

AMBIENT TEMPERATURE THERMOSTATS

series
TA

Protection	Gas	1-2	II2G	Ex d IIB+H ₂ T6÷T5 Gb
	Dusts	Zone 21-22	II2D	Ex tb IIIC T85°C÷T100°C Db

Degrees of Protection	IP65
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Amb. Temp.	Standard	-20°C	+40°C
	Extended	-50°C	+60°C



Enthies Threading	NPT ANSI B1.20
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Material	Aluminum light alloy
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Painting	External Epoxy RAL 7000
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Standards and Certificates

Directive 2014/34/EU (ATEX)

EN 60079-0 • EN 60079-1
EN 60079-31

INERIS 13 ATEX 0039X

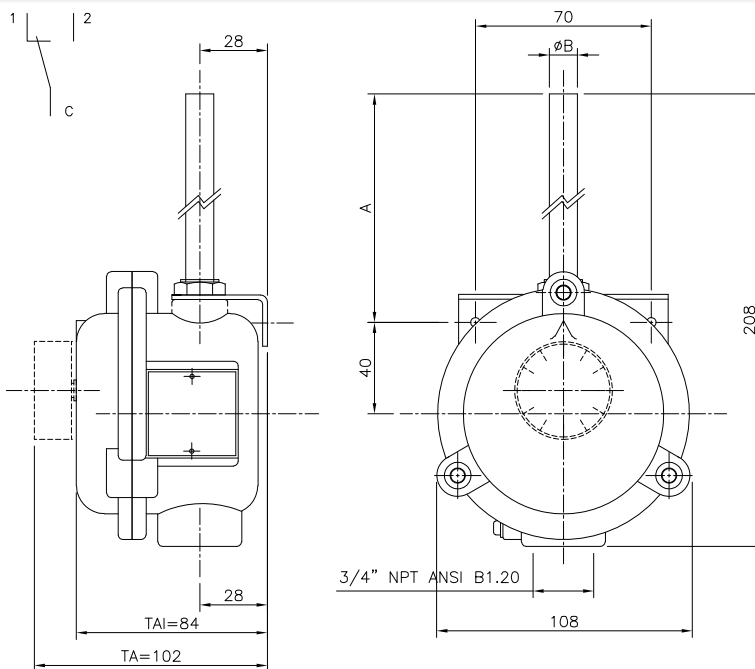
IEC 60079-0 • IEC 60079-1
IEC 60079-31

IECEx INE 13.0053X

- Thermostat with liquid expansion probe suitable for the automatic control of ambient temperature.
- Available either with external or internal temperature adjustment (type TA or type TAI respectively).
- The internal adjustment helps to prevent unauthorized manipulations.
- Bracket in tropicalized galvanized steel, sheath in tropicalized zinc plated brass.
- Plate and external screws in Stainless Steel.

- Options**
- Sheath and bracket in Stainless Steel AISI 316.
 - Sheath of different lenght other than standard (L).

- Cable entry: cylindrical M20x1,5 (M).
- Control temperature range other than standard.



NOTES

To read the installation and maintenance instructions is recommended.

Temperature adjustment on TAI is allowed at open case only. This operation shall not be made with the thermostat powered and, in any case, far from hazardous atmosphere.

The Temperature class T6/T85°C takes into account an Ambient Temperature (A.T.) up to +40 °C, the Temperature class T5/T100°C an extened A.T. up to +60°C.

Code	Temperature Control Range (°C)	Max Bulb Temperature (°C)	Differential ΔT (°C)	A (mm)	ØB (mm)
TA 40/TAI 40	0°C÷40°C±2°C	50°C	3°C±1°C	112 ÷ 242	13
TA 90/TAI 90	0°C÷90°C±3°C	120°C	4°C±1°C	112 ÷ 242	10
TA 120/TAI 120	0°C÷120°C±3°C	150°C	4°C±1°C	112 ÷ 242	10

Example: TA 40N

Order Coding

Type	TA = Thermostat with External adjustment TAI = Thermostat with Internal adjustment
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Temperature control range	40 = 0°C ÷ +40°C 90 = 0°C ÷ +90°C 120 = 0°C ÷ +120°C
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Sheath	.. = std. L = long version
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Threading	N = NPT (N) M = metric (M)
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CONTROL THERMOSTATS

series
TR

Protection	Gas	Zone	1-2	II2G	Ex d IIB+H ₂ T6÷T5 Gb
	Dusts	Zone	21-22	II2D	Ex tb IIIC T85°C÷T100°C Db

