



概述 General

产品用途: 适用于建筑物发生火灾或其它紧急情况下为应急照明等各种灯具(含单进单出型、卤素灯、钠灯)提供集中供电的应急电源装置。安装形式: 落地式、挂式、嵌入式三种。备用时间: 90 分钟, 国标型(可按设计要求配置备用时间)。

Application: It is an emergency power device suitable for providing the centralized power supply for emergency lightings (including the single-inlet single-outlet type, halogen lamp, sodium lamp) under fire accident or other emergency circumstances. Mode of installation: Floor type, hanging type and embedded type. Standby time: 90min, international standard type (the standby time is available according to the design requirements).

规格范围 Specification scope

规格范围 Specification scope	0.6KW~10KW		
单相输入 Single-phase input	220V/220VAC	柱式、嵌式、落地式, Hanging type, embedded type and floor type	YF-0.6KW
三相输入 Three-phase input	380V/220VAC	落地式, Floor type	YF-1KW/1.5KW/2KW/3KW/4KW/5KW/6KW/7KW/8KW/9KW/10KW
		落地式, Floor type	YF-3KW/4KW/5KW/6KW/7KW/8KW/9KW/10KW

产品特点 Product features

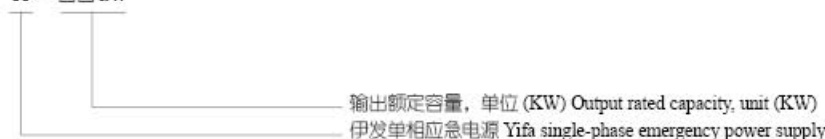
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|---|--|
| <ol style="list-style-type: none"> 1、采用最新 IGBT 逆变技术; 2、采用集中供电模式, 无需特殊灯具; 3、应急供电时, 正弦波交流电输出, 稳压、稳频、静音无噪音、无公害; 4、可消防联动, 可计算机监控, 可消防中心控制; 5、隔离变压器输出, LCD 液晶显示; 6、双路电源自动切换, 可靠性高; 7、采用单片机控制, 保护各动作点准确。 | <ol style="list-style-type: none"> 1. Adopt the latest IGBT inversion technology; 2. Adopt the centralized power supply mode, not need the special lightings. 3. When the emergency power is supplied, the sine wave AC power supply outputs, it has such features as voltage stabilization, frequency stabilization, no noise at static placement, no environmental protection; 4. Fire control linkage is available, computer monitoring or fire control center control can be also realized. 5. Isolating transformer output, LCD display 6. Dual-circuit power automatic transfer, high reliability; 7. SCM control is applicable, ensuring the accuracy of each operation point. |
|---|--|

产品优点 Advantages

- | | |
|---|--|
| <ol style="list-style-type: none"> 1、设计简单, 施工方便; 2、综合造价低, 投资省; 3、寿命长, 主机寿命 20 年以上; 4、免维护电池, 可循环使用 300 ~ 500 次; 5、管理简单, 自动瞬间切换, 可无人值守; 6、保持照明亮度稳定, 工作可靠, 维护简便。 | <ol style="list-style-type: none"> 1. Simple design, convenient construction; 2. Low comprehensive construction price, saving the investment. 3. Long service life, the life of main engine is more than 20 years; 4. Maintenance-free battery, it can be used circularly as high as 300-500 times. 5. Simple management, automatic instantaneous transfer, no attendance. 6. Keep the brightness of lighting stable, reliable work, simple maintenance. |
|---|--|

型号说明 Model description

YF - □□ kW



说明: 安装形式、输入相数路数、备用时间、消防联动、输出回路数均在订货时说明。

Note: Please indicate the installation mode, circuit number of input phase, standby time, fire control linkage, output circuit number when placing an order.

