

MaxWell

Digital Temperature Controller

CH Series

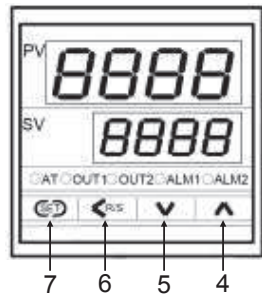
Enhanced Version

Optional for heat+cool control

- Selectable input(TC,RTD,Analog)
- PID with auto-tuning
- Accuracy 0.5%F.S
- 90~260 VAC,24VDC power supply optional
- SSR drive/Relay/4-20mA/Thyristor trigger output
- Dual line four digits display
- Panel mount
- Heat+cool Control optional
- Up to two stages alarm optional



Front Panel Description



- 1:Process value or parameter symbol display(Green color)
- 2:Setting value or parameter value display(orange)
- 3:Indication lamps
AT---Auto-tuning lamps
OUT1---For output 1 indication
OUT2---For output 2 indication
ALM1---For first stage alarm indication
ALM2---For second stage alarm indication
- 4:Increase key
- 5:Decrease key
- 6:shift key or Run/Stop key
- 7:Set key

Ordering Information

CH -

1 2 3 4 5

1:Size Information

102: 48mm(Width)*48mm(Height)
402: 48mm(Width)*96mm(Height)
702: 72mm(Width)*72mm(Height)
902: 96mm(Width)*96mm(Height)
502: 96mm(Width)*48mm(Height)

2:Output 1

R: Relay
V: Logic voltage pulse(ssr drive)
D: 4-20mA
A: Single-phase thyristor trigger output
T: Traic output

3:Output 2

R: Relay
V: Logic voltage pulse(ssr drive)
A: Single-phase thyristor trigger output
T: Traic output
N: Without output 2

4:Alarm

1: 1 alarm output
2: 2 alarm output

5:Power Supply

96: 90~260VAC
24: 24VDC

Specifications

Power Supply	:90~260VAC/24DC
Power Consumption	:5 VA(Maximum)
Display	:Dual Line four digits.7 segments LED display
Control method	:P,PID,PI, PD,ON/OFF(P=0)
Input	:Thermocouple(K,J,R,S,B,E,N,T,U,L,PLII,W5Re/W26Re) RTD(Pt100, JPT100) Voltage and Current(0-5VDC,1-5VDC,0-20mADC,4-20mADC)
Output type	:Relay(10A/220VAC) SSR DRIVE(12VDC 50mA max) Current output(4-20mA/0-10mA) Thyristor zero-crossing trigger(1A 500V)
Output Control	:Heat/Cool/Heat+Cool
Measuring Accuracy	:0.5%F.S
Control Accuracy	:+/- 1 Celsius
Alarm output	:One stage or two stages alarm
Alarm mode	:Deviation high Deviation low Deviation high/low Band alarm Process high Process low
Proportional band(P)	:0.1-999.9/1-9999(default 30)
Integral time(I)	:1-3600S(default 240S)
Derivative times(D)	:1-3600S(default 60S)
Control Time(T)	:1-100S(default 20S for replay output, 2S for SSR drive and 4-20mA output)
Sampling time(T)	:0.5 second
Ambient Temperature	:0°C~50°C
Memory retention	:yes
Ambient humidity	:45%-85% RH(None Freeze)
Weight	:CH102(0.18kg) CH402(0.26kg) CH502(0.26kg) CH702(0.28kg) CH902:(0.33kg)
Size and dimensions	:CH102--48mm*48mm cutout(45mm*45mm*100mm) CH402--48mm*96mm cutout(45mm*91.5mm*100mm) CH702--72mm*72mm cutout(67.5mm*67.5mm*100mm) CH902--96mm*96mm cutout(91.5mm*91.5mm*100mm) CH502--96mm*48mm cutout(91.5mm*45mm*100mm)

