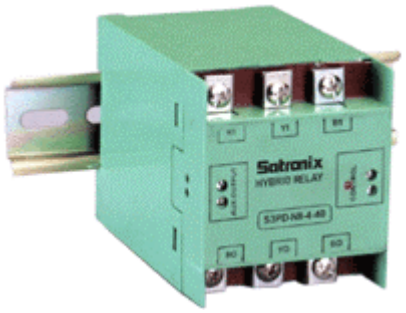
www.satronixindia.com

DIN RAIL MOUNT HYBRID NON-HEAT THREE PHASE SSR

Features

- No heatsink required.
- Direct control by integrated circuits.
- Normal open type.
- LED indication.
- Galvanic separation between control buffer and power circuits (4000 volts).
- 4000 Volt Insulation.
- Rated operational voltage: Up to 600 VAC rms.
- Optically isolated.
- Rated operational current : 16, 25 and 40 A.



Description

Transients are generated when high power load switches. To clip the certain transients NON HEAT SSR is used. It is also called ***hybrid relay***. An electromechanical relay is integrated in this SSR. The unique feature of the Hybrid SSR is, it does not require a heatsink. When power as well as control voltage is applied to the load the SSR turns on before the electromechanical relay thus shunting the SSR. Since the load is now under full voltage, the contactor does not take any inrush currents it only bypasses the SSR. The On/Off switching is carried out properly because of the built in timing function of the SSR. When the control signal is removed first the mechanical relay will be disconnected. After a minimum delay of 30 ms the load will be switched off. The power outputs will be off max100ms after the input control voltage has been removed.

Type Selection Guide

Input Control Voltage	Rated operational voltage	Rated operational current AC rms.		
		16 amps	25 amps	40 amps
24 VDC	440V AC rms	S3PD-NH-4-16	S3PD-NH-4-25	S3PD-NH-4-40

Input Specifications

Type	S3PD-NH-4-16	S3PD-NH-4-25	S3PD-NH-4-40
Control Voltage	24 VDC	24 VDC	24 VDC
Turn-on Voltage(Min)	18 VDC	18 VDC	18 VDC
Turn-off Voltage(Max)	18 VDC	18 VDC	18 VDC
Reverse Voltage	24 VDC	24 VDC	24 VDC

* Available on request

Output Specifications

Type	S3PD-NH-4-16	S3PD-NH-4-25	S3PD-NH-4-40
Current range with proper heatsink	16 Arms	25 Arms	40 Arms
Surge Current (I) non-repetitive t = 20msecs.	200 A	230 A	350 A
Voltage Drop	Approximate 0 VAC	Approximate 0 VAC	Approximate 0 VAC
Load Voltage Range	25 – 480 VAC rms		
Over Voltage Rating (PIV) Transient Peak	1200 VAC	1200 VAC	1200 VAC
Off-state leakage current @ voltage	10 mA	10 mA	10 mA
Turn-on (max.)	10 ms	10 ms	10 ms
Turn-off (max.)	10 ms	10 ms	10 ms
Power contact	3 NO, 16 A/phase	3 NO, 25 A/phase	3 NO, 40 A/phase
Auxilliary contact	1 NO (24 VDC/200 mA)	1 NO (24 VDC/200 mA)	1 NO (24 VDC/200 mA)
Dv/Dt @ Voltage (out)	500 V/ µs	500 V/ µs	500 V/ µs
I^2T Fusing (8.3 ms.)	130 A^2S	310 A^2S	450 A^2S

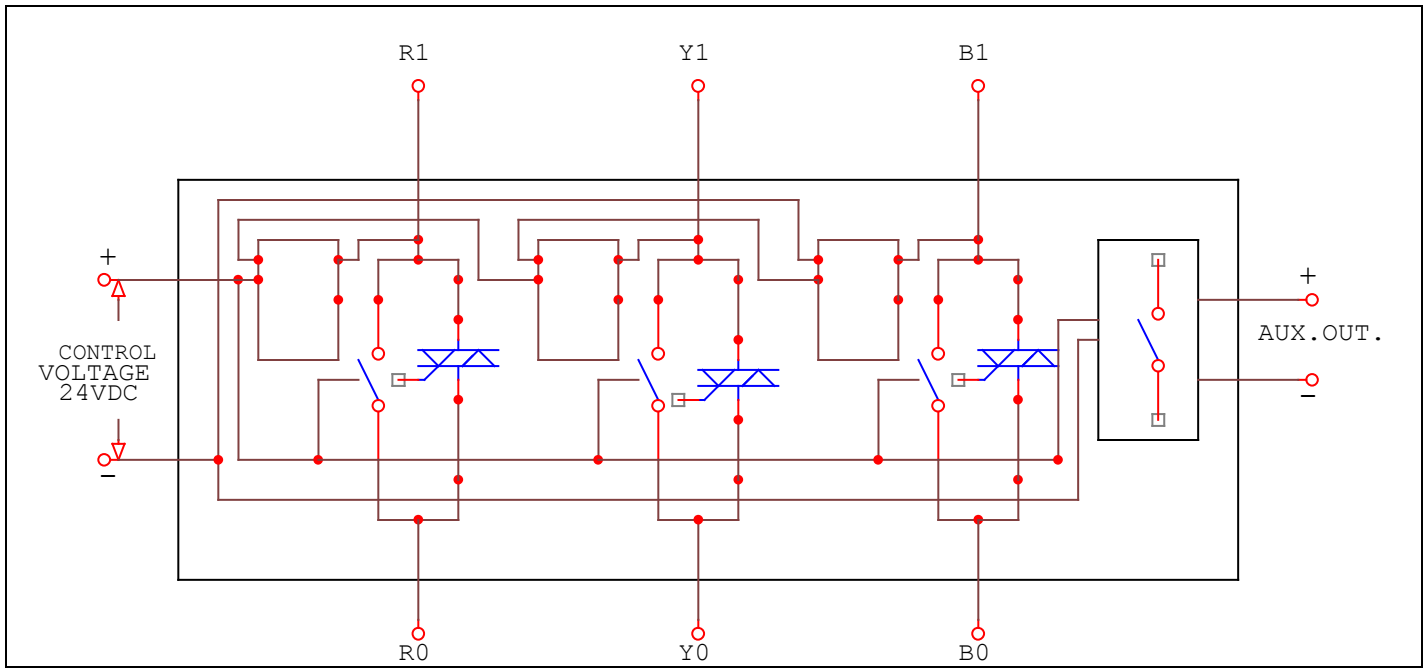
General Specifications

Type	S3PD-NH-4-16	S3PD-NH-4-25	S3PD-NH-4-40
Frequency Range	47 – 70 Hz	47 – 70 Hz	47 – 70 Hz
Dielectric Strength (Input to Output to Base)	2500 VAC	2500 VAC	2500 VAC
Weight	Approximate 60 gms		
Storage Temp.	– 40 °C to 100 °C		
Junction Temp.	100 °C		

Dimensions

Mechanical Specifications			
Dimensions in mm (compact).	Width –68.5mm	Height – 75mm	Depth –100.6mm

Functional Block Diagram



SATRONIX (INDIA) Pvt.Ltd.
OFFICE: 412, Laxmi Plaza, Laxmi Indl. Est., Link Rd, Andheri (W), Mumbai- 400 053.INDIA
Works: Unit No. 1,Electronic Sadan 1/Unit No.12, Electronic Sadan 3,Bhosari MIDC, PUNE – 411026,INDIA
Tele: 91(020) 27122758 Cell No. 91(020) 31076215 **FAX**: 91(020) 27129518
Email: satronix@bom3.vsnl.net.in