



Accepterad
monteringsanvisning
2016:1



WaterFuse® - Equipment

User Manual
&
Installation Instructions



WaterFuse®

Thank you for choosing the WaterFuse® water switch.
We hope that WaterFuse® will meet your expectations as a simple yet effective protection against water damage due to damaged pipes or equipment. The manual is divided into two parts, one for the user and one for the installer, in order to provide simple and clear instructions for the user and the necessary information for the installer.



Safety

Read this manual carefully and follow the instructions for placement and usage.



The product may only be connected by a qualified installer. The warranty does not cover repairs of faults caused by faulty installation or incorrect use of the appliance.



SINTEF



Recycling

Used products must be left at a collection point for the recycling of electrical and electronic components. By ensuring that the product is handled correctly, you help to prevent any negative environmental and health effects that may occur if the product is disposed of as normal waste. For further information on recycling, please contact local authorities, your household waste disposal service, or the shop where you purchased the item.

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User Manual

1.1 General Information:

WaterFuse® Equipment reduces the risk of water damage through the use of water sensors that turn off the water when water is indicated, a timer on the water, and the ability to easily turn off the water manually or via external control.

The product is fitted on water-connected appliances such as dishwashers and coffee machines in order to protect against water damage if the appliance or its connections should start to leak. It can also be connected to external controls e.g. an alarm or property control for turning the water on and off. There is a timer function on the ON button which means that the water is on for 12 hours and then automatically switches off. (This can be changed via the DIL switches to 1h, 6h, or manually OFF.)

The OFF button turns off the water immediately and Delayed OFF  turns it off with a 2h delay. (This can be changed via the DIL switches to 15 minutes.)

While the water is on, the water sensor continuously detects if a water leak has occurred and then automatically shuts off the water.

As the water switch is installed, a washing machine can also be placed in the kitchen without a floor drain, if there is a waterproof surface and a water sensor is placed so that any water leaking from the equipment can be detected so that the leak can be automatically stopped. This of course also applies to other pressurised equipment, such as dishwashers, coffee makers and refrigerator/ freezer with automatic water supply. water sensor.

Components

- Central unit, art. no. 2220092 - Motorised ball valve, art. no. 2130051 (DN15)
- Water sensor, art. no. 2230011
- DC adapter, Manual

The motorised ball valve can be ordered G15 (DN15), G20 (DN20).

(Up to three parallel motorised ball valves can be installed. Additional valves can be ordered separately)

1.2 The Different Parts:

The central unit:

The central unit controls the water unit and looks for leaks from the equipment with the help of the water sensors.

Mount in a suitable place near the appliance intended to be monitored.



Motorised ball valve:



Motorised ball valve to turn water supply ON and OFF.

If the power goes out, they can also be operated manually with a mechanical knob on the unit. Lift the knob 5 mm and turn clockwise to close the valve.

The indicator next to the knob shows open/closed.

Fitted by the water meter.

Water Sensor:

The water sensor is placed under the appliance which is to be monitored. If it indicates presence of water, the central unit shuts the motorised ball valve and the leakage is stopped. Two water sensors are included, one single and one double; which one you use depends on how you want to place the sensors.

Fitted underneath the appliance which is to be monitored with the included Velcro tape.



1.3 Daily Operation:

If external control is used, see section 1.5


Turn on the water

- Press ON. Green light indicates that the water is on.
- The water stays on permanently or according to the set timer.
The timer for the water being on is set using the DIL switches, see section 2.3. (Factory setting 12h) Repeatedly pressing ON reloads the timer with the set time.

Turn off the water

- Press OFF. Red light indicates that the water is off.

Delayed shutoff of the water

- Press DELAYED OFF.  Red light indicates that the water will turn off after a while.
- The time until the water is switched off is set with the DIL switches, see section 2.3. (Factory setting 2h) Repeatedly pressing DELAYED OFF reloads the timer with the set time.

