

BACnet® IP控制器
PEC系列

安装指导



参考图片

本产品必须由专业人士安装

⚠ 警告：

- 电击危险，安装维护前请务必切断电源。
- 安装前请认真阅读本手册，不按照说明操作会造成设备损坏或者人身伤害。
- 本产品应安装于标准的电气箱内，并使用Class 2变压器供电。
- 所有的接线应该满足当地的电气法规要求。
- 检查本手册中的额定值以及产品上的额定值，确认该产品适合您的应用。
- 变压器的一次侧推荐采用过载保护。
- 保证设备的物理安全，只有授权的人员才能接触到设备及总线。
- 保证设备的网络及上层服务器，安装部署、运维管理的安全性，详情参考上层服务器安全手册。
- 保证设备处于隔离的内部网络。
- 保证系统中的路由器安全部署，运维管理，做好系统加固，详情参考系统选用的路由器的安全配置手册。

产品型号：

控制器型号	类别	UI	DI	A0	D0
PEC8445-PB1-SM	通用	8	4	4	5
PEC8445-PB1-SO	通用	8	4	4	5

产品包含：

- 控制器数量：1
- 控制器安装指导（本手册）数量：1

使用环境：

存储	-40℃ ~ 65.5℃
运行温度	0℃ ~ 50℃
湿度	5%RH ~ 95%RH，不凝露
防护等级	IP20
污染等级	2

电气规格：

额定电压	24VAC, 50/60Hz
功耗	5VA MAX. (仅控制器) 15VA MAX. (包含控制器与所有输入、输出和通讯)

产品中有害物质的名称及含量：

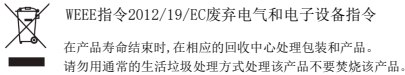
部件名称	有害物质				
	铅	汞	镉	六价铬	多溴联苯 多溴二苯醚
塑料件	0	0	0	0	0
端子	X	0	0	0	0
电路板组件	X	0	0	0	0

本表格依据SJ/T 11364的规定编制。

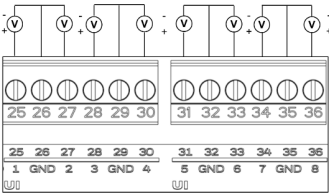
0：表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572规定的限量要求以下。

X：表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。

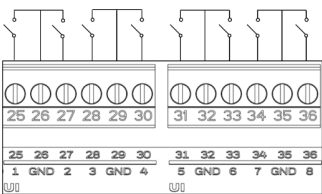
*未列入表内的部件，皆不含任何超出限量要求的限制使用物质。



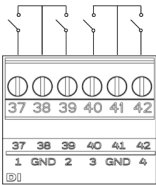
UI 电压输入（Block F 蓝色）



UI 干接点输入（Block F 蓝色）



DI 数字量输入（Block G 黄色）



接线注意事项：

- 通讯以太网：标准RJ45接口和超五类网线。
- 通讯485：建议采用18-22AWG屏蔽双绞线。单股实芯或多股绞合铜线，剥线长度7-8mm，接线端子螺丝扭矩：0.5Nm
- Sy1k, A0, D0, UI, DI：建议采用18-22AWG线。单股实芯或多股绞合铜线，剥线长度7-8mm，接线端子螺丝扭矩：0.5Nm

STA LED 状态

STA LED状态	控制器状态说明
不亮	未供电，LED损坏，供电不足，初始上电，引导程序固件损坏。
常亮(绿)	没有足够的电源启动：检查电源，这需要大约3.5秒；并在上电复位和重新刷新时发生。
慢闪烁模式1 – 1秒亮，1秒灭	正常工作状态。
慢闪烁模式2 – 0.5秒亮，0.5秒灭	设备报警中，下载配置中，配置丢失。
慢闪烁模式3 – 0.25秒亮，0.25秒灭	设备在固件升级模式。

