

# AX-TBS780A

Room Digital FCU Controller



## Product Overview

The AX-TBS780A Room Digital FCU Controller measure the temperature in the room and sends a modulating 0-10V signal to the FCU actuator based on the difference between the setpoint and actual temperature. The unit is powered from 24Vac. The unit comes complete with a 3 speed fan selector.

The unit has two Energy Saving Inputs, The first is a door contact to switch off the A/C if the door is left open, the second is a digital input from a keycard or occupancy sensor to allow the unit to go into unoccupied mode

## Features

- LCD Display of temperature / setpoint
- 24Vac/dc +/-10%
- One 0-10Vdc Cooling Output
- Two Energy Saving Inputs
- Three speed fan selection
- Large LCD Screen

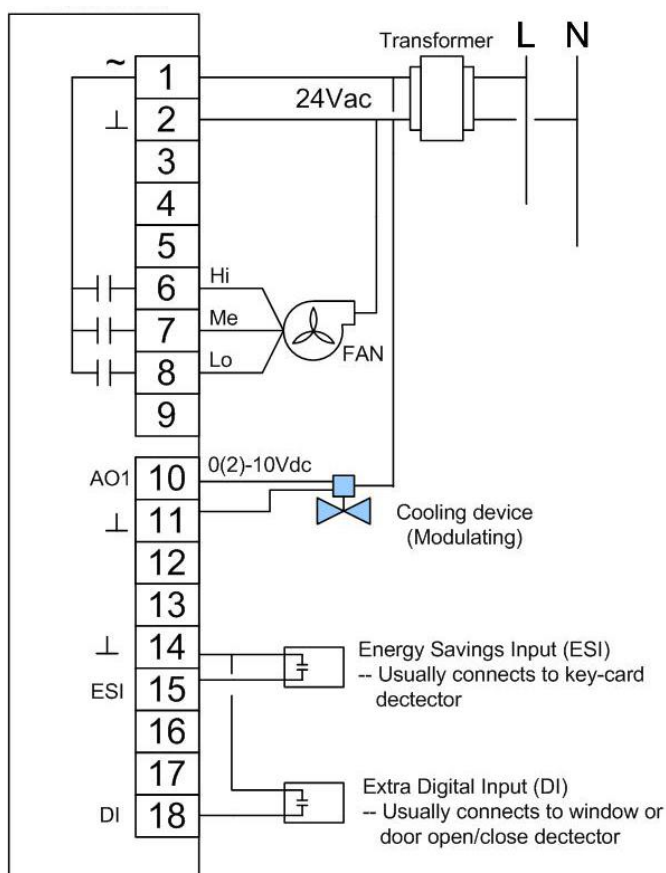
## Product Specification

<b>Housing:</b>	White ABS
<b>Power Supply:</b>	24Vac/dc +/- 10%
<b>Power Consumption:</b>	Typical 40mA
<b>Control:</b>	Proportional plus integral algorithm applied to modulating control
<b>Display Size:</b>	41 x 63 mm
<b>Display Resolution:</b>	0.1 deg C
<b>Cooling Output:</b>	0-10Vdc max 3mA
<b>Setpoint Adjust:</b>	Up/Down push buttons
<b>Setpoint Control:</b>	Maximum 0-50C (range adjustable)
<b>Fan Speed Selection:</b>	Auto- Off - Low - Med - High
<b>Fan Speed Output:</b>	3 x Relays rated 2A@250Vac inductive load
<b>Energy Saving Contact:</b>	NO or NC contact - to go into unoccupied mode
<b>Door Contact Input:</b>	NO or NC contact - to switch off A/C if door is left open
<b>Dimensions:</b>	94(w) x 118(h) x 34(d)mm
<b>Backbox:</b>	The unit fits to a deep gang backbox (not included) 65x65
<b>Weight:</b>	120 gms
<b>Terminals:</b>	Terminals for 0.5 to 2.5mm <sup>2</sup> cable
<b>Ambient Range:</b>	0 to 50°C
<b>Country of Origin:</b>	United Kingdom

## Order Codes

**AX-TBS780A - Room FCU Thermostat**

### Connections



### Engineering Presets

NO	Mnemonic	Description	Default	Range	Step	Validity
1	db	Deadband	4.0	10.0	0.5	Not Valid
2	ESIC	Unoccupied (ESI) cooling setpoint	28.0	25 to 30	1.0	
3	ESIH	Unoccupied (ESI) heating setpoint	15.0	10 to 22	1.0	
4	I-t	Integral Time & Output cycle time	90.0	10 to 500	10 sec	
5	OP-L	Minimum Output Voltage when at low limit	6(0)V	0-125	1 (LSB) (0.04V)	
6	Span	Span Offset	-5(10V)	-55-0	1 (LSB) (0.04V)	
7	SP-L	Low limit for temperature setpoint	10.0	0 to 50	1.0	
8	SP-H	High Limit for temperature setpoint	30.0	0 to 50	1.0	
9	OFSt	Current temperature Offset	0.0	-10 to +10	0.1	
10	Pb	Proportional Band or stage width	2.0	0 to 10	0.1	
11	diFF	Stage differential	0.5	0.1 to 1	0.1	Not Valid