Chapter 7
DIRECT AND INDIRECT THERMAL ENERGY METERING

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### USER MODULES FOR DIRECT METERING

#### GE555

<table>
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<th>PRODUCT CODE</th>
<th>CONNECTIONS</th>
<th>DIMENSIONS (L x H x D) mm</th>
<th>BALANCING</th>
<th>UNITS FOR Domestic WATER METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE555Y461</td>
<td>3/4&quot;</td>
<td>500 x 500 x 110−160</td>
<td>Only by-pass</td>
<td>2 1 -</td>
</tr>
<tr>
<td>GE555Y462</td>
<td>3/4&quot;</td>
<td>600 x 600 x 110−160</td>
<td>Static</td>
<td>3 1 -</td>
</tr>
<tr>
<td>GE555Y463</td>
<td>1&quot;</td>
<td>600 x 600 x 110−160</td>
<td>Static</td>
<td>3 1 -</td>
</tr>
<tr>
<td>GE555Y468</td>
<td>3/4&quot;</td>
<td>600 x 600 x 110−160</td>
<td>Dynamic</td>
<td>3 1 -</td>
</tr>
<tr>
<td>GE555Y469</td>
<td>1&quot;</td>
<td>600 x 600 x 110−160</td>
<td>Dynamic</td>
<td>3 1 -</td>
</tr>
<tr>
<td>GE555Y472</td>
<td>3/4&quot;</td>
<td>600 x 600 x 145−195</td>
<td>Only by-pass - with double delivery</td>
<td>2 1 -</td>
</tr>
</tbody>
</table>

User module for centralized heating and/or cooling systems.
- Shut-off ball valves
- Motorizable zone valve
- Guide rails for installation of domestic and/or service water metering units
- Plastic spacer for installation of thermal energy meter
- Box with terminal board for electric connections
- Housing for thermal energy meter delivery temperature probe, built into the shut-off valve
- Painted sheet metal cabinet (RAL9010) with lockable door and adjustable frame depth
- Fittings for connection and fixing
- Max. working temperature 110 °C (90 °C with plastic spacer)
- Max. working pressure 16 bar (10 bar with plastic spacer)

To complete the GE555 module, the following may be ordered separately:
- Thermal energy meter, GE552 series
- Units for domestic/service water, GE550 or GE550-1 series
- Actuator for commanding the zone valve, K270
- Insulation, GE551-4 series
- Components for M-Bus data centralization (GE552-4 series), or Wireless M-Bus data centralization (GE552-W series)
GE555-2

MULTIUSER MODULES

FOR 2 APARTMENTS

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>CONNECTIONS</th>
<th>N° OF APARTMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE551Y040</td>
<td>3/4&quot; or 1&quot;</td>
<td>2</td>
</tr>
</tbody>
</table>

GE551Y040 metal cabinet. It can be used as a multiuser module for centralized heating and/or cooling systems.
- Guide rails for installation of thermal energy metering units (maximum 2 outputs)
- Guide rails for installation of domestic and/or service water metering units (maximum 6 outputs)
- Boxes with terminal boards for electrical connections
- Dimensions: 600 x 1100 x 110÷160 mm

FOR USE AS A MULTIUSER MODULE FOR 2 APARTMENTS, THE CABINET MUST BE FITTED WITH THE FOLLOWING COMPONENTS:
- Thermal energy metering units, GE550-2 series
- Thermal energy meters, GE552 series
- Units for domestic/service water, GE550 series
- Actuator for commanding the zone valve, K270
- Insulation, GE551-4 series
- Components for M-Bus data centralization (GE552-4 series), or Wireless M-Bus data centralization (GE552-W series)

FINISHING COMPONENTS, IN LIGHT GREY.

DELIVERY
RETURN
DOMESTIC HOT WATER
DOMESTIC COLD WATER
SERVICE WATER

FOR 3 or 4 APARTMENTS

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>CONNECTIONS</th>
<th>N° OF APARTMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE555Y135</td>
<td>1 1/4&quot; x 3/4&quot;</td>
<td>3</td>
</tr>
<tr>
<td>GE555Y136</td>
<td>1 1/4&quot; x 3/4&quot;</td>
<td>4</td>
</tr>
</tbody>
</table>

Multiuser module for centralized heating and/or cooling systems.
- Thermal energy metering units (3 or 4 depending on codes)
- Domestic metering units (3 or 4 depending on codes)
- Guide rails for installation of multiuser units (4 outputs) for service water
- Box with terminal board for electrical connections
- Dimensions: 750 x 1500 x 190 mm

TO COMPLETE THE MULTIUSER MODULE, THE FOLLOWING MAY BE ORDERED SEPARATELY:
- Thermal energy meters, GE552 series
- Domestic/service water meters, GE552-2 series
- Multiuser unit (4 outputs) for service water, code GE550Y148
- Actuator for commanding the zone valve, K270
- Insulation, GE551-4 series
- Components for M-Bus data centralization (GE552-4 series)

FINISHING COMPONENTS, IN LIGHT GREY.

DELIVERY
RETURN
DOMESTIC HOT WATER
DOMESTIC COLD WATER
SERVICE WATER
Delivery & return metering units.
- Shut-off ball valves
- Plastic spacer for installation of thermal energy meter (the thermal energy meter must be installed splitting the volumetric part from the display)
- Depending on the version, multiuser units for Domestic water, heating and/or cooling or universal metallic template units, are available
- Depending on the version, balancing valve units, motorizable zone valve, motorizable mixing valve, are available
- Max. working temperature 110 °C (90 °C with plastic spacer)
- Max. working pressure 16 bar (10 bar with plastic spacer)

Delivery heating/cooling units.
- Guides to move the position of the collars in vertical direction
- Zone valves (motorizable with K270 actuators)
- Static balancing valves
- Shut-off ball valves with housing for thermal energy meter delivery temperature probe
- Possibility of installation of the fifth zone (code GE550Y094)
- Frame dimensions: 390 x 495 x 160 mm

Return heating/cooling units.
- Guides to move the position of the collars in vertical direction
- Plastic spacer for installation of 3/4” thermal energy meters, GE552 series
- Shut-off ball valve
- Possibility of installation of the fifth zone (code GE550Y093)
- Frame dimensions: 390 x 495 x 110 mm

Domestic water units.
- Guides to move the position of the collars in vertical direction
- Plastic spacer for installation of 3/4” water meters, GE552-2 series
- Shut-off ball valves, upstream and downstream of the spacer
- Shut-off valves with check valves (green T-handle)
- Possibility of installation of the fifth zone (code GE550Y090)
- Frame dimensions: 390 x 495 x 160 mm

Universal multiuser metallic frame.
- Metallic frame with insulated manifold (size 1 1/4” x 3/4”)
- 2-4 zones with 3/4” units GE550, GE550-1 or GE550-2 series
- Shut-off ball valve
- Possibility of installation of the fifth zone (code GE550Y091)
- Frame dimensions: 400 x 495 x 140 mm

