

By studying nature you can achieve extraordinary projects.



# experience evolution

This is the thermoregulation's new reality.

**Imit Control System** has decided to accept the challenge: new products, top quality, immediateness of working process, with a careful and specific look at renewable energies.

**Imit Control System** uses the decennial competence of IMIT to develop new strategies and objectives, to respond to market demands in the near future.

Making a good use of the skills acquired by the company, members of the team, suppliers and customers, **Imit Control System** gets a quality standard suitable to new technologies and innovation requirement.

Our products are the best that thermoregulation can offer: functionality and simplicity of operation, integration, design and energy saving.

IMIT has been synonym of quality for ninety years. **Imit Control System** is the new answer to all demands: using the experiences as a resource and the technology as the way.

There is no innovation without reliable competences to start from.

**Imit Control System.** We have accepted the challenge for the future.



#### Devices for the control of the solar panels plants:

- Differential thermostats
- Electronic control boards for complex plants, with temperature sensor control and activation of pumps or three way valves...
- ...



#### Appliances for the ambient comfort:

- Electronic control boards for heating or cooling
- External temperature sensors
- Ambient relative humidity sensors
- ...



#### Components for conditioning and heat pumps:

- Flow switch
- Electronic control board and remote control
- Hydraulic interfacing kit



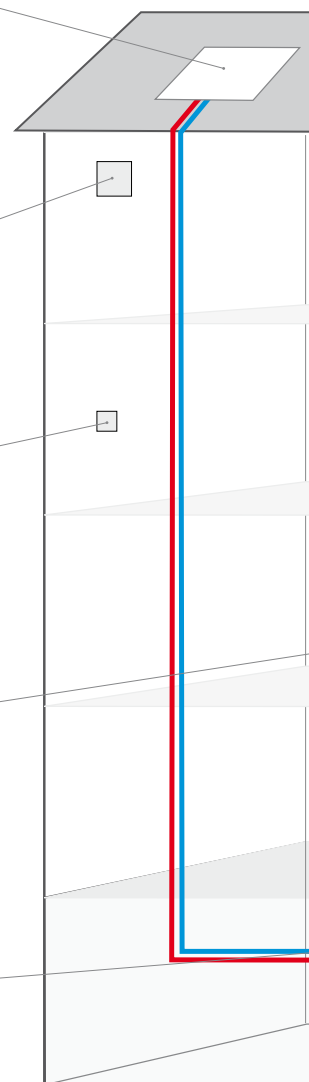
#### Consumptions' recording:

- Hydraulic heat modules with temperature regulation
- Modules for recording
- Stand-alone components
- Systems for the acquisition, the concentration and the reading of the consumption data with the possibility of telereading and telecontrol also from remote



#### Boiler or thermal power station components:

- Thermometers – Thermostats
- Manometers
- Thermo-manometers
- Volumetric counters
- Electronic control boards for regulation
- ...



## ICS philosophy

ICS has taken inspiration from nature to achieve efficient thermo-regulators, eco-friendly and absolutely unique, thanks to an experience matured in over **90 years** of research and development of the most innovative, reliable and precise solutions.

ICS has obtained and it can guarantee the most rigorous and selective quality certifications:



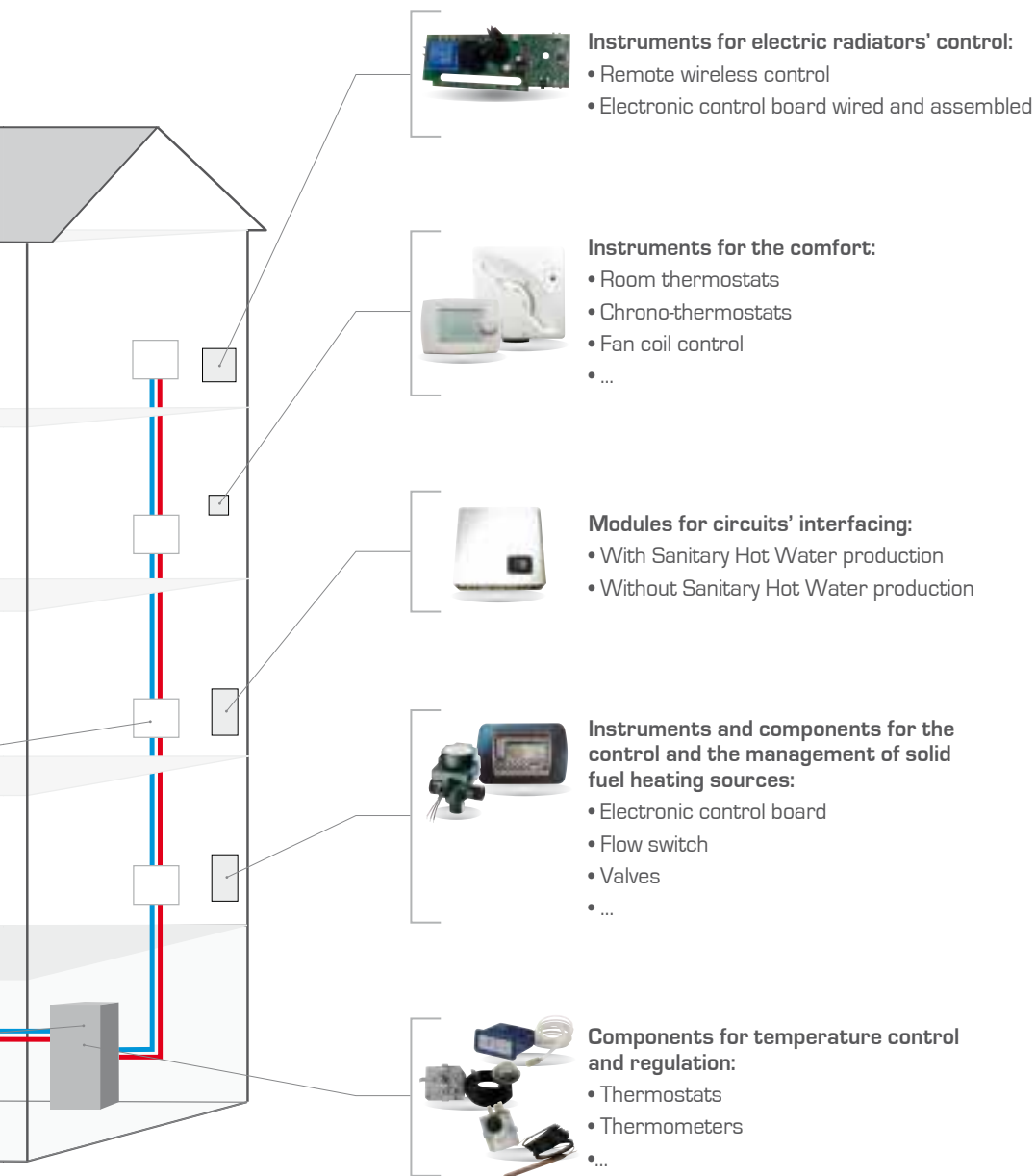
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## Product quality

Quality in all the production phases; this is the constant ICS objective. ICS suggests the best solutions, it guarantees the highest quality and respect the delivery times agreed with our customers.

The currently industrial reorganization plan aims both to strengthen ICS distinctive competences and make them constantly closed to the customer's needs, creating a more and more innovative, flexible and pro-active reality.

# » Imit Control System: the company



## ICS. A unique company, also in its customers' service

An excellent efficiency level is verifiable also through the competence and the organization of the customer service, where the customer can find experienced and reliable interlocutors... ICS patented.

The customer service is operative from Monday to Friday, from 8.00 a.m. till 6.30 p.m.

Telephones: **+39 0331 941681 / 680 / 740**

Fax: **+39 0331 973100**

## Customized solutions

ICS combines the Know-how of a long experience matured both in the **electromechanical** and in the **electronic field**, and it can guarantee personalized industrial and civil solutions to realize equipments on demand for any need. ICS pays attention to its customers' needs and elaborates the ideal solutions.



# SUMMARY

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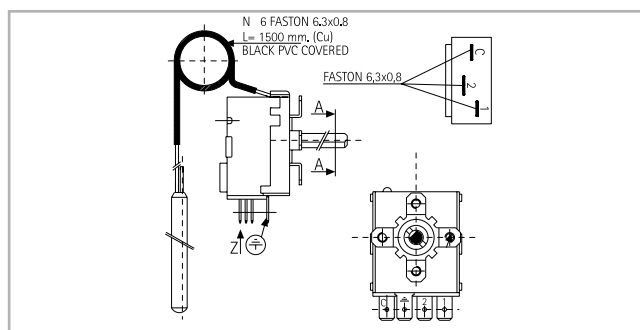
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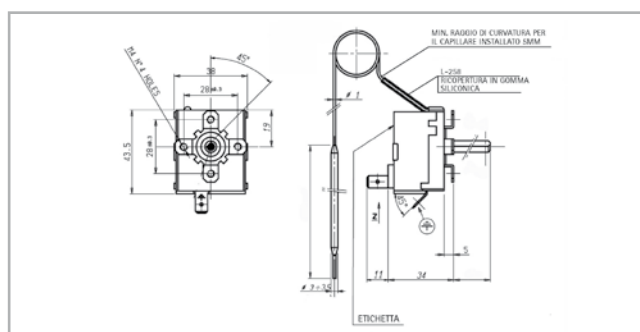
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# TR2



# TR3



8

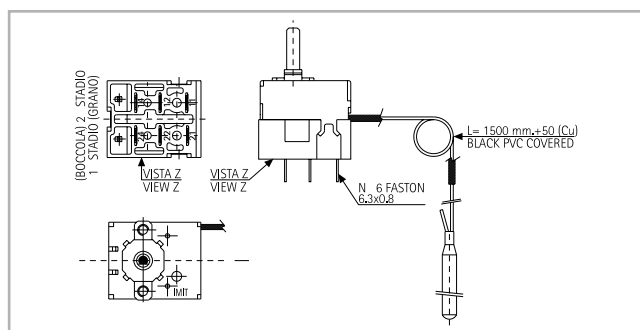
# THERMOREGULATORS – LIMITERS – INDICATORS

**TRZ**



2 stages adjustable thermostat, measuring temperature thanks to liquid filled sensing element. SPDT contacts, usually used to adjust the temperature of boilers, electric radiators, oven, washing machines and other various applications. The sensing bulb may be supplied with pocket or fitting for liquid sealing. It can be equipped with a mechanical device for contacts opening.

## 2 STAGES ADJUSTABLE THERMOSTAT



Contacts = Ag 1000/1000  
Contacts rating = 15 (2,5)A 250V ~  
Contacts = switching contacts for temperature increase

Max. head temperature = 80°C  
Min. capillary bending radius = 5 mm  
Connections = faston 6,3 x 0,8

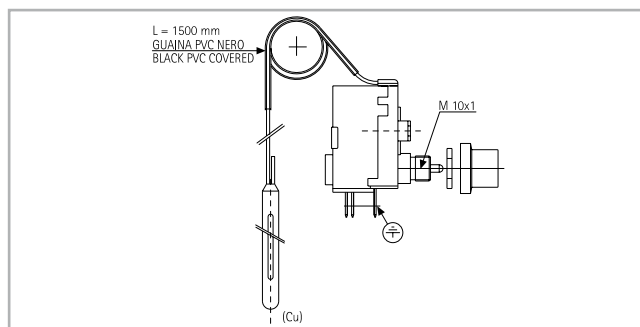
ITEM CODE		PACKAGE N.
544024	2 stages adjustable thermostat - temperature range 1° range 40°÷78°C - 2° range 47°÷85°C - Capillary 1500 PVC.	100
544023	2 stages adjustable thermostat - temperature range 1° range 38°÷78°C - 2° range 47°÷87°C - Capillary 900 PVC.	100

**LS1/LS3**



Safety limiter thermostat, measuring temperature thanks to liquid filled sensing element. SPDT contacts, manual or automatic reset, usually used to limit the temperature in boilers, electric radiators, oven, washing machines and other various applications when a maximum safety temperature is not to be exceeded. The sensing bulb may be supplied with pocket or fitting for liquid sealing.

