Features

- Three-pole, single-throw, one normally open, suitable for three-phase loads
- Rated off-state voltage: 480Vrms; 530Vrms
- The switch type is zero-crossing conduction type and random conduction type
- Input control voltage: 3-32Vdc, AC 90-280Vac
- Good thermal performance and long life
- Rated on-state current: 3x10-120A
- Input/output insulation voltage: 2500Vrms
- LED input display

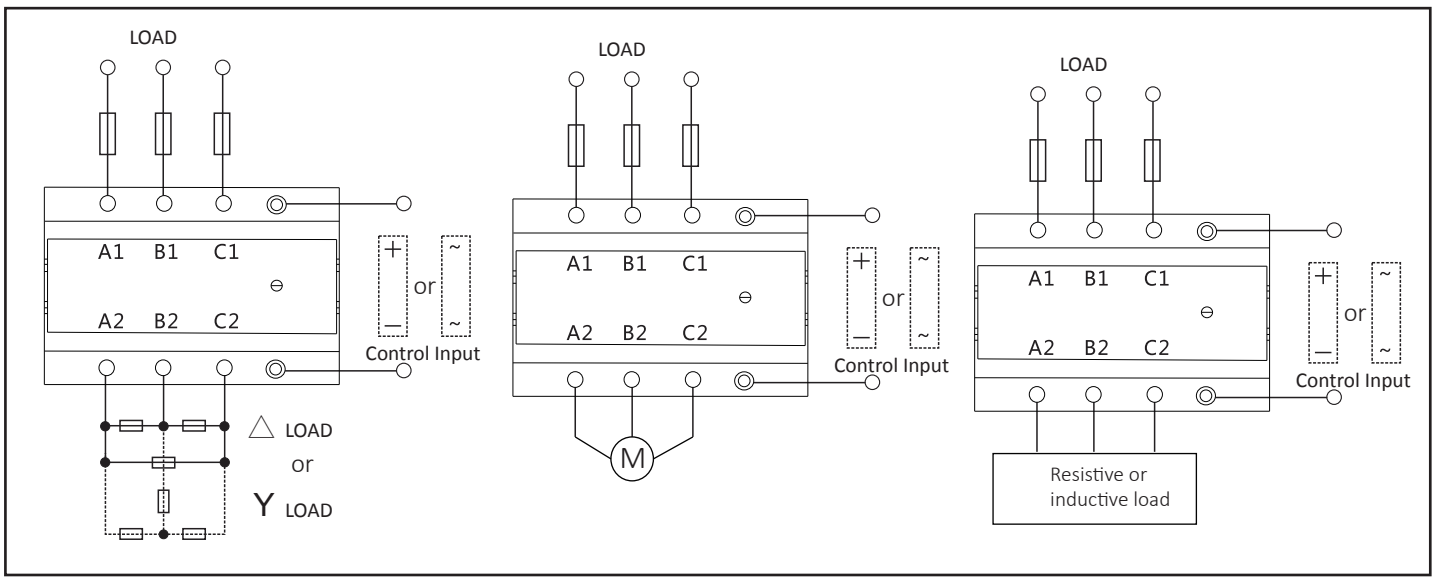
Ordering Options

VTG	40	D	A48	Z
VTGSeries	**Load Current**	**Control Voltage**	**Output Voltage**	**Switching Type**
Three Phase Solid State Relay	10: 10Amps 25: 25Amps 40: 40Amps 60: 60Amps 80: 80Amps 100: 100Amps 120: 120Amps	D: 3-32VDC A: 90-280VAC	A48: 48-480VAC A53: 53-530VAC	Z: Zero Cross Turn-on R: Radom Turn-on

Product Selection

Control voltage	Rated Voltage	Rated operational current						
		10 Amp	25Amp	40Amp	60 Amp	80Amp	100Amp	120Amp
3 to 32 Vdc	480 VAC “Z”	VTG10DA48Z	VTG25DA48Z	VTG40DA48Z	VTG60DA48Z	VTG80DA48Z	VTG100DA48Z	VTG120DA48Z
3 to 32 Vdc	480 VAC “R”	VTG10DA48R	VTG25DA48R	VTG40DA48R	VTG60DA48R	VTG80DA48R	VTG100DA48R	VTG120DA48R
90 to 280Vac	480 VAC “Z”	VTG10AA48Z	VTG25AA48Z	VTG40AA48Z	VTG60AA48Z	VTG80AA48Z	VTG100AA48Z	VTG120AA48Z
90 to 280Vac	480 VAC “R”	VTG10AA48R	VTG25AA48R	VTG40AA48R	VTG60AA48R	VTG80AA48R	VTG100AA48R	VTG120AA48R
3 to 32 Vdc	530 VAC “Z”	VTG10DA53Z	VTG25DA53Z	VTG40DA53Z	VTG60DA53Z	VTG80DA53Z	VTG100DA53Z	VTG120DA53Z
3 to 32 Vdc	530 VAC “R”	VTG10DA53R	VTG25DA53R	VTG40DA53R	VTG60DA53R	VTG80DA53R	VTG100DA53R	VTG120DA53R
90 to 280Vac	530 VAC “Z”	VTG10AA53Z	VTG25AA53Z	VTG40AA53Z	VTG60AA53Z	VTG80AA53Z	VTG100AA53Z	VTG120AA53Z
90 to 280Vac	530 VAC “R”	VTG10AA53R	VTG25AA53R	VTG40AA53R	VTG60AA53R	VTG80AA53R	VTG100AA53R	VTG120AA53R

