THYRISTOR CAPACITOR SWITCHING MODULE



Thyristor capacitor switching module is designed to use for Real time power factor correction. It consist Dynamic switching Module (DSM- Electronic circuitry housed in Din rail mount enclosure) and Thyristor power stack (TSM –2 no Thyristors mounted on suitable heat sink). DSM is a microcontroller based design which generates trigger pulse to TPS and ensures the zero voltage switching of thyristor to achieve the transient free operation. DSM is common for all rating thyristor capacitor switching module and TSM varies according to the capacitor bank KVAr rating. Both DSM and TPS are interconnected with simple wiring.

FEATURES

- · Transient free switching.
- Real time PF correction is possible.
- Suitable to use with tuned and detuned filter reactor.
- Relay provided for cooling fan to activate the fan only at bank ON
- Over temperature Protection.
- Electronic circuitry is housed in the enclosure, so that suitable to work in dust environment.

SPECIFICATION FOR DSM

System Voltage	415V/480V/600V			
Frequency	50/60Hz			
Rating	Suitable to with all rating TPS			
Auxiliary supply	12VDC/24VDC ±10%			
Control Input	12 to 24 VDC			
Switching Response Time	Less than 20ms			
Indication	1)Ready, 2)Trigger, 3)capacitor ON, 4)Trip			
Cooling Fan relay	Active at trigger present, contact rating-4A@250V			
Dimension	Din Rain Mounting Enclosure. 150(W)X70(H)X110(D)mm			

SPECIFICATION FOR TSM

System Voltage	415VAC		
Frequency	50/60Hz		
Power Circuit	2 no SCR-SCR for L1 & L3, L2 directly connected to capacitor bank.		
Rating	15KVAr	25KVAr	50KVAr
Nominal Current	21A	35A	70A
Maximum current	25A	42A	84A
PowerLoss	45w	75w	150w
Cooling Fan (4 inch)	No	No	Provided
Dimension(HxWxD)mm	125x200x200	125x200x200	210x200x200
Detuned system	Suitable to use with 5.6/7/14 % Detuned system		
Terminal	Copper bar with nut and bolt termination		
Discharging of capacitor	By discharge resistor module.		

CONNECTION DIAGRAM