1.4 Alarm:

The water sensor indicates water

- Water indication from a water sensor. The ball valve closes automatically, and the central unit goes to the OFF position. The ALARM LED flashes, and the buzzer pulsates.
- Fix the error. If necessary, contact the installer.
- Confirm the alarm by pressing OFF.

1.5 External Control:

With the help of external control, an alarm or property control can control the water ON/OFF. Note that the last keystroke or control signal overrides the previous ones. Connect according to the description in section 2.4.

2 Assembly Instructions

2.1 General:

The product must be installed by a person who has the professional knowledge required to perform the installation correctly. Unless the installation is performed by a professional, the insurance companies may claim that the insurance does not cover any damage that has occurred and that the offers made by the insurance companies to the property owner are invalid.

The ball valve is exercised daily through the closing / opening that takes place when water is turned off or on. If the ball valve is open for more than three days, it will be automatically exercised, but the water will not be completely turned off.

A washing machine can also be placed in the kitchen without a floor drain, if there is a waterproof surface and a water sensor is placed so that any water leaking from the equipment can be detected so that the leak can be automatically stopped. (According to Safe Water Installation 2016: 1 Section 3.6.3)

This of course also applies to other pressurised equipment such as dishwashers, coffee machines, and refrigerators / freezers with automatic water supply. If a water-connected appliance other than a dishwasher or washing machine is connected, the installation must be supplemented with a non-return valve, according to Safe Water Installation 2016:1 Section 4.3.4.

2.2 Installation:

Motorised ball valve: (art. no. 2130051)

The unit is intended for tap water, 0-60 ° C and 0-10 bar.

Fitted after the water meter and the water main. It can be mounted in all positions, horizontally, vertically, upside down, and regardless of flow direction. The unit has an internal R-thread. Connect to them to pipes, for example with compression fitting according to the pipe and coupling manufacturer's instructions. Use the required sealant. The unit must not be mounted in a concealed place; it must be placed so that it can be changed and so that any leaking water can be easily detected. The units must be installed in a room with a waterproof floor, in a distribution cabinet, or in a custom space. If a distribution cabinet is used, the installation instructions for this must be followed.

After mounting, the installation must be checked for leaks with the tap water installation's existing water pressure according to the instructions on www.säkervatten.se (Up to three parallel motorised ball valves can be installed. Additional valves are ordered separately.)



Central unit: (art. no. 2220092)

Install in a suitable place near the space near the appliance which will be monitored. The box has a "button" on the underside that is used to open it.

The cable from the ball valve is routed to the central unit and connected to the

2-pin terminal V3 with red cable to +. (For more valves, both V1 and V2 are used.)

The water sensor has a socket that is connected directly to the outside. The supplied DC adapter must be used for power supply or if the property has 12 vdc, it is connected via a terminal block on the circuit board. All cables can be connected on the back of the central unit to avoid visible wiring, disconnect the centre plate on the mounting plate and connect the cables to the terminals. Alternatively, use the premade hole at the bottom of the casing. See section 2.5.



"Button"

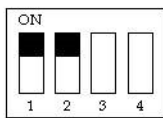
Water sensor: (art. no. 2230011)

The included water sensor is placed under the appliance which is to be monitored and is easily connected to the socket directly in the central unit or via a terminal directly on the circuit board. Use the supplied Velcro tape to mount the water sensor.



2.3 Settings:

There are a number of settings that can be changed for the product. Settings are changed with dip switches on the central unit circuit board. Changes to the dip switches are easily made by using a pen or a small screwdriver to move the switch. The black marking below shows the plastic switch you are moving. The plastic switch can be black, white, or blue.



