

Features

- The SCR unit attached with high speed Fuse in order to prevent the damage of SCR due to the shortage current (di/dt).
- Patented efficient Heat Sink design with less dimension, easy for installation and wiring.
- The causes of malfunction can be indicated by individual LED lamp, easy for trouble shooting.
- Less non-linearity output provides accurate control of Temperature.
- High quality and technical productions with no electrical interference.
- Option Constant Current Control is available for variable resistance load.



Control Mode & Output Wave

| Control Mode | Output Wave | | |
|-----------------------|---------------------------|--------------------------|---------------------------|
| | 10% Output | 50% Output | 90% Output |
| Phase Angle Control | | | |
| Zero Crossing Control | | | |
| | 1 cycle ON & 9 cycles OFF | 1 cycle ON & 1 cycle OFF | 9 cycles ON & 1 cycle OFF |

Panel Description

MODE: PHASE ANGLE ZERO CROSSING

MAIN SOURCE: 200V ~ 240V 340V ~ 480V

AUX. SOURCE: 220V

INPUT: 4 ~ 20mA 1 ~ 5V DC MANUAL

CURRENT: 30A 50A 75A 100A
 125A 150A 225A 300A

(Lamp Indication)

- PL (Green) ⇒ Control circuit power lamp.
- IN (Green) ⇒ Input signal indicator lamp. LED operation frequency is proportional to input signal.
- OUT (Red) ⇒ Output signal indicator lamp, LED operation frequency is proportional to output signal.
- ERROR (Yellow) ⇒ Malfunction or over temperature indication.

Note) There is two adjustable VRs (BIAS & MAX) on left of Lamps.

Our original setting for the BIAS VR & MAX VR as below:
 BIAS (Output adjustment of basic voltage) 6mA
 MAX (Max. Output adjustment) 0~100%



Ordering Guide

Please cogitate power fluctuant rate and heater error, or order aggrandize a grade when make choice of purchase

Model No.

| | | | | | | | | |
|---|----------------------|---|-----------------------|---|---|---|--|---|
| W2 | T | P | 4V | 050 | N | 2 | 4 | C |
| SERIES | | Control Mode | | Rated Current | Control Type | Aux. Source | Input Signal | Soft Start Time |
| S Single Phase | T Three Phase | P Phase Control | Z Zero Control | 030 30A 050 50A 075 75A 100 100A 125 125A 150 150A 225 225A 300 300A 400 400A 500 500A | N Standard F Additional Fuse (For 3f - Zero crossing model only) TF TF Phase-angle Control (For transformer resistance Load) IR For IR Quartz Heater Load Control CT CT Control c/w over-current Tripping protection & Alarm contact. (For constant current control Load) CTL CTL Control c/w over-current Tripping protection & Alarm contact. (For limit current control Load) CTO CTO Control c/w none-current Detecting contact (no tripping). (For constant current control Load) CTA CTA Control c/w over-current Detecting contact (no tripping). (For none-limit current control Load) | 1 1f 110Vac 2 1f 220Vac 3 1f 380Vac 4 1f 415Vac 5 1f 440Vac 6 1f 480Vac * Special source | O 0-5VDC 1 1-5VDC 2 2-10VDC 3 0-10VDC 4 4-20mA M Manual | C About 2 sec. (Factory setting) S About 30 seconds T About 12 seconds |
| Phase No. | | Main Source 50/60Hz | | Standard is for general constant resistance load | | Standard is 220Vac | | Standard is 2sec. |
| Main Source | | Limited Current | | | | | | |
| 1V 110V (for 1f only) 2V 200-240V 4V 340-480V 22V 220V 38V 380V 41V 415V 44V 440V 48V 480V | | 025 For 30A Regulator 045 For 50A " 065 For 75A " 085 For 100A " 110 For 125A " 135 For 150A " 220 For 225A " 280 For 300A " 380 For 400A " 480 For 500A " | | | | | | |

Note: 1) If no specified input signal, we will supply by 4-20mA Input Signal and Buffer time is 2sec.

