

UNIVERSAL CONTROLLER HS 2.2-M

HS 2.2-M is a universal controller for HVAC applications. The controller can be used for controlling e.g. pressure, differential pressure, temperature or illumination level. The controller can be connected to any system that supports Modbus RTU protocol by using the RS-485 connection. The bus is galvanically isolated from the controller's other electronics.

Controller supports 0...10 V controlled actuators and thermal actuators or 3-point actuators.

The 0...10 V input signal corresponds to the 0...100 % range in the controller. The input signal is viewed on the display and the signal can be scaled to be viewed as the correct unit. Possible units are: Pa, kPa, bar, °C, m/s, lx, CO₂, CO and % rH .

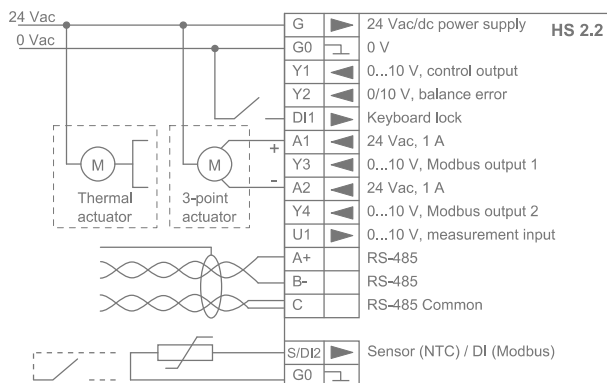
The controller commissioning can be done by using the display and buttons. For daily use, only "+" and "-" buttons are needed. Additional buttons needed for commissioning are hidden under the cover.

The buttons can be locked by connecting the DI1 input to the 0 V level (= G0).

There is also an output indicating failure function in cases when the controller does not reach the balance during the set time.

The Y3 and Y4 outputs can only be controlled via Modbus.

Wiring



Technical data:

Supply	24 Vac/dc** (22...28 V), < 1 VA
Inputs	1 x 0...10 V, 10 kΩ 2 x DI, pot. free contact
Outputs	3 x 0...10 V, 2 mA 1 x 24 Vac, 1 A 1 x 0/10 V (error signal)
Set point	- 9999 ... +9999
Resolution	1...1000
Proportional band (Xp)	1/1000 of the range
Integration time (Tn)	10...5000 s
3-point actuator driving time	30...300 s
Ambient temperature	0...50 °C
Ambient humidity	0...95 % RH (non-condensing)
Housing	IP20, ABS plastic
Mounting	on the wall or on the standard flush mounting box (60 mm hole distance)
Dimensions (w x h x d)	87 x 86 x 30 mm

* factory settings
** **NOTE:** Only the 0...10 V outputs and Modbus work when using DC supply voltage.

Ordering guide:

Model	Product number	Description
HS 2.2-M	1150290	universal controller

Products fulfil the requirements of directive 2004/108/EU and are in accordance with the standards EN61000-6-3: 2001 (Emission) and EN61000-6-2: 2001 (Immunity).