Features:

- Three phase power regulator, auto phase detection
- Soft start function to protect SCR and load against surge current
- Integrated display with various LED indicator for status and error dispaly
- Integrated heatsink and fans with temperature detection
- Over temperature alarm, output protection after alarm on(except SCR-51)
- Maximum and minimum output configurable
- Auto/manual control bumpless transfer(except SCR-51)
- Run/stop functcion
- RS-485 modbus RTU display
- Event input function
- Rated load voltage 380~480Vac 50/60HZ
- Power supply for SCR to work is 100-240Vac, 12-24VDC optional
- Input, 0-10Vdc, 4-20mA, 0-5Vdc, 1-5Vdc, 2-10Vdc, 0-20mA, 0-10mA
- Rated current options, 40 amps, 60 amps, 75 amps, 100 amps.
- This SCR only compatible with resistive load

Technical Specifications

Ordering Information

SCR— 1 — 2 3 4 5 — 6 7

1: Type of SCR power regulators

51	51 series SCR regulator(without alarm and RS-485 function)
6	6 series SCR regulator
7	7 series SCR regulator

2: Load phase

| 3 | 3 phase load system |

3: Load current

4	40 amps 380~480Vac
6	60 amps 380~480Vac
7	75 amps 380~480Vac
1	100 amps 380~480Vac(only SCR-6 with 100 amps option)

3: Power supply for the unit itself

2	100-240Vac
4	380Vac
D	12-24Vdc

4: Input signal

1	0-10mA
2	0-20mA
8	4-20mA
5	0-5Vdc(potentiometer)
6	0-10Vdc
7	1-5Vdc
3	2-10Vdc

5: Over temperature alarm(This is only available for SCR-6 and SCR-7)

| N | without alarm |
| M | with 1 alarm, relay output |

6: Communication(This is only available for SCR-6 and SCR-7)

| N | without communication |
| M | With RS-485 modbus RTU communication |

Remark: T-51 series do not have alarm and RS-485 options, only SCR-6 and
SCR-7 have alarm and RS-485 option
only SCR-6 series available with 100 amps

eg: SCR-6-3128-NN(SCR-6 3 phase regulator, 100 amps, 4-20mA input)
SCR-7-3728-MM(SCR-7 3 phase regulator, 70 amps, 4-20mA input,
with 1 alarm, with RS-485 communication)

Size and dimensions

Model: SCR-51-3428 40 amps
overall size:118mm*140mm*118mm
Mounting size:55mm*135mm

Model: SCR-51-3628 60 amps
overall size:133mm*140mm*118mm
Mounting size:55mm*135mm

Model: SCR-51-3728 75 amps
overall size:133mm*140mm*118mm
Mounting size:55mm*135mm

Model: SCR-7-3428 40 amps
overall size:160mm*110mm*148mm
Mounting size:105mm*100mm

Model: SCR-7-3628 60 amps
overall size:160mm*110mm*148mm
Mounting size:105mm*100mm

Model: SCR-7-3728 75 amps
overall size:160mm*110mm*148mm
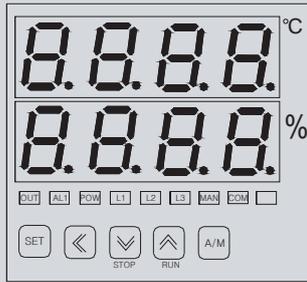Mounting size:105mm*100mm

Model: SCR-6-3428 40 amps
overall size:160mm*140mm*145mm
Mounting size:120mm*130mm

Model: SCR-6-3628 60 amps
overall size:160mm*140mm*145mm
Mounting size:120mm*130mm

Model: SCR-6-3728 75 amps
overall size:160mm*140mm*145mm
Mounting size:120mm*130mm

Model: SCR-6-3128 100 amps
overall size:220mm*140mm*145mm
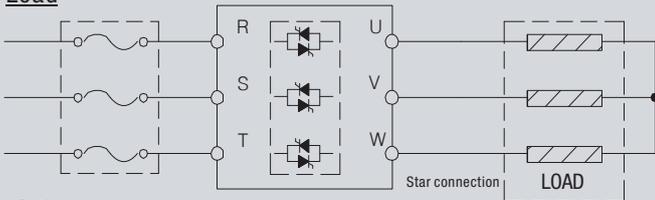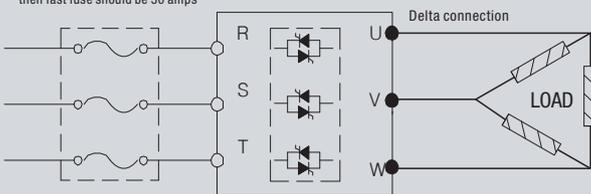Mounting size:150mm*130mm

