

- ◆ SCR Output for Heavy Industrial Loads
- ◆ Phase Angle or Distributed Full Cycle Switching Mode Available
- ◆ High EMC Immunity Design
- ◆ Control Inputs: 0-5VDC, 0-10VDC, 4-20mA
- ◆ Load Current: 25A-80A
- ◆ Integrated RC/MOV Protection Circuit
- ◆ IP20 Finger Touch Protection
- ◆ RoHS Compliant



Ordering Information

KYRT	V	480	L	25	-L
KYRT Series	Output Type V: Voltage Proportional Output P: Power Proportional Output	Load Voltage 480: 530VAC	Control Mode L: 0-5VDC; 4-20mA H: 0-10VDC; 4-20mA	Load Current 25: 25Amp 40: 40Amp 60: 60Amp 80: 80Amp	L: LED

General Specifications

Input Specifications		
Control Voltage Range	L	0-5VDC
	H	0-10VDC
Control Current Range		4-20mA
Input impedance (Typ.)	0-5V	110kΩ
	0-10V	22kΩ
	4-20mA	200Ω
Turn-on Voltage	L	≤0.2VDC
	H	≤0.4VDC
Turn-on Current		≤4.5mA
Turn-off Voltage		≥0.1VDC
Turn-off Current		≥3.9mA
External Power Supply Range		10-32VDC

Output Specifications		
Load Voltage Range	480VAC	180-530VAC
Maximum Surge Current (@10ms)	25A	300A
	40A	400A
	60A	600A
	80A	1250A
Maximum I ² t for Fusing (@10ms)	25A	450A ² s
	40A	800A ² s
	60A	1800A ² s
	80A	7800A ² s
Maximum Transient Overvoltage	480VAC	1200Vpk
Maximum Off-State Leakage Current@Rated Load Voltage		5mA
Maximum On-State Voltage Drop@Rated Current		1.6Vrms
Minimum Off-State dv/dt@Maximum Rated Voltage		500V/μs

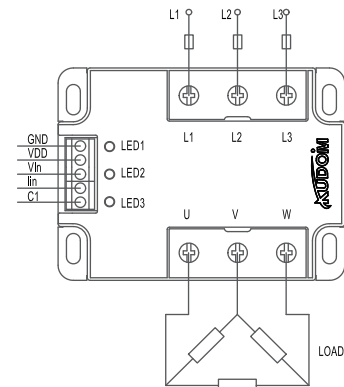
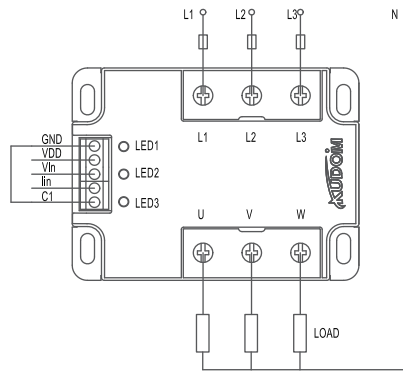
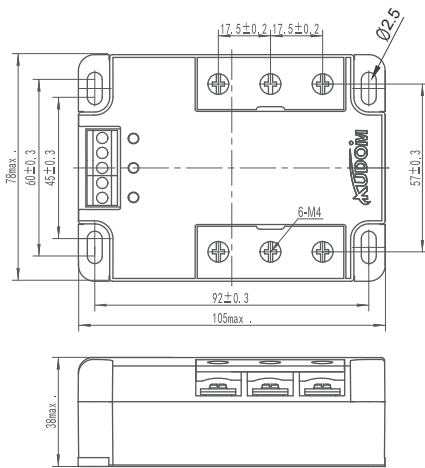
General Specifications (@25°C)

General Specifications		
Dielectric Strength (50/60Hz)	Input/Output	4000Vrms
	Output/Base	2500Vrms
Minimum Insulation Resistance (@500VDC)		1000MΩ
Burst Immunity Level	IEC61000-4-4	2kV/100kHz
Surge Immunity Level	IEC61000-4-5	2kV/Line-PE, 1kV/Line-Line
Electrostatic Discharge Immunity Level	IEC61000-4-2	4kV/Touching, 8kV/In the Air
Ambient Temperature Range		-30°C ~ +80°C
Storage Temperature Range		-30°C ~ +100°C
Weight (Typical)	25A/40A	360g
	60A/80A	560g