*LED红色闪烁：硬件损坏

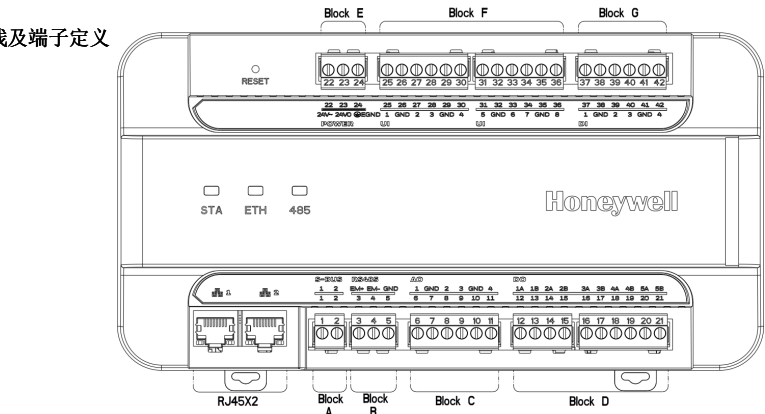
ETH LED 状态

ETH LED 状态	通讯状态说明
常亮（绿）	设备死机，故障。
常亮中每2.5秒灭一下	引导程序模式且没有获取IP。
常亮中每2.5秒灭二下	引导程序模式且有BACnet通讯。
常亮中每2.5秒灭三下	引导程序模式且有BACnet通讯和数据发送。
不亮	未供电，设备故障，死机。
常灭中每2.5秒亮一下	控制器正常工作，没有获得IP。
常灭中每2.5秒亮二下	控制器正常工作并且有BACnet通讯。
常灭中每2.5秒亮三下	控制器正常工作模式且有BACnet通讯和数据发送。
快速亮灭交替闪烁	设备故障，死机。

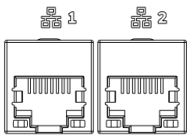
485 LED 状态

485 LED 状态	通讯状态说明
不亮	没有配置扩展模块或配置文件已坏。
常灭中每2.5秒亮一下	控制器正常工作，没有与扩展模块通讯。
常灭中每2.5秒亮二下	控制器正常工作，并且与扩展模块有通讯。
常灭中每2.5秒亮三下	控制器正常工作，正在与扩展模块进行文件传输。

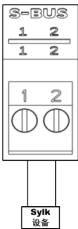
接线及端子定义



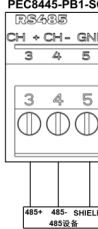
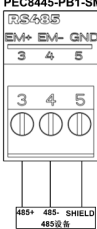
通讯 以太网（RJ45）



