



## E001EN Radiators: indirect energy metering and components

### PRODUCTS

Heat cost allocators for energy consumption metering, thermostatic heads, valves and lockshield valves, air vent valves, caps and accessories for radiators

Electronic heat cost allocator with data transmission via radio frequency signals



A wide range of lowinertia thermostatic actuators with liquid sensor

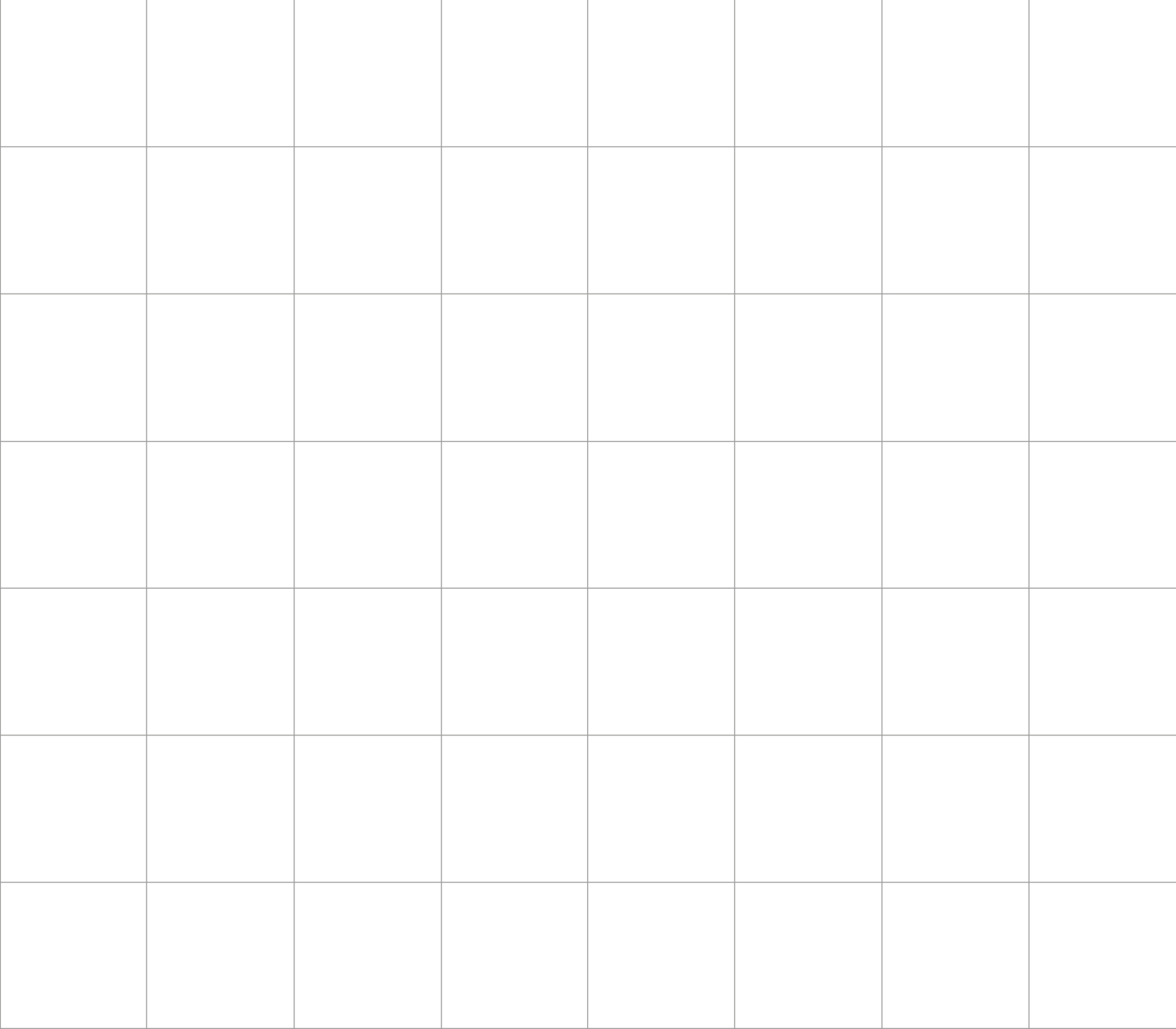


Valves with thermostatic option with and without pre-adjustment, for single-pipe and twin-pipe systems. Also available chrome-plated

