

FRENCH MANUFACTURER OF HEATING CABLES

PRODUCT CATALOG

**TECHNITRACE**

heating  
cables



[www.heating-cables.com](http://www.heating-cables.com)

# CERTIFICAT D'ENREGISTREMENT

Le Système de Management de :

## Technitrace

Site principal : Avenue du Général de Gaulle, 89130, Toucy, France.

a été enregistré par Intertek comme étant conforme aux exigences de la norme :

## ISO 9001:2015

Le Système de Management est applicable à :

Fabrication de câbles électriques chauffants.

Certificat n° :  
0147157

Date de certification initiale :  
31 janvier 2014

Date de certification :  
13 mars 2023

Date d'émission du certificat :  
18 avril 2023

Date d'expiration :  
30 janvier 2026



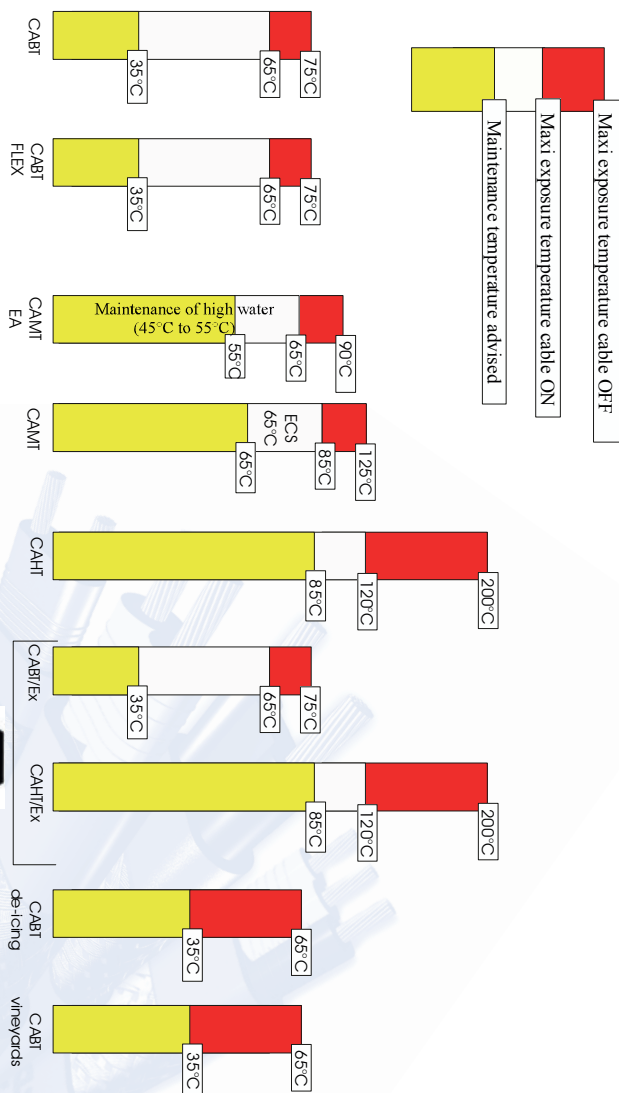
intertek

**Calin Moldovean**  
Président, Business Assurance

Intertek France Tour PB5, 1 Avenue du Général De Gaulle 92800 Puteaux – France



## Our range of Self Regulating Heating Cables



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# Low temperature self regulating heating cable **CABT**



FIQ 117



CABT low temperature self-regulating heating cable consist of a heating semiconductor plastic element which adapts its calorific power (W/m) on each point depending on the local temperature. This intrinsic feature of the semiconductor heating element allows in some cases to dispense of using a thermostatic controller (self-regulation).




They can be cut on the adjusted length directly on the job site.

For your heat tracing installations and especially on temperature maintenance of hot water systems, we strongly recommend the combination of our electronic THA / E controllers. The latter are equipped with a current absorber for start up of self regulating heating cables. They are the guarantee of a rigorous and reliable electronics regulation (energy saving of + 50%).

## Applications

Freeze protection of water and domestic fuel oil pipes.

Temperature maintenance until 35°C of pipes, tanks, balloons, ...

 <b>CABT</b>	Basic version  <b>CABT+C</b>
 <b>CABT+CG</b>	Tinned copper braid version Aluminium foil + ground wires + over jacket option  <b>CABT+RG</b>

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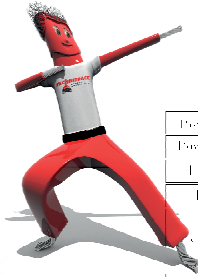
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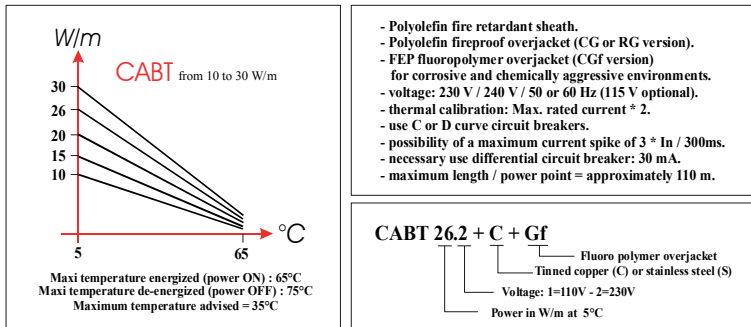
## Advantages

- can be cut directly on the adjusted length on the site.
- allow derivation from a unique and single feed point.
- semiconductor heating element adapts its power locally.
- good flexibility allowing the tracing of hydraulic organs (valves, pumps, ...)
- allow overlaps during implementation (self-regulating).
- maxi temp energized : 65 °C (power on)- maxi temp de-energized : 75°C.
- Technical CSTB approval, in accordance with the European standards in force.



