



**Automatización Eléctrica**  
Especialistas en Automatización

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# TEMPERATURE

CONTROLLERS

DATALOGIC™

DATALOGIC AUTOMATION

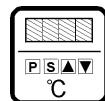
## TH-T SERIES

The TH-T temperature controller series offers a complete range of solutions able to satisfy many varied industrial automation needs, including basic models suitable for more simple and cost-effective applications and advanced models created specifically for the more evolved control and interface systems.

Programming of the temperature controllers is quick and easy as the most frequently-used configurations can be set with few keyboard operations. Models with a RS485 serial interface can send the parameter configuration and receive the controlled values through an industrial PC that can control different units.

Versions with a current transformer input, available as an accessory for measurements reaching 25 or 100 A, can detect even a partial load failure, as for example due to a broken heating element.

The series includes models with optoisolated relay and transistor outputs to control static relays, as well as models with 4-20 mA or 0-10 V normalised proportional analogue outputs.



## HIGHLIGHTS

- Complete range including basic and advanced control functions
- Relay output, static output for SSR, 4-20 mA and 0-10 V analogue outputs
- Models with current transformer input and HBA function
- Models with RS485 serial interface for MODBUS-RTU protocol

## APPLICATION

### Packaging lines



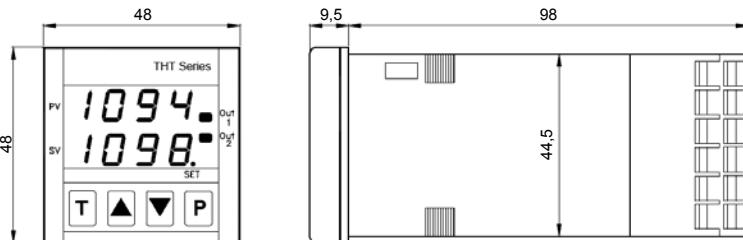
### Process control



SENSOR

The temperature controllers are easily programmed by the 4 push-buttons and display indicators present on the front panel, or via the RS485 serial interface. Additionally the accessory device, as compact as a car key, copies the same configuration onto different temperature controllers. The 'T' push-button rapidly activates the Auto-Tuning function when the temperature increases and reaches the set value, alongside the continuous Self-Tuning of the PID control parameters.

## DIMENSION



Single-display panel



Double-display panel



Terminal block



Amperometric transformer



Programming device

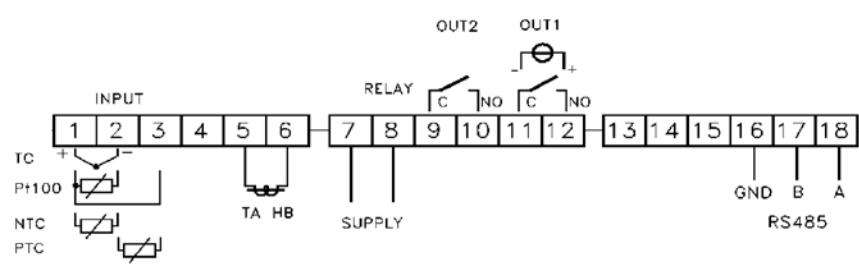


## INDICATORS AND SETTINGS



- A** P push-button for programming access and confirmation
- B** Down push-button for value decrease / parameter selection
- C** Up push-button for value increase / parameter selection
- D** T push-button for Auto-Tuning and Self-Tuning activation
- E** Out1 LED for main output 1 ON status indication
- F** Out2 LED for auxiliary output 2 ON status indication
- G** SET LED for programming access indication (blinking)
- H** AT-ST LED Auto-Tuning (blinking) and Self-Tuning (on)
- I** PV display for process value indication
- J** SV display for set value indication (only TH-TD vers.)

## CONNECTIONS



**Note:** For correct installation and use Datasensor SpA can guarantee only the data indicated in the instruction manual supplied with the products.

Versions and options: refer to **MODEL SELECTION TABLE**

## TECHNICAL DATA



## MODEL SELECTION AND ORDER INFORMATION

MODEL	DISPLAY	POWER SUPPLY	MAIN OUTPUT	ADVANCED FUNCTION	ORDER N°
TH-TS-00	single	24 Vac/Vdc	relay	basic	95B030000
TH-TS-10	single	100-240 Vac	relay	basic	95B030010
TH-TS-01	single	24 Vac/Vdc	transistor	basic	95B030020
TH-TS-11	single	100-240 Vac	transistor	basic	95B030030
TH-TD-00	double	24 Vac/Vdc	relay	basic	95B030040
TH-TD-10	double	100-240 Vac	relay	basic	95B030050
TH-TD-01	double	24 Vac/Vdc	transistor	basic	95B030060
TH-TD-11	double	100-240 Vac	transistor	basic	95B030070
TH-TD-03	double	24 Vac/Vdc	4-20 mA	analogue out	95B030080
TH-TD-13	double	100-240 Vac	4-20 mA	analogue out	95B030090
TH-TD-04	double	24 Vac/Vdc	0-10 V	analogue out	95B030100
TH-TD-14	double	100-240 Vac	0-10 V	analogue out	95B030110
TH-TD-00-RS	double	24 Vac/Vdc	relay	RS485	95B030120
TH-TD-10-RS	double	100-240 Vac	relay	RS485	95B030130
TH-TD-01-RS	double	24 Vac/Vdc	transistor	RS485	95B030140
TH-TD-11-RS	double	100-240 Vac	transistor	RS485	95B030150
TH-TD-00-HB	double	24 Vac/Vdc	relay	HBA *	95B030160
TH-TD-10-HB	double	100-240 Vac	relay	HBA *	95B030170
TH-TD-01-HB	double	24 Vac/Vdc	transistor	HBA *	95B030180
TH-TD-11-HB	double	100-240 Vac	transistor	HBA *	95B030190

