



AL24TN is a micro processor based room controller intended for wall mounting.

- * One 3-point output (or)
Two on/off outputs cooling/heating
- * Time proportional outputs
- * Night setback function
- * External or internal sensor
- * Setpoint 0...30°C

Function

AL24TN has two running positions, one of them is intended for traditional increase/decrease actuator. The other position is intended for use with two thermal actuators in heating/cooling configuration.

The controller is intended for wall-mounting. It has built-in sensor, input for external sensor, input for change-over and output. The output signal is pulse/pause type, where the ratio between on- and off-time is proportional to the temperature offset. The total pulse-period is constant 4 seconds.

Sensor

The controller has a built-in temperature sensor. External sensor can also be used.

Setpoint

Is set using the knob on the right hand side of the housing. The setting can be fixed with a locking screw under the cover.

Indications

The unit indicates output status with three LEDs inside. L1 indicates that output increase or heating is active and L2 indicates output decrease or cooling is active (when terminal 8 is open, see change-over). L3 is used to indicate setback status. When night setback is activated, L3 is lit.

Night setback

By closing input on terminals 7 (Neutral) and 8 the setpoint is decreased by 5K. Night setback reduction will not affect the cooling output when running thermal actuator control. This input can be connected in parallel with the night setback input of other devices belonging to the Regin AL-Series.

Typical applications

Individual room control of valve or damper actuators in hotels, offices, conference rooms etc. For heating or cooling applications. When running thermal actuator control the controller can be used for applications with heating and cooling valve actuators.

Technical data

Supply voltage	24 V AC +/-10% 50-60Hz
Power consumption	Max 5 VA
Ambient temperature	0...50°C
Storage temperature	-40...50°C
Ambient humidity	Max. 90%RH
Protection class	IP30
Mounting	Two holes (c:c 60mm) to fit over wallbox
CE	This product conforms with the requirements of European EMC standards CENELEC EN50081-1 and EN50082-1

Inputs

Sensor input	One (1) input for external sensor, (See section 6-100 for choice of sensor)
Night set-back input	One (1) input for night set-back function

Output (Selectable, one output type activated at a time)

Three-point (floating)	24V AC (heating / cooling) 0,5 A, 12 VA
Or Thermal actuator control	One 24 V AC 500 mA heating, and one 24 V AC 500 mA cooling (CONNECTION SEE FIG 2)

Settings

Setpoint	0...30°C
Jumper BY 1	"Closed" Control of three-point actuator (increase/decrease) <i>factory setting</i> P-band = 20 K
	"Open" Control of two thermal actuators (heating and cooling) P-band = 1 K, Neutral zone (fixed) 1 K
Jumper BY 2	"Closed" External sensor
	"Open" Internal sensor <i>factory setting</i>

Indicators

L1 (green LED)	Indicates that output increase or heating is active
L2 (red LED)	Indicates that output decrease or cooling is active
L3 (red LED)	Indicates setback status. When night setback is activated, L3 is lit.

Wiring and Dimensions

1	Supply voltage 24V AC
2	Neutral 24V AC
3	Output Increase or Heat (thermal)
4	24V AC Actuator supply (500 mA)
5	Output Decrease or Cooling (thermal)
6	Input external sensor
7	Neutral
8	Night set-back input

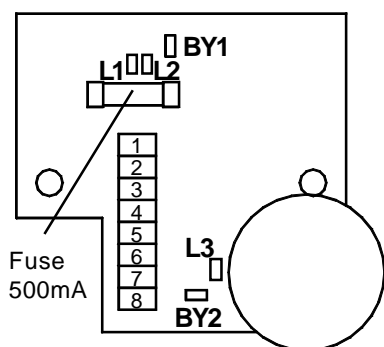


Fig. 1

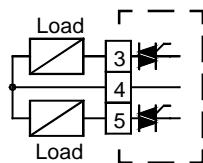


Fig. 2

