



# **Operating Instructions for Humidity Annex Switch**

**Model: AFS-G3**



## 1. Contents

---

1. Contents.....	2
2. Note .....	3
3. Instrument Inspection .....	3
4. Recommended usage .....	4
5. Operating Principle.....	4
6. Mechanical connection.....	4
7. Electrical connection .....	5
8. Adjusting the switch point.....	5
9. Maintenance .....	5
10. Technical Data .....	6
11. Order Codes .....	6
12. Dimensions .....	6
13. Disposal .....	7
14. EU Declaration of Conformance .....	8

### Manufactured and sold by:

Kobold Messring GmbH  
Nordring 22-24  
D-65719 Hofheim  
Tel.: +49(0)6192-2990  
Fax: +49(0)6192-23398  
E-Mail: [info.de@kobold.com](mailto:info.de@kobold.com)  
Internet: [www.kobold.com](http://www.kobold.com)

## 2. Note

---

Please read these operating instructions carefully before unpacking and putting the unit into operation. Follow the instruction precisely as described herein.

The instruction manuals on our website [www.kobold.com](http://www.kobold.com) are always for currently manufactured version of our products. Due to technical changes, the instruction manuals available online may not always correspond to the product version you have purchased. If you need an instruction manual that corresponds to the purchased product version, you can request it from us free of charge by email ([info.de@kobold.com](mailto:info.de@kobold.com)) in PDF format, specifying the relevant invoice number and serial number. If you wish, the operating instructions can also be sent to you by post in paper form against an applicable postage fee.

Operating instructions, data sheet, approvals and further information via the QR code on the device or via [www.kobold.com](http://www.kobold.com)

The devices are only to be used, maintained and serviced by persons familiar with these operating instructions and in accordance with local regulations applying to Health & Safety and prevention of accidents.

When used in machines, the measuring unit should be used only then when the machines fulfil the EC-machine guidelines.

## 3. Instrument Inspection

---

Instruments are checked before dispatch and should arrive in perfect condition. In case of damage, please inform your parcel service / forwarding agent immediately, since they are responsible for damages during transit. Should damage to a device be visible, we recommend a thorough inspection of the delivery packaging.

### **Items included with delivery:**

- Humidity Annex Switch, AFS-G3

## 4. Recommended usage

---

Any use of the AFS-G3 which exceeds the manufacturers specification, may invalidate its warranty and any resultant damage therefore is not the responsibility of the manufacturer. The user assumes all risk for such usage.

## 5. Operating Principle

---

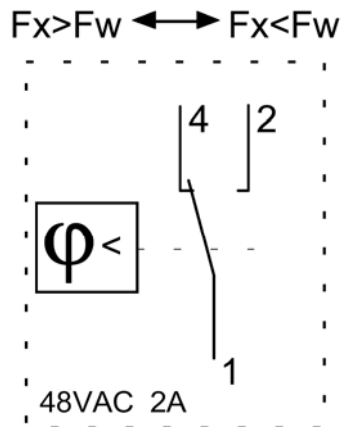
The humidity annex switch, Model AFS-G3, serves to monitor condensed water formation. The hygroscopic module of the measuring instrument is arranged on an aluminum base plate so that the measuring element is near the mounting plate. Protected by the housing, relative humidity close to the dew point allows condensation to form inside. The aluminium base plate is close to the cooling tube and transmits cooling energy to the measuring element. The measuring point can be set inside. The threshold should be adapted for local conditions. The microswitch trips a potential-free SPDT with silver contact plates rated max 2A / 48 V and 100 mA / 20 V<sub>AC/DC</sub>. The AFS requires no supply voltage.

## 6. Mechanical connection

---

If condensed water formation shall be monitored in a room, the most humid location should first be established. The coldest spot does not necessarily have to be the most humid location. It should also be borne in mind that any changes made in the room should not create a different, more humid, spot. The FAS humidity add-on switch must be mounted in such a way that there is good heat exchange with the selected position. Please note also that any condensate must not get into the interior of the housing. Attachment is made by using the supplied binders, which can be used for pipes with diameters of up to 50mm. The housing must not be exposed to any outside heat as this may cause erroneous measurements.

## 7. Electrical connection



## 8. Adjusting the switch point

It is important to set the correct switch point for the equipment. A set value that is too high can cause dew to form, as the conditions at the measuring point are not constant. Tests have shown that good results are achieved at a switch point of 80 % rh. The switch point can be adapted to the equipment. Open the covering cap and finely adjust the set value.

## 9. Maintenance

The measuring element is maintenance-free in pure ambient air. Aggressive media containing solvents can cause measuring errors and failure, depending on the type and concentration. As with almost all humidity measuring elements, deposits that eventually form a water-repellent film over the sensor are harmful. Such substances are resin aerosols, lacquer aerosols, smoke substances (furnigation) etc.

## 10. Technical Data

---

Operating instructions, data sheet, approvals and further information via the QR code on the device or via [www.kobold.com](http://www.kobold.com)

## 11. Order Codes

---

Operating instructions, data sheet, approvals and further information via the QR code on the device or via [www.kobold.com](http://www.kobold.com)

## 12. Dimensions

---

Operating instructions, data sheet, approvals and further information via the QR code on the device or via [www.kobold.com](http://www.kobold.com)

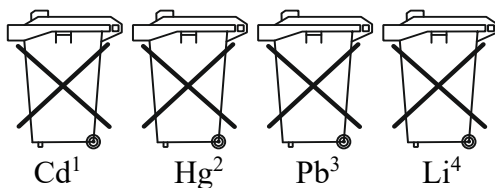
## **13. Disposal**

### **Note!**

- Avoid environmental damage caused by media-contaminated parts
- Dispose of the device and packaging in an environmentally friendly manner
- Comply with applicable national and international disposal regulations and environmental regulations.

### **Batteries**

Batteries containing pollutants are marked with a sign consisting of a crossed-out garbage can and the chemical symbol (Cd, Hg, Li or Pb) of the heavy metal that is decisive for the classification as containing pollutants:



1. „Cd" stands for cadmium
2. „Hg" stands for mercury
3. „Pb" stands for lead
4. „Li" stands for lithium

### **Electrical and electronic equipment**



## 14. EU Declaration of Conformance

---

We, KOBOLD Messring GmbH, Nordring 22-24, 65719 Hofheim, Germany, declare under our sole responsibility that the product:

**Humidity Annex Switch    Model: AFS-G3**

to which this declaration relates is in conformity with the following EU directives stated below:

<b>2014/35/EU</b>	<b>Low Voltage Directive</b>
<b>2011/65/EU</b>	<b>RoHS</b>
<b>2015/863/EU</b>	Delegated Directive (RoHS III)

According to article 2.2 of the EMC directive 2014/30/EU this directive does not apply to the product mentioned above due to the inherent of its physical characteristics

Also, the following standards are fulfilled

**EN 60730-1:2012**    Automatic electrical controls for household and similar use - Part 1: General requirements

**EN 60730-2-13:2008** Automatic electrical controls for household and similar use - Part 2-13: Particular requirements for humidity sensing controls

Hofheim, 04 Sept. 2023



H. Volz  
General Manager

J. Burke  
Compliance Manager