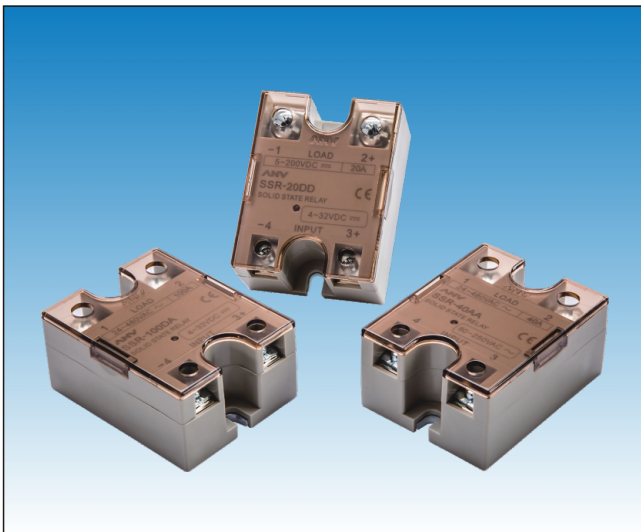


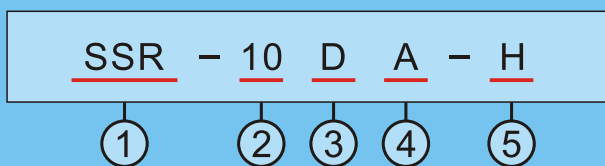
## Solid state Relay

SSR (Single phase type)



- Built-in operation indicator
- High reliability by S.M.T. (Surface Mounting Technology)
- High isolation over than 50MΩ (500VDC)
- High dielectric over than 2.5KV
- Low EMI / EFI & surge by zero cross trigger method
- Output snubber circuit protection

## ORDER INFORMATION



### 1. Solid State Relay Type

SSR: Single phase type

### 2. Load current

05: 5A	50: 50A
10: 10A	80: 80A
15: 15A	100: 100A
25: 25A	120: 120A
40: 40A	

### 3. Input voltage

D: DC4~32V(SSR-DA, SSR-DD)  
 DC3~32V(SSR-120DA)  
 A: AC80~250V(SSR-AA)  
 AC90~250V(SSR-120AA)  
 L: 4~20mA  
 V: Adjusted output voltage

### 4. Output voltage

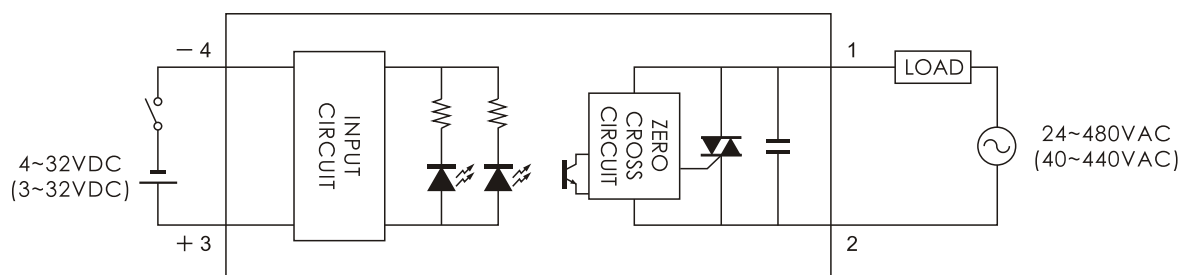
D: DC5~200V  
 A: AC24~480V(SSR-DA, SSR-AA)  
 AC40~440V(SSR-120DA,  
 SSR-120AA)  
 AC90~250V(SSR-LA)  
 AC90~480V(SSR-VA)

### 5. High voltage

Non: Standard type  
 H: AC250~480V(SSR-LA-H)

