

RELATIVE HUMIDITY + TEMPERATURE ONOFF CONTROLLER — HX96A



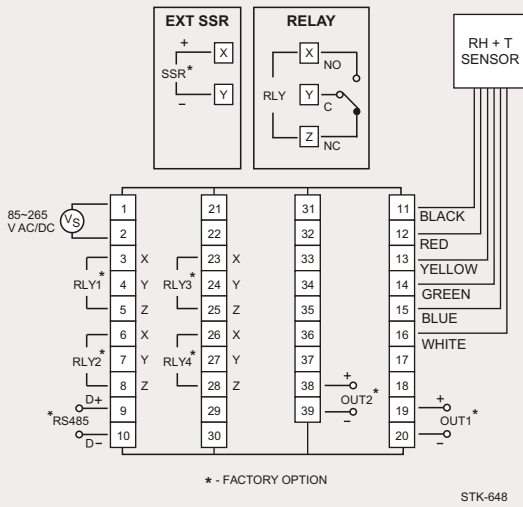
- Input : RH and T signals from sensor
- 0 / 1 / 2 / 3 / 4 setpoints corresponding to temperature or humidity
- Accuracy : $\pm 2\%$ RH, $\pm 0.5\text{ }^{\circ}\text{C}$
- 85~265 V AC SMPS or 20~35 V DC supply
- Sensor break indication
- 2 x isolated 4~20 mA outputs corresponding to temperature and/or humidity
- RS485/MODBUS RTU

SPECIFICATIONS All specifications at ambient of 25 °C, unless specified otherwise

INPUT		COMMUNICATION	
Input	Basic RH and T signals from sensor	Port	RS485
Compatible sensors (see Note 1 below)	SHT20 (General purpose / wall mount) SHT30 (Wall mount) SHT40 (Duct mount) SHT20, SHT30 & SHT40 must be ordered separately	Protocol	Modbus RTU
Distance between sensor & instrument	Upto 50 meters	Slave ID	User programmable (1~256)
Range limits		PROGRAMMABLE PARAMETERS	
Normal	0~100% RH, non-condensing	Setpoint	0 ~ 100
Maximum	-20~100 °C (-4~212 °F) -40~120 °C (-40~248 °F)	Unit	°C, °F
Accuracy (see Note 1 below)	Also see sensor range and Fig1	Resolution	User selectable
Resolution	$\pm 2\%$ RH, $\pm 0.5\text{ }^{\circ}\text{C}$		0.1, 1
INDICATION		High scale	0 ~ 100
Display	Upper : 4 digit, 7 segment 0.56" (14.2 mm) green LED display Lower : 4 digit, 7 segment 0.56" (14.2 mm) red LED display	Low scale	0 ~ 100
Status indication	LEDs for relay status LEDs for communication	Digital filter	A (minimum) ~ F (maximum)
OUTPUTS		Hysteresis (ONOFF control)	0.1 ~ 99.9
No. of relays	0/1/2/3/4 electromagnetic relays	Bias for RH & T	-10 to 10
Relay contact type	NO-C-NC	Relay logic	a. Full Scale Hi b. Full Scale Lo c. Heat d. Cool
Relay contact rating	5A / 230V AC, resistive	Setpoint lock	ON, OFF
SSR drive	12 V DC drive signal for external SSR	Relay action	Reverse / direct
No. of analog outputs	0 / 1 / 2	Retransmission output	Corresponding to RH or T
Retransmission output	Current or voltage corresponding to RH or T	OTHER	
Current output	4~20 mA / 0~20 mA isolated from input	Keyboard	Tactile, 3 keys
Maximum load for current output	600 ohms	Enclosure construction	Plug-in (circuit removable without affecting terminal wiring)
Voltage output	0~10 V DC isolated from input	Dimensions (in mm)	96(W) x 96(H) x 100(D)
Load for voltage output	>10 Kohms	Mounting	Panel mount
Mutual isolation between input/output/supply	1 KV AC / 1 minute	Panel cutout	92 x 92 mm
		Supply voltage	a) 85~265 V AC, 50/60 Hz b) 20~35 V DC (optional)
		Power consumption	3 watts maximum
		Operating ambient temperature	0 ~ 50 °C
		Relative humidity	Below 90%, non condensing
		Note 1	
			HX96A must be used in conjunction with a compatible RH+T sensor such as SHT20. All relevant specifications, eg accuracy, are for HX96A and the sensor together only, and cannot be specified individually.

RELATIVE HUMIDITY + TEMPERATURE ON/OFF CONTROLLER — HX96A

CONNECTION DIAGRAM



ORDERING INFORMATION

ORDER CODE	
2042	A

A	Configuration		
	Relay	Analog output (4-20 mA)	RS485
01	0	2	0
02	0	2	1
03	2	0	0
04	2	0	1
05	2	2	0
06	4	0	0
07	4	0	1
08	4	2	0

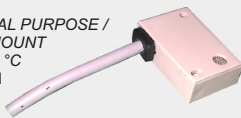
Ordering Options

The following ordering options are available on request. Minimum order quantity and/or minimum order value may apply.

Option details	
1.	0 ~ 10 V DC analog output
2.	24 V DC supply voltage
3.	SSR drive

RH + T SENSORS (To be ordered separately)

SHT20
GENERAL PURPOSE /
WALL MOUNT
-20 ~ 60 °C
See Fig1



2049 XX

XX	Cable Length
05	5 meters
10	10 meters
15	15 meters
XX	User specified in meters

SHT30
WALL MOUNT
-20 ~ 100 °C
See Fig1



2050 XX

XX	Cable Length
05	5 meters
10	10 meters
15	15 meters
XX	User specified in meters

SHT40
DUCT MOUNT
-20 ~ 100 °C
See Fig1



2169 XX

XX	Cable Length
05	5 meters
10	10 meters
15	15 meters
XX	User specified in meters

OTHER RH+T PRODUCTS

RH + T INDICATOR



RH + T CONTROLLER



2-WIRE PROGRAMMABLE RH + T TRANSMITTERS

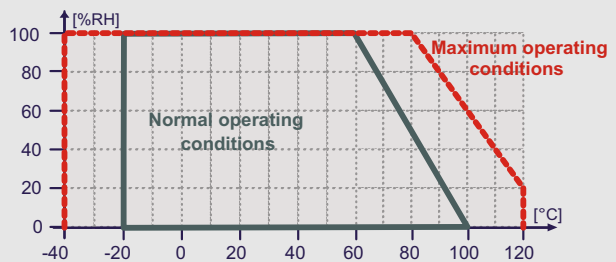
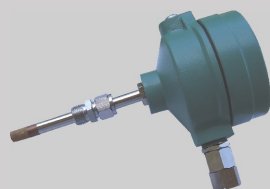


Fig1

radix

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