BASIC Series

Electronic control units for solar thermal systems

Technical Data Sheet







Description

BASIC Series electronic control units provide a synoptic that enables you to monitor system status by means of the LCD display: fluid temperature in storage tank, temperature difference between solar collector and system circuit, solar collector temperature, fluid temperature at bottom of tank, pump operating status. When the sun heats the solar collector to a temperature exceeding the temperature in the water heater, the electronic control actuates the pump built into the **FlowBox Series** units.

Circulator control On-Off mode, not compatible with PWM control signal.



BASIC

Electronic control unit for solar panel systems with LED operating status indicator lights. Pt1000 sensors (ST Series - art.PPLELE00060) for solar collector, tank and auxiliary included as standard. 2 x 230VAC-8A relay outputs for controlling heating circuit and solar circuit pumps (ON-OFF). Easy to use, with just three pushbuttons. Solar circuit pump starts up automatically according to the temperature difference between the solar collector and the tank: 4-30°C (default 8°C). Maximum tank temperature control: 30-90°C (default 90°C). Tank temperature control with auxiliary sensor: 0-85°C (default 50°C). Solar circuit protection:

- against overtemperature: 100-200°C (default 140°C);
- with operation of pump for 15 sec. if unused for 5 days.

IP rating: IP42. Power supply: 230VAC-50Hz.

Туре	Part No.	No. of sensors
BASIC	P03686	2 (L = 3 m + L = 1.5 m)
BASIC	P03752	3 (two L = $3 \text{ m} + \text{one L} = 1.5 \text{ m}$)



ST

Pt1000 temperature sensors.

- in silicone sheath, up to 105°C, length 3 metres (suitable for tank);
- in PVC sheath, up to 180°C, length 1.5 metres (suitable for solar collector).

Туре	Part No.	No. of sensors
ST	PPLELE00061	Length 1.5 m - 180°C
ST	PPLELE00060	Length 3.0 m - 105°C

Technical features	BASIC	PLUS
Operating temperature	0-50°C	0-50°C
IP rating	IP42	IP20
Supply voltage	230VAC +/- 10% Hz	230VAC +/- 10% Hz
Outputs:		
P1 – main pump	8A 250VAC relay	1 A 230V triac, min. load > 1 W
P2 – secondary pump	-	1 A 230V triac, min. load > 1 W
P3 – auxiliary contact	8A 250VAC relay	2A 250VAC relay
Inputs:		
Temp. sensor, coll. 1	Pt 1000 (1.5 m – 180°C)	2 x Pt 1000 (1.5 m - 180°C)
Temp. sensor, coll. 2	-	Pt 1000 (1.5 m - 180°C)
Temp. sensor, tank 1	Pt 1000 (3 m – 105°C)	Pt 1000 (3 m – 105°C)
Temp. sensor, tank 2	-	Pt 1000 (3 m – 105°C)
Temp. sensor, extra	-	Pt 1000 (3 m – 105°C)
Flow meter sensor	-	5V pulse
Flow rate sensor	-	analogue
Pressure sensor	-	analogue



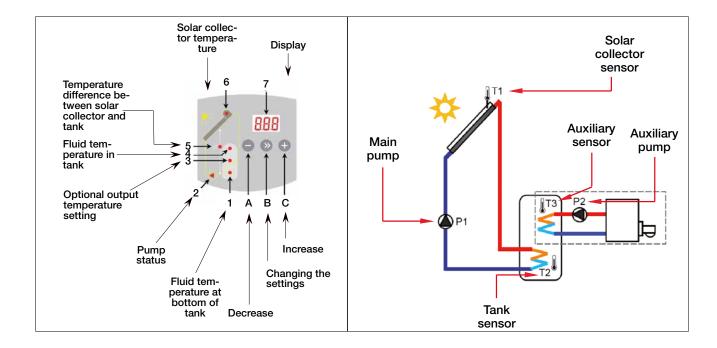
Application

BASIC

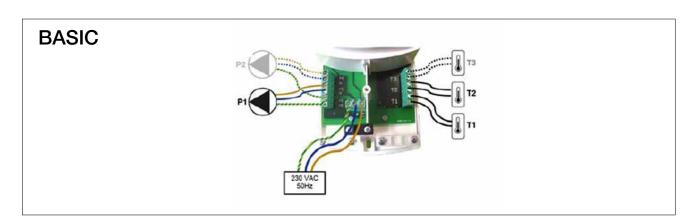
BASIC Series electronic control units are used to manage and control forced-circulation solar thermal systems with one solar collector, one tank and one pump (+ one solar pump). The front panel of the control unit shows a schematic of the system configuration, and LEDs indicate the operating status of the individual components. The unit is easy to use and programme with just three pushbuttons, and depending on the parameter selected (pushbutton B), the display (7) shows the following:

- fluid temperature at bottom of tank (1);
- fluid temperature in tank (4);
- temperature difference between solar collector and tank (5);
- solar collector temperature (6);
- optional output temperature setting (3).

The LED (2) shows the pump operating status. Changing the settings: pushbutton A (decrease), C (increase).

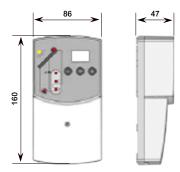


Electrical connections



Overall dimensions (mm)

BASIC



Specification text

BASIC Series

Electronic control unit for solar panel systems **BASIC Series** – WATTS brand – with LED operating status indicator lights. ST Series Pt1000 sensors for solar collector, tank and auxiliary included as standard. 2 x 230VAC-8A outputs for controlling heating circuit and solar circuit circulation pumps. Easy to use, with just three pushbuttons. Solar circuit pump starts up automatically according to the temperature difference between the solar collector and the tank: 4-30°C (default 8°C). Maximum tank temperature control: 30-90°C (default 90°C). Tank temperature control with auxiliary sensor: 0-85°C (default 50°C). Solar circuit overtemperature protection: 100-200°C (default 140°C) and operation of pump for 15 sec. if unused for 5 days. IP rating: IP42. Power supply: 230VAC – 50Hz.

Circulator control On-Off mode, not compatible with PWM control signal.

The descriptions and photographs contained in this product specification sheet are supplied by way of information only and are not binding.

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Watts Industries Italia S.r.I.

Via Brenno, 21 • 20853 Biassono (MB) • Italy Tel. +39 039 4986.1 • Fax +39 039 4986.222 infowattsitalia@wattswater.com • www.watts.com