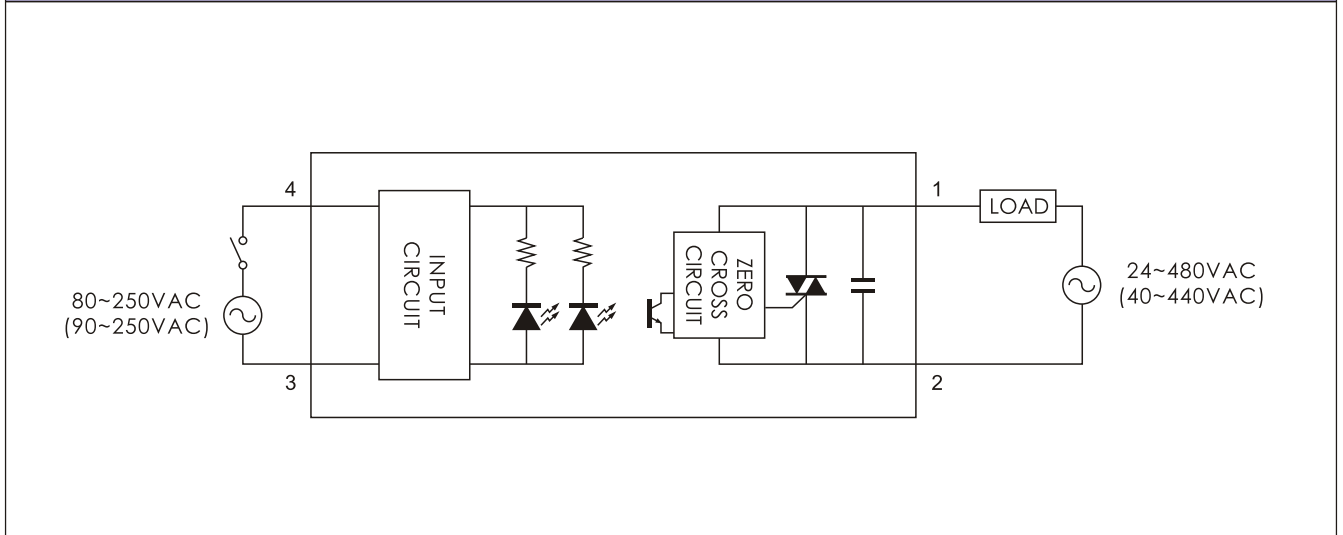
MODEL	SSR-10DA	SSR-15DA	SSR-25DA	SSR-40DA	SSR-50DA	SSR-80DA	SSR-100DA	SSR-120DA	
LOAD CURRENT	10A	15A	25A	40A	50A	80A	100A	120A	
<b>INPUT</b>									
OPERATING VOLTAGE	4~32VDC							3~32VDC	
TRIGGER CURRENT	7.5mA/12VDC max								
CONTROL METHOD	Zero Cross Trigger								
<b>OUTPUT</b>									
OPERATING VOLTAGE	24~480VAC							40~440 VAC	
VOLTAGE DROP	1.6V								
LEAKAGE CURRENT	< 3.0mA								
RESPONSE TIME	ON<10ms, OFF<10ms								
<b>GENERAL</b>									
INSULATION RESISTANCE	Min. 50MΩ (500VDC)								
DIELECTRIC STRENGTH	2500VAC 50/60 Hz for 1 min								
AMBIENT TEMPERATURE	-20°C~+80°C								
AMBIENT HUMIDITY	45%~85%RH								
WEIGHT	Approx. 70g	Approx. 85g		Approx. 115g			Approx. 155g		