Applications

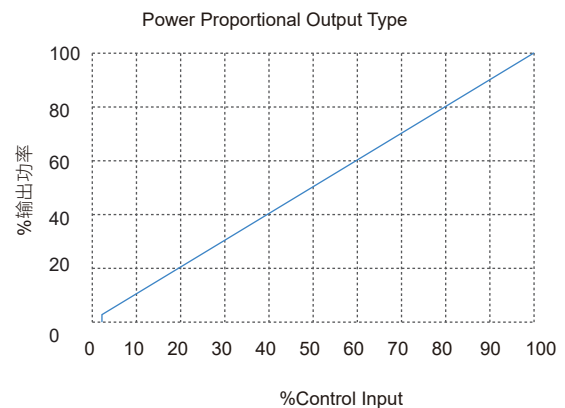
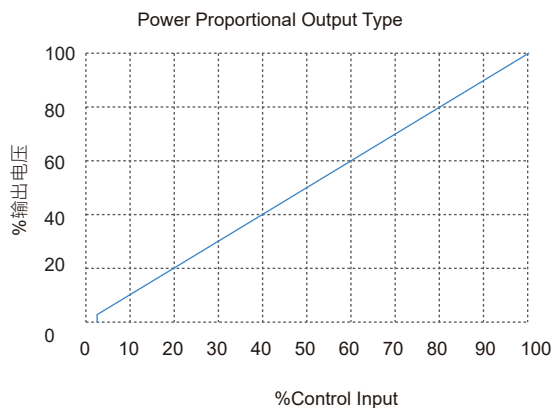
Used for resistive load, such as three-phase heating loads, and etc.

Outline Dimensions/Wiring Diagram

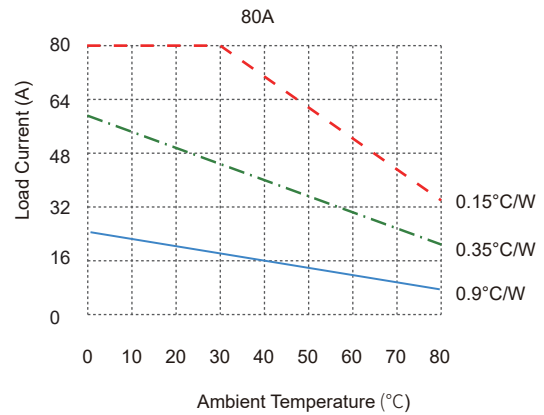
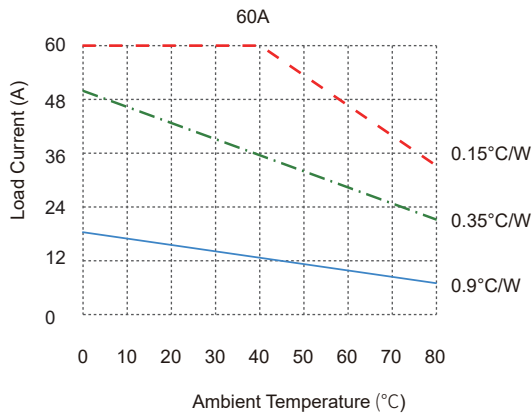
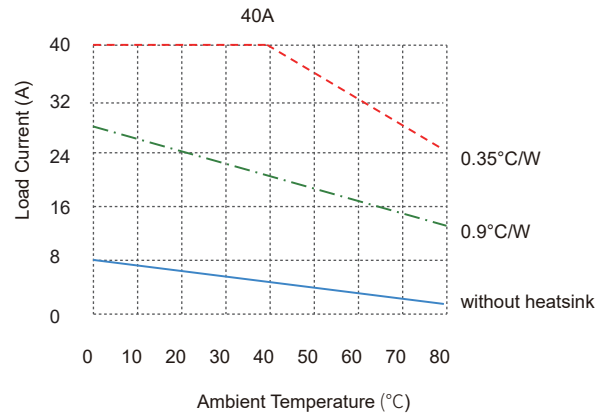
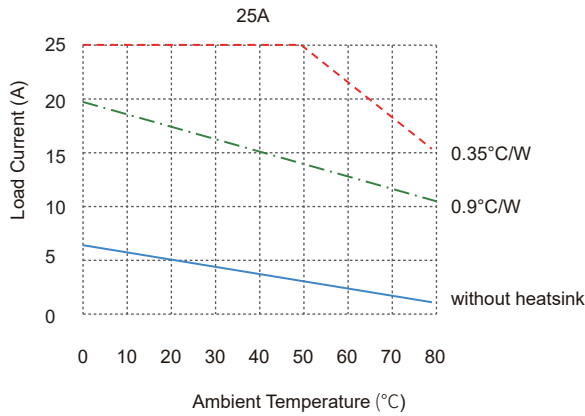


- GND: Common Cathode
- VDD: Anode of the power supply
- Vin: Voltage control input
- Iin: Current control input
- C1: Load type selection. C1 connect to VDD or open for load without neutral line.
C1 connect to GND for load with neutral line.
- LED1: Power supply indication
- LED2: Load connected indication
- LED3: Line undervoltage error indication

Output / proportional Control Characteristic



Thermal Derating Curve



General Notes

1. For product with internal phase detection circuit, L1/L2/L3 should be connected to input line voltage, U/V/W should be connected to load. Product will not work when the connection is reverse.
2. To ensure the C1 terminal connected correctly according to the different load connections, otherwise the product will not work properly.
3. 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 and be torqued down to 18-20 /2.0-2.2 In-lb/N·m.
4. When connecting wiring to SSR please ensure screws are torqued down properly (input 4.43/0.5 in-lb/Nm M3 screws 5.13-8.67/0.58-0.98 in-lb/Nm, M4 screws 8.67 -12.13/0.98-1.37 in-lb/Nm)
5. When operating temperature is above 25°C see Thermal Derating Curves.

Agency Approvals (Certification)