Panel discription

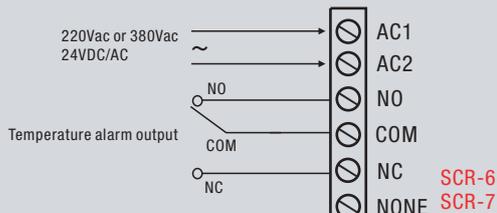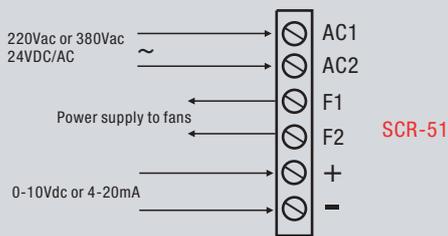| INDICATOR | OUT: The flashing frequency indicate the output ratio |
	AL1: Over temperature alarm indicator
	POW: Power feed indicator
	L1: Phase indicator, when L1 absence, lights on
	L2: Phase indicator, when L2 absence, lights on
	L3: Phase indicator, when L3 absence, lights on
	MAN: Manual control indicator
	COM: Communication indicator
SET KEY	SET: Parameter setting and configuraion
	A/M: Manual/auto control switch
	POW: Power feed indicator
	<: Left shift key, to shift the display unit
	∨: Decrease key or Stop key

Connection diagram

Load
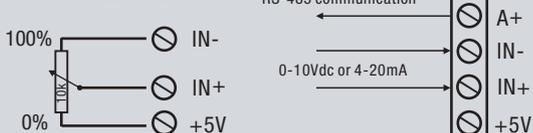

Fast fuse rated at 1.5*actual load
for example, if the acutal current is 20 amps
then fast fuse should be 30 amps

Star connection   LOAD

Delta connection   LOAD

Input

220Vac or 380Vac 24VDC/AC

Power supply to fans

0-10Vdc or 4-20mA

SCR-51

AC1
AC2
F1
F2
+
−

220Vac or 380Vac 24VDC/AC

Temperature alarm output

SCR-6
SCR-7

AC1
AC2
NO
COM
NC
NONE
B-
A+
IN-
IN+
+5V

RS-485 communication

0-10Vdc or 4-20mA

Potentiometer

100%   IN-
0%   IN+
    +5V

Operation flow chart

Power on

1 Sec → 1 Sec →

Press SET once to enter into configuration menu

UAD: each SCR has an address if it comes with RS-485 function the communicaion address of specific SCR will be assigned to this parameter,for example, if the lower shows "1" then this is number 1 device

SET

LCK
SET LCK=101 to enter into configuration menu 1

SET

AL1
SCR temperature higher limit alarm,the maximum allowable temperature will be assigned to this parameter,for example, you can put 80^{0}C as the higher limit, the AL1 alarm will be triggered if the temperature cross AL1 value, and the output of the SCR will be restrained to EOP value

SET

EOP
when AL1 triggered, the SCR output will be constrained to a certain value to protect the SCR, the output value will be assigned to EOP value for example, EOP=25%, when AL1 triggered, the output goes down to 25% immediately

SET

OPL
Minimum output,the output will be higher than OPL value regardless of the input

SET

OPH
Maximum output, the output will be lower than OPH value regardless of the input

SET

BUF
Soft-start,range:0.0~100.0
if BUF=0, means it takes 10 seconds for the SCR output changes from OPL-OPH,if BUF=100, soft-start function disabled

SET

ADD
This parameter is used to set the SCR address if it comes with the RS-485 function, range: 0-127

SET

BAU
This parameter used to configure the communication speed if the SCR comes with RS-485 functcion,options are
24:2.4 KBPS   48:4.8KBPS, 96:9.6KBPS 192:19.2KBPS

SET

UAd
Setting of the parameters in menu 1 all finished press SET to UAd and LCK to enter into menu 2

SET

LCK
Set LCK=202 to menu 2

SET

AUtO
Auto control manual control configuration
0: auto/manual control function disabled
1: auto/manual control function enabled

SET

rUN
Run/stop function configuration
0: run/stop function disabled
1: run/stop function enabled

SET

Hz
Choose the frenquency based on your power
50H: for 50HZ
60H: for 60HZ