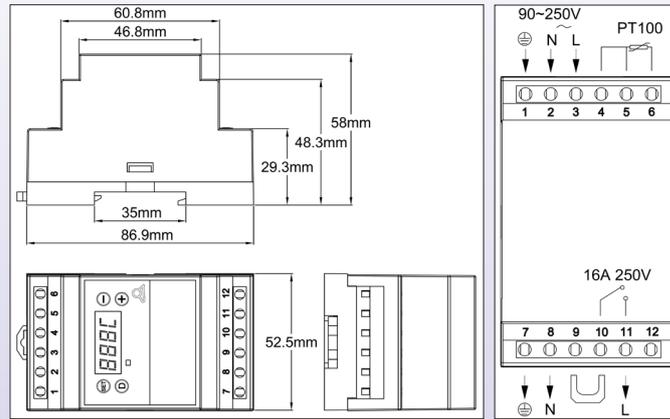## Digital display electronic controller, Din Rail mounting, ON-OFF, Type: 2DNAP6F0

This electronic temperature controller with the simplest and instinctive end user setting, was designed for simple incorporation inside cabinets with DIN rail mounting, and to be used by not highly trained operators.

It provides °C or °F display, On Off action with adjustable temperature differential, and heating or cooling relay output setting.

Dimensions: 86.9 x 58 x 52.5 mm

Display: 3+1 digit LED. The fourth digit is used to display °C or °F, upon setting made.

Set point setting: In normal use, the display shows the measured temperature. Push "Set" key will display the set point value, at that time it can be adjusted with " +" and "-" keys. Push "set" again or no action during 5 seconds will register the new set point value and bring back display to the measured value.

Temperature differential setting: In normal use, the display shows the measured value. Push "D" key will display the differential value, at that time it can be adjusted with" +" and "-" keys. Push "D" again or no action during 5 seconds will register the new differential value and bring back display to the measured value.

Action: On-OFF

Temperature sensor: Pt100 2 or 3 wires

Accuracy: +/-1% of scale

Temperature adjustment ranges:
-30, 0 to +40, 0°C (-20,0 + 99.9°F), with 1/10° display
-30+400°C (-20+750°F), with 1° display
Temperature range can be selected by a dip switch on circuit (Needs to open the housing)

Other temperature range available: -30+400°C

Power supply: 90 to 240V, 50Hz or 60Hz

Relay output: SPNO, 16A250V res., 100000 cycles.

Relay action: Heating or cooling, open or close on temperature rise output relay action can be selected by a dip switch on circuit (Needs to open the housing)

°C or °F display: can be selected by a dip switch on circuit (Needs to open the housing by the installer)

Ambiant: -20+50°C, 10-85% RH

Power: <2W

Fail safe safety:
• If no power supply, relay output contact will open
• If Pt100 sensor is broken or not connected properly, relay output contact will open and display will show "EEE"
• If measured temperature is higher than 40,0°C or 99,9°F, display will show HHH
• If measured temperature is lower than -30,0°C or -20,0°F, display will show LLL

Electrical connections:
• Power input: Neutral, phase, ground, with 2.5 mm² terminals
• Power output: Neutral, phase, ground, with 2.5 mm² terminals for direct connection to the load.
• Temperature sensor: three 2.5 mm² screw terminal
One removable jumper provides a potential free relay output for applications needing a separate circuit for relay, external timer or other.

Standards: Complies with EMC (CE), ROHS and Reach

Reference	2DNAP6F0

77 x 35mm intelligent temperature controller, On/Off action
Type: 273

Mini-sized and integrated intelligent controller, with very simple end-user interface: Change of set point is made without password, with up and down keys.