\* Heater Break Alarm: load failure detection (eg. heating elements) through external current transformer, which can be ordered as an accessory.

## ACCESSORY SELECTION AND ORDER INFORMATION

MODEL	DESCRIPTION	ORDER N°
THT-AT-25	25/0.05 A current transformer for HBA function	95A301010
THT-AT-100	100/0.2 A current transformer for HBA function	95A301020
THT-KEY	Device for copying the same programming to different temperature controllers	95A301030



The company endeavours to continuously improve and renew its products; for this reason the technical data and contents of this catalogue may undergo variations without prior notice. For correct installation and use, the company can guarantee only the data indicated in the instruction manual supplied with the products.

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- Online documentation and datasheets of all products.
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- Logistics systems for the shipment of materials almost anywhere in the world.
- Purchasing management, order record and tracking of shipments.

To access the product, click on the green button.

Product	Code	Reference	Product link
THT-AT-25 HB AMP. TRANSFORMER 25/0.05A	95A301010	THT-AT-25	<a href="#">Buy on EAN</a>
THT-AT-100 HB AMP. TRANSFORMER 100/0.2A	95A301020	THT-AT-100	<a href="#">Buy on EAN</a>
THT-KEY THT PROGRAMMING KEY	95A301030	THT-KEY	<a href="#">Buy on EAN</a>
TH-TS-00 24 VAC/VDC RELAYS OUT	95B030000	TH-TS-00	<a href="#">Buy on EAN</a>
TH-TS-10 100-240VAC RELAYS OUT	95B030010	TH-TS-10	<a href="#">Buy on EAN</a>
TH-TS-01 24 VAC/VDC TRANS/RELAY OUT	95B030020	TH-TS-01	<a href="#">Buy on EAN</a>
TH-TS-11 100-240VAC TRANS/RELAY OUT	95B030030	TH-TS-11	<a href="#">Buy on EAN</a>
TH-TD-00 24 VAC/VDC RELAYS OUT	95B030040	TH-TD-00	<a href="#">Buy on EAN</a>
TH-TD-10 100-240VAC RELAYS OUT	95B030050	TH-TD-10	<a href="#">Buy on EAN</a>
TH-TD-01 24 VAC/VDC TRANS/RELAY OUT	95B030060	TH-TD-01	<a href="#">Buy on EAN</a>
TH-TD-11 100-240VAC TRANS/RELAY OUT	95B030070	TH-TD-11	<a href="#">Buy on EAN</a>
TH-TD-03 24 VAC/VDC 4-20mA RELAY OUT 2	95B030080	TH-TD-03	<a href="#">Buy on EAN</a>
TH-TD-13 100-240VAC 4-20mA RELAY OUT 2	95B030090	TH-TD-13	<a href="#">Buy on EAN</a>
TH-TD-04 24 VAC/VDC 0-10V RELAY OUT 2	95B030100	TH-TD-04	<a href="#">Buy on EAN</a>
TH-TD-14 100-240VAC 0-10V RELAY OUT 2	95B030110	TH-TD-14	<a href="#">Buy on EAN</a>

TH-TD-00-RS 24 VAC/VDC RELAYS OUT RS485	95B030120	TH-TD-00-RS	<a href="#">Buy on EAN</a>
TH-TD-10-RS 100-240VAC RELAYS OUT RS485	95B030130	TH-TD-10-RS	<a href="#">Buy on EAN</a>
TH-TD-01-RS 24 VAC/VDC TR/REL OUT RS485	95B030140	TH-TD-01-RS	<a href="#">Buy on EAN</a>
TH-TD-11-RS 100-240VAC TR/REL OUT RS485	95B030150	TH-TD-11-RS	<a href="#">Buy on EAN</a>
TH-TD-00-HB 24 VAC/VDC RELAYS OUT HB-TA	95B030160	TH-TD-00-HB	<a href="#">Buy on EAN</a>
TH-TD-10-HB 100-240VAC RELAYS OUT HB-TA	95B030170	TH-TD-10-HB	<a href="#">Buy on EAN</a>
TH-TD-01-HB 24 VAC/VDC TR/REL OUT HB-TA	95B030180	TH-TD-01-HB	<a href="#">Buy on EAN</a>
TH-TD-11-HB 100-240VAC TR/REL OUT HB-TA	95B030190	TH-TD-11-HB	<a href="#">Buy on EAN</a>