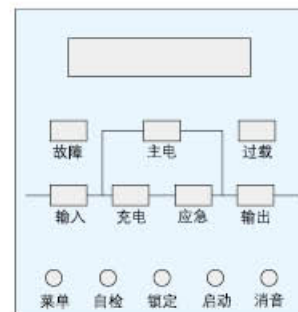
YF 系列应急照明电源

Series emergency lighting power supply



YF 系列 EPS 面板说明 Description for YF series EPS panel

- 1、LCD 液晶显示器：显示主电电压、输出电压、输出电流、电池电压。
- 2、主电指示灯：当市电正常时显示绿灯，表示在正常电网供电状态。
- 3、应急指示灯：当主电电压过低、过高、停电时显示红灯，表示在 EPS 应急供电状态。
- 4、充电指示灯：充电器对蓄电池充电时显示红灯，表示在充电状态。
- 5、过载指示灯：超过容量显示黄灯。
- 6、故障指示灯：当黄灯亮时，有以下原因：
 - A、逆变器温度过高
 - B、输出电路中有开路或短路
 - C、应急控制电路的开路、短路
 - D、充电器故障或输出开路，短路

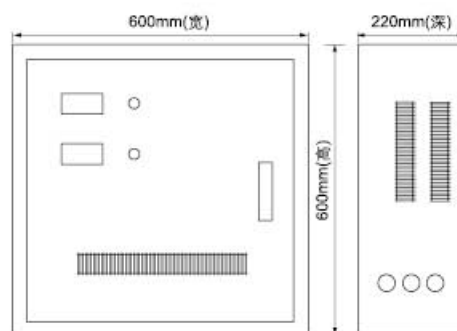


1. LCD: Display the main voltage, output voltage, output current, battery voltage.
2. Main power indicator lamp: When the utility power is normal, it brightens in green, this means the power is supplied by the normal power grid.
3. Emergency indicator lamp: When the main supply voltage is too low or too high, it brightens in red when power is cut off, this means the power is supplied by emergency power supply (EPS).
4. Charging indicator lamp: When the battery is charged by the charger, it brightens in red, this means the battery is in the charging state.
5. Overload indicator lamp: It brightens in yellow if the capacity is excessive.
6. Fault indicator lamp: If it brightens in yellow, this means there are faults occurring caused by the following reasons:
 - A. Over high temperature of inverter
 - B. The output circuit is open or short.
 - C. The emergency control circuit is open or short.
 - D. The charger has trouble or the output circuit is open or short.

集中供电式应急照明电源（挂式、嵌式、落地式）

Centralized supply type emergency lighting power supply (hanging type, embedded type and floor type)

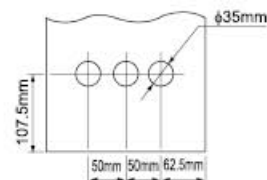
YF-0.6kW



尺寸示意图 Dimension diagram



顶部进线敲落孔示意图
Diagram of top inlet knocking hole



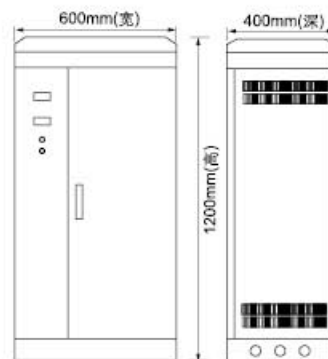
右侧出线敲落孔示意图
Diagram of right outlet knocking hole



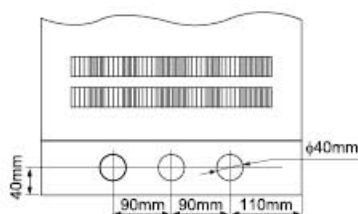
集中供电式应急照明电源（落地式）

Centralized supply type emergency lighting power supply (floor type)