## SAFETY LIMITER



Contacts = cutoff contacts for temperature increasing  
Max. head temperature = 85°C  
Max. bulb temperature = 125°C  
Bulb = Cu Ø6,5 x 95 mm  
Min. capillary bending radius = 5 mm  
Connections = faston 6,3 x 0,8

ITEM CODE	TEMPERATURE SETPOINT		RESET	CONTACTS RATINGS	CAPILLARY LENGTH	PACKAGE N.
	FIXED	ADJUSTABLE				
541510		90°/110°C -6K	manual	16(2,5)A/250V~	1000 mm	100
541550	100°C-6K		manual	16(2,5)A/250V~	1000 mm	100
541563	100°C-6K		manual	16(2,5)A/250V~	1500 mm cov. PVC	100
541750	100°C-6K		automatic	100mV 0,3A cc	1000 mm	100
541752 **	100°C-6K		automatic	100mV 0,3A cc	1000 mm	100
541569 *	100°C-6K		manual	16(2,5)A/250V~	1500 mm ric. PVC	30
541511 ***		90°/110°C-6k	manual	16(2,5)A/250V~	1000 mm	100

\* Single package. \*\*Polyvinyl chloride-coated bipolar cable, 800 mm length, 2,5 mm<sup>2</sup> section. \*\*\*Switching contacts SPDT NC 16(2,5)A/250V~ NA 0,5A/250V~.



# THERMOREGULATORS – LIMITERS – INDICATORS

## ACCESSORIES

FOR TR2 – TR3 – TRZ THERMOSTATS

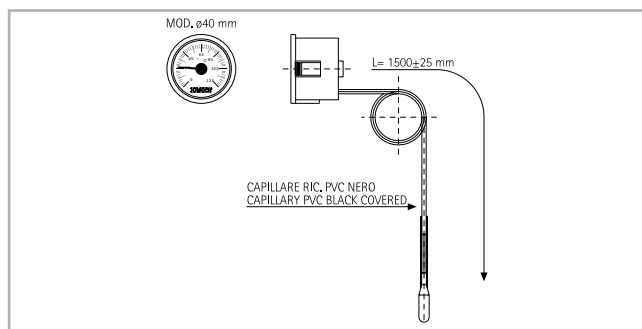


ITEM CODE		PACKAGE N.
556301	Knob Ø 42 mm. for adjustable thermostat 0°/90°C.	o.r.
556302	Knob Ø 42 mm. for adjustable thermostat (with arrow mark).	o.r.
556313	Knob Ø 42 mm. for adjustable thermostat 40°/210°C.	o.r.
556303	Knob Ø 42 mm. for adjustable thermostat 0°/120°C.	o.r.
556326	Knob Ø 42 mm. for adjustable thermostat 50°/300°C.	o.r.
556343	Knob Ø 42 mm. for adjustable thermostat 0°/40°C.	o.r.
556360	Knob Ø 42 mm. for adjustable thermostat -30°/+30°C.	o.r.
556501	Chromium plated bezel Ø 42 mm. for adjustable thermostat	o.r.
556503	Black bezel Ø 42 mm. for adjustable thermostat	o.r.
556978	Spring for knob Ø 42 mm.	o.r.
556979	Locking device for Ø 42 mm knob.	o.r.

## THERMOMETERS



Thermometer with liquid filled sensing bulb. Particularly suitable for boilers, refrigerators, catering equipment and household appliances. Available in different bodies and options: capillary length, bulb dimension, custom made dial.



ITEM CODE		PACKAGE N.
010247	Round thermometer Ø 52 mm - Working range: 0°/120°C - Capillary 1.500 mm PE covered Bulb Ø 6,5x15,5 mm - Black dial with white inscriptions - Black plain frame - M6 threaded tie-rod.	50
060107	Round thermometer Ø 37 mm - Working range: 0°/120°C - Capillary 1.500 mm PE covered Bulbo Ø 6,5x31 mm - White dial, black inscriptions.	50
060130	Round thermometer Ø 37 mm - Working range: 0°/120°C - Capillary 1.500 mm PVC covered Bulbo Ø 6,5x31 mm - White dial, black inscriptions.	50

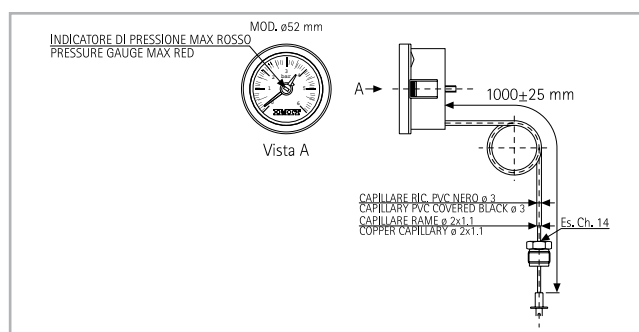
NOTE: on request available with custom features.

# THERMOREGULATORS – LIMITERS – INDICATORS

## PRESSURE GAUGES



Pressure gauge with capillary. Particularly suitable for boilers, steam cleaners and household appliances. Available in different bodies and options: capillary length, bulb dimension, custom made dial.



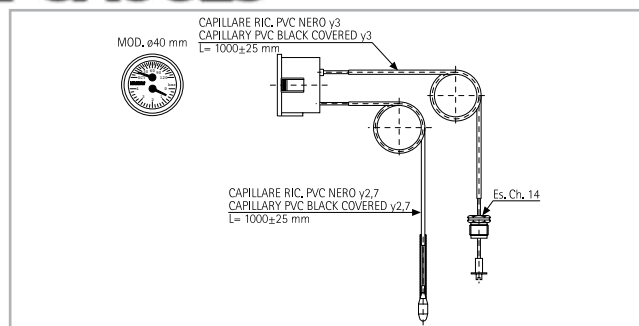
ITEM CODE		PACKAGE N.
035553	Round pressure gauge Ø 52 mm - Range 0/6 bar - Capillary 1.500 mm PE covered Valve coupling 14x1 - Black dial, white inscriptions - Black plain frame - M4 threaded tie-rod.	50
066226	Round pressure gauge Ø 37 mm - Range 0/4 bar - Capillary 1.500 mm PE covered Valve coupling 1/4 gas - White dial, black inscriptions, black frame.	50
066218	Round pressure gauge Ø 37 mm - Range 0/4 bar - Capillary 1.500 mm PVC covered Valve coupling 1/4 gas - White dial, black inscriptions, white frame.	50
066106	Round pressure gauge Ø 37 mm - Range 0/4 bar - Capillary 1.500 mm PVC covered Valve coupling 14x1 - Black dial, white inscriptions, black frame.	

NOTE: on request available with custom features.

## TEMPERATURE PRESSURE GAUGES



Temperature and pressure gauge with liquid filled sensing bulb (thermometer) and capillary with quick coupling (pressure). Particularly suitable for boilers and household appliances. Available in different bodies and options: capillary length, bulb dimension, custom made dial.



ITEM CODE		PACKAGE N.
030646	Round temperature pressure gauge Ø 52 mm - Working range 0°/120°C - 0/6 bar- Capillary 1.500 mm PE covered Bulb Ø 6,5x25 mm - Valve coupling 14x1 - Black dial, white inscriptions - Black plain frame - M4 threaded tie-rod.	50
028020	Round temperature pressure gauge Ø 40 mm - Working range 0°/120°C - 0/4 bar- Capillary 1.500 mm PVC covered Bulb Ø 6,5x25 mm - Valve coupling 1/4 gas - White dial, black inscriptions - White plain frame.	50

# THERMOREGULATORS – LIMITERS – INDICATORS

## ACCESSORIES FOR THERMOMETERS – PRESSURE GAUGES – TEMPERATURE PRESSURE GAUGES

ITEM CODE		PACKAGE N.
501576	Fastening clamp Ø 52mm	o.r.
501578	Fastening plug - M4 threaded tie-rod.	o.r.
501579	Fastening plug - M6 threaded tie-rod.	o.r.
001565	Non-return valve 14x1 - 1/2" NPT.	o.r.
001566	Non-return valve 1/4 gas - 1/2" NPT.	o.r.
001567	Non-return valve 1/4 gas - 1/4 gas.	o.r.
557205	Adapter for 1/4 gas pressure gauges (ISO 228).	o.r.
557206	Adapter for M 14X1 pressure gauges.	o.r.

## PROTECTION POCKETS



Waterproof protection pockets made with brass coupling and copper tube suitable for thermostatic and thermometric probes.

*Hexagonal brass coupling* = 22 mm OT 58

*Thread* = 1/2" NPT

*Max. temperature* = 130°C

*Max. external pressure* = 10 bar

*for code 555012* = 7 bar

*for code 555014* = 6 bar

CODICE ARTICOLO		CONF. N.
555001	Protection pocket Ø 7x8 mm. - L=50 mm.	o.r.
555002	Protection pocket Ø 7x8 mm. - L=100 mm.	o.r.
555004	Protection pocket Ø 7x8 mm. - L=120 mm.	o.r.
555034	Protection pocket Ø 15x16 mm. - L=100 mm.	o.r.
555035	Protection pocket Ø 15x16 mm. - L=120 mm.	o.r.
555012	Protection pocket Ø 15x16 mm. - L=100 mm. - Tipo sagomato.	o.r.
555014	Protection pocket Ø 15x16 mm. - L=120 mm. - Tipo sagomato.	o.r.
556559	Friction spring for protection pocket Ø 7x8 mm. - L=120 mm. piatta.	o.r.
556554	Friction spring for protection pocket Ø 15x16 mm. - L=100 mm. ondulata.	o.r.
556557	External spring for bulb fastening.	o.r.

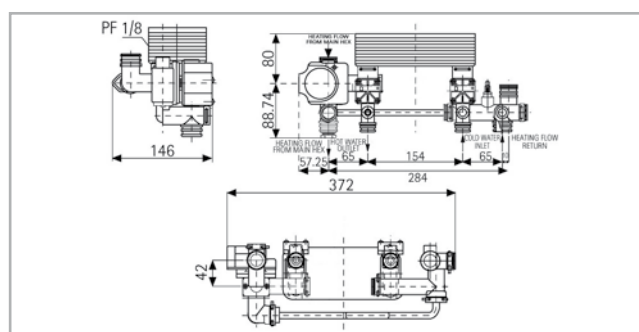
# SENSORS – ACTUATORS – CONTROLS

## WU-B2



Just one component combines all the functions necessary to a water unit block of a wall-mounted boiler, allowing a reduction of workmanship costs. Compared to a traditional system there is a performance improving, thanks to a low pressure drop on the heating circuit, a sanitary hot water fast output and a dimensional compactness easy to obtain using a standard circulator.

