



GE556Y401 - GE556Y402

Index

- 1. General information 1
 - 1.1 Warnings 1
 - 1.2 Versions and product codes 1
 - 1.3 Completion codes 1
 - 1.4 Main characteristics 2
 - 1.5 Technical data 2
 - 1.6 Dimensions 3
- 2. Operation 3
 - 2.1 GE556Y401 operational data 5
 - 2.2 GE556Y401 energy-saving features 6
 - 2.3 GE556Y402 operational data 7
 - 2.4 GE556Y402 energy-saving features 8
- 3. Components 9
- 4. Installation 10
 - 4.1 Unpacking 10
 - 4.2 Installation set up 10
 - 4.3 Hydraulic system precautions 10
 - 4.4 Electric system precautions 10
 - 4.5 Template and HIU installation 10
 - 4.6 Start-up 12
 - 4.7 Optional: additional unit for domestic cold water 13
 - 4.8 Flow and thermal energy meter installation 13
 - 4.9 Positioning of external temperature probe 14



5. HIU standard presetting	15
5.1 Parameters programming: variation from low to high temperature	15
6. Remote control/chronothermostat with display K480Y002	16
6.1 Technical characteristics	16
6.2 Buttons and display	16
6.3 LCD display symbols	17
6.4 General warnings	18
6.5 Main characteristics	18
6.6 Remote control positioning	18
6.7 Remote control installation	19
6.8 Configuring the operational parameters	20
6.9 Disabling the climatic regulator	21
6.10 Selecting the operational mode	21
6.11 Setting time and temperature	23
6.11.1 Setting the setting	23
6.11.2 Setting the room temperature DAYTIME ZONE	24
6.11.3 Setting the room temperature NIGHT TIME ZONE	24
6.11.4 Setting the temperature HEATING	24
6.11.5 Setting the temperature Domestic WATER	25
6.11.6 Setting the external probe KD value	25
6.12 Setting the time and temperatures	26
6.12.1 MANUAL mode	26
6.12.2 AUTOMATIC mode	26
6.13 Heating weekly program	27
6.13.1 Displaying the heating program	27
6.13.2 Modifying the heating program	27
6.14 Provisional modification of room temperature set point	28
6.15 Displaying the values	28
6.15.1 Displaying the preset room temperature	28
6.15.2 Displaying the domestic water probe temperature	
6.15.3 Displaying the delivery probe temperature	29
6.15.4 Displaying the external probe temperature	29
6.15.5 Displaying the system water pressure	29
6.16 Restoring default values	30
6.17 Full reset	30
6.18 Ambient anti-freezing function	30
6.19 Anomaly alerts	31
6.19.1 Restartable anomalies	31
6.19.2 Non-restartable anomalies	32
7. Circulator typical curves	32
8. Electric installations	33
9. Troubleshooting	34
9.1 Domestic hot water temperature too low	
9.2 Domestic hot water temperature too high	
9.3 Heating circuit water temperature too low	35
9.4 Heating circuit water temperature too high	35
9.5 Heating circuit down	36
9.6 Noise in the heating system	36
10. Inspections and service	37
10.1 Recommended service operations	37
11. Spare parts	38
11.1 GE556Y401 - GE556Y402 HIU spare parts	38
11.2 GE551Y074 template spare parts	39
12. Compliance statements	39

1. General information

GE556Y401 and GE556Y402 Heat Interface Units (HIU) enable metering thermal energy consumptions when heating and the production of Domestic Hot Water (DHW) in modern autonomous systems with heat centralized production (eg. teleheating). Control of the HIU parameters is fully electronic. The various parameters can be entered through a remote device which works also as programmable chronothermostat. The HIUs offer great energy saving by minimizing the flow request from the primary side and reducing the delivery temperature.

1.1 Warnings

- Installation must be carried out by qualified personnel authorized by the building administration body. Comply with the regulations in terms of use (installation, fitting, etc...), operation, re-gauging and replacement of metering units. Also refer to assembly instructions included with every metering unit.
- Risk of scalds and electric shocks. Only qualified personnel authorized by the building administration body should access the HIU. Misuse may cause serious injuries to people and damage the system.
- An excessive temperature of the domestic hot water may cause scalds to people; too cold water may lead to undesired bacterial growth within the hot water system.
- Some HIU parts may overheat, do not touch them.
- Before connecting the HIU to the power line, make sure it has been properly filled with water. Starting the HIU without water inside may damage the circulator and the HIU.
- When starting up the HIU, make sure no one uses the system water till the water temperature has been adjusted in order to prevent scalds.



- To prevent polluting agents from entering the system, first open the primary circuit valves and then the return valves when starting up the HIU. Open the valves slowly to prevent pressure peaks.
- Do not cut off the electric power from the control panel. This may damage the circulator, the valve actuators, etc...
- The cleaning frequency of the domestic water exchanger strongly depends on the hardness of the supply domestic cold water.
- With water hardness values higher than 15°f we recommend using anti-scaling devices to be selected based on the water characteristics.
- To enhance the resistance to limestone crusting, we recommend adjusting the domestic water temperature at a value very close to the value of actual use.
- Clean the domestic water exchanger at the end of the first year; then, based on the limestone crusting status, this period can be extended to two years.
- The HIU can be used in closed boiler rooms for operation with non-aggressive fluids (water, glycol-based water in compliance with VDI 2035/ÖNORM 5195).
- The electrical installation must be done by qualified personnel, respecting the current legislation and Standards.

1.2 Versions and product codes

Code	Type	Heating side power	DHW exchanger nominal power	Template with valves
GE556Y401	Heating and DHW production	26 kW	58 kW	GE551Y074
GE556Y402	Heating and DHW production	26 kW	67 kW	GE551Y074

	
ANNO YEAR	2014 <input type="checkbox"/> 2015 <input type="checkbox"/> 2016 <input type="checkbox"/> 2017 <input type="checkbox"/>
CODICE CODE	GE55 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> Y <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Riferimento unità abilitativa Nisuse reference	
Regolazione bilanciamento Balancing Set	
Costruito da - Produced by: GIACOMINI S.p.A. Via per Abate 16/19 28017 San Maurizio d'Ossola (NO)	



Serial Nr. 00001 /2015



Warning.

- Every HIU includes:
 - a label with the HIU model identification data;
 - a label proving its compliance with electric and hydraulic tests;
- Every HIU is identified by a serial number both inside and on the packaging.



1.3 Completion codes

The components listed below may be installed on every HIU:

- Thermal energy metering unit series GE552
- Domestic hot water metering unit series GE552-2
- Template with 6 interception valves and 3/4" connections: code GE551Y074
- Optional unit for domestic cold water: code GE550Y001

1.4 Main characteristics

- SET POINT electronic thermoregulation to control DHW and heating temperatures.
- Remote control with chronothermostat function to control the parameters, with display.
- External temperature probe for climatic compensation.
- Heat exchanger for DHW instantaneous production.
- Control flow switch for DHW production priority.
- Motorized 3-way priority valve, on delivery of primary side.
- Motorized 2-way modulating valve, on return of primary side.
- Filter and manual air vent valve on the primary side.
- Low-pressure safety pressure switch on primary side.
- Thermal and electric safety valve on heating side.
- 3/4" M connections.
- 15/6 self-modulating circulator, 130 mm central distance, compliance with ErP (2009/125/CE).
- Heat exchanger and fully-insulated pipes.
- WRAS certified components for domestic circuit.
- Spacer for metering unit installation.
- Varnished metal sheet cabinet (RAL9010) with key lock.