	CABT 10	CABT 15	CABT 20	CABT 26	CABT 30
Power at 5°C	10 W/m	15 W/m	20 W/m	26 W/m	30 W/m
Power at 55°C	3 W/m	4 W/m	5 W/m	7 W/m	8 W/m
Current	0.130 A/m	0.170 A/m	0.220 A/m	0.260 A/m	0.320 A/m
Tolerance	0 / +4 W/m	0 / +4 W/m	0 / +5 W/m	0 / +5 W/m	0 / +5 W/m
Supply conductors	Nickel copper 2*1.00 mm²	Nickel copper 2*1.00 mm²	Nickel copper 2*1.00 mm²	Nickel copper 2*1.25 mm²	Nickel copper 2*1.25 mm²
Dimensions	CABT	CABT+C	CABT+S	CABT+CG	CABT+RG
mini	3.6 * 9.8 mm	4.6 * 10.8 mm	4.6 * 10.8 mm	5.50 * 11.70 mm	5.50 * 11.70 mm
maxi	4.6 * 10.8 mm	5.6 * 11.8 mm	5.6 * 11.8 mm	6.50 * 12.70 mm	6.50 * 12.70 mm
Basic version					

## Main features



*Thermal dissipation curves are theoretical and given for information purposes*

## Accessories



**Other voltage  
(12, 24, 48, 110, 400 V)  
Ask us**

*Low voltage self  
regulating heating cable*

**CABT**  
**24 / 48V**







The CABT/24V and CABT/48V low voltage and low temperature self-regulating heating cables consist of a semi-conductive plastic heating core that adjusts at any point its calorific power (W/m) depending on the local temperature.

This intrinsic feature of the semiconductor heating element can avoid using in certain cases regulation system (self-regulation).

They can be cut to length on site and are therefore very easy to install.

### Application range

Freeze protection or low temperature maintenance of pipes, tanks, valves for your camper van, mobile home.  
Frost protection of video, cabinets and boxes, antennas, solar panels, etc.  
Frost protection of retractable parking bollards.  
Use directly on battery or solar panel regulator.

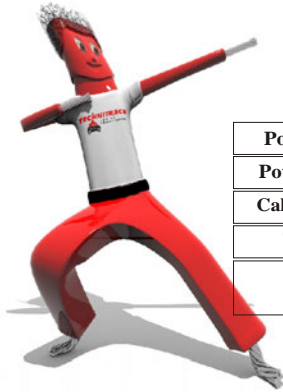
 <p>Basic version</p> <p><b>CABT</b></p>	 <p>Tinned copper braid version</p> <p><b>CABT+C</b></p>
 <p>Braid + over jacket version</p> <p><b>CABT+CG</b></p>	 <p>Aluminium foil + ground wires + over jacket option</p> <p><b>CABT+RG</b></p>

# 24 or 48 V

## Direct current

### Benefits

- can be cut to the desired length on site.
- direct power supply at 24 or 48 V (depending on version) without transformer.
- allow connecting branches with power from a single point.
- semi-conductive heating element that adjusts locally its heating power.
- good flexibility allowing the tracing of hydraulic components (valves, pumps, etc.)
- allow overlaps during implementation (self-regulating feature).
- CABT heating cables support 65°C power on / 75°C power off (de-energized)



Power at 5°C
Power at 55°C
Calibration A/m
Tolerance
Bus wires section

CABT 10	CABT 15	CABT 30
10 W/m	15 W/m	30 W/m
3 W/m	4 W/m	8 W/m
0.85 A/m	1.25 A/m	2.50 A/m
0 / +4 W/m	0 / +4 W/m	0 / +5 W/m
Nickled copper 2*1.00 mm <sup>2</sup>	Nickled copper 2*1.00 mm <sup>2</sup>	Nickled copper 2*1.25 mm <sup>2</sup>

**24 V CC**  
Maximum length = 10 m

CABT 10	CABT 15	CABT 30
10 W/m	15 W/m	30 W/m
3 W/m	4 W/m	8 W/m
0.42A/m	0.65 A/m	1.25 A/m
0 / +4 W/m	0 / +4 W/m	0 / +5 W/m
Nickled copper 2*1.00 mm <sup>2</sup>	Nickled copper 2*1.00 mm <sup>2</sup>	Nickled copper 2*1.25 mm <sup>2</sup>

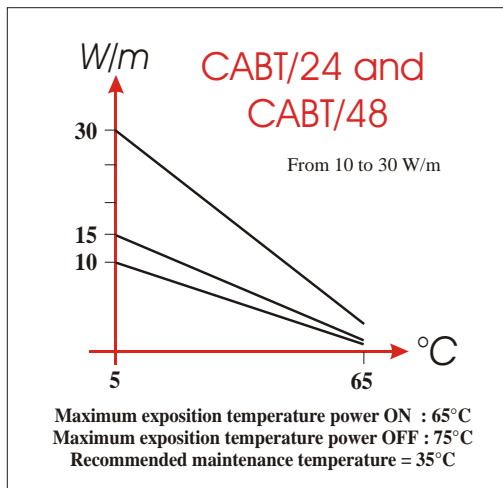
**48 V CC**  
Maximum length = 20 m

dimensions	CABT	CABT+C	CABT+S	CABT+CG	CABT+RG
mini	3.6 * 9.8 mm	4.6 * 10.8 mm	4.6 * 10.8 mm	5.50 * 11.70 mm	5.50 * 11.70 mm
maxi	4.6 * 10.8 mm	5.6 * 11.8 mm	5.6 * 11.8 mm	6.50 * 12.70 mm	6.50 * 12.70 mm

Version base

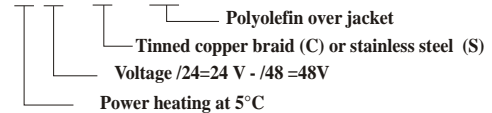
Other voltages available.  
(12, 24, 48, 115, 230, 400 V)  
Ask us.

### Main features



- Polyolefin fireproof sheath.
- Polyolefin fireproof over jacket (CG or RG version).
- FEP fluoropolymer over jacket (CGf version) for corrosive and chemically aggressive environments.
- voltage: 24 or 48 V Direct Current.
- calibration: Maximum nominal intensity \* 2.
- use curve C or D circuit breakers.
- possible current peak of 3 \* I<sub>n</sub> / 300ms.
- maximum length / power point = 10 or 20 m
- if using THA/C or THS: limit the intensity to 16 A

#### CABT 30/24 + C + G



Dissipation curves are theoretical and solely provided for information purposes.

