

MANUAL

IBC immersion heater 2kW complete w. control unit





NOTE! Not for EX environment! 

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HEALTH AND SAFETY

A. Safety

	Danger! Failure to follow these instructions can be life threatening!
	Warning! Failure to observe this information can result in death or serious injury!
	Warning! Failure to observe this information may result in minor injury or damage equipment.
	Instructions or information that requires special attention!

B. Operators

Read the manual before commissioning and using the product

This manual should be kept near the system.

- Manual and documents for installing and using the equipment
- Ensure that everyone working with the equipment knows this manual
- Ensure that everyone working with the equipment can handle the system
- Ensure that any system modification or changes are confirmed by HeatXperts prior to the modification, then noted in this manual for future awareness

C. System modifications

We do not allow modifications

GENERAL DESCRIPTION

This standard immersion heater is specially designed for Intermediate Bulk Containers (IBC container 1000L) and is the perfect and easy way to raise the temperature of your liquid. The temperature control included in the package contains a lot of intelligence that come in handy when you need even heating, ramp functionality, maximum adjustable temperature, program steps with different set points or just a need for temperature control that is CE marked and approved. The stainless steel immersion heater is installed through the tank opening on the top of the IBC and used to heat water and oils but also works in mild acids and alkaline mixtures.

This immersion heater for IBC is made of stainless steel tube element AISI 316L (1.4404) and is IP65 to cope with outdoor environments. The diameter of the heater fits the top opening of IBC tanks and it has an active heating zone that requires a minimum of a half-filled IBC 1000 liter tank. We have equipped our immersion heater with a fixed handle, which makes it easy to lift in and out of the tank and allows it hanging during the times when not in use.

The heater and controller is designed as one unit and may not be disabled or repaired by other parties. Always contact the seller if any work needs to be done regarding the unit. This heater unit is designed to work with a total maximum output of 3200 Watt and 230V. The control box manual must be read accordingly.

INSTALLATION AND COMMISSIONING

The control unit needs an electrical connection, 230V/50Hz Max 16A.

The unit is **not** equipped with a **earth leakage breaker** The system has **no overheating protection** but controller has a heating limitation currently set on 90°C

Operation and use / Daily operation

This system is user friendly designed to control the heating process automatically.

Begin heating

1. Fill the IBC container to minimum half full with non-flammable liquid.
2. Mechanically mount the heater through the top filling hole in your IBC container
3. Make sure the heating coil is fully covered in non-flammable liquid
4. Make sure the 230V socket of choice is protected by a 30mA earth leakage breaker
5. Connect the 230V Schuko plug into a minimum 10A socket
6. Change the temperature of choice by pressing the arrow buttons for UP/Down on the controller (please refer to the DigiTherm Manual)
7. The system will automatically heat the fluid to your temperature of choice
8. Make sure the fluid level never drops below half full or the heating coil is not fully covered in non-flammable liquid, this will cause serious damage to the heater.



NOTE! The heater may reach very high temperature. Warn people handling the equipment regarding hot area (warning signs, fence off).

Stop heating

1. Disconnect the 230V Schuko plug into a minimum 10A socket
2. Lift the heater out of the IBC container and make sure not to touch the heating coil, it may still be very hot.
3. Store the heater and control unit in a dry and safe place



NOTE! The system is not certified for explosive environments.

NOTE! There is power in the cabinet even when the controller is off.



NOTE! When the work is to be done on the heater or control cabinet, **power cord (mains cable) must be disconnected**. The system has a "Solid state relay". The power output has dangerous voltage even when heating is off.

The equipment requires the following three criteria to heat.

Power cord connect to 230V

The controller has sensor connected.

The controller's setting value (set point) exceeds the actual value

MAINTENANCE

NOTE! There is power in the cabinet even when the controller is off.



- Before maintenance is done input voltage must be disconnected in a proper and safe manner.
- Make sure that the cabinet has no power with proper equipment.



- Make sure that all cables are intact and tightened correctly.

• It is important to keep all parts of the system clean, controller, cables and heater / heaters as much as possible free from dirt.



