Voltage Regulator Module
KRA Series Single Phase AC Output



- **Ratings 25A, 40A, 60A, 80A**
- **SCR Output for Heavy Industrial Loads**
- **DC control: 0-5VDC, 0-10VDC, 4-20mA**
- **Phase Angle Control Output**
- **Stablized Voltage Output (KRA220/380 with R)**
- **Stablized Power Output (KRA220/380 with P)**
- **LED Indication**
- **Load Open Detect & Output Error Signal**
- **SCR Fault Detect & Output Error Signal**

Product Description

KRA series is the latest single phase voltage regulator module, which is wide used in a variety of industrial applications. DC control signal is 0-5VDC, 0-10VDC or 4-20mA,input current is 4-20mA without external power. Output current is rated at 25A or 40A or 60A or 80A.

Product Selection

KRA	220	L	25	P	-XXX
KRA Series	Output Type 220: 0-220V Regulated Output (RMS) 380: 0-380V Regulated Output (RMS) 480: 0-480V Proportional Output	Control Mode L: 0-5VDC/4-20mA H: 0-10VDC/4-20mA	Load Current 25: 25Amp 40: 40Amp 60: 60Amp 80: 80Amp	Proportional Output Mode R: RMS P: Power	Customer Special Serial Number

Model Selection Table

Series	Output Type	Control Mode	Load Current	Proportional Output Mode
KRA	KRA220LxxP KRA220HxxP	L: 0-5VDC/4-20mA H: 0-10VDC/4-20mA	25: 25Amp 40: 45Amp 60: 60Amp 80: 80Amp	Voltage Control: U_{OUT}^2=2202×VCONTROL/5(10) Current Control: U_{OUT}^2=2202×(ICON-4)/16
	KRA220LxxR KRA220HxxR	L: 0-5VDC/4-20mA H: 0-10VDC/4-20mA		Voltage Control: U_{OUT}^2=220×VCONTROL/5(10) Current Control: U_{OUT}^2=220×(ICON-4)/16
	KRA380LxxP KRA380HxxP	L: 0-5VDC/4-20mA H: 0-10VDC/4-20mA		Voltage Control: U_{OUT}^2=3802×VCONTROL/5(10) Current Control: U_{OUT}^2=3802×(ICON-4)/16
	KRA380LxxR KRA380HxxR	L: 0-5VDC/4-20mA H: 0-10VDC/4-20mA		Voltage Control: U_{OUT}^2=380×VCONTROL/5(10) Current Control: U_{OUT}^2=380×(ICON-4)/16
	KRA480LxxP KRA480HxxP	L: 0-5VDC/4-20mA H: 0-10VDC/4-20mA		Voltage Control: U_{OUT}^2=UAC2×VCONTROL/5(10) Current Control: U_{OUT}^2=UAC2×(ICON-4)/16
	KRA480LxxR KRA480HxxR	L: 0-5VDC/4-20mA H: 0-10VDC/4-20mA		Voltage Control: U_{OUT}^2=UAC×VCONTROL/5(10) Current Control: U_{OUT}^2=UAC×(ICON-4)/16

Note: For 220/380 with stablized voltage output, when the actual input voltage is less than 220V/380V, the max. output voltage is the actual inut voltage.

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Technical Specification

Input Circuit

Control Signal Parameters	Voltage Control	Power Supplier Voltage Range		10-32VDC
		Max. Power Supply Current		25mA@24VDC
				30mA@32VDC
		Control Voltage Range	L	0-5VDC
			H	0-10VDC
		Start Voltage		0.2V max
		Input Impedence		60kΩ Typ.
	Current Control	Control Current		4-20mA
		Start Current		4.1mA max
		Max. Input Drop.V		10V@20mA

Output Circuit

Input Voltage Range		176-530 VAC
Output Voltage Range	KRA220	0-220
	KRA380	0-380
	KRA480	0-VAC
Maximum Surge Current [@10ms]	25A	250A
	40A	400A
	60A	600A
	80A	800A
Transient Overvoltage		1200Vpk
Working Frequency Range		45-65Hz
Maximum Off-State Leakage Current [@ Rated Voltage]		5mA
Minimum Off-State dv/dt [@ Maximum Rated Voltage]		500V/us