**If thermostat THA/C or THS used,  
take care to limit the intensity at 16 A/maxi**

*High flexibility self regulating  
heating cable*



## CABT/FLEX



FIQ 117



CABT low temperature self-regulating heating cable consist of a heating semiconductor plastic element which adapts its calorific power (W/m) on each point depending on the local temperature. This intrinsic feature of the semiconductor heating element allows in some cases to dispense of using a thermostatic controller (self-regulation).

They can be cut on the adjusted length directly on the job site.

For your heat tracing installations of cold water, we strongly recommend the combination of our electronic THA / E controllers.

The latter are equipped with a current absorber for start up of self regulating heating cables. They are the guarantee of a rigorous and reliable electronics regulation at 5°C and energy saving of + 50%.

The polyurethane insulating sheath offers unrivaled flexibility of implementation in small world of self-regulating heating cables.

### Applications

Freeze protection of water and domestic fuel oil pipes.

Temperature maintenance until 35°C of pipes, tanks, balloons, ...

 <p>Basic version</p> <p><i>CABT/FLEX</i></p>	 <p>Tinned copper braid version</p> <p><i>CABT/FLEX + C</i></p>
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Minimum order : 2\*300m

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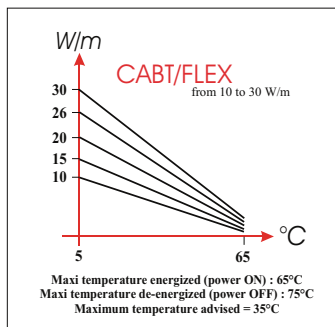
## Advantages

- can be cut directly on the adjusted length on the site.
- allow derivation from a unique and single feed point.
- semiconductor heating element adapts its power locally.
- **VERY HIGH FLEXIBILITY** allowing the tracing of hydraulic organs (valves, pumps, ...)
- allow overlaps during implementation (self-regulating).
- maxi temp energized : 65 °C (power on)- maxi temp de-energized : 75°C.



	10 W/m	15 W/m	20 W/m	26 W/m	30 W/m
Power at 5°C	10 W/m	15 W/m	20 W/m	26 W/m	30 W/m
Power at 55°C	3 W/m	4 W/m	5 W/m	7 W/m	8 W/m
I Current	0.130 A/m	0.170 A/m	0.220 A/m	0.260 A/m	0.320 A/m
Tolérance	0 / +4 W/m	0 / +4 W/m	0 / +5 W/m	0 / +5 W/m	0 / +5 W/m
Supply conductors	Nickel copper 2*1.00 mm²	Nickel copper 2*1.00 mm²	Nickel copper 2*1.00 mm²	Nickel copper 2*1.25 mm²	Nickel copper 2*1.25 mm²
dimensions	CABT/FLEX		CABT/FLEX +C		
mini	3.6 * 9.8 mm		4.6 * 10.8 mm		
maxi	4.6 * 10.8 mm		5.6 * 11.8 mm		
	Basic version		Minimum of order : 600 m / per type		

## Main features



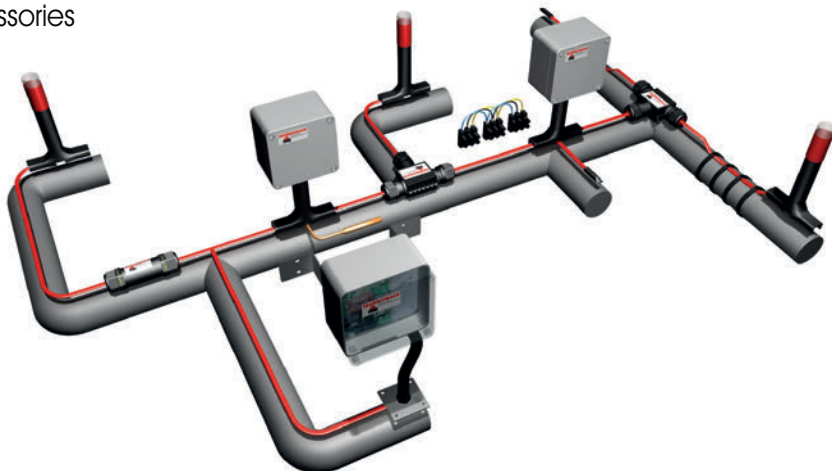
- very flexible Polyurethan jacket.
- tinned copper braid (option).
- thermal calibration: Max. rated current \* 2.
- use C or D curve circuit breakers.
- mini order 600m : 12, 24, 48, 115, 230, 400 V
- possibility of a maximum current spike of 3 \* In / 300ms.
- necessary use differential circuit breaker: 30 mA.
- maximum length / power point = approximately 110 m.

**CABT/FLEX 26.2 + C**

└── Tinned copper (C)  
Voltage: 1=110V - 2=230V  
Power in W/m at 5°C

*Thermal dissipation curves are theoretical and given for information purposes*

## Accessories





*Self regulating  
heating cable.*

**CAMT/EA**



FIQ 117



CAMT/EA medium temperature self-regulating heating cables are dedicated to maintaining the temperature of plastic domestic hot water pipes.

Without any regulation or power variator, their innovative constitution is the guarantee never exceed the thermal limits of the pipes or the appearance of a any thermal drift. They consist of a semi-plastic heating element conductor self-regulating at 65°C and adapt their heating power at any point the pipeline according to the local temperature.

Advantages :

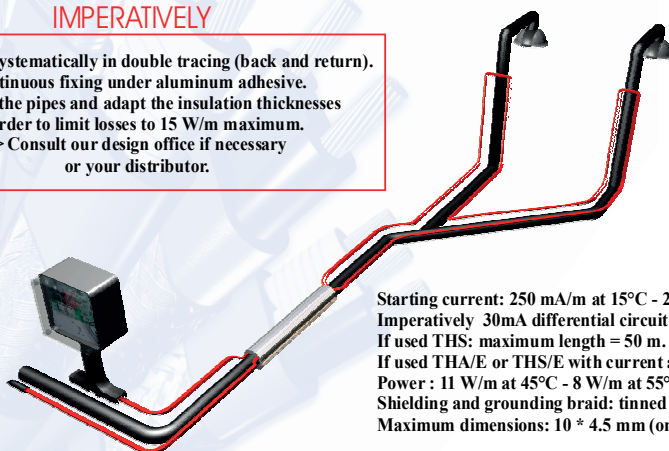
- cut to length and an adaptation of power according to contact temperature.
- FEP insulating sheath for perfect chemical and thermal resistance (anti-bacterial).
- semi-conductor element regulated at any point intrinsically at 65°C.