Degree of Protection	IP65
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Amb. Temp.	Standard	-20°C	+40°C
	Extended	-50°C	+60°C



Entries Threading	NPT ANSI B1.20
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Material	Aluminum light alloy
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Painting	External epoxy RAL 7000
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Standards and Certificates



Directive 2014/34/EU (ATEX)

EN 60079-0 • EN 60079-1
EN 60079-31



INERIS 13 ATEX 0039X



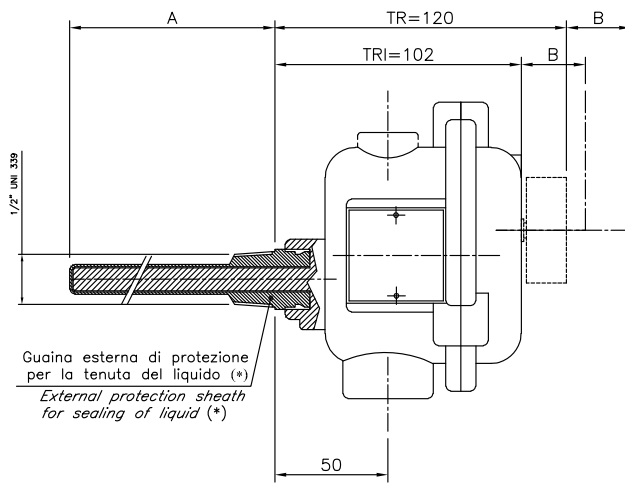
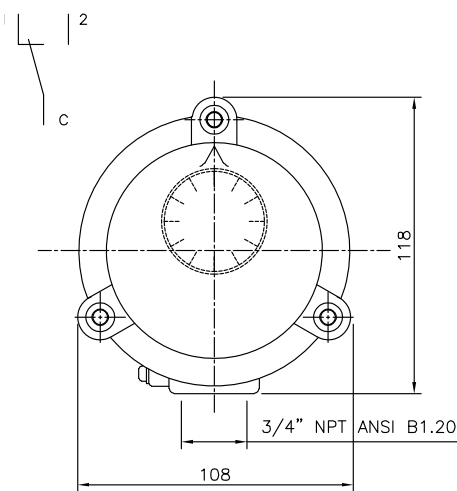
IEC 60079-0 • IEC 60079-1
IEC 60079-31

IECEX INE 13.0053X

- Thermostat with liquid expansion probe.
- Recommended for the automatic control of liquids temperature and for industrial heating process.
- Its design allows the rapid replacement of the control unit without having to empty the process fluids containers.
- Available either with external or internal temperature adjustment (type TR or TRI respectively).
- The internal adjustment helps to prevent unauthorized manipulations.
- External sheath in AISI 316L Stainless Steel.
- Plate and external screws in Stainless Steel.

Options - Sheath of different length other than standard (L).
- Cable entry: cylindrical M20x1,5 (M).

- Control temperature range other than standard.



NOTES

To read the installation and maintenance instructions is recommended.

(*) The temperature probe is protected by an internal explosion-proof sheath as well as by an external watertight sheath which induces a greater thermal inertia of the thermostat that raises the temperature reading of the controlled fluid. It's advisable to carry out tests on the adjustments to minimize this effect.

Temperature adjustment on TRI is allowed at open case only. This operation shall not be made with the thermostat powered and, in any case, far from hazardous atmosphere.

The Temperature Class T6/T85°C takes into account an Ambient Temperature (A.T.) up to +40 °C, the Temperature class T5/T100°C an extended A.T. up to +60°C

Code \	Temperature Control Range (°C)	Max Bulb Temperature (°C)	Differential ΔT (°C)	A (mm)	B (mm)
TR 40 TRI 40	0°C÷40°C±2°C	50°C	√3°C±1°C	95 ÷ 225	111
TR 90 TRI 90	0°C÷90°C±3°C	120°C	4°C±1°C	95 ÷ 225	111
TR 120 TRI 120	0°C÷120°C±3°C	150°C	4°C±1°C	95 ÷ 225	111

B = Minimum clearance in mm to remove the case without removing the sheath.