1.5 Technical data

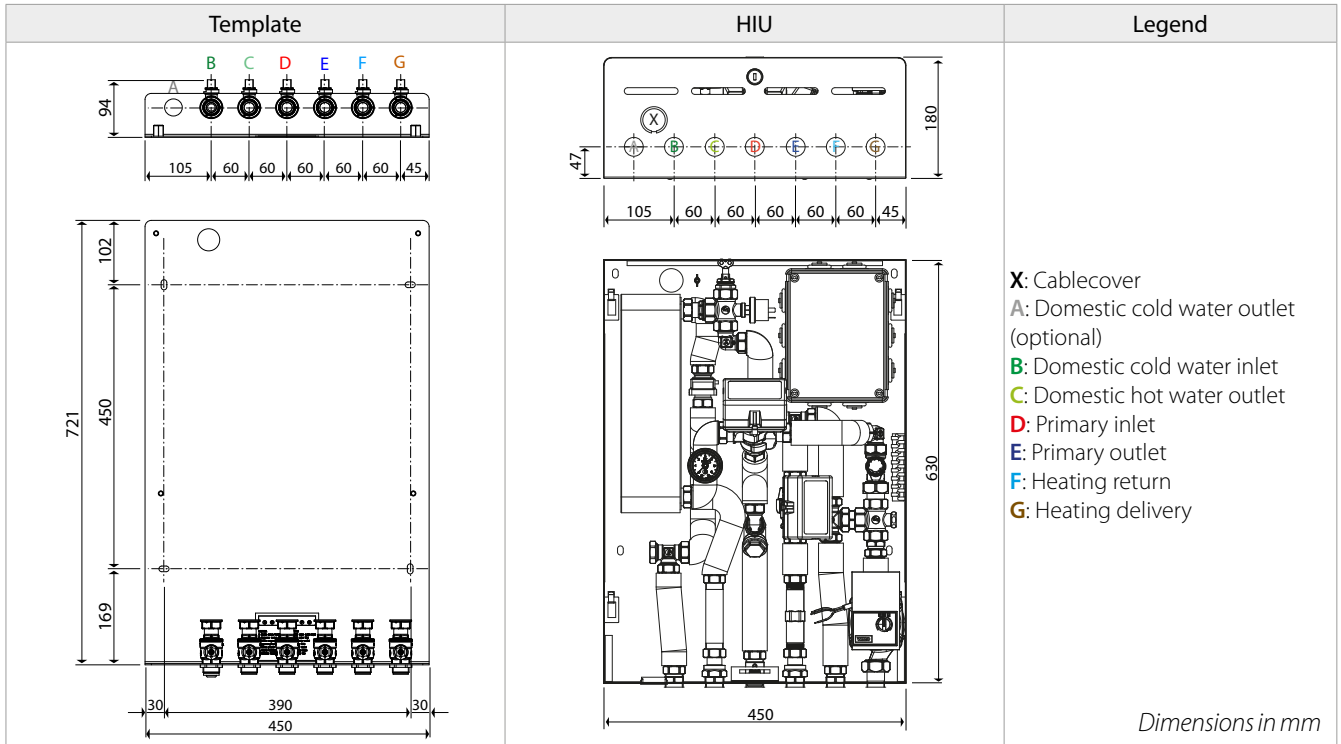
- Max. working temperature: 90 °C
- Max. working pressure of primary circuit: 10 bar
- Max. working pressure of DHW secondary circuit: 10 bar

**Warning.**

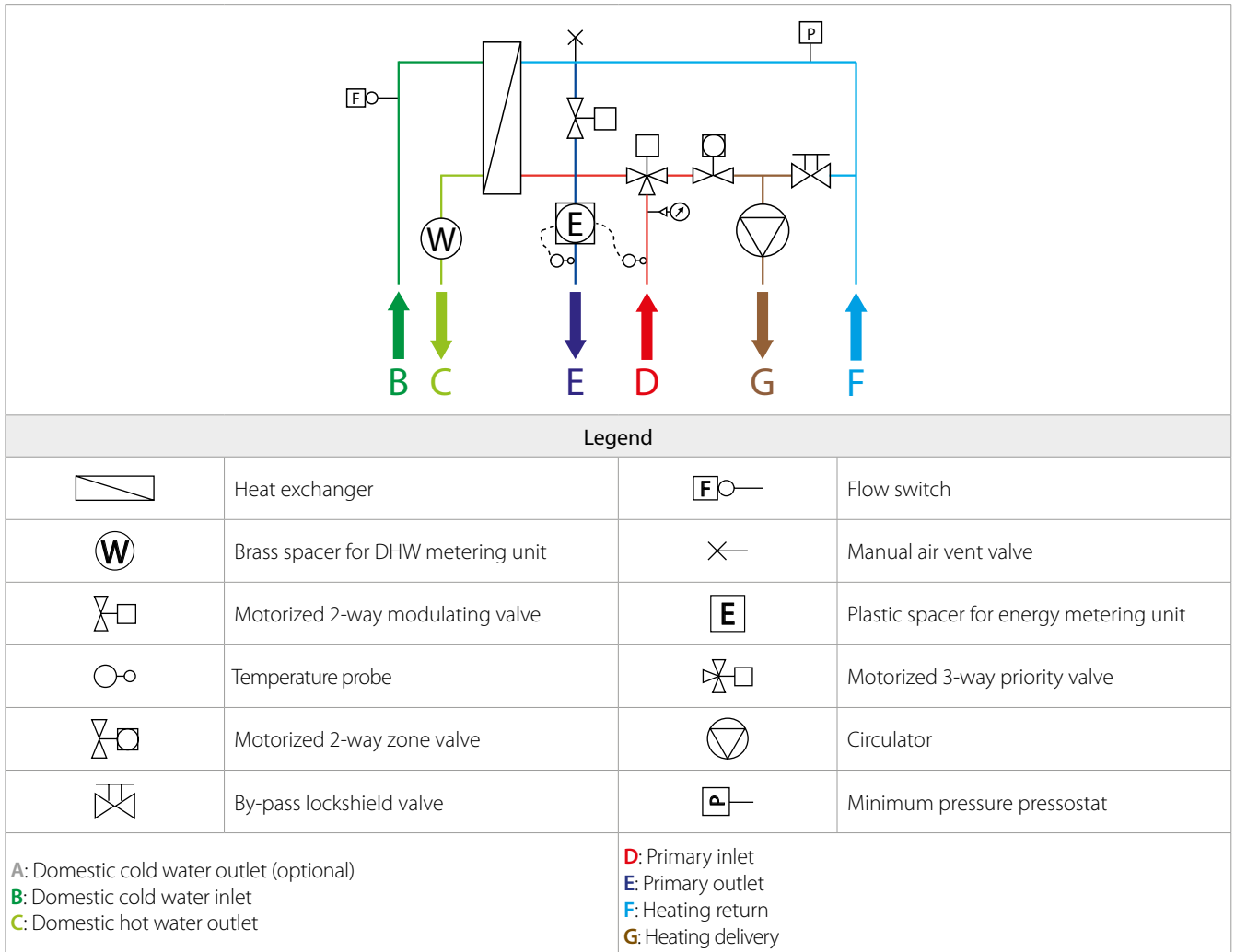
Max. working differential pressure for primary side = 4 bar (priority valve)

- Temperature range of heating secondary circuit: low temperature 25÷45 °C (factory original setting)
high temperature 25÷85 °C
- Temperature range of DHW secondary circuit: 30÷60 °C (SET POINT 50 °C)
- Primary nominal flow: 1070 l/h @ 75 °C for 58 kW
1150 l/h @ 75 °C for 67 kW
- Electric power: 230 V; 50-60 Hz
- Weight: ~25 kg

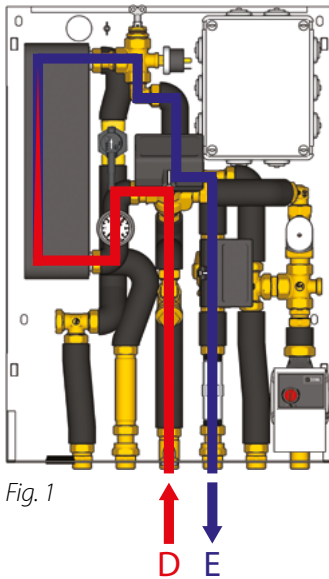
1.6 Dimensions



2. Operation



Primary circuit

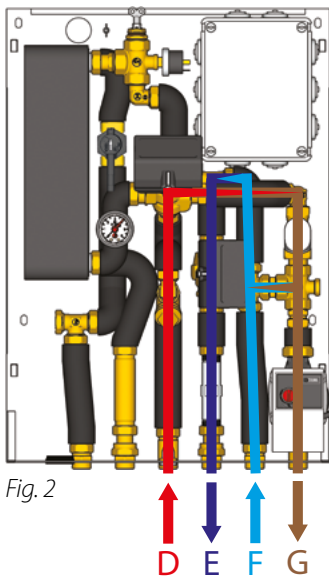


Inlet (D) and return (E). The primary circuit includes an inspectionable filter, a motorized 3-way priority valve, a manual air vent valve, a heat exchanger, a pressure gauge, a minimum pressure switch and a motorized 2-way modulating valve.

Energy-saving function: the 2-way modulating valve, controlled by the HIU electronic control, limits to the minimum the flow request by the primary circuit to obtain the SET POINT preset temperature. The priority valve diverts the flow into the heat exchanger (in case of DHW request: DHW flow switch activated) or into the heating system.