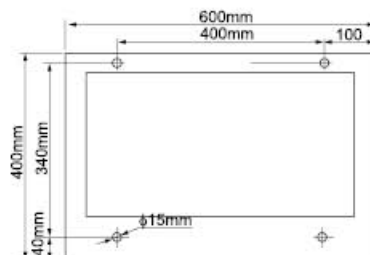
YF-1kW/1.5kW/2kW



尺寸示意图 Dimension diagram

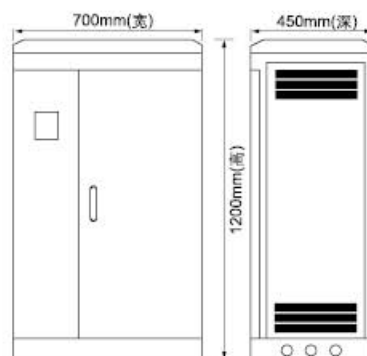


右侧出线敲落孔示意图
Diagram of right outlet knocking hole

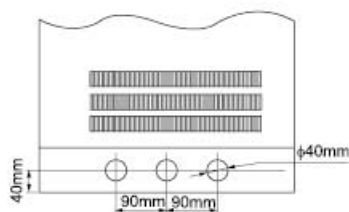


顶部进线敲落孔示意图
Diagram of top inlet knocking hole

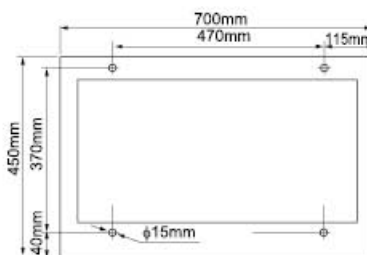
YF-3kW



尺寸示意图 Dimension diagram



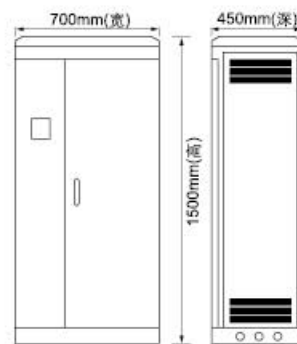
右侧出线敲落孔示意图
Diagram of right outlet knocking hole



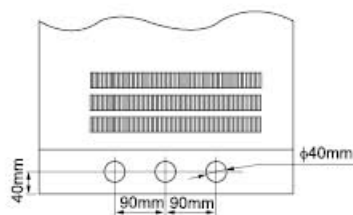
顶部进线敲落孔示意图
Diagram of top inlet knocking hole



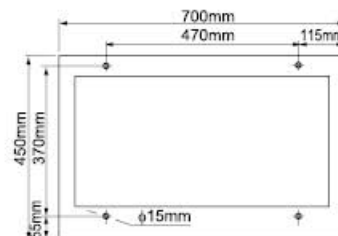
YF-4kW/5kW



尺寸示意图 Dimension diagram

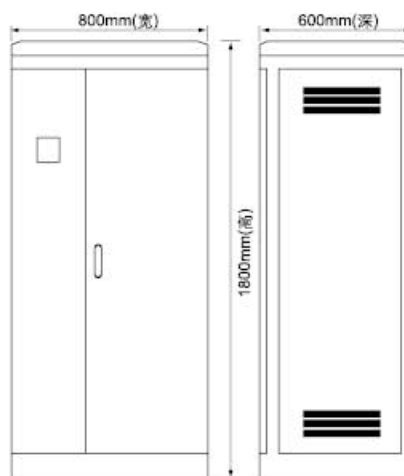


右侧出线敲落孔示意图
Diagram of right outlet knocking hole



顶部进线敲落孔示意图
Diagram of top inlet knocking hole

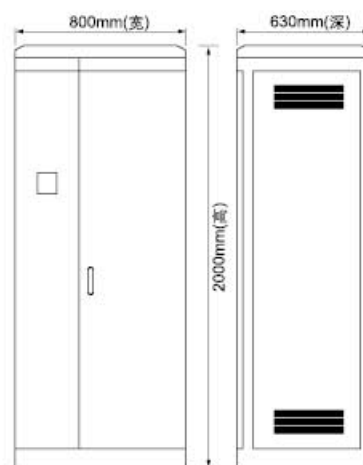
YF-6kW/7kW/8kW



尺寸示意图 Dimension diagram



YF-9kW/10kW



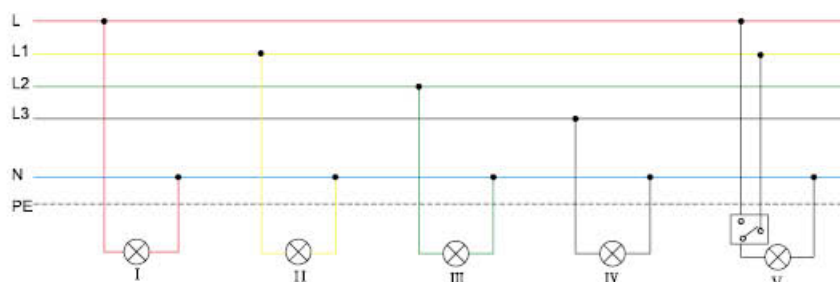
尺寸示意图 Dimension diagram

用于应急照明时 EPS 出线及灯具、开关接线法

EPS outline and lamp and switch connection method when it is applied to emergency lighting