Input:
Input NTC : value R@25°C:10KO (±1%), B@25/50°C: 3380KQ (±1%)
PtlOO and thermocouple K Inputs: standard curves
Outputs: Relay with 16A or 10A resistive contact depending on models.
Alarm: 5A alarm relay on thermocouple K models
Display: Single display °C (°C or °F for the −45 +120° model)
Power supply: AC 220-230V 50-60Hz
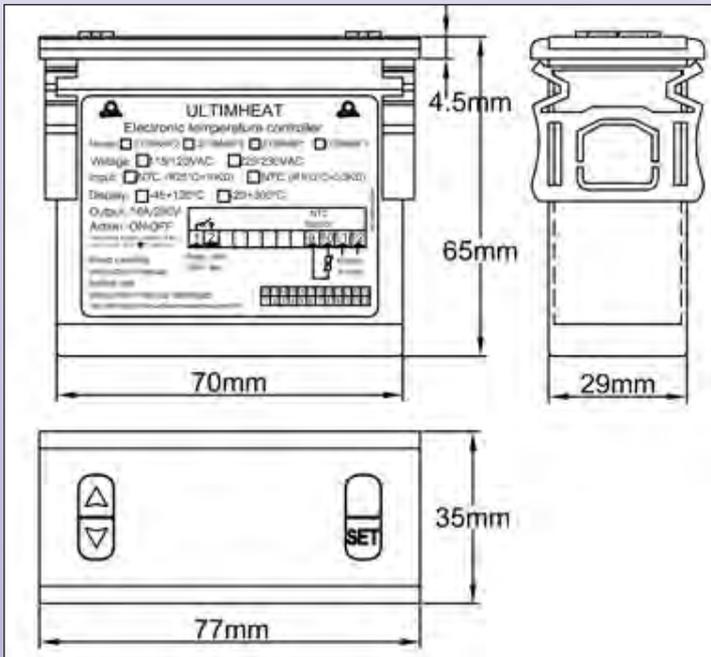**Accuracy:** ±1°C (±2°F) or 0.3%FE± one digit
Selt testing: Over-scale, under-scale, and open circuit sensor display.
Dimensions: 77 x 35 X 60mm. Panel cut-out 71x29mm
Ambient temperature: -10 to 60°C, 20 to 85% relative humidity, non condensing.
**Temperature display range:** - 45 to +120°C (41 to 248°F)
Resolution: 1° (0.1° within the -19.9° à 99.9° range for the model -45+120°C)

References (230V types)	Temperature range	Sensor	Main relay output
273BN6F2	-45+120°C	NTC	16A
273BP0F2	-150+550°C	Pt100	10A
273BK1F2	0-999°C	K	10A
273DJ2F2*	-45+120°C and 0-100% relative humidity	NTC and Capacitive sensor	10A

*For more choices within the humidity controls, please see the specialized catalogue "Humidity controls".

Connection :

NTC sensor

Ptl00 sensor

Thermocouple K

NTC temperature sensor and humidity capacitive sensor
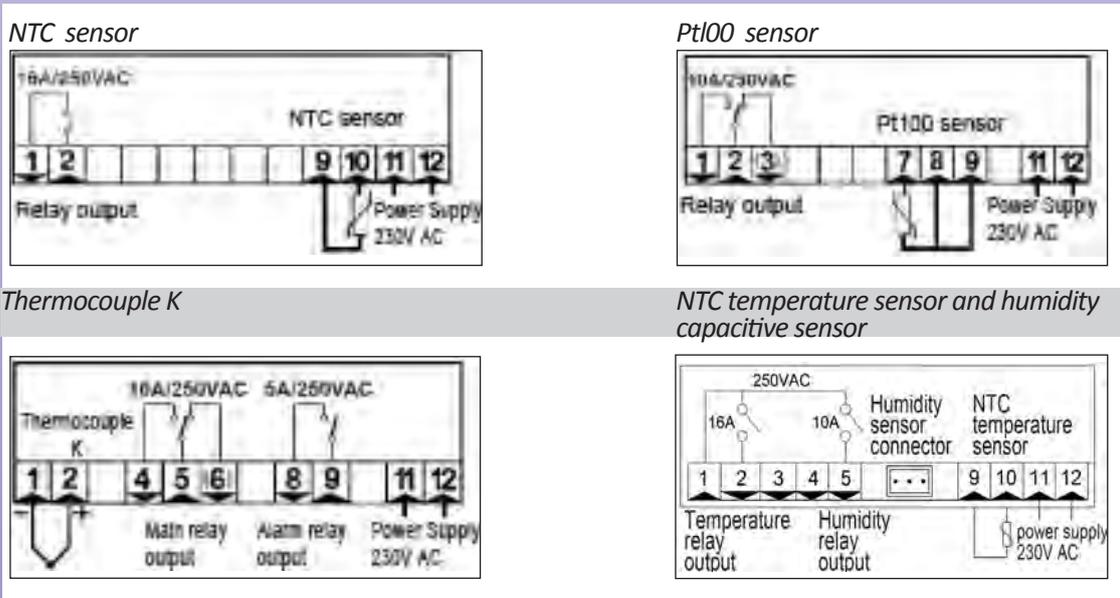
Programmable temperature controller, PID auto-tune 25 x 48, multi sensor, relay and SSR (solid state relay) outputs
Type: 242

Reduced size: very small foot print allows it to replace any electromechanical thermostat.

