

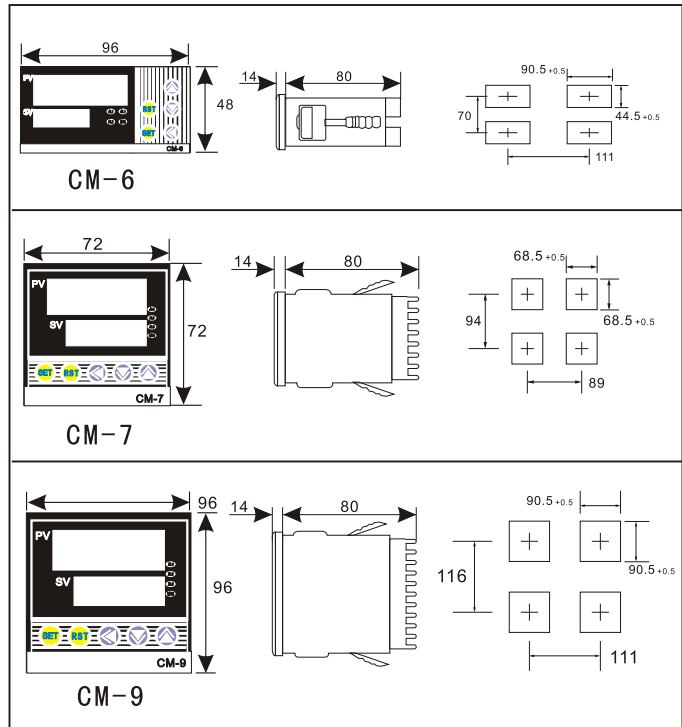
CM Series

Microcomputer Current Monitor

Operation Manual

Thank you for purchasing our CM Series Current Monitor. The motor (current) monitor mainly uses of the CT detection to monitor current , converting the current to digital display, the provision of Relay alarm(there are up to 3 groups of 10 monitor modes).The purpose of these is the protection of motor or other high-current device.Please keep this manual close to you for reference.

3: Panel Cutout / Size (Unit :mm)



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1: Attention

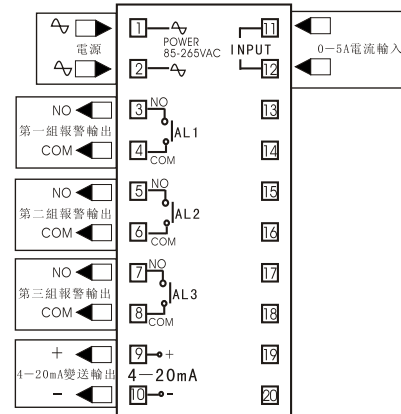
- (1) Please do not use the product in places where explosive or flammable gases may be present.
- (2) Please make sure that the load power supply is within the rating(85-265VAC) and terminal position of AC power is correct , before supplying power .Or else , the controller would be damage.
- (3) Please confirm whether the the wiring terminal of the correct use is correct or not.
- (4) Please keep the instrument distance from the short circuited liquids and corrosive gases.
- (5) Disassembling , modifying and repairing the product is forbidden.

2: Specifications and features

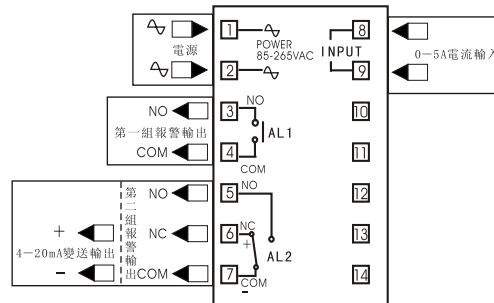
- (1) Various models of the instrument
- (2) Key uses for timing and reposition of in-box.
- (3) Built-in 0-5ACT,according to the proportion of CT, free set the control range of the current.
- (4) Supply up to three group of Relay alarm,10 alarm models, can do all kinds of protection and alarm.
- (5) Alarm mode 9(6) can supply the function of timing deviation high(low) alarm,can set the alarm (only the value of current is lower than the set-value for a period of time) . This function can avoid the wrong alarm which caused by starting motor or current inter-shun , or adjusting a base on present environment.Delaying time is controlled by digital,the range from 1 second to 1 hour, High-accuracy. Compared to the traditional instrument which is use of the RC circuit as the delay function , this instrument has the higher accuracy.

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4.Connection instruction(the function of the terminal according to the surface of the panel)



CM-6/9



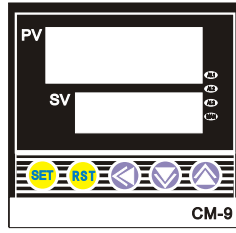
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5: Manipulation

5.1 Instruction of function on the panel

PV	Display the testing value of current
SV	Display the set value of current
SET	Choose/Confirm key
RST	Timing and reposition of in-box
◀	Left key
▲▼	Up and down keys
AL1 AL2 AL3	Indicator of group 1,2,3 alarm
MAN	Indicator of reposition



5.2 The way of setting the alarm mode

5.2.1 Parameter Ad that alarm mode (Please refer to the attachment), Ad1 is the alarm mode of group 1, Ad2 is the alarm mode of group 2, and so on.