Connection Diagram



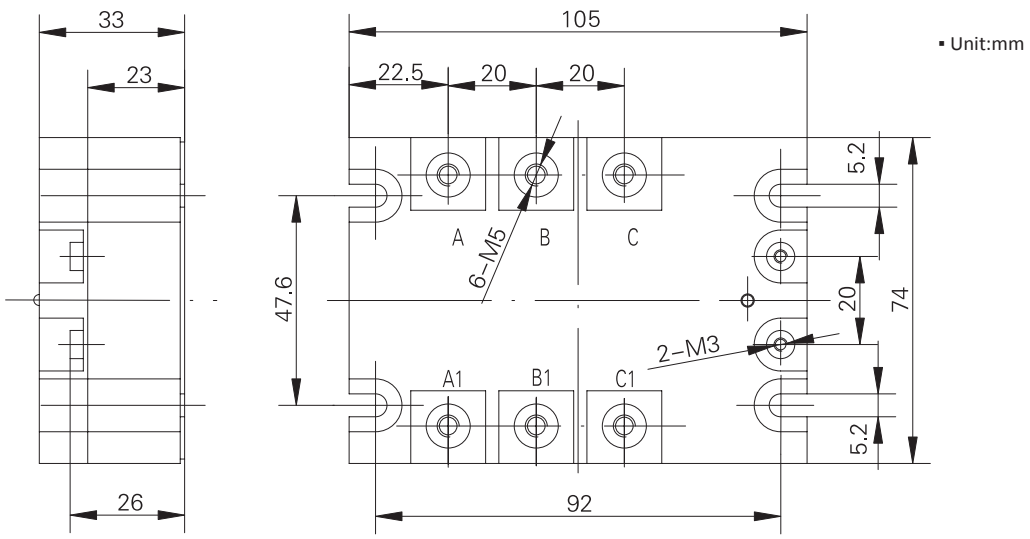
Input Specifications

Parameter-list	Specification Limits	
Input Parameter	D	A
Control Voltage Range	3 to 32Vdc	90 to 280Vac
Input Current(Max.)	33/56mAdc @=5V/12V	13mAac @=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.:VTG	Amp	10	25	40	60	80	100	120
Load Current Range	Arms	3x10	3x25	3x40	3x60	3x80	3x100	3x120
Surge Current 20mSec(Max.)	Arms	200	300	400	600	1000	1200	1500
Load Voltage Range(480V)	Vrms	48 to 480						
SCR Over voltage(480V)	Vpk	≥1200						
Load Voltage Range(530V)	Vrms	53 to 530						
SCR Over voltage(530V)	Vpk	≥1400						
Thermal Resistance,(Rthjc)	°C/w	0.75	0.55	0.46	0.38	0.34	0.23	0.23
Frequency Range	Hz	47 to 63						
Off State dv/dt (Min.)	V/μsec	500						
Off State Leakage Current(Max.)	mArms	≤8						
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.)"A"	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							
Led Display	Yes							

