

LAST UPDATED 10:31:47 GMT



## ACTIVE UNIT

## STATUS INFORMATION

ALARM	NO
RUNNING	0.5
CURRENT RUNTIME	RESET
RESET FAILURE	

## SERVICE INFORMATION

TOTAL RUNTIME	36:54 H
TOTAL RUNCOUNT	579



# Monitoring, communication & protection interfaces for wastewater pumps with sensors



## GRUNDFOS IO 113

The IO 113 forms an interface between a Grundfos wastewater pump with analog and digital sensors and the pump controller.

They are mainly used with Grundfos SE/SL 9-30 kW and S wastewater pumps.

The most important sensor statuses are indicated on the front panel.

One pump can be connected to an IO 113 module. Together with the sensors, the IO 113 forms a galvanic separation between the motor voltage in the pump and the controller connected.

The IO 113 is normally placed in a cabinet together with power supply, switch gear equipment and surge protection.

### By means of the IO 113 it is possible to:

- Protect the pump against over-temperature
- Monitor sensors for analog measurement of:
  - motor winding temperature
  - water content [%] in oil
  - stator insulation resistance
  - bearing temperature
  - digital measurement of moisture in motor
- Stop the pump in case of alarm
- Remote monitoring of the pump via RS485 communication (Modbus or GENIbus) by PC Tool for Water Utility (wired or wireless) or by a SCADA or PLC system via CIU data communication interfaces
- Operate the pump via frequency converter.

#### Variants:

IO113 standard variant PN: 98097391  
 IO113 with communication PN: 98097390

All details are available on the related datasheets



## GRUNDFOS SM113

The SM 113 sensor module is used for the collection and transfer of sensor data of a wastewater pump.

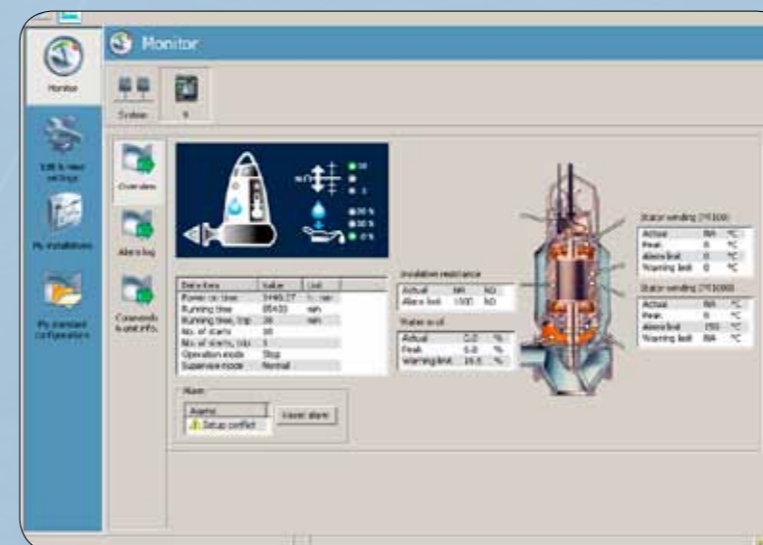
The SM 113 works together with IO 113. They communicate by Power Line communication using Grundfos GENIbus protocol.

The SM 113 can collect pump data from

- current input, 4-20 mA, for vibration
- current input 4-20mA, spare
- current input 4-20mA, for water-in-oil/water in air sensor
- PT 100/PT1000 for main bearing temperature
- PT 100/PT1000 for support bearing temperature
- PT 100/PT1000 for stator temperature
- PT PT1000 for Stator temperature
- Pt1000 thermal sensor
- digital input

### By means of the SM 113 it is possible to:

- have powerline communication of pump data
- monitor sensors and inputs for analog measurement
- enable proactive maintenance of wastewater pumps
- send alarms and warnings on a SCADA system
- pass sensor data to PC Tool water utility
- protect pumps



#### SM 113 sensor module:

SM 113 PN: 98149751 to connect only to IO113 interface (98097390) with communication

## SEE THE BIGGER PICTURE

Grundfos is a global leader within water handling technology. Our passion is to bring you all the products you require to create and operate pump systems that combine reliability, cost-efficiency – and innovation. Our products are for use in water supply and wastewater infrastructure on any scale.

Grundfos has a full line of products and systems for the intake, treatment, and distribution of drinking water and for the transport and treatment of wastewater. We also offer expertise and industry insight that can increase reliability and reduce lifecycle costs for water utilities.

Key product areas include:

-  Submersible pumps
-  Surface pumps
-  Sewage pumps
-  Mixers, flowmakers & recirculation pumps
-  Pumping stations
-  Monitoring & controls
-  Dosing & disinfection
-  Aeration equipment

Further details about Grundfos communication interfaces and Remote Management are available on request – contact your local Grundfos office or representative.

Our products are the result of decades of engineering expertise. Supported by a worldwide service network. Visit [www.grundfos.com](http://www.grundfos.com) for more.