

- ◆ RS 485 MODBUS Control
- ◆ MODBUS RTU Communication
- ◆ Multi-control Functions Available
- ◆ SCR Antiparallel Output
- ◆ Monitoring Load Current, Voltage and Base Plate Temperature
- ◆ SCR Short Circuit, Open Circuit, Load Failure Detection Function
- ◆ Load Current: 40A
- ◆ LED Indicator
- ◆ RoHS Compliant



Ordering Information

KRB	240	D	40	-C
KRB Series (1)	Load Voltage 240: 240VAC 380: 380VAC	Control Mode D: DC Control	Load Current 40: 40Amp	Current Monitoring Detect Function

Note (1): The part number selection is subject to the following list.

Information	240VAC	380VAC
model	KRB240D40-C	KRB380D40-C

Control Modes

Series	Mode Description	Input Control	Output Type
0	"On/Off mode"	RS 485	$U_{load} (ON) = U_{LN}$, $U_{load} (OFF) = 0VAC$
1	Power Proportion Output Mode		$U_{load}^2 = U_{LN}^2 \times (REG_CON/256)$
2	Cycle Control Output Mode 1		$Num_Cycletotal = 256, Num_Cycleon = REG_CON$
3	Cycle Control Output Mode 2		$Num_Cycletotal = REG_NUM, Num_Cycleon = REG_CON$
4	Voltage Proportion Output Mode		$U_{load} = U_{LN} \times (REG_CON/256)$
5	220VAC Stablized Voltage Output Mode		$U_{load} = 220 \times (REG_CON/256)^{(1)}$
6	220VAC Stablized Power Output Mode		$U_{load}^2 = 220^2 \times (REG_CON/256)^{(1)}$
7	380VAC Stablized Voltage Output Mode		$U_{load} = 380 \times (REG_CON/256)^{(1)}$
8	380VAC Stablized Power Output Mode		$U_{load}^2 = 380^2 \times (REG_CON/256)^{(1)}$

Note: (1) Power Supply Voltage U_{LN} should be higher than the setting value of output voltage U_{load} , Otherwise the output voltage is equivalent to power voltage.

General Specifications

Input Specifications		
Bias Power Supply Range		15 ~ 30VDC/AC
Max. Bias Power Supply Current		60mA
Input Control		RS 485
Output Specifications		
Power Supply Voltage Range	240VAC	150-280VAC
	380VAC	300-440VAC
Maximum Surge Current (@10ms)		600A
Maximum I ² t for Fusing (@10ms)		1800A ² s
Maximum Transient Overvoltage		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