5.2.2 Parameter AL is the value of alarm, AL1 is the alarm value of group 1, AL2 is the alarm value of group 2, and so on. E.g. Ad1=0, AL1=3 that the alarm mode of group 1 is high deviation alarm, the deviation of Relay is 3; Ad1=9, AL1=50 that the alarm mode of group 1 is high deviation alarm of timing (over-current). Operating Relay, the instrument is $PV > SV + AL$, PV > SV + 50, AL1 lighting, set t1 that starting countdown..

5.2.3 If select model is 9, Parameter t1 that the group 1 alarm is delay. T2 that group 2, and so on.

5.2.4 After finishing power-on and self-test, press SET key for several times until find the parameter of t and AL, then press the LEFT key and blinking cursor, then press LEFT, UP and DOWN key until the value which you need, then press the SET key to finish it.

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5.2.5 The value of Ad. After finishing power-on and self-test, press SET key for 5 seconds into the second level, then press SET key for several times until find the parameter of Ad, then press the LEFT key and blinking cursor, then press LEFT, UP and DOWN key until the value which you need, then press the SET key to finish it. If you want to out the second level, press SET key for 5 seconds, or without operating for 20 seconds.

5.2.6 A13 for model 6, and t3 for pre-delay.

5.3 The step of use

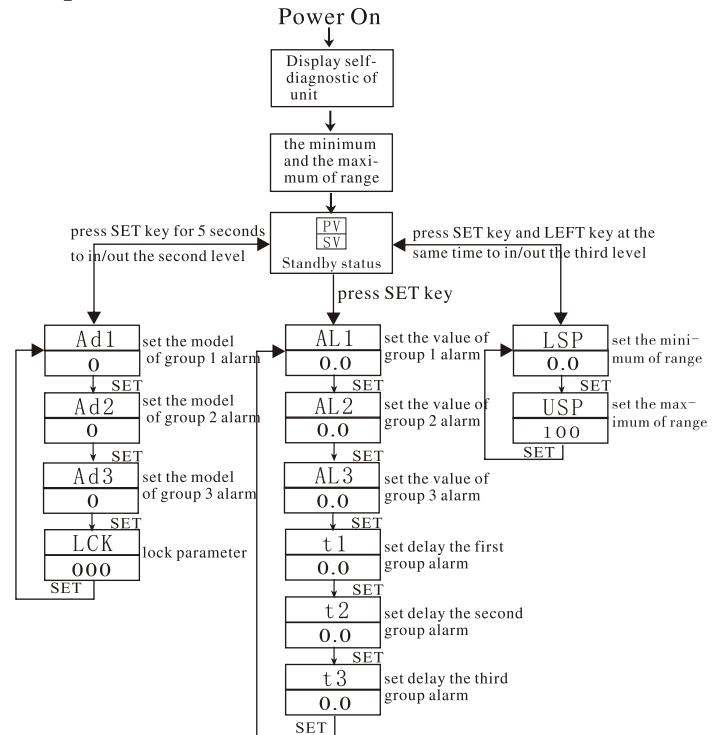
5.3.1: According to proportion of CT, use parameter of LSP and USP to set the control range of current, the unit is Amp. Press SET key and LEFT key for 5 seconds, enter into level 3, then press SET key for several times until find the parameter, then press the LEFT key and blinking cursor, then press LEFT, UP and DOWN key until the value which you need, then press the SET key to finish it. If you want to out the third level, press SET key for 5 seconds, or without operating for 20 seconds return to the first level.

5.3.2 Set alarm. Please refer to the instruction of alarm model. Using alarm model 9, the parameter of setting timing is t1, t2 and t3, the corresponding deviation is AL1, AL2 and AL3. As $PV > SV + AL$, AL lighting, set t that starting countdown (non-operation of Relay). After starting timing alarm, before timing and $PV < SV + AL$, then reset the timing alarm (indicator of AL off, and time of unit t recovery.), until $PV > SV + AL$, start alarm again (AL lighting, t starting countdown)

Remark: After Relay operation of alarm model 9, the unit of t timing auto-recovery, but Relay of this group continuing closed, indicator of AL continuing lighting. At that time, if change the model of alarm, alarm model 9 will reset, otherwise, power off or press SET key for timing reset.

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6. Operational Processes



Remark: Please don't change the other parameter of the instrument. If you have any questions, please ask the distributor.

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7. Attachment

Alarm mode reference table

Code (the value of Ad)	Instruction of mode
0	Deviation high alarm
1	Deviation low alarm
2	Absolute value high alarm
3	Absolute value low alarm
4	Alarm in the region
5	Alarm out the region
6	(Break line) timing deviation low alarm (first time no alarm) (only for the third group alarm)
7	Absolute value low alarm (first time no alarm)
9	(over-current) timing deviation low alarm
10	In-band alarm (first time no alarm)

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