

SCHEDARELAY3

Dry Contact Card Manual

(Ver.02 26.06.2015)

1. Introduction

Dry contact card provide dry contacts for UPS external monitoring, and tell the UPS operation status. This manual works for

Hipower triphase In & triphase Out UPS, 《Triphase communication protocol》

Hipower single phase In & single phase Out UPS, 《Single phase communication protocol》

2. External connectors define

Dry contact card provide 10 connectors for users, 7 outputs for indicating UPS status, 1 for common ground, 2 input for remote UPS shut down.

Connector Parameter:

Parameter		Max	Type
Diode	Reverse Voltage V_R	5V	
	Forward Current	25mA	16mA
	Pulse Forward Current I_{FP}	1A (100μ pusle,100pps)	
	Forward input voltage	30V	DC: 5 ~ 12V
Relay contact	Voltage (DC)	5 ~ 24V	
	Current	3A	
	Voltage (AC)	230V	
	Current	3A	

Connector definition:

Pin NO.	Description	Status		In & Output
1	Mains fault	Relay1 on	Pin1 & Pin8 ON	Output
2	Battery low	Relay2 on	Pin2 & Pin8 OFF	Output
3			Pin3 & Pin8 ON	Output
4	Bypass output	Relay3 on	Pin4 & Pin8 ON	Output
5	UPS fault	Relay4 on	Pin5 & Pin8 ON	Output
6	INV. output	Relay5 on	Pin6 & Pin8 ON	Output
7	Alarm	Relay6 on	Pin7 & Pin8 ON	Output
8	COM			
9				
10				

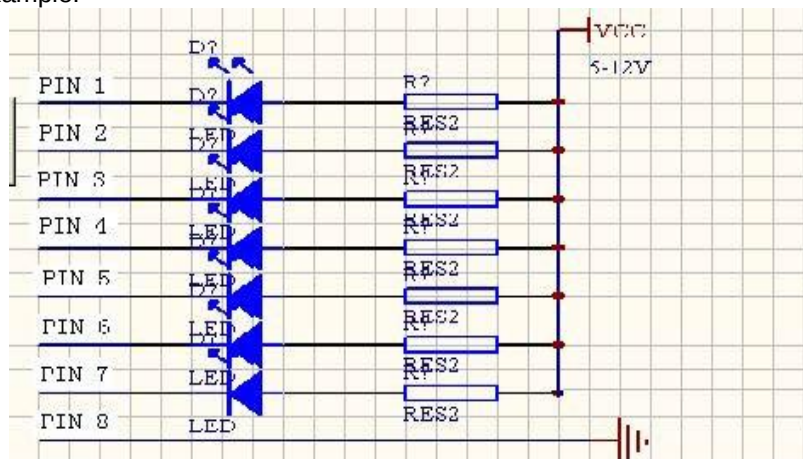
NOTE: Pin NO.s pls refer to Pic.2

On real relay card, the mark is K1,K2.....

Connector's pins instruction:

Phenomenon	Descriptions	Fault reason
Pin 1 & 8 ON	Mains abnormal	Mains frequency or voltage abnormal
Pin 2&8 OFF, Pin 3&8 ON	battery low	battery low
Pin 4&8 ON	bypass output	UPS output through bypass
Pin 5&8 ON	UPS fault	Rectifier fault; INV fault; Over-temperature; Short circuit
Pin 6&8 ON	INV output	UPS inverter output
Pin 7&8 ON	UPS alarm	Rectifier fault INV fault; Over-temperature; Short circuit

Connecting example:



3. Internal connector define

Totally 26 internal connectors, 4 are valid connectors, they are Pin 1,2,3,4 are shown in Pic.2

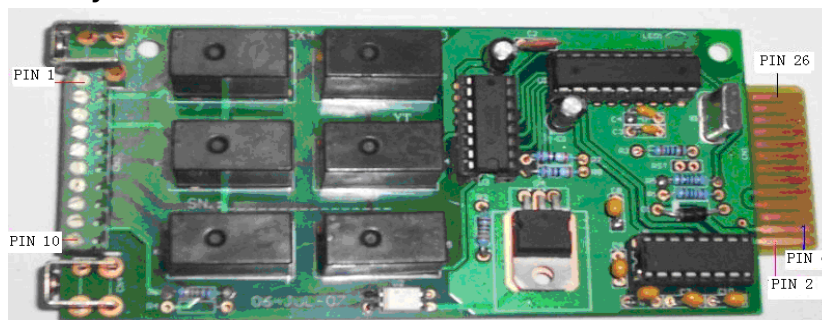
Pin1: (at the back of Pin2): Ground

Pin2: 12V Power

Pin3: (at the back of Pin4): Send

Pin4: Receive

4. Picture of relay card



Pic. 2:the Overview of the relay card