

## ROOM TEMPERATURE CONTROLLER HLS 34

The HLS34 is specifically designed for individual room temperature and zone control applications. The HLS 34 controller has built-in RS-485 channel for Modbus communication. Controllers can be connected to any supervisory software / system supporting Modbus RTU.

The HLS34 has built-in display and unique touch sensitive buttons for adjusting the user parameters and for configuring the controller.

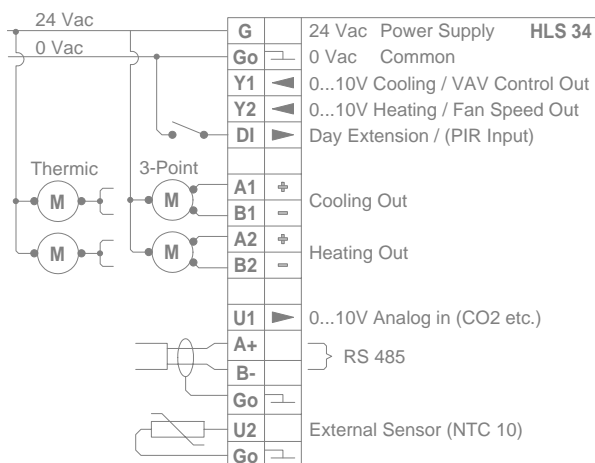
This controller supports 0...10V actuators, 3-point controlled actuators and thermic actuators.

One of the 0...10Vdc outputs of the controller can be configured for a fan speed control via FCRY3 relay module or it can be used for VAV control.

The controller has DAY and NIGHT operating modes. When in the NIGHT mode the controller can be overridden to the DAY mode via a hardware input or by touching day extension button or via the MODBUS network. Return to NIGHT mode is automatic after pre-set delay.

The controller has also a CO2 measurement input for boosting the ventilation (fan speed) in case of high CO2 level in the room space.

### Wiring:



### Technical data:

supply		24Vac/dc (20...26V) < 1 VA Note! When using dc supply only 0-10V outputs are operational
set point		day mode: 21°C, *+/- 3°C, *21°C night mode: 5-20°C, *18°C +/- 0,5 °C
accuracy		
dead zone Dz		day mode: 0...3 °C, *0,3 °C night mode: 0...10 °C
P-band	Xp	1...32 °C, *2 °C
integration time	Tn	50...5000 s, *300 s
3-point act. running time Mt		30...300 s, *180 s
outputs Y1 and Y2		0...10V, 2mA
outputs A1/B1 and A2/B2 selectable by commissioning		3-point actuator, 24Vac 1A or thermic actuator 24Vac 1A
allowed ambient humidity		0...85 % RH (non-condensive)
wiring terminals		1,5 mm <sup>2</sup>
housing		ABS-plastics, IP20
dimensions w x h x d		87 x 86 x 32 mm
		* = factory setting

### Ordering guide:

Model	Product number	Description
HLS 34	1150110	room temp. controller with MOD-bus communication
FCRY 3	1183070	fan coil relay with a 0-10V input
HLS 34-SER	1150111	configuration tool

**HLS 34-SER Handheld Configuration Tool**

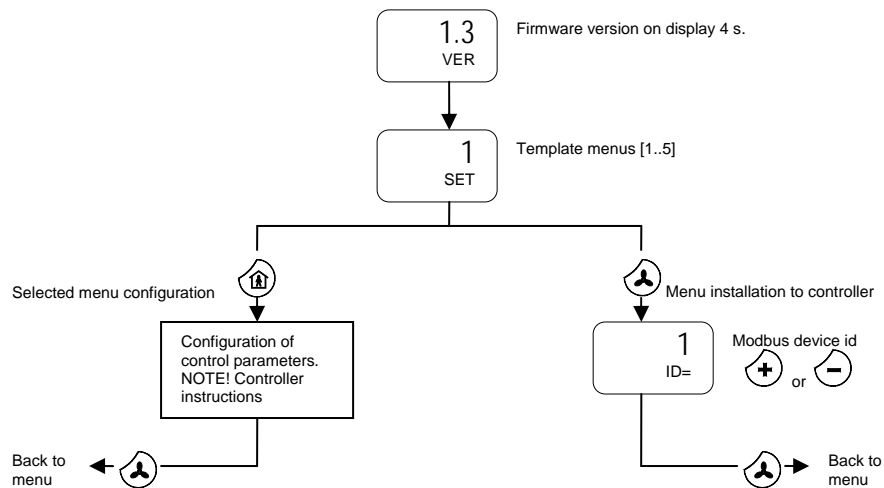
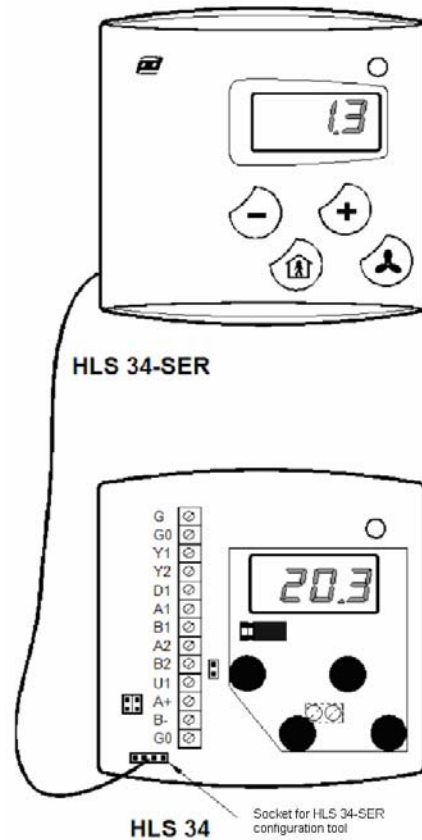
NOTE! HLS 34 controller must be disconnected from the Modbus during feeding the data.

Commissioning of HLS 34 controllers can easily be done by using HLS 34-SER configuration tool. The versions of software must be equal at the controller and tool (e.g. Ver 1.3).

HLS 34-SER configuration tool may include five different controller configurations.

After removing the cover HLS 34-SER can be connected to the configuration socket of HLS 34 controller (see the picture). The supply of HLS 34-SER will come via the configuration socket of HLS34 controller. The first information at the display of configuration tool, after connecting to the controller, is the version number of the software (Must be equal to controller).

We recommend careful planning and setting the configurations to the configuration tool before feeding the data to the controllers. HLS 34 controllers can be configured on the field during commissioning or in advance before installation in the office.



Products fulfill the requirements of directives 73/23/EEC and 2004/108/EY and are in accordance with the standards EN60730, EN61000-6-3: 2001 (Emission) and EN61000-6-2: 2001 (Immunity).

**Produal Oy**

Keltakalliontie 18  
48770 Kotka  
FINLAND  
www.produal.com

Tel: +358-5-230 9200  
Fax: +358-5-230 9210  
info@produal.fi