Application range

- temperature maintenance of domestic hot water networks 45/50/55°C
- other applications: please contact us

### IMPERATIVELY

Installation systematically in double tracing (back and return).  
Continuous fixing under aluminum adhesive.  
Insulate the pipes and adapt the insulation thicknesses  
in order to limit losses to 15 W/m maximum.  
-> Consult our design office if necessary  
or your distributor.



Starting current: 250 mA/m at 15°C - 230 V.  
Imperatively 30mA differential circuit breaker.  
If used THS: maximum length = 50 m.  
If used THA/E or THS/E with current absorber = 80 m.  
Power : 11 W/m at 45°C - 8 W/m at 55°C.  
Shielding and grounding braid: tinned copper.  
Maximum dimensions: 10 \* 4.5 mm (on braid).

*It is imperative to comply with the FIQ 93 Technitrac instructions for use.  
Guarantee range: 65°C maximum power on / 90°C de energized*

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## SELF REGULATING HEATING CABLE

# CABT Vineyards



Technitrac company has developed a reliable solution against spring frosts and accumulation of snow or ice on the buds of vines and having widely proven itself in vineyards.

Ecological and innovative technology, the CABT++/Vigne self-regulating heating cable can be cut to the precise length at each end of the row without any loss of power calorific linearity of the latter unlike other technologies used.

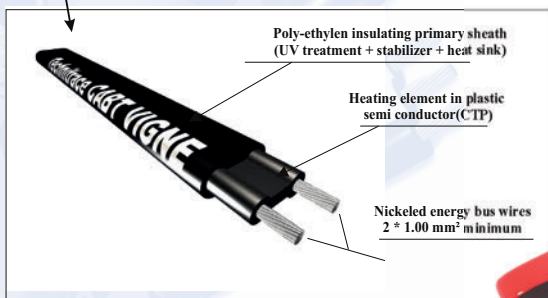
Its outer sheath is specially designed to resist a harsh environment (treatments used by the profession, shocks, bad weather, etc and sun radiations.).

Electronic cards have been specially developed for monitoring installations with intensity absorber and heating cable cut detection.



- ✓ no maintenance and completely autonomous.
- ✓ low initial investment (around 30K/ha\*)
- ✓ economical (150 KVA/h or 45 /h per hectare)
- ✓ ecological and durable over several years.
- ✓ simple installation by the winegrower by strapping on the lowering wire.
- ✓ delivered in pre-wired lengths ready to plug in (50 or 100 m) or in bobin of 300m that can be cut on different lengths on site.
- ✓ automatic detection of a circuit break
- ✓ Supply voltage directly on 230 V / 50 Hz
- ✓ UV resistant sheath, chemical treatments, etc.

\* other solutions are also available : contact us



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## Medium temperature self regulating heating cable **CAMT**



FIQ 117



### Exclusively on metal pipes

CAMT medium temperature self-regulating heating cable consist of a heating semiconductor plastic element which adapts its calorific power (W/m) on each point depending on the local temperature. This intrinsic feature of the semiconductor heating element allows in some cases to dispense of using a thermostatic controller (self-regulation).

They can be cut on the adjusted length directly on the job site.

For your heat tracing installations and especially on temperature maintenance of hot water systems, we strongly recommend the combination of our electronic THS / E controllers with a Pt1000 sensor to apply directly on the pipe.

The latter are equipped with a current absorber for start up of self regulating heating cables. They are the guarantee of a rigorous and reliable electronics regulation (energy saving of + 50%).

The fluoropolymer insulation is the gaurantee of e perfect thermal and chemical resistance.

### Applications

Temperature maintenance of hot watter pipes at 45/50/55°C.

Temperature maintenance of hot watter pipes at 60/65°C.

Temperature maintenance of pipes, vessels, baloons until 75°C.

<p>Basic version</p>  <p><b>CAMT</b></p>	<p>Tinned copper braid version</p>  <p><b>CAMT+C</b></p>	<p>Braid + overjacket version</p>  <p><b>CAMT+CGf</b></p>
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*Do not use the CAMT heating cable on plastic pipe.*

*It is imperative to comply with FIQ93 operating instructions.*

*Warranty maxi exposure temperature : power ON = 85°C / power OFF 125°C.*

*Maximum maintenance advised temperature : 65°C.*

*Beyond these exposure temperatures use control thermostat.*

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[www.heating-cables-technitrace.com](http://www.heating-cables-technitrace.com)

## Advantages

- can be cut directly on the adjusted length on the site.
- allow derivation from a unique and single feed point.
- semiconductor heating element adapts its power locally.
- good flexibility allowing the tracing of hydraulic organs (valves, pumps, ...)
- allow overlaps during implementation (self-regulating).
- maxi temp energized : 85 °C (power on)- maxtemp de-energized : 125°C.
- Technical CSTB approval, in accordance with the European standards in force.

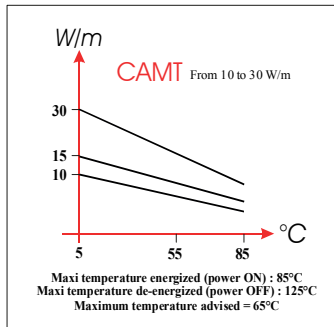


	CAMT 10	CAMT 15	CAMT 30	Other power on request.
Power at 5°C	10 W/m	15 W/m	30 W/m	
Power at 55°C	6 W/m	10 W/m	20 W/m	
I Current	0.130 A/m	0.170 A/m	0.310 A/m	
Tolerance	0 / +4 W/m	0 / +4 W/m	0 / +5 W/m	
Supply conductors	Nickel copper 2*1.00 mm <sup>2</sup>	Nickel copper 2*1.00 mm <sup>2</sup>	Nickel copper 2*1.25 mm <sup>2</sup>	
dimensions	CAMT	CAMT+C	CAMT+S	CAMT+CG
mini	4.0 * 9.0 mm	4.6 * 9.6 mm	4.6 * 9.6 mm	5.8 * 10.8 mm
maxi	4.4 * 10.0 mm	5.0 * 10.6 mm	5.0 * 10.6 mm	6.2 * 11.8 mm