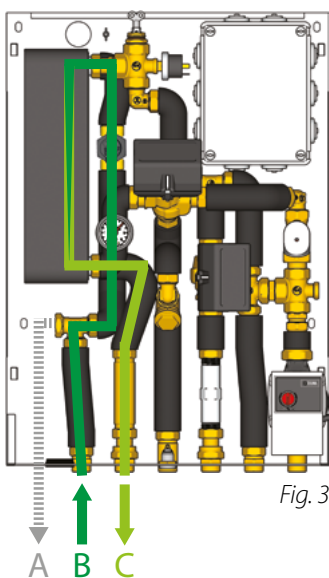
The thermal energy metering unit can be installed in place of the plastic spacer by inserting its temperature probe in the housing (1).

Heating circuit



Delivery (G) and return (F). The heating circuit includes a motorized 2-way zone valve working as thermal safety device (the valve interrupts the flow within the system when the delivery temperature exceeds the temperature set on the remote control - SET POINT - by at least 5 °C), an adjustable by-pass lockshield valve and a high energy efficiency circulator (ErP 2009/125/CE).

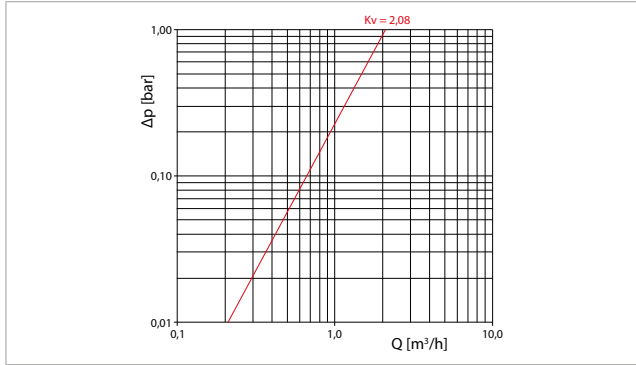
Domestic hot water circuit



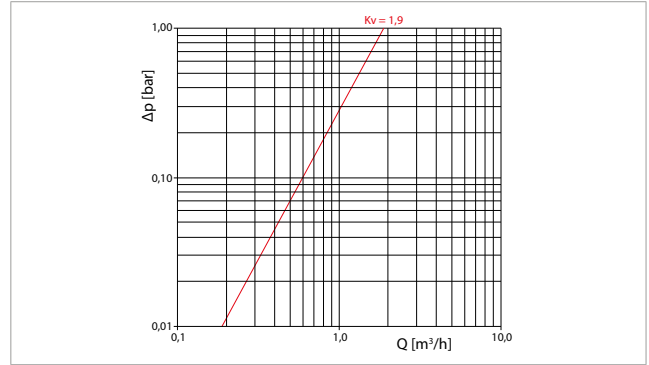
Cold water inlet (B), hot water outlet (C) and cold water outlet (A - optional). The DHW circuit includes a flow switch and a brass spacer to install the liter metering unit. A domestic hot water metering unit can be installed in place of the brass spacer.

2.1 GE556Y401 operational data

Primary circuit



Primary circuit for DHW production, modulating valve fully open (see fig.1)



Heating primary circuit, lockshield valve and modulating valve both open (see fig.2)

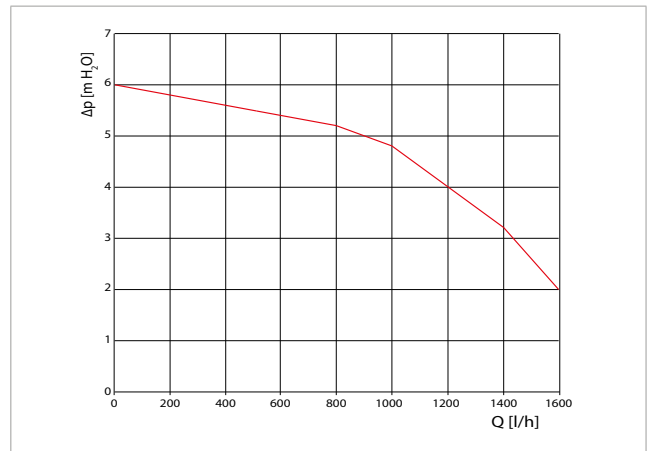
Heating

Low temperature heating (Δt 35-30 °C)			Primary circuit working conditions		
Circulator speed	Flow rate [l/h]	Power [kW]	Inlet T [°C]	Flow rate [l/h]	Outlet T [°C]
Max.	1500	8,8	75	170	30
			70	190	30
			65	215	30
			60	250	30

Low temperature heating (Δt 45-40 °C)			Condizioni di funzionamento circuito primario		
Circulator speed	Flow rate [l/h]	Power [kW]	Inlet T [°C]	Flow rate [l/h]	Outlet T [°C]
Max.	1500	8,8	75	215	40
			70	250	40
			65	300	40
			60	375	40

High temperature heating (Δt 60-45 °C)			Primary circuit working conditions		
Circulator speed	Flow rate [l/h]	Power [kW]	Inlet T [°C]	Flow rate [l/h]	Outlet T [°C]
Max.	1500	26,3	75	750	45
			70	900	45
			65	1130	45
Max.	1200	21	60	1200	45

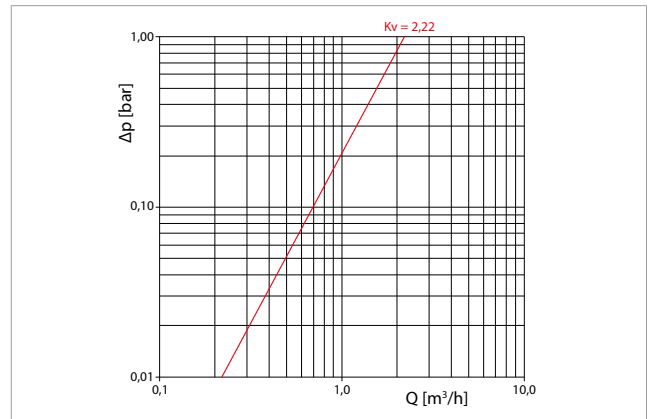
High temperature heating (Δt 70-55 °C)			Condizioni di funzionamento circuito primario		
Circulator speed	Flow rate [l/h]	Power [kW]	Inlet T [°C]	Flow rate [l/h]	Outlet T [°C]
Max.	1200	21	75	900	55
			70	1200	55



Heating circulator diagram - Circulator with constant Δp (see fig.2)

DHW production

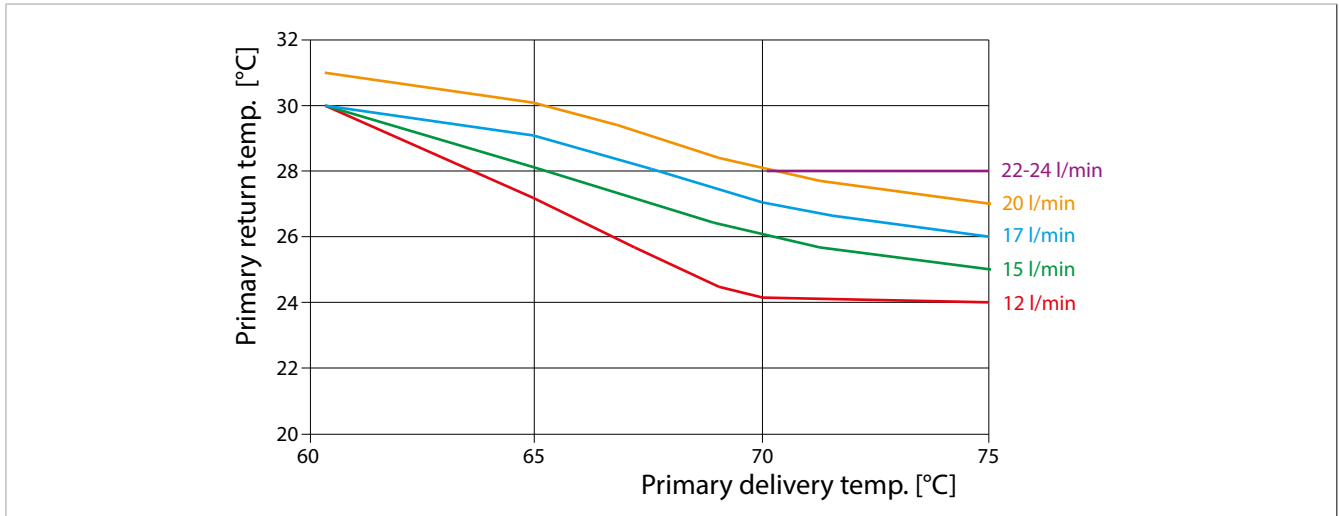
Domestic hot water (Δt 15-50 °C)			Primary circuit working conditions		
Flow rate [l/min]	Flow rate [l/h]	Power [kW]	Inlet T [°C]	Flow rate [l/h]	Outlet T [°C]
12	720	33	75	495	24
			70	550	24
			65	665	27
			60	850	30
15	900	42	75	630	25
			70	720	26
			65	850	28
			60	1050	30
17	1020	47,5	75	730	26
			70	830	27
			65	1000	29
			60	1200	30
20	1200	56	75	875	27
			70	1000	28
			65	1200	30
			60	1450	31
22	1320	54	75	980	28
			70	1100	28
24	1440	58,8	75	1070	28
			70	1200	28



