



**Accepterad**  
monteringsanvisning  
2016:1



# WaterFuse® - Public Area

User Manual  
&  
Installation Instructions



**WaterFuse®**

Thank you for choosing to the WaterFuse® automatic water shut-off valve. We hope that WaterFuse® will live up to your expectations as a simple yet effective protection against water damage caused by pipe or equipment damage. 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**

The ball valves have been tested by Sintef, in accordance with EN 13828 and NT VVS 094



### **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® - Public Area reduces the risk of water damage in public spaces such as schools, hospitals, shopping centres, and other public spaces. The product is based on the principle that if a space is occupied, there is water, but not otherwise. This means that if vandalism occurs or if someone forgets to turn off a tap, the water is switched off automatically when the space is unoccupied. The extent of the damage is therefore much smaller and easier to repair. The same presence detector used for the water is also used for the lighting. This means that the room always has water when the lights are on and when the lights are switched off, the water is also switched off.

As a result, energy is saved as the lighting is not used unnecessarily. Taps that have been left running, but which do not cause water damage, are also automatically turned off.

The ball valves are mounted on the incoming cold and hot water and connected to the control unit via cable. The presence detector is placed so that it detects any presence in the space being monitored and is also connected to the control unit via cable.

The control unit can be controlled by any 230vac control such as a switch or a timer. This makes it possible to control the water on/off through various 230vac solutions.

## Included Items

- Control unit 2 art. no. 2220111, two (2) Motorised ball valves art. no. 2130051 (DN15)
- Presence detector E1904391 (optional), – one (1) extra Motorised ball valve (optional).

The motorised ball valves may be ordered, DN15 or DN20.

The product is delivered in different package combinations; the above items are not always included.

The products are marked with a label stating the article number and date of manufacture.



## 1.2 The Different Parts:



### **The Control Unit: (art. no. 2220111)**

The control unit receives the signal from the presence detector and controls the ball valves. The signal from the presence detector is 230 vac and the motorised ball valves run at 12 vdc. Up to three motorised ball valves can be controlled with one control unit.

*Mount in a suitable place in the monitored space.*

### **Motorised Ball Valves: (art. no. 2130051 DN15)**

Motorised ball valves to turn water supply ON and OFF.

The units are intended for tap water, 0-60°C and 0-10 bar.

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.

*Mount in a suitable place on the water pipes which are to be controlled.*



### **Presence Detector:**

If an existing presence detector is available, it can be used to control the control unit if it can control fluorescent lights and other reactive loads, but not if it can only control incandescent lights.

The same presence detector is used for the lighting in the room.

We recommend Eljo Trend, E1904391. The delay on the presence detector is set to how long the water and lighting should be on after no presence is detected.

*Mount in a suitable place in the monitored space.*

### **1.3 Daily Operation:**

Monitoring of presence in the space takes place continuously and no daily measures need to be taken.

## 2 Installations 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 products are marked with a label stating the article number and date of manufacture.

### 2.2 Installation:

#### **Motorised Ball Valves: (art.no. 2130051 if DN15 is used)**

The units are intended for tap water, 0-60°C and 0-10 bar.

The ball valves are mounted on the incoming cold and hot water to the monitored space and connected to the control unit via cable. They can be mounted horizontally, vertically, or upside down and regardless of the flow direction. The unit has an internal R-thread. Connect them to pipes, for example with compression fittings. Use the required sealant.

The units must not be mounted in a concealed place; they must be placed so that they are replaceable and so that any leaking water can be easily detected. The units must be installed in rooms 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](http://www.säkervatten.se)



#### **The Control Unit: (art. no. 2220111)**

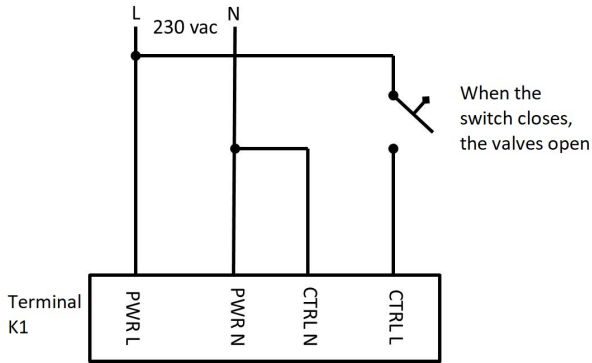
Mount in a suitable place near the space which will be monitored. The cable from the presence detector (230 vac) is connected on one side of the control unit and the cables to the motorised ball valves (12vdc) on the other side. The wiring from the motorised ball valves and the presence detector is drawn to the control unit and connected to the K2 6-pole terminal block with the red cable to +. Up to three motorised ball valves can be mounted on each control unit. Each ball valve has its own position on the terminal block but are controlled in parallel.



The connection of 230 vac from the presence detector takes place on the K1 4-pole terminal.

The direct 230 vac is connected to PWR L and PWR N. Jumper between PWR N and CTRL N. The control signal from the presence detector, which indicates presence, must be connected to CTRL L.

The red LED indicates that the ball valves are open, Green LED that they are closed.



### Presence Detector:

If an existing presence detector is used, read the product manual before installation. The control unit requires that the presence detector is capable of controlling fluorescent lamps and reactive loads.

If Eljo Trend E1315005 is used, connect as follows:

The neutral conductor is connected to N on the presence detector. Phase is connected to L on the presence detector. A control signal is output at  $\uparrow$  during active presence, which is connected to the control unit on CTRL L.

The time of switch-off after presence detection can be adjusted by lifting the centre cover between 1s– 20 minutes, the norm is 2 minutes. If the detector is like the Eljo Trend, there is a light level sensor, which must be adjusted so that presence is always activated no matter how bright it is in the room. For Eljo Trend, adjust the sensor clockwise to the maximum.







### 3 Technical Specification

#### EL

230 vac for the control unit

12 vdc for the motorised ball valves

#### VHP

G15, G20,  
(DN15, DN20)

Motorised ball valve with  
manual override

## 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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