2) User can modify the other input signal for change the jumper pin as below:

✘ For 4-20mA Input signal --> Put the P1 jumper pin to the S1 place. [Input Impedance: 249Ω]

✘ For 1-5Vdc / MANUAL --> Put the P1 jumper pin to the S2 place. [Input Impedance: 30KΩ]

✘ For 2-10VDC / 0-10VDC --> Put the P1 jumper pin to the S3 place. [Input Impedance: 12KΩ]

3) Please adjust the "MAX" VR for the input signal 2~10Vdc, 0~10Vdc to be about 50% output from the PCB.

Installation

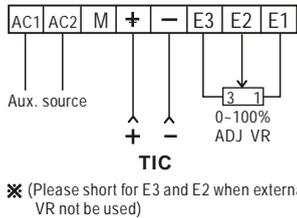
- The Power Regulator unit will produce heat itself during operation, please install it with upward erection.
- The unit must be upward ventilated for hot air. Mounting a cooling fan in the control panel are recommend.
- Don't install the unit in the space with high temperature and poor ventilating.
- Don't operate the unit exceed 70% of rated output in case of poor ambient conditions. (Ideal ambient temperature is -10~45C and Humidity under 90%)

Load Test

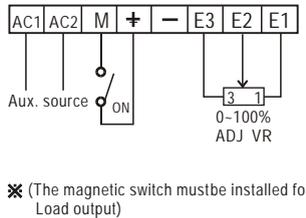
The SCR unit will not wellfunctioned in case of less 0.6Amp of output load, please connect with the load at least 0.6Amp.

Wiring Examples

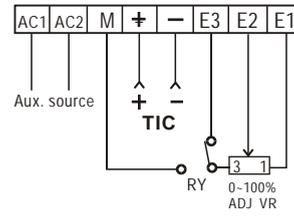
(1) Analog voltage, current input with external adjustable VR



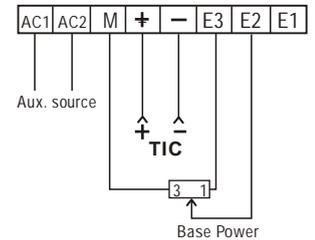
(2) Contact input with external adjustable VR



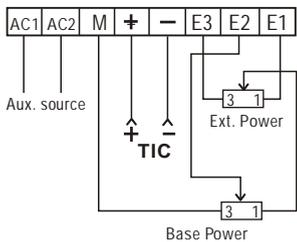
(3) Manual/Auto by RY switching.



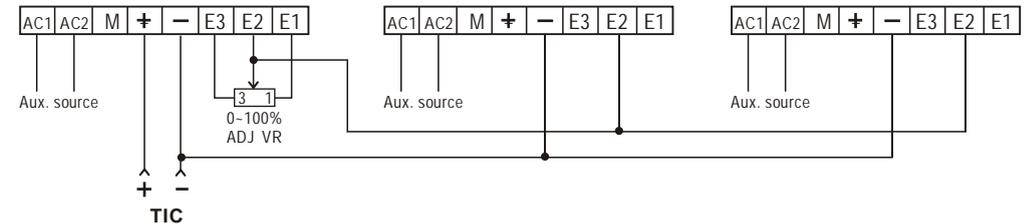
(4) Basic Load output setting.



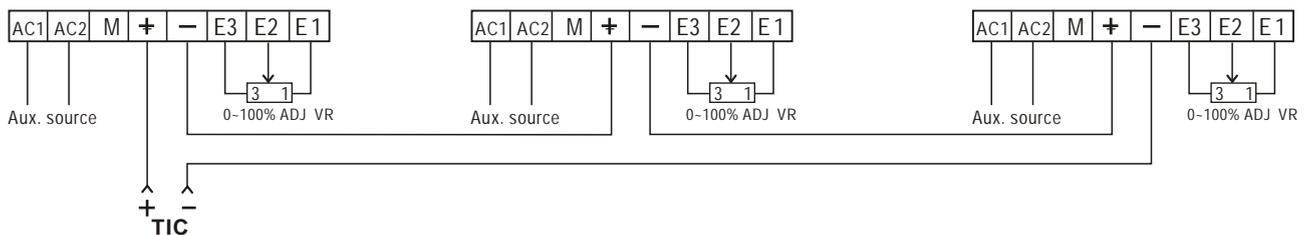
(5) Basic output & Max. Output setting.