### WATER UNIT BLOCK



Max. working pressure on the sanitary circuit	= 10 bar
Testing pressure on the sanitary circuit	= 15 bar
Max. working pressure on the primary circuit	= 6 bar
Testing pressure on the primary circuit	= 9 bar
Max. water temperature while functioning	= 90°C
Max. ambient temperature	= 60°C
Power supply	= 240VAC/50Hz or 24VAC/50Hz
Switching time of the diverting valve to sanitary	= 3 or 1,5 seconds (*)
Switching time of the diverting valve to heating	= 9 or 4,5 seconds (*)
Diverting valve power consumption	= 3W
Switching flow rate for sanitary water	= ON = 2,7 / OFF = 1,9 (0,3) l/min (*)
Flowswitch electric contact (reed)	= 50 VA
Pipe connections	= according to DIN 3368

(\*) Different options depending on the application

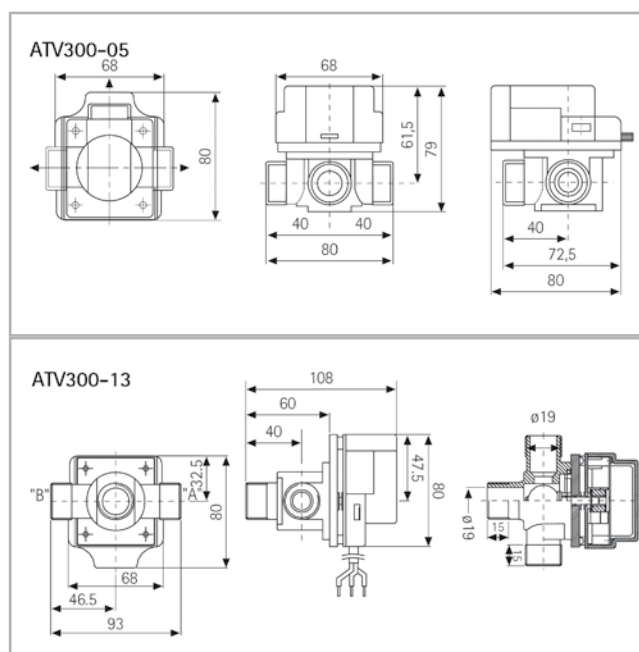
ITEM CODE		PACKAGE N.
561318	WU-B2 - Water unit block.	o.r.

## ATV 300



Fluid	= water
Max. working pressure	= 3,0 bar
Max. fluid temperature	= 90°C
Max. ambient temperature	= 60°C
Working time	= 6 o 12 sec. (50Hz)
Power consumption	= 3W
Power supply	= 220/240 Vac 50/60Hz
Hydraulic connections	= 3/4"

### 3 WAYS MOTORIZED DIVERTING VALVE



ITEM CODE		PACKAGE N.
561110	ATV300-05 - Brass body.	5
561112	ATV300-13 - Nylon 66 GF30% body.	5

# SENSORS – ACTUATORS – CONTROLS

## AFS

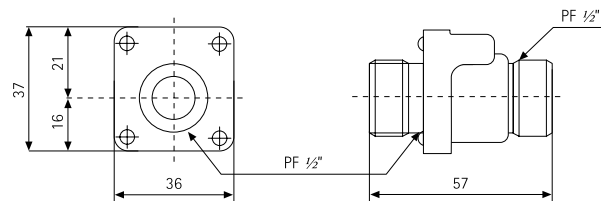
### FLOWSWITCH



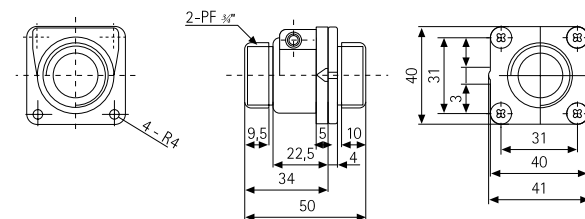
Flowswitch for water flow control in pipes. Available versions suitable for vertical or horizontal installation.

*Fluid* = acqua  
*Max. working pressure* = 15 bar  
*Contacts rating* = 0,2A  
*Contact resistance* = max 100 mΩ  
*Mounting position* = horizontal connection  $\pm 5^\circ$   
 (reed switch must be in upper position)  
 vertical connection  $\pm 5^\circ$   
 (flow direction must be upwards)

AFS42



AFS60



ITEM CODE		PACKAGE N.
561015	AFS42 -Flowswitch made in Nylon 66 GF30%. Switching flow rate = 1,7 l/min, 1/2" hydraulic connections.	10
561017	AFS42 - Flowswitch made in Nylon 66 GF30%. Switching flow rate = 2,7 l/min, 1/2" hydraulic connections.	10
561019	AFS60 - Flowswitch made in brass. Switching flow rate = 7 l/min, 3/4" hydraulic connections.	10
561049	AFS71 - Flowswitch made in brass. Switching flow rate = 16,7 l/min, 1" hydraulic connections.	10

## AC02

### SAFETY UNIT CIRCUIT BOARD



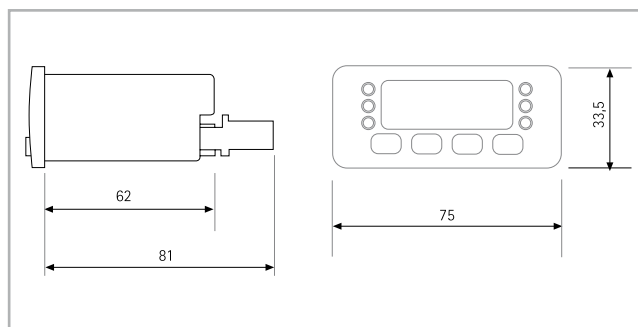
ITEM CODE		PACKAGE N.
576302	AC02F - Control circuit board for gas atmospheric burners provided with open combustion chamber and discontinuous operation, non-volatile lock and manual reset. This appliance checks the constant presence of the flame and the safety thermostat status. "Td" Pre-washing interval = 2 sec. "Ts" Safety interval = 10 sec.	10
576300	AC02VF - Control circuit board for gas atmospheric burners provided with open combustion chamber and discontinuous operation, non-volatile lock and manual reset. This appliance checks the constant presence of the flame and the air differential pressure switch status. "Td" Pre-washing interval = 2 sec. "Ts" Safety interval = 10 sec.	10
577030	AC02E - FOR UNIT HEATERS - Control circuit board for gas atmospheric burners provided with open combustion chamber and discontinuous operation, non-volatile lock and electrical reset. This appliance checks the constant presence of the flame and the safety thermostat status. "Td" Pre-washing interval = 2 sec. "Ts" Safety interval = 10 sec.	10

# SENSORS – ACTUATORS – CONTROLS

**TRE**



## DIGITAL THERMOMETERS AND THERMOREGULATORS

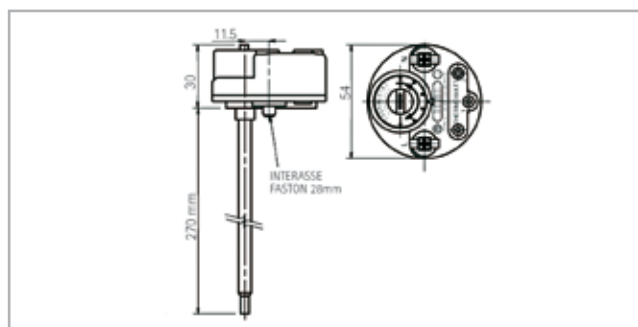


ITEM CODE		PACKAGE N.
547002	TRE/1P - Digital thermometer suitable for panel mounting - Working range: -50°/+150°C (resolution 1°C) Power supply 230Va.c. with incorporated transformer - Dimensions 62x28 mm (front part) x40 mm (depth) - Complete with probe (model PTCS Code 547007) - Snap-in fastening by means of elastic-holding wings.	10
547001	TRE/2 - Digital thermometer suitable for panel mounting - Working range: -50°/+150°C (resolution 1°C) - Power supply 12Va.c./d.c. - Dimensions 74x32 mm (front part) x65 mm (depth) - Complete with probe (model PTCS Code 547007) + screws and spring holder.	10
547003	TSE/1 - Digital thermoregulator with 1 output (switching relay) suitable for panel mounting - Working range: -50°/+150°C (resolution 0,1°C or 1°C) - Power supply 12Va.c./d.c. - Dimensions 74x32 mm (front part) x65 mm (depth) - Integrated alarm BUZZER and parameter configuration through PASSWORD - Complete with probe (model PTCS Code 547007) + screws and spring holder.	10
547004	TSE/2 - Same as model TSE/1 but with 2 output (1 switching relay + 1 cutoff relay).	10
547005	TRT/1 - Digital thermoregulator with de-frost cycle management suitable for panel mounting (refrigeration applications) - Working range: -50°/+99°C (resolution 1°C) - Power supply 230Va.c. with incorporated transformer - Output: switching relay - Dimensions 74x32 mm (front part) x65 mm (depth) - Integrated alarm BUZZER and parameter configuration through PASSWORD - Complete with probe (model PTCS Code 547007) + screw and spring holder.	10
547011	NTC probe suitable as spare probe for TRE/1P, TRE/2 models or as alternative to PTCS probe for TSE/1, TSE/2, TRT/1 models.	o.r.
547007	PTCS - PTC temperature probe with sylicon -rubber cable L. 1.500 mm - Sensing element protection pocket Ø 6,8 mm Working range: -60° ÷ 200°C. - 990 Ω at 25°C ± 1% - Connections with 2 poles cables - Suitable as spare probe for the following models: TRE/1P - TRE/2 - TSE/1 - TSE/2 - TRT/1.	o.r.

**MGR**



## COUPLING THERMOSTAT FOR ELECTRIC WATER-HEATER



ITEM CODE		PACKAGE N.
554760	Adjustable temperature 10°/80°C - Rod Ø 6x270 mm. - Provided with lamp-holder coupling.	50



# SENSORS – ACTUATORS – CONTROLS

## RESISTORS

UNIT COPPER RESISTOR



ITEM CODE		PACKAGE N.
550660	1.000W/230Va.c. - 1" 1/4 G. - L=300 mm. complete with thermostat protection pocket.	50
550670	1.200W/230Va.c. - 1" 1/4 G. - L=300 mm. complete with thermostat protection pocket.	50
550680	1.500W/230Va.c. - 1" 1/4 G. - L=300 mm. complete with thermostat protection pocket.	50
550200	2.000W/230Va.c. - 1" 1/4 G. - L=400 mm. complete with thermostat protection pocket.	50

## BC42

BIMETALLIC THERMOSTAT



ITEM CODE		PACKAGE N.
557500	Contact microswitch - Silver contacts - Suitable as temperature limiter for fan-coils, unit heaters, etc. - Closing temperature $42^{\circ}\text{C} \pm 3,5^{\circ}\text{C}$ - Opening temperature $32^{\circ}\text{C} \pm 3,5^{\circ}\text{C}$ Available with 250 mm. cable - Complete with connection terminals and fastening stainless steel springs.	20

## PROGRAMMER CLOCKS



ITEM CODE		PACKAGE N.
557268	Quartz programmer clock allowing daily settings provided with back-up function (72 hours) - 10-min segments dial - Switching relay (16A/250V~) - Power supply 230Va.c. 50/60Hz - Dimensions 72x72 mm.	10
557269	Quartz programmer clock allowing weekly settings provided with back-up function (72 hours) - 1-hour segments dial - Switching relay (16A/250V~) - Power supply 230Va.c. 50/60Hz - Dimensions 72x72 mm.	10

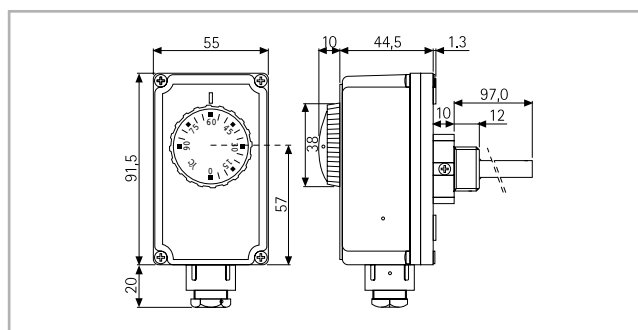
# THERMOREGULATORS – INDICATORS

TC2



Immersion thermostat, measuring temperature thanks to liquid filled sensing element. SPDT contacts, complete with water proof protection pocket. The thermostat, usually used to measure temperature on the primary heating pipe circuit is particularly suitable for automatic adjustment of boilers, pumps and other various applications. It's available also in capillary version. Approvals: ENEC, DIN, ISPESL, conformity to PED standards.

