

- ◆ Phase-Shift Control Output
- ◆ SCR Output
- ◆ Control Signal: 0-5VDC, 0-10VDC or 4-20mA
- ◆ Load Current: 25A, 40A, 60A , 80A
- ◆ LED Indicator
- ◆ RoHS Compliant



Ordering Information

KYR	P	240	L	25	P	(XXX)
KRA Series	Output Type P: Power Proportional Output	Load Voltage 240: 240V 480: 480V	L : 0-5VDC H: 0-10VDC I : 4-20mA	Load Current 25: 25Amp 40: 40Amp 60: 60Amp 80: 80Amp	IP20 Optional Blank: without Cover P: IP20 Safety Cover	Customized Code

Note: (1) When it is current control version, the drive voltage should be more than 10V.

Model

Series	Output Type	Control Mode	Load Current	Output Type
KYR Series	KYRPxxLxx KYRPxxIxx	L/H: 0-5VDC/0-10VDC I : 4-20mA	25: 25Amp 40: 40Amp 60: 60Amp 80: 80Amp	Voltage Control: $U_{OUT}^2 = U_{AC}^2 \times V_{CONTROL} / 5 (10)$ Current Control: $U_{OUT}^2 = U_{AC}^2 \times (I_{CON} - 4) / 16$

General Specifications

Input Specifications					
Input Control	Voltage Control	Auxiliary Power Supply Voltage Range		10-32VDC	
		Control Voltage Range	L	0-5VDC	
			H	0-10VDC	
		Open Voltage	L	0.2VDC Max.	
			H	0.4VDC Max.	
		Turn-Off Voltage	L	0.1VDC Min.	
			H	0.2VDC Min.	
		Input Impedance	L	30kΩ Typical.	
	H		60kΩ Typical.		
	Current Control	Control Current Range	4-20mA		
		Open Current	4.6mA MAX		
		Turn-Off Current	3.8mA MIN		
		Input Impedance	200Ω Typical. ⁽¹⁾		

Note: When "I" option is used, the drive voltage should be more than 10V.

General Specifications

Output Specifications		
Load Voltage Range	240	176-280VAC
	480	300-530VAC
Maximum Surge Current (@10ms)	25A	250A
	40A	400A
	60A	600A
	80A	800A
Maximum Transient Overvoltage	1200Vpk	
Output power	0-99%	
Operational Frequency Range	47-63Hz	
Maximum Off-State Leakage Current@Rated Load Voltage	5mA	
Minimum Off-State dv/dt@Maximum Rated Voltage	500V/μs	

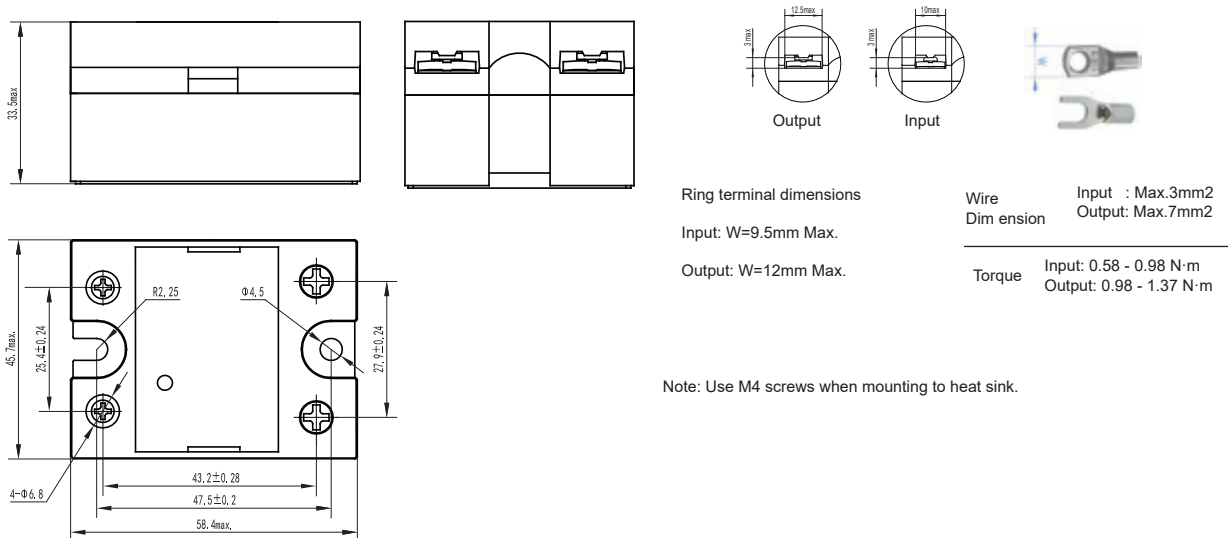
General Specifications		
Dielectric Strength (50/60Hz)	Input/Output	4000Vrms
	Input, output/Base	2500Vrms
Minimum Insulation Resistance (@500VDC)	1000MΩ	
Ambient Temperature Range	-30°C ~ +80°C	
Storage Temperature Range	-30°C ~ +100°C	
Weight (Typical)	KYRPxxL/Hxx Series	123g
	KYRPxxlxx Series	96g
	KYRPxxlxx-P Series	121g
LED (Green)	When the product is connected, LED lights up.	

