TEMPERATURE CONTROLLER

PAULISTA HEATERS

ELECTRIC HEATING SYSTEM

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TEMPERATURE CONTROLLER

1- Product Specifications

- ✓ Voltage: 24V, 110V, 220V, 380V, 440V or other.
- ✓ We work with both analog and digital temperature controllers.
- ✓ We have temperature controller options for J, K, PT100, PTC, NI 120 or other sensors.
- ✓ We have support for mounting the controllers, such as a pedestal.
- ✓ We manufacture them in various sizes and with one or more controllers.
- ✓ We manufacture digital temperature control panels in accordance with NR10.
- ✓ We have options for classified EX areas.
- ✓ We manufacture custom-made products according to the customer's needs.

2- Description of the product structure

Control Panel:

We manufacture temperature controllers with both plastic and metal control panels, and even stainless steel for cleanrooms with IP65 and IP66 ratings.

Power plug:

We offer plug sockets according to the current and voltage specifications of the design, as well as the model that the customer needs for their process. The three product line options are:

3-pin Brazilian standard plug 10A or 20A for 110V or 220V.

Industrial power plug16A, 32A, 63A and 125A for 110V, 220V, 380V or 440V.

Multipin power plug 4-pole, 6-pole, 10-pole, or 16-pole.

Fastening system:

In general, the controller panels allow the customer to mount them on a wall or structure. But we also offer the option of a digital panel mounted on a pedestal.

Temperature controller :

These are the available options:

Digital Thermostat

Controller used: NOVUS 321. We have the option for NTC, PT100 and JKT sensors. Output: SPDT relay: 1 HP 250 VAC / 1/3 HP 125 VAC (16 a resistive). Sensor offset adjustment. Power supply: 100 to 240 VAC/DC + 10% (internal switched-mode power supply, can be connected directly to the mains). Measures from 0 to 1000ºC depending on the type of sensor used. Indication in ºC and ºF .

Digital Panel

Controller used: NOVUS 1030. We have options for NTC, PT100, and JKT sensors. Operates in ON/OFF or PID mode, ideal for optimizing processes, reducing oscillations,

and making the system more stable and efficient. The controller also has two independent outputs that can be used for alarm or control, in addition to the innovative removable rear connector. Configurable setpoint limits . Configuration protection via access password. Possibility of restoring the original factory calibration. Dual 4-digit display in red and green. Power supply: 100 to 240 VAC/DC and we have a 24 VDC option. Measures from 0 to 1000ºC depending on the type of sensor used. Indication in ºC and ºF .

Controller used: NOVUS 1050. We have the option for NTC, PT100 and JKT sensors. High-contrast multicolor LCD display. Differentiated multi- angle viewing. Compact and elegant design for machines. Integrated timer function. 5 ramp and plateau programs to configure the setpoint profile . Output with soft start and timer function. Password protection and parameterization via the display menu, USB port or RS485 Modbus interface . Outputs: 1 voltage pulse (5V - 50mA max.) 1 SPST relay (1.5A - 240VAC/230VDC). Display: 11-segment alphanumeric LCD with high-contrast multi- angle viewing. PID control: PWM and auto-tuning. Alarm: 2 alarm functions directed to one output. Power supply: 100 to 240 VAC/DC and we have a 24 VDC option. Measures from 0 to 1000ºC depending on the type of sensor used. Displays in ºC and ºF .

In the case of 380V or 440V voltages, the panel is connected to an industrial outlet using the phase-neutral connection to supply 220V.

Analog Thermostat

Controller used: IMIT. We have several temperature ranges.

Percentage Control

Loti power variator . It is made by a potentiometer with adjustable power levels, restricting or increasing its power, which directly impacts the temperature of the thermal tape.

3- Components

Our digital panels are custom-made according to the client's needs. Generally, they include a circuit breaker, relay, heat sink, fan, grille, on/off switch, LED lights , and identification plates. Panels compliant with NR10 standards include an residual current circuit breaker (RCCB), emergency stop button, main switch, mechanical lock (padlock with key), louver, and 24V power supply. EX panels are fully sealed, made with shielded cabling and components for use in explosive environments. We can also include other components such as an alarm, ammeter, voltmeter, etc. We also manufacture panels with PLC connectivity and interface, or Wi-Fi control and operation .

4- Application :

Temperature control for machines in general, electrical resistors, equipment in general, or heating systems.

Ideal for use in areas such as:

- ✓ Pharmaceutical industry,
- ✓ Food industry,
- ✓ Chemical industry,
- ✓ Metallurgical industry,
- ✓ Auto repair shop,
- ✓ Laboratory.

We manufacture custom solutions, tailored to best meet your specific needs. Contact us for a quote!

Registration Data

Company Name

Paulista Heaters co.

Trade Name

Paulista Heaters

CNPJ

44.493.049/0001-07

State Registration

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