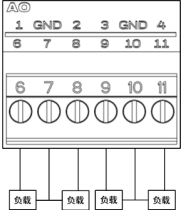
通讯 Sy1k
Block A 灰色



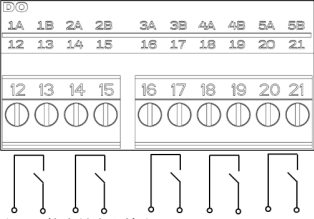
通讯 485（Block B 灰色）



A0 模拟量输出（Block C 绿色）

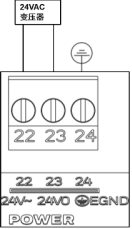


D0 数字量输出（Block D 橙色）

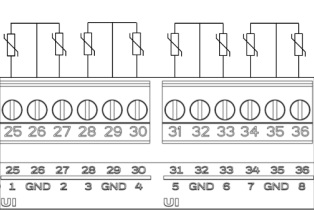


注：干接点继电器输出

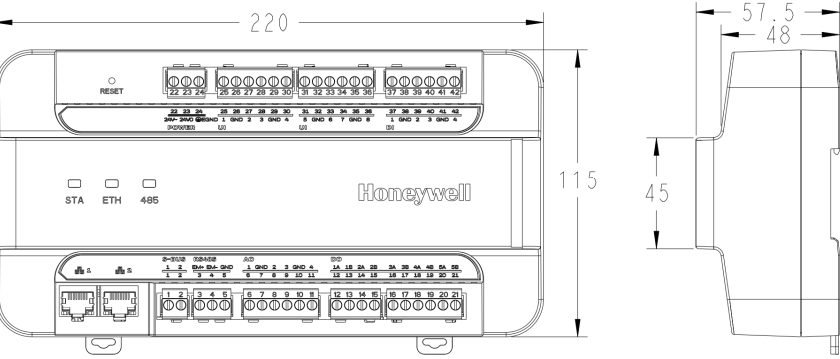
电源（Block E 黑色）



UI 电阻输入（Block F 蓝色）



产品尺寸（单位：mm）



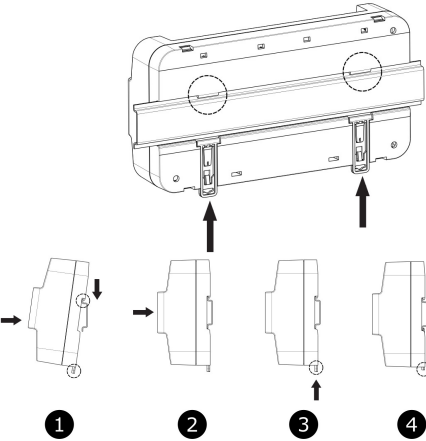
产品安装

安装说明：

- 可拆卸端子，让产品安装维护更加容易；
- 控制器必须安装在有足够空间进行布线，维修和拆卸的位置；
- 产品支持导轨安装，导轨规格EN50022 7.5mmX35mm。

安装步骤：

- 拉出控制器底部的两个卡勾，倾斜控制器，并把控制器顶部的卡勾固定在导轨上；
- 下压控制器使控制器贴合导轨；
- 推入底部两个卡勾，固定控制器；
- 卡勾推入后如图4所示。



Honeywell

霍尼韦尔环境自控产品（天津）有限公司
地址：中国天津经济技术开发区南海路158号
说明书如有变动，恕不另行通知。
提交漏洞途径：http://www.honeywell.com.cn/about/contact-us/vulnerability-reporting



Reference

The Installation should be carried out by an electrician.

WARNING:

1. Disconnect power outage before installation and maintenance to prevent electrical shock.
2. Read instruction carefully, failure to follow instruction will damage the product or cause a hazardous condition.
3. The controller must be installed in the standard electric box and get power from class 2 transformer.
4. All wiring must comply with national and local electrical code regulations.
5. Check the nominal parameter of the controller with the installation guide and make sure the controller is suitable.
6. Overload protection is recommended for the primary side of the transformer.
7. Ensure the security of the device physical connection, only authorized user can get access to the device and its service.
8. Ensure the device network as well as associated upper layer server to be deployed and maintained in such a manner complied with group security policy. please refer to the user instruction of upper level server for detail description.
9. Ensure a safe and secure network environment isolated from external connection for the device .
- 10.Ensure secure deployment of router in the network, system enforcement and regular maintenance. Please refer to router security configuration manual.

Package includes the following

- Controller 1 Set
- Installation guide 1 Pcs

Environmental

Storage Temperature	-40℃ ~ 65.5℃
Operation Temperature	0℃ ~ 50℃
Humidity	5%RH ~ 95%RH, Non condensation.
IP	IP20
Pollution Degree	2

Model Number

Model	Type	UI	DI	AO	DO
PEC8445-PB1-SM	Universal	8	4	4	5
PEC8445-PB1-SO	Universal	8	4	4	5

Electrical:

Voltage	24VAC, 50/60Hz
Power Consumption	5VA MAX. (Controller Only) 15VA MAX. (Controller including input, output and communication)

Hazardous Substances and Content of the Product

Parts	Hazardous substances					
	Pb	Hg	Cd	Cr (VI)	PBB	PBDE
Plastic parts	O	O	O	O	O	O
Terminal	X	O	O	O	O	O
PCBA	X	O	O	O	O	O

This table is based on SJ/T 11364.

