W-Series Quick Start Manual

C/S : +82 53 604 5800
dain007@naver.com
WWW.SCR.KR

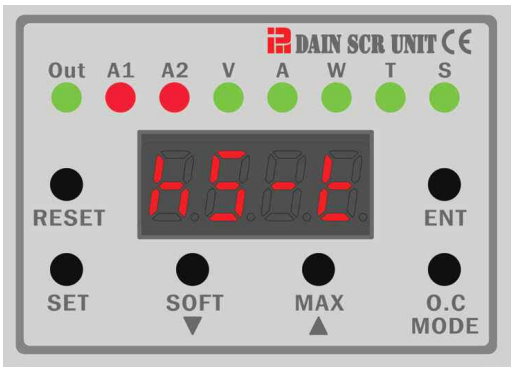
DAIN INSTRUMENT
48, Banyawol-ro, 16-gil, Dong-gu, Daegu, Korea

88023126562 IPM-SCR

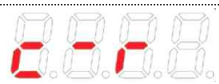
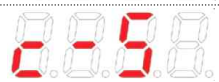
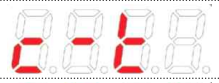
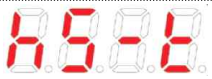
The most important is quality

⚠ DANGER **Do not operating under the state of no load. Thyristor(SCR) has the property of occurring short circuit when it was error. So It is impossible to control the SCR. That case, if there aren't extra safety devices It can cause the fire and damaging heater .Therefore you need some extra safety devices.**

W-Series Display Function

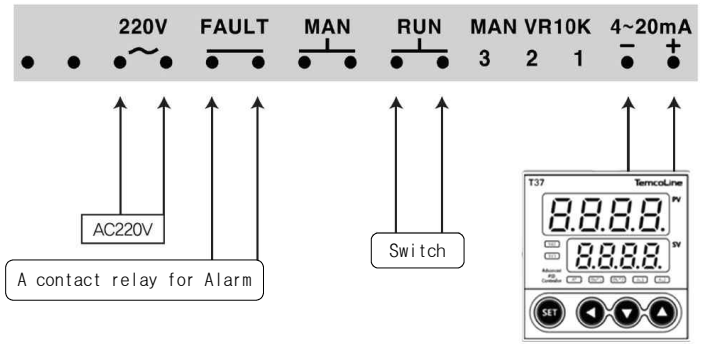


You can check current state by the display window.
When push the Up key(Down key), below word will be shown in order(in opposite direction).

	R-Phase Current ('A' LED turned on)
	S-Phase Current ('A' LED turned on)
	T-Phase Current ('A' LED turned on)
	Heat sink temp ('T' LED turned on)

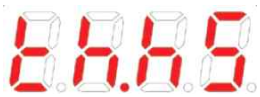
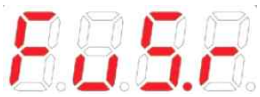
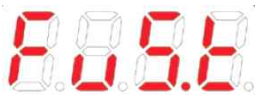
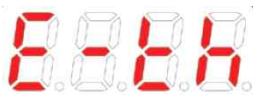
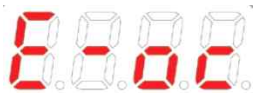
You can see output range (00.00~99.99%),
If push the MODE key during operation.
(In this case, 'S' LED is turned on)

How to wire for auto operation

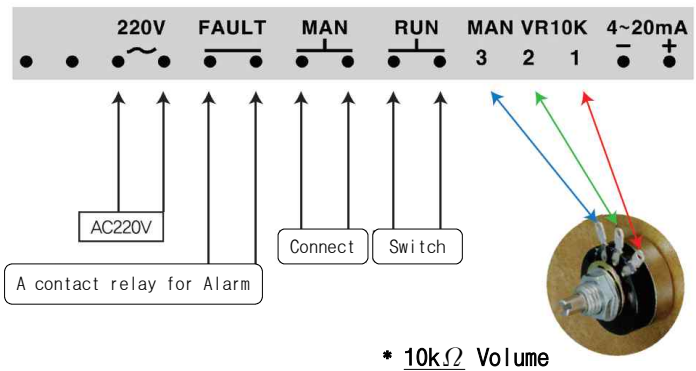


Display when alarmed

When alarmed, please push the ENT key to check the state
(In case of multiple alarm, push ENT key again to see next state)