General Information

Dielectric Strength	Input/Output	⩾4000Vrms
	Input,Output/Base	⩾4000Vrms
Ambient Operating Temperature Range		-30˚C ～ +80˚C
Ambient Storage Temperature Range		-30˚C ～ +100˚C
Weight [Typical]		200g
LED Indicate	LED1	DC Power Indicate
	LED2	Output Indicate
	LED3	Error Indicate

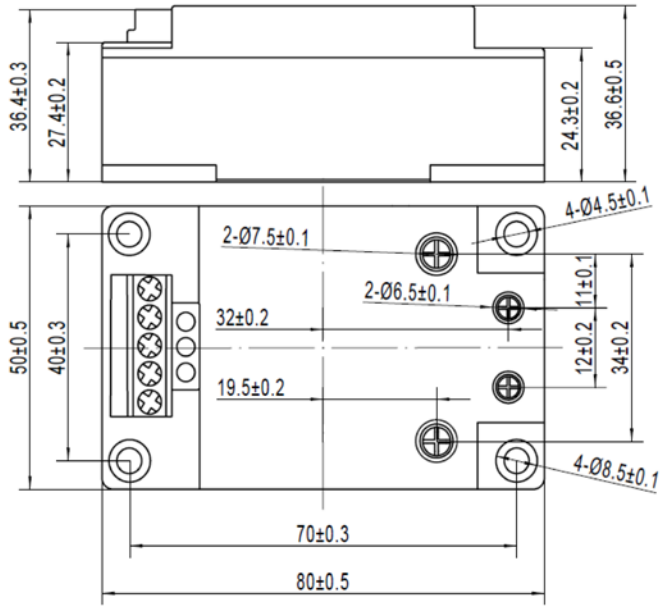
Application

Suitable for High Temperature Cabinet, Plastic Machinery, Hatching Machine, Oiling Machine, Air Conditioning,Lighting,Fountain Controller.

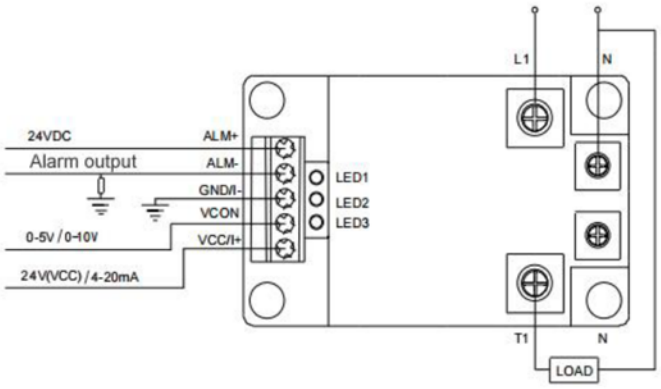
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Installation