Hydraulic data for domestic hot water circuits (see fig.3)

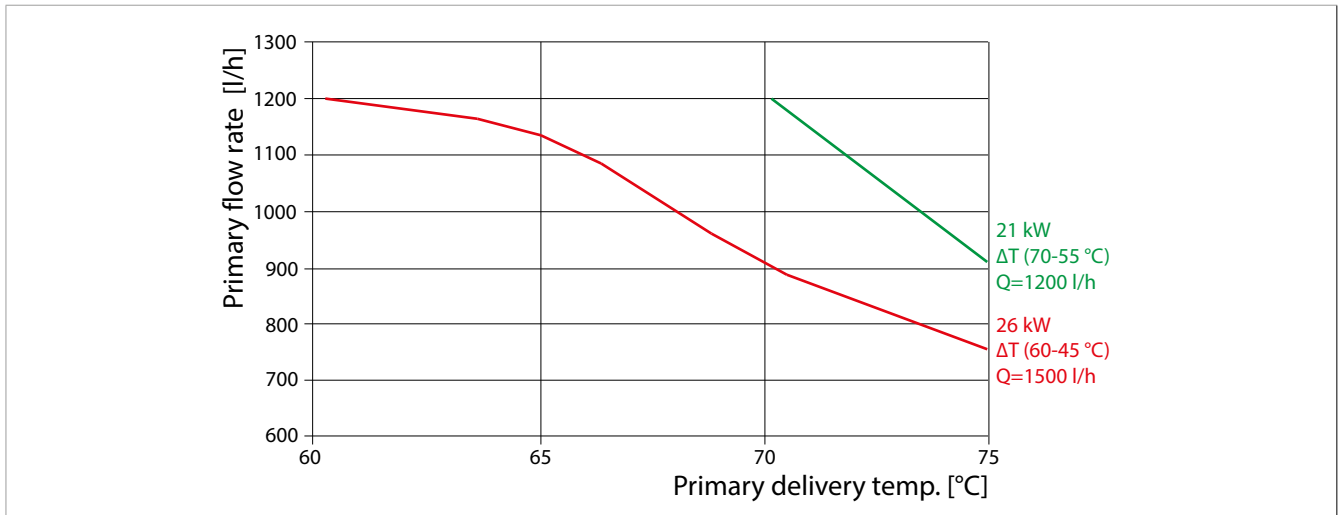
2.2 GE556Y40 energy saving features

Low return temperatures of primary circuit when used for domestic water

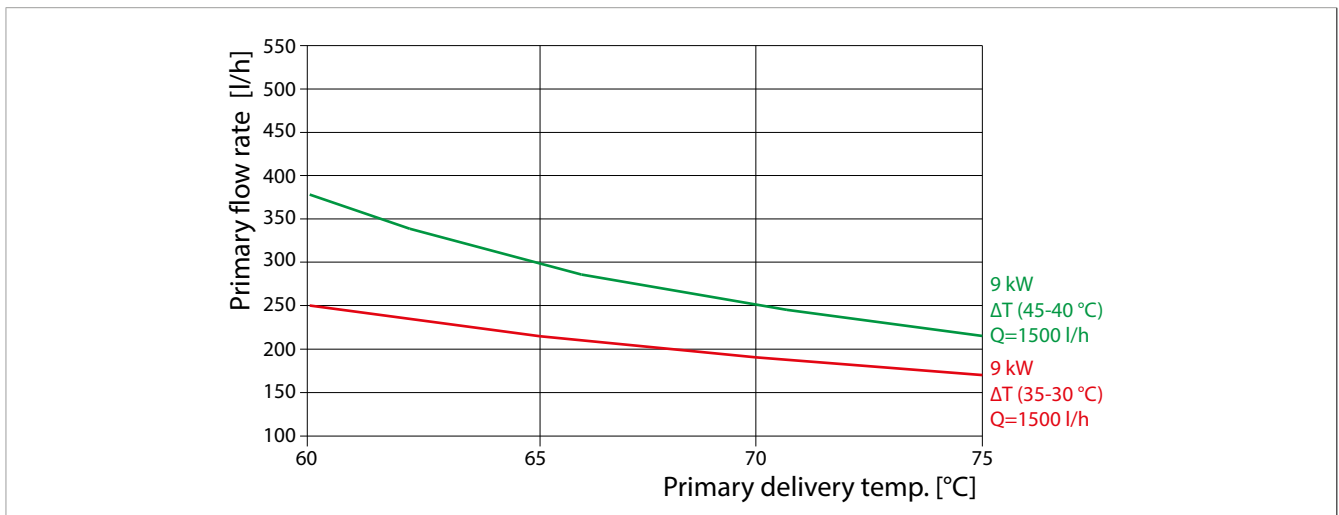


Reduced flows requested to the primary circuit, when heating

- High temperature:



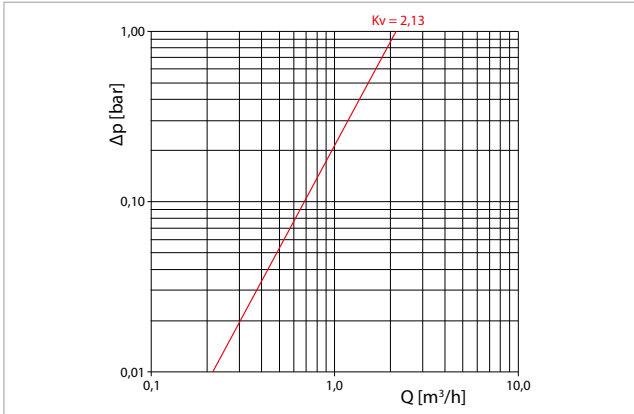
- Low temperature:



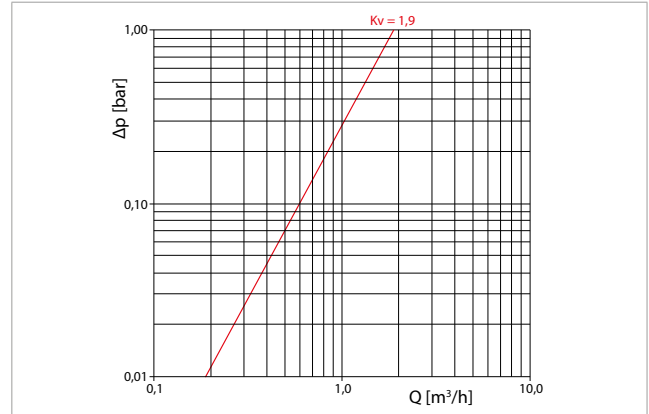


2.3 GE556Y402 operational data

Primary circuit



Primary circuit for DHW production, modulating valve fully open (see fig.1)



Heating primary circuit, lockshield valve and modulating valve fully open (see fig.2)

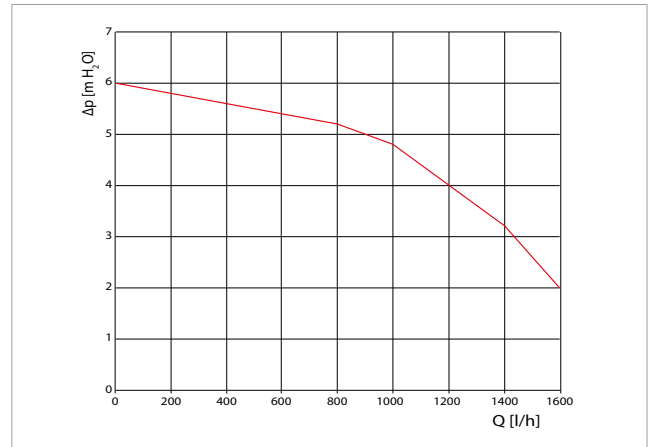
Heating

Low temperature heating (Δt 35-30 °C)			Primary circuit working conditions		
Circulator speed	Flow rate [l/h]	Power [kW]	Inlet T [°C]	Flow rate [l/h]	Outlet T [°C]
Max.	1500	8,8	75	170	30
			70	190	30
			65	215	30
			60	250	30

