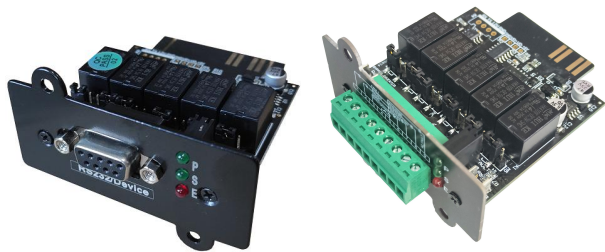
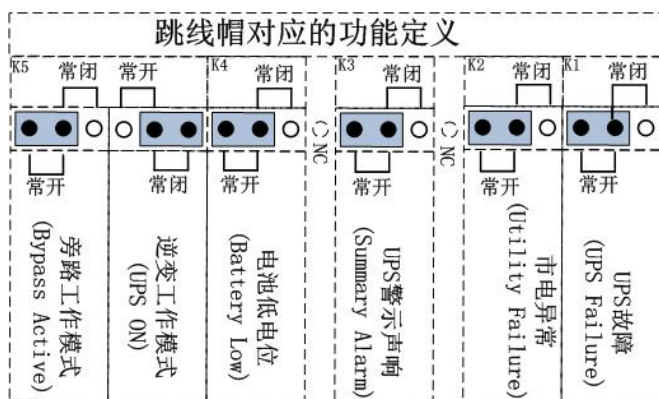


AS400mini 干接点卡简介：

AS400mini 干接点卡为 UPS 外围监控提供干接点界面,以干接点信号来反映 UPS 运行状态,也可接受外界干接点的关机命令。用户可以通过外接线路来实现对 UPS 的监控。



注：AS400mini 卡默认为**常开**状态,如下图所示,若要默认为常闭状态,则需要将跳线帽调整为常闭(注：逆变工作模式默认为常闭)



DB-9 接口电气参数：

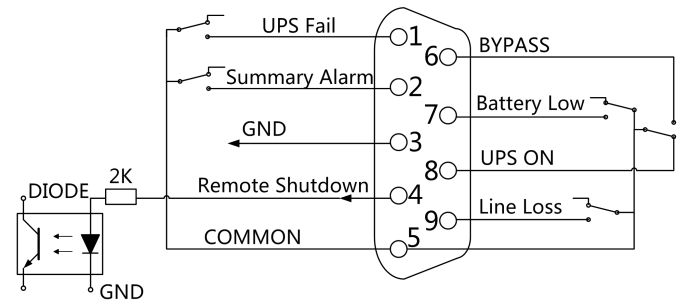
参数 (Parameter)		SYMBOL	MAX	UNIT
继电器触点 (Relay)	直流电压 (DC Voltage)	Vdc	30	V
	直流电流 (DC Current)	Idc	3	A
	交流电压 (AC Voltage)	Vac	250	V
	交流电流 (AC Current)	Iac	3	A
指示灯 (Led)	P 电源指示 (Power)	电源正常时常亮		
	S 运行状态 (Status)	UPS 状态正常: 每秒闪烁一次 UPS 状态异常: 快闪		
	E 通讯状态 (Extremely)	监控连线正常: 常亮 监控连线异常: 快闪		

DB-9 接口脚位定义：

DB-9 脚位	功能描述	输入输出
1	UPS 故障 (UPS Failure)	输出
2	UPS 告警声响 (Summary Alarm)	输出
3	外设地 (GND)	
4	遥控关机 (Remote Shutdown)	输入
5	公共电源端 (Common)	
6	旁路(非逆变)工作模式 (Bypass Active)	输出
7	电池低电位 (Battery Low)	输出
8	逆变工作模式 (UPS ON)	输出

9	市电异常 (Utility Failure)	输出
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DB-9 内部接口线路：

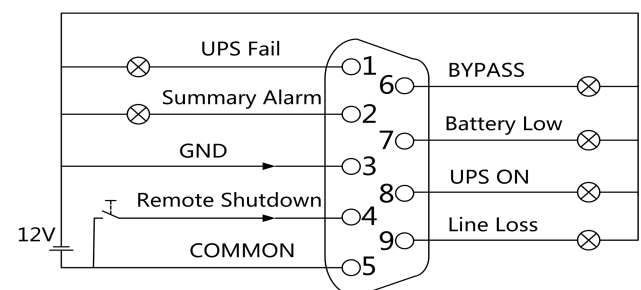


DB-9 接口脚位说明：

现象	功能描述	原因
PIN1、PIN5 接通	UPS 故障 (UPS Failure)	UPS 内部故障
PIN2、PIN5 接通	UPS 警示声响 (Summary Alarm)	1、市电中断 2、电池低电位 3、旁路供电 4、内部故障 5、通讯断线
PIN3	外设地 (GND)	
PIN4	遥控关机 (Remote Shutdown)	外部输入遥控关机信号
PIN5	外设公共电源端 (Common)	
PIN6、PIN5 接通	旁路 (非逆变) 工作模式 (Bypass Active)	UPS 由旁路供电
PIN6、PIN5 断开	逆变工作模式 (UPS ON)	UPS 工作在逆变模式
PIN7、PIN5 接通	电池低电位 (Battery Low)	电池低电位
PIN8、PIN5 接通	逆变工作模式 (UPS ON)	UPS 工作在逆变模式
PIN8、PIN5 断开	旁路 (非逆变) 工作模式 (Bypass Active)	UPS 由旁路供电
PIN9、PIN5 接通	市电异常 (Utility Failure)	市电异常