Basic version

Approximative dimensions

## Main features



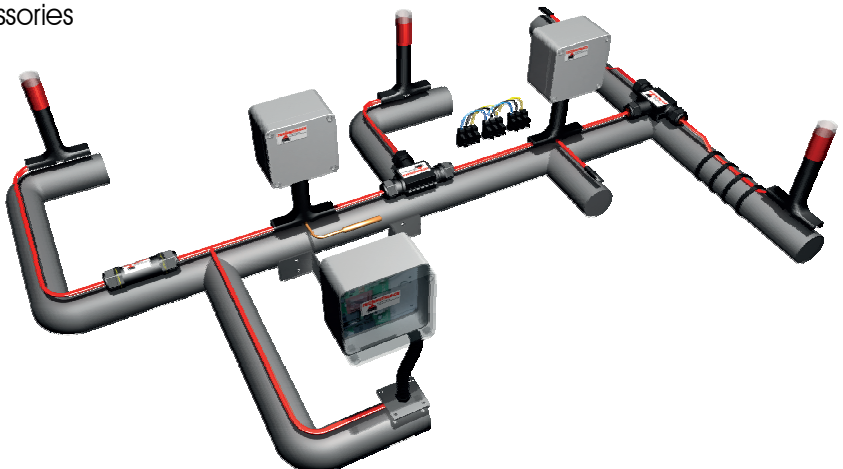
- FEP fluoropolymer jacket.
- FEP fluoropolymer overjacket (CGF version) for corrosive and chemically aggressive environments.
- voltage: 230 V / 240 V / 50 or 60 Hz (115 V optional).
- thermal calibration: Max. rated current \* 2.
- use C or D curve circuit breakers.
- possibility of a maximum current spike of 3 \* I<sub>n</sub> / 300ms.
- necessary use differential circuit breaker: 30 mA.
- maximum length / power point = approximately 110 m.
- maxi temperature exposure : power ON = 85°C
- maxi temperature exposure : power OFF = 125°C

### CAMT 30.2 + C + Gf

Fluoropolymer overjacket  
Tinned copper braid (C) or stainless steel (S)  
Voltage: 1-110V - 2-230V  
Power in W/m at 5°C

*Thermal dissipation curves are theoretical and given for information purposes*

## Accessories



# High temperature self regulating heating cable **CAHT**



FIQ 117



Braid + overjacket version

CAHT high temperature self-regulating heating cable consist of a heating semiconductor plastic element which adapts its calorific power (W/m) on each point depending on the local temperature. This intrinsic feature of the semiconductor heating element allows in some cases to dispense of using a thermostatic controller (self-regulation).

They can be cut on the adjusted length directly on the job site.

For your heat tracing installations and especially on temperature maintenance of hot water systems, we strongly recommend the combination of our electronic THS / E controllers with a Pt1000 sensor to apply directly on the pipe.

The latter are equipped with a current absorber for start up of self regulating heating cables. They are the guarantee of a rigorous and reliable electronics regulation (energy saving of + 50%).

The fluoropolymer insulation is the gaurantee of a perfect thermal and chemical resistance.

## Applications

*Temperature maintenance of baloons, tanks, vessels and pipes systems until 85°C.*

<p>Basic version</p>  <p>CAHT</p>	<p>Tinned copper braid version</p>  <p>CAHT+C</p>	<p>Braid + overjacket version</p>  <p>CAHT+CGf</p>
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*Do not use the CAHT heating cable on plastic pipe.*

*It is imperative to comply with FIQ93 operating instructions.*

*Warranty maxi exposure temperature : power ON = 120°C / power OFF 200°C.*

*Beyond these exposure temperatures use control thermostat.*

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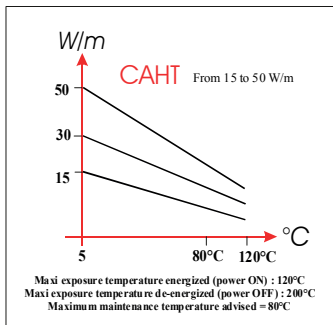
## Advantages

- can be cut directly on the adjusted length on the site.
- allow derivation from a unique and single feed point.
- semiconductor heating element adapts its power locally.
- good flexibility allowing the tracing of hydraulic organs (valves, pumps, ...)
- allow overlaps during implementation (self-regulating).
- maxi exposure temp energized : 120°C (power ON) / de-energized (power OFF) : 200°C.
- construction in accordance with the European standards in force.



	CAHT 15	CAHT 30	CAHT 50
Power at 5°C	15 W/m	30 W/m	50 W/m
Power at 80°C	7 W/m	15 W/m	26 W/m
I current	0.130 A/m	0.260 A/m	0.430 A/m
Tolerance	0 / +4 W/m	0 / +6 W/m	0 / +6 W/m
Supply conductors	Nickel copper 2*1.00 mm <sup>2</sup>	Nickel copper 2*1.25mm <sup>2</sup>	Nickel copper 2*1.25mm <sup>2</sup>

## 1 Main features.



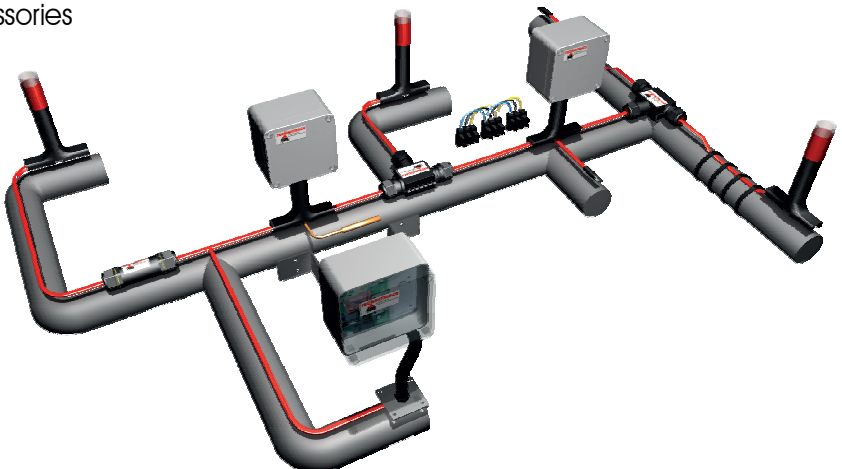
- FEP fluoropolymer jacket
- FEP fluoropolymer overjacket (CGF version) for corrosive and chemically aggressive environments.
- voltage: 230 V / 240 V / 50 or 60 Hz (115 V optional).
- thermal calibration: Max. rated current \* 2.
- use C or D curve circuit breakers.
- possibility of a maximum current spike of 3 \* In / 300ms.
- necessary use differential circuit breaker: 30 mA.
- maximum length / power point = approximately 150 m.
- maxi temperature exposure : power ON = 120°C
- maxi temperature exposure : power OFF = 200°C
- maxi temperature maintenance advised : 85°C