## IMMERSION ADJUSTABLE THERMOSTAT



*Contacts rating* = 10(2,5)A/250V~  
*Contacts* = switching or closing contact for temperature increasing  
*Max. head temperature* = 80°C  
*Max. bulb temperature* = 125°C  
*Temperature rate of change* = 1°K/min  
*Protection degree* = IP40  
*Cover colour* = orange

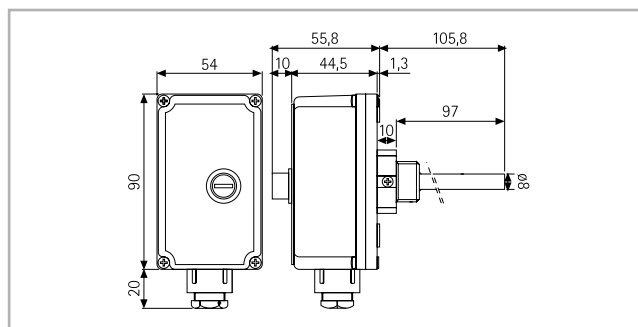
ITEM CODE	TEMPERATURE RANGE	DIFFERENTIAL	MAX. BULB TEMPERATURE	CAPILLARY LENGTH	PROTECTION POCKET 1/2" NPT	COPPER BULB	METAL BASE	PACKAGE N.
542470	0°/90°C	$\Delta t = 4 \pm 1K$	130°C		7X8X100 mm			20
542425	0°/90°C	$\Delta t = 4 \pm 1K$	130°C		7X8X200 mm			20
542441	40°/210°C	$\Delta t = 9 \pm 2K$	250°C		7X8X100 mm		46x72 mm	20
542440	40°/210°C	$\Delta t = 9 \pm 2K$	250°C		7X8X200 mm		46x72 mm	20
542562	0°/90°C	$\Delta t = 4 \pm 1K$	130°C	1000 mm		Ø 6,5x95 mm		20

LSC1



Immersion thermostat, measuring temperature thanks to liquid filled sensing element. Single pole contacts, safety limiter with manual or automatic reset and fail-safe protection safety in the event of capillary breakage complete with water proof protection pocket. The thermostat, usually used to measure temperature on the primary heating pipe circuit is particularly suitable for heating plants and for all the applications when a maximum temperature is not to be exceeded. Approvals: ENEC, DIN, ISPESL, conformity to PED standards.

## IMMERSION SAFETY LIMITER THERMOSTAT



*Contacts rating* = 10(2,5)A/250V~  
*Contacts* = closing contact for temperature increasing  
*Temperature rate of change* = 1°K/min  
*Max. head temperature* = 80°C  
*Max. bulb temperature* = 125°C  
*Protection degree* = IP 40  
*Fairlead* = M 20 x 1,5  
*Cover colour* = orange

ITEM CODE	LIMITER TEMPERATURE		TOLERANCE	PROTECTION POCKET 1/2" NPT	PERFORATED POCKET	DIFFERENTIAL	RESET	PACKAGE N.
	ADJUSTABLE	FIXED						
543010	90°/110°C		+0/-6K	8X7X120 mm		Temp. Int. -15K	manual	20
543031		100°C	+0/-6K	8X7X100 mm		Temp. Int. -15K	manual	20
543151	90°/110°C		+0/-6K		Ø 16X280 mm	Temp. Int. -15K	manual	20



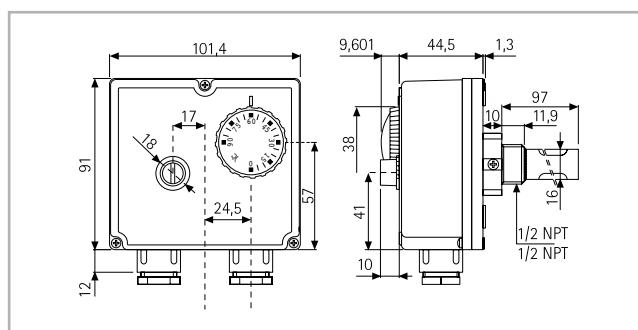
# THERMOREGULATORS – INDICATORS

**TLSC**



Encased immersion double thermostat, single pole contacts, liquid expansion sensing elements, works as temperature adjuster and limiter with manual reset (TLSC) or automatic reset (TLSC/A) and failsafe protection in the event of capillary breakage. It comes complete with protection pocket. Approvals: ENEC, DIN, ISPEL, conformity to PED standards.

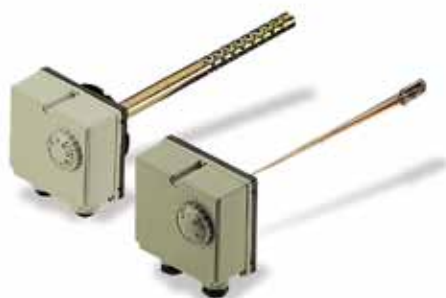
## IMMERSION ADJUSTABLE AND LIMITER DUAL THERMOSTAT



*Contacts rating* = 10 (2,5) A 250V ~  
*Contacts* = closing for temperature increasing  
*Max. head temperature* = 80°C  
*Max. bulb temperature* = 125°C  
*Thermal gradient* = 1°K/min  
*Protection degree* = IP 40  
*Fairlead* = M 20 x 1,5  
*Cover colour* = orange

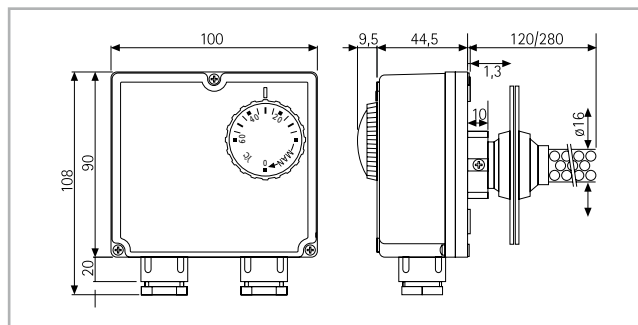
ITEM CODE	TEMPERATURE RANGE	DIFFERENTIAL	LIMITER TEMPERATURE		POCKET DIMENSIONS	RESET	PACKAGE N.
			ADJUSTABLE	FIXED			
542714	0°/90°C	$\Delta t = 4 \pm 1K$	90°/110°C+0/-6K		15X16X100 mm	manuale	20
542731	0°/90°C	$\Delta t = 4 \pm 1K$		100°C+0/-6K	15X16X100 mm	manuale	20

**TTCA**



Double adjustable thermostat for burner control (internal regulation and fan functioning (external regulation) particularly suitable for hot air generators. Approvals: ENEC.

## DUAL THERMOSTAT FOR HOT AIR GENERATORS



*Contacts rating* = 10 (2,5) A 250V ~  
*Adjustable temperature FAN* = 0°/60°C  
*Adjustable internal temperature* = 30°/120°C  
*Contacts* = Ag 1000/1000  
*Protection degree* = IP 40  
*Independent regulation elements* = 2  
*Fairlead* = M 20 x 1,5  
*Max. head temperature* = 80°C  
*Max. bulb temperature* = 150°C  
*Cover colour* = grey

ITEM CODE	POCKET	POCKET DIMENSION	JOINT AND FLANGE ON REQUEST	PROVIDED WITH JOINT AND FLANGE	PACKAGE N.
542860	perforated	Ø 16X120 mm		•	20
542870	perforated	Ø 16X280 mm		•	20
542873	bulbfasteningpin	foro 12X280 mm	•		20
SPECIAL VERSION					
542833	External and internal adjustable temperature 0°/90°C - provided with pocket 15x16x100 mm.				20

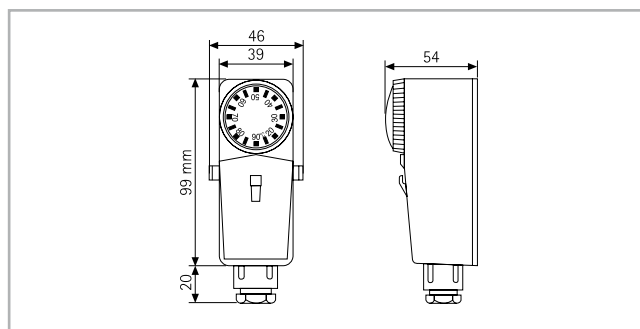
# THERMOREGULATORS – INDICATORS

**BRC**



contacts. Provided with fair lead. It's particularly suitable for measuring temperature on heating systems, domestic cylinders and other various applications. Thermostat clamping is made by means of a spring-brand, assuring a perfect contact with the pipes and vessels. Approvals: ENEC.

## BIMETALLIC CONTACT THERMOSTAT



<i>Temperature range</i>	= 20°/90°C
<i>Differential</i>	= 8± 3K (adjustable)
<i>Contacts</i>	= Ag 1000/1000
<i>Contacts rating</i>	= 16(2,5) A/250 V~
<i>Number of automatic cycles</i>	= 11 (100.000)
<i>Temperature rate of change</i>	= 1°K/min.
<i>Max. head temperature</i>	= 80°C
<i>Protection degree</i>	= IP 20
<i>Fairlead</i>	= 3/8" G
<i>Cover colour</i>	= orange

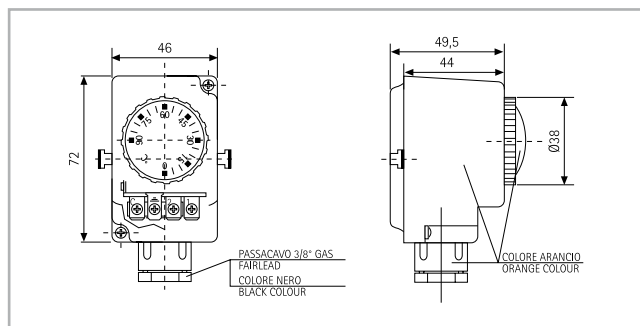
ITEM CODE		PACKAGE N.
545610	External regulation of the temperature.	50
545860	Internal regulation of the temperature.	50

**TCR**



Encased contact thermostat, measuring temperature thanks to liquid filled sensing element. Cutoff or switching contacts. Provided complete with the fairlead. It's particularly suitable for measuring temperature on heating systems, domestic cylinders and other various applications. Thermostat clamping is made by means of a spring-brand, assuring a perfect contact with the pipes and vessels. Approvals: ENEC.