Applications

Temperature chamber, plastic machinery, incubator, dimmer, solar panel welding machine, and etc.

Outline Dimensions

Unit: mm Current Control (With P)

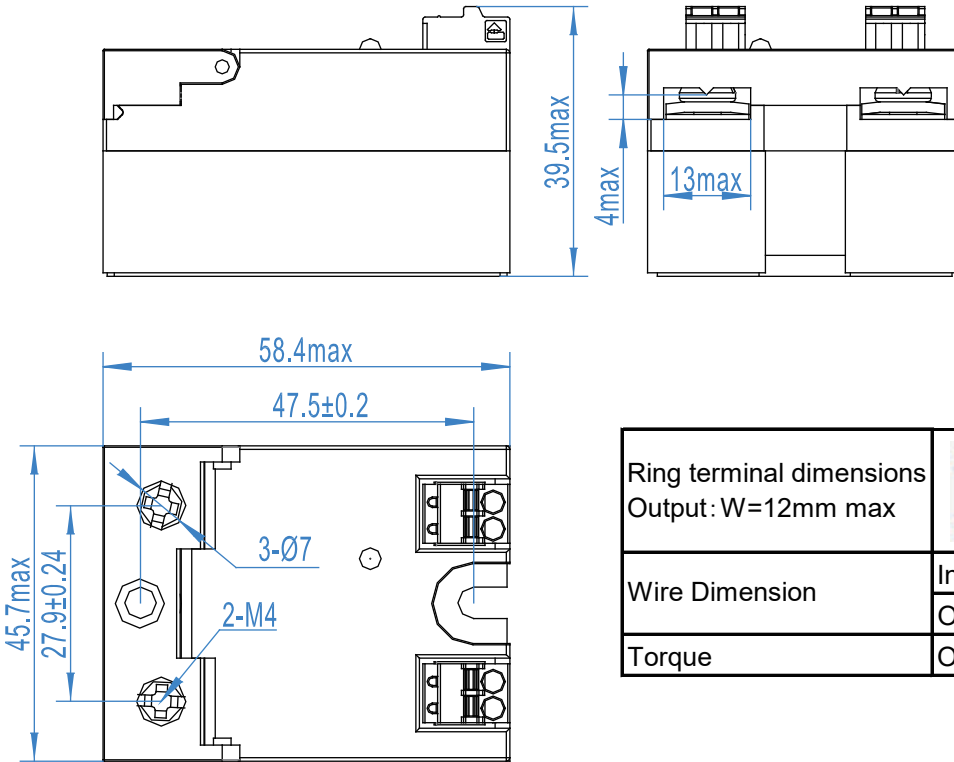


Note: Use M4 screws when mounting to heat sink.