输出线 Output line	说明	接线方法
代号 Code	颜色 Color	Connection method
L	红色 Red	I
L1	黄色 Yellow	II
L2	绿色 Green	III
L3	黑色 Black	IV
N	蓝色 Blue	V
PE	黄绿双色 Yellow and green	

接线方式 (混合) Connection mode (mixed)



说明: 上述接线示意图中 L1、L2、L3 在每一台 EPS 中不是同时具备, 而是根据设计要求制作。

As shown in abovementioned diagram, L1, L2 and L3 are not provided simultaneously in each EPS, they are fabricated according to the design requirements.

YF 系列应急照明电源

Series emergency lighting power supply



YF 系列 EPS 产品技术参数 Technical parameters of YF series EPS product

型号 Model	YF-0.6kW	YF-1kW	YF-1.5kW	YF-2kW	YF-3kW	YF-4kW	YF-5kW	YF-6kW	YF-7kW	YF-8kW	YF-9kW	YF-10kW
输入 Input	电压 Voltage	单相 220V ± 25% Single phase 220V ± 25%										
输出 Output	频率 Frequency	50Hz ± 5%										
	电压 Voltage	正常时: 同市电电压 应急时: 220V ± 3% Under normality: It is same as utility power voltage; under emergency: 220V ± 3%										
	频率 Frequency	正常时: 同市电同步 应急时: 50Hz ± 0.5% Under normality: It is synchronization with the utility power; under emergency: 50Hz ± 0.5%										
	波形 Waveform	正弦波 (THD ≤ 3%) Sine wave (THD ≤ 3%)										
电池 Battery	电池形式 Battery type	密封式免加水 Seal type, water free										
	标称电压 Nominal voltage	DC36V	DC96V				DC220V					
	充电时间 Charging time	≤24h										
切换时间 Transfer time	≤5s (特殊≤ 0.25s) ≤5s (≤ 0.25s under special conditions)											
应急供电时间 Emergency power supply time	90min(可按需而定) (depending on the requirements)											
过载能力 Overload capacity	120% 正常工作; 150% 10s 120% at normal work; 150% for 10s											
保护功能 Protection function	欠压保护, 过压保护, 过流保护, 短路保护 Protections against under voltage, over voltage, over current and short circuit;											
噪音 (1m 距离) Noise (1m distance)	正常时: 无噪音; 应急时: <55dB Under normality: no noise; under emergency: <55dB											
工作环境 Working environment	相对湿度 Relative humidity	10~90%										
	环境温度 Environment temp.	-20℃ ~40℃										
	海拔高度 Altitude	≤ 2500m										
适用负载 Applicable load	适用于各种照明负载 Applicable for various lighting loads											
输出回路 (标准型) Output load (standard type)	3											

注: 技术参数如有变更, 恕不另行通知, 以最新数据为准。

Note: If the technical parameters are subject to change, no notice will be made separately, and they are based on the latest data.

YF 系列 EPS 主要设计参数 YF series EPS main design parameters

型号 Model	输出功率 (kW) Output power	应急时间 (min) Emergency time	主机尺寸 (mm) 宽 × 深 × 高 Main machine size (mm) W × D × H	重量 (kg) Weight	输出回路 Output circuit	安装 Installation mode
YF-0.6kW	0.6	60	600x220x600	60	3	嵌入式、挂式、落地式 Embedded type, hanging type and floor type
		90	600x220x600	75		
YF-1kW	1	60	600x400x1200	80	3	落地式 Floor type
		90	600x400x1200	130		
YF-1.5kW	1.5	60	600x400x1200	150	3	
		90	600x400x1200	210		
YF-2kW	2	60	600x400x1200	215	3	
		90	600x400x1200	230		
YF-3kW	3	60	700x450x1200	240	3	
		90	700x450x1200	360		
YF-4kW	4	60	700x450x1200	320	3	
		90	700x450x1500	460		
YF-5kW	5	60	700x450x1200	410	3	
		90	700x450x1500	590		
YF-6kW	6	60	700x450x1500	560	3	
		90	800x600x1800	750		
YF-7kW	7	60	700x450x1500	650	3	
		90	800x600x1800	900		
YF-8kW	8	60	800x600x1800	750	3	
		90	800x600x1800	1000		
YF-9kW	9	60	800x600x1800	850	3	
		90	800x600x2000	1100		
YF-10kW	10	60	800x600x1800	960	3	
		90	800x600x2000	1200		

注: 技术参数如有变更, 恕不另行通知, 以最新数据为准。

Note: If the technical parameters are subject to change, no notice will be made separately, and they are based on the latest data.