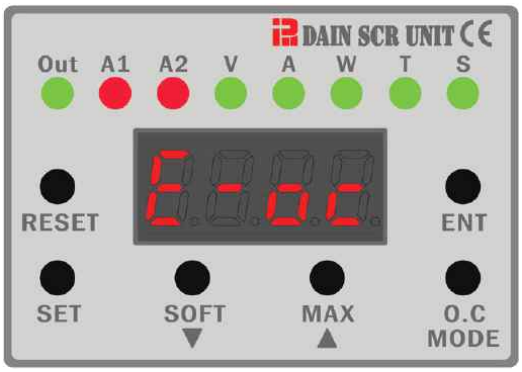
	Heat sink over temp alarm 1 ('A1' LED is on) (In normal operation)
	R-Phase open R-Phase Fuse blown ('A1' LED is on)
	S-Phase open S-Phase Fuse blown ('A1' LED is on)
	T-Phase open T-Phase Fuse blown ('A1' LED is on)
	Heat sink over temp alarm 2 ('A2' LED is on) (In stop operation)
	Over-Current alarm ('A2' LED is on) (RESET required for re-operation)

How to wire for manual operation



* 10kΩ Volume

How to set value



Value can be set only at RUN OFF state, so please be aware of it. But you can check the value set anytime.

(*Setting and checking the value can not be processed while 'S' LED is turned on. So please check if 'S' LED is off)

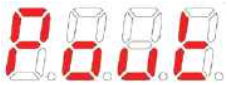
Soft start time setting

(Default 10sec)

Please push and hold SET + SOFT for 2sec to enter setting mode.
After entering, push SET to set the value.
If you finish to set value with UP/DOWN, please push ENT, MODE in order to return.

Output range setting

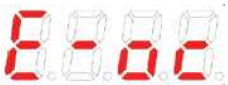
(Default 100(%))



Please push and hold SET + MAX for 2sec to enter setting mode.
After entering, push SET to set the value.
If you finish to set value with UP/DOWN, please push ENT, MODE in order to return.

Over-current alarm setting

(Default 0)



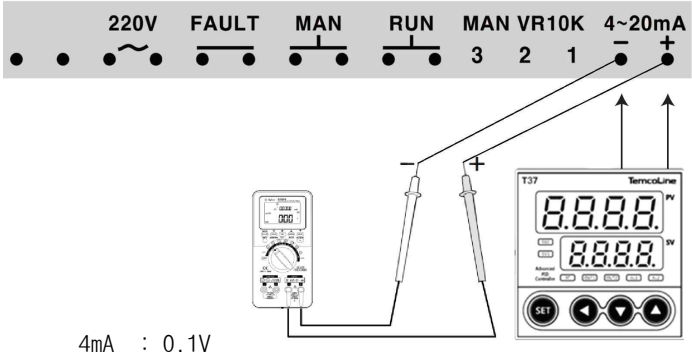
Please push and hold SET + O.C for 2sec to enter setting mode.
After entering, push SET to set the value.
If you finish to set value with UP/DOWN, please push ENT, MODE in order to return.

Spec

- Phase / Zero-crossing control
- Output Current / Voltage limit
- Over current / temp detection
- Unbalanced / Open-circuit load detection
- SCR short detection
- Phase open / Fuse blown detection
- RS485 MODBUS Communication

Status : 19,200BPS, Data 8_Bit, 1_Stop Bit, None_Parity
Register info : [Please refer on our homepage]

How to check 4~20mA input signal



4mA : 0.1V
20mA : 0.5V * Please check it with multimeter

Calculation formula of IPM capacity

1-Phase Resistive load = $\frac{Heater(W)}{Voltage} * 1.3$

1-Phase Trans load = $\frac{Heater(W)}{Voltage} * 2$

3-Phase Resistive load = $\frac{Heater(W)}{\sqrt{3} * Voltage} * 1.3$

3-Phase Trans load = $\frac{Heater(W)}{\sqrt{3} * Voltage} * 2$

NOTE!

Before using the machine, please be aware of the details about safety in the manual to prevent hazards or accidents. Please install additional protective equipment when using facility that can cause significant damage or risk due to failure of the machine.

W-Series Quick Start Manual

C/S : +82 53 604 5800
dain007@naver.com
WWW.SCR.KR

DAIN INSTRUMENT
48, Banyawol-ro, 16-gil, Dong-gu, Daegu, Korea

88023126562 IPM-SCR