

Users manual

Electronic Box Basic

Art nr: 1000-0111



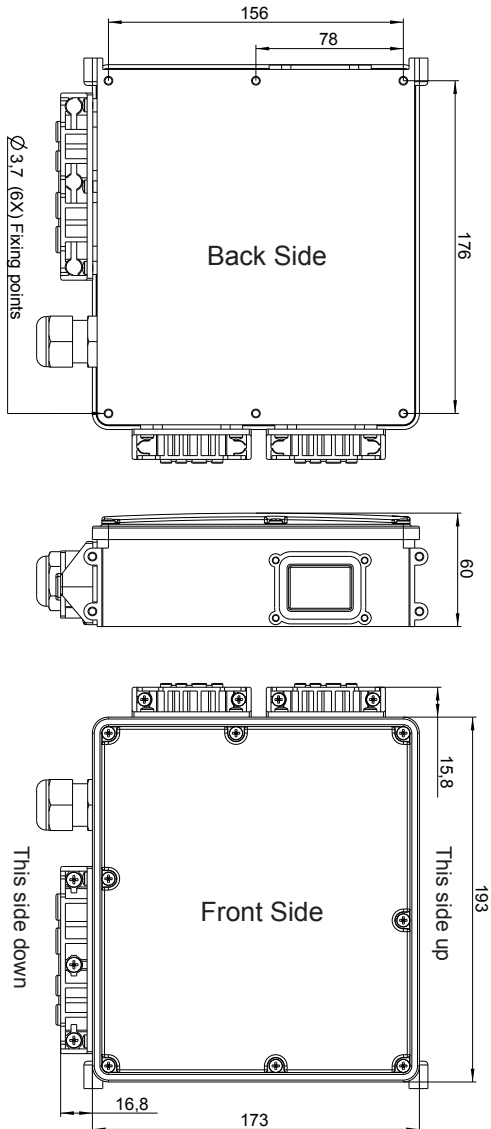
Description

Electronic Basic Box is constructed for private whirlpools used indoors. Electronic Basic box shall not be installed higher than 2000 meter above sea level.

Recommended working temperature: 0 to 25°C
Storage temperature: -20 to 60°C

Dimensions

(mm)



Specification

Rated Voltage:	Class I 3N~ 230 / 400 V 50 Hz
Rated Effect:	L1: 1715 W L2: 3000 W L3: 3000 W
Rated Current:	L1: 7,5 A L2: 13 A L3: 13 A
Protection Classification:	IPX5

Maximal load L1

Pump	1N~ 230 V 50 Hz 1300 W
Blower	1N~, 230 V, 50 Hz, 400 W
2 pcs level sensor	SELV, 3,3 Vdc, 5 mA
Temperature sensor	SELV, 3,3 Vdc, 5 mA
Touch panel	SELV, 11,5 Vdc, 150 mW
Light therapy / Lamp	SELV, 5 Vdc, 4 W
Pop Up	SELV, 11,5 Vdc, 400 mA
7 pcs regulating valves	SELV, 11,5 Vdc, 400 mA

Maximal load L2

Heater 1	1N~, 230 V, 50 Hz, 3000 W
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Maximal load L3

Heater 2	1N~, 230 V, 50 Hz, 3000 W
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Test instructions

- Functional test shall be performed.
- Electronic Basic Box shall be safety tested according to current standards; EN60335-1 and EN 60335-2-60.

