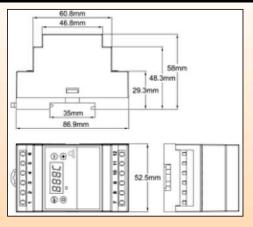
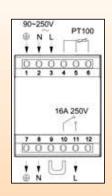
# Digital display electronic controller, Din Rail mounting, ON-OFF, Type: 2DNAP6F







Because of permanent improvement of our products, drawings, descriptions, features used on these data sheets are for guidance only and can be modified without prior advice

This electronic temperature controller with the simplest and the most instinctive setting by end user was designed for easy incorporation inside cabinets with DIN rail mounting. It can be used by untrained operators.
It provides simple On Off action temperature control.

End user has access to set point and differential setting only.

It is possible to set °C or °F display, heating or cooling relay output, decimal display, sensor type and temperature range by internal Dip switches (Without access by end user). Adjustment of maximum temperature can be set without need to open the control.

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 measured temperature. Push "+" or "-" keys will display the set point value, and at that time it can be adjusted with "+" and "-" keys. No action during 5 seconds will register the new set point value and bring back display to measured value.

Temperature differential setting: In normal use, the display shows measured temperature. 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 measured value.

Action: On-OFF

Temperature sensor: Pt100 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (chapter @35°C n= 2000 (2 or 3 wires) or NTC 10 (

Temperature sensor: Pt100 (2 or 3 wires) or NTC 10Kohms @25°C, B= 3380 (2 wires) Temperature sensor can be selected by a dip switch on circuit (No access to final user) Accuracy: +/-1% of scale

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Temperature adjustment ranges:
-30+120°C (-20+250°F), with 1° display
-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 and decimal digit can be selected by a dip switch on circuit (No access to final user)
Power supply: 90 to 240V, 50Hz or 60Hz
Relay output: SPNO, 16A250V res., 100.000 cycles. Output Led displays relay position.
Relay action: Heating or cooling, open or close on temperature rise output relay action can be selected by a dip switch on circuit (No access to final user)
\*\*C or °F display: can be selected by a dip switch on circuit (No access to final user)

\*\*Maximum possible set point adjustment by user: Push "D" button more than 10 seconds, display shows the maximum temperature that can be set by user. Then it is possible to adjust this value with "+" and "-". push again on "D" or do nothing during 5 seconds will register the maximum possible setting value and control will comes back to measured valued

\*\*Ambiant: -20+60°C. 10-90% RH\*

Ambiant: -20+60°C, 10-90% RH Power: <4W Fail safe safety:

- Fail safe sarety:

  If no power supply, relay output contact will open

  If Pt100 sensor or NTC is broken or not connected properly, relay output contact will open and display will show "EEE"

  If measured temperature is higher than allowed by the set range, display will show "HHH"

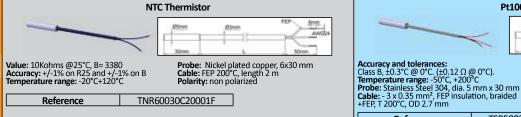
  If measured temperature is lower than -30,0°C or -20,0°F, display will show "LLL"

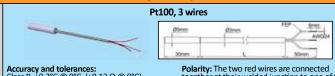
## **Electrical connections:**

- 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.
Internal parameters setting: Process is given on request to approved distributors. This allows to store only one product and set parameters upon end user request.
Standards: Comply with EMC (CE), ROHS and Reach

## Main references

References	Temperature range	Sensor	Display	Relay Output
2DNAP6FA	-30+120℃	NTC	888 <mark>C</mark> (°C)	Heating
2DNAP6FB	-20+250°F	NTC	888 <mark>F</mark> (°F)	Heating
2DNAP6FC	-30+120°C	NTC	888 <mark>C</mark> (°C)	Cooling
2DNAP6FD	-20+250°F	NTC	888 <mark>F</mark> (°F)	Cooling
2DNAP6FE	-30, 0 to +40, 0°C	Pt100	88.8 <mark>C</mark> (°C)	Heating
2DNAP6FF	-20,0 + 99.9°F	Pt100	88.8F (°F)	Heating
2DNAP6FG	-30, 0 to +40, 0°C	Pt100	88.8 <mark>C</mark> (°C)	Cooling
2DNAP6FH	-20,0 + 99.9°F	Pt100	88.8F (°F)	Cooling
2DNAP6FI	-30+400°C	Pt100	888 <mark>C</mark> (°C)	Heating
2DNAP6FJ	-20+750°F	Pt100	888 <mark>F</mark> (°F)	Heating
2DNAP6FK	-30+400°C	Pt100	888 <mark>C</mark> (°C)	Cooling
2DNAP6FL	-20+750°F	Pt100	888 <mark>F</mark> (°F)	Cooling
2DNAP6F0	No internal setting made, sold only to approved distributors.			





**Polarity:** The two red wires are connected together at their welded junction to one of the sensing element terminal and the white wire is connected to the other terminal

TSR50030I2000BK6