**CONNECTION DIAGRAM**



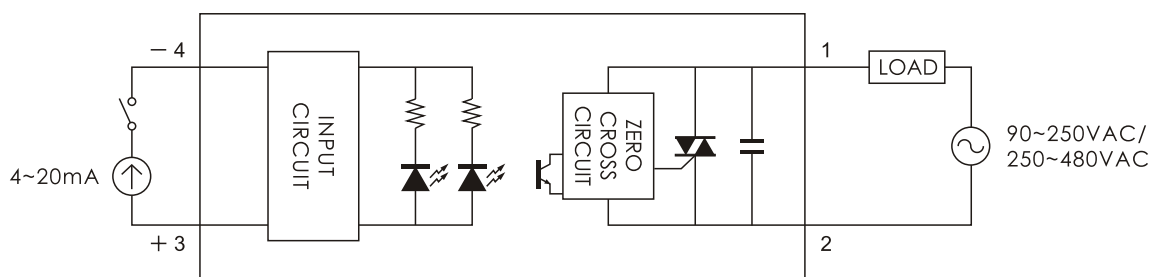
MODEL	SSR-10AA	SSR-15AA	SSR-25AA	SSR-40AA	SSR-50AA	SSR-80AA	SSR-100AA	SSR-120AA	
LOAD CURRENT	10A	15A	25A	40A	50A	80A	100A	120A	
<b>INPUT</b>									
OPERATING VOLTAGE	80~250VAC 50/60Hz							90~250 VAC	
TRIGGER CURRENT	5.0mA/110VAC max								
CONTROL METHOD	Zero Cross Trigger								
<b>OUTPUT</b>									
OPERATING VOLTAGE	24~480VAC							40~440 VAC	
VOLTAGE DROP	1.6V								
LEAKAGE CURRENT	< 3.0mA								
RESPONSE TIME	ON<20ms, OFF<20ms								
<b>GENERAL</b>									
INSULATION RESISTANCE	Min. 50MΩ (500VDC)								
DIELECTRIC STRENGTH	2500VAC 50/60 Hz for 1 min								
AMBIENT TEMPERATURE	-20°C~+80°C								
AMBIENT HUMIDITY	45%~85%RH								
WEIGHT	Approx. 70g	Approx. 85g		Approx. 115g			Approx. 155g		

**CONNECTION DIAGRAM**



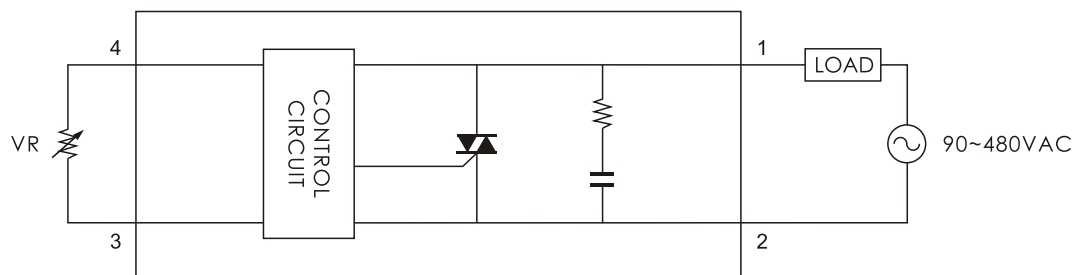
MODEL	STANDARD	SSR-10LA	SSR-15LA	SSR-25LA	SSR-40LA	SSR-50LA	SSR-80LA
	HIGH VOLTAGE	SSR-10LA-H	SSR-15LA-H	SSR-25LA-H	SSR-40LA-H	SSR-50LA-H	SSR-80LA-H
LOAD CURRENT		10A	15A	25A	40A	50A	80A
<b>INPUT</b>							
TRIGGER CURRENT	4~20mA						
CONTROL METHOD	Zero Cross Trigger						
<b>OUTPUT</b>							
OPERATING VOLTAGE	Standard : 90~250VAC High voltage : 250~480VAC						
VOLTAGE DROP	1.6V						
LEAKAGE CURRENT	Standard : < 3.0mA High voltage : < 5.0mA						
RESPONSE TIME	ON<10ms, OFF<10ms						
<b>GENERAL</b>							
INSULATION RESISTANCE	Min. 50MΩ (500VDC)						
DIELECTRIC STRENGTH	2500VAC 50/60 Hz for 1 min						
AMBIENT TEMPERATURE	-20°C~+80°C						
AMBIENT HUMIDITY	45%~85%RH						
WEIGHT	Approx. 70g		Approx. 85g		Approx. 115g		