### CAHT 30.2 + C + Gf

- Fluoropolymer overjacket
- Timed copper braid (C) or stainless steel (S)
- Voltage: 1=110V - 2=230V
- Power in W/m at 5°C

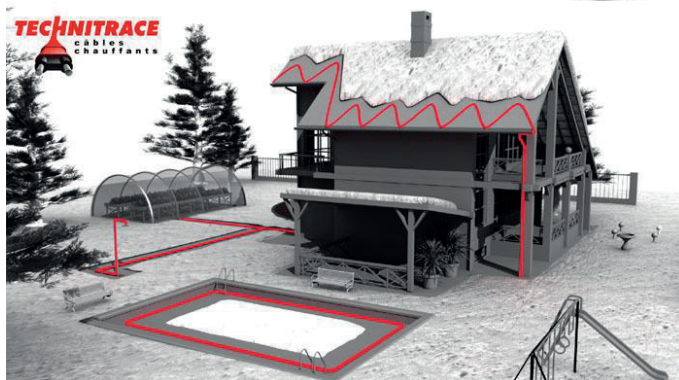
*Thermal dissipation curves are theoretical and given for information purposes*

## Accessories



# Self regulating heatin cable

## CABT/De-Icing



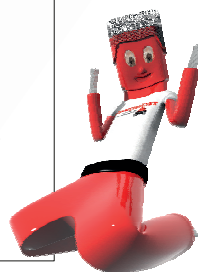
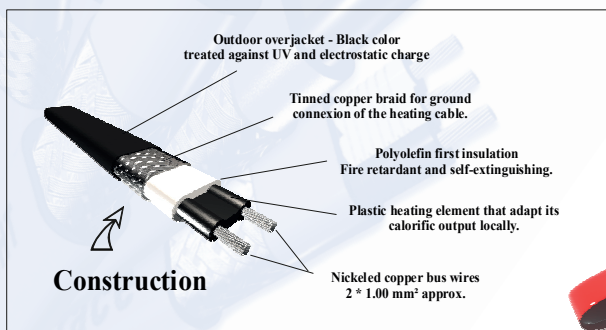
The self regulating heating cable CABT/De-Icing is specily designed to prevent against the accumulation of snow or ice on roofs and gutters.

The innovative technology of the Technitrace self-regulating heating adpts its calorific output (W/m) at each point. In presence of snow or ice, its calorific output will increase locally to melt the snow or the ice. When the heating cable will be in a dry atmosphere it will reduce its calorific output saving energy.

### Applications



- snow removal of roofs and particularly at low slopes,
- snow removal of gutters, connecting gutters between roofs,
- snow removal of gutter runs and heaving pipes,
- de-icing of the evacuation gutter, ...



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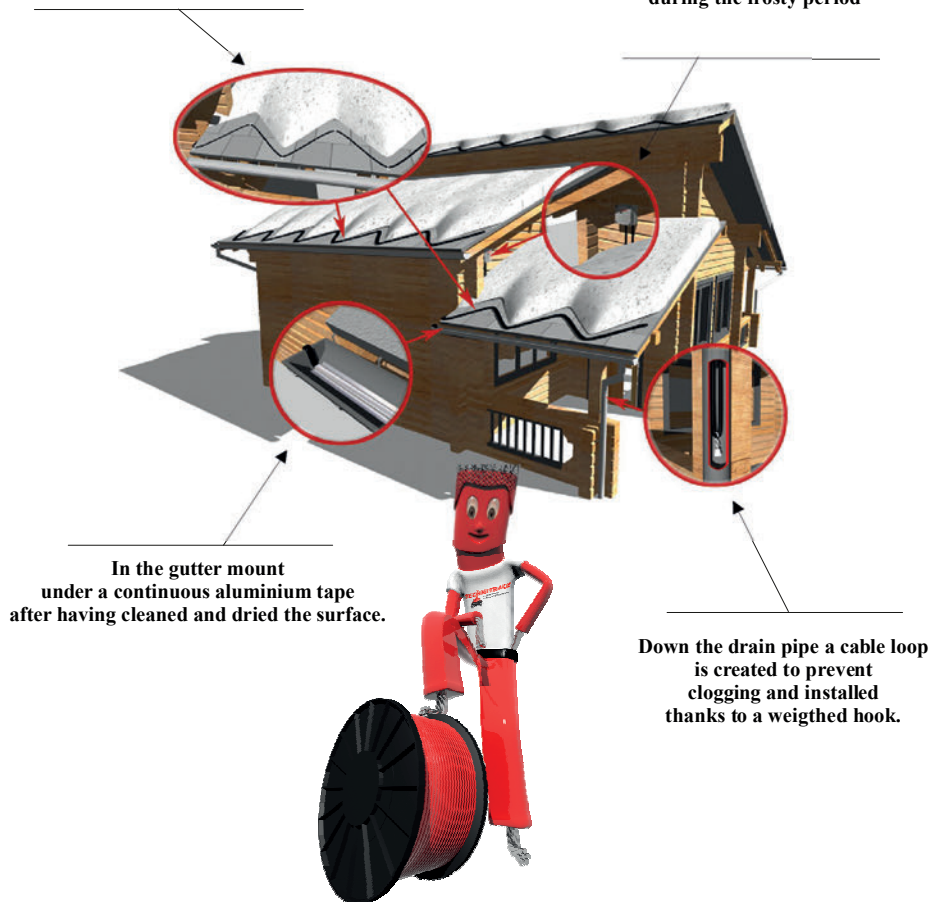


