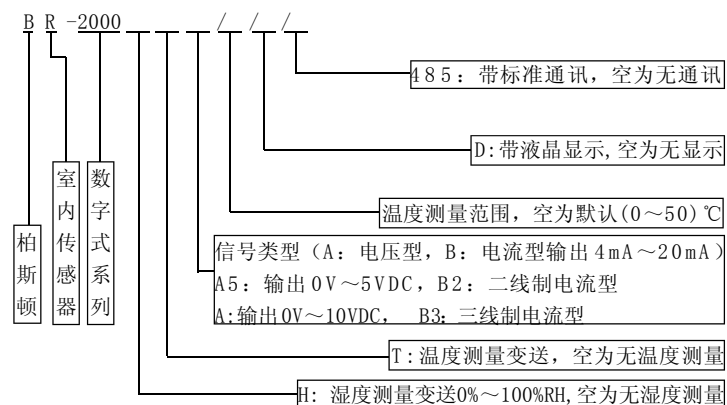


BR-2000/ D 系列 室内数字液晶式温湿度传感器使用说明



1. 型号定义



2. 技术指标

温度分辨率: 0.1℃

精确度: ±1% FS

环境温度: 0℃ ~ 50℃

湿度分辨率: 1%RH

精确度: ±5% RH (23℃±5℃)

环境湿度: 5%~95% RH (不结露)

电源电压: 15V~35VDC (24VDC)

敏感元件: 温湿度数字探头

负载能力: 电流: ≤1mA 保护等级: IP30

接线端子: 能连接 2 x 1.0 mm²

标准通讯: RS-485 (选件)

3. 应用

BR-2000/D 为液晶显示数字式温湿度变送器, 可广泛应用于电厂、制药厂、化纤厂、卷烟厂、印钞厂、无人值守程控交换机机房等净化的厂房环境及楼宇自控领域, 如: 医院手术室、博物馆、档案馆、图书馆等办公环境; 及仓库、弹药库等储存环境的室内温度、湿度测量。温湿度输出信号为电压型, 并有通讯接口可以适应多种控制系统的不同要求。

4. 使用

正确接入 24VDC 既开机, 无需任何操作 LCD 既开始即时显示: 温度值、相对湿度值。左下角图标闪烁表示传感器正常运行。

5. 安装注意事项

- (1)、传感器应置于普通洁净程度的空气环境中, 如暴露在诸如丙酮蒸气、氯气或高浓度烟雾 (香烟) 等环境中将导致其损坏。
- (2)、传感变送器应固定在空气自然循环不受限制的地方, 切勿将传感器置于阳光直射或者靠近灯源、壁炉、暖气以及特别潮湿的地方。

6. 接线注意事项

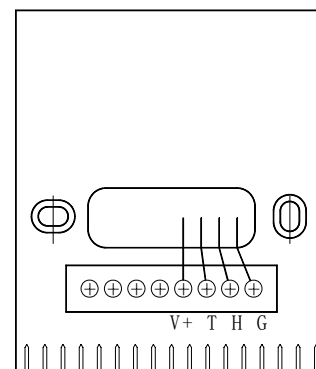
- (1)、传感器温湿度敏感元件及器件应避免静电, 不要用手触摸壳内电路及元器件, 以防损坏。
- (2)、所有引线应与接线标识相符, 并且接线工作只能由专业人员进行。
- (3)、传感器的引线应与高、低电压线路或其它用电设备 (接触器、线圈、电机等) 的走线分开。

(4)、推荐采用屏蔽电缆接线以防干扰, 屏蔽层单端接地 (接控制器的信号地线), 不可以接零线或者大地, 以免引入更多干扰。

(5)、电压输出, 引线长度不应超过 50 m。

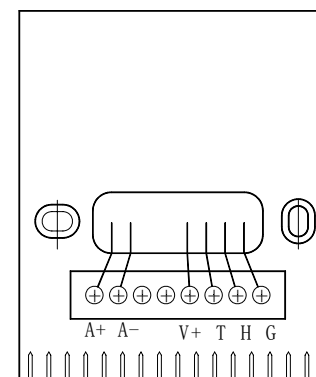
7. 特别说明

由于产品不断改进, 本说明书电气连接图仅供参考, 详细的电气接线图印于产品本身。



无通讯型:

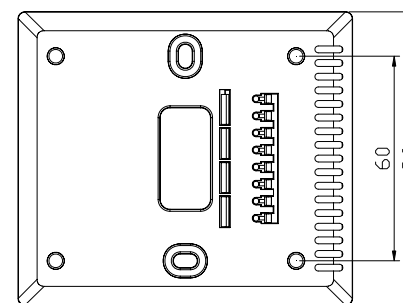
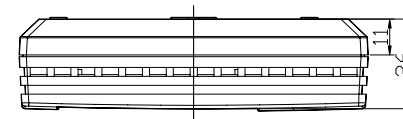
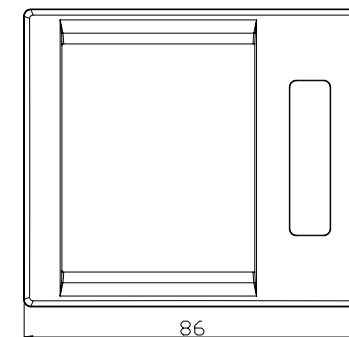
G: 24VDC “-” H: 湿度传输 T: 温度传输 V+: 24VDC “+”



通讯型:

G: 24VDC “-” H: 湿度传输 T: 温度传输 V+: 24VDC “+” A-: 485 通讯 “-” A+: 485 通讯 “+”

接线示意图 (后盖内视)