**CONNECTION DIAGRAM**



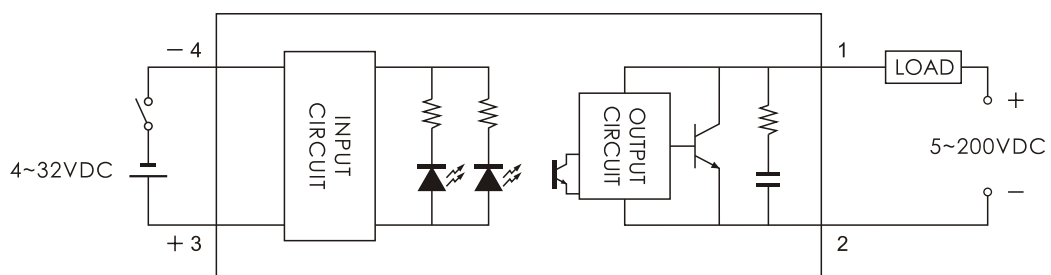
MODEL	SSR-10VA	SSR-15VA	SSR-25VA	SSR-40VA	SSR-50VA	SSR-80VA	SSR-100VA
LOAD CURRENT	10A	15A	25A	40A	50A	80A	100A
<b>INPUT</b>							
VARIABLE RESISTANCE	Trimmer 80KΩ/110V, 150KΩ/220V, 250KΩ/380V, 300KΩ/480V						
CONTROL METHOD	Phase Control						
<b>OUTPUT</b>							
OPERATING VOLTAGE	90~480VAC						
VOLTAGE DROP	1.6V						
LEAKAGE CURRENT	< 5.0mA						
<b>GENERAL</b>							
INSULATION RESISTANCE	Min. 50MΩ (500VDC)						
DIELECTRIC STRENGTH	2500VAC 50/60 Hz for 1 min						
AMBIENT TEMPERATURE	-20°C~+80°C						
AMBIENT HUMIDITY	45%~85%RH						
WEIGHT	Approx. 70g	Approx. 85g		Approx. 115g			

**CONNECTION DIAGRAM**



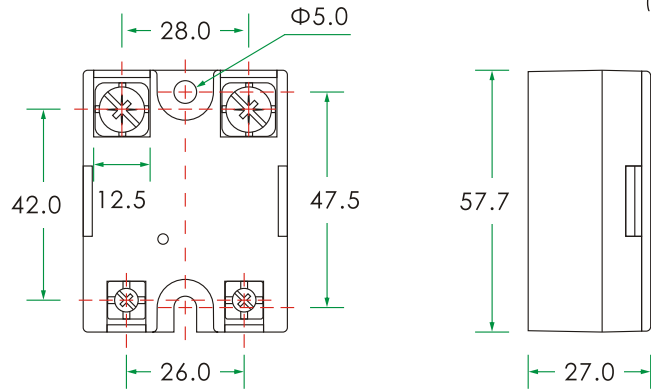
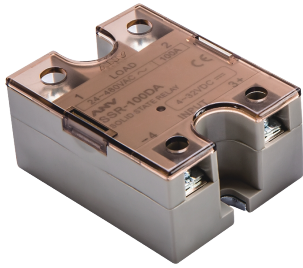
MODEL	SSR-05DD	SSR-10DD	SSR-20DD
LOAD CURRENT	5A	10A	20A
<b>INPUT</b>			
OPERATING VOLTAGE	4~32VDC		
TRIGGER CURRENT	7.5mA/12VDC max		
CONTROL METHOD	Isolated by photocouple		
<b>OUTPUT</b>			
OPERATING VOLTAGE	5~200VDC		
VOLTAGE DROP	1.3V		
LEAKAGE CURRENT	< 0.8mA		
RESPONSE TIME	1ms<ON+OFF>		
<b>GENERAL</b>			
INSULATION RESISTANCE	Min. 50MΩ (500VDC)		
DIELECTRIC STRENGTH	2500VAC 50/60 Hz for 1 min		
AMBIENT TEMPERATURE	-20°C~+80°C		
AMBIENT HUMIDITY	45%~85%RH		
WEIGHT	Approx. 70g		

