DC Solid State Relay Board (Compact) Technical Information

DC Solid State Relay Board: This is a opto-Transistor with optical isolation between input signal and output signal. This is to be used for switching 24V-60VDC supply by 5V-230 VDC input signal.

Features

- DIN rail mountable, compact and easy for troubleshooting.
- Two/Four/Eight phototransistors on a single board.
- Sink or Source type input connectable
- LED indication for input signal.
- Ideal to drive hydraulic and pneumatic solenoid coils.
- Built in free wheeling diode across driving load for every individual output point

Product Picture:



Technical specifications:

Input signal voltage:3 VDC-100 VDC, Typical voltage is 24/10/5VDC Max. input current:20 mA @24VDC Max. output voltage:60 VDC Min.output voltage:Supply voltage-4 VDC Max. load per output point:5 Amps Peak non repeatitive surge current:8 Amps Input to output electrical isolation: 3.55 KV Max. Voltage drop in output voltage: 2.5 V @ 2 Amp load Switching ON/OFF delay:10 microseconds Load type:Resistive and Inductive Size:40X90 (2 POINTS),70x90 (4 points),90x140 (8 points) Applications:

a) For switching contactors from PLC outputs.

b) For switching DC loads like solenoid valves, DC actuators, DC Lamps, DC electromagnets in industrial use directly from controller outputs.

c) In all applications where we need very fast switching and require isolation between driver and driven circuits. The load can be inductive or resistive.

Solid State Relay Board Vs Relay Board Comparison:

Sr.No	Solid State Relay Board	Relay Board
1	Switching time 10micro Sec	Switch ON time 18mS and Switch OFF time 18 ms
2	No limitation on number of operations at 5 Amp load	300,000 operations is limit at 2A/230 V load
3	Max. load 5 A per point	Max. load 5/10A per point
4	To be used for DC switching	Can be used for AC/DC switching

Available in 2/4/8 points variants.

Solid State Relay boards with input signal other than 24/10/5 VDC can be supplied on demand.

Caution :DO NOT USE SSR BOARD FOR SWITCHING AC SUPPLY !

Standards/Approvals:

- CE certified
- PCB:IEC 61373
- Optoisolator/transistor:UL/VDE
- Connectors:CE
- Profile and end plates:UL

CONNECTION DETAILS ON NEXT PAGE !

NOTE:-Due to continuous product development the product supplied to you may look different than the product image in the pdf file.

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CONNECTION DETAILS FOR COMPACT SSR

4 POINT COMPACT SSR BOARD

SR.NO	INPUT TERMINAL NO	CONNECTION	OUTPUT TERMINAL NO	CONNECTION
1	1:ORANGE	PLC O/P:1 (1+)	1:ORANGE	+24 VDC
2	2:BLUE	GND (1-)	2:GREY	OUT-1
3	3:ORANGE	PLC O/P:1 (2+)	3:ORANGE	+24 VDC
4	4:BLUE	GND (2-)	4:GREY	OUT-2
5	5:ORANGE	PLC O/P:1 (3+)	5:ORANGE	+24 VDC
6	6:BLUE	GND (3-)	6:GREY	OUT-3
7	7:ORANGE	PLC O/P:1 (4+)	7:ORANGE	+24 VDC
8	8:BLUE	GND (4-)	8:GREY	OUT-4
9	-	-	9:BLUE	GND (-)

8 POINT COMPACT SSR BOARD

SR.NO	INPUT TERMINAL NO	CONNECTION	OUTPUT TERMINAL NO	CONNECTION
1	1:ORANGE	PLC O/P:1 (1+)	1:ORANGE	+24 VDC
2	2:BLUE	GND (1-)	2:GREY	OUT-1
3	3:ORANGE	PLC O/P:2 (2+)	3:ORANGE	+24 VDC
4	4:BLUE	GND (2-)	4:GREY	OUT-2
5	5:ORANGE	PLC O/P:3 (3+)	5:ORANGE	+24 VDC
6	6:BLUE	GND (3-)	6:GREY	OUT-3
7	7:ORANGE	PLC O/P:4 (4+)	7:ORANGE	+24 VDC
8	8:BLUE	GND (4-)	8:GREY	OUT-4
9	-	-	9:BLUE	GND (-)
10	9:ORANGE	PLC O/P:5 (1+)	10:ORANGE	+24 VDC
11	10:BLUE	GND (1-)	11:GREY	OUT-1
12	11:ORANGE	PLC O/P:6 (2+)	12:ORANGE	+24 VDC
13	12:BLUE	GND (2-)	13:GREY	OUT-2
14	13:ORANGE	PLC O/P:7 (3+)	14:ORANGE	+24 VDC
15	14:BLUE	GND (3-)	15:GREY	OUT-3
16	15:ORANGE	PLC O/P:8 (4+)	16:ORANGE	+24 VDC
17	16:BLUE	GND (4-)	17:GREY	OUT-4
18	-	-	18:BLUE	GND (-)

NOTE:1)If 2 power supplies are used for control and power then GND is (-) of control power supply and GND(-) is (-) of power supply.

CAUTION !: GND MUST BE CONNECTED TO TERMINALS 9/18 !