NOTE: for the manifold-units connection, please order separately the fittings R189DY004
GE550Y172-3-4-5-6

PRODUCT CODE | CONNECTIONS | MANIFOLDS | OUTPUTS | DELIVERY MODULE LENGTH mm | RETURN MODULE LENGTH mm
--- | --- | --- | --- | --- | ---
GE550Y172 | 1 1/4" x 3/4" | 2 | 750 | 555 | 1 -
GE550Y173 | 1 1/4" x 3/4" | 3 | 750 | 555 | 1 -
GE550Y174 | 1 1/4" x 3/4" | 4 | 750 | 555 | 1 -
GE550Y175 | 1 1/4" x 3/4" | 5 | 850 | 655 | 1 -
GE550Y176 | 1 1/4" x 3/4" | 6 | 950 | 755 | 1 -

Multiuser heating/cooling module.
- Filter
- Static balancing valve on the delivery outputs
- Differential pressure controller on the return outputs
- Plastic spacer on the return outputs, for installation of GE5S2 thermal energy meters
- Distribution manifolds with automatic air vent and drain tap
- Delivery module dimensions: 750÷950 x 415 x 310 mm
- Return module dimensions: 555÷755 x 640 x 310 mm

GE550Y192-3-4-5-6

PRODUCT CODE | CONNECTIONS | MANIFOLDS | OUTPUTS | LENGTH mm
--- | --- | --- | --- | ---
GE550Y192 | 3/4" x base 18 | 2 | 585 | 1 -
GE550Y193 | 3/4" x base 18 | 3 | 635 | 1 -
GE550Y194 | 3/4" x base 18 | 4 | 685 | 1 -
GE550Y195 | 3/4" x base 18 | 5 | 735 | 1 -
GE550Y196 | 3/4" x base 18 | 6 | 785 | 1 -

Multiuser heating/cooling module.
- Filter
- Static balancing valve
- Differential pressure controller
- Plastic spacer for installation of GE552 thermal energy meter
- Distribution manifolds with automatic air vent and drain tap
- Dimensions: 585–785 x 390 x 110 mm

GE553Y132-3-4-5-6

PRODUCT CODE | CONNECTIONS | MANIFOLDS | OUTPUTS | LENGTH mm
--- | --- | --- | --- | ---
GE553Y132 | 1" x 3/4" | 2 | 630 | 1 -
GE553Y133 | 1" x 3/4" | 3 | 730 | 1 -
GE553Y134 | 1" x 3/4" | 4 | 830 | 1 -
GE553Y135 | 1" x 3/4" | 5 | 930 | 1 -
GE553Y136 | 1" x 3/4" | 6 | 1030 | 1 -
GE553Y232 | 1 1/4" x 3/4" | 2 | 700 | 1 -
GE553Y233 | 1 1/4" x 3/4" | 3 | 800 | 1 -
GE553Y234 | 1 1/4" x 3/4" | 4 | 900 | 1 -
GE553Y235 | 1 1/4" x 3/4" | 5 | 1000 | 1 -
GE553Y236 | 1 1/4" x 3/4" | 6 | 1100 | 1 -
> Heat Interface Units for Direct Metering

**GE556**

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>CONNECTIONS</th>
<th>MAIN FEATURES</th>
<th>POWER EXCHANGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE556Y301</td>
<td>3/4&quot;</td>
<td>Priority valve</td>
<td>44 kW</td>
</tr>
<tr>
<td>GE556Y302</td>
<td>3/4&quot;</td>
<td>Priority valve</td>
<td>58 kW</td>
</tr>
<tr>
<td>GE556Y314</td>
<td>3/4&quot;</td>
<td>Softened water management</td>
<td>44 kW</td>
</tr>
</tbody>
</table>

Heat Interface Unit (HIU) for centralized systems, for managing heating and domestic hot water production.
- Heat exchanger for instantaneous production of domestic hot water
- Filter and housing for delivery temperature probe, on the primary side
- Motorizable zone valve and lockshield for static balancing, on the heating side
- Pre-arrangement for housing the HIU inside a metallic template fitted with shut-off valves
- Plastic spacers for installation of thermal energy meter and domestic water meter
- Box with terminal board for electric connections
- Fittings for connection and fixing
- Max. working temperature: 90 °C
- Max. working pressure: 16 bar (10 bar with plastic spacer)
- Dimensions: 540 x 390 x 155 mm

To complete the GE556 HIU, the following may be ordered separately:
- Thermal energy meter, GE552 series
- Domestic water meter, GE552-2 series
- Actuator for commanding the zone valve, K270
- Template for installation in building site, GE551-2 series
- Additional valve kit (only for GE556Y314)
- Components for M-Bus data centralization (GE552-4 series), or Wireless M-Bus data centralization (GE552-W series)

For all the versions, the exchanger power refers to the following operation conditions:
- Primary side 75 °C, flow rate 1 m³/h
- Secondary side 15-50 °C, 18 l/min
  (24 l/min for GE556Y302)

For the versions with big exchanger (GE556Y302, GE556Y303), the power can be considered equal to 44 kW to the following operating conditions:
- Primary side 65 °C, flow rate 1 m³/h
- Secondary side 15-50 °C, 18 l/min
Heat Interface Unit (HIU) with a double heat exchanger, for centralized systems for high and low temperature heating and production of domestic hot water (only for GE556Y176-Y177).

- Heat exchanger to separate the secondary heating circuit from the primary circuit of the condominium
- Heat exchanger for the instantaneous production of domestic hot water (except GE556Y171)
- Self-regulating circulator, which conforms to directive ErP (2009/125/EC), expansion tank, safety valve, manometer, pressure switch, automatic air vent valve, on heating side
- Thermostatic control of the heating temperature (possibility of high and low temperature)
- Automated zone valve, on heating side
- Priority control in the production of domestic hot water (except GE556Y171)
- TMV2+TMV3+WRAS-certified anti-scalding thermostatic mixer (except GE556Y171)
- Adjustable by-pass, dynamic balancing valve, primary side (except for the by-pass, there is no primary flow when the HIU is not active), automatic air vent
- Pre-arrangement for housing the HIU inside a metallic template fitted with shut-off valves
- Brass spacers for installation of thermal energy meter and domestic water meter
- Box with terminal board for electric connections
- Max. working temperature: 90 °C
- Max. working pressure: 16 bar
- Dimension: 450 x 630 x 180 mm

**GE556-1**

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>CONNECTIONS</th>
<th>MAIN FEATURES</th>
<th>HEAT EXCHANGER POWER</th>
<th>TEMPLATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE556Y171</td>
<td>3/4&quot; Heating</td>
<td>17,4 kW</td>
<td>GE551Y081 1</td>
<td></td>
</tr>
<tr>
<td>GE556Y176</td>
<td>3/4&quot; Heating / Domestic water production</td>
<td>17,4 kW / 56 kW</td>
<td>GE551Y082 1</td>
<td></td>
</tr>
<tr>
<td>GE556Y177</td>
<td>3/4&quot; Heating / Domestic water production</td>
<td>17,4 kW / 67 kW</td>
<td>GE551Y082 1</td>
<td></td>
</tr>
</tbody>
</table>