**CONNECTION DIAGRAM**

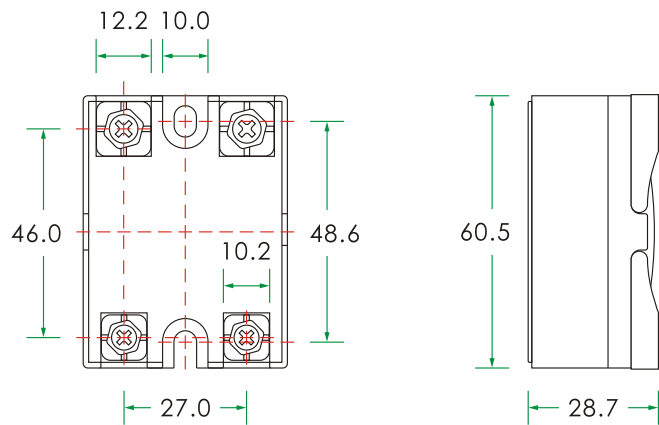
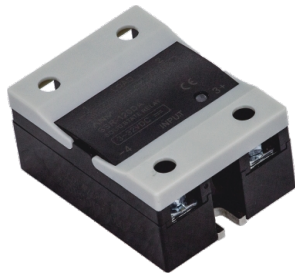
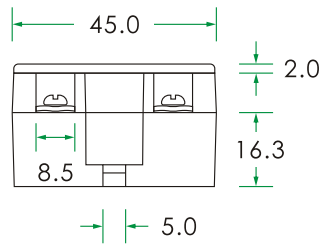
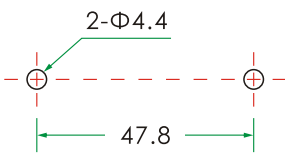


Dimensions

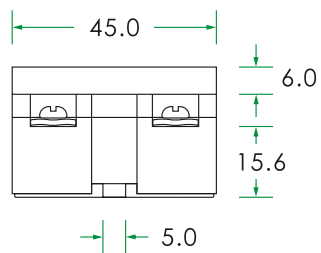
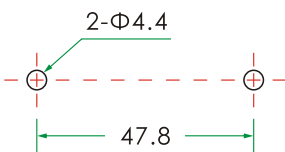
(Units: mm)



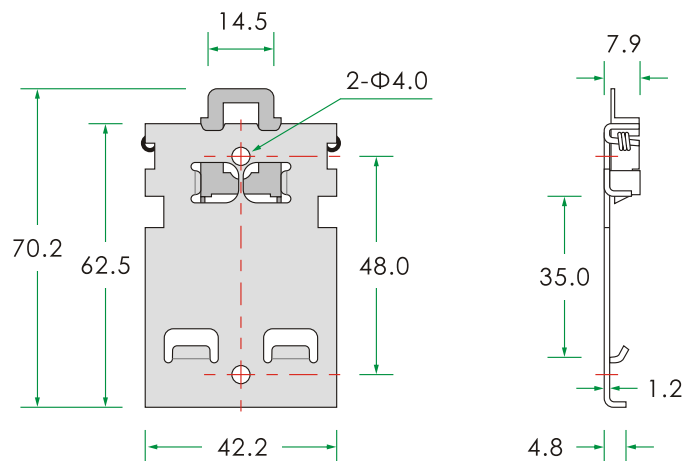
Mounting holes



Mounting holes

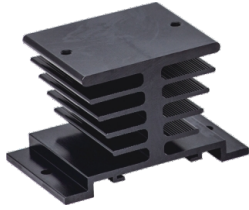


SSR-N

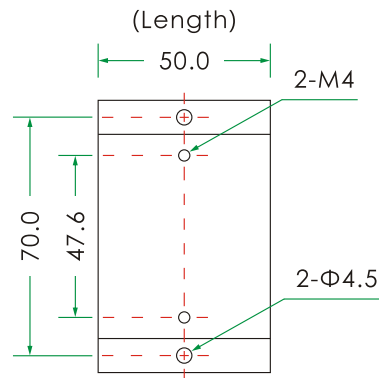
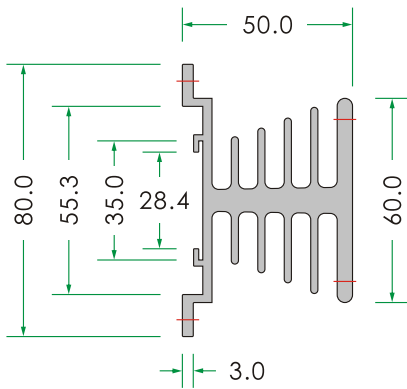
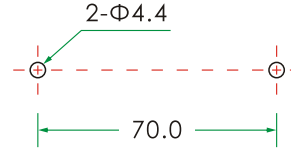


