

### Characteristics

Controller C 6 is an electronic temperature regulator with the following technical features:

- one heating-up ramp, setable in minutes (time to reach the set temperature)
- one endless holding time of set temperature (until furnace is switched-off manually)
- one memory-chip that memorizes all set values
- pre-adjusted (but changeable) regulating parameters.

### Safety

Controller C 6 is equipped with several electronic safety components.

In case of a failure the furnace will switch-off and the error is shown on the display of controller C 6.

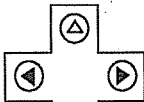
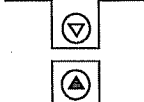
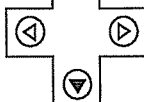
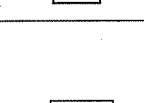


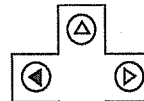
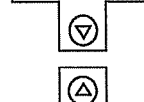
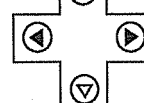

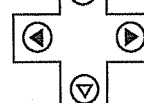
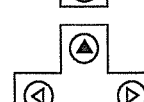
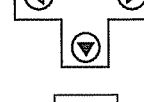
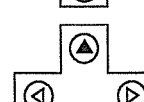
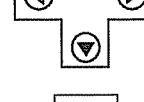
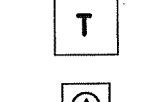

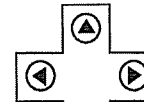
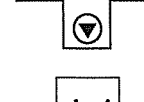
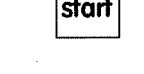

### Indications of failures

- F3: thermocouple defective (measuring circuit interrupted)
- F4: connection of thermocouple mixed-up
- F6: controller defective
- F7: safety relais has switched-off the furnace

For removal of failures:

Please contact Nabertherm service-department.

	press key	answer	comments
<b>Setting of a temperature</b>  1. Recall input key T  2. Choosing of desired position on the display  3. Input of required temperature		Diode T is flashing, diode in the display is flashing   Desired value will be shown on the display, after approx. 10 sec the actual value is displayed	With T the working temperature is defined.  Press control-keys ◀ ▶ of input cross-key.  Control keys ▲ ▼ change the values from 0 - 9.  By pressing the keys <b>start</b> or <b>stop</b> the controller will immediately leave the input mode. If no value for time is set the furnace will heat-up with full power to the set temperature.
<b>If the required temperature should be reached within a fixed time the heating-up time ramp must be set as follows:</b>  <b>Setting of heating-up ramp:</b>  1. Press input key time		Diode time is flashing, diode in the display is flashing	With time the heating-up ramp is defined.

	press key	answer	comments
2. Choose desired position on the display			Press control keys ◀▶ of input cross-key
3. Set desired time	  	Desired value will be shown on the display, after approx. 10 sec the actual value is displayed	Control keys ▲▼ change the values from 0-9. By pressing the bottom <b>start</b> the set values will be memorized and the program will be started automatically.
<b>Starting a program</b>			Diode <b>time</b> is enlightened until the set temperature is reached. Diode <b>M</b> is only enlightened when the heating is switched-on. Diode <b>T</b> is only enlightened if the set temperature is reached and as long as the furnace is not switched-off manually.
1. Press function key <b>start</b>		Diode <b>start</b> is flashing.	
<b>Finishing a program</b>			The program will be finished immediately. All other diodes will switch-off. Nevertheless, the set values remain memorized.
1. Press function key <b>stop</b>		Diode <b>stop</b> is flashing.	
<b>Controller C 6 has got pre-adjusted regulating parameters. We strongly recommend not to change the adjusted values without basic knowledge of regulating technics!</b>			
<b>Setting of regulating parameters</b>			
1. Recall regulating parameters	  	 Diodes <b>time</b> and <b>T</b> are flashing, diode in the display is flashing. Display shows P = 4	The regulating parameters (P,I and D) can also be changed during a running program
2. Choose desired position in the display	  		Pre-adjusted parameters: P = 4 I = 200 D = 2
3. Set desired parameter	  		
4. Confirm input		Display shows I = 200	
5. For input of other parameters please see fig. 2. - 4.	  	Display shows D = 2	
6. Finish input		Display shows actual temperature	By pressing of button <b>start</b> the input mode will immediately be left.