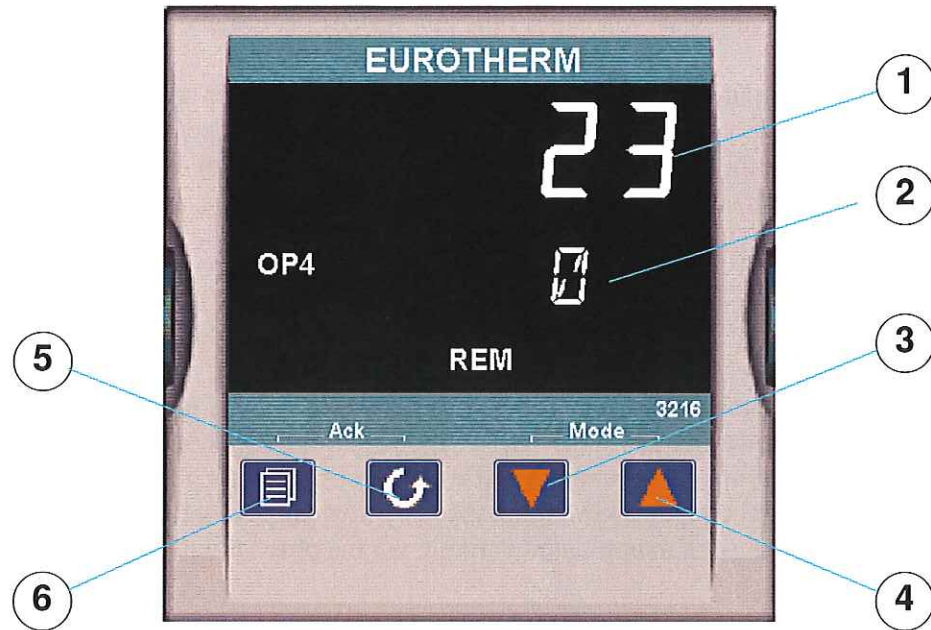


Short description 3216

Controller
front view



Controller front view			
Pos.	Designation	Pos.	Designation
1.	Actual temperature	2.	Set value / Correcting variable
3.	Minus key	4.	Plus key
5.	Parameter key	6.	Picture key

1.) Operating mode selection (at multi zone system only master)

Set point adjustment (Automatic mode)

At master controller the set point adjustment can be done via the plus / minus key.
To change the values (SP) the controller must be in **automatic mode (Auto)**.

In the following way you can set the controller in automatic mode:

Press the parameter key until "A-M" appears in the lower half of the display.
Press the plus / minus key until "Auto" appears in the upper display.
By pressing the picture key simultaneously you can return to the main screen.
Now you can set a temperature via the plus / minus key.

Manipulated variable (Manual mode)

At master controller can set a manipulated variable [%] done via the plus / minus key.
As to set the controller must be in **manual mode (mAn)**.
In the following way you can set the controller in manual mode.
Press the parameter key until "A-M" appears in the upper half of the display.
By means of the plus / minus key the regulator can set to "mAn".
By pressing the picture key simultaneously you can return to the main screen.
Now you can set a manipulated variable via the plus / minus key.

OFF (Standby)

At standby the controller is switched off. The power is 0%.
As to set the controller must be in **standby mode (off)**.
In the following way you can set the controller in standby mode.
Press the parameter key until "A-M" appears in the upper half of the display.
By means of the plus / minus key the regulator can set to "OFF".
By pressing the picture key simultaneously you can return to the main screen.

Attention: After the power supply is on, the controller will return to the actual setpoint.
For this reason check the value of the setpoint after switch on the control unit !!!

2.) Parameters

By pressing the parameter key, following parameters will appear:

A-M	= Operating Mode	(Off/Auto/man)
T.STAT	= Timer Status	(res/run/hold)
WRK.OP	= Working Power 0-100%	(only in operating mode „auto“ or „off“)
A4.HI	= Alarm 4 Setpoint	(don't manipulate Max.Temp.furnace)

In Level 2 following parameters will appear:

Proceed as follows:

Keep picture key pressed for >2 seconds, until GOTO appears in the lower half of the display.

Now, you can change by the plus / minus key into Lev2.

Then, the password is required automatically (CODE appears in the lower half of the display).

Now, enter 2 by means of the plus key. Then the controller returns to the main screen. (level 2 active)

A-M	= Operating Mode	(Off/Auto/man)
T.STAT	= Timer Status	(res/run/hold)
WRK.OP	= Working Power 0-100%	(only in operating mode „auto“ or „off“)
SP.HI	= upper limit	(modification is not allowed!)
SP.LO	= lower limit	
SP1	= Setpoint 1	(only in auto-modus)
SP.RAT	= ramp	(refers to Setpoint 1)
TM.CFG	= Timerconfiguration	(there should be PROG here)
TM.RES	=setting	(h or min)
THRES	= Timer start value	
END.T	= Timer ende	(Action if timer is run down)
SERVO	= PV	
T.SP1	= 1. Setpoint °C of the program segment	
RMP.1	= 1. Ramp k/h or k/min of the program segment	

.
. .
. .
etc.