To complete the GE556-1 HIU, the following may be ordered separately:
- Thermal energy meter, GE552 series
- Domestic water meter, GE552-2 series
- Actuator for commanding the zone valve, K270
- Template for installation in building site, GE551-2 series
- Components for M-Bus data centralization (GE552-4 series), or Wireless M-Bus data centralization (GE552-W series)
GE556-2

**PRODUCT CODE** | **CONNECTIONS** | **MAIN FEATURES** | **EXCHANGER POWER** | **TEMPLATE** | **OPTIONAL ACCESSORIES**
---|---|---|---|---|---
GE556Y401 | 3/4” Heating / Domestic water production | 58 kW | GE551Y074 | 1 | -
GE556Y402 | 3/4” Heating / Domestic water production | 67 kW | GE551Y074 | 1 | -

High-efficiency electronic Heat Interface Unit (HIU) for centralized systems, for managing high/low temperature heating and hot domestic water production.

- Heat exchanger for the instantaneous production of domestic hot water
- Flow switch for domestic hot water priority command
- Three-way motorized diverting valve
- Two-way motorized mixing valve
- Filter and manual air-vent valve on primary side
- Adjustable by-pass and static balancing lockshield on heating side
- Thermal safety valve on heating side
- Safety pressure switch for low pressure
- Fully insulated pipes
- Electronic thermostilation unit with fixed point (Set-Point) for managing the domestic hot water temperature and the climatic heating curve, with external probe support (included)
- Remote command for parameter management, with visualisation display
- Domestic hot water temperature control probes (heating and primary return)
- Box with terminal board for electric connections
- Brass and plastic spacers for installation of thermal energy meter and domestic water meter
- Energy savings: reduction of the flow rate requested from the primary line, and reduction of the primary return temperatures
- Heating temperature range: low temperature: 25÷45 °C / high temperature: 25÷85 °C
- Domestic hot water temperature range: 30÷60 °C (Set-Point 48 °C)
- Max. working temperature: 90 °C
- Max. working pressure: 6 bar
- Dimensions: 450 x 630 x 180 mm

To complete the GE556-2 HIU the following may be ordered separately:
- Thermal energy meter, GE552 series
- Domestic water meter, GE552-2 series
- Templates for installation in building site, GE551-2 series
- Components for M-Bus data centralization (GE552-4 series), or Wireless M-Bus data centralization (GE552-W series)

**Energy saving features**

Low return temperatures of primary side, in heating operation

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**PRESENTATION**

K480Y002
Thermostat with remote command.
Provided with the HIU.

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**GRAPHIC**

Energy saving features
Low return temperatures of primary side, in heating operation
Heat Interface Unit (HIU) for centralized systems, for managing high/low temperature heating and hot domestic water production.

- Heat exchanger for instantaneous production of domestic hot water
- Flow switch for domestic hot water priority control
- Motorized three-way diverting valve
- Self-modulating circulator complying with Directive ErP 2009/125/EC (only for GE556Y322-323)
- Static balancing valve (only for GE556Y320-321)
- Thermostatic valve for adjusting the domestic hot water and heating temperature
- By-pass on the Domestic primary side to keep the exchanger warm
- Automatic air vent valve with hygroscopic gasket, filter and manometer on the primary side
- Safety pressure switch for low pressure on the primary side (only for GE556Y322-323)
- Differential pressure control valve on the primary side
- Safety valve with electrical actuator on the heating side
- Box with terminal board for electric connections
- Brass spacers for installation of thermal energy meter and domestic water meter
- Max. working temperature: 90 °C
- Max. working pressure: 6 bar (for low temp. versions); 16 bar (for high temp. versions)
- Dimensions: 450 x 630 x 180 mm

To complete the GE556-4 HIU, the following may be ordered separately:
- Thermal energy meter, GE552 series
- Domestic water meter, GE552-2 series
- Templates for installation in building site, GE551-2 series
- Components for M-Bus data centralization (GE552-4 series), or Wireless M-Bus data centralization (GE552-W series)
Modular Heat Interface Units (HIU) for thermal energy consumptions in heating systems and domestic hot water production in modern autonomous systems with centralized heat production (e.g., teleheating).

GE556-5 heat interface units are known as modular as one can assemble various components to create an interface unit suitable based on installation needs (control of high or low temperature heating with or without balancing valves, control of domestic hot and/or cold water, etc.).

Main features
- Hydraulic connection: 3/4"M.
- Heat exchanger power for domestic water up to 50 kW.
- Priority valve for domestic water production.
- Insulation through polypropylene foam shell.
- Predisposition for installation of thermal energy meter and domestic water meters.

Optional features
- Upper or lower primary circuit inlet.
- Differential pressure control valve on primary circuit.
- Domestic hot water control through thermostatic head.
- Flow rate control of high temperature heating circuit through static balancing valve.
- Additional low temperature heating circuit with thermostatic head and circulator, ErP compliance.
- Thermostatic by-pass to maintain constant the domestic hot water temperature of the heat exchanger.
- Recirculation kit with or without circulator for domestic water circuit.
- Varnished metal cover aesthetically pleasant.

Technical data
- Max. working temperature of primary and secondary circuits (heating and domestic hot water): 90 °C
- Max. working pressure of primary circuit: 6 bar
- Max. differential pressure of primary circuit: 0.5 bar
- Max. working pressure of domestic hot water (DHW) circuit: 10 bar
- Temperature range of heating secondary circuit: 20–70 °C (set point 45 °C)
- Temperature range of domestic hot water (DHW) secondary circuit: 20–70 °C (set point 50 °C)

Nominal flow rate of primary circuit (domestic hot water production):
- With GE556YS11/512 heat exchanger: 515 l/h @ 80 °C for 34 kW
- With GE556YS13/514 heat exchanger: 620 l/h @ 80 °C for 42 kW
- With GE556YS15/516 heat exchanger: 720 l/h @ 80 °C for 50 kW

Nominal flow rate of high temperature heating circuit:
- With GE556YS41/542 kit: 1000 l/h @ ΔT 15 °C (80-65 °C) for 17.5 kW
- With GE556YS41/542 kit: 480 l/h @ ΔT 10 °C (80-70 °C) for 5.5 kW

Nominal flow rate of low temperature heating circuit:
- With GE556YS46 kit: 1500 l/h @ ΔT 7 °C (45-38 °C) for 12.5 kW

Nominal flow rate of high and low temperature heating circuit:
- With GE556YS42 + GE556YS46 kit
  Primary: 770 l/h @ 80-54.5°C for 23 kW
  Low temp. secondary circuit: 1500 l/h @ ΔT 7 °C (45-38 °C) for 12.5 kW
  High temp. secondary circuit: 600 l/h @ ΔT 15 °C (80-65 °C) for 10 kW
- With GE556YS43 + GE556YS46 kit
  Primary circuit: 680 l/h @ 80-56°C for 19 kW
  Low temp. secondary circuit: 1500 l/h @ ΔT 7 °C (45-38 °C) for 12.5 kW
  High temp. secondary circuit: 480 l/h @ ΔT 10 °C (80-70 °C) for 5.5 kW
**HOW TO CREATE THE DESIRED HIU**

Starting from the GE5S6Y501/502 basic codes, the heat interface unit can be configured with additional product codes and possible optionals.