YF 系列 EPS 产品工作原理图 Working principle diagram of YF series EPS product

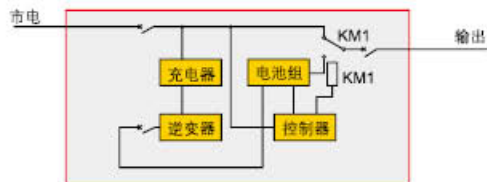
单电源原理图之一（单输入） Schematic diagram I of single power supply (single input)

说明：

当有市电时，市电通过 KM1 输出，同时充电器对免维护蓄电池充电。当控制器检测到市电停电或者市电电压过低时，逆变器工作使 KM1 切换至应急输出状态向负载提供电能。

Instruction:

When utility power is switched on, it outputs through KM1, meanwhile, the maintenance-free battery is charged by the charger. When the controller detects that the utility power is failure or its voltage is too low, the inverter actuates KM1 to switch into emergency output state for supplying the power to the load.



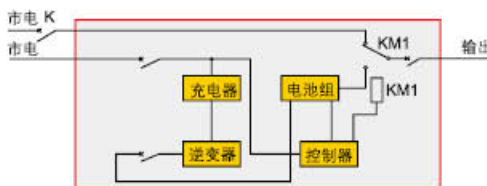
单电源原理图之二（双输入） Schematic diagram II of single power supply (dual input)

说明：

一路市电双线输入中，负载平时由外部开关 K 控制，可开可关。但当 EPS 检测到市电停电或电压过低时，无论开关 K 在何位置，均能实现应急供电。

Instruction:

In one-circuit utility power dual-wire input, usually, the loads are controlled by external switch K, it can be on or off. But when EPS detects that the utility power is failure or the voltage is too low, no matter where the switch K locates, it can realize emergency power supply.



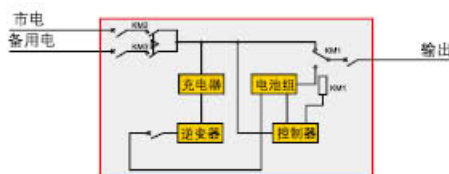
双电源原理图之一 Schematic diagram I of double power supply

说明：

在正常情况下，市电通过 KM2、KM1 输出，同时充电器对免维护蓄电池充电。在市电停电，备用电源投入通过 KM3、KM1 输出，只有当常用电和备用电源同时停电时，通过控制器控制逆变器工作使 KM1 切换至应急输出状态，向负载提供电能，但当备用电源投入的时间大于本 EPS 切换时，本 EPS 先投入，待备用电源来时，再切换退出，此种方式的互投装置在本 EPS 中。

Instruction:

Under normal conditions, the utility power outputs through KM2 and KM1, meanwhile, the maintenance-free battery is charged by the charger. When the utility power is failure, the reserve power works and outputs through KM3 and KM1, only when both the normal power and reserve power are failure, then the controller orders inverter to work and switch KM1 to emergency output state for supplying the power to loads. But if the switch-on time of reserve power is longer than EPS, the EPS will switch on first, till the reserve power is provided again, it can transfer and exit from supply. The switching device in this mode is included in this EPS.



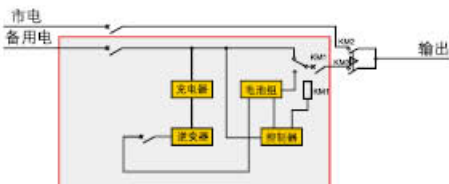
双电源原理图之二 Schematic diagram II of double power supply

说明：

采用此种接线方式可实现一级负荷末端互投，EPS 充当第三路电源，此种方式互投装置在本 EPS 之外。

Instruction:

This kind of wiring mode can realize the end switching operation for primary load, EPS works as the power supply of third circuit. The switching device in this mode is not contained in this EPS.