Low temperature heating (Δt 45-40 °C)			Condizioni di funzionamento circuito primario		
Circulator speed	Flow rate [l/h]	Power [kW]	Inlet T [°C]	Flow rate [l/h]	Outlet T [°C]
Max.	1500	8,8	75	215	40
			70	250	40
			65	300	40
			60	375	40

High temperature heating (Δt 60-45 °C)			Primary circuit working conditions		
Circulator speed	Flow rate [l/h]	Power [kW]	Inlet T [°C]	Flow rate [l/h]	Outlet T [°C]
Max.	1500	26,3	75	750	45
			70	900	45
			65	1130	45
Max.	1200	21	60	1200	45

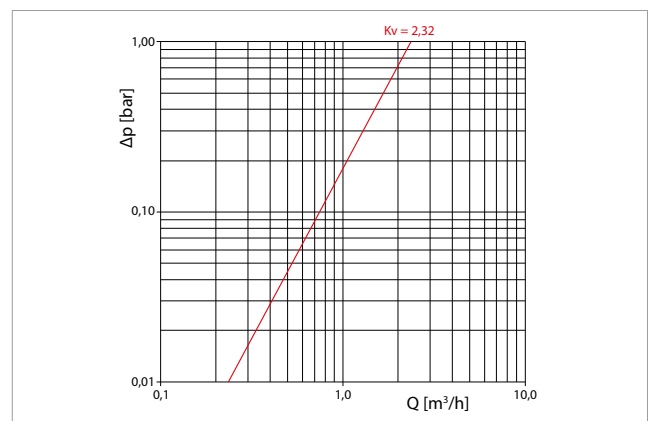
High temperature heating (Δt 70-55 °C)			Condizioni di funzionamento circuito primario		
Circulator speed	Flow rate [l/h]	Power [kW]	Inlet T [°C]	Flow rate [l/h]	Outlet T [°C]
Max.	1200	21	75	900	55
			70	1200	55



Heating circulator diagram - Circulator with constant Δp (see fig.2)

DHW production

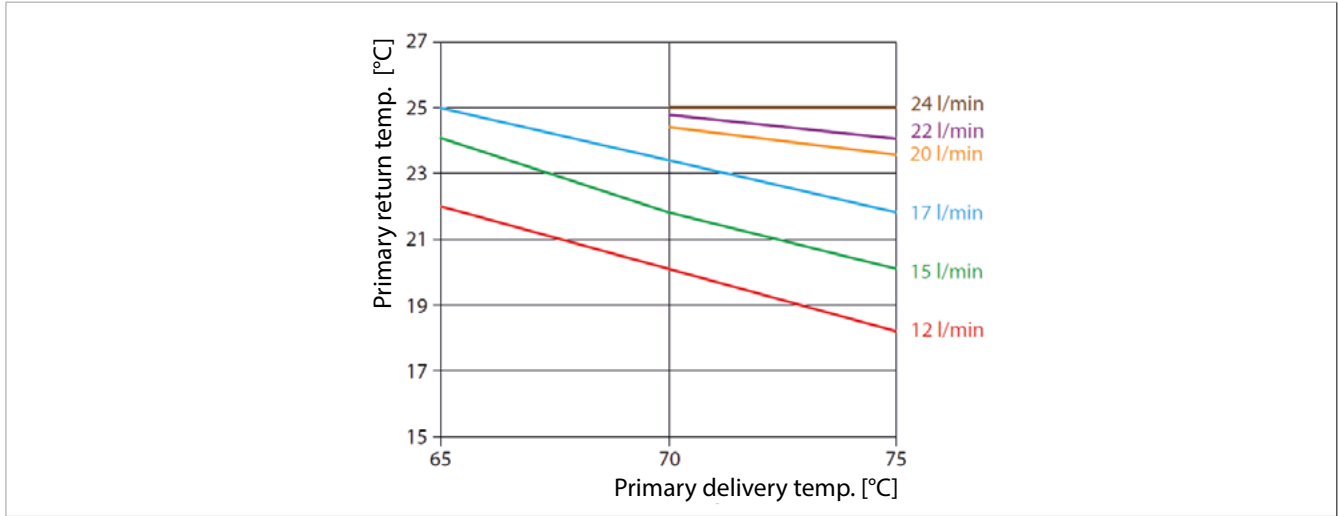
Domestic hot water (Δt 15-50 °C)			Primary circuit working conditions		
Flow rate [l/min]	Flow rate [l/h]	Power [kW]	Inlet T [°C]	Flow rate [l/h]	Outlet T [°C]
12	720	33,5	75	510	18,5
			70	580	20
			65	670	22
15	900	42	75	660	20,5
			70	750	22
			65	880	24
17	1020	47,5	75	770	22
			70	880	23,5
			65	1020	25
20	1200	56	75	940	23,5
			70	1050	24,2
22	1320	61,5	75	1040	24
			70	1160	24,6
24	1440	67	75	1150	25
			70	1280	25



Hydraulic data for domestic hot water circuits (see fig.3)