Dimensions

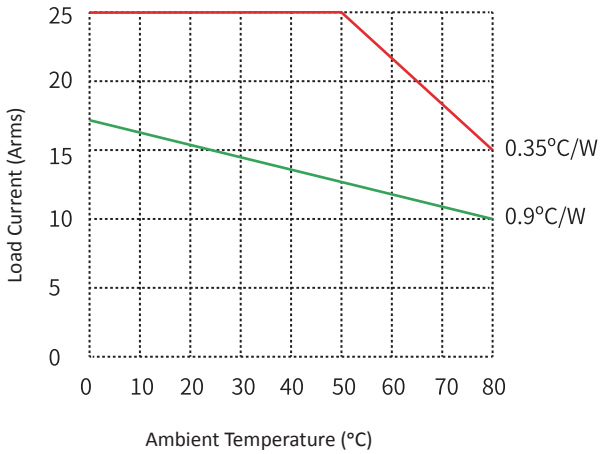


▪ Unit:mm

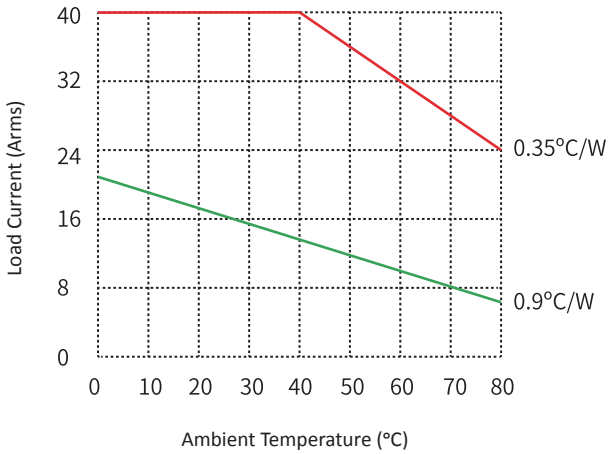
▪ When installing to the panel, tightening the screw with a torque of 1.8 to 2.5 N m.

Thermal Derating Curve

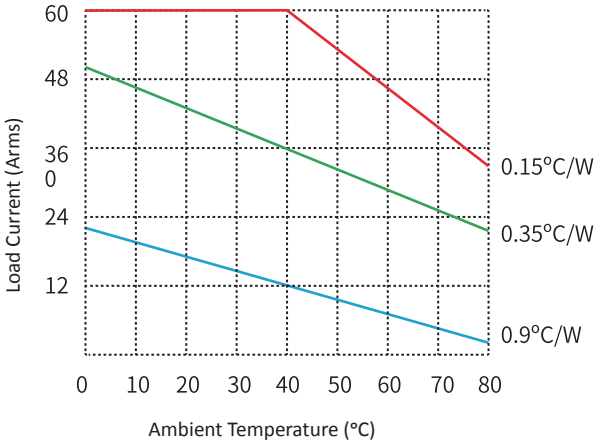
25A



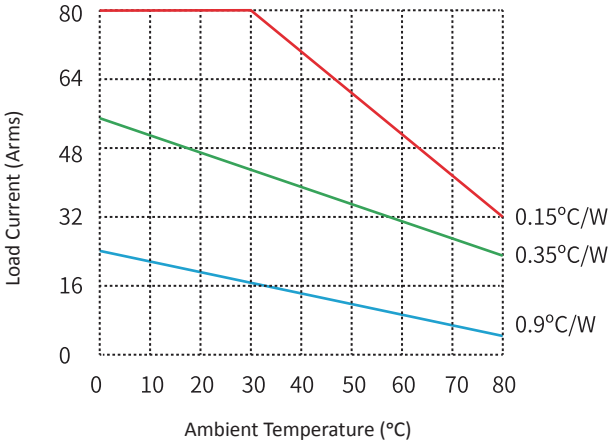
40A



60A



80A

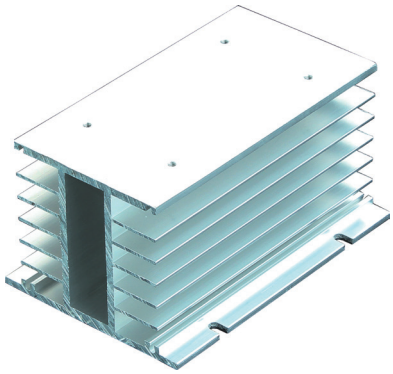


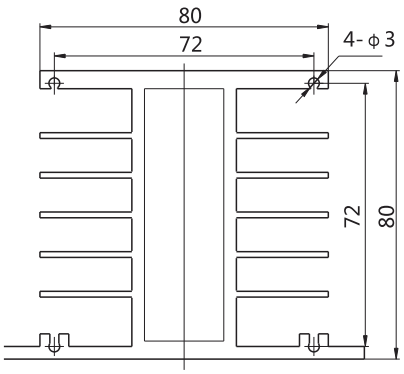
Important Notice

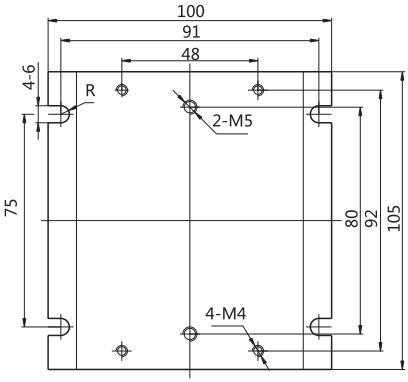
1. If the connection of the load will produce high surge current, please pay attention to the solid state relay is able to withstand surge current value.
2. If the connection of the load will produce high peak reverse voltage, please pay attention to the solid state relay is able to withstand the peak voltage.
3. When choosing SSR, please pay special attention to the working current of the load and working temperature, when the environment temperature is higher, the user should take load discount into account according to the thermal curve

Solid State Relay Heatsink

VTR-1 (For VTG10A-40A)







VTR-2 (For VTG10A-120A)