<table>
<thead>
<tr>
<th>BASIC CODE</th>
<th>DOMESTIC WATER CIRCUIT</th>
<th>PRIMARY CIRCUIT</th>
<th>SECONDARY CIRCUIT</th>
<th>OPTIONALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Heat exchanger</td>
<td>Control components</td>
<td>Primary circuit connections</td>
<td>Insulation</td>
</tr>
<tr>
<td>GE5S6Y501</td>
<td>Lower primary connections</td>
<td>GE5S6Y51  16 plate exchanger + 5 mm insulation</td>
<td>GE5S6Y52  DHW production with no controls</td>
<td>GE5S6Y531 Primary circuit connections with no heating</td>
</tr>
<tr>
<td></td>
<td>GE5S6Y512 Upper primary connections</td>
<td>GE5S6Y522 16 plate exchanger + 20 mm insulation</td>
<td>GE5S6Y532 Primary circuit connections with differential pressure control valve</td>
<td>GE5S6Y542 Secondary circuit, direct heating with static balancing</td>
</tr>
<tr>
<td></td>
<td>GE5S6Y513 26 plate exchanger + 5 mm insulation</td>
<td>GE5S6Y543 Secondary circuit, direct heating with presetting valve, possible installation of thermo-electric actuator</td>
<td>GE5S6Y546 Secondary circuit, low temperature heating kit (circuit + thermostatic head)</td>
<td>GE5S6Y563 Domestic water recirculation unit output without circulator</td>
</tr>
<tr>
<td></td>
<td>GE5S6Y515 36 plate exchanger + 5 mm insulation</td>
<td>GE5S6Y546</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GE5S6Y516 36 plate exchanger + 20 mm insulation</td>
<td>GE5S6Y546</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Second to last number of each product code (in red in the table) indicates product type:

- 0 for heat interface unit base
- 1 for heat exchanger of domestic water circuit
- 2 for control components of domestic water circuit
- 3 for control components of primary circuit
- 4 for control components of secondary circuit (heating)
- 5 for insulation (optional)
- 6 for other optional components

To ensure proper operation of heat interface unit, order at least one product code for each type of component with 0, 1, 2, 3, 4 as second to last figure.

Product codes with 5, 6 as second to last figures are considered optionals.
Electronic Heat Interface Unit (HIU) with double heat exchanger for centralized systems, for managing high/low temperature heating and domestic hot water production.

- Heat exchanger to separate the secondary heating circuit from the primary circuit of the condominium
- Heat exchanger for the instantaneous production of domestic hot water
- Electronic thermoregulation unit with fixed point (Set-Point) for managing the domestic hot water temperature and the climatic heating curve, with external probe support (included)
- Remote control with chronothermostat function to manage the parameter (for single zone)
- Flow switch for domestic hot water priority command
- Three-way priority valve on the delivery of the primary side
- Two-way modulating valve on the return of the primary side
- Self-modulating circulator (ErP 2009/125/EC)
- Filter and automatic air-vent valve on primary side
- Safety valve on heating side
- Safety pressure switch for low pressure on the primary side
- Fully insulated pipes
- Box with terminal board for electric connections
- Multizone additional control by the free contact on the electronic board (additional thermostats to be ordered separately)
- Brass spacers for installation of thermal energy meter and domestic water meter
- Energy savings: reduction of the flow rate requested from the primary line, and reduction of the primary return temperatures
- Heating temperature range: low temperature: 25–45 °C / high temperature: 25–85 °C
- Domestic hot water temperature range: 30–60 °C (Set-point 50 °C)
- Max. working temperature: 90 °C
- Max. working pressure: 10 bar
- Dimensions: 460 x 630 x 270 mm

**Energy saving features**

Low return temperatures of primary side, in heating operation

<table>
<thead>
<tr>
<th>Primary delivery T [°C]</th>
<th>65</th>
<th>70</th>
<th>75</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary return T [°C]</td>
<td>20</td>
<td>19</td>
<td>18</td>
<td>17</td>
</tr>
</tbody>
</table>

K480Y1002
Thermostat with remote command. Provided with the HIU.

<table>
<thead>
<tr>
<th>TO COMPLETE THE GE556-6 HIU, THE FOLLOWING MAY BE ORDERED SEPARATELY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Thermal energy meter, GE552 series</td>
</tr>
<tr>
<td>- Domestic water meter, GE552-2 series</td>
</tr>
<tr>
<td>- Templates for installation in building site</td>
</tr>
<tr>
<td>- Components for M-Bus data centralization (GE552-4 series), or Wireless M-Bus data centralization (GE552-W series)</td>
</tr>
</tbody>
</table>
## GE552

### THERMAL ENERGY METERS

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>CONNECTIONS</th>
<th>NOMINAL FLOW RATE m³/h</th>
<th>MAX FLOW RATE m³/h</th>
<th>SUPPLY</th>
<th>DISTANCE mm</th>
<th>DATA CENTRALIZATION TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE552Y215</td>
<td>3/4”</td>
<td>0,6</td>
<td>1,2</td>
<td>battery</td>
<td>110</td>
<td>M-Bus / Wireless M-Bus</td>
</tr>
<tr>
<td>GE552Y216</td>
<td>3/4”</td>
<td>1,5</td>
<td>3,0</td>
<td>battery</td>
<td>110</td>
<td>M-Bus / Wireless M-Bus</td>
</tr>
<tr>
<td>GE552Y217</td>
<td>1”</td>
<td>2,5</td>
<td>5,0</td>
<td>battery</td>
<td>130</td>
<td>M-Bus / Wireless M-Bus</td>
</tr>
</tbody>
</table>

Volumetric thermal energy meters with double register, for measuring heating and/or cooling consumption.

- Electronic processing unit
- Flow rate measuring section
- Impulsive inputs for domestic water meters
- Two water temperature probes (delivery and return)
- Max. working temperature 90 °C
- Max. working pressure 16 bar
- Arranged for data communication in accordance with M-Bus EN1434 or Wireless M-Bus EN13757 (by the GE552Y027 board)
- EC marks
- Certified in accordance with MID Directive 2004/22/EC

### DOMESTIC WATER METERS

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>CONNECTIONS</th>
<th>Domestic WATER TYPE</th>
<th>PERMANENT FLOW RATE Q3 m³/h</th>
<th>MAX WATER TEMPERATURE °C</th>
<th>CENTRE DISTANCE mm</th>
<th>DATA CENTRALIZATION TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE552Y190</td>
<td>3/4”</td>
<td>cold</td>
<td>2,5</td>
<td>30</td>
<td>110</td>
<td>M-Bus</td>
</tr>
<tr>
<td>GE552Y191</td>
<td>3/4”</td>
<td>hot</td>
<td>2,5</td>
<td>90</td>
<td>110</td>
<td>M-Bus</td>
</tr>
</tbody>
</table>

Domestic water meters, for measuring the consumption of domestic hot and cold water.

