EASYBus-display and monitoring device for 20 channels

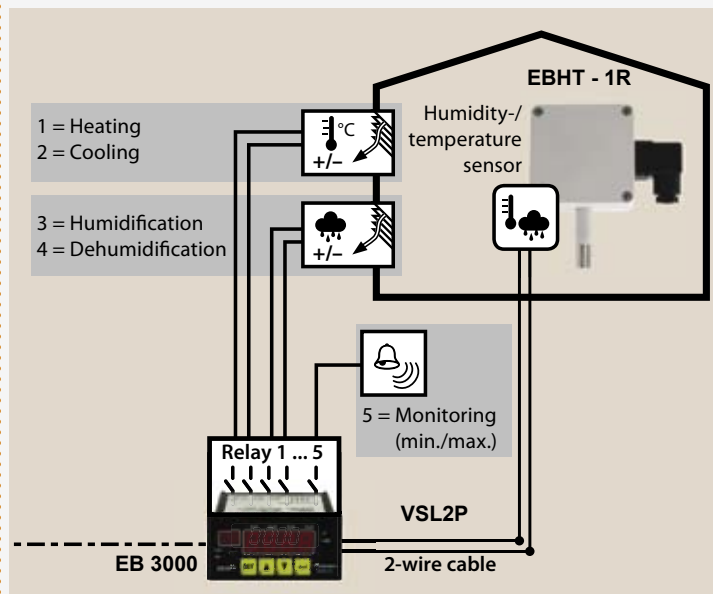FRONT
48 x 96

E.A.S.Y.Bus - Modul

EB 3000
EASYBus-display and monitoring device for 20 channels

General:
- Up to 20 sensor-modules or loggers can be connected
- Sensor module supply and data transfer are carried out via one single 2-wire line
- 5 relay outputs (4 x controlling, 1 x alarm)
- Controller functions can be assigned to any channel, e.g.:
  - 4 x two-point-controllers (of 4 sensors)
  - 2 x three-point-controllers (of 2 sensors)
  - 4-way switch (of 1 sensor), ...
- 2 further functions / calculations:
  - average value over more sensors
  - difference of 2 sensors
  - special functions (upon request)
- Alarm monitoring for all connected EASYBus-moduls
- easy configuration via front-side keypad or via interface
- Via serial interface the connected devices can be read or additionally be monitored with a PC.
- Up to 1000 m cable-length possible
- Additional connection of a second EB 3000 for enlargement

Specification:

Display range:	-1999 ... +9999 digit
Resolution, Accuracy:	depending on sensor module used
Sensor modules:	all intelligent EASYBus sensor modules
Sensor supply:	via EB 3000
max. bus load:	30 EASYBus standard loads
measuring channels:	20
permitted cable length:	500 m (depending on type of cable and wiring)
Switching outputs:	4 relay outputs (NO), shared input. Outputs can be assigned to any channel
Switching power:	230 VAC, 5 A, ohm resistive load
Switching function:	2-point controller, 2-point controller inverting. Switching points and delay for each output freely selectable
Alarm output:	1 relay output (change-over contacts)
Switching power:	230 VAC, 5 A, ohm resistive load
Alarm function:	Common alarm for all sensors.
Configuration:	directly on the device or via additional configuration software (supported converter is needed).
Min./Max. value memory:	from all connected sensor modules the max. and min. value are callable via front-side keypad.
Calculation functions:	there are 2 "virtual" channels additionally to the sensor-channels. A calculated value can be displayed here. Possible calculation functions: sensor-deviation, averaging above x sensors, etc.
Self diagnosis:	permanent self-diagnosis, diagnosis of all connected sensor moduls to ensure trouble-free function.
Display:	main display: LED, 4-digit, 13 mm. channel display: LED, 2-digit, 7 mm. 11 more LEDs for e.g.: switching status and alarm
Interface:	EASYBus-interface with supported converter (e.g. EBW1) GRS232 compatible, for communication with a PC.
Housing:	48 x 96 x 100 mm (H x W x D).
Panel cutout:	43 x 90,5 mm (H x W).
Front:	Transparent membrane keyboard IP65. Sealing for housing for installation according to IP65 will have to be ordered separately.
Connection:	2-wire connection in ring-, tree- or star type. No polarity.
Connection terminals:	screw-type/plug-in terminals
Ambient temperature:	-25 ... 50 °C (permissible ambient temperature)
Voltage supply:	230V AC 50/60 Hz
Power consumption:	approx. 9 VA

1 = Heating
2 = Cooling
3 = Humidification
4 = Dehumidification
5 = Monitoring (min./max.)

EBHT - 1R
Humidity-/temperature sensor

Relay 1 ... 5
EB 3000
VSL2P
2-wire cable

EB 3000 FTR
Cost effective Set for Moisture / Temperature Controlling

Scope of Supply:
EB 3000: monitoring and controlling device
EBHT - 1R: temperature / mumidity modul (p.r.t. page 90)
VSL2P: 10 m twisted pair cable (p.r.t. page 99)

General:
Cost effective monitoring and controlling of temperature and humidity. The humidity- / temperature sensor EBHT-1R will be connected with the EB 3000 via a single 2-wire twisted pair cable (e.g. bell wire). The maximum distance between sensor and controlling device is 500 m.
The components are fully configured. The only remaining work is to connect the modules via a 2-pole twisted wire and input the switching points.

Advantages:
- Simple installation and polarity free 2-wire system
- 4 switching outputs (humidify, dehumidify, heating, cooling) and 1 alarm output
- Easy upgrate to 20 single sensors (temperature, humidity, standard signals, CO, CO_2 etc.)
- Excellent cost-performance-ratio

Application:
Refrigeration warehouse, green house, storage room, terrarium, etc.

Note:
For configuration of the EB 3000 and recording / reading of connected EASYBus modules, a serial converter EBW 1 is needed.

Accessories and spare parts:
EBW 1
Interface converter, for connection of max. 9 EASYBus data loggers to the RS232 interface of your PC. (power supply: 230V/50Hz)
EBS 20M
Software for recording and archiving of max. 20 sensor modules (p.r.t. p. 97)