O: The hazardous substances content in the related part are less than the limit in GB/T 26572 standard.

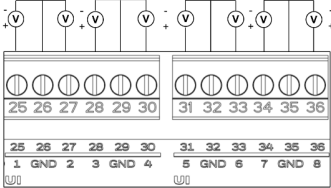
X: The hazardous substances content in the related part are more than the limit in GB/T 26572 standard.

*Other parts all conform to China RoHS requirements.

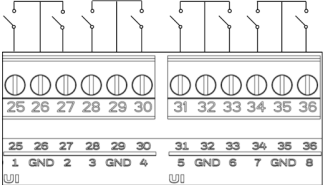


WEEE Directive 2012/19/EC Waste Electrical and Electronic Equipment directive
At the end of the product life dispose of the packaging and product in a corresponding recycling center. Do not dispose of the unit with the usual domestic refuse. Do not burn the product.

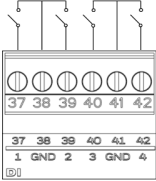
UI Voltage Input (Block F Blue)



UI Dry Contact input (Block F Blue)



DI Digital Input (Block G, Yellow)



Wiring Note:

- 1.Communication Ethernet: Standard RJ45 and CAT5E or higher.
- 2.Communication 485: Recommended to use 18-22AWG shielded twisted pair wire solid or stranded copper wire, strip length 7~8mm insulation, terminal screw torque 0.5Nm
- 3.Sylk,AO,DO,UI,DI: Recommended to use18-22AWG wire solid or stranded copper wire, strip length 7~8mm insulation, terminal screw torque 0.5Nm.

485 LED Status

485 LED status	485 Status
Solid off	No Extension module is configured or config file is broken
Solid off, blinking on once in 2.5 sec	Controller is running, no communication with Extension module
Solid off, blinking on twice in 2.5 sec	Controller is running and communicating with Extension module
Solid off, blinking on thrice in 2.5 sec	Controller is running and there is file transfer in progress with Extension module.

STA LED Status

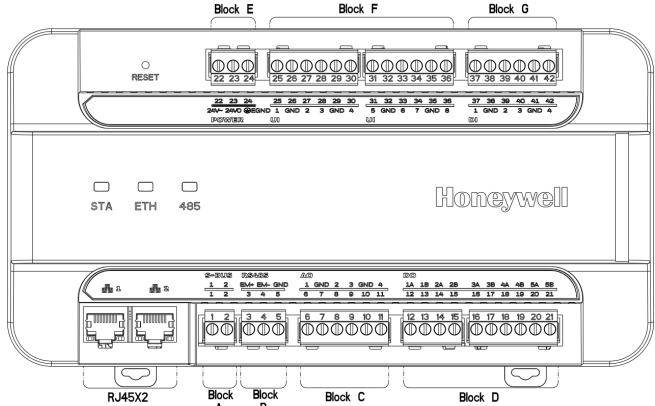
STA LED Status	Controller Status
Off	No power to processor, LED damaged, low voltage to board, first second of power up, or boot loader damaged.
On (green)	No sufficient power supply to start up. power supply being checked, this takes about 3.5 second and occurs on power up, reset and reflash.
Very Slow Blink-continuously blinks 1 second on, 1 second off.	Controller operating normally.
Slow Blink-continuously blinks 0.5 second on, 0.5 second off.	Controller alarm is active, controller in process of download, controller lost its configuration.
Medium Blink 1 continuously blinks 0.25 second on, 0.25 second off.	Controller is in boot loader (reflash) mode.

