






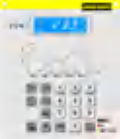





Alternative Controls

Controller Product Range

Basic	Comfort	Professional
 <p>Eurotherm 3208 -2 temperature setpoints</p>	 <p>Eurotherm 3216 -1 program / 8 steps -With optional serial interface</p>	 <p>Eurotherm 3504 -Multi-zone-/charge control -Up to 6 settable functions -25 programs / up to 500 steps</p>
 <p>R7 - 1 temperature setpoint</p>	 <p>Nabertherm C280 -9 programs / 4 steps -2 settable functions -With preset programs for ceramic applications</p>	 <p>Nabertherm P470/P480 - 50 programs / 40 steps - Up to 6 settable functions - Up to 3 zones, charge control, cooling - Logical and continuous control of heating - Calibration (10 base points) - Jog Dial - Real-time clock - NTLog - USB interface - Language selection (DE/EN/FR/IT/SP/RU)</p>
 <p>Nabertherm B150, B180 -1 program / 2 steps</p>	 <p>Nabertherm P300-P330 -9 programs / 40 steps -2 settable functions -P330 with real-time clock</p>	Options
 <p>Nabertherm B130 -2 programs / 4 steps -With preset programs for ceramic applications</p>	 <p>Nabertherm C440/C450 - 10 programs / 20 steps - Up to 2 settable functions - Calibration (10 base points) - Jog Dial - Real-time clock - NTLog - USB interface - Language selection (DE/EN/FR/IT/SP/RU)</p>	<ul style="list-style-type: none"> - Further Controller: I.e. Stange, Omron, Jumo - Temperature limiter - Interfaces
 <p>Nabertherm B400/B410 - 5 programs / 4 steps - Up to 2 settable functions - Calibration (10 base points) - Jog Dial - Real-time clock - NTLog - USB interface - Language selection (DE/EN/FR/IT/SP/RU)</p>		

Alternative Controls

HiProSystems

Comfort



Process controls H500 for standardized processes without any customer specific adjustments/configurations
 1. H500 for electrically heated bale-out and tilting furnaces

2. H500 for furnaces with standard functions: Rotary tube furnaces, controlled cooling (also for air circulation furnaces), multi-zone, charge control
 - Touch panel: 4"-display or 7"-display with alpha numeric process visualization
 - Siemens PLC hardware



Process controls H700 for advanced, standardized processes without any customer specific adjustments / configurations

1. H700 for bale-out and tilting furnaces
 2. H700 for VHT furnaces
 3. H700 for R(SR) furnaces
- Touch panel: 7"-display with alpha numeric process visualization
 - Siemens PLC hardware



Process controls H1700 for complex standardized processes with customer specific adjustments/configurations

- Touch panel: 7"-display with alpha numeric process visualization
- Siemens PLC hardware

Professional



Process controls H3700 for complex standardized processes with customer specific adjustments/configurations

- Touch panel: 12"-display with graphical process visualization
- Siemens PLC hardware



Process controls Nabertherm Control Center NCC, also for multi-step and parallel processes with customer specific adjustments/configurations

- PC Process-Control-System (SCADA) with 19"-monitor and graphical process visualization
- Siemens PLC hardware



Safety packages

- Realization with conventional safety technology
- Realization with failsafe PLC technology (F-SPS)

Options

- Connection to customer-specific systems
- Uninterruptible power supplies (UPS)
- Alternative operating languages

Remote & Alarm Services

Remote Services



Remote service for PLC

- Via conventional telephone (analog modem)
- Via cell phone (GSM, GPRS, Edge, UMTS, eWon 2000/4000)
- Via internet (eWon 2000/4000, VPN)



Remote service for PC

- Via Internet (Teamviewer)

Alarm Services



Alarm messages HiProSystems

- As SMS message
- eWon 2000/4000
- Forwarding of 1 (up to 5) group messages



Alarm messages Nabertherm Control Center NCC

- As SMS message
- Siemens AlarmControlCenter with GSM module
- Forwarding of any alarm message
- Configurable by the operator



Alarm message from process as SMS for standard Controller with floating contact

- GSM module with message input
- Forwarding of an alarm message from the controller (unspecific) as SMS

Process Controls and Documentation

Basic



Record and display of process data with paper chart recorder

- Eurotherm 4102/3
- 6 measuring points



Record and display of process data with graphical recorder

- Eurotherm 6100A/E
- With 3-18 measuring points
- Interface for USB-flash drive and CF-card
- Data security level 2



Recording of process data with USB-flash drive for Nabertherm-controller with NTLog Basic

- Presentation with Nabertherm presentation software NTGraph or customer's spreadsheet
- Recording of differential time
- Data security level 1



Recording of process data with storage device with NTLog Comfort (HiProSystems)

- On storage card, USB-flash drive or network
- From H1700/H3700
- Presentation with Nabertherm presentation software NTGraph or customer's spreadsheet
- Data security level 1

Comfort



Reading and processing with MV-Software

- Setpoints, actual values from one or more Nabertherm- and/or Eurotherm-controller according to ISO9000ff., incl. operating and programming
- Only actual values for other controllers and systems
- Available for 32 bit operating systems
- Data security level 2



Data transmission between graphical recorder and HiProSystems or Eurotherm controller

- Option for Eurotherm 6100A/6180A
- Communication to recorder via network
- Data security level 2



Reading and processing with Nabertherm Documentation Center NDC

- 16 records defined by one or more Nabertherm furnaces according to ISO9000ff.
- From H1700
- Data security level 2

Professional



Process Controls and Documentation with Nabertherm Control Center NCC

- PC process control system (SCADA)
- Documentation of complete process chains according to ISO9000ff.
- At least 16 Process-specific records per furnace
- Data security level 2



Relevant documentation for standards, i.e. according to AMS 2750E/NADCAP, CQI-9, FDA, EN14179...

- Realization with NCC Aviation/Automotive
- Realization with recorder Eurotherm 6100A, 6180A
- TUS-recorder with Eurotherm 6100A/6180A
- Data security level 2

Options

- Connection to customer-specific systems
- Uninterruptible power supplies (UPS)
- Alternative operating languages
- Replacement systems
- PC enclosures

Security Levels

Legend of Nabertherm security levels

Nabertherm security levels describe the protection against manipulation of the process documentation.

1. level: Protection against intentional manipulation of a file with little criminal effort

Documentation with a simple proof obligation (e.g. the quality of a product), where damages due to criminal actions remains manageable. -> Realization i.e. by checksum calculation, etc...

2. level: Protection against intentional modification of a file with a high criminal effort

Use in normative burden of proof, which cause high damages by criminal manipulation (e.g. AMS, FDA, CQI-9..). -> Realization e.g. by generating PDF-Files, additional saving of hidden files, etc.