Lockshield valves with iron pipe or adaptor connection. Also available chrome-plated



**GIACOMINI**  
ENERGY MANAGEMENT



## ENERGY MANAGEMENT

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Our passion for energy has been with us right from the start. It even comes out in our corporate colour, "energising" red, and our motto - WATER E-(energy)-MOTION.

For Giacomini, energy management translates into components for energy consumption optimisation and metering, and for the distribution of hot and cold fluids.







# Indirect energy metering

Even in buildings where radiators systems operate via old-fashioned risers piping, heating costs can be allocated on the basis of real consumption, to respect European directives and national regulations about energy requalification..

By combining thermoregulation (our thermostatic valves) and metering (our electronic heat cost allocators), even old-fashioned systems can be requalified and brought in line with current requirements in terms of comfort and energy efficiency.



The **GE700** electronic heat cost allocator produces a reliable estimate of the energy transferred from the radiator to the environment. The detected data are transmitted via radio frequency - safely and harmlessly to health - to the measurement devices located outside the apartment. Thanks to the wide range of support brackets and accessories, these devices can be assembled on all the most common radiators on the market (→5).



Complete range of electronic **Wireless M-Bus** devices for managing the energy consumption data obtained by heat cost allocators. Radio frequency transmission allows consumption data to be obtained outside the apartment in a safe, reliable, continuous manner that respects the residents' privacy (→6).



Indirect metering works together with individual thermoregulation performed by the **thermostatic valves** installed on radiators. The thermostatic heads (adjustable to suit the user) guarantee the precise temperature control in each room in a simple, reliable way, ensuring constant optimum comfort and interesting energy savings.

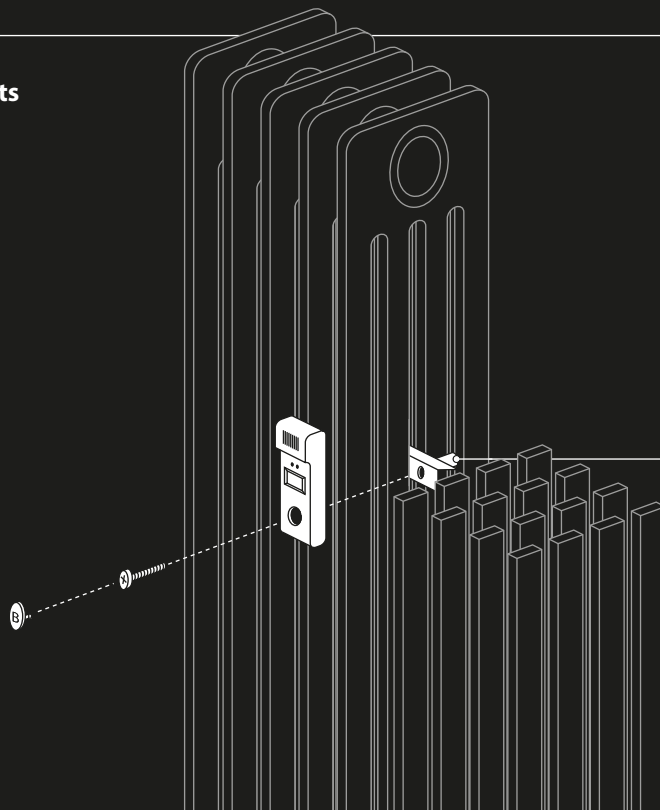
## Radio electronic heat cost allocator GE700



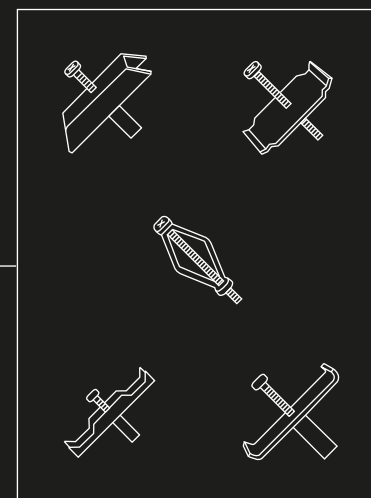
Manufactured in compliance with Standard UNI EN 834, with 2-sensor technology ❶ for detecting radiator temperature and room temperature. Anti-tampering seal and disassembly alarm.