Unit: mm



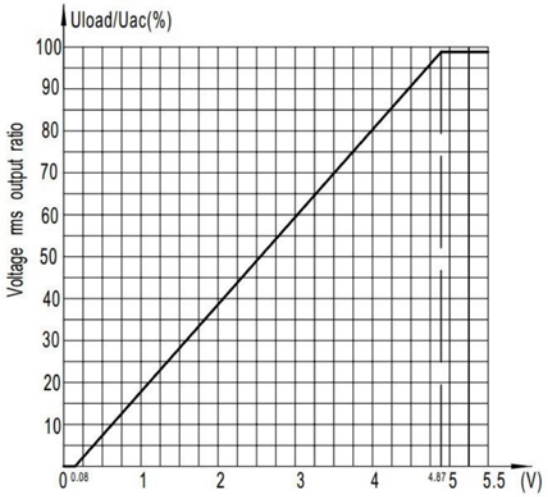
Wiring Diagram

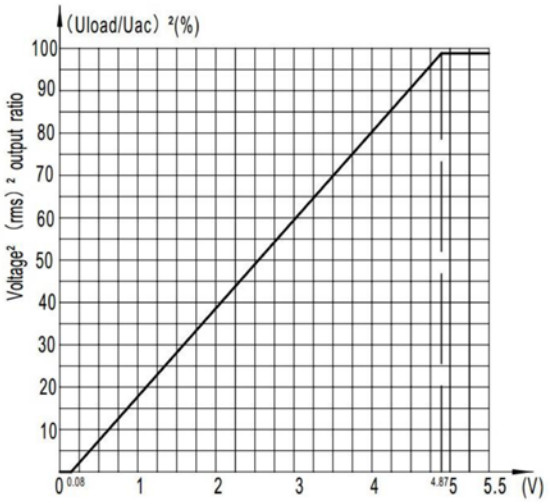


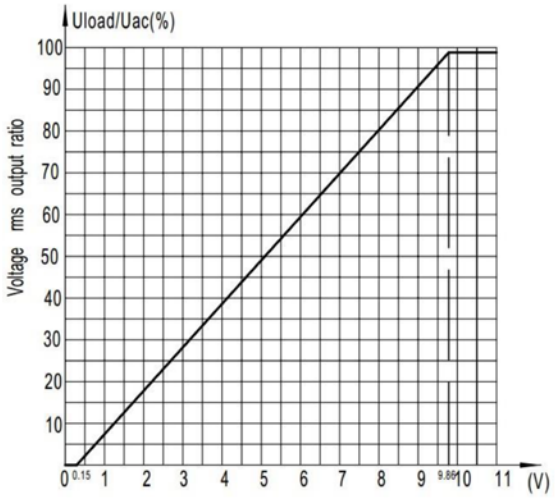
VCC：with external auxiliary DC power supply positive pole 10-32V
V_{CON}：Control Voltage Input
GND：with external auxiliary power supply negative pole
LED1：Power Supply Indication
LED2：Connection Indication
LED3：Error Indication
I+：4-20mA Conrol Current Input+

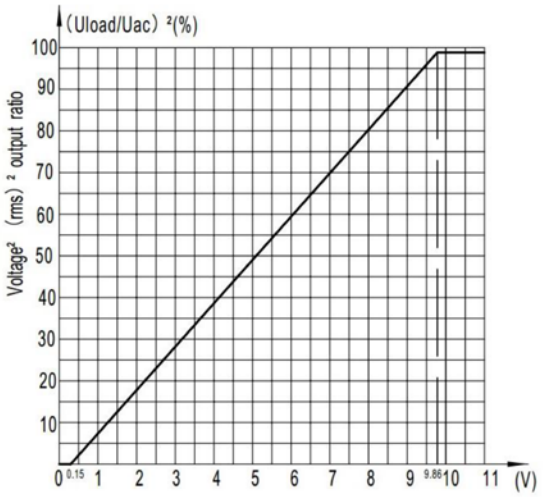
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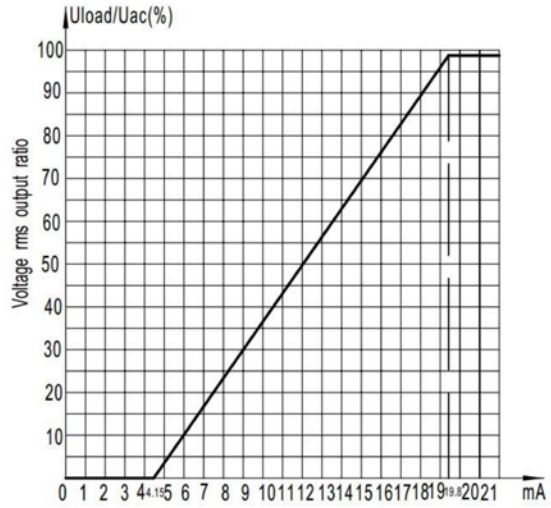
Output /Proportional Control Characteristic

