Product Description

CRB Series single phase voltage module, applying phase-shift to control output, DC control at 4-20mA, 0-5V, 0-10V, output current at 25A, 50A, 75A.

- Load Current: 25A, 50A, 75A
- SCR Output
- Control Signal: 4-20mA or 0-5V, 4-20mA or 0-10V
- Phase-shift Control Output
- LED Indication
- RoHS Compliant
- Suitable for Inductive Load, Resistive Load

Ordering Information

CRB	380	L	25	P	(XXX)	-P
CRB Series	Load Voltage 380: 176~440VAC 480: 300~530VAC	Control Mode L: 4-20mA or 0-5VDC H: 4-20mA or 0-10VDC	Load Current 25: 25Amp 50: 50Amp 75: 75Amp	Propotional Output: P: Phase-shift Control	Customer Code	Heat Sink P: KHS-P90 H: KHS-H90 IF24DC: KHS-I93-B24DC

Selection Guide

	Propotional Output	Control Mode	Load Current	Output Mode(1)
CRB Series	Power	L: 4-20mA or 0-5VDC H: 4-20mA or 0-10VDC	25Amp 50Amp 75Amp	Voltage Control: $U_{load}^2=U_{ac}^2\times V_{CONTROL}/5$ Voltage Control: $U_{load}^2=U_{ac}^2\times V_{CONTROL}/10$ Current Control: $U_{load}^2=U_{ac}^2\times(I_{CON}-4)/16$

Note: (1) U_{load}: representing the voltage at both ends of the load; U_{ac}: representing the grid voltage; I_{con}: representing the control current; $V_{CONTROL}$: representing the control voltage.

	25A	50A	75A
L: 4-20mA or 0-5VDC	CRB380L25P-P	CRB380L50P-H	CRB380L75P-IF24DC
	CRB480L25P-P	CRB480L50P-H	CRB480L75P-IF24DC
H: 4-20mA or 0-10VDC	CRB380H25P-P	CRB380H50P-H	CRB380H75P-IF24DC
	CRB480H25P-P	CRB480H50P-H	CRB480H75P-IF24DC

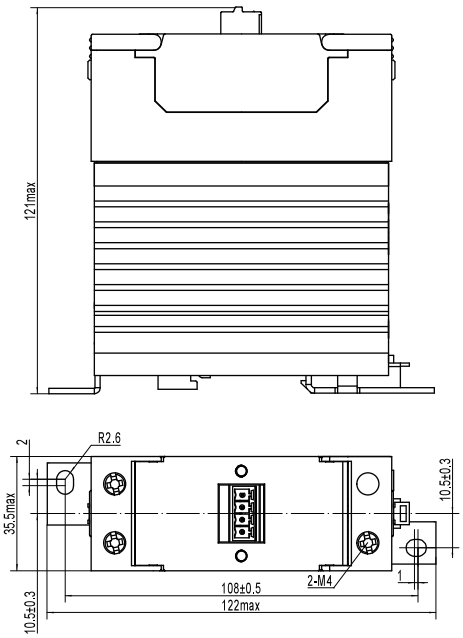
Technical Specification

Input Circuit(Ta=25℃)				
Control Signal Parameters	Voltage Control	Voltage Range of APS		10-32VDC
		Control Voltage Range	L	0-5VDC
			H	0-10VDC
		Turn-on Voltage	L	0.15VDC Max.
		Turn-on Voltage	H	0.25VDC Max.
		Turn-off Voltage	L	0.05VDC Min.
		Turn-off Voltage	H	0.1VDC Min.
		Input Resistance	L	30kΩ (Typical)
		Input Resistance	H	60kΩ (Typical)
	Current Control	Control Current		4-20mA
		Turn-on Current		4.8mA Max.
		Turn-off Current		3.6mA Min.
		Input Resistance		100Ω (Typical)