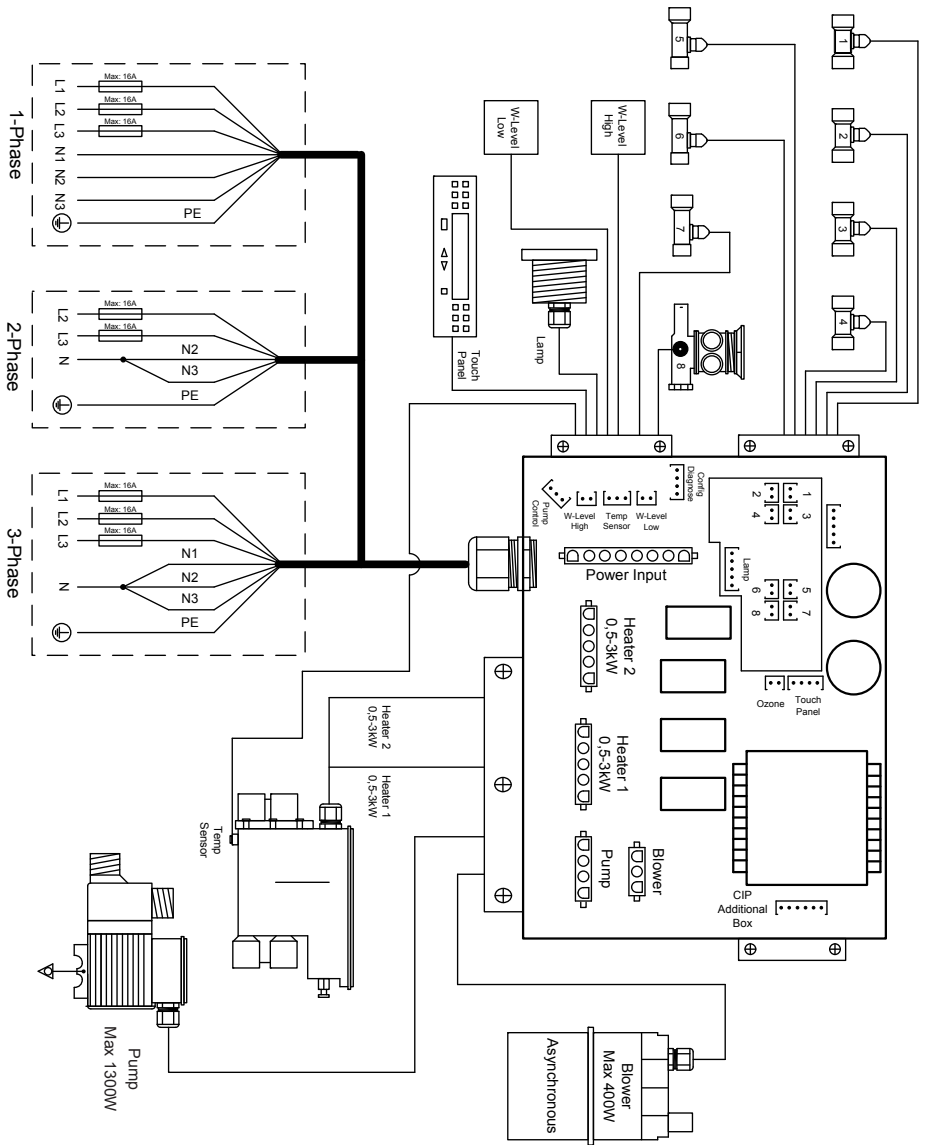
Assembly instructions

- Electronic Basic Box shall be installed with input power connector turned downwards.
- Electronic Basic Box shall be installed in a dry space with good ventilation.
- Electronic Basic Box shall be mounted at least 30mm from the floor surface.
- Electronic equipment shall be mounted in such a way so that it can not fall into the whirlpool.
- Cables shall be routed away from sharp edges, cooling flange, and other mounted equipment which can damage the cables.
- The bending radius for SELV- cables shall not be less than 10mm.
- Always keep at least 20mm distance between SELV cables and Low voltage cables.
- Cables inside Electronic Basic Box shall always be routed as short as possible.
- Make sure that no cables without sockets exist inside Electronic Basic Box, after all quick connectors are connected.
- After the quick connectors have been attached to Electronic Box Basic, shall their conductors be fixed together in packs of two or three pieces with a stripe. This is to prevent eventual single faults.
- Assembly shall be made so that no live parts with current exceeding 12V can be touched by a person sitting in the bath.
- Electronic Basic Box is rated Class I and shall be connected according to current standards; EN60335-1 and EN60335-2-60.
- Electronic Basic Box shall be installed as a fixed installation to the main system.
- Electronic Basic Box is delivered with a cable of type; "Type-Y attachment" This means that if the connection cable is damaged, it must be replaced by the manufacturer, the manufacturers agent or other qualified person.
- The connection cable (7G1,5mm²) have the following colour and number code.
 - Green/ Yellow conductor PE(Safe earth)
 - Black conductor marked with 1: N3 (Neutral 3)
 - Black conductor marked with 2: N2 (Neutral 2)
 - Black conductor marked with 3: N1 (Neutral 1)
 - Black conductor marked with 4: L1 (Live 1)
 - Black conductor marked with 5: L2 (Live 2)
 - Black conductor marked with 6: L3 (Live 3)

See page 4 for connection to 1-phase, 2-phase or 3-phase.

