



Features

- High power and high current.
- High performance/low cost circuit design.
- Logic compatible current regulated input.
- 4000 Vrms optical isolation.
- Both "Zero Voltage" & phase controllable "Random Switching" versions.
- High voltage (1200 Vpk) versions for 480 Vrms service.
- LED-indication for control input.
- Control voltage range: 3 to 32 Vdc or 90 to 280Vac
- Industry standard "SCR Modules" package.

Ordering Options

VSM

VSM Series

Single Phase
Solid State Relay
(module type)

500

Load Current

500: 500Amps
650: 600Amps
800: 800Amps
1000: 1000Amps

D

Control Voltage

D: 3-32VDC
A: 90-280VAC

A28

Output Voltage

A28: 24-280VAC
A48: 48-480VAC
A53: 53-530VAC
A66: 66-660VAC

R

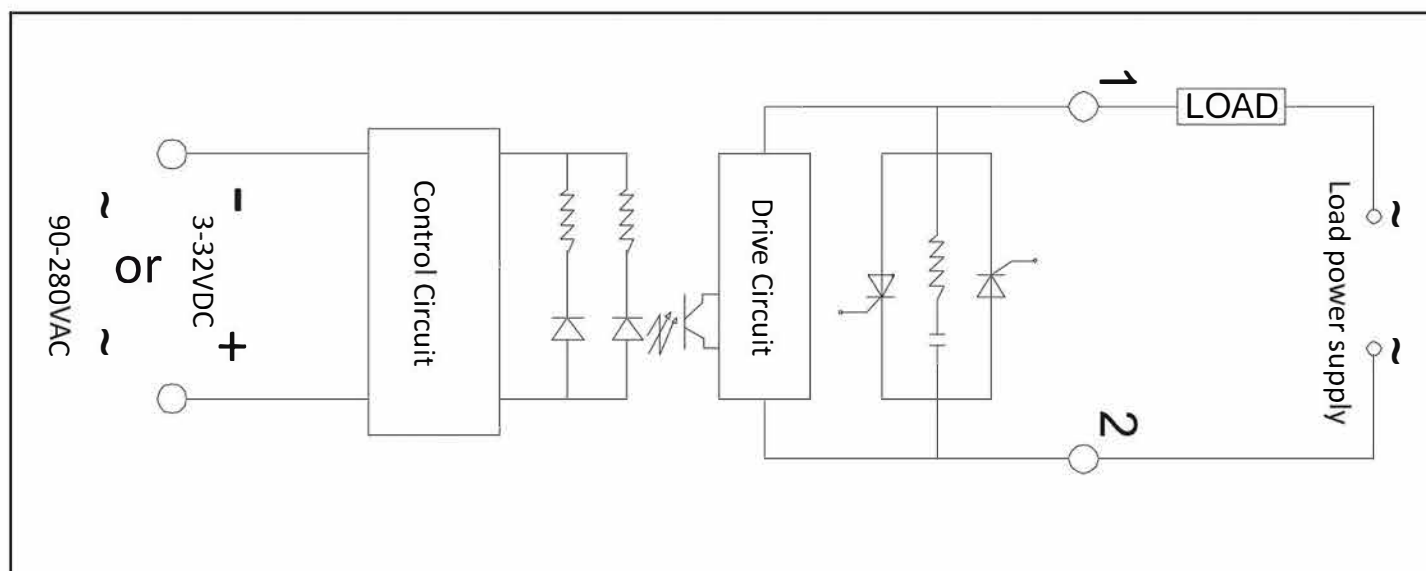
Switching Type

Z: Zero Cross Turn-on
R: Radom Turn-on

Product Selection

Control voltage	Rated Voltage	Rated operational current			
		500Amp	600Amp	800Amp	1000 Amp
3 to 32 Vdc	280 VAC "Z"	VSM500DA28Z	VSM600DA28Z	VSM800DA28Z	VSM1000DA28Z
3 to 32 Vdc	280 VAC "R"	VSM500DA28R	VSM600DA28R	VSM800DA28R	VSM1000DA28R
90 to 280Vac	280 VAC "Z"	VSM500AA28Z	VSM600AA28Z	VSM800AA28Z	VSM1000AA28Z
90 to 280Vac	280 VAC "R"	VSM500AA28R	VSM600AA28R	VSM800AA28R	VSM1000AA28R
3 to 32 Vdc	480 VAC "Z"	VSM500DA48Z	VSM600DA48Z	VSM800DA48Z	VSM1000DA48Z
3 to 32 Vdc	480 VAC "R"	VSM500DA48R	VSM600DA48R	VSM800DA48R	VSM1000DA48R
90 to 280Vac	480 VAC "Z"	VSM500AA48Z	VSM600AA48Z	VSM800AA48Z	VSM1000AA48Z
90 to 280Vac	480 VAC "R"	VSM500AA48R	VSM600AA48R	VSM800AA48R	VSM1000AA48R

Connection Diagram



Input Specifications

Parameter-list	Specification Limits	
Input Parameter	D	A
Control Voltage Range	3 to 32Vdc	90 to 280Vac
Input Current(Max.)	13/16mAdc @=5V/24V	29mAac @=220V
Must Turn On Voltage	3Vdc	90Vac
Must Turn Off Voltage	1Vdc	10Vac
Reverse Voltage (Max.)	32Vdc	/

Output Specifications

Output Parameter	Units	Specification Limits			
Model No.:VSM	Amp	500	600	800	1000
Load Current Range	Arms	0.05 to 500	0.05 to 650	0.05 to 800	0.05 to 1000
Surge Current 20mSec(Max.)	Arms	7200	8800	11500	12000
Load Voltage Range(280V)	Vrms	24 to 280			
SCR Over voltage(280V)	Vpk	≥800			
Load Voltage Range(480V)	Vrms	48 to 480			
SCR Over voltage(480V)	Vpk	≥1200			
Thermal Resistance,(Rthjc)	°C/w	0.1	0.1	0.08	0.07
Frequency Range	Hz	47 to 63			
Off State dv/dt (Min.)	V/μsec	500			
Off State Leakage Current(Max.)	mArms	≤10			
On State Voltage Drop(Max.)	Vrms	1.8			
Turn On Time (Max.)"Z"	Cycle	1/2			
Turn On Time (Max.)"R"	mSec	1			
Turn Off Time (Max.)	Cycle	1/2			
Turn Off Time (Max.)"A2"	mSec	40			
Dielectric (Input/Output)	Vrms	2500			
Dielectric (Input-Output/Base)	Vrms	2500			
Capacitance	pf	10			
Ambient Temperature Range	Operating or Storage -30°C to +80°C				
Weight (Typical)	g	880	880	1500	1500
Base Plate	Copper, nikel-plated				
Case Color	Black				
Led Display	Yes				

Dimensions
