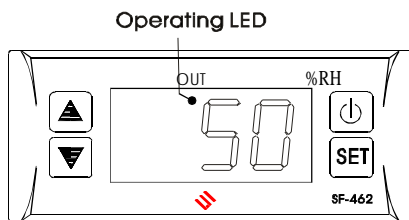


MODEL : SF-462D Digital Humidity Controller



Features:

Mini sized integrated intelligent controller.

Humidity display / Humidity control / Value storing /Humidity Alarm/ Self-testing

Specifications

1. Power supply:230VAC 50/60Hz
2. Humidity Sensor : 1pc
3. Range of humidity displayed: 01~99% RH Accuracy:± 5% RH
4. Humidity control range:10~99% RH Default:40% RH
5. Dimension:77(Length)×35(Width)×60(Depth)mm
Mounting hole dimension:71(Length)×29(Width)mm
6. Temperature of the operating environment:−10℃ ~60℃
Relative Humidity:20%~90% (Non-condensing)
7. Output contact capacity:
 - Control relay :16A/250VAC
 - Alarm relay: 10A/ 250VAC

Front Panel Operation

1. Humidity setting adjustment

- Press **SET** button, the set humidity is displayed.
- Press **▲** or **▼** button to modify and store the displayed value.
- Press **SET** button to exit the adjustment and display the measured humidity.

If no more button is pressed within 6 seconds, the measured humidity will be displayed.

2. Power ON/OFF: press **⏻** button for 1 second to turn on power, the measured humidity is displayed, it will automatic enter the work status. Press **⏻** button at any time for 3 seconds to turn off power, "---" is displayed, it stops control output.
3. Operation LED: the LED is on during dehumidifying or humidifying; the LED flashes during delay time; the LED is off when it stops dehumidifying or humidifying.
4. Parameter setup
 - Press **SET** button and hold for 6 seconds to enter the parameter setup mode while E1 flashes.
 - Press again **SET** button to select sequentially from the parameters : E2, E3,E4, A1~A5.
 - Press **▲** or **▼** button, the value of parameter will be displayed and can be modified and stored.
 - If no more button is pressed within 6 seconds, it will return to normal operation.

Parameter	Function	Set range	Default	Parameter	Function	Set range	Default
E1	Start delay time	0~10Min	2Min	A1	Lower humidity display	1%~A2	1%RH
E2	Humidity hysteresis	1~70%	20%RH	A2	Higher humidity display	A1~99%	99%RH
E3	Humidity offset	−30~30%	0%RH	A3	Low humidity alarm value	1%~A4	1%RH
E4	Dehumidify & Humidity Switch	Dehumidify=0 Humidify=1	0	A4	High humidity alarm value	A3~99%	99%RH
				A5	Humidity alarm delay	0~90Min	30Min

5. The factory default resumption: press ∇ button for 1 second and then press \triangle button simultaneously for 6 seconds, 888 will be displayed, all parameters will be resumed to factory defaults. After 6 seconds, it returns to normal operation mode.
6. Parameters Locking
Press ∇ button and hold for 6 seconds to lock the parameters if LOC is displayed or to unlock if OP is displayed. Parameters can be displayed only and can not be modified if locked, but the adjustment of the set humidity is still active (The factory default is OP)

Function details

1. Dehumidify Control

When measured humidity \geq Set humidity, relay will start to dehumidify. When measured humidity \leq (Set humidity - Humidity hysteresis E2), the relay will be disconnected, and stop dehumidify.

2. Humidify Control

When measured humidity \leq (Set humidity - Humidity hysteresis E2), relay connected and start humidify. When measured humidity \geq Set. humidity, relay disconnected and stop humidify.

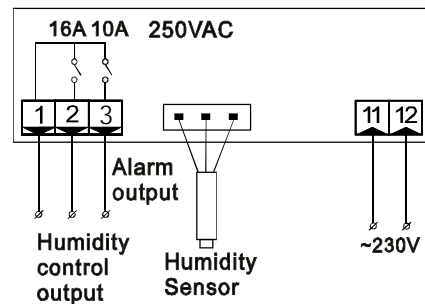
3. To prevent relay frequent start start, it can not re-start unless every time it stops longer than delay time (Parameter E1).

4. Humidity over limit alarm

- When compressor pass one normal turn on and turn off, can enter alarm state.
- When humidity is higher than the high humidity alarm value A4, and duration more than alarm delay time A5, will alternate display HI and humidity value.
- When humidity is lower than low humidity alarm value A3, duration more than alarm delay time A5, will alternate display Lo and humidity value.
- During a alarm process, the alarm relay connected, the buzzer sound, press random button to cancel the sound.
- When alarm is cancelled, the alarm relay is disconnected.

5. Abnormal work mode: When humidity sensor open-circuited, will display 01; when the humidity sensor over limit, will display 99. The humidity control output stop.

6. Circuit diagram



Notes for Installation

1. The humidity controller can not be installed in the area with water drops.
2. When installation the probe shall be placed with the head upward and the wire downward
3. Sensor leads must be kept separately from main voltage wires in order to avoid high frequency noise induced. Separate the power supply of the loads from the power supply of the controller.

Accessories for the humidity controller

1. One humidity sensor
2. One installation stand