Temperature Controller/Solid State Relay/Rotary Encoder

Input Signals

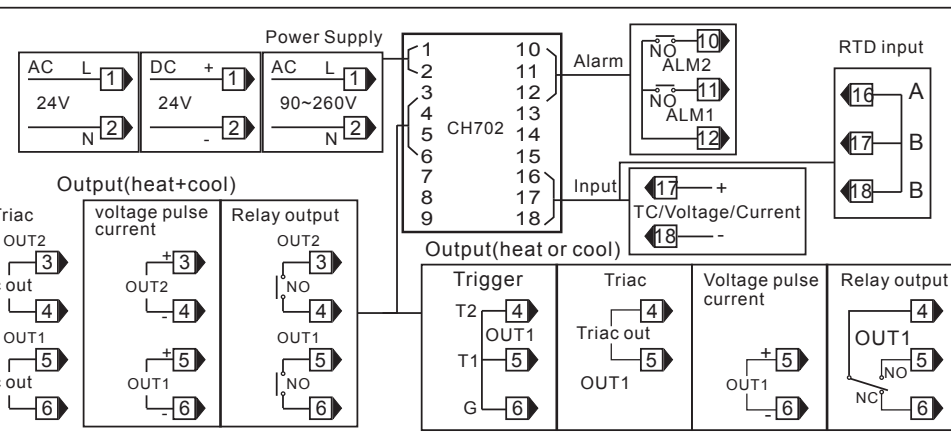
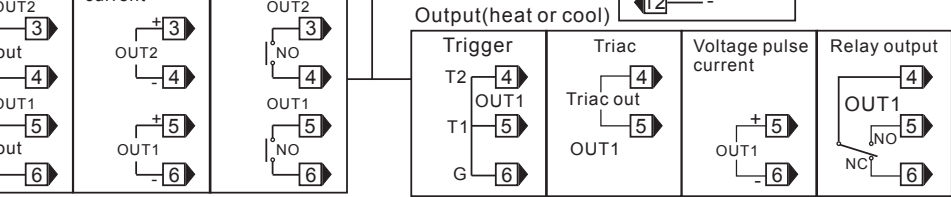
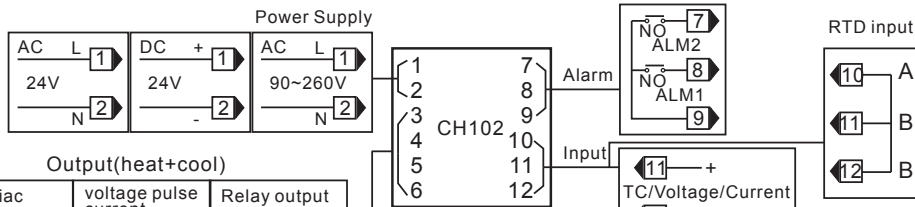
Thermocouple :K(0°C-1372°C) J(0°C-1200°C) R(0°C-1769°C)
 S(0°C-1769°C) B(0°C-1820°C) E(0°C-1000°C)
 T(-199°C-400°C) N(0°C-1300°C) U(-199°C-600°C)
 L(0°C-900°C) PLII(0°C-1390°C)
 W5Re/W26Re(0°C-2320°C)

RTD :PT100(-199.9°C-649.0°C) Jpt100(-199.9°C-649.0°C)

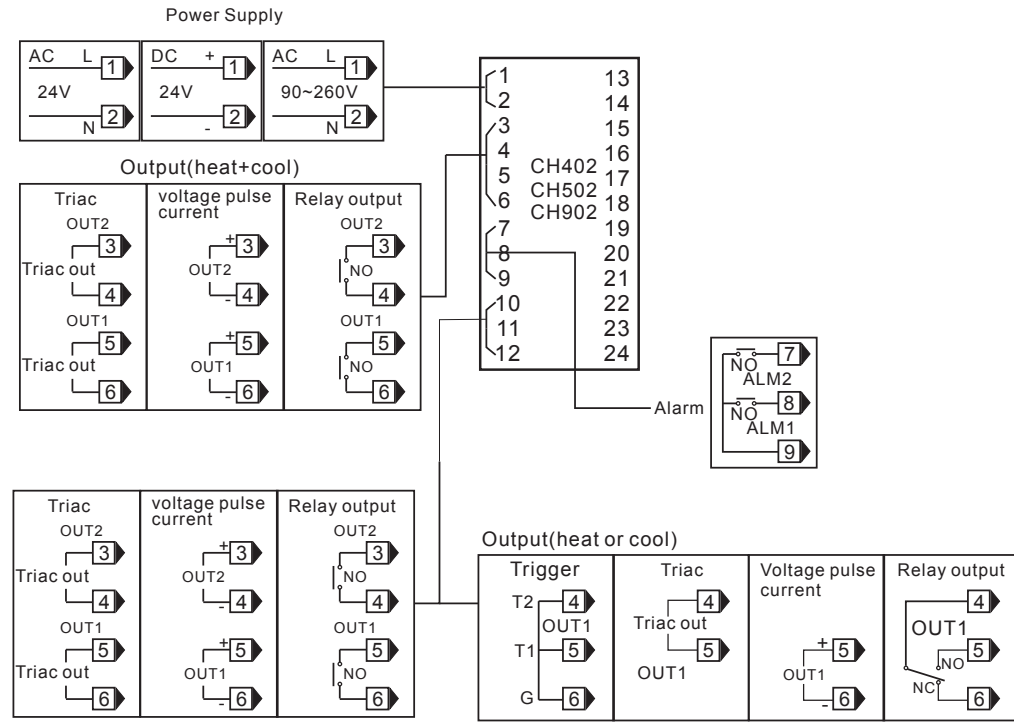
Analog :0-5VDC(-1999-9999 range configurable)
 1-5VDC(-1999-9999 range configurable)
 0-10mADC(-1999-9999 range configurable)
 4-20mADC(-1999-9999 range configurable)

Remark:Be sure to parallel connect a 250 ohm to the input terminal when input is 0-10mA or 4-20mA

Terminal Arrangement



Temperature Controller/Solid State Relay/Rotary Encoder



Heating+Cooling Control