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On the roof: fixation approximately every 0.50m with stainless steel hooks

Connexion box equipped with a ambient thermostat insuring the automatic start up during the frosty period



### ***Precautions for use and special features***

Maximum length circuit : 110 m  
Maximum exposure power on : 65°C  
Maximum exposure power off : 85°C

Breaker thermal protection : 0.30 A/m  
Breaker sensibility : 30 mA advised  
Supply voltage : 230 V / 50 Hz

Output calorific power: following the thermal transfer : 40 to 20 W/m

**Your distributor or contact**



**VFL**  
End light to screw directly on a support tube to indicate that the cable is properly working.

**THS/T**  
Surface thermostat fixed directly on pipe with the support tube.

**BJS/S**  
Connexion and junction water proof box.

**EXT/T**  
End cape for heating cable thermo-retractable or to seal.

**T/CONNECT**  
Quick T water proof connector for heating cables.

**P/CONNECT**  
Quick water proof connector for extension of heating cables.

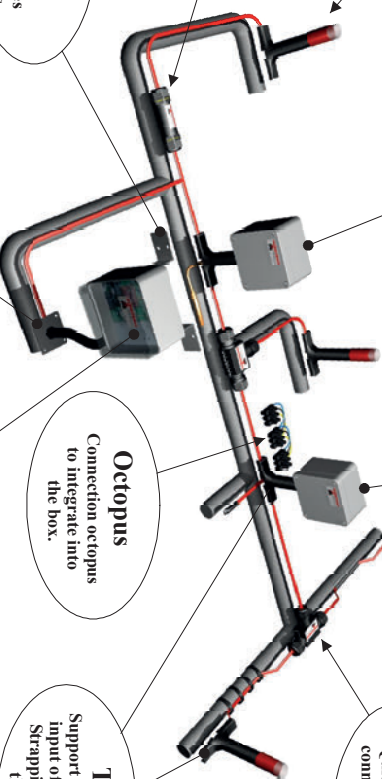
**EQ/FIX**  
Stainless steel support for boxes and thermostats.

**SC/FLEX**  
Input / Output insulation kit through a flexible protection tube.

**Octopus**  
Connection octopus to integrate into the box.

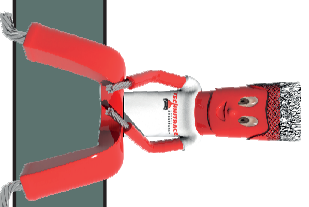
**THA/E**  
Electronic ambient thermostat with current limiter for self regulating heating cables.

**T/SCS**  
Support tube and direct input of cables in box. Strapping directly on the pipe.



**TECHNITRACE**  
heating cables

**Our accessories**



# Temperature control

## Ambient thermostat THA/C

Halogen free Polycarbonate box- IP 66 (CEI 529)  
thermostat circuit board- 2 output terminals/ maxi 16 A/230V/400 V  
Cut current on phase / common neutral  
0°C/+50°C - dim : 175\*125\*75 mm



## Electronic ambient thermostat THA/E

Halogen free polycarbonate box - IP 66 (CEI 529)  
130\*130\*73 mm / equipped with Novatrace electronic card  
1 Input 230 V - 1 controlled Output 230 V/16 A.  
Integrated inrush absorber current unit for SR cables.  
Ambiant temperature sensor included in M20 Gland.



## Electronic surface thermostat THS/E

Halogen free polycarbonate box - IP 66 (CEI 529)  
130\*130\*73 mm / Novatrace electronic card + LCD display  
1 Input 230 V - 1 controlled Output 230 V/16 A.  
Integrated inrush absorber current unit for SR cables.  
Temperature sensor Pt1000 length 2m / 0-100°C operating range.



## Mini programming console for THA/E

Mini programming console on support feet.  
Allows to re-programming Novatrace devices.  
Energy supply received directly from the Novatrace card.  
Digital LCD display / 3 mini push buttons.  
Programming manual supplied for level I and expert level II.



## ATEX surface thermostat Eex'd' - THD

Capillary surface thermostats with sensitive bulb  
temperature ranges available : 0-100°C or 50-250°C  
capillary protection by flexible sheath SC/FLEX  
Cut current = maxi 16 A - 230 V/400V  
Explosion proof box : Eex'd' IIC T6 - 140 \* 140 \* 89 mm  
4 holes 3/4"NPT + 2 plugs + Glands 3/4"NPT



## Surface thermostat THS/S and THS/SS

Water proof box 130\*130\*73 mm -IP 66  
Thermostat circuit board : maxi 16 A / 230 V / 400 V  
version THS/SS : potential free change contact ON/OFF.  
Temperature ranges available : 0 - 100°C or 50 - 250°C  
capillary protected by flexible sheath SC/FLEX.



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## Connecting devices

### Connecting and junction boxes BJK/S and BJK/RR

Halogen free Polycarbonate box - IP 66 (CEI 529)  
Knock out Input / temperature range : -40°C / + 80°C  
model BJK/S : 130\*130\*74 mm  
model BJK/RR : 175\*130\*74 mm  
Mobile terminals and power gland included



### Quick connectors P & T CONNECT

P-CONNECT : for extension junction  
IP 68 (Dmaxi = 35 mm).  
T-CONNECT : for T junction box IP 65  
temperature range : -20°C / +125°C  
section : mini : 1.00 mm² / maxi 2.50 mm²  
connexion blocks and washers included.