❷ 6-figure display for direct reading, optic interface for programming/reading, long-life lithium battery (standard 10 years).

## Brackets



Complete range of support  
elements for every type of radiator.



Antennas  
and concentrator



Heat cost allocators and data management devices can transmit the data in Wireless M-Bus mode at 868 MHz (European band ISM - Industrial, Scientific, Medical). The consumption data can be read in two ways: ① centralised (remote) or ② "Walk-by", via a mobile terminal supplied to the appropriate personnel.



Concentrator and transmitter



USB wireless receiver



# Advantages of indirect metering



Compliance with national regulations in terms of the energy requalification of existing buildings

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Energy bill reflects real consumption

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Residents can manage in a very accurate way different temperature for different rooms, according to their specific needs

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Accurate billing motivates users to avoid waste by adjusting room temperatures to actual needs, prompting economic savings

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Comfort and energy savings thanks to individual thermoregulation

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User-friendly data reading: consumption data can be gathered via radio frequency, right outside the apartment

# Components for radiators

The most traditional device for heating a room - the radiator - has always been able to rely on Giacomini components. We are universally recognised as specialists in the manufacture of valves, lockshield valves, thermostatic heads, and all the other accessories involved in the operation of heating elements.

Technical skill, production reliability, wide range: these are the characteristics that allow us to easily equip every type of radiator, whether in new installations or in energy requalification projects.



A wide range of **low-inertia thermostatic actuators** with liquid sensor, for automatically adjusting and controlling the radiator temperature. By automatically adjusting the hot fluid inflow to the radiator on the set value basis, optimum comfort and energy savings are guaranteed. Compatible with Giacomini valve bodies and other manufacturers' too.



The new frontier for Giacomini radiator valve actuators: the **electronic chrono-thermostatic head**. A technologically advanced device with a long operating life, silent and compact. The function keys, wheel selector and LCD display ensure easy weekly programming, with various daily activation bands and three different temperature set-points: comfort, economy/night and antifreeze.



**1 Valves with thermostatic option** (with and without pre-adjustment) **2 manual valves, lockshield valves:** all these components are available in various configurations and measurements for installation on the main radiators available on the market. Also available **3 chrome-plated for toweldryers** (→15).



Vast assortment of **manual valves** and **valves with thermostatic option** for **4 single-pipe** and **5 twin-pipe** applications (→14).

In particular, the micrometric valve with thermostatic option, with an adjustable command handwheel, is the “universal” solution for requalification projects.



Manual and **6 automatic** **7 air vents, radiator caps** **8**, accessories such as **hole-cover rosette trims** **9** and **telescopic tail pieces** **10** complete our range (→16).

### Energy efficiency of the thermostatic heads



Thanks to the construction methods that ensure a low degree of hysteresis, quick response times, reduced influence on the temperature of the heating fluid and on the differential pressure, the Giacomini thermostatic heads ensure a high energy efficiency performance.

### Operation elements designed for every need



Valves fitted with an elegant handwheel in glossy white ABS **1** for manual valve command, or with **2** worksite protection with the possibility of operation during the installation and testing phase.

### Internal bonnet anti-blocking-system



Inside the operating mechanism of the valve with thermostatic option, there is **3** a single-piece stainless steel operating stem that notably reduces the adhesion of calcareous deposits and therefore the risk of the bonnet itself becoming stuck. **4** If the bonnet gets damaged, it can be replaced without draining the system, via the R400 key.