## CONTACT CAPILLARY THERMOSTAT



<i>Differential</i>	= 10±3K
<i>Max. head temperature</i>	= 55°C
<i>Protection degree</i>	= IP40
<i>Contacts rating</i>	= 10(2,5)A/250V~
<i>Cover colour</i>	= orange

CODICE ARTICOLO		CONF. N.
543451	Capillary bulb contact thermostat. Temperature range (external): 0°÷90°C	50
543453	Capillary bulb contact thermostat. Temperature range (internal): 10°÷65°C	50

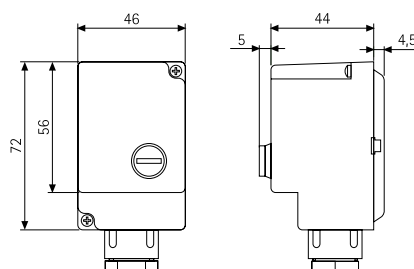
# THERMOREGULATORS – INDICATORS

TCS



Encased contact thermostat, measuring temperature thanks to liquid filled sensing element. Cutoff or switching contacts. Provided complete with the fairlead. It's particularly suitable for floor heating systems. Thermostat clamping is made by means of a spring-brand, assuring a perfect contact with the pipes and vessels. Approvals: ENEC.

## SAFETY CONTACT CAPILLARY THERMOSTAT



Pre-setting limiter temperature = 60°C  
 Temperature range = 40°÷70°C  
 Differential = 0-10K  
 Manual reset  
 Reset temperature = cutoff -25K±8K  
 Protection degree = IP 40  
 Isolation class = I  
 Max. head temperature = 55°C  
 Contacts ratings = C-1: 0,5A/250V~  
                           C-2: 10(2,5)A/250V~  
 Output = cutoff contacts  
 Action type = 1B  
 Setting = normal  
 Fairlead = 1/8" GAS  
 Mount = on pipe

ITEM CODE		PACKAGE N.
543454	Safety contact thermostat.	50

TA IP54

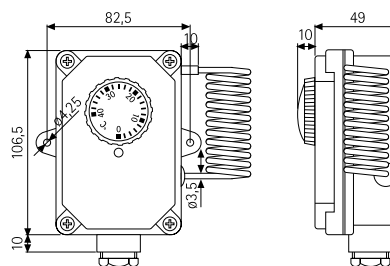


Running out item!



Encased room thermostat with an external liquid filled sensing element. It's provided with a painted aluminium case. It's particularly suitable for the control of temperature in hostile environments such as greenhouses, stables, garages and workshops.

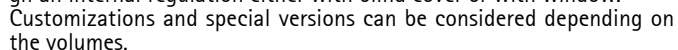
## ROOM THERMOSTAT IN TIGHT CONTAINER



Contacts = Ag 1000/1000  
 Contacts ratings = 10(2,5)A 250V~  
 Thermal gradient = 1°K/min  
 Max. bulb temperature = 50°C  
 Test class = II (100.000)  
 Fairlead = PG 13,5 1/2" G

ITEM CODE	ADJUSTABLE TEMPERATURE	BULB	CONTACTS	BOX	PROTECTION DEGREE	PACKAGE N.
544600	0°/40°C	spiral	switching	aluminium	IP54	50
544601	-5°/+35°C	spiral	switching	aluminium	IP54	
544610	0°/40°C	spiral	switching	ABS/Polycarbonate	IP40	

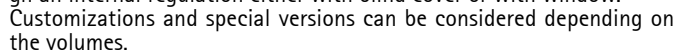
**ETR**



*Temperature range* = da -30° a 240°C  
*Differential* = da 3 a 6 °C  
*Contacts ratings* = 16(2,5)A/250Vac  
*Max. operating temperature* = 65°C  
*Protection degree* = IP54  
*Fairlead* = M20 x 1,5  
*Number of automatic cycles* = II (100.000 cycles)  
*Tracking index* = PTI 250 (KB250)  
*Contacts* = switching (SPDT)

ITEM CODE	TEMPERATURE RANGE	DIFFERENTIAL	MAX.BULB TEMPERATURE	BULB DIMENSION	CAPILLARY LENGTH	FIXABLE ON DIN SYMMETRICAL SECTION	PACKAGE N.
544400	0/+55 ±2°C	3 ±1 °C	60°C	9,5x92	Ni side	With accessory to be ordered separately	5
544402	-35/+35 ±2°C	3 ±1 °C	60°C	6x120	NI 2000	With accessory to be ordered separately	5
544401	-35/+35 +3°C	3 +1 °C	60°C	9.5x92	Ni side	With accessory to be ordered separately	5

# ERT



*Temperature range* = da -30° a +60°C  
*Differential* = da 1,5 a 3 °C  
*Contacts ratings* = 16(2,5)A/250Vac  
*Max. operating temperature* = 65°C  
*Protection degree* = IP54  
*Fairlead* = M20 x 1,5  
*Number of automatic cycles* = II (100.000 cycles)  
*Tracking index* = PTI 250 (KB250)  
*Contacts* = switching (SPDT)

ITEM CODE	TEMPERATURE RANGE	DIFFERENTIAL	MAX.BULB TEMPERATURE	BULB DIMENSION	CAPILLARY LENGTH	FIXABLE ON DIN SYMMETRICAL SECTION	PACKAGE N.
544405	-5/+35 ±2°C	3 ±1 °C	50°C		Ni spiral	With accessory to be ordered separately	5
544404	0/+40 ±2°C	2 ±1 °C	50°C		Ni spiral	With accessory to be ordered separately	5

# THERMOREGULATORS – INDICATORS

## ESL



ESL is an encased limiter for measuring temperature in different applications, particularly suitable for environments with high pollution degree.

IP54 protection degree.

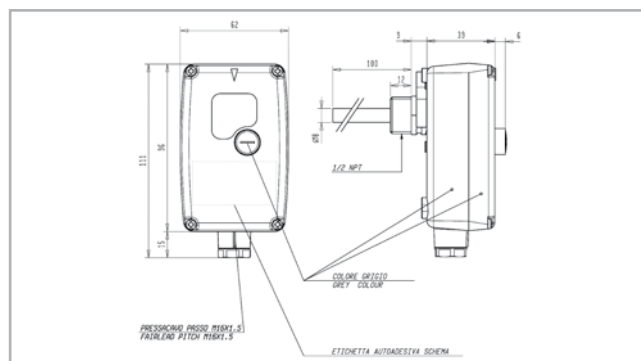
The liquid filled sensing element is able to operate in temperature ranges between 70° and 240°C, depending on the configurations.

Equipped with single pole switch in deviation (switch in deviation only for signal), the device can be used in different conditions and with different sensors, such as remote bulb or probes and wells.

The eventual regulation (range at 20°C) can be protected by tampering and accidental operation, through an internal regulation either with blind cover or with window.

Customizations and special versions can be considered depending on the volumes.

### ENCASED LIMITER WITH HIGH PROTECTION DEGREE



*Temperature Range* = da 70° a +240°C  
*Contacts Ratings* = 16(2,5)A/250Vac  
*Max. operating Temperature* = 65°C  
*Protection Degree* = IP54  
*Fairlead* = M20 x 1,5  
*Tracking Index* = PTI 250 (KB250)  
*Contacts* = switching (SPDT)

ITEM CODE	TEMPERATURE RANGE	DIFFERENTIAL	MAX.BULB TEMPERATURE °C	BULB DIMENSION	CAPILLARY LENGTH	Fixable on DIN symmetrical section	PACKAGE N.
544451	100 0/-6°C	15/25 °C	125		Pocket 8x100 1/2" NPT	With accessory to be ordered separately	5

## ETR – ERT – ESL ACCESSORIES

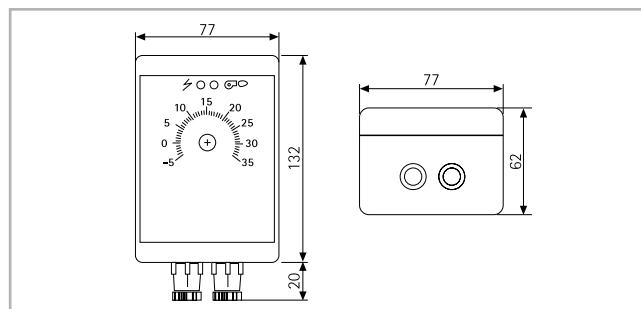
ITEM CODE		PACKAGE N.
008755	Accessories Bag for fixing on DIN bar	a.r.

## TAE/S



Electronic room thermostat in tight container, with integrated circuit and high sensitive NTC temperature sensor. It's equipped with 2 LED: the red one displays heating ON, the green one displays connection to the power supply. It's particularly suitable for the control of temperature in hostile environments such as greenhouses, stables, garages and workshops.

### ELECTRONIC THERMOSTAT IN TIGHT CONTAINER



*Power supply* = 230Va.c./50Hz  
*Temperature range* = -5°/+35°C  
*Temperature probe* = NTC  
*Differential* = 1K  
*Operating temperature* = -10°C...+60°C  
*Operating humidity* = 10...90%  
*Contacts* = in commutazione  
*Contacts rating* = 6(1)A/250V~  
*Protection degree* = IP54  
*Probe length* = 1,5m

ITEM CODE		PACKAGE N.
560051	Electronic thermostat in tight container	5
556602	Spare probe for TAE/S with cable L=1.500 mm	a.r.

# CLIMATIC REGULATION

## SRP Simple

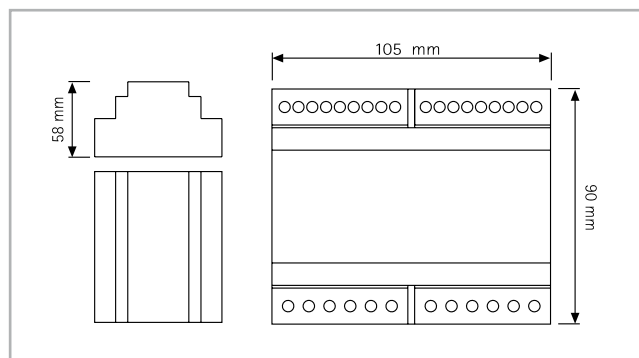


### CLIMATIC REGULATOR SUITABLE FOR FLOOR HEATING

The SRP Simple Climatic Regulator controls the heating plant in order to obtain the best comfort while saving energy. It's especially developed for floor heating. It's easy to install and program and holds many functions in a compact lay out.

### GENERAL FEATURES

- Complete and versatile regulator, suitable for many different applications.
- Tested electronic control, to guarantee comfort and reliability
- Compact dimensions for easy installation.
- SRP Simple controls in a easy and immediate way the climatic regulation of a floor heating or a radiating panel plant.
- It allows the control of an additional high temperature circuit. The inlet temperature of the first circuit can have a moving setpoint (climatic regulation with external probe) or a fixed setpoint, adjustable by keyboard. In the second circuit only the pump is controlled.
- The regulator works both in heating and cooling function. Thanks to a dew point monitor is kept under control the formation of condense and with an additional output a fancoil unit or a dehumidifier can be controlled.
- Adjustable opening and closing valve time, for a complete compatibility with all the valves available.
- The regulator is provided with all the necessary safety parameters.
- Climatic regulation and consequently the inlet temperature is corrected in function of the room temperature, measured by a probe or a room thermostat (remote control). Proportional-integrate-derivative regulation algorithm (PID).
- Pump control output with adjustable delayed stop and possibility of temporized functioning while plant turned off.
- Plant parameters adjustable with password to avoid accidental settings.
- Compact dimensions and DIN rail mountable. Provided with wall mounting plate.