3.) Heating with program [4 ramps, 4 dwell times] (only 3216CP look at the label)

To **modify the program** you must go into **operating level 2**.

Proceed as follows:

Keep picture key pressed for 2 seconds, until GOTO appears in the lower half of the display.

Now, you can change by the plus / minus key into Lev2.

Then, the password is required automatically (CODE appears in the lower half of the display).

Now, enter 2 by means of the plus key. Then the controller returns to the main screen.

(level 2 active)

Enter first Set point

Press the parameter key until you see TSP.1 in the display.

With the key less or more enter the first target temperature [°C].

Enter first ramp

Press the parameter button again until you see RMP.1 in the display.

With the key less or more enter the ramp [°C/h].

Enter first holding time

Press the parameter button again until you see DWEL.1 in the display.

With the key less or more enter the holding time [h:min].

Enter further set points, ramps and holding times

Retry the steps b) to d) for all segments.

Do you want to start the program you must set the regulator in run mode.

In the following way you can set the regulator in run mode:

You must go into **operating level 2**.

Press the parameter key until “T.STAT” appears in the upper half of the display.

By means of the plus / minus key the regulator can set to “run”.

Info:

The orange LED “run” shows, if the controller is activated.

Attencion:

If the program will stoped „res“ the setpoint from automatic mode is active. From these set the setpoint in automatic mode at “0” before you start the program.

4.) Heating with ramp and dwell time [without program] (only 3216CC look at the label)

Important:

Is a program controller used (**3216CP**), this function is not activated!

In the Timerconfiguration: **TM.CFG -> PROG** ! The function ramp and dwell time can be activated in the configuration-level however, with which the control timer is deactivated then, however. You find further information in the handbook 3200 of Eurotherm.

Do you want to heat with a ramp to set point you must set the regulator in **run mode**.

In the following way you can set the regulator in run mode.

Press the parameter key until "T.STAT" appears in the upper half of the display.

By means of the plus / minus key the regulator can set to "**run**".

If the regulator is at „run“ you can modify the **setpoint** by the plus / minus key.

To **modify the ramp** you must go into **operating level 2**.

Proceed as follows:

Keep picture key pressed for 2 seconds, until GOTO appears in the lower half of the display.

Now, you can change by the plus / minus key into Lev2.

Then, the password is required automatically (CODE appears in the lower half of the display).

Now, enter 2 by means of the plus key. Then the controller returns to the main screen.

(level 2 active)

Now, press the parameter key, until "**SP.RAT**" appears in the lower half of the display. By means of the plus / minus key the **ramp slope [K/h]** can be entered.

Info:

If ramp is "off", the controller regulates without ramp to setpoint!

In the following way you can activate a "**holding time**". At the end of the timer the setpoint will set at "0".

Press the parameter key, until "**END.T**" appears in the lower half of the display.

By means of the plus / minus key you must enter "**OFF**".

In the following way you can modify the **holding time**.

Press the parameter key, until "**Dwell**" appears in the lower half of the display. By

means of the plus / minus key the holding time [h:min] can be entered.

Via the picture key you can return to the main screen.

5.) Slave controller Offset (Trimming)

Normally, the slave regulators regulate automatically to the set temperature of the master. However, there can be entered a trimming value (offset value) for each slave regulator.

Therefore, you must change into **level 3** at the corresponding slave regulator.

Proceed as follows:

Keep picture key pressed until LEV3 appears in the upper half of the display (skip LEV2). Then, the password is required automatically (CODE appears in the lower half of the display). Now, enter 3 by means of the plus key. Then the controller returns to the main screen.(level 3 active)

Now, press the picture key, until "SP" appears in the lower half of the display.

Then, press the parameter key, until LOC.T appears.

By means of the plus / minus key the trimming value [°C] can be entered.

By pressing the picture and parameter key simultaneously you can return to the main screen.

Now, the regulator indicates the changed set value compared to the master.

(Set value slave = set value master +/- trimming value)

6.) Alarms

Sensor break and over temperature are shown at the display. The red LED blinks.

After remedy the fault you must reset the error (Press parameter key and picture key together).

7.) Selfoptimization

To start selfoptimization you must go into **operating level 2**.

Proceed as follows:

Keep picture key pressed for 2 seconds, until GOTO appears in the lower half of the display.

Now, you can change by the plus / minus key into Lev2.

Then, the password is required automatically (CODE appears in the lower half of the display).

Now, enter 2 by means of the plus key. Then the controller returns to the main screen.

(level 2 active).

Now, press the parameter key, until A.Tune appears in the lower half of the display.

By means of the plus / minus key the selfoptimization can set On.

Now the selfoptimization is running.

The selfoptimization take a long time (5-15min). After it the new control parameters will accept automaticly.

Via the picture key you can return to the main screen.

Info:

You should start the selfoptimization after reaches the setpoint or in a dwell time.