YF 系列应急照明电源

Series emergency lighting power supply



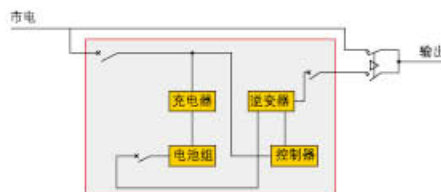
充当第二路电双回路原理图 Double-circuit schematic diagram under working as the second circuit power supply

说明：

EPS 可按左图接法对负载充当第二路电，并且末端互投。此种方式逆变器在有市电时为未开机状态。当无市电应急时，立即开机有输出。此种方式互投装置在 EPS 之外。

Instruction:

EPS can be wired according to the left drawing and works as the second circuit power supply, with end switching operation. In this wiring mode, the inverter will be in OFF state when the utility power is switched on; it starts up and outputs when utility power is failure and under emergency situation. The switching device in this mode is not contained in this EPS.



YF 系列 EPS 产品接线示意图 Wiring diagram of YF series EPS products

(注：红色虚线框内无均在 EPS 中配置，EPS 中分别设有 N、PE 线接线排)

(Note: EPS has such configuration in the red dashed block diagram, with N and PE line terminal boards)

单相单输入单相多回路输出接线图 Diagram of single-phase single-circuit input and single-phase multi-circuit output

接线方式：

单路持续型编号为：YF01A

说明：

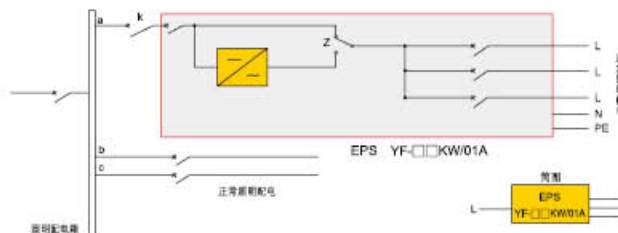
- a) 当有市电时，由市电给负载供电，停电时由 EPS 给负载供电；
- b) K 为断路器，不属本公司提供；
- c) Z 为转换开关。

Wiring mode:

Single standing type, code: YF01A

Instruction:

- a) When the utility power works, the power of load is provided by it, when it is cut off, the power of load is provided by EPS;
- b) K represents the circuit breaker, not provided by us.
- c) Z represents the transfer switch.



单相双输入单相多回路输出接线图 Connection diagram of single-phase double-circuit input and single-phase multi-circuit output

接线方式：

单路可控型编号为：YF01B

说明：

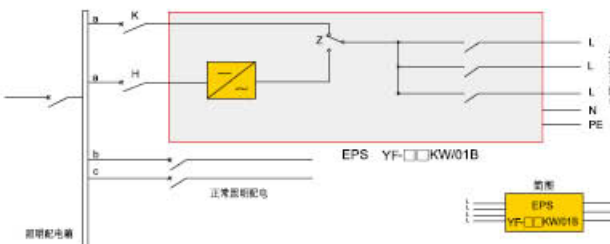
- a) 通过断路器 K 可控制照明灯具平时工作状态；
- b) 当 H 无电时 Z 转换为应急电源供电，实现应急照明。

Wiring mode:

Single-circuit controllable type, code: YF01B

Instruction:

- a) The usual working state of lightings may be controlled by the circuit breaker K;
- b) When there is no power supply for H, Z switches to emergency power supply, to realize emergency lighting.





单相三输入三输出接线图 Diagram of single-phase triple-circuit input and triple-circuit output

接线方式:

多路可控型编号为: YF02

说明:

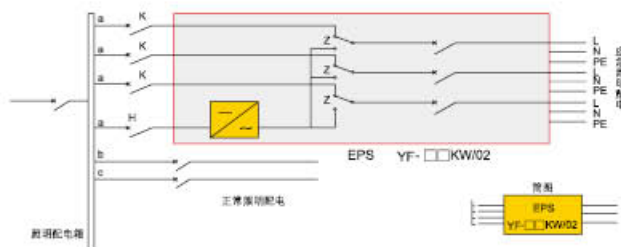
- a) 通过断路器 K 可控制多个回路应急灯平时工作状态;
- b) 当 H 无电时 Z 转换为应急电源供电, 实现应急照明。

Wiring mode:

Multi-circuit controllable type, code: YF02

Instruction:

- a) The usual working state of multi-circuit emergency lamp may be controlled by the circuit breaker K;
- b) When there is no power supply for H, Z switches to emergency power supply, to realize emergency lighting.



