



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

VTR

VTR Series

Three Phase
Solid State Relay

40

Load Current

10: 10Amps
25: 25Amps
40: 40Amps
60: 60Amps
80: 80Amps
100: 100Amps
120: 120Amps

D

Control Voltage

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

A48

Output Voltage

A48: 48-480VAC
A53: 53-530VAC

Z

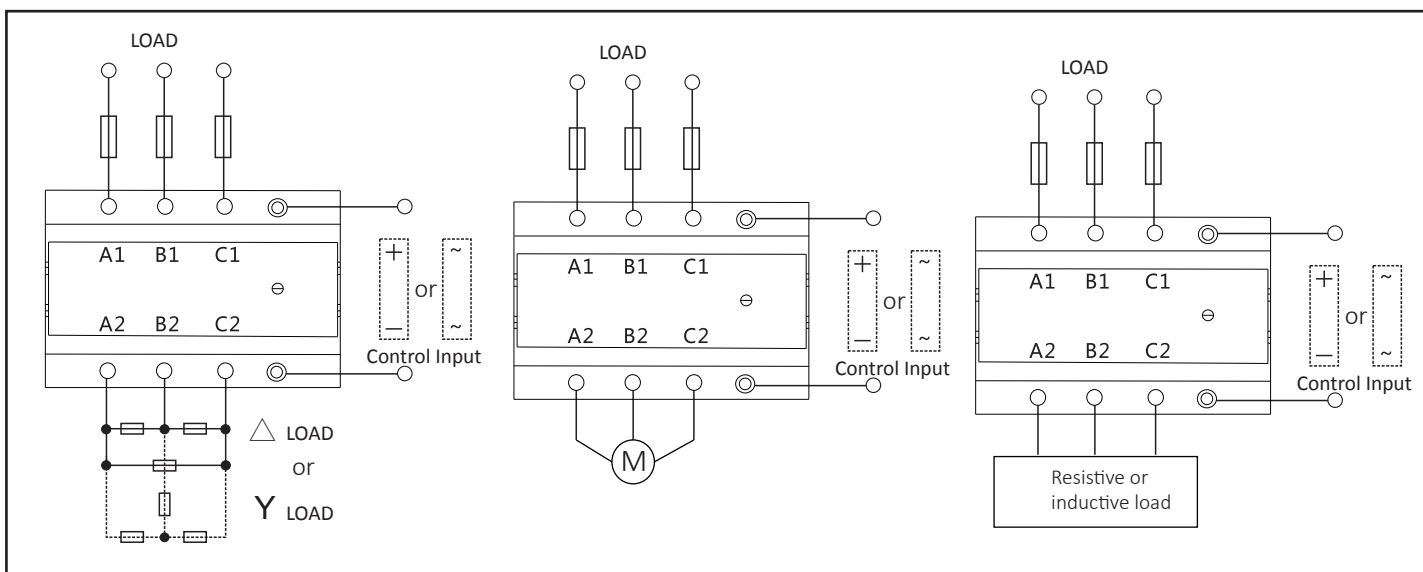
Switching Type

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"	VTR10DA48Z	VTR25DA48Z	VTR40DA48Z	VTR60DA48Z	VTR80DA48Z	VTR100DA48Z	VTR120DA48Z
3 to 32 Vdc	480 VAC "R"	VTR10DA48R	VTR25DA48R	VTR40DA48R	VTR60DA48R	VTR80DA48R	VTR100DA48R	VTR120DA48R
90 to 280Vac	480 VAC "Z"	VTR10AA48Z	VTR25AA48Z	VTR40AA48Z	VTR60AA48Z	VTR80AA48Z	VTR100AA48Z	VTR120AA48Z
90 to 280Vac	480 VAC "R"	VTR10AA48R	VTR25AA48R	VTR40AA48R	VTR60AA48R	VTR80AA48R	VTR100AA48R	VTR120AA48R
3 to 32 Vdc	530 VAC "Z"	VTR10DA53Z	VTR25DA53Z	VTR40DA53Z	VTR60DA53Z	VTR80DA53Z	VTR100DA53Z	VTR120DA53Z
3 to 32 Vdc	530 VAC "R"	VTR10DA53R	VTR25DA53R	VTR40DA53R	VTR60DA53R	VTR80DA53R	VTR100DA53R	VTR120DA53R
90 to 280Vac	530 VAC "Z"	VTR10AA53Z	VTR25AA53Z	VTR40AA53Z	VTR60AA53Z	VTR80AA53Z	VTR100AA53Z	VTR120AA53Z
90 to 280Vac	530 VAC "R"	VTR10AA53R	VTR25AA53R	VTR40AA53R	VTR60AA53R	VTR80AA53R	VTR100AA53R	VTR120AA53R