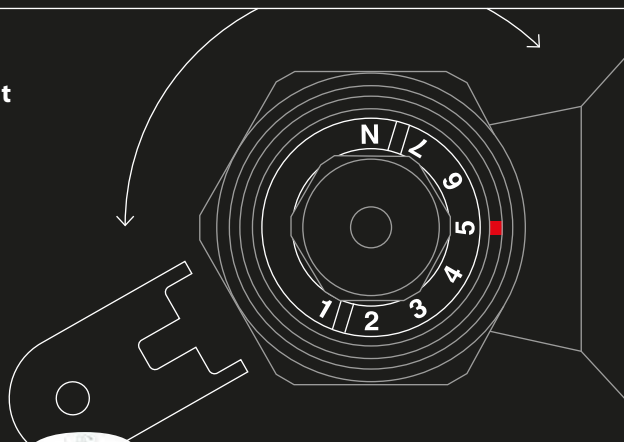
### Self-sealing tail-piece



Valves are linked to the heating body via a tail piece with a self-sealing gasket in an elastomeric material.

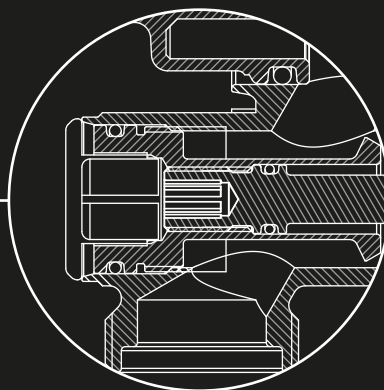
Without the need for hemp, paste or other sealing materials, joints can be made quickly and will prove reliable over time.

### Valves with pre-adjustment



Thanks to the special operating bonnet, the PTG series valves can be pre-adjusted to generate a deliberate pressure loss and hence ensure the effective balancing of the circuit.

### Universal valve R304T for single-pipe and twin-pipe systems



Can be installed in both single-pipe and twin-pipe systems, thereby facilitating the work of the installer. On top of that, the adjustable handwheel ensures the maximum flexibility for the ideal adjustment of the thermostatic head installed.

# Advantages of thermostatic valves



Comfort and energy savings thanks to individual temperature regulation

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Tax incentives for energy requalification projects

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Attractive design and prime materials

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# Catalogue

**Valves with thermostatic option,  
and lockshield valves**



code **R421TG**



code **R14TG**



code **R422TG**



code **R15TG**



code **R401TG**



code **R402TG**



code **R431TG**



code **R29TG**



code **R432TG**



code **R31TG**



code **R411TG**



code **R412TG**



code **R435TG**



code **R403TG**

Valves with thermostatic option,  
with pre-adjustment



code R401PTG



code R402PTG



code R411PTG



code R412PTG



code R415PTG

Manual valves and valves  
with thermostatic option  
for single and twin-pipe systems



code R304T



code R440N



code R356B1



code R357B1



code R358B1



code R437N



code R356M1



code R357M1



code R358M1



code R324N



## Valves for toweldryers (with brilliant chrome-plating)

code **T439L**code **T431C**code **T29C**code **T432C**code **T31C**code **T25C**code **T27C**code **T357M**code **T358M**

## Thermostatic heads

code **R470**code **T470**code **R468C**code **R462**code **R463**code **R462L**

Electrothermal actuators



code **R473**



code **R473M**



code **R478**



code **R478M**

Energy requalification  
kit for radiators



code **R470F**  
without heat cost allocator



code **R470A**  
without heat cost allocator

Other radiator components  
(air vents, caps)



code **R200**



code **R66A**



code **R90**



code **R92**



code **R173**

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**Heat cost allocators  
for indirect metering  
and accessories**



code **GE700**



code **GE700-1**



code **GE700-2**



Concentrator  
and wireless  
data transmitter

code **GE552W**



Wireless  
data receiver  
antenna



Wireless  
signal  
repeater



Software for  
programming the  
heat cost allocators  
and for Wireless data  
centralisation

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## Radiators: indirect energy metering and components

- Valves and lockshield valves
- Thermostatic heads
- Air vent valves
- Accessories for radiators
- Heat cost allocator
- Data concentrator
- Data transmitter
- Data receiver



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