- Measurement section of the flow and circular dial
- Max. working temperature: 30 °C for domestic cold water
  90 °C for domestic hot water
- Max. working pressure 10 bar
- Arranged for data communication in accordance with M-Bus EN1434
- EC marking
- Certified in accordance with MID Directive 2004/22/EC
The wireless M-Bus (868 MHz) centralization complies with the standard EN 13757. The consumption data may be sent remotely or in walk-by mode.

REMOTE MODE

The new modular M-Bus Wireless centralization system is composed of a datalogger GE552Y052 (with integrated web server) and radio signal repeater antennae GE552Y053. The system allows:

- connecting in series the various wired and wireless devices, extending the reading capacity up to 500 devices.
- directly managing 500 wireless devices or 20 wired devices and 480 wireless.

The number of wired devices may be extended to 250, connecting more local concentrators GE552Y050 to the GE552Y052 datalogger, maintaining the possibility to manage up to 250 wireless devices.

Advantages:

- The integrated web server allows the set-up, the search and the consultation of data from all the devices that make up the M-Bus/M-Bus wireless network directly on the display of the device
- Through a dial-up router all data can be managed and viewed on a PC or smartphone
- Management of alarms due to failure, tampering or the exceeding of configurable thresholds with the sending of email notifications
- Scheduling for the generation and forwarding of reports on the data gathered

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE552Y052</td>
<td>Wireless M-Bus/M-Bus datalogger for acquisition, processing and registration of data from wired or wireless M-Bus devices. Manages directly up to 500 wireless devices and 20 wired devices.</td>
</tr>
<tr>
<td>GE552Y053</td>
<td>Wireless repeater and concentrator to extend the radio flow rate of the devices and for data transmission to the GE552Y052 datalogger.</td>
</tr>
</tbody>
</table>

Modem router

PRODUCT CODE  GE552Y055
3G/EDGE/GPRS wireless modem router for remote connection of GE552Y051 or GE552Y052 datalogger.

Wireless signal repeater antenna

PRODUCT CODE  GE552Y053
Wireless repeater and concentrator to extend the radio flow rate of the devices and for data transmission to the GE552Y052 datalogger.

WALK-BY MODE

Data sent to a PC, received by antenna GE552Y043 connected to USB port.

PRODUCT CODE  GE552Y043
Wireless data receiver for devices installed on the installation (heat cost allocators, wireless modules for meters). Can be connected to PC via USB port. Flow rate up to 400 m.

The operation is provided by the same software GESWY001 used for heat cost allocators programming.
**WIRELESS DEVICES**

**Wireless module for thermal energy meters**

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>CHARACTERISTICS</th>
<th>QUANTITY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE552Y027</td>
<td></td>
<td></td>
<td>For installation on the thermal energy meter dial GE552Y215, GE552Y216, GE552Y217.</td>
</tr>
</tbody>
</table>

**Software for wireless data centralisation.**

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>QUANTITY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>GESWY001</td>
<td>1</td>
<td>For all devices</td>
</tr>
</tbody>
</table>

The software can be used to configure and easily manage the wireless metering system. The codes refers to no. 1 user license.

**SAMPLE SCHEME**

**WIRELESS DEVICES**

**G500**

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>CHARACTERISTICS</th>
<th>QUANTITY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE500Y401</td>
<td>brass</td>
<td>1</td>
<td>Probe-support replacement kit M10 x 1 mm for energy meters.</td>
</tr>
<tr>
<td>GE500Y402</td>
<td>plastic</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
The new M-bus modular centralization system comprises two solutions and allows to place the various devices in series expanding the reading possibility from 60 to 250 devices.

The **standard solution** is to use a local M-Bus concentrator that supports up to 60 devices and allows the on-site consultation and acquisition of data on the PC through a special software and USB cable. Up to 4 local concentrators can be placed in series and therefore up to 240 devices managed.

The **complete solution** consists of a datalogger with integrated web server that supports up to 4 local concentrators expanding the network to 250 devices.

**Advantages:**
- The integrated web server allows the set-up, the search and the consultation of data from all the devices that make up the M-Bus network directly on the display of the device
- Through a dial-up router all data can be managed and viewed on a PC or smartphone
- Management of alarms due to failure, tampering or the exceeding of configurable thresholds with the sending of email notifications
- Scheduling for the generation and forwarding of reports on the data gathered

### Local concentrator

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GE552Y050</td>
<td>1 -</td>
</tr>
<tr>
<td>GE552Y056 *</td>
<td>1 -</td>
</tr>
</tbody>
</table>

Local concentrator for the collection, processing and recording of data originated from the M-Bus network. Capable of managing up to 60 devices. To be used with the software for data acquisition GE552Y056.

* The code refers to no. 1 user license.

### Modem router

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GE552Y055</td>
<td>1 -</td>
</tr>
</tbody>
</table>

3G/EDGE/GPRS wireless modem router for remote connection of GE552Y051 or GE552Y052 datalogger.

### Datalogger with web server

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GE552Y051</td>
<td>1 -</td>
</tr>
</tbody>
</table>

M-Bus datalogger for the collection, processing and recording of data originating from local GE552Y050 concentrators (max. 4 concentrators). Can manage directly up to 20 devices and expands the M-Bus network up to 250 devices.

### SAMPLE SCHEME

![Sample Scheme Image]
DATA CENTRALIZATION WITH M-BUS

The European Parliament and Council of the European Union have adopted Directive 2004/22/CE* concerning measurement instruments (MID – Measurement Instrument Directive): it sets the requirements for a set of devices and measurement systems in order to be marketed and operated in UE countries. This directive was acknowledged in Italy with Decreto Legislativo 2nd February 2007 n. 22**.

All measurement devices used in GESS5 modules and GESS6 HIUs comply with MID European Directive.


COMPLIANCE WITH MID DIRECTIVE (2004/22/CE)

The use of measurement instruments suitable for the recording of consumption data is particularly important for the aspects that involves, as the consumer and environment protection, the fair expense sharing out, the imposition of taxes or the correctness of the commercial transactions. For this reason, the Countries of the European Union have acknowledged MID Directive (2004/22/CE) that defines the requirements to which the measurement instruments shall comply with to be marketed or started.

The range of Giacomini’s modules and user HIUs includes exclusively measurement devices complying with the Directive, as attested on them by the presence of the MID metrological marking close by the CE marking.

METROLOGICAL MARKING

Compliance of measurement devices with all provisions of D.Lgs. 2nd February 2007 n.22 is certified by the presence, on them, of CE marking and of metrology marking composed of letter “M” and of the last two digits of the year of production.