Connection Diagram

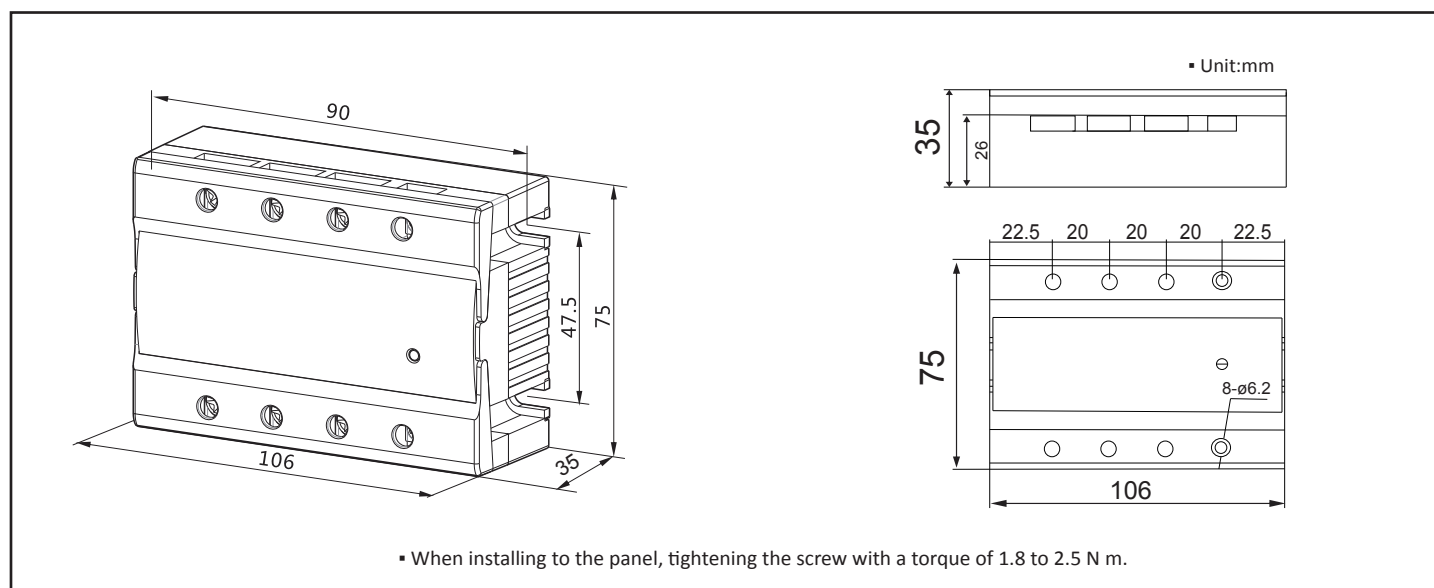


Input Specifications

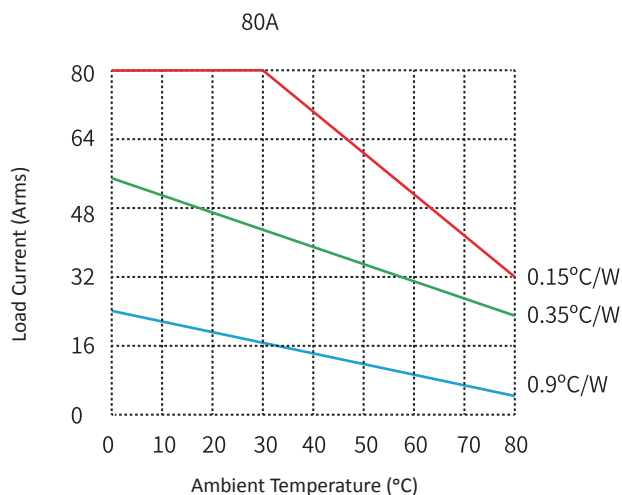
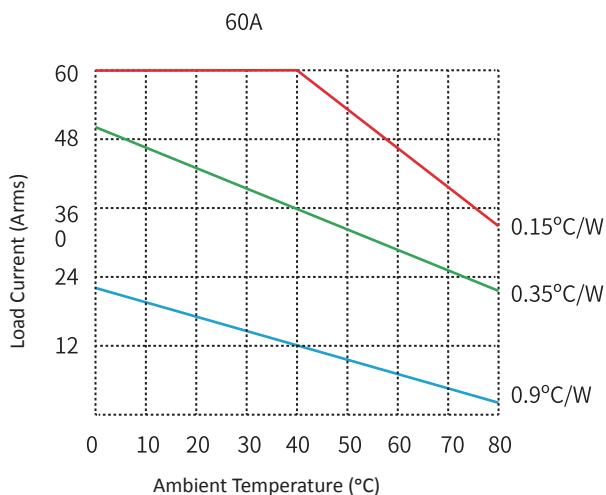
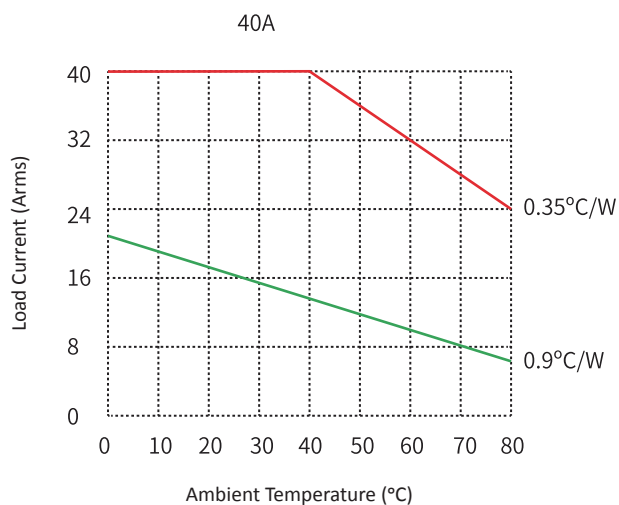
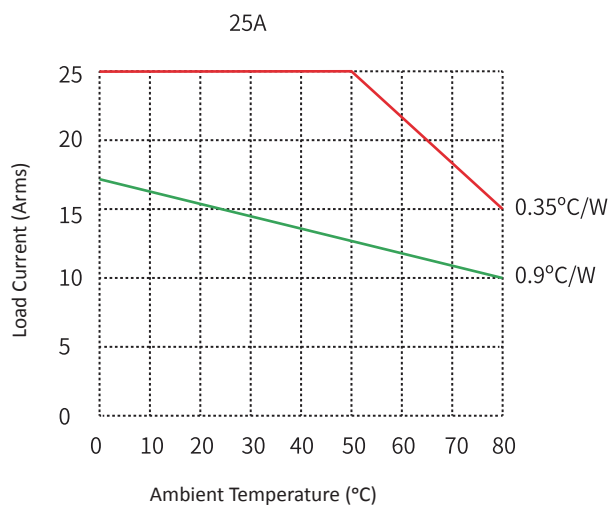
Parameter-list	Specification Limits	
Input Parameter	D	A
Control Voltage Range	3 to 32Vdc	90 to 280Vac
Input Current(Max.)	33/56mA _{dc} @=5V/12V	13mA _{ac} @=220V