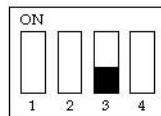
Manual shutoff



Delayed shutoff for 2 hours



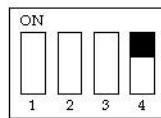
Water on for 1 hour



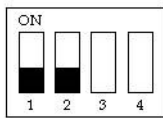
Delayed shutoff for 15 minutes (Factory setting)



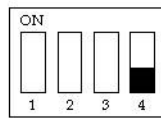
Water on for 6 hours



Water shuts off directly after deactivation of the external signal



Water on for 12 hours (Factory setting)



Delayed shutoff when the external signal is deactivated (Factory setting)

2.4 Connection to Alarm or Other Remote Controls

WaterFuse® Appliance can be connected to a master alarm or property control system and thus becomes part of that system. This allows you to turn the water to the equipment on and off automatically.

The input port uses optocouplers to protect the electronics.

Suggestion for connection to external controls:

- Jumper + Out with + Ext. Install switch between –Ext and 0v.
- When the switch is closed, the optocoupler / signal is activated and the water is turned on.
- When the switch is opened, the optocoupler / signal is deactivated and the water is turned off immediately or with a delay according to DIL switch 4.

2.5 Connecting the Cables:

Terminal block - K82

Ball valve 1 is connected to V3. Red on +.

Terminal block - K80

Ball valve 1 is connected to V1. Red on +. (If connecting via the back cover)

Ball valve 2 is connected to V2. Red on +. (If extra ball valve is fitted)

The terminal outputs for V1 and V2 are parallel to V3 on K82.

Extreme voltage supply 12vdc between +12/24 and 0v.

Terminal block - K81

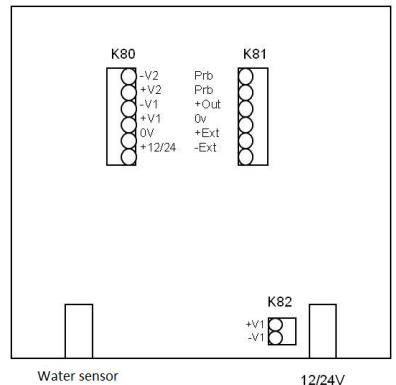
Water sensor between Prb and Prb.

External control of on / off with + Out, 0v, + Ext, -Ext.

+ Out = + 12vdc

0v = GND (0v)

+ Ext, -Ext = Connection to optocoupler (alarm input)



3 Technical Specifications

ELECTRICITY

230vac for 12v dc adapter

PHS

G20(DN20) alt. G15(DN15).

Motorised ball valve with
manual override

Up to three parallel motorised
ball valves may be installed.



4 Warranty and Limitation of Liability

In addition to the terms of the Consumer Purchase Act, a 1-year functional warranty is provided for the product.

The warranty stipulates that during normal use and maintenance, the product must be free from defects in design and function. The warranty period is calculated from the date of purchase, which must be proven by a receipt from the place of purchase. The warranty presupposes that the product has been installed appropriately and in accordance with the written instructions. The plumbing installation must be completed by a plumber.

If you have questions or problems with your product, you should first contact the dealer who sold or installed your equipment. Before you report a fault /complaint about your broken product, please read the operating instructions and, if possible, check that all settings are correct. The warranty stipulates that defective parts or components will be replaced with defect-free ditto. The customer is responsible for all overhead, unless the Consumer Sales Act is applicable. This means that shipping costs, inspection, and assembly costs are not included in the warranty commitment.

If possible, use the original packaging if the product needs to be transported.

The transport companies do not compensate for damage if the product has been poorly packaged.

The warranty does not apply to defects that occur during or after making your own changes to the product's function or appearance, such as rebuilding, upgrading, or other configurations of the product made without written approval.

The warranty does not cover faults that have arisen through an accident or malicious damage.

The warranty does not cover deterioration that has occurred after the purchase, if the seller can prove it probable that the deterioration is due to neglected or incorrect maintenance or that the appliance has been used for something other than its intended purpose, that inappropriate measures, unauthorised or incorrect interventions have been made or that installation instructions were not followed.

Batteries are considered consumables and are not covered by the warranty.

The reseller is not responsible for loss or damage of any kind caused by this product. The liability is, in any case, strictly limited to the replacement of the product.



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