OMS: OPEN METERING SYSTEM

The Open Metering System (OMS) is the only specification in Europe intended to integrate the instruments for measuring various elements, to guarantee their interoperability and future operation. The water and heat meters and the heat cost allocators using an open communication standard are interchangeable regardless of the producer and guarantee maximum safety and data protection levels.
INDIRECT METERING (HEAT COST ALLOCATORS)

The metering of thermal consumption using the GE700 electronic heat cost allocator system allows reorganizing radiator systems with centralized production and rising column distribution, making them more modern and appropriate for the times. In addition to the comfort and energy saving provided by individual thermostatic heads and valves, it is possible to divide the cost of heating on the basis of the actual consumption, with a criterion of greater equity with respect to the traditional criteria of subdividing.

A radiator system that is reorganized with metering and theremogulation also encourages more responsible, individual behaviour towards energy use. By paying for what they actually consume, each user is motivated to eliminate waste and to regulate the temperature towards the rooms of his house, on the basis of his actual need.

No longer will rooms be unnecessarily overheated, with the windows open, which will be a great benefit for the environment and for the energy bill. The GE700 electronic heat cost allocators conform to regulation EN 834, and are based on the principle of dual-sensor temperature measurement.

Their use is possible in radiator systems that have single, or twin pipe distribution. They can also transmit the data remotely, at a radio frequency of 868 MHz (the ISM (Industrial, Scientific, Medical) European band) and are fitted with a long-life battery.

The large range of accessories allow them to be assembled to the most common radiators on the market.

GE700

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>FEATURES</th>
<th>α</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE700Y030</td>
<td>-</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>GE700Y033</td>
<td>with remote sensor</td>
<td>1</td>
<td>40</td>
</tr>
</tbody>
</table>

LEGEND

1 = Safety seal
2 = Fixing screws
3 = Heat cost allocator
4 = Support

Radio-controlled heat cost allocator, for measuring thermal consumption. With certification of conformity to the norm EN 834. EN 13757 Wireless M-Bus transmission of data at 868 MHz in accordance with OMS standard. Six-figure display for direct reading. Dual temperature sensor operation, with automatic switching to one sensor under critical temperature measuring conditions. Optical interface for programming/reading using a special configuration key. Anti-tamper seal and alarm disassembly with data storage. Daily storage of data, with monthly archive. Archive of consumptions and average temperatures, up to 24 months before. Powered by a lithium battery, standard lifetime, 10 years. Type of centralized system: with 2 pipes / 1 pipe. Sensor precision: error ≤ 1 %.

Heating temperature field (Tmin for initial count, Tmax): 21÷90 °C.

Temperature for initial count, summer mode: 38 °C. Switching ΔT: 3 K.

Maximum radiator power: 12500 W.

Programmable data transmission frequency.

Transmission power ≤ 10 mW.

Warehouse storage temperature: 10÷30 °C.

Standard OMS.

Production check of every individual heat cost allocator. Certification document of the count precision, available (in accordance with EN 834).

NOTES

GE700Y033: radio-controlled heat cost allocator with remote sensor.

To be used in installation situations in which the radiator is difficult to access, or where there is insufficient space to fit the heat cost allocator. In these cases, the heat cost allocator and probe can be installed separately, with the remote sensor in contact with the surface of the radiator.

Producing probe and kit to fit the heat cost allocator to the wall. Suitable for measuring thermal consumption in convectors. Remote probe cable length: 2 m.

GE700-1

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>SIZE</th>
<th>α</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE700Y100</td>
<td>35 mm fixing support, M4 screws x20</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>GE700Y101</td>
<td>43 mm fixing support, M4 screws x20</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>GE700Y102</td>
<td>53 mm fixing support, M4 screws x20</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>GE700Y103</td>
<td>55 mm fixing support, M3 screws x20</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>GE700Y104</td>
<td>37 mm fixing support, M3 screws x20</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>GE700Y105</td>
<td>67 mm fixing support, M4 screws x20</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>GE700Y106</td>
<td>Bracket</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>GE700Y107</td>
<td>Threaded stud bolt</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>GE700Y108</td>
<td>Screw nut for the welding operation</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>GE700Y109</td>
<td>Spanner for tightening the GE700Y108 nut</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>GE700Y110</td>
<td>Additional plate for installing onto radiators that have a large space between the elements</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>GE700Y101</td>
<td>Welder</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

Fixing elements for GE700 heat cost allocators.

GE700-2

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
<th>α</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE700Y150</td>
<td>optical key</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>GESWY001 *</td>
<td>software</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

Optical key, for configuring the GE700 heat cost allocators. Can be connected to a USB port, and programmed using specific software for heat cost allocators (GESWY001).

* The code refers to 1 user license.
The centralisation of the wireless M-Bus (868 MHz) complies with EN 13757. The consumption data may be sent **remotely** or in **walk-by mode**.

### REMOTE MODE
The data received by the GE552Y053 is sent to the datalogger GE552Y052, allowing:
- the remote transmission of read data to programmable e-mail addresses;
- the management and display of the data from the PC, smartphone or tablet, through integrated web server if connected to the GSM/GPRS network.

### WALK-BY MODE
Data sent to a PC, received by GE552Y043 antenna connected to USB port.

#### Wireless data receiver antenna
**PRODUCT CODE**
GE552Y043

Wireless data receiver for devices installed on the installation (heat cost allocators, wireless modules for meters). Can be connected to PC via USB port. Flow rate up to 400 m.

The operation is provided by the same software GESWY001 used for heat cost allocators programming.

#### Wireless signal repeater antenna
**PRODUCT CODE**
GE552Y053

Wireless repeater and concentrator to extend the radio flow rate of the devices and for data transmission to the GE552Y052 datalogger.
## BASIC UNITS AND ACCESSORIES
(BOXES, TEMPLATES, INSULATIONS, OTHER COMPONENTS)