Never perform cleaning when the system is turned on!



Electrical work on the equipment must only be performed by trained personnel.

TECHNICAL DATA

EMC-class: B

Placement: Indoors/Outdoors

Protection: IP65

INCOMING

Voltage: 230V

Frequency: 50Hz

Fuse: max 16A

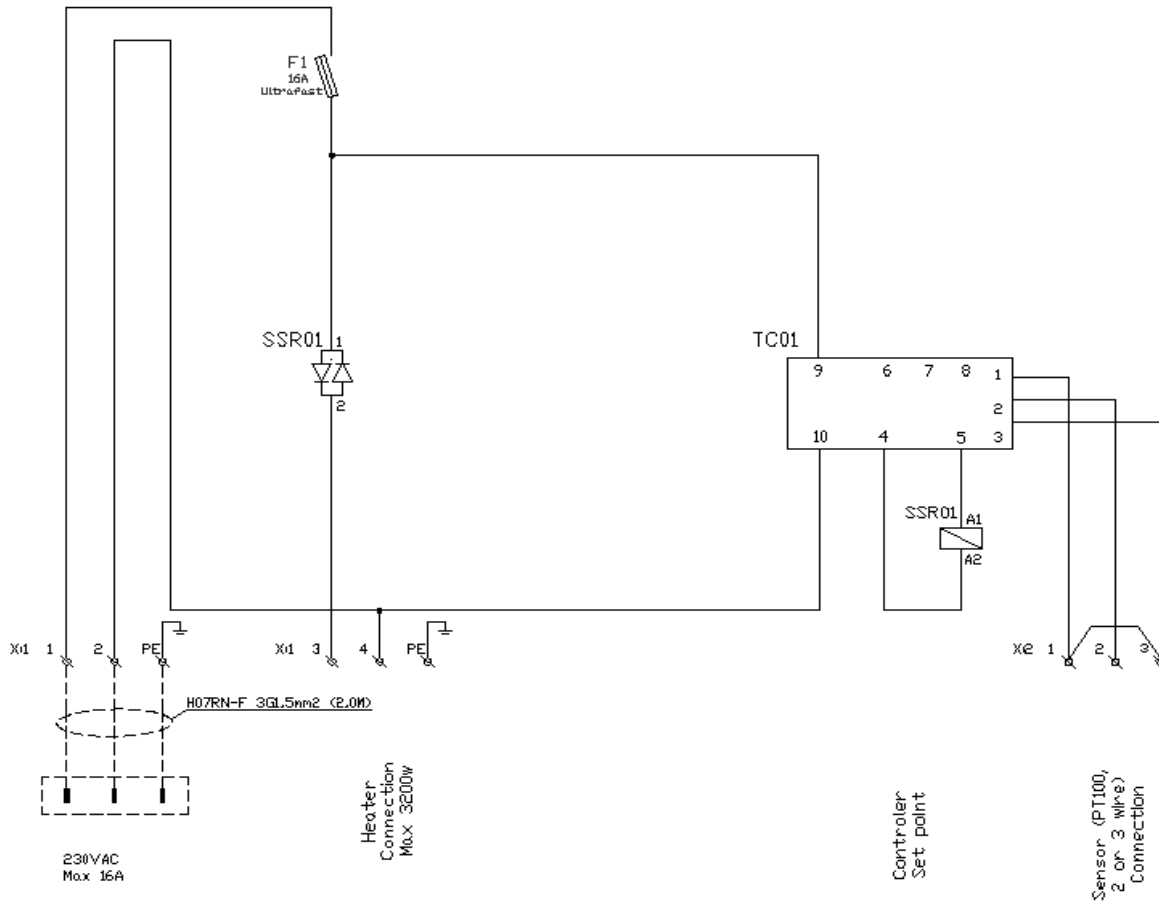
OUTGOING

Voltage: 230V

Frequency: 50Hz

Power: max 3200W

ELECTRIC DIAGRAM



SPARE PARTS

Recommended spare parts and consumables.

Spare parts list

Number	Product	Part	Quantity
1	Fuse	FWP-16G10F	1