*LED in Red Blinking: Hardware damage

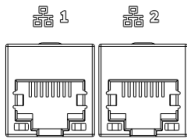
ETH LED Status

ETH LED Status	BACnet Status
Solid on (green)	The processor is not running, or the processor is dead.
Solid on, blinking off once in 2.5 sec	The bootloader is running in the processor, but there is no IP link.
Solid on, blinking off twice in 2.5 sec	The bootloader is running in the processor and there is an BAC-net communication.
Solid on, blinking off thrice in 2.5 sec	The bootloader is running in the processor and there is BAC-net communication data transfer in progress.
Solid off	There is no power, the processor is not running, or the processor is dead.
Solid off, blinking on once in 2.5 sec	Controller is running, no IP link.
Solid off, blinking on twice in 2.5 sec	Controller is running and there is a BACNet communication.
Solid off, blinking on thrice in 2.5 sec	Controller is running and there is a BACnet communication data transfer in progress.
Quick on and off blink.	The processor is not running, or the processor is dead.

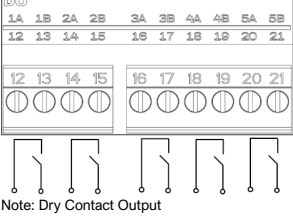
Terminal Definition and Wiring



Communication Ethernet (RJ45)

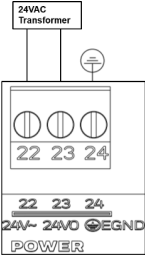


DO Digital Output (Block D Orange)

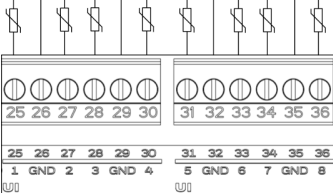


Note: Dry Contact Output

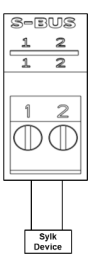
Power (Block E Black)



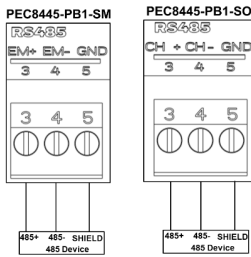
UI Resistance Input (Block F Blue)



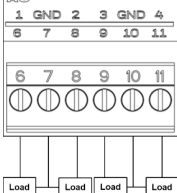
Sylk-Bus Block A Gray



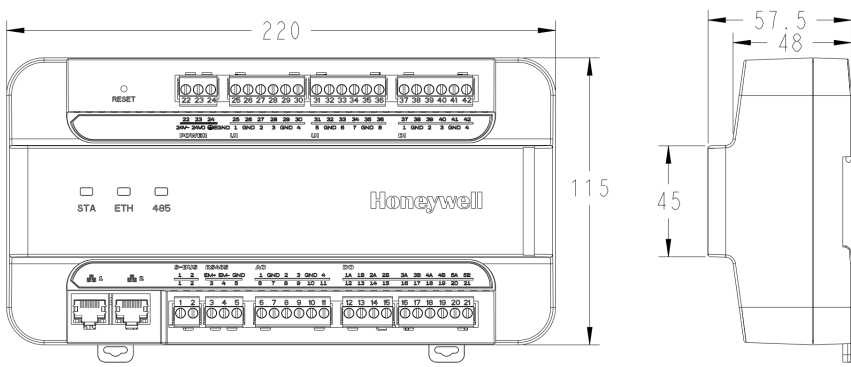
RS485 (Block B Gray)



AO Analog Output (Block C Green)



Dimensions (mm)



Mounting

Note:

- Removable terminal blocks are used for all wiring connections, which allow the controller to be wired before or after mounting;
- The controller must be mounted in a position that allows clearance for wiring, servicing, and removal;
- The controller mounts to DIN rail (standard EN50022 7.5mm x 35mm)

Installation:

1. Pull out the two rail hooks at the bottom of the controller, holding the controller with its top tilted in towards the DIN rail, hook the two top tabs on the back of the controller onto the top of the DIN rail.
2. Push the bottom of the controller and make sure the controller tightly attach on the DIN rail.
3. Push two rail hooks up and lock the controller.
4. Reset DIN rail hooks and lock the rail.