### GE550

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>CONNECTIONS</th>
<th>TYPE OF Domestic WATER</th>
<th>PERMANENT FLOW-RATE m³/h</th>
<th>MAX. WATER TEMPERATURE</th>
<th>WATER METER</th>
<th>COLLARS</th>
<th>UNITS LENGTH mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE550Y004</td>
<td>3/4&quot;</td>
<td>cold</td>
<td>2,5</td>
<td>30 °C</td>
<td>YES</td>
<td>included</td>
<td>262</td>
</tr>
<tr>
<td>GE550Y005</td>
<td>1&quot;</td>
<td>cold</td>
<td>4,0</td>
<td>30 °C</td>
<td>YES</td>
<td>included</td>
<td>310</td>
</tr>
<tr>
<td>GE550Y014</td>
<td>3/4&quot;</td>
<td>hot</td>
<td>2,5</td>
<td>90 °C</td>
<td>YES</td>
<td>included</td>
<td>262</td>
</tr>
<tr>
<td>GE550Y015</td>
<td>1&quot;</td>
<td>hot</td>
<td>4,0</td>
<td>90 °C</td>
<td>YES</td>
<td>included</td>
<td>310</td>
</tr>
<tr>
<td>GE550Y008</td>
<td>3/4&quot;</td>
<td>cold - service water</td>
<td>2,5</td>
<td>30 °C</td>
<td>YES</td>
<td>included</td>
<td>262</td>
</tr>
<tr>
<td>GE550Y101</td>
<td>3/4&quot;</td>
<td>cold</td>
<td>-</td>
<td>-</td>
<td>NO</td>
<td>included</td>
<td>262</td>
</tr>
<tr>
<td>GE550Y102</td>
<td>1&quot;</td>
<td>cold</td>
<td>-</td>
<td>-</td>
<td>NO</td>
<td>included</td>
<td>310</td>
</tr>
<tr>
<td>GE550Y103</td>
<td>3/4&quot;</td>
<td>hot</td>
<td>-</td>
<td>-</td>
<td>NO</td>
<td>included</td>
<td>262</td>
</tr>
<tr>
<td>GE550Y104</td>
<td>1&quot;</td>
<td>hot</td>
<td>-</td>
<td>-</td>
<td>NO</td>
<td>included</td>
<td>310</td>
</tr>
</tbody>
</table>

Domestic water metering units.
- Shut-off ball valves
- Check valve integrated with the shut-off ball valve (green handle)
- Available with or without water meter
- Max. working temperature:
  - 30 °C for cold domestic water
  - 90 °C for hot domestic water
- Max. working pressure: 16 bar (10 bar with plastic spacer)

### GE550-1

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>CONNECTIONS</th>
<th>TYPE OF Domestic WATER</th>
<th>PERMANENT FLOW-RATE m³/h</th>
<th>MAX. WATER TEMPERATURE</th>
<th>WATER METERS</th>
<th>COLLARS</th>
<th>UNITS LENGTH mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE550Y024</td>
<td>3/4&quot;</td>
<td>cold + hot</td>
<td>2,5</td>
<td>90 °C (hot side)</td>
<td>YES</td>
<td>included</td>
<td>420</td>
</tr>
<tr>
<td>GE550Y111</td>
<td>3/4&quot;</td>
<td>cold + hot</td>
<td>2,5</td>
<td>90 °C (hot side)</td>
<td>NO</td>
<td>included</td>
<td>420</td>
</tr>
</tbody>
</table>

Domestic water metering units, with thermostatic mixer.
- Shut-off ball valves
- Check valve
- Available with or without water meter
- Max. working temperature:
  - 30 °C on cold domestic water side
  - 90 °C on hot domestic water side
- Max. working pressure: 16 bar (10 bar with plastic spacer)
## Delivery Units

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>CONNECTIONS</th>
<th>NOMINAL FLOW RATE m³/h</th>
<th>ZONE VALVES</th>
<th>BALANCING VALVES</th>
<th>FILTER</th>
<th>COLLARS</th>
<th>UNITS LENGTH mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE550Y121</td>
<td>3/4&quot;</td>
<td>1.5</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>included</td>
<td>264</td>
</tr>
<tr>
<td>GE550Y122</td>
<td>1&quot;</td>
<td>2.5</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>included</td>
<td>316</td>
</tr>
<tr>
<td>GE550Y123</td>
<td>3/4&quot;</td>
<td>1.5</td>
<td>2 ways</td>
<td>NO</td>
<td>YES</td>
<td>included</td>
<td>237</td>
</tr>
<tr>
<td>GE550Y124</td>
<td>3/4&quot;</td>
<td>1.5</td>
<td>2 ways</td>
<td>NO</td>
<td>YES</td>
<td>included</td>
<td>320</td>
</tr>
<tr>
<td>GE550Y125</td>
<td>1&quot;</td>
<td>2.5</td>
<td>2 ways</td>
<td>NO</td>
<td>YES</td>
<td>included</td>
<td>371</td>
</tr>
<tr>
<td>GE550Y135</td>
<td>3/4&quot;</td>
<td>1.5</td>
<td>2 ways</td>
<td>YES</td>
<td>YES</td>
<td>included</td>
<td>508</td>
</tr>
<tr>
<td>GE550Y136</td>
<td>3/4&quot;</td>
<td>1.5</td>
<td>2 ways</td>
<td>YES</td>
<td>YES</td>
<td>included</td>
<td>439</td>
</tr>
<tr>
<td>GE550Y137</td>
<td>3/4&quot;</td>
<td>1.5</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>included</td>
<td>264</td>
</tr>
<tr>
<td>GE550Y138</td>
<td>3/4&quot;</td>
<td>1.5</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>included</td>
<td>345</td>
</tr>
<tr>
<td>GE550Y139</td>
<td>1&quot;</td>
<td>2.5</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>included</td>
<td>411</td>
</tr>
</tbody>
</table>

Delivery metering units for use in heating and/or cooling circuits.
- Shut-off ball valves
- Depending on the version, there are connections of 3/4" or 1", a motorized zone valve, a static balancing valve and a filter
- Max. working temperature: 110 °C
- Max. working pressure: 16 bar

## Return Units

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>CONNECTIONS</th>
<th>NOMINAL FLOW RATE m³/h</th>
<th>PLASTIC SPACER</th>
<th>COLLARS</th>
<th>UNITS LENGTH mm</th>
<th>SPACER CENTRE DISTANCE mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE550Y129</td>
<td>3/4&quot;</td>
<td>1.5</td>
<td>YES</td>
<td>included</td>
<td>254</td>
<td>110</td>
</tr>
<tr>
<td>GE550Y130</td>
<td>1&quot;</td>
<td>2.5</td>
<td>YES</td>
<td>included</td>
<td>300</td>
<td>130</td>
</tr>
</tbody>
</table>

Return metering units for use in heating and cooling circuits.
- Shut-off ball valves
- Plastic spacer for installation of thermal energy meter
- Max. working temperature: 110 °C (90 °C with plastic spacer)
- Max. working pressure: 16 bar (10 bar with plastic spacer)

## Delivery and Return Units

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>CONNECTIONS</th>
<th>NOMINAL FLOW RATE m³/h</th>
<th>ZONE VALVES</th>
<th>BALANCING</th>
<th>COLLARS</th>
<th>UNITS LENGTH mm</th>
<th>SPACER CENTRE DISTANCE mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE550Y166</td>
<td>3/4&quot;</td>
<td>1.5</td>
<td>3 ways</td>
<td>NO</td>
<td>included</td>
<td>422</td>
<td>110</td>
</tr>
<tr>
<td>GE550Y167</td>
<td>1&quot;</td>
<td>2.5</td>
<td>3 ways</td>
<td>NO</td>
<td>included</td>
<td>491</td>
<td>130</td>
</tr>
<tr>
<td>GE550Y168</td>
<td>3/4&quot;</td>
<td>1.5</td>
<td>3 ways</td>
<td>static</td>
<td>included</td>
<td>453</td>
<td>110</td>
</tr>
<tr>
<td>GE550Y169</td>
<td>1&quot;</td>
<td>2.5</td>
<td>3 ways</td>
<td>static</td>
<td>included</td>
<td>491</td>
<td>130</td>
</tr>
<tr>
<td>GE550Y170</td>
<td>3/4&quot;</td>
<td>1.5</td>
<td>3 ways</td>
<td>dynamic</td>
<td>included</td>
<td>444</td>
<td>110</td>
</tr>
<tr>
<td>GE550Y171</td>
<td>1&quot;</td>
<td>2.5</td>
<td>3 ways</td>
<td>dynamic</td>
<td>included</td>
<td>490</td>
<td>130</td>
</tr>
</tbody>
</table>

