PRODUAL
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ROOM CONTROLLER HLS 34

HLS 34 is a room controller for individual room temperature and VAV control applications. The controller can be connected to any system that supports Modbus RTU protocol.

Controller supports 0...10 V actuators, 3-point controlled actuators and thermal actuators. The fan coil fan speed can be controlled directly with a 0…10 V output if the fan coil is equipped with EC motor. FCRY 3 relay module is needed for controlling the fan speed of 3-step motors.
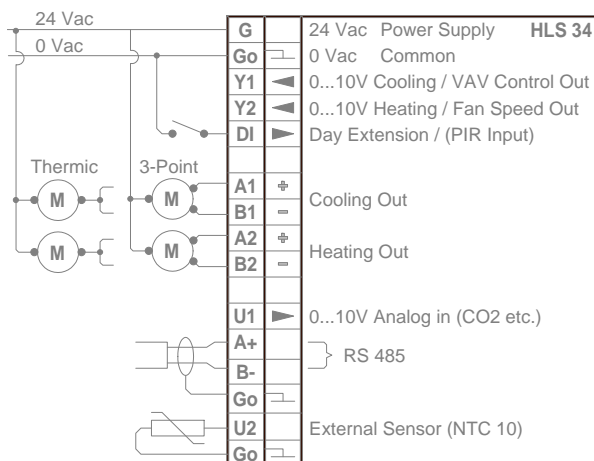
The Y1 output is used for VAV control. A demand based and energy saving ventilation can be implemented with a separate carbon dioxide measurement connected to the U1 input.

Temperature is detected with an internal or external NTC10 sensor (terminals included).

The controller works in day or night mode according to the information received via the Modbus. The day mode can be activated temporarily for a specific time (1...480 min) by touching the "man in house" button or using external (home/away) switch or motion detector. The controller returns to the night mode after the delay.

The controller settings can be supplied with controller buttons or by using the HLS 34-SER commissioning tool which speeds up the commissioning.

Wiring:

G		24 Vac Power Supply	**HLS 34**
Go		0 Vac Common	
Y1	◄	0...10V Cooling / VAV Control Out	
Y2	◄	0...10V Heating / Fan Speed Out	
DI	►	Day Extension / (PIR Input)	
A1	÷	Cooling Out	
B1	−		
A2	÷	Heating Out	
B2	−		
U1	►	0...10V Analog in (CO2 etc.)	
A+		RS 485	
B-			
Go			
U2		External Sensor (NTC 10)	
Go			

24 Vac / 0 Vac — Thermic — 3-Point

Technical data

Supply		24 Vac/dc** (20…28 V), < 1 VA
Set point	- day mode	8…50 °C, *21 °C, ±3 °C
	- night mode	8…50 °C, *17 °C
Accuracy (measurement)		±0.5 °C
Dead zone	Dz	in day mode 0…3 °C, *0,3 °C in night mode 0…10 °C, *6,0 °C
Proportional band	Xp	1…32 °C, *2 °C
Integration time	Tn	50…5000 s, *300 s
3-point control actuator running time		30…500 s, *180 s
Outputs Y1 and Y2		0…10 V, 2mA
Outputs A1/B1 and A2/B2, selectable		3-point motor, 24 Vac 1 A or thermal actuator, 24 Vac 1 A
Allowed ambient humidity		0...85 % RH (non cond.)
Wiring terminals		1,5 mm²
Housing		ABS plastic, IP20
Mounting		on the wall surface or on the standard flush mounting box (60 mm hole distance)
Dimensions (w x h x d)		87 x 86 x 32 mm

* = Factory setting
= **NOTE: Only the 0...10 V outputs work when using DC supply voltage.

Ordering guide:

Model	Product number	Description
HLS 34	1150110	fan coil and VAV controller; Modbus connection
FCRY 3	1183070	fan coil relay with a 0...10 V input
HLS 34-SER	1150111	commissioning tool for HLS 34