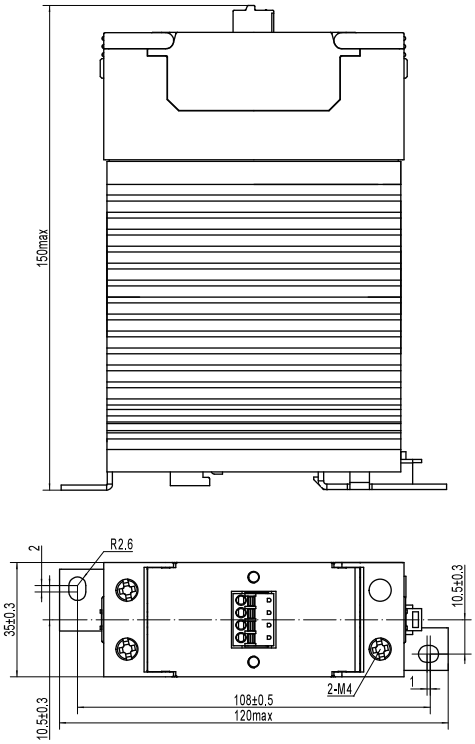
Output Circuit(Ta=25℃)		
Load Voltage Range	380	176-440VAC
	480	300-530VAC
Maximum Surge Current(@10ms)	25A	250A
	50A	800A
	75A	800A
Maximun I^2t(@10ms)	25A	312A^2s
	50A	3200A^2s
	75A	3200A^2s
Transient Overvoltage	CRB380xxx Series	800Vpk
	CRB480xxx Series	1200Vpk
Output Power		0-99%
Operating Frequency Range		47-63Hz
Maximum Off-State Leakage Current (@ Rated Voltage)		5mA(@220VAC/50Hz)
Minimum Off-State dv/dt (@ Maximum Rated Voltage)		500V/μs

General Information(Ta=25℃)		
Dielectric Strength (50Hz/60Hz)	Input/Output	4000Vrms
	Input, Output/Base	2500Vrms
Insulation Resistance (@500VDC)		1000MΩ
Ambient Operating Temperature Range		-30℃ ～ +80℃
Ambient Storage Temperature Range		-30℃ ～ +100℃
Weight (Typical)	25A	308g
	50A	390g
	75A	485g
LED Indication	Power (Red)	LED is illuminated when the product applies the auxiliary power supply
	Load (Green)	LED is illuminated when the product is connected