Outline Dimensions

Unit: mm

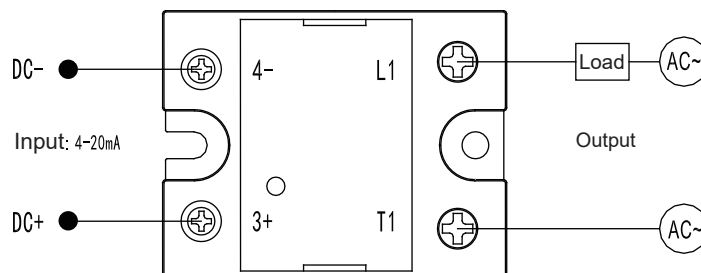
Voltage Control



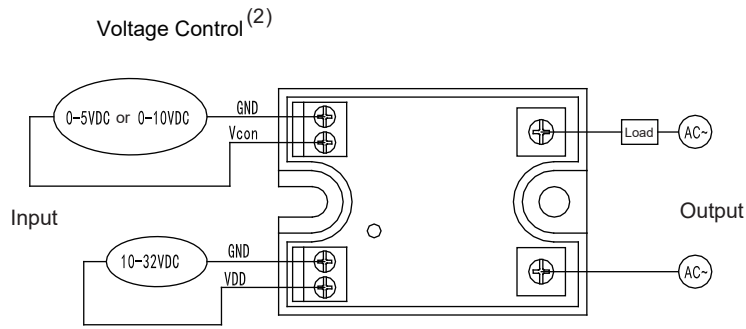
Ring terminal dimensions Output: W=12mm max	
Wire Dimension	Input: Max. 1.5mm ² Output: Max. 7mm ²
Torque	Output: 0.98 - 1.37 N·m

Wiring Diagram

Current Control

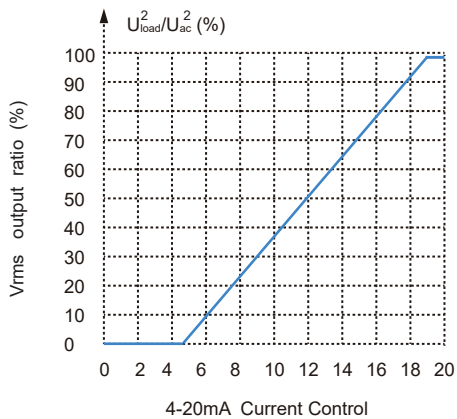
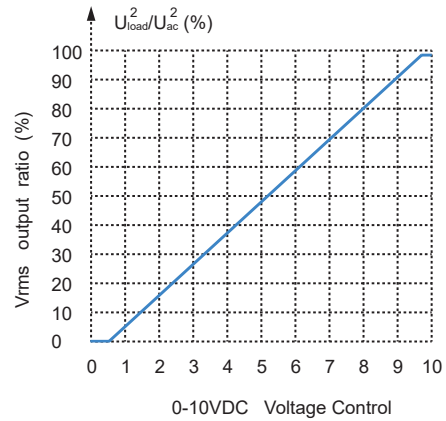
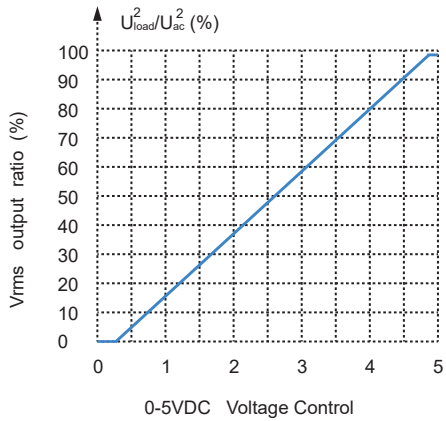


