

# EHT Electronic Hygrostat EHT电子湿控器

## Types

GB

EHT Electronic Hygrostat

EHT-2-220 - Normally open (dehumidifying) with frost protection

## 类型

CH

EHT电子湿控器

EHT-2-220A - 常开式(除湿), 有防冻保护

## 1. Application

Electrical controller for drying and providing frost protection in outdoor enclosures. This electronic hygrostat is a fully electronic humidity sensing switch with adjustable switchpoint setting between 15% - 90% RH in increments of 5% RH. If humidity exceeds a set level or temperature drops lower than 4°C, controller will switch anti-condensation device.

## 2. Safety Information

- The control should only be installed by qualified technicians in accordance with the respective national electrical codes.
- Safety and protection against incidental contact is to be ensured through proper installation.
- The technical specifications (voltage and current) as stated on the product must not be exceeded!
- The company charged with the installation of the device must instruct the user of the control system into its functions and in how to operate it correctly. These operating instructions must be kept at a place that can be accessed freely by the operating and/or servicing personnel in charge.

## 3. Installation Guidelines

- The unit is set to operate in NO - Dehumidifying mode.
- The controller provides an extra dry contact which can be used to either switch an independent load or act as a feedback contact for PLC.
- The device is to be installed on a DIN EN 60715 compliant standard rail, please refer to section 6 for mounting and demounting.
- For applications not to be foreseen by the manufacturer of this device, relevant safety standards should be followed and adhered to.
- Electrical connection of the devices are to be made in accordance with connection diagrams as shown in section 8.
- This device is intended for installation in an enclosure that complies with the protection class admitted for this purpose, such as a switch cabinet.
- Suitable for environmental conditions of pollution degree 2.

## 4. Technical Data

Contact :	2 NO (dehumidifying)
Rated Voltage :	100 - 270VAC
Switching Difference :	~ 5% RH
Max Switching Capacity (Relay Output) :	8A @ 240/120VAC resist
Control Range :	15 - 90%RH, 20 - 95%RH
Sensing element :	Electronic
Connection Terminals :	0.5 ... 2.5 mm <sup>2</sup> , terminal screws
Service Life :	> 50,000 cycles
Operating / Storage Temperature :	0 ... 60°C / -20 ... 70°C
Degree of protection :	IP20
Protection Class:	0 (protection class must be guaranteed by installation location)
Weight :	Approx 70g
Housing :	Plastic
Marking :	CE

## 1. 应用

本电子湿控器为户外机柜提供湿度控制及防冻保护。本电子湿控器是一个全电子湿度感应开关，它的设定范围在15%~90%RH之间，每级增量为5%RH。如果湿度超过设定的水平或温度低于4°C，控制器将切换防结霜装置。

## 2. 安全信息

- 只有合格的技术人员才可以按照各自的国家电气规范为产品进行安装作业。
- 通过正确的安装才能确保对偶然接触的安全性和保护。
- 不得超过产品上标示的电压和电流规格!
- 负责安装的公司有责任向使用者说明产品的功能和使用方法。操作指引必须被保存并方便操作和维护人员随时取阅。

## 3. 安装指南

- 产品设置为常开 - 除湿模式。
- 机组提供了一个额外的干接点，可用于切换一个独立的负载或作为一个PLC信息反馈。
- 产品应安装在符合EN60715标准的DIN导轨上，请参照第6节的安装和拆卸方法。
- 对于未在设计应用范围内的其他应用，须参照相关的安全标准。
- 产品的电路连接是根据第8节的连接图。
- 产品用于安装在符合其所需要安全等级的机柜内部（比如开关机柜）。
- 适用于污染等级2的环境条件。

## 4. 技术参数

接触:	2 NO(除湿)
额定电压:	100 - 270VAC
开关湿度差:	~ 5% RH
开关电流 (继电器输出):	8A @ 240/120VAC 抗性
控制范围:	15 - 90% RH, 20 - 95% RH
感应器:	电子
连接方式:	0.5 ... 2.5mm <sup>2</sup> , 螺丝紧固
使用寿命:	> 50,000周期
工作/储存温度:	0 ... 60°C / -20 ... 70°C
外壳防护等级:	IP20
防触电保护等级:	0 (由安装位置保证防护等级)
重量:	约70克
外壳:	塑料
标示:	CE

## 5. Setting Recommendation

Exterior setting: 5% RH increments, 2 colour LED status indicator : operation mode/ error status, frost protection activation 4 °C (default).

