Temperature Controller Without Datalogger Model: TC-R200 :-

Temperature Controller TC-R200 Features :-


```
Front View
Panel Mounting
Size: 45X45X70 MM
CutOut Dimension: 46X46 MM
Switches: Sw1, Sw2, Sw3 as
UpArrow,LeftArrow,EnterArrow
Output Led: Control,Type
```

```
Rear View

1:Level Gnd      2: Level In
3:Not Used       4:RTD(+)
5:RTD(-)         6:RTD Return
7:Relay Cont NO  8:Relay Cont NO
9:Relay Type NO  10:Relay Type NO
11: 90-265VAC    12:90-265VAC
```
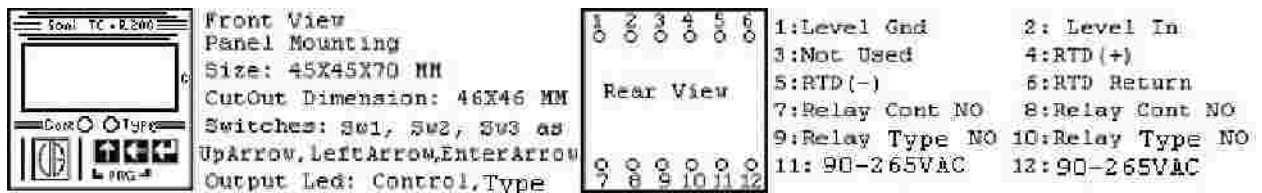
It is 3 digit-7 Segment with calibration Temperature-Controller Instrument, used to measure and control temperature for 0 to 200 centigrade from a   or RTD, has a built-in level controller (Can be used as door switch), and a control-Relay, which can be cut-off if level input is not sensed.

It has an additional relay, Type-Relay, which can be used with different function.
1) To create Flashing-Error if temperature is not reaching to required

Set-point.
2) To create On-Type(Not Flashing) Error if temperature is not reaching to required Set-point.
3) It can be used as In-Range to set relay on when temperature is In-Range (Settable Range-Low to Range-High).
4) Two Point Controller as Low-Point.
5) Two Point Controller as High-Point.

A relay indication is provided in front for relay status and three membrane-push-buttons, Up-Arrow, Left-Arrow, Enter-Arrow are provided to view and edit parameters.

There are two modes for operation.
(1) <u>Measure-Mode</u>
(2) <u>Program-Mode</u>
(3) <u>Operating Help</u>

Note: If two wire RTD is used then short pin 5 & 6 and re-calibrate to compensate wire length of RTD (If large length).

Measure-Mode

At power on and if none of switch is pressed display start showing Measured Temperature value in centigrade if calibrated correctly and relays start functioning as per parameter settings. Press Sw3 (Enter-Arrow) to see Set-Point, Or press both Sw1 (Up-Arrow) and Sw2 (Left-Arrow) to Program Parameters.

Program-Mode

There are 14 parameters can be viewed/edited one by one in this mode.
When user is in Measure-Mode and presses Sw1 and Sw2 both together, user enters in this mode with display shows first parameter 5P.

Parameters are abbreviated on display and are shown as follows.
(1) Set-Point abbreviated as 5P
(2) Proportionate/Control as Po

(3) Band as bA
(4) Proportionate-Time as Pt
(5) Alarm-Time as At
(6) Delay-Time as dt
(7) Type as ty
(8) Range-Low as rL
(9) Range-High as rH
(10) Low-Level Sense/No-Level Sense as LL
(11) Heating/Cooling as HE
(12) Lock-Edit/No-Lock as LE

(13) Calibrate-Low as CL
(14) Calibrate-High as CH

To exit any time from Program mode press both Sw1 (UpArrow) and Sw2 (LeftArrow) again.

Note: If this mode is left for sometime without any action for preset internal time, Measure-Mode will be established automatically.

For Further Help please download Help File for TC-R200

Temprature Controller With Data Logger Model : VG-TC

Temperature Controller VG-TC Features :-

_____

240V 10% A.C Input Supply 12V 10% A.C Supply for Level Sensors
0 to +2.5V for Sensor
4 Level Sensors
RS-485 port for Logging & Display
5 Pushbuttons for Settings
Outputs:-
Relay for Low set point
Relay for Control set point
Relay for High set point
Relay for Error
2 Relay for Dozing (Optional)

Instrument Front View:-
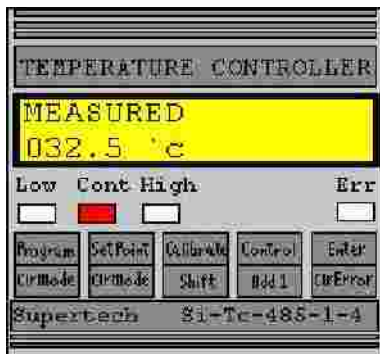
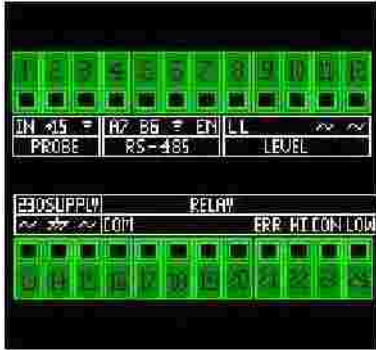Low: - Low Relay Output on Indication

Cont: - Control Relay Output On Indication

High: - High Relay Output on Indication

Following push button is given for settings.

Program/ClrMode
SetPoint/ClrMode
Calibrate/Shift
Control/Add1
Enter/ClrError

Instrument Back View:-

1) Input +ve of Pt100 Amplifier

2) Output +15V for Pt100 Amplifier

3) Output Ground(+15V) for Pt100 Amplifier

4) A7 Connection of RS485, connected to A7 of RS485-To- RS232-Converter card. This is also connected to all A7 connection of all other Instruments.

5) B6 Connection of RS485, connected to B6 of RS485-To- RS232-Converter card. This is also connected to all B6 connection of all other Instruments.

6) Common Connection of RS485, connected to Common of RS485-To- RS232-Converter card. This is also connected to all Common connection of all other Instruments.

7) En (Enable) Connection of RS485, connected to En of RS485-To- RS232-Converter card. This is also connected to all En connection of all other Instruments.

8) LL (Low Level) connected to Low Level Probe.

9) Optional For OverFlow.

10) Not Used

11) 12V AC Supply for Level Controller (Built-In).Also used as common point for Low Level & OverFlow sensor.

12) 12V AC Supply for Level Controller (Built-In).

13) 230 V AC Supply.

14) Supply Earth.

15) 230 V AC Supply.

16) Common point For All Relays.

17) Not Used.(Optional For Dozing)

18) Not Used.

19) Not Used.

20) Not Used.

21) Normally open contact of Error relay.

22) Normally open contact of High temperature relay.

23) Normally open contact of Control temperature relay.

24) Normally open contact of Low temperature relay.

Other Settings (Provided through push button):-

- Give Password
- New Password
- Locking System?
- Meter ID (Number)
- Decimal Place
- Set Point: Low
- Set Point: Control
- Set Point: High
- Dead Band Width
- Proportion.Band
- Proportion.Time
- OnOff Control?
- Heating Control?
- Control Alarm Time
- CalibrationLoPoint Temperature%20Controllers.pdf
- CalibrationHiPoint

Error:-

- Error1? Check Relay Probe
- Error2? Tank Low Level

Note: For Further Help please download Help File for VG-TC