### ATEX connexion box BJE/EEx"e" for hazardous area

Increase security connexion box  
II C T6 (85°C) - Ex "e" Graphitized Polycarbonate  
4 holes M 20 + 3 plugs M20 / 1 power gland M20.  
IP 66 / Maxi current 10 A / 230 V / maxi section: 2.50 mm²  
DIN rail + 4 bridge terminals  
+ 2 ground terminals / 120\*120\*92 mm



### ATEX explosion proof connexion box BJD/EEx"d" for hazardous area

Explosion proof box  
for hazardous area  
II C T6 (85°C) - EEx "d" - cast iron  
3 holes 3/4" NPT + 1 plug



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## Miscellaneous accessories

### Aluminium adhesive tape ALU-BT or ALU-HT

Roll of adhesive aluminium tape  
width = 50 mm / length = 50 m +/- 10%  
Temperature range : ALU/BT : 105°C - ALU/HT : 200°C



### Adhesive tape POLY50 and FIV 200

Adhesive tape for heat cables strapping  
width = 19 mm / length = 50 m +/- 10%  
POLY 50 : polyester / maxi 60°C  
FIV 200 : armed fiber glass / maxi 150°C



### Modular electrical boxes CE 001 to CE 003

Pre assembled modular electric box  
CE 001 = Circuit breaker 16 Amps + differential 30mA  
CE 002 = Circuit breaker 25 Amps + differential 30mA  
+ Electronic temperature regulator REG 150  
+ power contactor : ask for request



### Temperature sensor PT1000 - length 2m

Temperature sensor PT1000 for electronic Novatrace box  
Flexible cable 2m / 0.75 mm<sup>2</sup> (other length on request)  
Water proof sensor IP x4 / Gland M20 included  
Available for ambient sensor or surface temperature  
for the electronic thermostats THA/E or THE/S.



### Output insulation and fixing tube for boxes T/SCS

Polycarbonate tube allowing direct fixing on process pipe  
of all boxes and thermostats :  
BJK/S, THA/C, THA/E, THS/S,....  
Direct entries of 3 or 4 heating cables.  
For pipe diam >20 mm / maxi temperature exposure 100°C.  
Height from baseplate / tube : 30/120 mm / M32



### Digital insulation tester

Digital insulation tester  
delivered in a storage case with  
2 connecting cables and crocs clips  
Insulation resistance mesure under 250 / 500 and 1000 Volts  
Measurement hold function (Hold)



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## Miscellaneous accessories

### Connection sets for normal zones.

Complete connexion set CAXT  
for self regulating heating cables CABT, CAMT & CAHT  
Thermo retractable 3/1 and 12/4 + gland M20



### ATEX/EEEx 'e' connection set

Complete connexion set for hazardous area  
(increased security) Eex'e'  
for self regulating heating cables  
CABT/Ex & CAHT/Ex



### ATEX/EEEx 'd' connection set

Complete connexion set for hazardous area  
(explosion proof security) Eex'd'  
for self regulating heating cables  
CABT/Ex & CAHT/Ex



**Other accessories available**  
**Do not hesitate to contact our technical departement**

### Virtual presentation on USB key

USB key which includes a virtual presentation animation  
of Techitrace company.  
Included all installation videos for all  
connexion kits.



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## Miscellaneous accessories

### Through insulation kit SC/CAxT

Perforated stainless steel plate  
Gland + gasket + nut  
SC/CAxT : for all self regulating heating cables



### Through insulation into flexible SC/FLEX

Perforated stainless steel plate  
Flexible grooved sheath length 500 mm  
+ 2 end fittings + 2 nuts



### Stainless steel fixing bracket EQ/FIX

Stainless steel folded fixing bracket  
for supporting  
BJK/S, BJK/RR, THA/C, THS, ...



### Voltage indicator lamp

Voltage indicator lamp for the front panel  
VOY230 for 230 V supply voltage or  
VOY400 for 400 V supply voltage  
opening 10 mm wide + bold.



### Self adhesive caution label ETI

Potential danger warning label  
black text on yellow background  
ELECTRIC HEAT TRACING  
Self adhesive



### Spare thermostatic insert

Printed circuit board with thermostatic insert  
for the replacement of surface thermostat  
THS/S or THS/SS  
Temperature available : 0-100°C or 50°C-250°C



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# Power management and regulation system **NOVATRACE**



*Ambiant electronic  
regulation **THA/E***



*Surface electronic  
regulation **THS/E***

The NOVATRACE electronic regulator has been specially developed for regulation of your electrical tracing installations using self-regulating heating cables. An integrated starting current absorber allows gradual power-up without over-calibration of thermal protections being necessary unlike the conventional control systems.

## Operation mode

The NOVATRACE regulator can be configured

- as a ambient controller: THA/E version (ambient temperature sensor)
- as a surface regulator: THS/E version (surface temperature sensor)

## Control modes

The regulation can be done according tow different control modes

- ON/OFF mode in the case of surface regulation with temperature sensor directly in contact with the pipe.
- chrono-proportional mode : power ON/OFF time ligne sequences according to the evolution of the ambient temperature over time  $Q=F(T_a)$  and regardless of the hydraulic regime of the pipe

## Energy control

At any time, the delivered power is in perfect harmony with the real need for the installation. The NOVATRACE system therefore allows perfect control of energy (savings of almost 50%), as well as temperature of maintenance which remains perfectly constant throughout the installation and this whatever the hydraulic regimes of the pipes.

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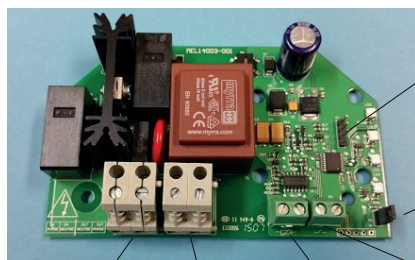


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## The NOVATRACE card



Connexion socket for the programming module.

Selection jumper digital mode or chrono proportional

Terminal block start-up forced / clock

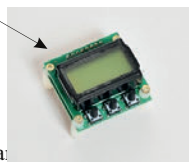
230V / 16A  
Input

Sensor terminal block  
PT1000

230 V / 16 A  
chrono-proportionnal  
output.

## Main advantages

- Ambient temperature sensor molded in PE M20.
- PT1000 temperature sensor offset by 2000 mm or more on request.
- range of use : 5°C to 120°C.
- works blindly (without visual console).
- mini programming console with digital display (option).
- energy saving because the power delivered over the entire network is the thermal image of the real calorific need.
- current absorber at start-up for self-regulating cables.
- 230 V / 50-60Hz power supply.
- under BJK/S IP 66 enclosure: dim 125\*125\*85 mm.
- elimination of the risks of overheating on the right of the dead a
- scalable system: possibility of changing the P0 and Tas parameters, differential, time base, current absorber, ...
- factory pre-settings: P0°C = 65% and TAS = 5°C.
- forced start on terminal for preheating.



## In box THS/E version



**In box THA/E  
version**





**SALES REPRESENTATIVE :**