LED steady Green: LOAD1 is active, dry contact closed.

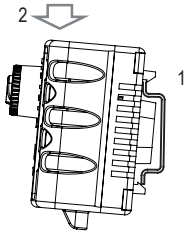
LED blinking Green: Frost protection, LOAD1 is active, dry contact closed.

LED steady Orange: Humidity Sensor failure. LOAD1 will only be switched when frost protection active.

The EHT-2-220 can switch an additional Load of up to 8A (resistive) between terminals 4 and 5 if this contact is not used for unit state indication or PLC feedback. The diagram 8.2 shows a dehumidifying application using a fan heater with a 230VAC heating element and a DC powered Fan. e.g.: DBK Typhoon Series Fan heaters.

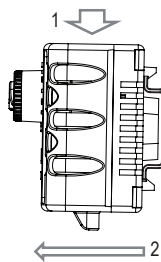
## 6. Mounting 安装方法

1. Hang up at the top  
1. 把产品背面的卡扣
2. Press down to snap on  
2. 把产品按下并扣上

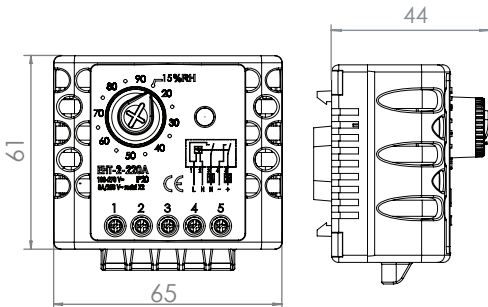


## Demounting 拆卸方法

1. Pull downwards  
1. 适度地从顶部压下产品
2. Demount in a slanted manner  
2. 把产品下端拉出安装导轨



## 7. Dimensional Drawings 尺寸图



## 5. 推荐设置

外部设定：5% RH为单位，双色LED状态指示灯：操作模式/错误状态，防冻保护在4°C启动（默认）。

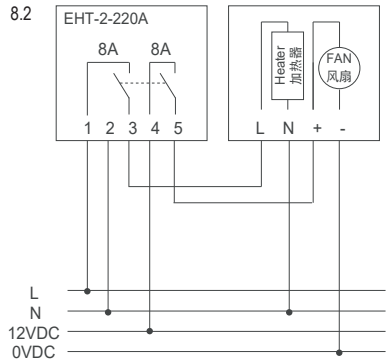
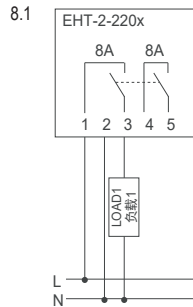
LED稳定绿色：负载1通电中，干接点闭合。

LED闪烁绿色：防冻保护，负载1通电中，干接点闭合。

LED常亮橙色：湿度传感器故障。只有在防冻保护生效下，负载1才会转换

如果端子4和5之间的干接点不是用于状态指示或PLC的反馈，EHT-2-220的开关电流可以高达8A的额外负载（电阻）。图8.2显示一个除湿应用，一个风扇加热器内有230VAC加热元件和一个直流供电的风扇。例如：DBK台风系列风扇加热器。

## 8. Switching Diagram 开关图



## 9. Warranty 声明

The technical data specified herein have been determined under laboratory conditions and in compliance with generally approved test regulations, in particular DIN standards. Technical characteristics can only be warranted to this extent. The testing with regard to the qualification and suitability for the client's intended application or the use under service conditions shall be the client's own duty. We refuse to grant any warranty with regard thereto. Subject to change without notice.

所有列明的技术参数是在实验室的条件下根据标准实验的方法(例如DIN标准)经过实验而获得。只有在以上的情况下，技术参数才是有效的。客户如有对特殊应用或者使用环境的需要，应自行进行实验验证。我方无法对任何客户的实验结果负责。如有内容更改，恕不另行通知。