单相双输入单相双输出回路现场控制接线图 Wiring diagram of on-site control of single-phase double-circuit input and single-phase double-circuit output

接线方式:

单路可控型编号为: YF03

说明:

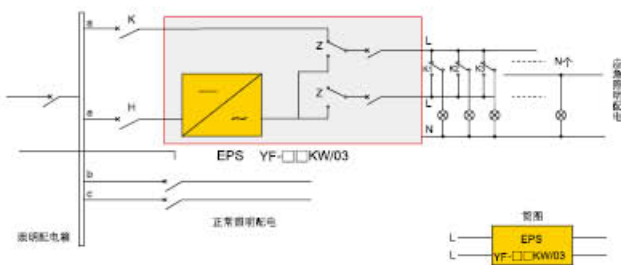
- a) 断路器 K 为平时非应急供电时控制开关;
- b) 当 H 无电时 Z 转换为应急电源供电, 实现应急照明;
- c) K1、K2、K3 为各灯回路现场双控制翘板开关。

Wiring mode:

Single lamp controllable type, code: YF03

Instruction:

- a) Circuit breaker K works as normal control switch (not for emergency power supply).
- b) When there is no power supply for H, Z switches to emergency power supply, to realize emergency lighting.
- c) K1, K2 and K3 are on-site double-control rocker switches at the circuits of lightings



三相输入三相输出, 应急时单相三路输出接线图 Wiring diagram of three-phase input and three-phase output, and single-phase triple-circuit output in emergency

接线方式:

三相可控型编号为: YF04

说明:

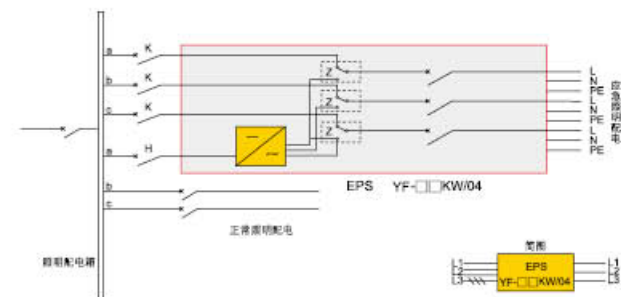
- a) 断路器 K 为控制多个回路正常照明工作状态;
- b) 当 H 无电时 Z 转换为应急电源供电, 实现应急照明;
- c) K 为断路器, 不属本公司提供;
- d) Z 为转换开关。

Wiring mode:

Three-phase controllable type, code: YF04

Instruction:

- a) Normal lighting operation state of multi circuits may be controlled by the circuit breaker K.
- b) When there is no power supply for H, Z switches to emergency power supply, to realize emergency lighting.
- c) K represents circuit breaker, beyond our supply range.
- d) Z represents transfer switch.



YF 系列应急照明电源

Series emergency lighting power supply



三相多路输入三相多路输出，应急时单相多路输出接线图

Wiring diagram of three-phase multi-circuit input and three-phase multi-circuit output, and single-phase multi-circuit output in emergency

接线方式:

三相多路可控型编号为: YF05

说明:

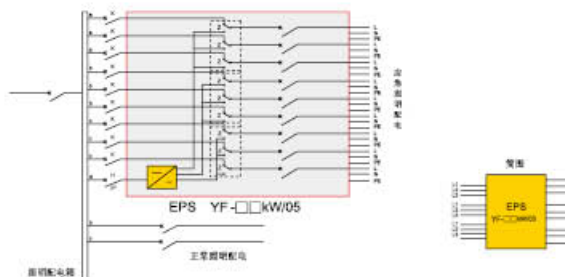
- a) 通过断路器 K 可控制多个回路应急灯平时工作状态;
- b) 当 H 无电时 Z 转换为应急电源供电, 实现应急照明;
- c) K 为断路器, 不属本公司提供;
- d) Z 为转换开关。

Wiring mode:

Three-phase multi-circuit controllable type, code: YF05

Instruction:

- a) Usual operation state of multi-circuit emergency lighting may be controlled by the circuit breaker K.
- b) When there is no power supply for H, Z switches to emergency power supply, to realize emergency lighting.
- c) K represents the circuit breaker, beyond our supply range.
- d) Z represents transfer switch.



