

NTC Probe

USER MANUAL

Translation of the original instructions

Version: **1.0**

Date: **15/04/2026**

Contents

1.	NTC Probe	4
	NTC Probe – description	4
	NTC Probe – parameters	4

VERSION	DATE	CHANGES
1.0	13/Nov/2025	-

Any information inside this manual can be changed without advice.

This handbook can be download freely from the website: www.eelectron.com

Exclusion of liability:

Despite checking that the contents of this document match the hardware and software, deviations cannot be completely excluded. We therefore cannot accept any liability for this.

Any necessary corrections will be incorporated into newer versions of this manual.

Symbol for relevant information



Symbol for warning



1. NTC Probe

This function is used to read temperature values from an external probe.

Communication objects involved:

"<NTC Probe x> Temperature"	2 Bytes	CRT
"<NTC Probe x> Upper Threshold"	1 Bit	CRT
"<NTC Probe x> Lower Threshold"	1 Bit	CRT
"<NTC Probe x> Enable Threshold"	1 Bit	CW
"<NTC Probe x> Alarm"	1 Bit	CRT

KNX PARAMETER	SETTINGS
Probe name	Free field (alphanumerical)
This parameter defines the name of the sensor; the name can be used to rapidly identify it.	
Sensor code	TS01A01ACC TS01B01ACC TS01C01ACC TS01D01ACC Custom
This parameter defines the probe connected to the device.	

When the dispositive has inputs, when configured as analog for temperature probe, the eelectron code NTC probes must be used:

- **TS01A01ACC (from -20 °C to +100 °C)**
- **TS01B01ACC (from -50 °C to +60 °C).**
- **TS01C01ACC (from -40 °C to +105 °C)**
- **TS01D01ACC (from -5 °C to +45 °C).**

Maximum length of connection cables: ≤ 20 m (braided cable).

TS01A01ACC

Dimensions in millimetres
 NTC resistance tolerance: ± 3%
 Measurement range: -20 °C ÷ +100 °C
 Cable: 2 wire single insulation
 Cable colour: Black
 Probe colour: Black

ATTENTION:
 Always keep a distance of at least 6 mm from live parts

TS01B01ACC

D1 = 9 mm D2 = 4 mm L2 = 49 mm L1 = 1250 mm
 NTC resistance tolerance: ± 2%
 Measurement range: -50 °C ÷ +60 °C
 Cable: 2 wire double insulation
 Cable colour: White
 Probe colour: White

ATTENTION:
 Always keep a distance of at least 3 mm from live parts

TS01C01ACC

D1 = 50 mm D2 = 30 ± 5 mm L = 1500 ± 30 mm
 NTC resistance tolerance: ± 1%
 Measurement range: -40 °C ÷ +105 °C
 Cable: 2 wire double insulation
 Cable colour: Black
 Probe colour: Metal

ATTENTION:
 Always keep a distance of at least 3 mm from live parts

TS01D01ACC

(W x H x D): 96 x 96 x 36 mm
 NTC resistance tolerance: ± 2%
 Measurement range: -5 °C ÷ +45 °C
 Cable: 2 wire double insulation
 Cable colour: White
 Probe colour: White/ Black

ATTENTION:
 Always keep a distance of at least 6 mm from live parts

By setting sensor code as "custom", it is possible to parametrize a different type of probe by defining three different pairs of measure (temperature and resistance) of the characteristic curve.

KNX PARAMETER	SETTINGS
Temperature <x>	-200 ÷ 1000
Resistance <x>	0 ÷ 670760
These parameters (as a pair) define a specific point in the characteristic curve of the probe.	
Activation telegram	telegram 0 / telegram 1
It defines which telegram value enables the sending of threshold on/off telegrams through object "<NTC Probe x> Enable Threshold".	
State after download	disabled / enabled
It defines whether the sending of threshold on/off telegrams is enabled or disabled after the download.	
Probe adjustment	-50 °C ÷ +50 °C
It is used to set a temperature offset to correct an impractical reading due, for example, to the location of the probe in a warmer or colder place than the environment to be monitored.	
Average of algorithm	very fast / fast / normal / slow / very slow
It defines the speed to set for algorithm.	
Cyclic sending time of temperature	No periodic send 1 / 2 / 5 / 10 / 30 minutes 1 hour / 2 hours
It defines the cyclical sending time interval of the temperature.	
Sending on variation	never / 0.5 / 1.0 / 1.5 °C
With this parameter it is possible to set the ΔT minimum to send the value through the object "<NTC Probe x> Temperature".	
Hysteresis type	symmetric / asymmetric
This parameter defines wheather the absolute limit values are the same for both thresholds (symmetric) or they can be set independently (asymmetric).	
Hysteresis	0.5 °C 1.0 °C 2.0 °C 5.0 °C
It defines the hysteresis value to be applied on the high and low thresholds.	
Upper setpoint value	-20 °C ÷ +100 °C TS01A01ACC -50 °C ÷ +60 °C TS01B01ACC -40 °C ÷ +105 °C TS01C01ACC -5 °C ÷ +45 °C TS01D01ACC
It defines the value for upper setpoint.	
Lower setpoint value	-20 °C ÷ +100 °C TS01A01ACC -50 °C ÷ +60 °C TS01B01ACC -40 °C ÷ +105 °C TS01C01ACC -5 °C ÷ +45 °C TS01D01ACC
It defines the value for lower setpoint.	

Telegram when probe is disabled	nothing / off / on
It is used to send a telegram on the bus if the associated NTC probe is disabled, for example in order to deactivate a solenoid valve or a heater controlled by an output object of the local or remote device, until the new activation.	
Nothing No telegram is transmitted.	
Off It sends an off telegram to the target device, which can be used to turn off probe-related functions.	
On It sends an on telegram to the target device, which can be used to activate probe-related functions.	
Cyclic sending time of telegrams	No of cyclic sending / 30 min / 1 hour / 2 hours
It defines the cyclical sending time interval of the telegram.	

KNX PARAMETER	SETTINGS
Alarm object	disabled / enabled
Set this parameter to "enabled" to activate object "<NTC Probe x> Alarm". If this object's value is "1" a problem is detected.	
Alarm telegram	telegram 0 / telegram 1
It defines the value to send when temperature value is below setpoint value.	

For the "Upper setpoint value" and "Lower setpoint value" settings; the following settings are the same.

KNX PARAMETER	SETTINGS
Telegram when value is above setpoint	nothing / off / on
It defines the value to send when temperature value is above setpoint value.	
Telegram when value is below setpoint	nothing / off / on
It defines the value to send when temperature value is below setpoint value.	