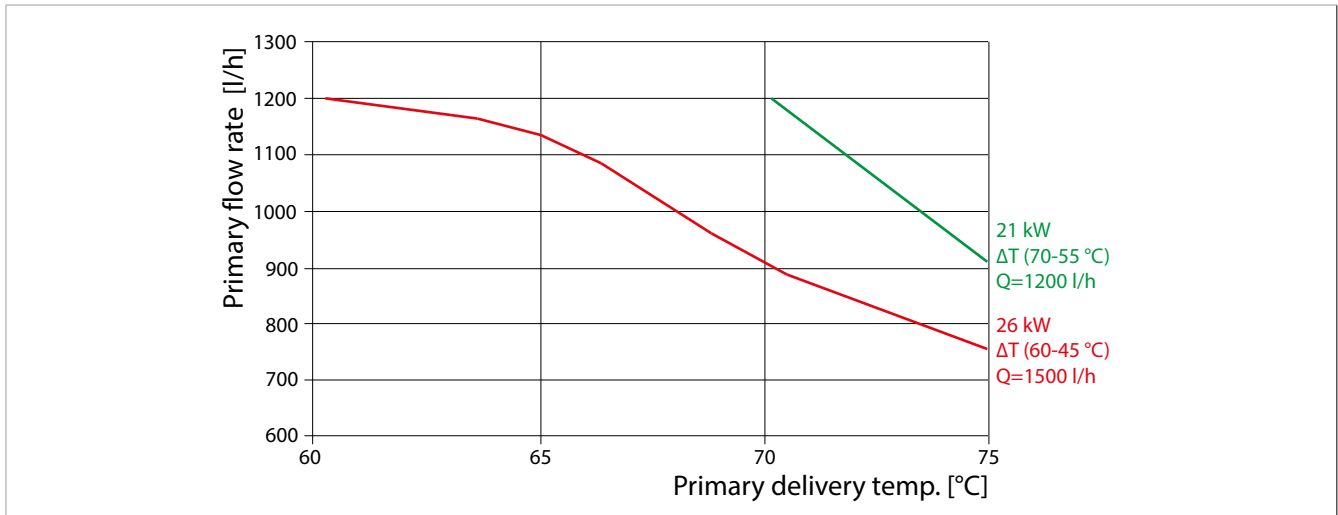
2.4 GE556Y402 energy-saving features

Low return temperatures of primary circuit when heating

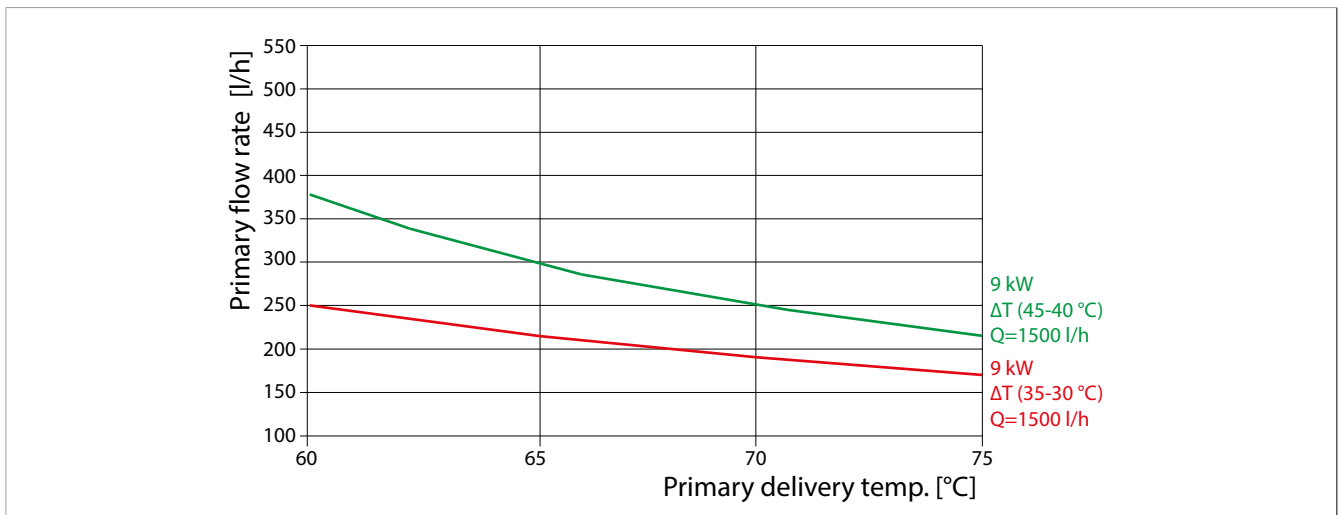


Flows requested to the primary circuit reduced when heating

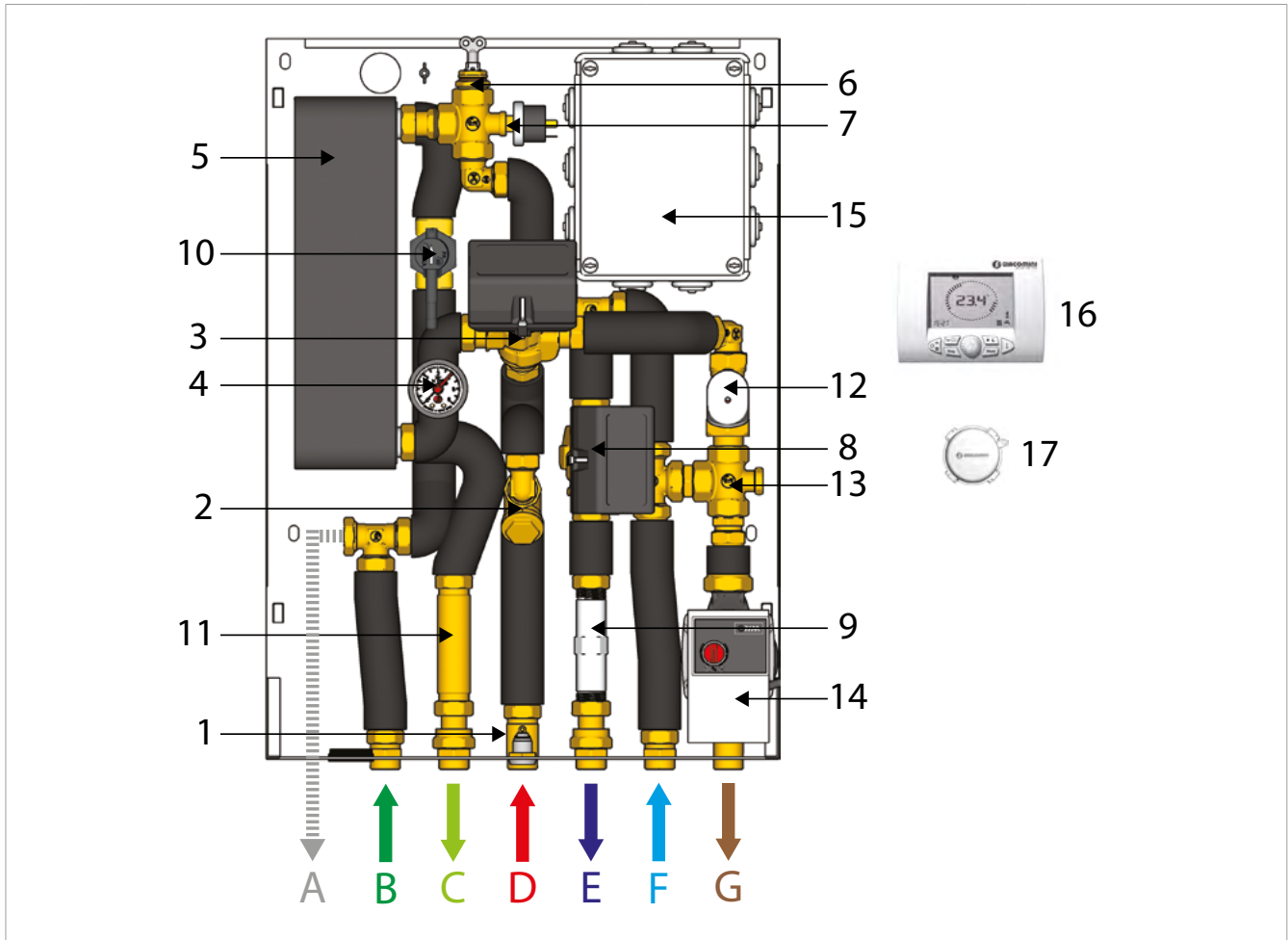
- High temperature:



- Low temperature:



3. Components



Legend

1	Housing for energy metering unit temperature probe	PRIMARY CIRCUIT
2	Filter	
3	Motorized 3-way priority valve for DHW function	
4	Pressure gauge	
5	Heat exchanger, domestic hot water function	
6	Manual air vent valve	
7	Min. pressure pressostat	
8	Motorized 2-way modulating valve	DHW PRODUCTION
9	Plastic spacer for thermal energy metering unit	
10	Flow switch	HEATING
11	Brass spacer for DHW liter metering unit	
12	Motorized 2-way zone valve for thermal and electric safety	
13	By-pass lockshield valve	CONTROLS
14	Circulator	
15	Cabinet with electronic control unit	
16	Remote control / chronothermostat with display	
17	External temperature probe	

A: Domestic cold water outlet (optional)
 B: Domestic cold water inlet
 C: Domestic hot water outlet

D: Primary circuit inlet
 E: Primary circuit outlet
 F: Heating return
 G: Heating delivery

4. Installation

4.1 Unpacking

- Remove the shipping packing, make sure the product is not damaged and that delivery has been carried out according to the agreed terms and conditions.
- When handling the HIU, the pipes and the exchanger should not be exposed to stress. Do not move the HIU holding it by the exchanger or pipes

4.2 Installation set up

- Make sure the primary circuit complies with the rules in force. The available differential pressure must be included between a minimum of 0,5 bar and a maximum of 4 bar. In case of higher pressure values, install a differential pressure controller.
- Wash the heating and domestic hot water circuit.

4.3 Hydraulic system precautions

- Max. working temperature: 90 °C
- Primary circuit max. working pressure: 10 bar
- DHW secondary circuit max. working pressure: 10 bar



Warning.

Max. working differential pressure for primary side = 4 bar (priority valve)

4.4 Electric system precautions

- Make sure the power voltage is 230 V and that the entire HIU is properly connected to the grounding network

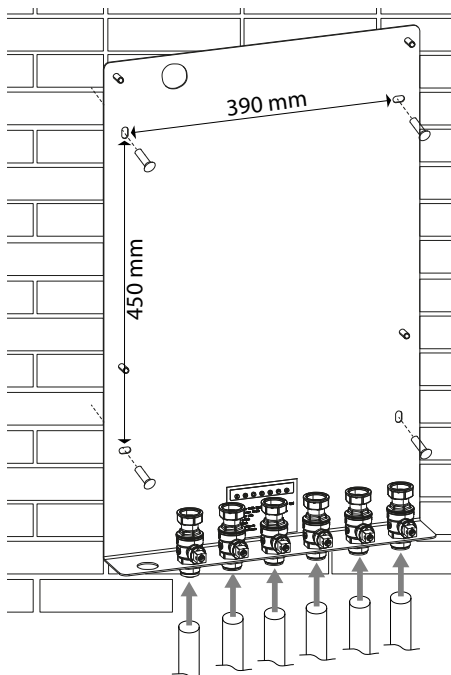
4.5 Template and HIU installation



Warning.