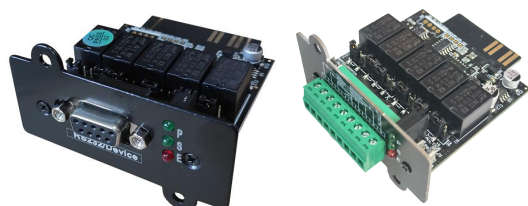
应用说明：

用户只需提供 Common 端 24VDC 以下的电源,以图示电路为例,各信号端接相应指示灯以及遥控关机按键,即可实现远程监控 UPS。

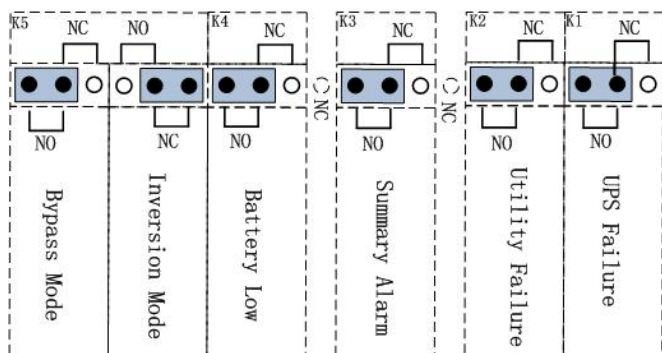


遥控 UPS 关机功能：当在 AS400mini 卡 PIN4 脚接收到一个 3~10 秒的高电平 (电平范围 12V~24V)，AS400mini 卡确认有远程关机信号输入,进行控制关闭 UPS。(小于 3 秒或者大于 10 秒的信号均为无效信号)

Appearance of AS400mini dry contact card :



Corresponding function definition of jumper cap:



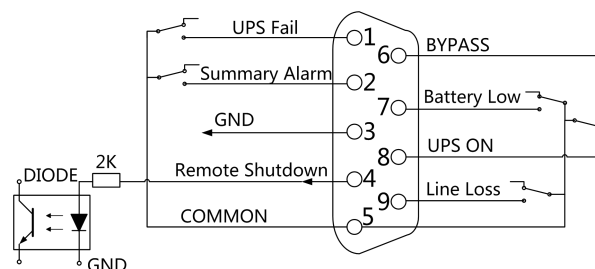
DB-9 Interface electrical parameters :

Parameter		SYMBOL	MAX	UNIT
Relay	DC Voltage	Vdc	30	V
	DC Current	Idc	3	A
	AC Voltage	Vac	250	V
	AC Current	Iac	3	A
Led	P Power	bright when the power supply is normal		
	S Status	UPS status normal: blink once per second UPS status abnormal: Flash		
	E Extremely	Normal communication: bright Abnormal communication: Flash		

DB-9 Interface pin definition :

DB-9 pin	Function description	Input/output
1	UPS Failure	output
2	Summary Alarm	output
3	GND	
4	Remote Shutdown	input
5	Common	
6	Bypass Active	output
7	Battery Low	output
8	UPS ON	output
9	Utility Failure	output

DB-9 Internal interface line :

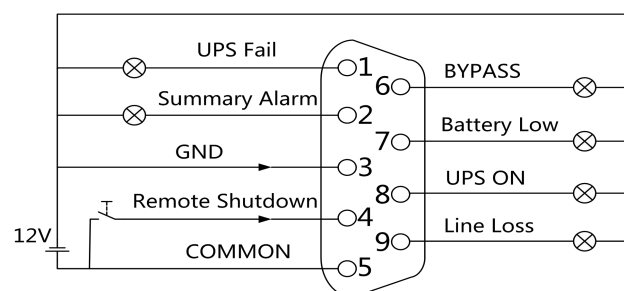


DB-9 Interface pin description :

phenomenon	Function description	reason
PIN1、PIN5 conduction	UPS Failure	UPS internal failure
PIN2、PIN5 conduction	Summary Alarm	1. Mains interruption 2. Battery low potential 3. Bypass power supply 4. Internal fault 5. Communication disconnection
PIN3	GND	
PIN4	Remote Shutdown	input remote control shutdown signal
PIN5	Common	
PIN6、PIN5 conduction	Bypass Active	UPS works in bypass mode
PIN6、PIN5 Non conduction	UPS ON	UPS works in inverter mode
PIN7、PIN5 conduction	Battery Low	Battery low potential
PIN8、PIN5 conduction	UPS ON	UPS works in inverter mode
PIN8、PIN5 Non conduction	Bypass Active	UPS works in bypass mode
PIN9、PIN5 conduction	Utility Failure	Power Abnormal

Application Description :

The user only needs to provide the power supply below 24VDC at the common terminal. Taking the circuit shown in the figure as an example, each signal terminal is connected with corresponding indicator light and remote control shutdown button to realize remote monitoring of ups.



Remote UPS shutdown function: when a high level voltage(range 12v-24v) of 3-10s is received at pin 4 of as400mini card, as400mini card confirms that there is remote shutdown signal input to control and shut down ups. (signals less than 3 seconds or more than 10 seconds are invalid signals)