单相双输入单相输出供多层接线图

Wiring diagram of single-phase double-input and single-phase output for multi floors

接线方式:

楼层可控型编号为: YF06

说明:

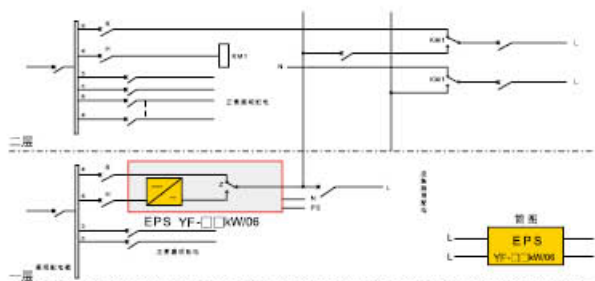
- a) 断路器 K 可控制每层回路照明灯平时工作状态;
- b) 当 H 无电时 Z 转换为应急电源供电, 实现应急照明;
- c) K 为断路器, 不属本公司提供;
- d) Z 为转换开关, 设在 EPS 产品内, L、N 同时转换;
- e) KM1 为转换交流接触器, 设在本层照明配电箱内。

Wiring mode:

Floor controllable type, code: YF06

Instruction:

- a) The usual working state at the circuits of every floor may be controlled by the circuit breaker K;
- b) When there is no power supply for H, Z switches to emergency power supply, to realize emergency lighting.
- c) K represents circuit breaker, beyond our supply range.
- d) Z represents the transfer switch, mounted in EPS, L and N changes over at the same time.
- e) KM1 denotes the changeover AC contactor, set in the lighting distribution box of local floor.



YF 系列应急照明电源

Series emergency lighting power supply



应急照明混合接线图 Mixed wiring diagram of emergency lighting

接线方式:

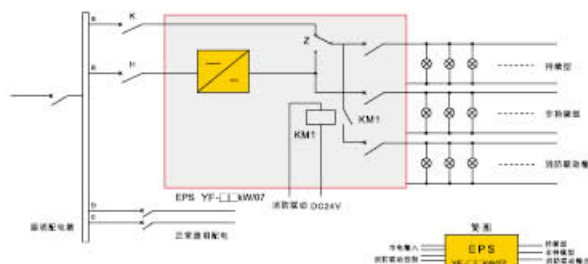
混合式编号为: YF07

说明:

a) 断路器 K 可控制持续型负载的工作状态。

注:

市电输出回路带有消防联动脱扣器,当发生紧急情况时,通过消防控制中心给出的 DC24V 电压信号,使脱扣器动作市电输出,同时启动应急逆变输出。



Wiring mode:

Mixed type, code: YF07

Instruction:

a) The working state of standing type load may be controlled by the circuit breaker K.

Note: There is a fire control linkage release at the utility power output circuit, under emergency, the fire control center sends DC24V voltage signal, to make the release work, thus, the utility power can output, meanwhile, the emergency inverter output can be actuated.

双电源接线图 Wiring diagram of double power

接线方式:

编号为: YF08

说明:

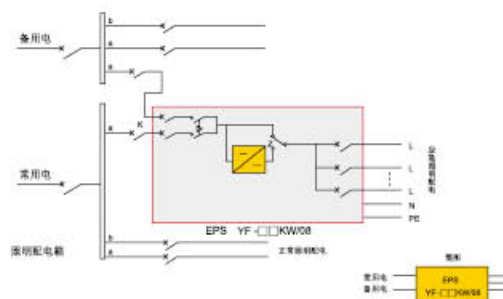
a) 互投裝置在 EPS 內。

Wiring mode:

Code: YF08

Instruction:

a) Switching device is set in EPS.



充当第二路电源双回路接线图 Double-circuit wiring diagram when it serves as power supply of the second

接线方式:

编号为: YF09

说明:

a) 互投裝置在 EPS 內。

Wiring mode:

Code: YF09

Instruction:

a) Switching device is set in EPS.

