



With the thermostatic heads it is possible to make each room autonomous with a specific pre-set temperature and guarantee a higher room comfort and an effective energy savings, as requested by national and international rules.

It is possible to regulate the room temperature thanks to the sensor placed inside the head, which works in a proportional way on the opening and closuring of the valve.

The thermostatic head can set a limit or a stop to the range of regulation.

It is extremely important not to place the thermostatic heads under barriers such as shelves, heavy curtains, furniture or assembled in vertical position. These barriers can store the heat and give a false perception of the room temperature.

TECHNICAL	Max working pressure	10 bar		
FEATURES	Max working temperature	120 °C		
	Max differential pressure	1 bar		

CONSTRUCTION	Sensor:	Wax		
FEATURES:	Sensor range:	0.21 mm/K		
	hysteresis:	< 1 K		
	Reaction time (Z):	21 min.		
	Effect of the water temperature (W):	1.4 K		
	Inalterability range:	-15 °C ÷ +60 °C		
	Intermediate position:	Pos. "3" = 20 °C		
	Length of capillary tube:	2 m		
	Material of the head:	ABS white RAL9016		
	Sensor:	CW 614 N UNI-EN 12164-98		

GALVANIC TREATMENTE:	-
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DIMENSIONAL DRAWING												
	Article:				TT 2302							
	Description:				Thermostatic head with control and remote sensor. Standard length of the capillary tube 2m.							
	Connection:				M30x1.5							
	Code	Size	А	В		С	D	Е	F	G	н	L
	69011005	M30x1.5	63	68	3	45	67	75	M30x1,5	-	28	51

## FUNCTIONING

The thermostatic head is made of a sensor filled with high expansibility liquid. The liquid, inside the regulation handle, can expand or reduce proportionally according to the increase of decrease of the room temperature, detecting even the smallest changes. When the room temperature increases the liquid expands and through the axial movement of the thrust affects the position of the obturator and controls the valve action. By opening and closing the valve it is possible to adjust the thermo-vector fluid flow. When the temperature decreases the action is inverse thanks to the thrust given by the return spring. The thermostatic head keeps the pre-set room temperature. The setting of the temperature required is given by rotating the regulation handle, the numbers on this correspond to a pre-defined temperature. The TT 2101 is classified as a "low inertia device" and is therefore in compliance to the Rule by the Ministry of Economy and Finances dt 19 Feb. 2007 "Regulation about the deduction for the costs from energetic improvements of the existing buildings according to the low art. 1, comma 349, 27/12/2006, n. 296".







TEMPERATURE BLOCK AND LIMIT					
4.	<ul> <li>It is possible to block the temperature on any number of the graded scale or to limit the run. The block or limit can be done simply by changing the position of the pins in the bottom part of the head.</li> <li>Remove the graded collar</li> <li>Remove the two pins at the bottom part of the head.</li> <li>Regulate the head at the max required temperature and insert the pin in the slide aligned with the first line printed on the body.</li> <li>Regulate the head at the minimum required temperature and insert the second pin in the slide aligned to the second line printed on the body.</li> <li>If you need to regulate only the max or the minimum temperature make only one of the above actions, if you want to block the head on a certain temperature once this is set place both the pins inside the hole</li> </ul>				



The thermostatic head should be installed far from heating waves (picture 1) and protected from sun rays (picture 2). Do not install the thermostatic head under shelves (picture 3), within the heating wave range (picture 4) or behind curtains (picture 5): These types of installations are not correct since the thermostatic head might detect a temperature which is not the real room temperature. To avoid noise do not use the thermostatic valves with  $\Delta p$  values higher than 0.2-0.25 bar.

TENDER SPECIFICATIONS					
Article Code:	69011041				
Understructure thermostatic head with remote sensor. Liquid expansion thermostatic element. Capillary length 2 m. Graded scale from antifreeze "*" to 5, corresponding to a regulation range from 6°C to 28°C. Connection to the long stem screw with a lose collar M30x1.5. It is possible to limit and block the temperature.					