Simple End-user interface: Easy to read 4-digit LED display. Change of set point is made without password, with "up" and "down" keys.

Simple installation interface: auto-tune PID control, relay output and SSR output are standard.

Simple storage and maintenance: one model covers all applications.

Electronics: Microprocessor, using Fuzzy Logic technology. It enables a process to reach a predetermined set point in the shortest time, with the minimum of overshoot during power-up or external load disturbance.

Input: RTD: Ptl00, Cu50 , Thermocouple: T, R, J, B, S, K, E, Wre-3 Wre25.

Output: relay contact output and voltage pulse output.

Alarm: the relay output can be used as alarm when control action uses SSR output.

Operation: auto-tune function sets the PID parameters to the system characteristics.

Display: single display. Temperature Unit: °C or °F.

Power supply voltage: AC 36~260V 50-60Hz (DC 36~260V. If connected to DC power supply, terminal 1 is positive, terminal 2 is negative).

Power: < 3W.

Relay contact rating: AC220V/3A resistive, 30VDC/3A resistive (NO or NC), 1×105 cycles.

Voltage pulse output: 8V (open-circuit voltage) 30mA (short-circuit current).
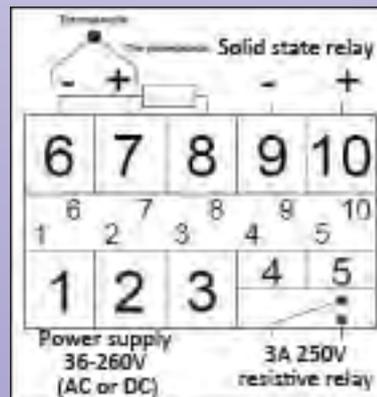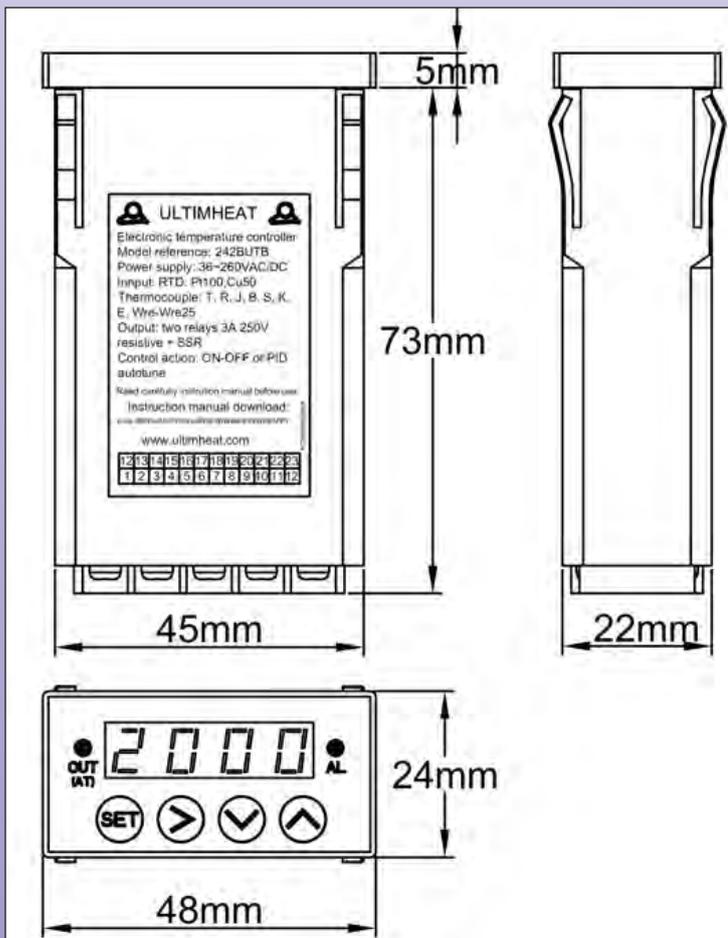
Temperature precision: 0.2%FE.

Over-scale, under-scale, and open circuit sensor display:EEEE.

Dimensions: 48 x 25 x 75mm.

Panel cut-out: 45 x 22 mm

Ambient Temperature: 0 to 50 °C, 0 to 85% Relative Humidity

Connection:

| Reference | 242BUTB |

48 x 48, Intelligent PID Temperature Controller, double display, multisensor, power relay and SSR (solid state relay) outputs
Type: 244

Reduced size: very small foot print allows it to replace any electromechanical thermostat.

