

CAT-230V ANALOGUE UNIVERSAL THERMOSTAT

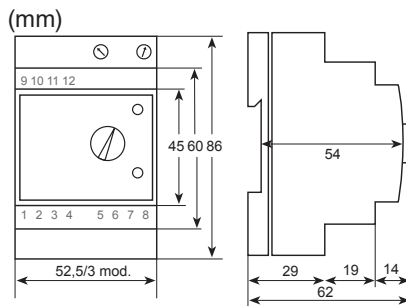
with adjustable hysteresis and fine tuning of the temperature scales, for Pt1000 and NTC sensors.



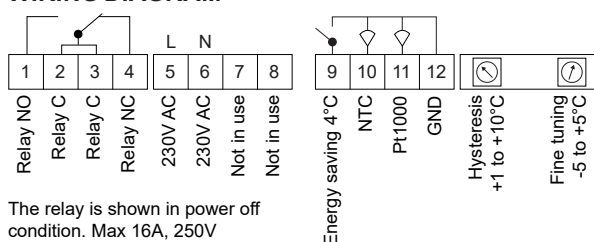
TECHNICAL DATA

Voltage supply:	230V AC $\pm 10\%$ 50-60 Hz
Power consumption:	Max. 4,5 W
Relay output:	16 A, 250V potential free changeover
Temperature range:	-10 to +50°C
Hysteresis:	1-10°C
Energy saving:	4°C
Selectable temperature sensors:	Pt1000 and NTC (Calectro type: 22/33/44/55/99)
Fine adjustment of temp:	-5 to +5°C
LED indicators	
- Steady green diod:	Normal operation
- Flashing green diod:	Temperature sensore fault
- Yellow:	Relay activated/Heat turned on
Ambient temperature:	0-50°C
Mounting:	DIN rail, Norm enclosure
Approvals:	CE
Dimensions BxHxD:	52,5x86x62 mm
Weight:	220 gram
Protection class:	IP20

DIMENSIONS



WIRING DIAGRAM



CHARACTERISTICS

- Selectable temperature sensors: Pt1000 and NTC
- Backwards compatible with Calectro's thermostats: ETE, ETN, ETI, ETV and others.
- Adjustable temperature range -10 to +50°C
- Adjustable hysteresis
- Fine tuning of temperature scale
- Potential free changeover relay: 16A
- Galvanically isolated temperature sensor
- Energy saving 4°C

FUNCTION

CAT is powered by 230V AC and has one potential free changeover relay output with the capacity of up to 16A, 250V.

The thermostat can be used together with a Pt1000 or a NTC sensor (the same type as previous Calectro thermostats), making it backwards compatible with parts of Calectro's previous thermostat programme.

The hysteresis (switching differential) is centred over the setpoint and is adjustable between 1 to 10°C. Example: Setpoint 20°C and hysteresis 1°C. The relay switches the heating on at 19.5°C and off at 20.5°C.

CAT has an energy saving feature that lowers the setpoint by 4°C by short circuiting terminals 9 and 12 using a timer.

CAT has two light emitting diode indicators. Steady green diode indicates normal mode. Flashing green diode indicates an interruption or short circuit in the temperature sensor circuit. Yellow diode indicates that the relay is activated, which happens when the temperature falls below the setpoint (minus half the hysteresis / switching differential).

In addition to the dial knob for temperature setting, the thermostat also has two potentiometers for setting the hysteresis and fine adjusting the temperature scale. The potentiometer for setting the hysteresis is adjustable between 1 to 10°C. The potentiometer for the fine adjustment of the temperature scale is used to point the temperature scale arrow at the correct setting on the temperature scale. This is useful when long sensor cables are used. Long cables affect the sensor circuit resistance and give a wrong reading of the temperature. The recommended maximum length of a sensor cable is 100 metres.

CAT monitors the temperature sensor circuit and turns the heating function off at an interruption or short circuit.

Note! This monitoring feature does not work when CAT is used to control cooling.

USE

CAT is an analogue universal thermostat for all types of 1-step temperature control between -10 and +50°C, e.g. for under-floor heating and freeze protection.

INSTALLATION

CAT is mounted on a DIN rail and is suited to Norm enclosures.

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MAINTENANCE

CAT requires no maintenance.

ORDERING EXAMPLE

Item code	Designation
CAT-230V	Analogue universal thermostat
CAT-230V-ETF	Analogue universal thermostat with floor sensor

ACCESSORIES

Item code	Designation
ETUK-1	IP55 norm enclosure, 3 modules
CTS-RW-PT1000	Temperature sensor, room installation
CTS-OW-PT1000	Temperature sensor, outdoor/industry
CTS-BC-50-PT1000	Temperature sensor, 50mm bulb 1,5m
CTS-DC-200-PT1000	Duct sensor 200mm, 1,5m cable
CTS-IC-200-PT1000	Fluid immersion 200mm, 1,5m cable
CTS-CC-PT1000	Strap-on temperature sensor 50mm, 1,5m cable, 2 tie straps & gap filler

For complete sensor range see data sheet for temperature sensors.