(6) Multiple units connecting with one external VR setting.

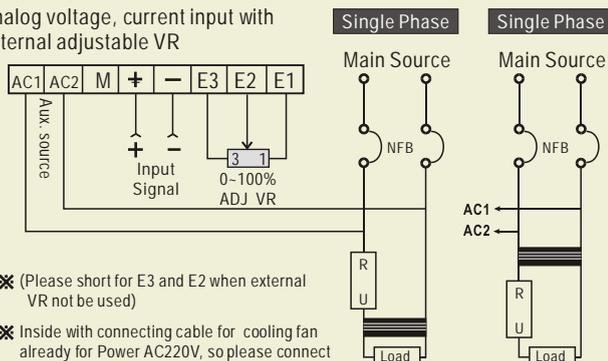


(7) Multiple units connecting with each individual external VR setting. ⊗ (The connecting method is only suitable with installation for Max. 3 units.)

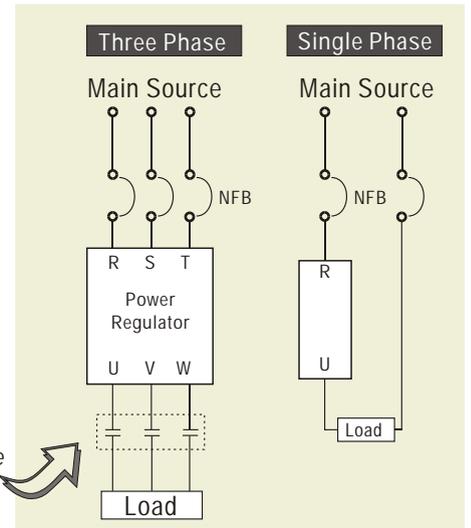


Wiring Example for TF or CT control

Analog voltage, current input with external adjustable VR



Main Circuit



The magnetic switch must be installed for load output

Dimensions & Weight

| W2 - series | Single Phase | | | | ThreePhase | | | |
|-------------|--------------|-----------|------------|------------|------------|-----------|------------|------------|
| | Length /mm | Width /mm | Height /mm | Weight /kg | Length /mm | Width /mm | Height /mm | Weight /kg |
| 30A | 160 | 100 | 120 | 1.35 | 210 | 140 | 185 | 3.20 |
| 50A | 200 | 100 | 120 | 1.60 | 250 | 140 | 185 | 3.80 |
| 75A | 160 | 108 | 162 | 1.80 | 250 | 140 | 185 | 3.80 |
| 100A | 230 | 108 | 162 | 2.50 | 250 | 140 | 185 | 3.90 |
| 125A | 230 | 108 | 162 | 2.50 | 300 | 140 | 185 | 4.30 |
| 150A | 230 | 108 | 162 | 2.50 | 300 | 140 | 185 | 4.50 |
| 225A | 290 | 108 | 162 | 3.30 | 340 | 420 | 195 | 14.20 |
| 300A | 390 | 140 | 185 | 5.60 | ⊙ 340 | 280 | 195 | 11.60 |
| | | | | | ⊙ 430 | 420 | 195 | 20.80 |
| 400A | 390 | 140 | 185 | 5.60 | ⊙ 430 | 280 | 195 | 14.00 |
| | | | | | ⊙ 430 | 420 | 195 | 20.80 |
| | | | | | ⊙ 430 | 280 | 195 | 14.00 |

⊙ Weight and Dimension of (3 phase) Zero-crossing unit.