Hydraulic connection of heating, domestic water and primary circuits should be carried out by qualified personnel and in compliance with the local or national rules and provisions in force.

We recommend installing a check valve on the domestic water circuit inlet.

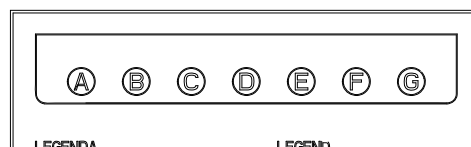


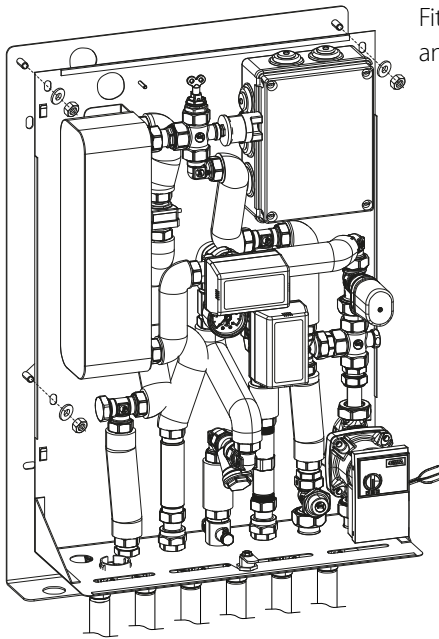
Install the GE551Y074 template on a wall using screw anchors suitable for the type of wall and equipment weight.

The HIU can be installed at any height however we recommend a distance of 1500÷1800 mm from the floor to the bottom edge of the HIU cover.

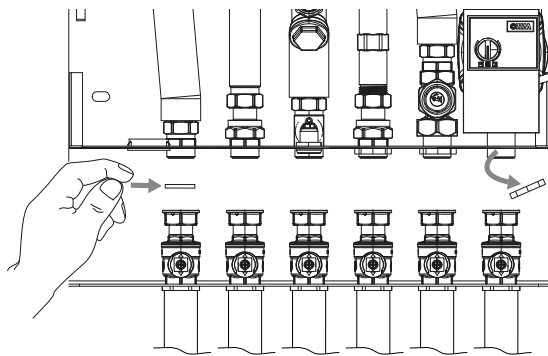
Install the ball valves in the template holes and lock the washers using a wrench.

Connect the system pipes to the ball valves with the template 3/4" M connections using proper adapters. For a correct installation of the pipes refer to the instructions on the template label.

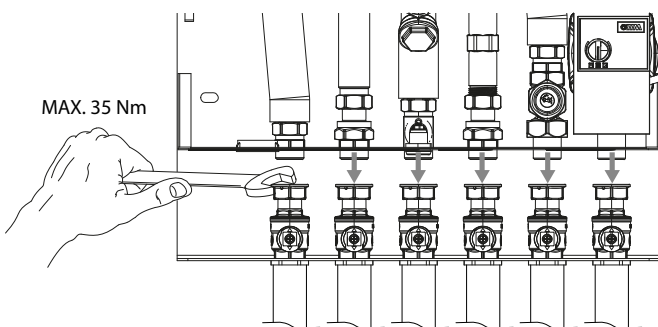




Fit the GE556Y401/402 HIU in the corresponding threaded pegs of the template and lock it using the included washers and nuts.



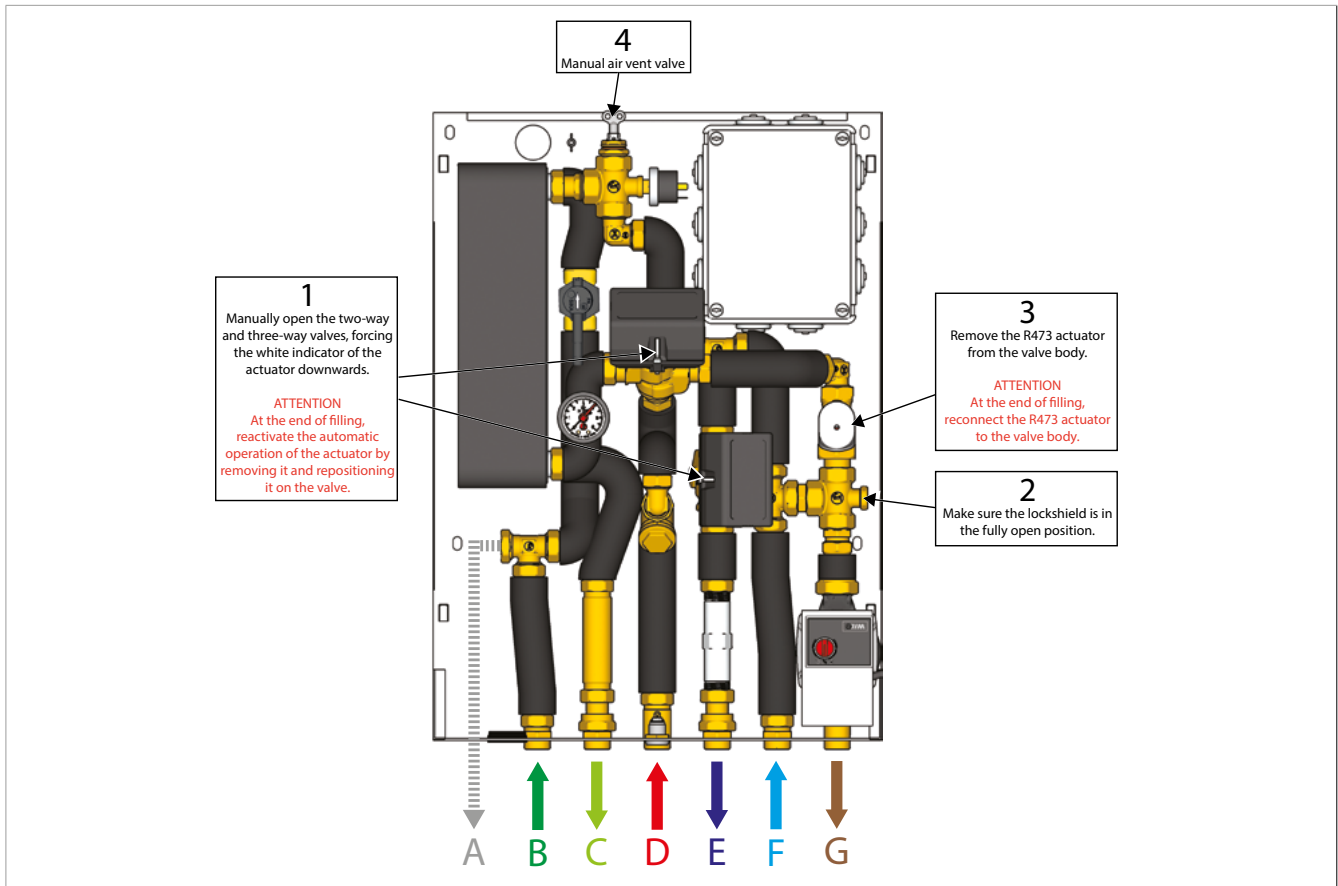
Before connecting the HIU to the template **remove the lock nuts from the threaded connections** and then insert the washers between the HIU connections and the template valve caps.



Tighten the template valve caps using a 35 Nm max. torque.

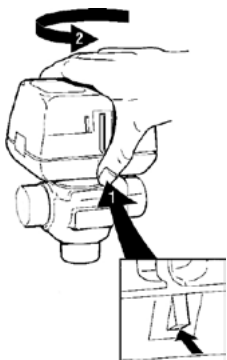
MAX. 35 Nm

4.6 Start-up



- Open the heating circuit 2-way valve and the diverter 3-way valve by forcing them, manually pushing the actuator white indicator downwards (ref. 1).
- Make sure the heating circuit lockshield valve is completely open and remove the R473 thermoelectric head from the valve body (ref. 2, 3).
- Open the domestic cold water inlet (ref. B) to fill the domestic water circuit.
- Open the primary circuit inlet (ref. D) to fill the primary and heating circuit then make sure the pressure on the HIU pressure gauge is the same of the system pressure.
- When filling the system, open the manual air vent valve till water starts to come out (ref. 4).
- Keep the HIU pressurized and check visually for possible leakages in the various joints and glued parts as well as under the exchanger insulation.
- Retighten all connections, including those originally tightened in factory. Should the connection require tightening after starting up the HIU, decrease the system pressure before performing this operation. The washers may be damaged if the system pressure is not reduced.
- ATTENTION: once the system has been filled, reactivate the actuators automatic operation.