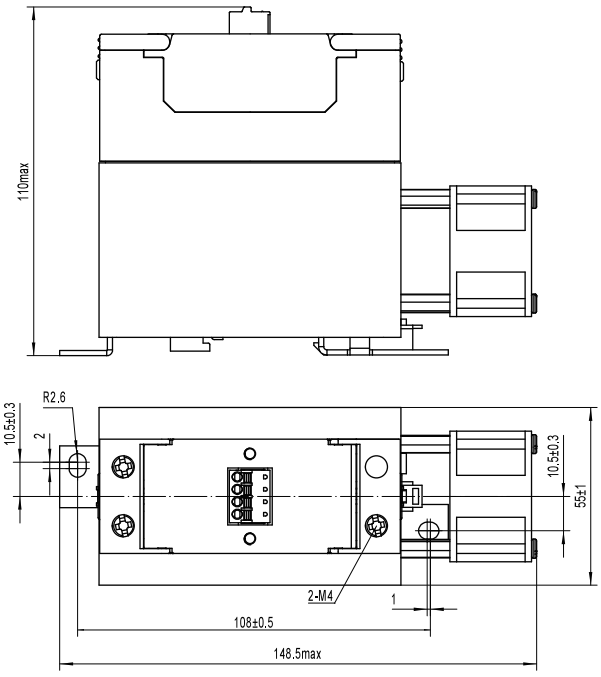
Outline Dimensions



CRB...25...P

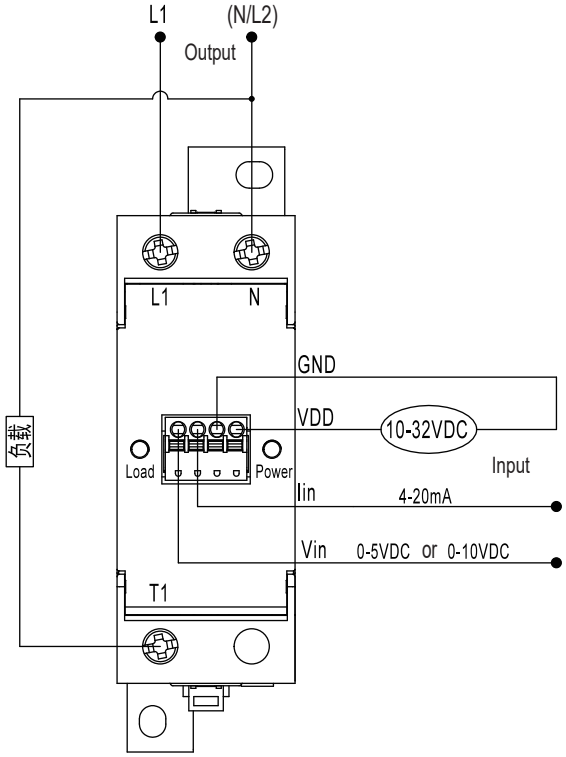


CRB...50...-H



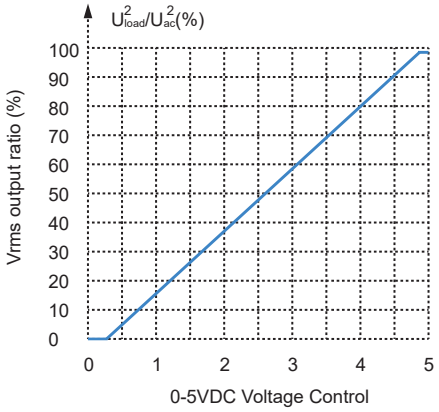
CRB...75...-IF24DC

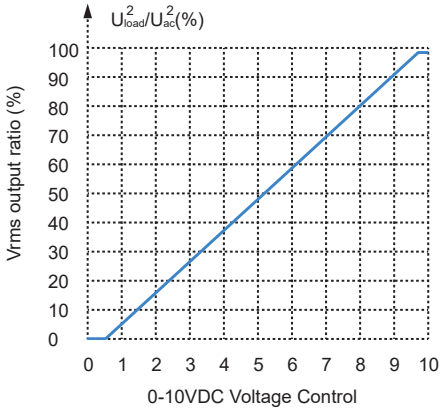
Wiring Diagram

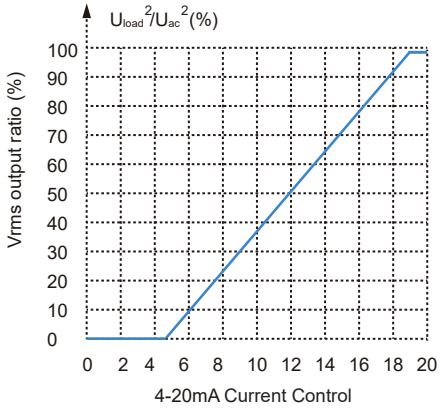


Note: (1) CRB...H...series control mode is 4-20mA or 0-10V; CRB...L...series control mode is 4-20mA or 0-5V;
(2) Whether for the current control or the voltage control, the input auxiliary power supply must be applied.
(3) N: When the load power is 220VAC, it should be connected to the neutral line; when the load power is 380VAC, it should be connected to another live wire.

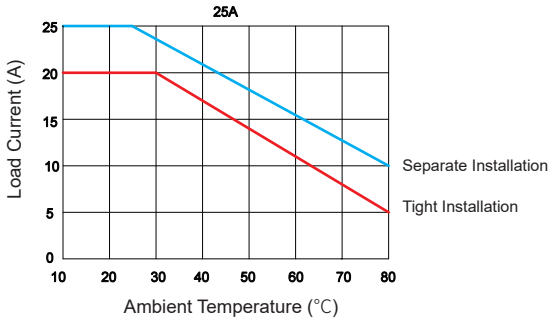
Output/Proportional Control Features

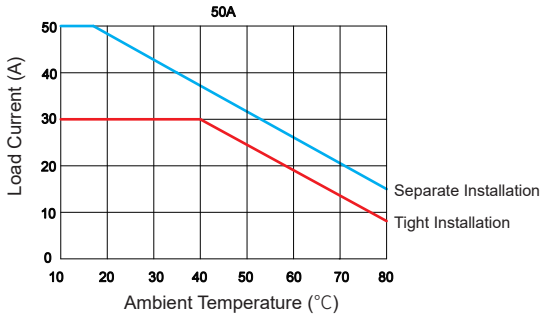


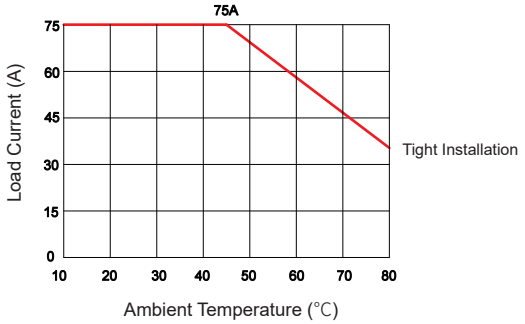




Thermal Derating Curve







General Notes

1.The relay terminal should ensure reliable connection; poor connection may lead to the product overheating and damaging the product;

2.The diameter of the single-core or multi-core wire at the input end of the voltage-controlled product is controlled between 0.2 and 1.5mm ², and the stripping length of the wire core is controlled between 8 and 10mm. After stripping the wire core, it needs to be stained with tin and then pressed the wire, to avoid disconnection, the recommended installation torque of the output M4 terminal is (0.98~ 1.37) N • m

3.When the operation temperature is high, please consider the derating as per the thermal curve.

! Warnings

1. The product's side panels and heat sink may be hot, allow the product to cool before touching.
2. Disconnect all power before installing or working with this equipment.
3. Verify all connections and replace all covers before turning on power.