Electronic humidistat and controller

EH3 T2

- Relative humidity % RH
- Absolute humidity g/kg
- Dew-point °Cdp
- Temperature °C / K / °F
- Two independent regulators
- Possible add-ons:
  - Condensation-free thanks to that temperature sensor 2 is being placed on the surface to be kept condensation-free, serves as set point for the humidity controller. Temperature sensor 2 can also be used for controlling the temperature
  - Communication through modbus
  - Additional displays



EH3 T2 with back-lit display, available from Seibu Giken DST only



Humidity- and temperature sensor from Honeywell (standard)



Temperature sensor 2 (optional), also available for surface mounting

Two closing contacts: Possible to choose source from one of the four para-meters above to each relay. Used for controlling one dehumidifier in two steps or to control two separate dehumidifiers. Can also be used for dehumidifying on one relay and temperature control on the other.

Display and diodes: 2 row display where two parameters can be monitored. Green "Normal" LED and red "Alarm" LED, switches at a set value of any of the four parameters.

Analogue outputs: 2 outputs with Vdc or mA, choose source from the PI-regulator or one of the four parameters above.

PI–regulator: Two independent regulators are available as standard. Thereby it is possible to control both the humidity and the temperature. Set the desired value for relative humidity, absolute humidity, dew point, liquid dew point and temperature and EH3 T2 will keep it constant.

Sensor: Capacitive type moisture sensor from Honeywell with an accuracy of <±2%RH and <±0.5° C. Each sensor comes with a calibration protocol.

World leaders in dehumidification.

SENSOR

Measuring range:	-30°C up to +80°C. 0-100%RH (not condensing)
Accuracy:	<±2%RH and <±0.5°C in the full measuring range
RH stability:	±1% RH at 50% RH during 5 years
Calibration:	Each sensor comes with a calibration protocol for 0% RH and 75.3% RH. The sensor can easily be changed and after setting the calibration parameters on the display the <±2% RH accuracy is obtained again
Response time:	At low air speed, 30 seconds
Mounting:	10 m sensor cable and wall mounting device included
Optional:	20 m sensor cable

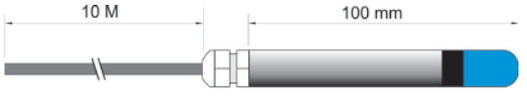
BOX

Dimensions:	Height: 120 mm, depth 90 mm, width 122mm
Display:	2 row LCD
Visual alarm:	Green LED marked "Normal" and red LED marked "Alarm"
Programming:	Four push-buttons for programming
Casing:	IP65, ABS. Surrounding temperature: 0-50°C
Weight:	0.7 kg.
Mounting:	4 screw holes ø4mm, towards the wall. c-c height: 90 mm, c-c width: 110mm. Optional: Frame for panel mounting

CONNECTIONS & PROGRAMMING

2 separate relays:	Potential free, max 230Vac 16A each. Possible to set parameter source, on value, differential down to off value and time delay.
2 analogue outputs:	Choose between 0-10Vdc, 2-10Vdc, 0-20mA or 4-20mA. Also possible to choose parameter source and scale parameter or regulator. Independent of the two relays.
2 independent PI-regulator:	Can be individually set to any of the parameters given below.
Visual alarm:	Possible to choose parameter source and value when it should switch between green LED and red LED.
Parameters:	Relative humidity %RH, absolute humidity g/kg, dew-point °Cdp and temperature °C/K/°F, from included standard sensor. Also possible to add temperature from extra sensor. The extra temp.-sensor can also be the set-point to a dew-point regulator.
Cable size:	Maximum 1 x 1.5 mm 2 per terminal.
Supply:	230Vac, 50Hz (cable not included).

Standard sensor Ø15.5 mm



Main connection board

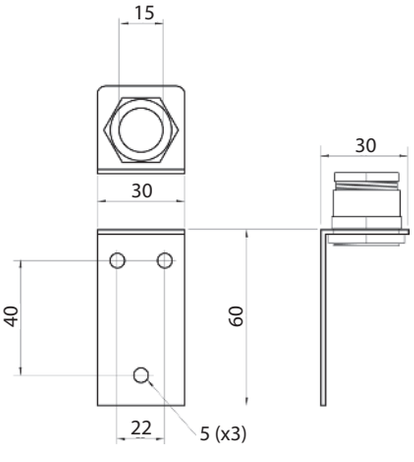
		Output 1			Output 2		
G (+)	G (-)	Volt (+)	Ground (-)	mA (+)	Volt (+)	Ground (-)	mA (+)
Not used							

Transformer- & Relay module

		Relay 1		Relay 2	
11	12	13	14	15	16
230 VAC, Line	230 VAC, Neutral	Relay Ch 1		Relay Ch 2	

Sensor connection board

-Pt1	+5V	+RH	AGND	+Pt1	-Pt2	+Pt2	AGND	AGND
31	32	33	34	35	36	37	38	39
Yellow	White	Brown	Green + Shield	Gray	Temp. input 2			



Wall mounting device for sensor

Subject to change without notice.

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