*Power supply* = 230 Vac $\pm$ 10%-50Hz  
*Power consumption* = 4VA  
*Protection degree* = IP40 (a prodotto installato)  
*Storage temperature* = -5°C ...+65°C  
*Operating temperature* = 0 ...+50°C  
*Humidity* = 30 ... 90% Rh non condensante  
*Plastic box* = ABS  
*Contact ratings* = 5(2)A/250V~

ITEM CODE		PACKAGE N.
578250	SRP Simple climatic regulator.	o.r.

## CLIMATIC REGULATOR ACCESSORIES

ITEM CODE		PACKAGE N.
578260	Dew point monitor.	o.r.
577667	External probe - 2m cable - IP65 box - NTC 1% - 10KOHM at 25°C.	o.r.
058007	Primary circuit inlet probe TRP 150 - Diam. 6,5x36mm - 2m sylicon cable.	o.r.
555001	Pocket for water immersion probe - Dim. 7x8x47mm - Coupling 1/2" NPT.	o.r.
578261	Room temperature probe - IP 20 box - NTC 1% 10KOHM at 25°C.	o.r.



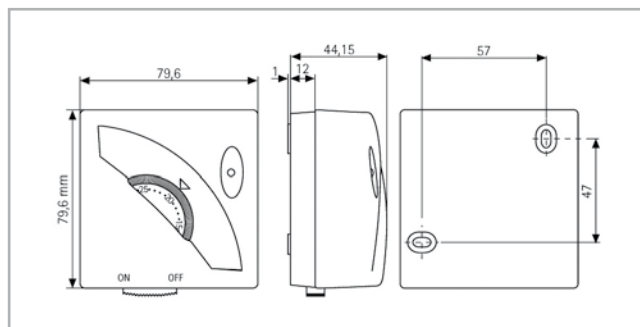
# ROOM THERMOSTATS

## TA3



The TA3 is a room thermostat with operating gas filled bellows. It's the new version of the TA2n thermostat. It heirs his easy functioning and long lasting performances. The TA3 proposes a new ergonomic and removable knob (to avoid accidental decalibration) and a modern design. It's suitable to every kind of environment. The knob offers the possibility to limit and block temperature setting. It's available in the following versions: with or without LED, ON/OFF and Heating/Cooling mode.

### MECHANICAL ROOM THERMOSTAT



*Contacts rating* = 16(2,5) A/250 V~  
*Temperature Range* = 5°÷30°C  
*Differential* = 1K  
*Isolation Class* = □  
*Protection Degree* = IP 20  
*Max. standing temperature* = 50°C  
*Connection* = 2 wires  
*Output* = switching contacts  
*Installation* = wall  
*Colour* = white

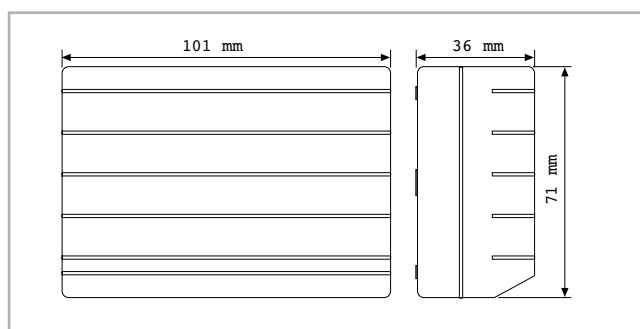
ITEM CODE		PACKAGE N.
546010	Functioning LED - ON/OFF selector.	20
546030	Functioning LED.	20
546070	Simple thermostat.	20
546230	Functioning LED - Heating/Cooling selector.	20
000071	Special retainer for TA3 knob.	o.r.
004095	Base for the installation of the room thermostat on the 60mm built in box. Suitable for TA3 - Black colour.	o.r.

## TAE/1



Electronic room thermostat with integrated circuits with highly sensitive NTC temperature sensor. Thanks to the OFF/Cooling/Heating selector, the TAE/1 is suitable to every kind of applications. It's provided with functioning LED signaling the actual functioning of the plant. It's conceived for wall installation.

### ELECTRONIC ROOM THERMOSTAT



*Power supply* = 230Va.c.  
*Contacts rating* = 5(2)A/250 V~  
*Temperature Range* = 5°÷30°C  
*Differential* = 0,2÷0,4K  
*Connection* = 4 fili  
*Output* = switching contacts  
*Protection degree* = IP 20  
*Installation* = wall  
*Colour* = white

ITEM CODE		PACKAGE N.
560090	TAE/1 room thermostat.	10

# PROGRAMMABLE ROOM THERMOSTATS

**BLUE**



2 temperature stages digital programmable thermostat for applications in heating and cooling systems. It can be programmed in three different modes: daily, weekly and week-end.

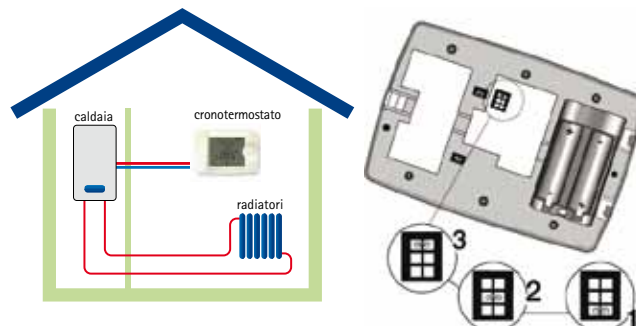
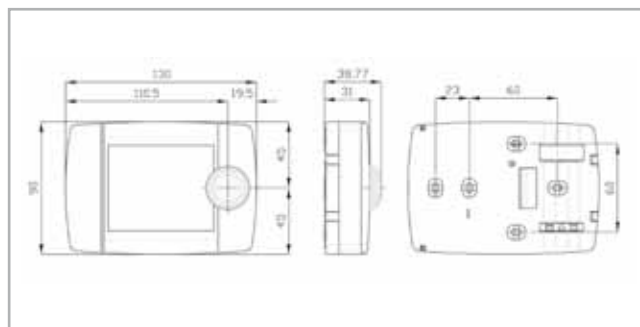
Some special functions ( holiday, party, pause) join comfort and energy saving.

Blue is equipped with a wide display easily showing: temperature, time, date, program, heating and symbols indicating the device functioning.

The door on the left side hides 6 big buttons which allow an easy setting.

It's conceived for telephone remote control if combined with the telephone actuator (optional – cod. 578016).

DIGITAL



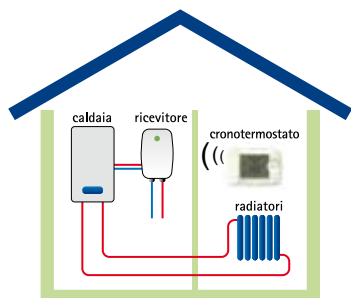
- Power supply* = tipo AA (included)
- Temperature range* =  $6^{\circ} \div 35^{\circ} \text{C}$
- Temperature resolution* =  $0,1^{\circ}\text{C}$
- Minimum programming interval* = 30 min.
- Refresh temperature* = once a minute
- Differential* =  $0,2 \div 0,4^{\circ}\text{C}$  (@dT/dt= $1^{\circ}\text{C}/15'$ )
- Protection degree* = IP 20
- Insulation class* = ☐
- Output* = switching relay
- Contacts rating* = 8 (2,5)A/250V~ on terminals
- Temperature sensor* = NTC 3%
- Storage temperature* =  $0^{\circ} \div 60^{\circ}\text{C}$
- Antifreeze* =  $6^{\circ}\text{C}$  fixed
- LCD display* = LCD (L75mmxH60mm)
- Colour* = white
- Installation* = wall

ITEM CODE		PACKAGE N.
578090	Blue – Digital programmable room thermostat	5



# PROGRAMMABLE ROOM THERMOSTATS

## BLUE radio



Wireless digital programmable thermostat combined with receiver;; equipped with 2 temperature stages, it's used in heating systems.

It can be programmed in three different modes: daily, weekly, week-end.

Some special functions (holiday, party, pause) join comfort and energy saving.

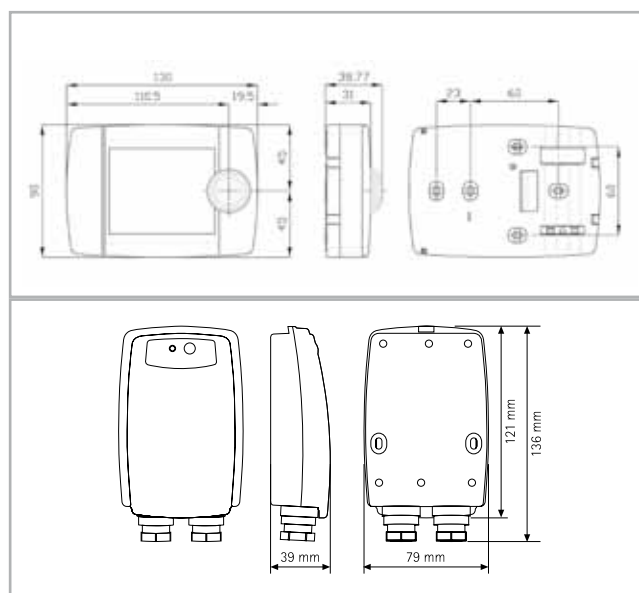
Blue is equipped with a wide display easily showing: temperature, time, date, program, heating and symbols indicating the device functioning.

The door on the left side hides 6 big buttons which allow an easy setting.

It's conceived for telephone remote control.

The radio communication system between transmitter and receiver, based on quartz technology, grant precision and lasting functioning even in case of reinforced concrete walls.

### DIGITALE VIA RADIO



*Temperature range* = 6° ÷ 35° C

*Temperature resolution* = 0,1°C

*Minimum programming interval* = 30 min.

*Refresh temperature* = once a minute

*Differential* = 0,4°C (@dT/dt=1°C/15')

*Insulation class* = □

*Range (transmitter - receiver)* = 150m open air, 20m inside a building

*Contacts rating* = 8 (2,5)A/250V~ on terminals

#### TRANSMITTER

*Power supply* = n°2 Alcalyne Batteries 1,5 V AA type ( included)

*Emission frequency* = 868 MHz

*LCD display* = LCD (L75mmxH60mm)

#### RECEIVER

*Power supply* = 230Vac -15% +10%

*Red led ON* = code learning mode operating

*Green led ON* = ready to receive ON/OFF input

*Output* = switching contacts 6A 250V

*Housing* = ABS IP44

ITEM CODE		PACKAGE N.
578091	Blue radio	5

## SPARE PARTS

ITEM CODE		PACKAGE N.
578082	Digital programmable room thermostat only	5
578014	Receiver only	5

# PROGRAMMABLE ROOM THERMOSTATS

## GSM ACTUATOR



The GSM telephone actuator permits in a remote way to control and verify the functioning of electronic devices.

In particular can be interfaced to the BLUE and BLUE RADIO programmable thermostat letting to change their functioning mode ( automatic/antifreeze).

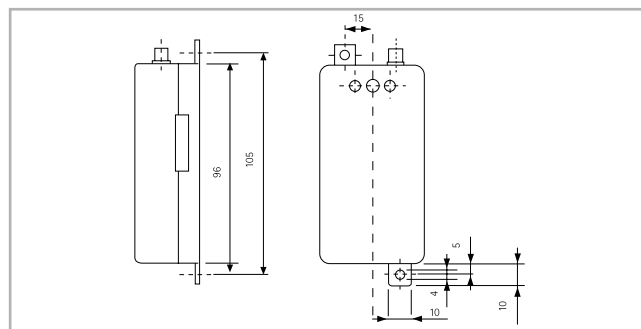
The device works thanks to a last generation GSM engine and a SIM card ( not included) and makes superfluous the connection with the P.T.S.N. telephone line. It's particularly suitable in second houses without P.T.S.N. telephone line.