Must Turn On Voltage	3Vdc	90Vac
Must Turn Off Voltage	1Vdc	10Vac
Reverse Voltage (Max.)	32Vdc	/

Output Specifications

Output Parameter	Units	Specification Limits						
Model No.:VTR	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

Thermal Derating Curve

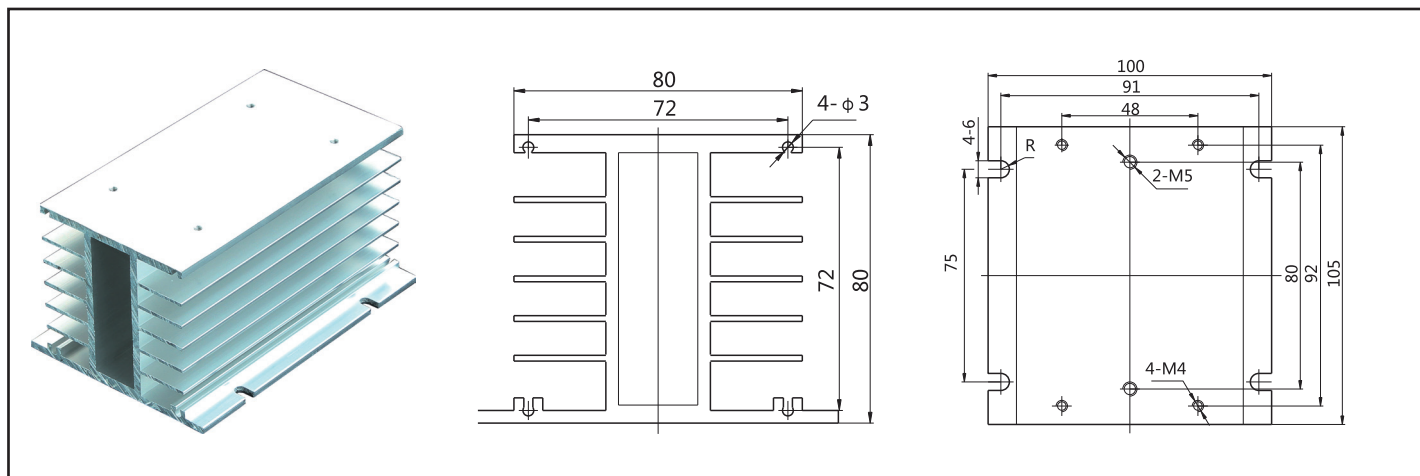


Important Notice

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 VTR10A-40A)



VTR-2 (For VTR10A-120A)