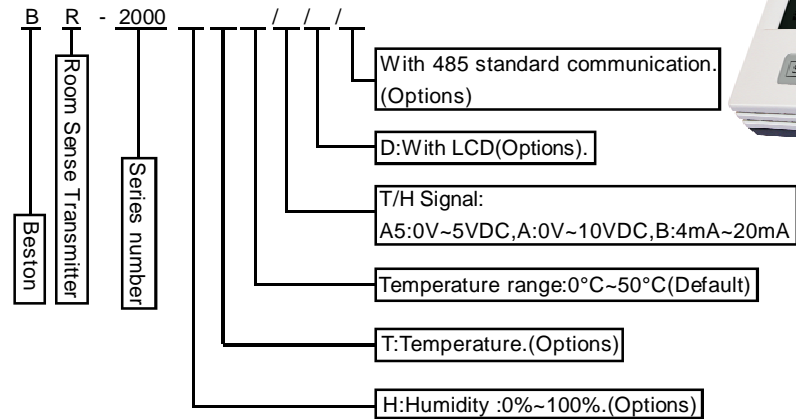
安装示意图

BR-2000/D Series

User's manual of Room Temperature & Humidity Sense Transmitter with Display



1. Model



2. Specifications

Temperature resolution: 0.1°C

Accuracy: ± 1%FS

Temperature: 0°C~50°C

Humidity Resolution: 1%RH

Accuracy: ± 5%RH(23°C ± 5°C)

Humidity: 5%~95%

Power supply: A: 24VDC(15V~35VDC)

A5: 12VDC(11V~30VDC)

Sensitive component: Digital temperature and humidity probe

Load capacity: Current ≤ 1mA

Protection class: IP30

Terminals: 2x1.0 mm²

Standard communication: RS-485(options)

3. Application

BR-2000/D series room temperature & humidity transmitter with LCD, can be widely used in power plants, pharmaceutical factory, chemical fiber factory, cigarette factory, banknote printing plant, unmanned program-controlled switchboard room and so clean factory environment and property controlled area, such as: operating theaters, museums,

archives, libraries and other office environments; And warehouses, ammunition depots and other storage environment of the indoor temperature and humidity measurements. Temperature and humidity output signal for the voltage, and a communication interface can adapt to the different requirements of a variety of control systems.

4. Operation

LCD will begin to real-time display temperature, relative humidity values when power on. The icon on the left bottom corner of LCD will be flashing in normal operation.

5. Installation

(1). The transmitter should work in the circumstance at normal lustration status. The sensor should not be exposed to the circumstances such as acetone steam, acid steam, chlorine, as well as high density smoke, etc., or it will be damaged.

(2). The transmitter should be fixed in the places where the natural circulation of the air is not encountered with confinement. Please do not put the sensor in direct sunlight, or places near lamp,

fireplace, central heating, neither the places where the circumstances are quit moist.

6. Wiring

(1). The sensitive component of sensor should avoid water condensation, static, please do not touch it by hand, or it may be damaged.

(2). All the fuses should be in accordance with the realm code, and the wiring process must be done by professionals.

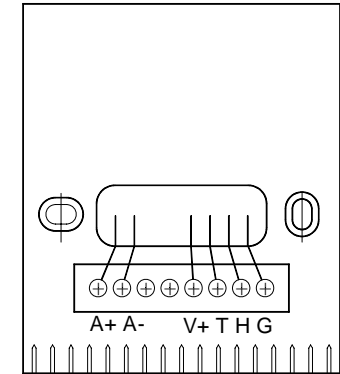
(3). The wiring of sense transmitter should be separated from the wiring of voltage or other conductors which supply power to high inductive load (contactor, coil, electrical machinery).

(4). It should be the best to adopt the shield cable in that it can prevent interference. In the condition that the shield wire is adopted, the shield layer should be connected on the wiring terminal (usually grounding) at one side of the controller.

(5). When using the voltage output transmitter, the length of the cable should be less than 50m.

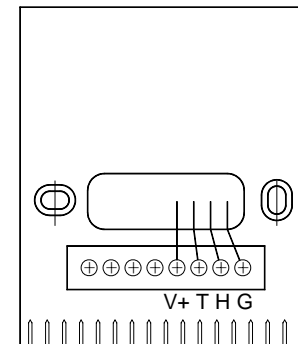
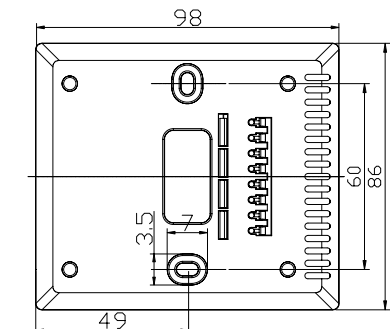
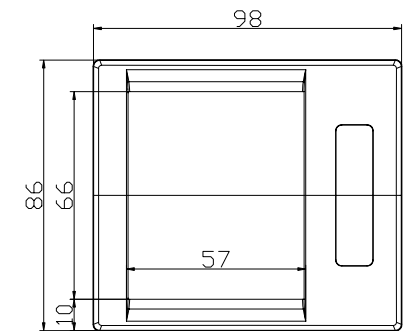
7. Special Note

As the products are improved constantly, the manual electrical connection diagram for reference only, detailed electrical wiring diagram was printed on the product.



Communication type:

G: 24VDC“-” H: Humidity Transfer T: Temperature Transfer V+: 24VDC“+” A-: 485“-” A+: 485“+”



No communication:

G: 24VDC“-” H: Humidity Transfer T: Temperature Transfer V+: 24VDC“+”