

17.0 Fault finding checklist

Fault event	Fault Detected and Remedy
SERVICE LED flashing every 10 seconds Internal buzzer sounding for 1 second at weekly test time	Battery's low Replace battery with new ones Refer to Service mode section 7.1 to reset
SERVICE LED Flashing every 5 seconds	12 month service required Arrange for Service and Annual test Refer to Service mode section 7.1 to reset
SERVICE LED flashing every 1.5 seconds Internal buzzer sounding every 30 mins Digital output DO1 changed over	Pump failed healthy test – Low current Outside of FLC – 30%, Service pump Refer to Service mode section 7.1 to reset
SERVICE LED flashing every 1 seconds Internal buzzer sounding every 30 mins Digital output DO1 changed over	Pump failed healthy test – High current Outside of FLC + 30%, Repair/Service pump Refer to Service mode section 7.1 to reset
FAULT LED flashing every 2 seconds Digital output DO1 changed over	Fire Mode Active Restore system pressure and press Test/Reset button on controller
FAULT LED flashing every 1 seconds Internal buzzer sounding every 30 minutes Digital output DO1 changed over	Pump failed healthy test – Excess current Greater than 14.3 Amps, Repair/Service pump Refer to Service mode section 7.1 to reset
FAULT LED flashing every 1.5 seconds Internal buzzer sounding every 30 minutes Digital output DO1 changed over	Pump failed healthy test – Pump fuse blown or pump fault. No current. Less than 1 Amp Replace fuse/repair pump Refer to Service mode section 7.1 to reset
FAULT LED Flashing every 10 seconds Digital output DO1 changed over	Exceeded 10 pump starts in a 7 day period System leak detected, fix leak. Refer to Service mode section 7.1 to reset
FAULT LED Flashing every 15 seconds Digital output D02 changed over after 60 second hold off	Low water level detected in tank Check water tank level, top up tank
POWER LED off Internal buzzer sounding every 30 minutes Digital output DO1 changed over	Mains Power failure or Controller fuse failure (> 2 Hours without mains power) Restore mains power Refer to Service mode section 7.1 to reset
Alarm! LED ON Internal buzzer sounding constantly Digital output D03 changed over	Flow switch activated, Sprinkler head activated. Restore system pressure and press Test/Reset button on controller

GRUNDFOS INSTRUCTIONS

The Digital outputs (D01/D02/D03) represent the following information:

Digital Output	Fault detected
D01	Fault detected by the controller refer to the checklist above. LED coding will describe fault found.
D02	Low water low level device (level switch in breaktank) has been activated.
D03	Fire Alarm device (system flow switch) has been activated.

System operation problems can be diagnosed using the following checklist:

Fault	Possible cause(s)	Corrective Action(s)
Pump does not run when "Test/Rest" button is pressed for 3 seconds	<ol style="list-style-type: none"> 1) No electrical supply to Pump/FireSAFE control panel. 2) Pump fuse blown. 3) Controller fuse blown. 4) Faulty Controller. 5) Power wiring to pump/controller. 	<ol style="list-style-type: none"> A) Check power LED ON on controller front. B) Check Fault LED, refer to above coding table. C) Check electrical supply to pump D) Contact your system supplier/Grundfos Service for remedial action.
Pump does not reach the duty point but continues to run.	<ol style="list-style-type: none"> 1) Not enough water getting to the pump. 2) Air trapped in pump and or system. 3) Small demand from system or leak. 	<ol style="list-style-type: none"> a) Check suction isolating valve is fully open. b) Bleed air from system and pump. c) Check system for demand/leak. d) Contact your system supplier/Grundfos Service for remedial action.
Pump does not reach the duty point while running and shuts off.	<ol style="list-style-type: none"> 1) Pressure switch setting too low 2) Pressure switch fault. 3) Wrong FireSAFE unit specified/delivered 	<ol style="list-style-type: none"> a) Check settings of the pressure switch are not too low. b) Replace pressure switch c) Check unit is suitable for duty point required. d) Contact your system supplier/Grundfos Service for remedial action.
Pump delivers correct pressure, but does not stop with no demand.	<ol style="list-style-type: none"> 1) Pressure switch setting too high 2) Pressure switch fault. 3) Demand from system/leak 4) Pressure vessel settings (if used) 	<ol style="list-style-type: none"> a) Check settings of the pressure switch are not too high. b) Replace pressure switch. c) Inspect system. d) Check vessel pre-set pressure. e) Contact your system supplier/Grundfos Service for remedial action.
Pump does not run	<ol style="list-style-type: none"> 1) Pressure switch has been disconnected from the PCB 	<ol style="list-style-type: none"> a) Check connections at pressure switch ends and PCB b) Check wire for breaks c) Check Pressure switch plug in the correct PCB socket d) Check pressure switch plug is correctly seated in PCB socket
Pump does not start Alarm! LED ON Buzzer ON	<ol style="list-style-type: none"> 1) Pressure switch and Flow switch plugs in wrong sockets 	<ol style="list-style-type: none"> a) Refit plugs in correct sockets see wiring diagram
Fire Mode engaged, pump on but no sprinkler head activated	<ol style="list-style-type: none"> 1) Leak in system great enough to cause pressure drop and engage Fire Mode 	<ol style="list-style-type: none"> a) Find and fix leak