

## Controllers Functions / Process Controls

Application	Controllers														HiProSystems Process Controls						
	R6	C6	3216	3208	B130	B150	B180	B400/B410	C280	C440/C450	P300	P310	P330	P470/P480	3504	H500	H500	H700	H700	H1700	H3700
					Ceramic bisc Glaze firing	Ramp + dwell time			Ceramic bisc Glaze firing					Charge control/ Multi-zone furnaces	For Furnaces with Standard Furnaces	Elektrisch beheizte Schöpf- und Kippöfen	For Furnaces with Standard Furnaces	Electrically or gas heated crucible furnaces/VHT-basic	Customized furnaces	Customized furnaces	
Number of programs (WT=week timer)	1	1	1		2	1	1	5	9	10	9	9	9	50	25	20	1 + WT	10	1 + WT	10	10
Segments	1	2	8		3	2	2	4	3	20	40	40	40	40	500 <sup>4</sup>	20	20	20	20	20	20
Extra functions (e.g. fan or autom. flaps)								2	2	2 <sup>3</sup>	2 <sup>3</sup>	2	2-6	2-8 <sup>4</sup>	3 <sup>4</sup>		0 <sup>4</sup>			bis 6/2 <sup>4</sup>	bis 8/2 <sup>4</sup>
Maximum number of control zones	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2 <sup>1,2</sup>	1-3 <sup>4</sup>	1	0 <sup>4</sup>	1	8	8
Drive of manual zone regulation								●		●		●		●		○	○	○	○ <sup>8</sup>	○	○
Charge control/Bath control															○	○	○	○	○	○	○
Auto tune			●	●	●	●	●	●	●	●	●	●	●	●	●						
Steps of parameter settings [steps/°C]			1/-		4/-	4/-	4/-	10/var	4/-	10/var	4/-	4/-	4/-	10/var	3/-	10/variabel	10/variabel	15/200	15/200	15/200	15/200
Real-time clock								●		●						●	●	●	●	●	●
Plain, blue-white LC-display					●	●	●	●	●	●	●	●	●	●							
Graphic color display																4"(7")	4"(7")	7"	7"	7"	12"
Status messages in clear text					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Data input via number pad							●									●	●	●	●	●	●
Data entry via touchpanel																●	●	●	●	●	●
Data entry via jog dial and buttons								●	●	●											
Entering program names (i.e."Sintering")								●	●	●											
Keypad lock					●	●		●	●	●											
Operators								●	●	●						○	○	○	○	○	○
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	○		○	○	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●
Fehlerspeicher					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
kWh meter					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Operating hour counter					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Sollwertausgang				○				●	●	●					○			○	○	○	○
NTLog Comfort for HiProSystems: Recording of process data on an external storage medium					○	○	○	●	○	●	○	○	○	●		○	○	○ <sup>6</sup>		○	○
NTLog Basic for Nabertherm Controller: Recording of process data with USB-flash drive					○	○	○	○ <sup>7</sup>	○	○ <sup>7</sup>	○	○	○	○							
Interface for MV software/VCD software																					
Interface NDC/NCC															○ <sup>7</sup>	○ <sup>7</sup>	●	●	●	●	●
Plain display of furnace data															●	●	●	●	●	●	●
Display of a flow chart																					○
Actual trend display																●	●				●
Number of standard languages								●		●					○	●	●	○		○	○
Controlled cooling								○		○					○					○	○
Gradient monitoring (not for safety functions)														●	○ <sup>5</sup>					○	○
Positioning motion control																				○	○
Safety package EN 1539				●		○					○									○	○
Safety package debinding																				○ <sup>4</sup>	○ <sup>4</sup>
Safety package flammable gases																				○ <sup>4</sup>	○ <sup>4</sup>

- Standard
- Option

<sup>1</sup> = Not for melt bath control

<sup>2</sup> = Control of additional separate slave regulators possible

<sup>3</sup> = As an extra feature in ovens with air circulation

<sup>4</sup> = Depending on the design

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<sup>5</sup> = Cooling thermocouple only without charge thermocouple



NCC