HS-1(Heat Sink)

(Units : mm)



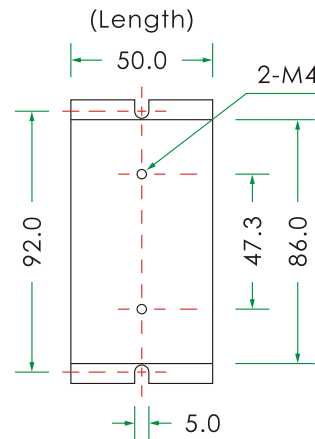
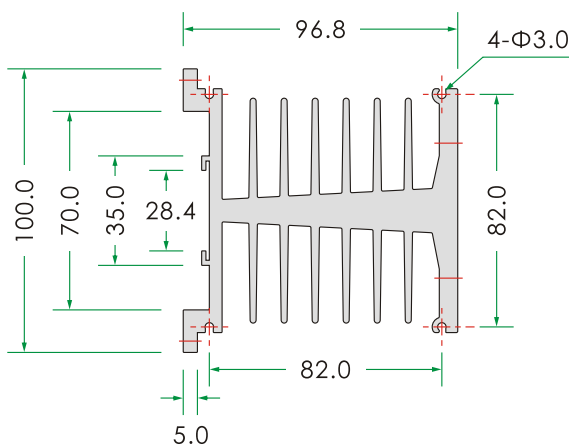
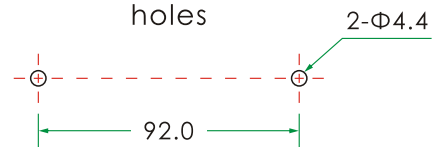
Mounting holes



HS-2(Heat Sink)