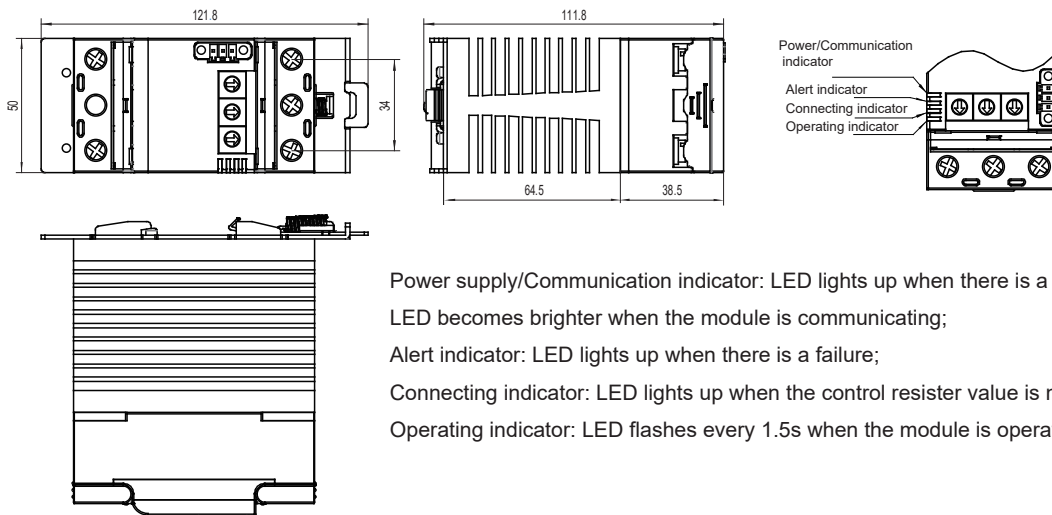
General Specifications

General Specifications		
Slave Address Range	001 ~ 255	
Maximum Nodes	255	
Signaling Rates	9.6kbps, 19.2kbps, 38.4kbps, 57.6kbps, 115.2kbps	
Communication Agreement	Modbus RTU	
Dielectric Strength (50/60Hz)	Input/Output	4000Vrms
	Input, output/Base	2500Vrms
Minimum Insulation Resistance (@500VDC)	1000MΩ	
Ambient Temperature Range	-30°C ~ +70°C	
Storage Temperature Range	-30°C ~ +100°C	
Weight (Typical)	700g	

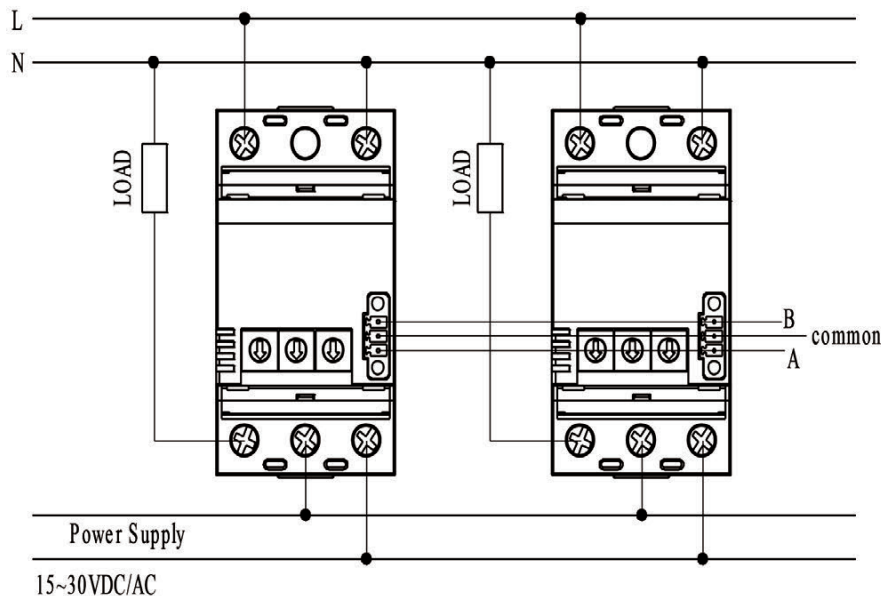
Applications

Widely used for the industry application that requests precise adjustment of temperature.

