

Process Control and -Documentation

Controller

The Nabertherm controllers convince with their intuitive operation and a contemporary design. They are operated via a central control dial (Jog Dial). Temperatures and program information are presented in a clear, high-contrast LC display. Optimum temperature uniformity over the entire temperature range through multi-stage PID parameterization.

In developing the controller, the ease of use was the focus. For convenient operation, the controller may be taken off from the holder at the kiln. The program is entered in plain text, so that all steps are easy to follow. Firing curves can be saved under their name for unique assignment (e.g. glaze firing). The user can choose between 17 languages.

When connected to a kiln for firing ceramics, five sample programs are stored in the controller (two bisque firings and three glaze firings). These programs can easily be used as a basis for an individual adaptation to the actually required firing curve. You can overwrite and save again with the required times and temperatures. Via an integrated real time clock, the kiln can be started delayed e.g. in the evening for a firing overnight.

Each controller of series B400 to P470 is equipped as standard with a USB interface. The firing will be documented on a USB stick, which has to be inserted during the operation. After the firing has been finished it can be easily read-out using the software NTGraph (freeware), which is based on Microsoft Excel as user interface. The visualization is presented in tabular form or as a clearly colored graphic.



B400



C440



P470

Allocation of the Standard Controller to the Furnace Groups

	N 100 - N 2200/H	NW 150 - NW 1000/H	N 140 E - N 500 E	N 40 E - N 100 E	Top 16/R - Top 220	HO 70. - HO 100	NB 150 - NB 600	GFM 420 - GFM 1425	GF 75 - GF 1425	IF 30 - F 110	IF 220
Catalog page	8-9	10-11	12-13	14	21	23	27	31	32-33	35	35
Controller											
B400	●	●	●	●	●	●	●				
C440	○	○	○	○	○	○	○	●	●	●	
P470	○	○	○	○		○	○	○	○	○	●

Functionality of the Standard Controllers

	B400	C440	P470
Number of programs	5	10	50
Segments	4	20	40
Extra functions (e.g. fan or autom. flaps) maximum	2	2	2-6
Maximum number of control zones	1	1	3
Drive of manual zone regulation	●	●	●
Auto tune	●	●	●
Real time clock	●	●	●
Status messages in clear text	●	●	●
Data input via jog dial and buttons	●	●	●
Entering program names (i.e. "Sintering")	●	●	●
Keypad lock	●	●	●
Skip-button for segment jump	●	●	●
Program entry in steps of 1 °C or 1 min.	●	●	●
Start time configurable (e.g. to use night power rates)	●	●	●
Switch-over °C/°F	●	●	●
Malfunction memory	●	●	●
kWh meter	●	●	●
Operating hour counter	●	●	●
NTLog Basic for Nabertherm controller: recording of process data with USB-flash drive	●	●	●
Interface for VCD-software	○	○	○
Number of selectable languages	17	17	17

- Standard
- Option

Supply Voltages for Nabertherm Furnaces

1-phase: All furnaces are available for 110 V - 240 V, 50 or 60 Hz.

3-phase: All furnaces are available for 200 V - 240 V and/or 380 V - 480 V, 50 or 60 Hz.

The connecting rates in the catalog refer to the standard furnace with 400 V (3/N/PE) respectively 230 V (1/N/PE).