



Function

The heating unit functions via a 230 V AC power supply. Two operating modes facilitate strictly digital or analogue operation.

If the digital operating mode is used, the heater is switched on and off via a 24 V input.

In the case of analogue operation, heating power can be infinitely adjusted via a 0 to 10 V signal.

An LED indicates the switching status and also any faults.

Setup

The heater is screwed into a 50 mm diameter hole in a container and retained via a threaded sleeve.



The submersible heater must only be operated when entirely submersed in fluid.

Technical data

Parameter	Value
Heating power	1000 W / 230 V AC
Power supply	24 V DC / 100 mA
Digital input	24 V DC / 12 mA
Analogue input	0 to 10 V
Dimensions	
Heater tube	150 mm x 20 mm diameter
Retaining thread	G 1½"
Materials (heater tube casing)	Stainless steel
Connections	
Heater	Mains cable with plug, 2000 mm long
Control	4-pin M8 plug

170713

Heating unit

LED display

Parameter	Value
Digital operation: 24 V at digital input and 24 V at analogue input	Green on continuously Heater on
0 V at digital input and 24 V at analogue input	Green off Heater off
Analogue operation: 24 V at digital input and 0 to 10 V at analogue input	Flashing green Heater actuated
Excessively high temperature at heater tube: Heater is shut down at TH > approx. 50° C, and is switched back on automatically at TH < 45° C	Red on continuously Heater off
Excessively high temperature at power section: Heater is shut down at component temperature TC > 90° C, and is switched back on automatically at TC < 85° C	Flashing red Heater off

Electrical pin allocations

Parameter	Value
24 V supply	Plug pin 1 (brown)
0 V supply	Plug pin 3 (blue)
24 V digital input	Plug pin 4 (black)
0 to 10 V / 24 V analogue input	Plug pin 2 (white)



The heating tube is subject to high temperatures – risk of burns!