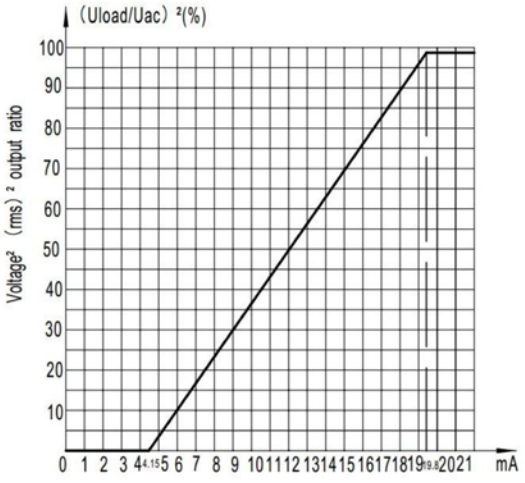






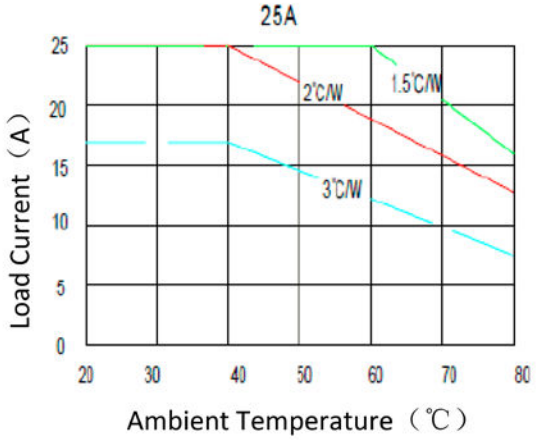


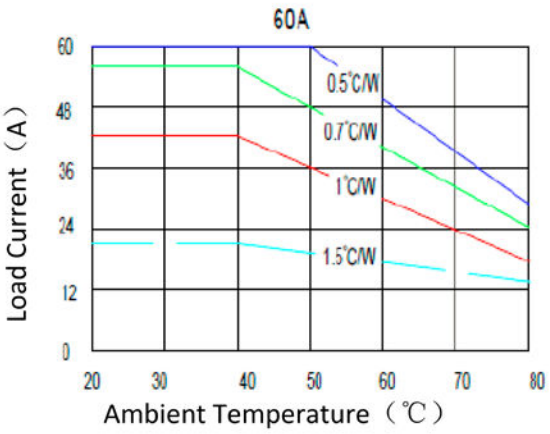


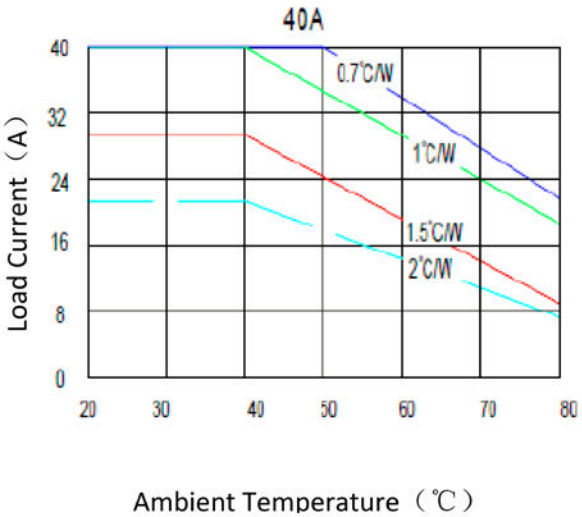


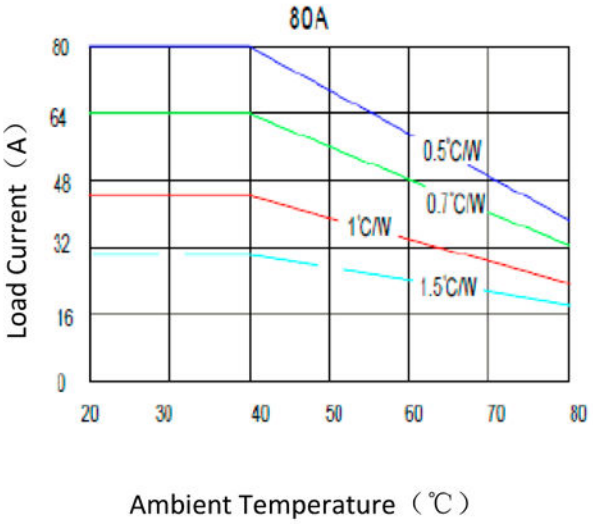
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Thermal Curve









Important Notice

When the ambient temperature is more than 40℃ or many KRA are installed closely together, the user should take load discount into account according to the thermal curve.

Product Certification

CE RoHS

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