Simple installation interface: auto-tune PID control, relay output and SSR output are standardized.

Simple storage and maintenance: one model covers all applications.

Electronics: Microprocessor, using fuzzy Logic technology. It enables a process to reach a predetermined set point in the shortest time, with the minimum of overshoot during power-up or external load disturbance.

Input: RTD: Pt l00, Cu50 , Thermocouple: T, R, J, B, S, K, E, Wre-Wre25.

Output: relay output or voltage pulse.

Alarm: the relay output can be used for an alarm when the device uses the SSR output.

ROperation: auto-tune function set the PID parameters to the system characteristics.

Power supply voltage: AC 36~260V 50-60Hz (DC 36~260V. If connected to DC power supply, terminal 1 is positive, terminal 2 is negative).

Power: < 3W.

Relay contact rating: AC220V/3A resistive, 30VDC/3A resistive (NO or NC), 1×105 cycles.

Voltage pulse output: 8V (open-circuit voltage) 30mA (short-circuit current).
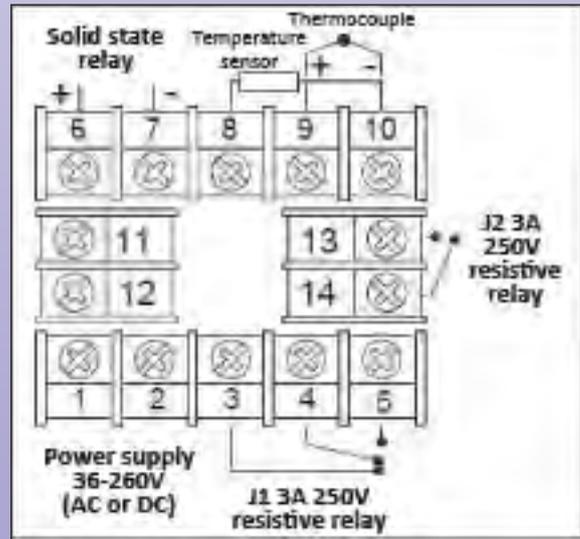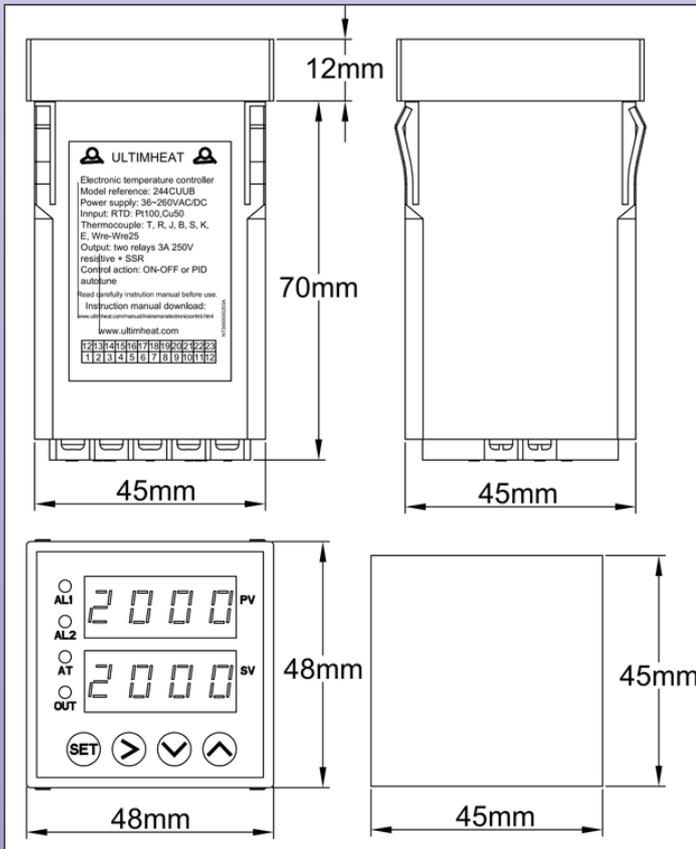
Temperature precision: 0.2%FS.

Over-scale, under-scale, and open circuit sensor display: EEEE.

Dimensions: 48 x 48 x 82mm.

Panel cut-out: 45 x 45 mm.

Ambient Temperature: 0 to 50°C, 0 to 85% RH

Connection:

Reference	244CUUB