### OPERATION

With a SMS message:

- Changes the functioning mode of the programmable thermostat ( from Antifreeze to Automatic and vice versa).
- Verifies the functioning mode of the programmable thermostat

### GSM ACTUATOR FOR PROGRAMMABLE ROOM THERMOSTAT



*Power Supply* = 9/12V DC - current 500mA max (use short circuit safe power supplier)

*Medium Power consumption* = 40 mA standby 100 mA sending/receiving SMS

*Output* = bistable relay

*Storage Temperature* = 40°÷85°C

*Operating temperature* = 20°÷55°C

*GSM Engine* = Siemens TC35i

*Contact Ratings* = 0,3A 125Vac - 0,3A 110Vdc - 1A 30Vdc

*Conformity with Standards* = 1999/5/CE  
EN 301489-7 - EST 300 489-1  
EN 60950

*Installation* = a parete

*Colour* = grey RAL 7035

ITEM CODE		PACKAGE N.
578016	GSM telephone actuator composed by an activating module, antenna, (cod. 578018), power supply unit (cod. 578019)	o.r.

## SPARE PARTS

ITEM CODE		PACKAGE N.
578018	Actuator antenna (only as spare part).	o.r.
578019	Actuator power supply unit (only as spare part).	o.r.

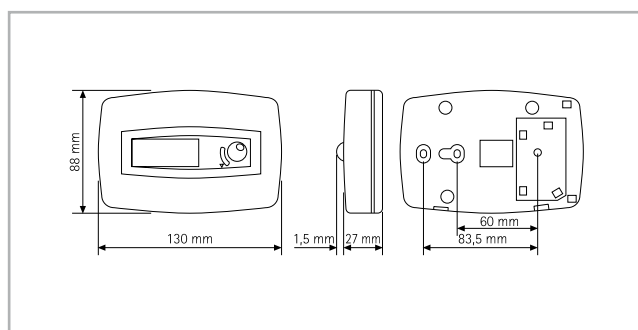
# PROGRAMMABLE ROOM THERMOSTATS

## DUO PLUS



The DUO PLUS electronic thermostat is recognizable for its easy programming and smooth and pleasant design. The daily program can be easily set thanks to a series of microswitches. Moving them it is possible to select one of the two temperature levels for each hour of the day. All the functions provided by thermostat are displayed: time, room temperature, set temperature, program, low batteries icon. With the Heating/Cooling selector it can controls both heating and air conditioning plants.

### PROGRAMMABLE ROOM THERMOSTAT



*Power supply* = n°2 1,5V-LR6 alcalyne batteries  
*Comfort temperature range* =  $5^{\circ}\div 30^{\circ}\text{C}$   
*Reduced temperature range* = fixed at  $6^{\circ}$  or  $16^{\circ}\text{C}$   
*Max. operating temperature* =  $50^{\circ}\text{C}$   
*Storage temperature* =  $0^{\circ}\div 60^{\circ}\text{C}$   
*Differential* =  $0,2\div 0,4\text{K}$   
*Output* = switching contacts  
*Contacts rating* =  $5(0,5)\text{ A}/250\text{V}\sim$   
*Thermal gradient* =  $1\text{K}/15\text{ min.}$   
*Protection degree* = IP 20  
*Temperature display* =  $0^{\circ}/40^{\circ}\text{C}$  (resolution  $0,1^{\circ}\text{C}$ )  
*Antifreeze* =  $6^{\circ}\text{C}$  fixed  
*Program* = daily  
*Heating/Cooling switching*  
*Connection* = 2 wires  
*Colour* = beige

ITEM CODE		PACKAGE N.
557880	DUO PLUS - daily programming.	10

## CHRONOMIX

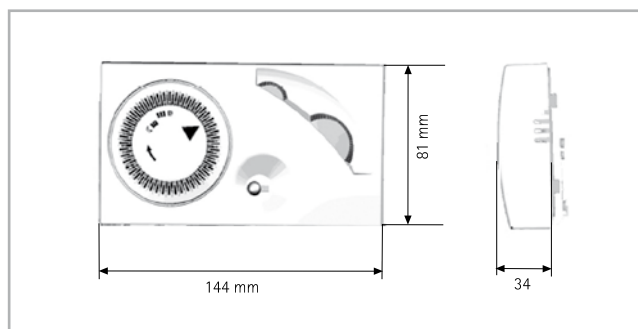


The Chronomix is an electronic thermostat and its design is similar to the one of the TA3 room thermostat.

Programmable thanks to an analogical clock, the electronic thermostat measures the ambient temperature, while the switch allows the temperature setting during the day.

Very easy to program and cheap.

### PROGRAMMABLE ROOM THERMOSTAT



*Power supply* = n° 2 alcalyne batteries 1,5 V -LR6  
*Temperature range*  
*Comfort temperature range* =  $5^{\circ}\div 30^{\circ}\text{C}$   
*Contacts ratings* =  $5(1)\text{ A}/250\text{V}\sim$   
*Differential* =  $0,5\text{ K}$   
*Protection degree* = IP 20  
*Colour* = white

ITEM CODE		PACKAGE N.
578070	CHRONOMIX - daily programming.	5

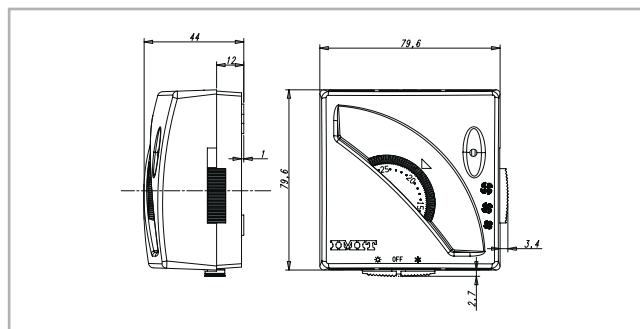
# THEMOSTATS FOR AIR-CONDITIONING SYSTEMS WITH FAN-COILS

## FAN TA3



Steam expansion sensing element.  
Knob limiting or blocking the temperature setting.  
Being very easy to use and cheap, it can be used for valve operating and regulation of defined areas.  
On customer's request, it's possible to realize the version with functioning LED showing the actual functioning of the plant or power supply presence.

### ROOM THERMOSTAT



Power Supply = 230Vac  
Temperature Range = 7° ÷ 30°C  
Differential = 1K  
Thermostat contacts ratings = 16(2,5)A/250Vac  
Selector contacts rating = 10(2)A/250Vac  
Output on relay = switching contacts  
Installation = wall  
Colour = white

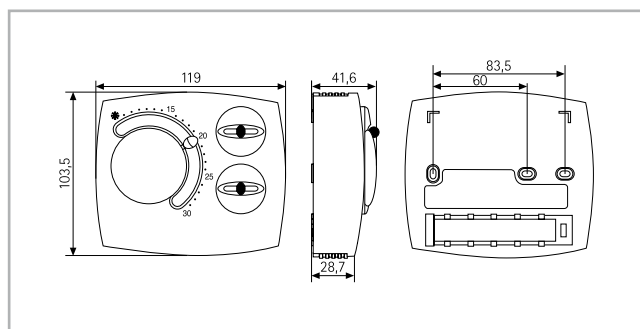
ITEM CODE		PACKAGE N.
548500	ON/OFF switch	20
548501	Same as code 548500 but with Summer/Winter switch	20

## PAN/TAE neXus7 Running out item!



The PAN/TAE NEXUS7 is an electronic room regulator for fan-coil, which widens a product range dedicated to heating and air-conditioning control in offices, hotels, shopping centers etc.

### FAN-COIL ELECTRONIC REGULATOR



Power supply = 230Va.c.  
Temperature range = 5° ÷ 30°C  
Differential = 0,6 ÷ 0,2K  
Thermostat contact ratings = 5(1)A/250V~  
Selector contacts ratings = 5(1)A/250V~  
Output = switching contacts  
Installation = wall  
Colour = white

ITEM CODE		PACKAGE N.
560820	PAN/TAE nexus7 - Summer/OFF/Winter selector.	5
560821	PAN/TAE nexus7 - ON/OFF selector - Neutral zone.	5
560822	PAN/TAE nexus7 - Heating/Cooling remote control.	5

# THEMOSTATS FOR AIR-CONDITIONING SYSTEMS WITH FAN-COILS

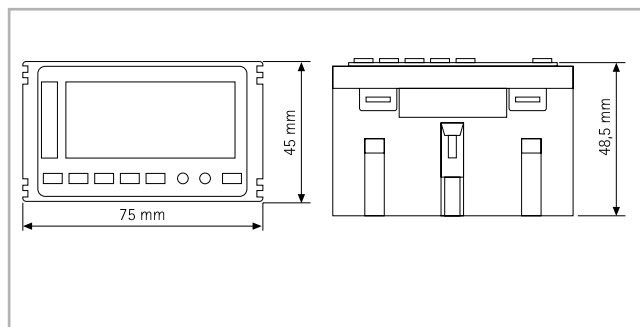
## FAN 503



The FAN 503 is an electronic and digital regulator for fancoil.

Easy to operate comes with a wide and easy readable display. It offers an high regulation precision thanks to the probe situated in the front side of the device. The fan can be set to manual or automatic functioning while regulating and displaying the room temperature. The FAN503 is suitable to the most common plates [bticino, Vimar, AVE and GEWISS]. It's offered in a complete range and can consequently be used in many different applications.

### ELECTRONIC BUILT-IN REGULATOR FOR FAN-COIL



*Power supply* = 230 Va.c.  
*Temperature range* = 5°÷35°C  
*Temperature measuring* = 0°÷40°C (accuracy 0,1°C)  
*Differential* = 0,5K  
*Protection degree* = IP 20 (installed)  
*Output* = relay free contact  
*Contacts rating* = 3A/250V~  
*Storage temperature* = 50°C  
*Antifreeze* = 6°C fixed  
*LCD Display*  
*Heating/Cooling switching*  
*Microprocessor*  
*with non-volatile memory*

ITEM CODE		PACKAGE N.
578330	FAN 503 Base version with ON/OFF - Summer/Winter - Fan speed Man/Auto - Output 3 relay fan.	5
578338	FAN 503 F- Same as 578330 version + H2O electrovalve control with H2O probe.	5
578372	FAN 503 Summer/Winter Remote - Same as 578330 version + H2O electrovalve control + Summer/winter switching from remote.	5
578334	FAN 503 BUS- Same as 578330 version for control up to 8 fan coils provided with code 578370.	5
578370	Power board control for fan coil with H2O electrovalve control with H2O probe. To combine with 578334. Installation on DIN guide (5 elements).	
557356	5 plates in Gewiss plastic material ( PLAYBUS YOUNG). Black colour.	5

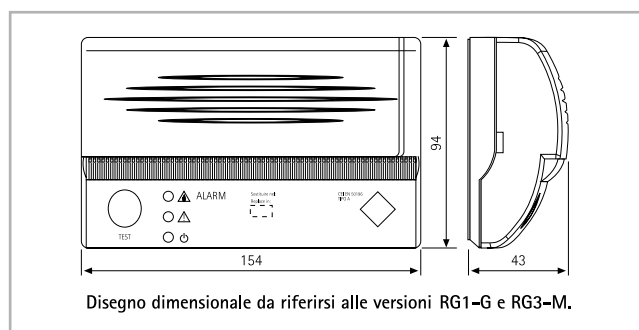
# GAS DETECTORS

## RG1-G



Wall hung LPG gas detector. Used in household applications, it has an high reliability and capture even minimum gas leak (from 5% to 15% of the L.E.L.). It's offered in a modern and pleasant design. Conformity to standards: CEI EN 50194 type A and CEI EN 50270 type1.