Delivery & return metering units, for use in heating and cooling circuits.
- Shut-off ball valves, may be sealed, can be plumbed
- Filter with basket in stainless steel
- Plastic spacer for installation of thermal energy meter
- Depending on the version, 3/4" and 1" connections, and static or dynamic balancing valves are available
- Max. working temperature: 110 °C (90 °C, with plastic spacer pipe)
- Max. working pressure: 16 bar (10 bar with plastic spacer pipe)
**GE551**

Flush-mounting cabinets in painted sheet metal (RAL9010).
- Lockable door
- Adjustable frame depth
- Front and side holes for the system transfer pipes with closure caps
- Box with fairlead for electrical components

<table>
<thead>
<tr>
<th>CODE</th>
<th>DIMENSIONS (L x H x D) mm</th>
<th>AREAS FOR UNITS FOR HEAT/COND.</th>
<th>GUIDES FOR Domestic UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE551Y031</td>
<td>750 x 1500 x 190</td>
<td>3  - 4</td>
<td>3  - 4</td>
</tr>
<tr>
<td>GE551Y038</td>
<td>500 x 500 x 110</td>
<td>1  - 2</td>
<td>1  -</td>
</tr>
<tr>
<td>GE551Y039</td>
<td>600 x 600 x 110</td>
<td>1  - 3</td>
<td>1  -</td>
</tr>
<tr>
<td>GE551Y040</td>
<td>600 x 1100 x 110</td>
<td>2  - 6</td>
<td>1  -</td>
</tr>
</tbody>
</table>

**GE551-1**

Electro-galvanised metallic frame pre-arranged for the installation of metering units for heating and/or cooling, and units for domestic and/or service water.

<table>
<thead>
<tr>
<th>CODE</th>
<th>DIMENSIONS (L x H x D) mm</th>
<th>AREAS FOR UNITS FOR HEAT/COND.</th>
<th>GUIDES FOR Domestic UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE551Y154</td>
<td>500 x 500 x 10</td>
<td>1</td>
<td>3  -</td>
</tr>
</tbody>
</table>

**GE551-2**

Templates for standard HIUs, GE556

Template for installation at the worksite of GE556 HIUs. Completed with shut-off valves.

GE551Y072: external
GE551Y073: flush-mounting

<table>
<thead>
<tr>
<th>CODE</th>
<th>CONNECTIONS (L x H x D) mm</th>
<th>No. of SHUT-OFF VALVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE551Y072</td>
<td>3/4&quot; 560 x 570 x 165</td>
<td>7</td>
</tr>
<tr>
<td>GE551Y073</td>
<td>3/4&quot; 570 x 770 x 165</td>
<td>7</td>
</tr>
</tbody>
</table>

Templates for HIU with double exchanger, GE556-1

Template for installation at the worksite of GE556-1 HIUs. Completed with shut-off valves.

GE551Y083, GE551Y084: with connection from above (on the back side of the template).

<table>
<thead>
<tr>
<th>CODE</th>
<th>CONNECTIONS (L x H x D) mm</th>
<th>No. of SHUT-OFF VALVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE551Y081</td>
<td>3/4&quot; 450 x 720 x 72</td>
<td>4</td>
</tr>
<tr>
<td>GE551Y082</td>
<td>3/4&quot; 450 x 720 x 72</td>
<td>7</td>
</tr>
<tr>
<td>GE551Y083</td>
<td>Ø 22 450 x 720 x 208</td>
<td>4</td>
</tr>
<tr>
<td>GE551Y084</td>
<td>Ø 22 450 x 720 x 208</td>
<td>7</td>
</tr>
</tbody>
</table>

Templates for HIU with differential pressure control valve, GE556-4

Template for installation at the worksite of GE556-4 HIUs. Completed with shut-off valves.

<table>
<thead>
<tr>
<th>CODE</th>
<th>CONNECTIONS (L x H x D) mm</th>
<th>No. of SHUT-OFF VALVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE551Y075</td>
<td>3/4&quot; 450 x 202 x 72</td>
<td>7</td>
</tr>
</tbody>
</table>

Templates for HIU with electronic regulation and double exchanger, GE556-6

Template for installation at the worksite of GE556-6 HIUs. Completed with shut-off valves.
GE551Y085: with connection from above (on the back side of the template).
GE551Y086: with connection from below.

<table>
<thead>
<tr>
<th>CODE</th>
<th>CONNECTIONS (L x H x D) mm</th>
<th>No. of SHUT-OFF VALVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE551Y085</td>
<td>Ø 22 450 x 792 x 218</td>
<td>7</td>
</tr>
<tr>
<td>GE551Y086</td>
<td>3/4&quot; 450 x 202 x 72</td>
<td>7</td>
</tr>
</tbody>
</table>
GE551-3

Plastic collars, for fastening metering units for heating and/or cooling and for Domestic and/or service water units.

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DIMENSIONS</th>
<th>USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE551Y002</td>
<td>DN25</td>
<td>For 3/4” outputs</td>
</tr>
<tr>
<td>GE551Y003</td>
<td>DN32</td>
<td>For 3/4” outputs</td>
</tr>
<tr>
<td>GE551Y004</td>
<td>DN40</td>
<td>For 1” outputs</td>
</tr>
</tbody>
</table>

GE551-4

Insulation for the heating and/or cooling delivery unit GE550Y136. Dimensions: 465 x 125 x 90 mm.

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>[GE551Y171]</th>
</tr>
</thead>
</table>

Insulation for Domestic water meter, GE552-2 series, only for 3/4” sizes. Dimensions: 170 x 90 x 65 mm.

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>[GE551Y173]</th>
</tr>
</thead>
</table>

Insulation for the GE555Y461 module and heating and/or cooling delivery and return unit GE550Y166. Dimensions: 450 x 250 x 90 mm.

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>[GE551Y177]</th>
</tr>
</thead>
</table>

Insulation for metering units GE550-3 with 70 mm centre distance (codes GE550Y112, GE550Y113, GE550Y114, GE550Y116, GE550Y117, GE550Y144, GE550Y146, GE550Y147). Dimensions: 300 x 110 x 80 mm.

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>[GE551Y178]</th>
</tr>
</thead>
</table>

Insulation for HIUs GE556Y176, GE556Y177. Dimensions: 300 x 430 x 100 mm.

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>[GE551Y180]</th>
</tr>
</thead>
</table>