Wiring Diagram

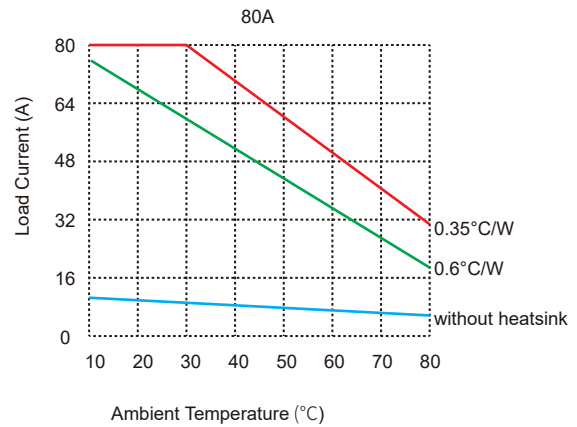
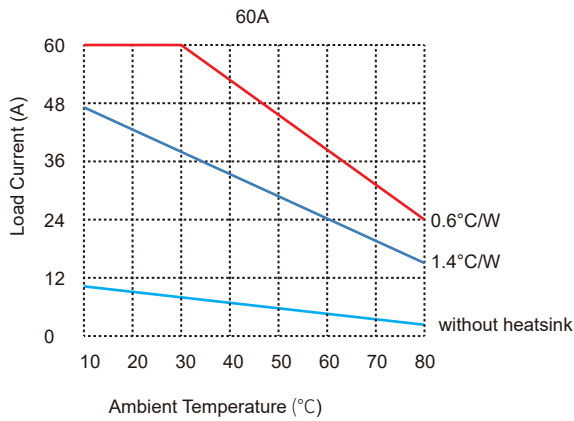
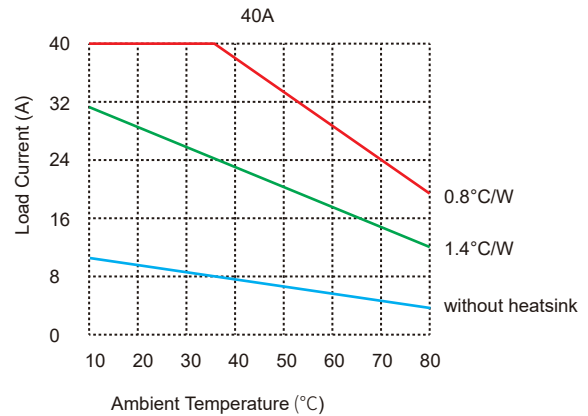
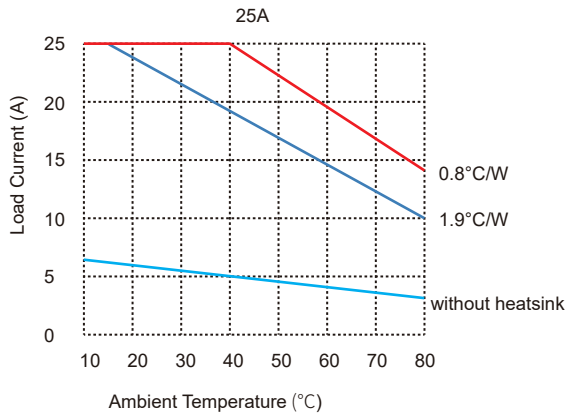


Note: (2) The auxiliary power supply GND and the input control GND should be connected internally to the earth ground; if the external control signal and the power supply are not connected together to the earth ground, then both should be connected to each GND respectively.

Output/Proportional Control Features



Thermal Derating Curve



General Notes

1. Relay must be mounted to proper sized heat sink based on thermal curves. Thermal grease or a thermal pad must be used between relay and heat sink .
2. When connecting wiring to SSR please ensure screws are torqued down properly (input 4.43/0.5 in-lb/N·m M3 screws 5.13-8.67/0.58-0.98 in-lb/N·m, M4 screws 8.67 -12.13/0.98-1.37 in-lb/N·m)
3. When Ambient temperature is above 25°C, see Thermal Derating Curves.

Agency Approvals (Certification)