### LPG GAS DETECTOR



Power supply = 230Va.c.

Calibration = at 1800 ppm in GPL/air volume (10% of L.E.L.)

Operating temperature =  $-5^{\circ}\div 35^{\circ}\text{C}$

Protection degree = IP 42

Output on relay = 8A/250Va.c.

AUTOTEST function

Acoustic alarm

ITEM CODE		PACKAGE N.
560566	RG1-G LPG gas detector.	10

## RG3-M

Wall hung methane gas detector. Used in household applications, it has an high reliability and capture even minimum gas leak (from 5% to 15% of the L.E.L.). It's offered in a modern and pleasant design. Conformity to standards: CEI EN 50194 type A and CEI EN 50270 type1.

### METHANE GAS DETECTOR

Power supply = 230Va.c.

Calibration = 5000ppm in methane/air volume (10% of L.E.L.)

Operating temperature =  $-5^{\circ}\div 35^{\circ}\text{C}$

Protection degree = IP 42

Output on relay = 8A/250Va.c.

Acoustic alarm = IP 42

= 8A/250Va.c..

ITEM CODE		PACKAGE N.
560567	RG3-M Methane gas detector.	10

## ELECTROVALVE



### MANUAL RESET

Power supply = 230Va.c. 50/60Hz

Max. pressure = 500 mbar

Coil = F class, 360° angle of rotation

Closing and block time = lower than 1 sec.

Protection degree = IP54

NBR sealing = in accordance with tab. UNI4916-74

Reset pin = brass TN-CW 614N

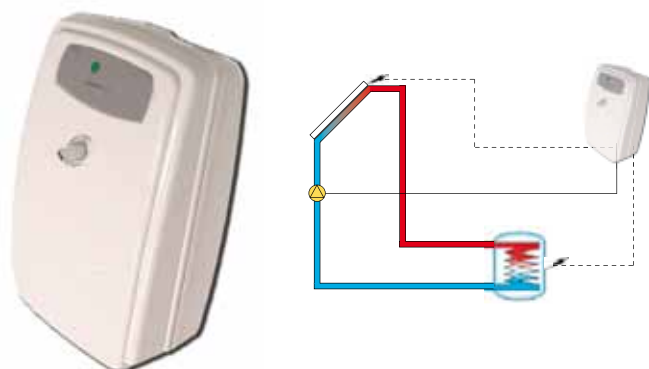
Leakage spring = stainless steel AISI 302

Compliance with = norms UNI-CIG and DIN 3391-3394

ITEM CODE		PACKAGE N.
	NA type (Closing when tension is present).	
557229	Electrovalve NO f/f gas thread 1/2" - Pitch: DN 15. Valve body made of ST-CW 617N brass.	5
557228	Electrovalve NO f/f gas thread 3/4" - Pitch: DN 20. Valve body made of ST-CW 617N brass.	5
557220	Electrovalve NO f/f gas thread 1" - Pitch: DN 25. NC type (Closing when tension is lacking).	5

# REGULATORS FOR SOLAR PANELS SYSTEMS

## SUNNY SIMPLE

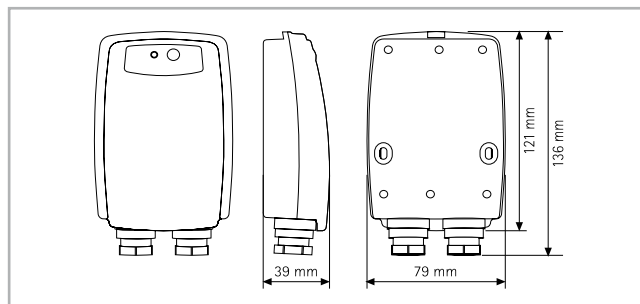


This unit compares the temperature of the fluid circulating into the collector with the temperature of the water in the boiler and makes the heat exchange possible only when the set differential value is reached. The temperature is measured by two probes: one inside the boiler, the other one in the collector.

The signals are processed by the circuit and when needed the pump is turned on.

The thermostat has also a frost protection that turns on the pump in order to increase the temperature inside the panel when the temperature goes under the 5°C preventing the circuit freezing.

### DIFFERENTIAL SOLAR PANEL CONTROLLER

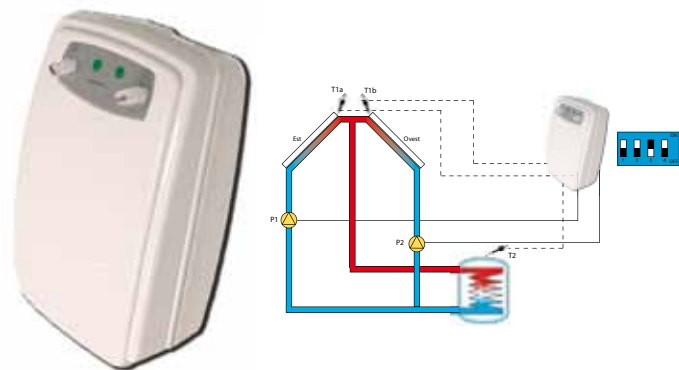


**Power supply** = 230V-/50Hz (+10%-15%)  
**Temperature sensor** = NTC  
**Sensor wires lenght** = 1,5 mt.  
**Sensor bulb dimension** = 7x8x45mm.  
**Brass pocket (on request)** = Ø 8,5x10 L=50mm./L=150mm  
**Probes protection degree** = IP66  
**Differential regulation field** = 2°: 20°C  
**Protection degree** = IP40  
**Output** = on relais (contacts with protection)  
**Contacts rating** = 5(2)A/250V~  
**Maximum operating temperature** = 50°C  
**Stocking temperature** = 0°: 60°C  
**Frost protection** = 5°C

**Installation** = on wall

ITEM CODE		PACKAGE N.
578060	Sunny Simple - thermostat	5
555020	Brass pocket Ø 8,5x10 mm. - L=50 mm.	o.r.
555021	Brass pocket Ø 8,5x10 mm. - L=150 mm.	o.r.

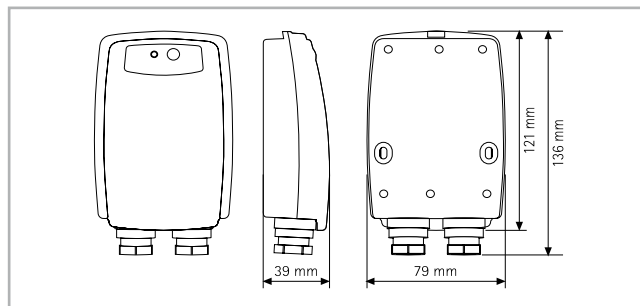
## SUNNY PLUS



The flexible design of Sunny Plus, characterized by 3 inputs for temperature probes and 2 outputs for pumps, makes the control of different heating systems possible using at the same time three different energy sources:

- 1.Plants with a solar collector ( or another renewable source) and a storage: it has the same function of Sunny Simple and in addition it breaks the circulating pump, when the temperature collected by a sensor situated at the top of the storage, exceeds the max. value set.
- 2.Plants with additional heating of the storage: it has the same function of Sunny Simple and starts up the additional heating pump when the temperature of the storage goes under the value set.
- 3.Heating Systems combined with renewable energies: when the temperature of the auxiliary source exceeds the return temperature of a heating system, a deviation valve starts to work "preheating" the return temperature.

### FLEXIBLE DIFFERENTIAL SOLAR PANEL CONTROLLER



**Power supply** = 230V-/50Hz (+10%-15%)  
**Temperature sensor** = NTC  
**Sensor wires lenght** = 1,5 mt.  
**Sensor bulb dimension** = 7x8x45mm.  
**Brass pocket (on request)** = Ø 8,5x10 L=50mm./L=150mm  
**Probes protection degree** = IP66  
**Differential regulation field** = 2°: 20°C  
**Protection degree** = IP40  
**Output** = on relais (contacts with protection)  
**Contacts rating** = 5(2)A/250V~  
**Maximum operating temperature** = 50°C  
**Stocking temperature** = 0°: 60°C  
**Frost protection** = 5°C

**Installation** = on wall

ITEM CODE		PACKAGE N.
578062	Sunny Plus - thermostat	5



# MODULES FOR CENTRAL HEATING SYSTEMS

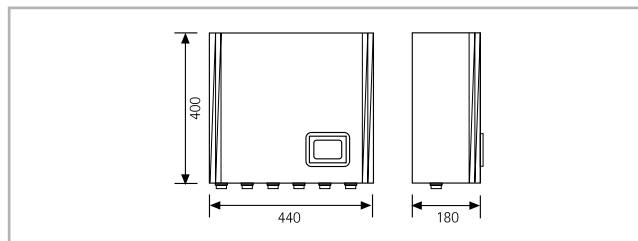
## WATERLINK



WATERLINK is an electronically managed hydraulic interfacing system, that allows heating withdrawal for home heating from two different sources alternatively.

The most typical application is when a fireplace (or a stove) and a boiler are coexisting.

### INTERFACING MODULE CONNECTING BOILER AND FIREPLACES/STOVES



Power supply	= 230V/50Hz
Power consumption	= 95W
Dimensions (H x L x D)	= 400x440x180
Coupling fireplace/stove	= 1"
Coupling boiler	= 3/4"
Coupling plant	= 3/4"
Electronic regulation	
Power supply	= 230Va.c./50Hz (+10%-15%)
Water temperature probe	= NTC 1%
Max. probe temperature	= 180°C
Operating temperature	= 0÷50°C
Storage temperature	= 0÷60°C
Functioning humidity	= 10%÷90% non condensing
Contacts rating	= 5A(NO) 3A(NC) /250Va.c. (not free of potential)
Power consumption	= 1VA
Adjustable temperature range-	= 30°÷85°C
Protection degree	= IP20

ITEM CODE		PACKAGE N.
561505	Waterlink unit with cover, 30 plates heatexchanger with FIRE 503 WATER - I regulator code 577477	o.r.
561506	Waterlink unit with cover and 30 plates heatexchanger	o.r.

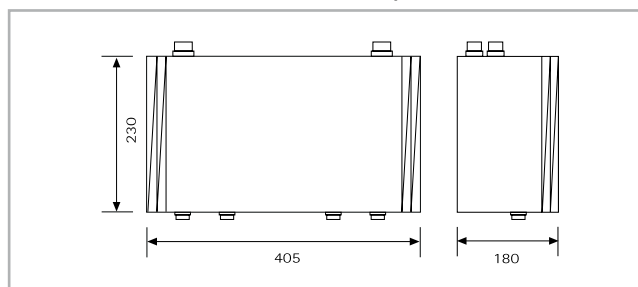
## WATERWARM



WATERWARM is a module to control heating plant fed by fireplaces or stoves. It allows the production of primary and sanitary hot water.

Hot sanitary water production is priority and is automatically detected by a flowswitch.

### INTERFACING MODULE CONNECTING BOILER AND FIREPLACES/STOVES



Power supply	= 230V/50Hz
Power consumption	= 95W
Dimensions (H x L x D)	= 230x405x180
Coupling fireplace/stove	= 3/4"
Coupling sanitary	= 1/2"
Coupling plant	= 3/4"

ITEM CODE		PACKAGE. N.
561508	Modules for fireplaces - heating and production of hot sanitary water.	o.r.



# NOTES