°C
Outlet temperature	26°C
Flow rate	1,0 m³/h
SECONDARY DHW	
Inlet temperature	10°C
Outlet temperature	45°C
Flow rate	21 l/min
USAGE	
Installation	indoor environments
Room temperature	5 - 55°C
Relative humidity	25 - 85%
MOTORISED VALVE	
Modulating type	15 sec
WEIGHT	
Dry weight	18 Kg

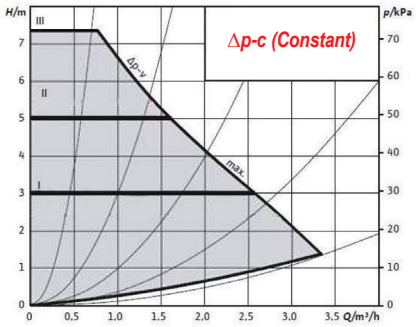
VERSIONS AND CODES

Version	Rated power	Pump	Code
	35 kW	included	ECOSP35
		predisposition	ECOSI35
	50 kW	included	ECOSP50
		predisposition	ECOSI50

Accessorio	Description	Code
	White cover	CEK

PRIMARY PUMP





ECOSAN

INSTALLATION WARNINGS

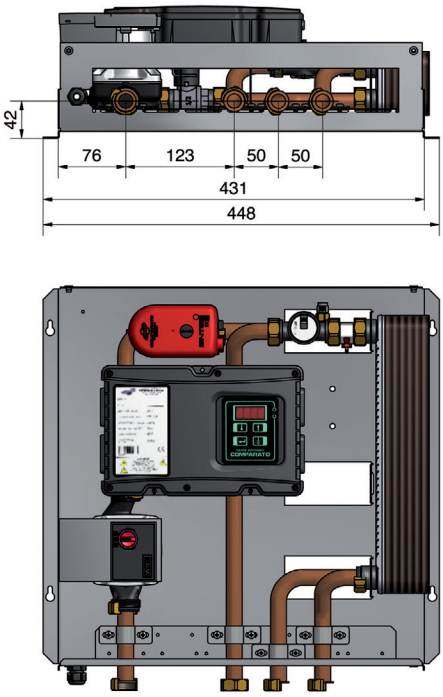
It is advisable to use hydraulic flexible connection in order to compensate for any thermal expansion and possible misalignment between the system connections.

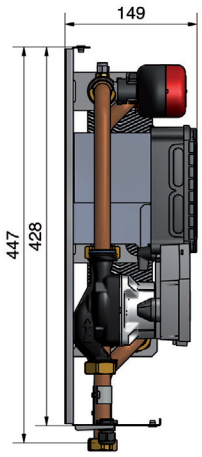
CERTIFICATIONS

CE Machinery Directive
2006/42/CE.
CE Low Voltage Directive
2014/35/ue: 26/04/2014
CE Electromagnetic Compatibility Directive
2014/30/UE

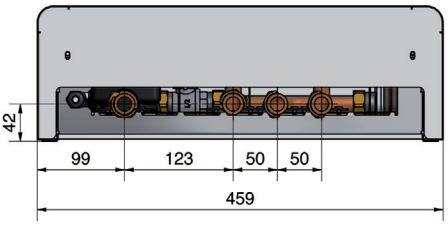
OVERALL SIZE

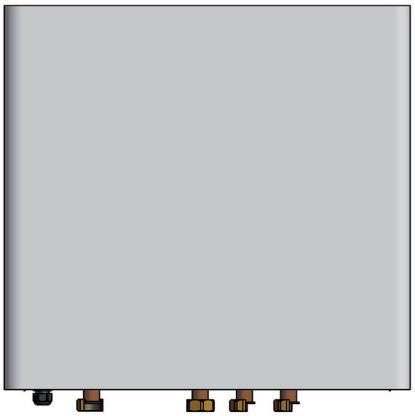
WITHOUT SHELL

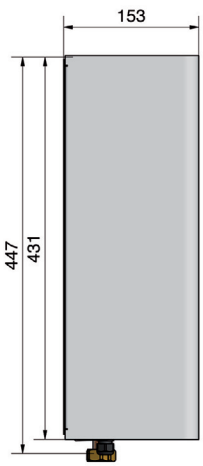




WITH SHELL







EXAMPLE OF SPECIFICATIONS

ECOSAN HYDRAULIC INTERFACE UNIT for the instantaneous production of domestic hot water using thermal energy from a technical water storage, nominal power 50 kW, wall-hanging technical room installation, complete with: • braze-welded plated heat exchanger • primary circuit pump • motorised 2-way modulating valve • temperature probe • flow meter • management electronics with interface display. Copper pipes Ø18mm, maximum working pressure 6 bar, maximum temperature 90°C, hydraulic connections G3/4" with flat-contact nuts, electrical supply 230V 50Hz, maximum absorption 60W, dimensions 448x444x150mm.

Brand: **COMPARATO**

Code: **ECOSP50**

COVER SHELL, white powder-coated RAL9010.

Brand: **COMPARATO**

Code: **CEK**

UPDATED DATA SHEETS AVAILABLE AT www.comparato.com