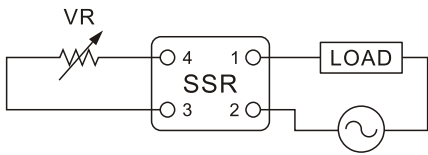
Mounting holes



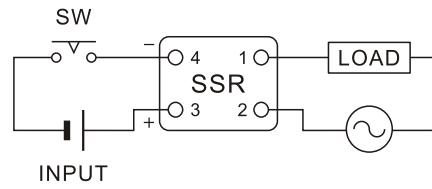


Application

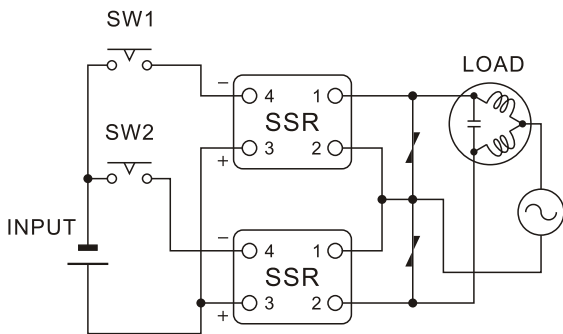
Variable Phase Control



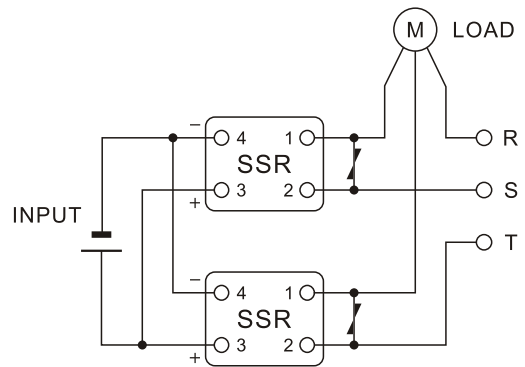
Switch control



1  $\phi$  Motor FOR/REV Control

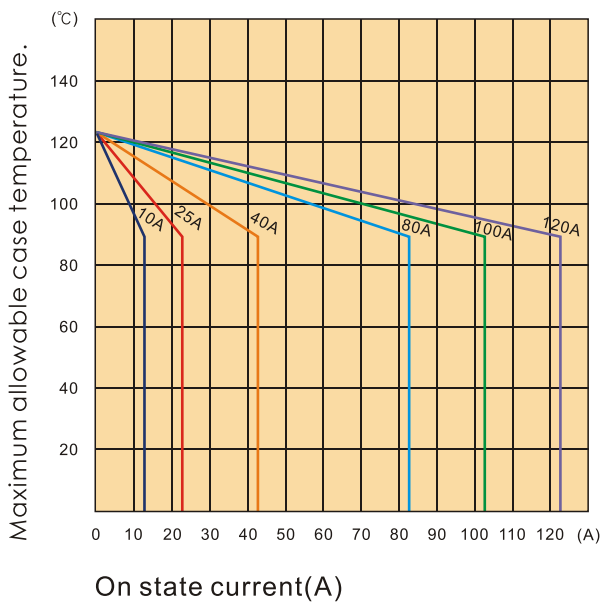


3  $\phi$  Motor Control

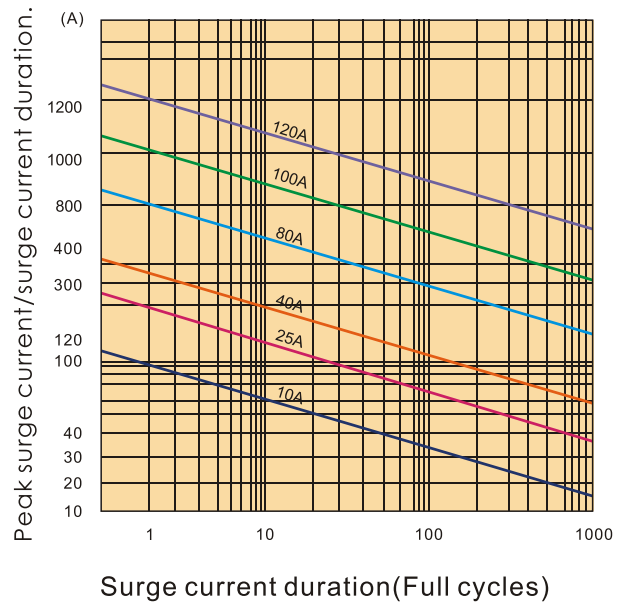


Reference Data

Maximum allowable case temperature.



Peak surge current/surge current duration.

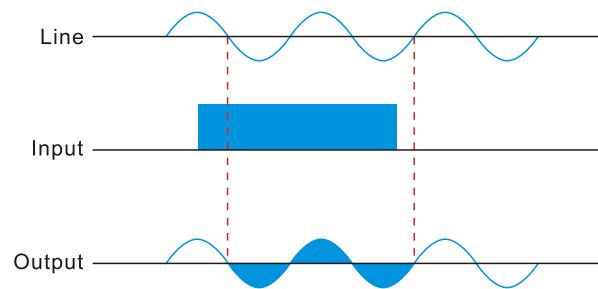


## CHARACTERISTIC

### Control Method

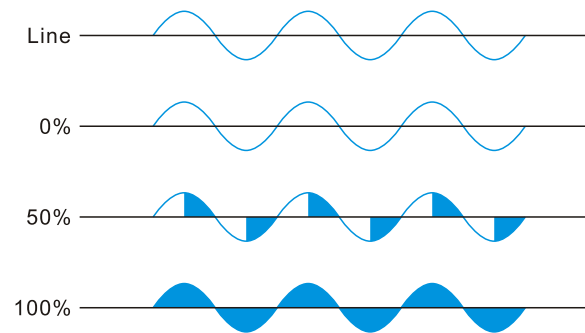
#### Zero Cross Trigger

Output will be turned ON or turned OFF Only on zero cross point of sine wave, may avoid surge or EMI / RFI occurring Specially suited to control resistive, capacitive and Non-saturated inductive loads.



#### Variable Resistance Control (Trimmer Control)

Power output is controlled by the trigger angle of TRIAC with variable resistor 80KΩ/110VAC, 150KΩ/220VAC, 250KΩ/380VAC, 300KΩ/480VAC


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