- The installation shall be preceded by an all-pole safety breaker with at least 3 mm contact separation
- The all pole safety breaker should be marked "pool" or "whirlpool".
- The installation shall be preceded by a residual current safety device (RCD) having a rated residual operating current not exceeding 30 mA.

Connection schedule



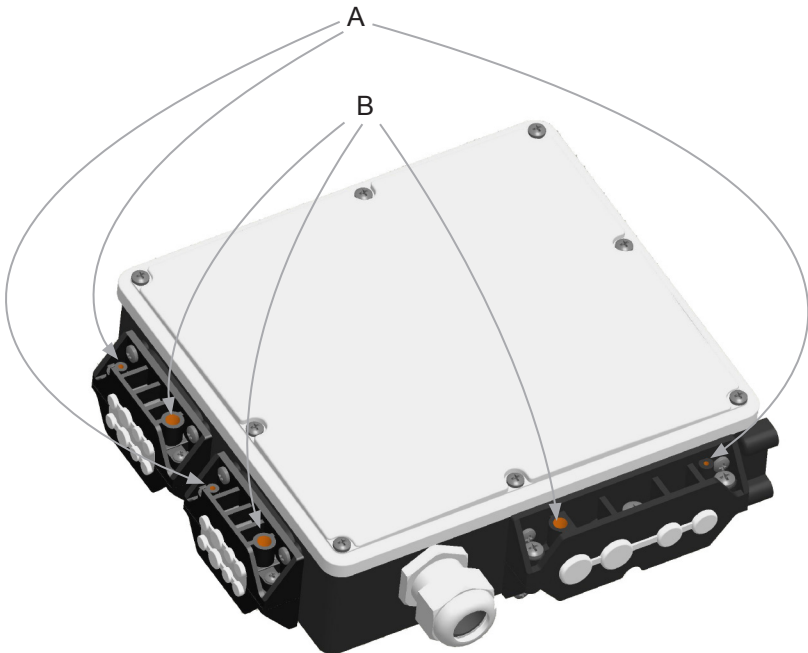
Component

Connects to connector

Level Sensor	W-Level Low, W-Level High (see sensors function description.)
Temperature Sensor	Temp Sensor
Touch Panel	Touch Panel
Light Therapy / Lamp	Light / X7
Regulating Valve 1	1
Regulating Valve 2	2
Regulating Valve 3	3
Regulating Valve 4	4
Regulating Valve 5	5
Regulating Valve 6	6
Regulating Valve 7	7
Pop Up	8
Pump	Pump
Blower (1-phase asynchronous)	Blower
Heater	Heater 1, Heater 2 (see heaters function description.)

Sealing the box

When the box is mounted and all the cables are in place, fill the holes marked "B" with silicone - Loctite 5140. Fill until the silicone is coming up in the holes marked "A".



Function description – Light therapy / Lamp

The Light therapy and the Lamp are the same unit. Consisting of four LEDs.
The Light therapy has up to 12 preset programmes depending on the touch panel.

- Program 1: Fixed white light
- Program 2: Fixed red light
- Program 3: Fixed green light
- Program 4: Fixed blue light
- Program 5: Pulsating white light
- Program 6: Pulsating red light
- Program 7: Pulsating green light
- Program 8: Pulsating blue light
- Program 9: Pulsating light shifting between colors
- Program 10: Pulsating light shifting between color (without white)
- Program 11: Alternate light sequences
- Program 12: Alternate light sequences (without white)

Function description – Level sensors

Our system demands two level sensors. Sensor 1 controls that the water has reached a certain level so that the system can be activated safely. The sensor shall be placed 2 cm above the highest placed jet and connected to the connector marked W-Level Low.

Sensor 2 function as an overflow protection. The Pop Up will automatically open if the water level exceeds level Sensor 2. The Pop Up will close again when the water level is below level sensor 2. Sensor 2 shall be placed at desired water level and connected to the connector marked W-Level High.

Function description - Pop Up (drain)

The Pop Up is opened and closed via the touch panel. The Pop up opens automatically when there is a power cut or when the water level exceeds level sensor 2.

Function description - Heater

The Heaters with article number: 100-0078, 1000-0140 and 1000-0141 shall be connected to the connector marked Heater 1 in the electronic box. The heater with article number 1000-0083 shall be connected to connectors "Heater 1" and "Heater 2".



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