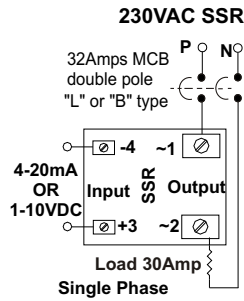
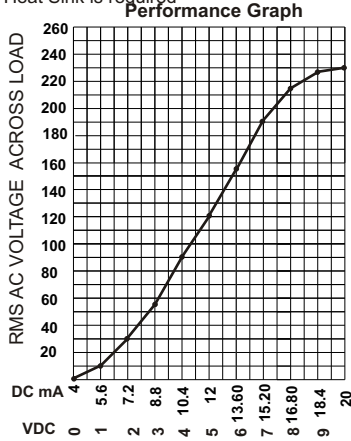


## 4-20mA Phase Angle (Back to Back SCR)

- The load power is Proportional to controller input
- Output to body 4kV~ isolation
- Input to Output 2500vrms isolation
- Heat Sink + Din Rail Mounting (35mm)
- Inbuilt Snubber network
- Controlled range 10% to 90% of line voltage
- Linearity Better than ±2% of the range.

### Precaution

- Used for resistive load only.
- Do not give DC voltage at 4-20mA input control of SSR otherwise Input of SSR will fail.
- Phase Line voltage should be in range of 230VAC ±10% or 440 vac ±10%
- SSR will not work if heater connected in star without neutral
- Heat sink temperatures should not increase 70°C
- For dv/dt and transient voltage uses dv/dt snubber and metal oxide varistor externally
- Protection : use semiconductor fuse for short circuit protection.
- Phase angle varies so that Rth will change So bigger size of Heat Sink is required



CE  
EN- 60947 - 5 - 1

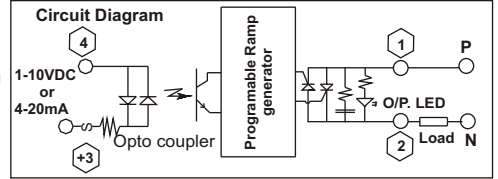
801 Model

35mm Din Rail mounting



S.S.R. Weight : @95 gms.

Enclosure Material :  
Glass filled nylon (Flame Retardant)

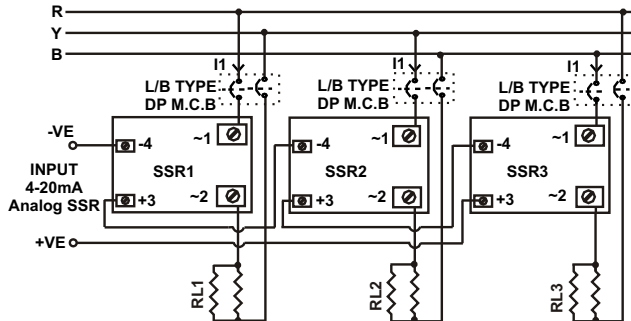


- Application**
- Glass Industries
  - Furnace Industries
  - Paper Industries
  - Hot runner system of plastic Processing Machinery
  - Polyester yarn processing industries
  - Biscuit Making Machine
  - Electroplating Machinery
  - Ceramic Industries

SSR TYPE NO	OUTPUT		EN-60947-4 Current Amp with Heat Sink at 55°C AC-3			Fusing current I <sup>2</sup> T	Short Circuit Protection by "B" type M.C.B. In AC-3 duty	Type of Heat Sink	Indian@ Rs./Each 100nos>
	Voltage	Current amp at 20°C	25Amp	50Amp	90Amp				
<b>BACK TO BACK SCR INPUT : 4-20mA Proportional signal or 1-10VDC</b>									
801 PHT 24 25 420	230 VAC ±10%	Star with Neutral	25Amp	12	-	500A <sup>2</sup> S	-	B	900.00
801 PHT 24 50 420			50Amp	22	15	3000A <sup>2</sup> S	16Amp	C	1050.00
801 PHT 24 90 420			90Amp	42	30	7200A <sup>2</sup> S	32Amp	X	1600.00
<b>BACK TO BACK SCR INPUT : 4-20mA Proportional signal or 1-10VDC</b>									
801 PHT 44 25 420	440 VAC ±10%	Delta without Neutral	25Amp	12	-	500A <sup>2</sup> S	-	B	900.00
801 PHT 44 50 420			50Amp	22	15	3000A <sup>2</sup> S	16Amp	C	1050.00
801 PHT 44 90 420			90Amp	42	30	7200A <sup>2</sup> S	32Amp	X	1600.00

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Circuit Diagram For 801 Model  
440vac Load Without Neutral In Delta Connection



Optional : 230VAC to 24VDC Converter  
price will be Rs. 200 Extra

24vdc Fan →

Type "V-209" 801/707 model  
current up to 90Amp  
Size: 66mm(W) X 210mm(L) x 60mm(H)  
Weight: 1.2kg Price Rs. 1100.00

### Technical Data

Output circuit - Switching element		THYRISTOR		
Operational voltage range	Vrms	0-230VAC or 0-440VAC		
Peak inverse voltage	Vpk	1000Vpk		
Rated operational current	IT	AC 51-20°C	25AAC	50AAC
		AC 53a-55°C	15AAC	30AAC
Frequency range	Hz	50Hz		
Max. off-state leakage current	mA	< 5 mArms		
Minimum load current holding current	IHO	175 mA	275 mA	275 mA
Rated peak withstand current (t = 10 ms)	ITSM	320A	800A	1200A
		500A <sup>2</sup> S	3000A <sup>2</sup> S	7200A <sup>2</sup> S
Max. load integral i <sup>2</sup> dt (t = 10 ms)	I <sup>2</sup> t	500A <sup>2</sup> S	3000A <sup>2</sup> S	7200A <sup>2</sup> S
Voltage drop in on-state	VTM	3 to 4 V	3 to 4 V	3 to 4 V
Critical current gradient	di/dt	100A/μs	100 A/μs	150A/μs
Critical voltage gradient	Dv/dt	350 V/μs	1500 V/μs	1500 V/μs
Thermal resistance Rth (Junction to case) DC	ØJC	2.3	2.5	2.7
Power factor	Cosφ	0.5 (at 600VAC)		
Maximum barrier-layer temperature		125°C		
Input		4-20mA	0-10VDC	
Impedance		100 ohm	300 ohm	
Current Min-Max		4mA-21mA	0.2Vdc/7mA-12Vdc/10mA	
Ambient temperature range operation		-30...+80 °C		
Test voltage between all isolated circuits (type test)		4kVA		
Electrical connection wire size		O/p. 16sqmm(max.), I/p. 4sqmm(max.)		