Exemple: TRI 120N

Order Coding

Type

TR = Thermostats with External adjustment
TRI = Thermostats with Internal adjustment

Temperature control range

40 = 0°C ÷ +40°C
90 = 0°C ÷ +90°C
120 = 0°C ÷ +120°C

Sheath

.. = std.
L = long version

Threading

N = NPT (N)
M = metric (M)

SAFETY THERMOSTATS

series
TS

Protection	Gas	1-2	II2G	Ex d IIB+H ₂ T6÷T5 Gb
	Dusts	21-22	II2D	Ex tb IIIC T85°C÷T100°C Db

Degree of Protection	IP65
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Amb. Temp.	Standard	-20°C	+40°C
	Extended	-50°C	+60°C



Enthies Threading	NPT ANSI B1.20
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Material	Aluminum light alloy
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Painting	External Epoxy RAL 7000
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Standards and Certificates

Directive 2014/34/EU (ATEX)

EN 60079-0 • EN 60079-1
EN 60079-31

CE INERIS 13 ATEX 0039X

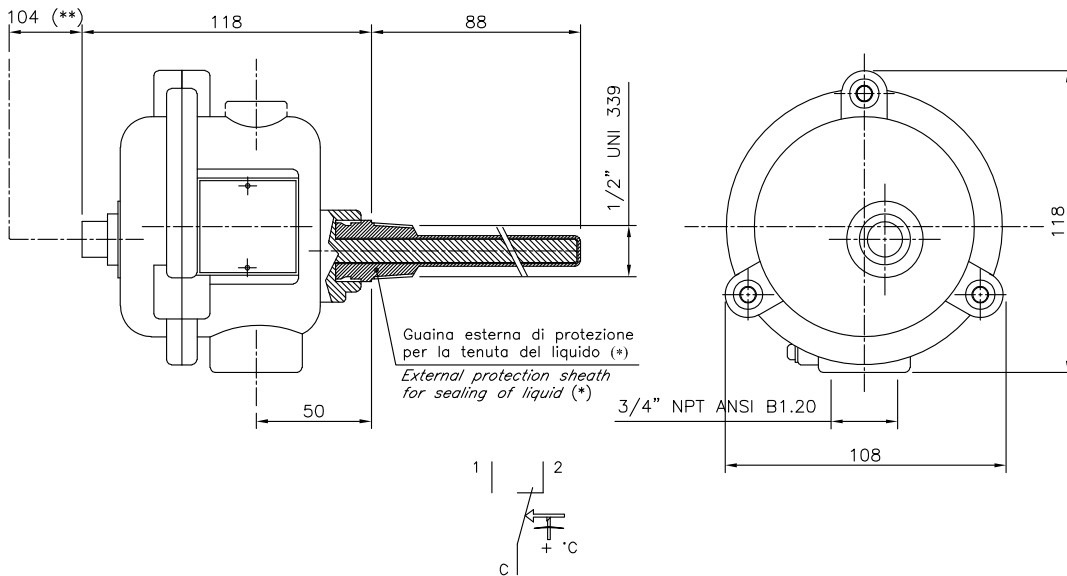
IEC 60079-0 • IEC 60079-1
IEC 60079-31

IECEx INE 13.0053X

- Thermostat with liquid expansion probe with manual reset and positive safety for capillary breakup.
- Especially suitable for boilers, heating systems and in all applications where it is necessary not to exceed the maximum temperature set.
- Its design allows the rapid replacement of the control unit without having to empty the process fluids containers.
- External sheath in AISI 316L Stainless Steel.
- Plate and external screws in Stainless Steel.

- Options**
- Cable entry: cylindrical threading M20x1,5 (M).
 - Thermostat with automatic reset.

- Control temperature range other than standard.



NOTES

To read the installation and maintenance instructions is recommended.

The temperature probe is protected by an internal explosionproof sheath as well as by an external watertight sheath which induces a greater thermal inertia of the thermostat that raises the temperature reading of the controlled fluid. It's advisable to carry out tests on the adjustments to minimize this effect.

The Temperature Class T6/T85°C takes into account an Ambient Temperature (A.T.) up to +40 °C, the Temperature class T5/T100°C an extended A.T. up to +60°C.

(**) Minimum space in mm to remove the case without removing the sheath.

Code	Control Temperature (°C)	Max Bulb Temperature (°C)	Differential ΔT (°C)
TS 100	100°C ^{+0°C} _{-6°C}	125°C	15°C±8°C

Example: TS 100N

Order Coding

Type	Control Temperature	Threading
TS = Safety Thermostat	100 = 100°C	N = NPT (N) M = metric (M)