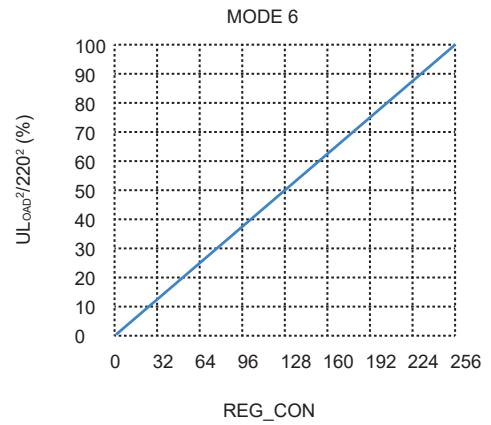
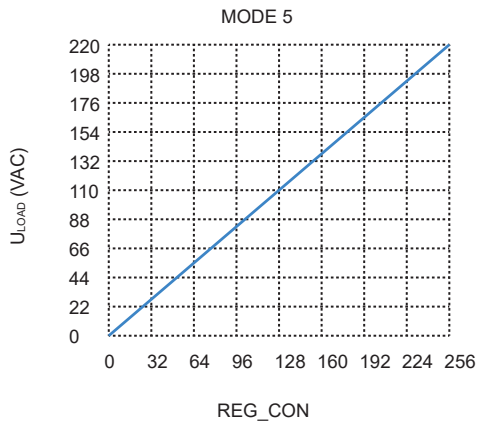
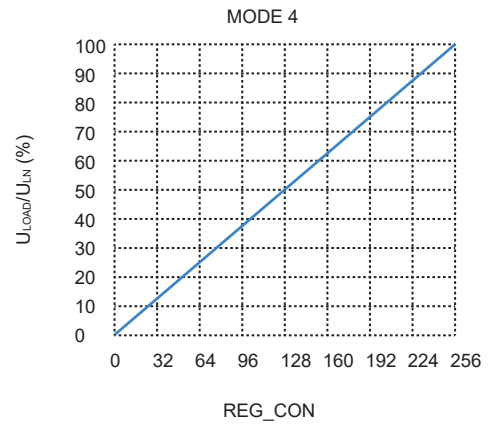
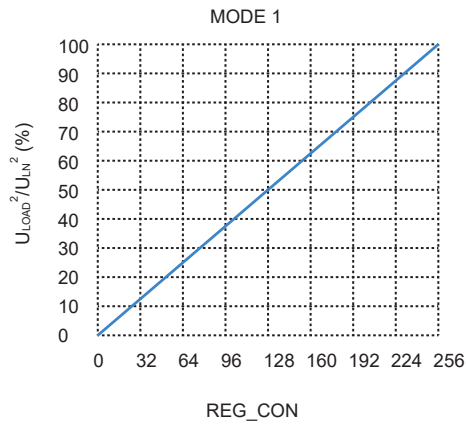
Outline Dimensions&LED



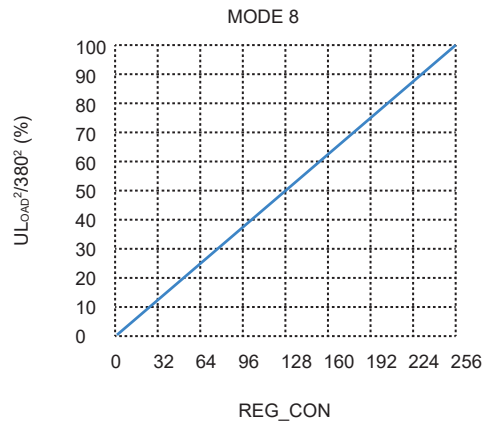
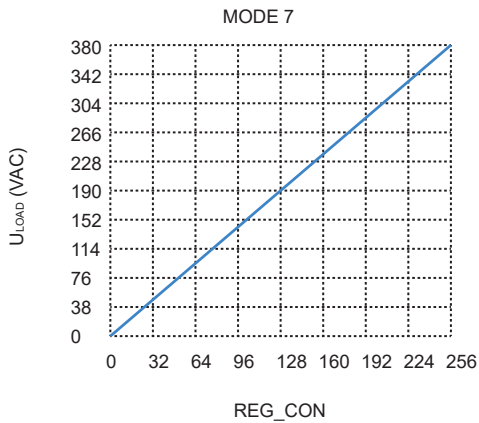
Wiring Diagram



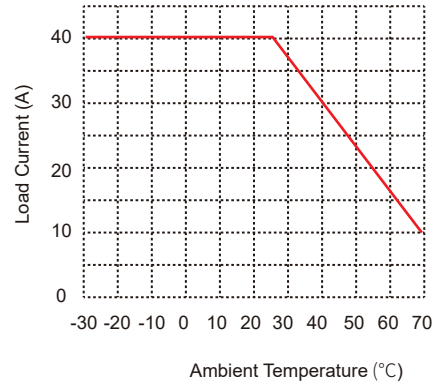
Output/Proportional Control Features



Output/Proportion control Characteristic



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 and be torqued down to 18-20/2.0-2.2 in-lb/N·m.
2. When connection wiring to SSR please ensure screws are torqued down properly (input 13-15/1.5-1.7in/lb/N·m, output 18-20/2.0-2.2 in-lb/N·m).
3. When Ambient temperature is above 25°C see thermal derating curve.

Agency Approvals (Certification)

