

## TEMPERATURE AND HUMIDITY CONTROLLER FOR AIR-HANDLING UNIT WITH ONE BATTERY

### RTU 614

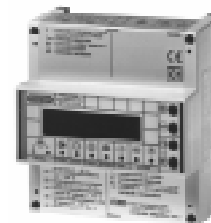
#### APPLICATION

Designed for control of room temperature and humidity and/or discharge air in air-handling units consisting of:

- 1 heating and/or cooling or pre-heating battery.
- 1 On-Off humidification unit.
- 1 air mixing unit or one heat recoverer.

**Essential detectors :** 1 room or air duct temperature detector.

**Optional accessories :** 1 flow or preheating temperature detector, 1 outside temperature detector, 1 room or air duct humidity detector, 1 window glass dew point detector, 1 battery frost protection detector, 1 temperature setpoint adjuster, 1 humidity setpoint adjuster.



#### FEATURES

- Power supply: 24 V~; Consumption: 5 VA; DIN 105 x 115 modular case; Protection: IP 40.
- Digital programming by means of four operating keys and alphanumeric display.
- 24-hour and 7-day events programming.
- Programming with date setting for: 25 holiday periods; winter season; summer season.
- Automatic switching GMT - BST.
- One 3-wire modulating output or On-Off in two stages (two equal loads) or in three stages (two unequal loads) which can be configured for:
  - control of winter and summer room temperature, with option summer compensation; minimum and maximum discharge air limits so as to avoid cold air currents and the stratification of hot air and condensation in the air ducts.
  - control of discharge air temperature at fixed point with option winter and summer compensation.
  - control of pre-heating temperature at variable value in relation to room temperature and humidity.
- 1 On-Off output for control humidification unit for regulation relative humidity at fixed point.
- 1 analogue 0 ... 10 V - output which can be configured for:
  - regulation of outside air mixing in relation to differential ambient - outside temperature (free cooling).
  - regulation of outside air for control of room dehumidification with compensation for dew point window glass.
  - control of heat recoverer in relation to differential room-outside temperature.
- Two On-Off outputs for control fan and plant pump according to timed events programme in use.
- Control battery frost protection temperature.
- Manual or automatic season switching of controller functions and of On-Off 3-wire season switch.
- Variation of temperature and humidity setting points by means of remote control.
- Alarms for controller fault and for short or open detector circuits.

Code	Description	Data sheet
RTU 614	Temperature and humidity controller for air-handling unit with one battery.	E 131

#### DETECTORS AND ACCESSORIES FOR RTU 614

Code	Description	Application range	Sensor or signal	Data sheet
STA 010	Air duct temperature detector (extract, discharge, dew point).	0...60 °C	NTC 10 kΩ	N 150
SAB 010	Room temperature detector.	0...40 °C	NTC 10 kΩ	N 111
STA 001	Air duct temperature detector (outside air).	-30...40 °C	NTC 1 kΩ	N 150
SAE 001	Outside temperature detector.	-30...40 °C	NTC 1 kΩ	N 120
SAF 010	Cable-type temperature detector (frost protection).	0...40 °C	NTC 10 kΩ	N 145
STV 010	Window glass dew point detector.	0...40 °C	NTC 10 kΩ	N 160
SUR 012	Air duct relative humidity detector.	20...80 %	0...10 V-	-
SUR 051	Air duct relative humidity detector (for swimming pool).	10...90 %	0...10 V-	-
SAU 012	Room temperature and humidity detector.	20...80 %	0...10 V-	N 225
CDB 100	Temperature setpoint adjuster.	-5...+5 °C	-	-
CDB 200	Humidity setpoint adjuster.	-10...+10 %	-	-