To restore the automatic operation:

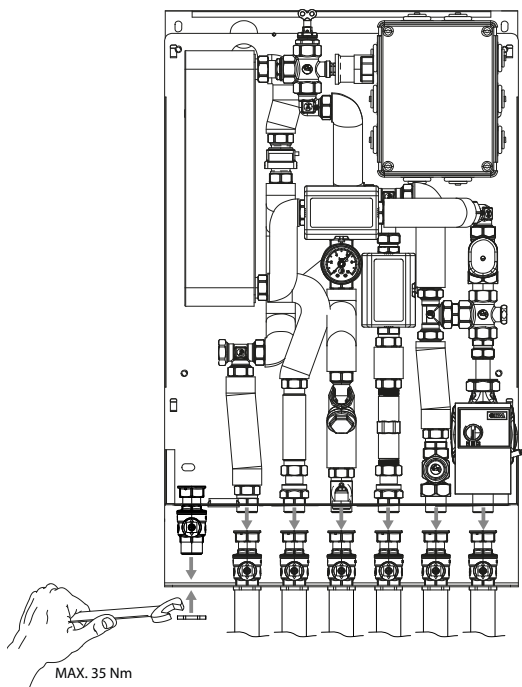


- Disconnect the Molex electric connector from the actuator so as to ease its rotation.
- The actuator is connected to the valve body, to remove it lift the locking mechanism directly under the manual opening lever (ref. 1).
- Push the actuator with your hand, without forcing it, towards the valve body while turning it in anticlockwise direction by 1/8 turn (45°).
- Remove the actuator from the valve body.
- Reinstall the actuator in reverse order.
- Reconnect the Molex electric connector to the actuator.

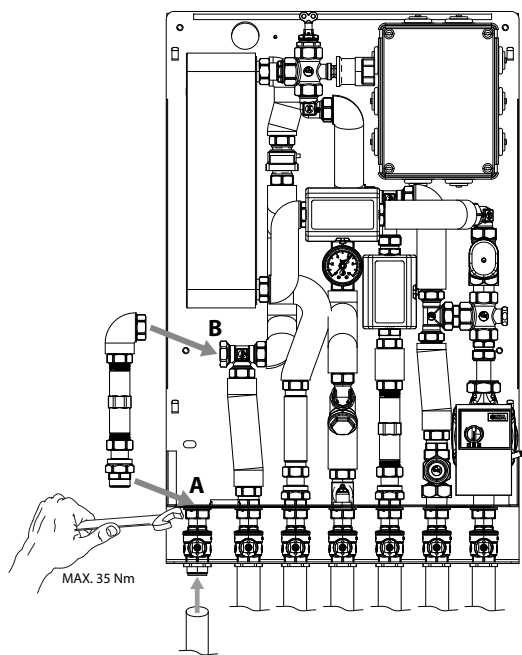
- Complete the start-up procedure by connecting the L and N terminals of the HIU electronic card to the power supply.

4.7 Optional: additional unit for domestic cold water

Install the GE500Y254 additional ball valve in the corresponding hole of the template and lock it with the washer using a wrench.



Install the GE550Y001 domestic cold water outlet unit fitting it to the additional valve previously installed (A) using a max. torque of 35 Nm and to the fitting (B) on the domestic cold water inlet unit, after removing the plug.



4.8 Flow and thermal energy meter installation

Flow and thermal energy metering units must be installed according to the manufacturer's instructions and replacing them at the corresponding spacers on the HIU (paragraph 3 "Components" - component 9 for thermal energy metering unit; components 11 for flow metering units).

4.9 Positioning of external temperature probe

The external temperature probe includes a PCB inside a plastic body; both the temperature-sensitive element and the connection terminal board are welded to the PCB.

Technical data

Housing material: ABS

Dimensions: 60x45x32 mm

Protection: IP44

Working temperature: -40÷60 °C

Electric connection: M3 threaded terminals

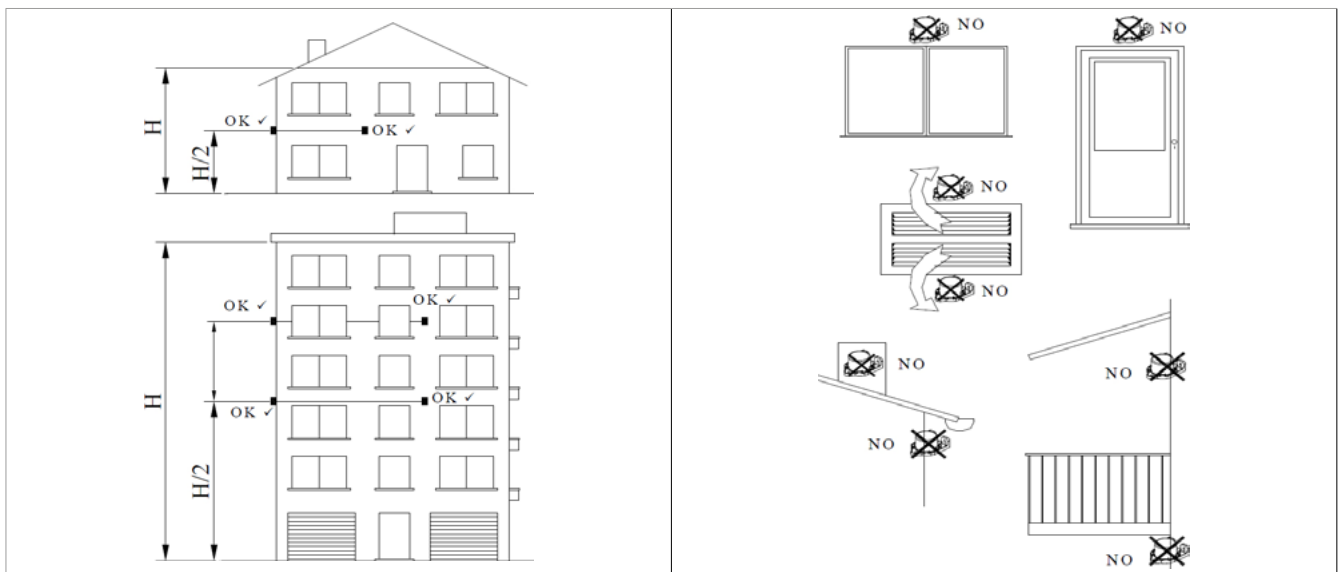
Provided accessories: N° 2 5x25 mm screw anchors; N° 2 3,5x25 mm screws

Warning.

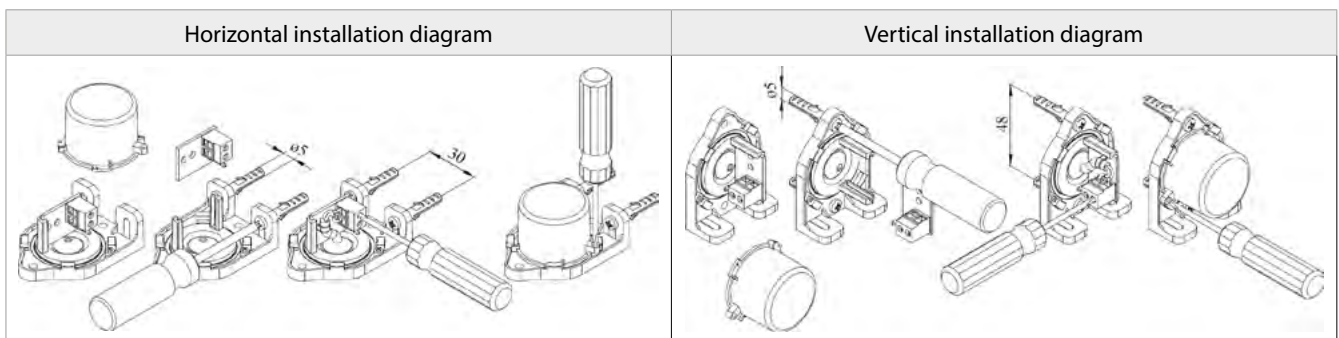


- The probe has no repairable parts. Repairing is not contemplated.
- The device must be connected with electric power off.
- The device must be connected in compliance with the rules in force.
- Use connection wires with proper insulation, working temperature and humidity resistance.

The temperature probe must be installed on an external wall of the building.

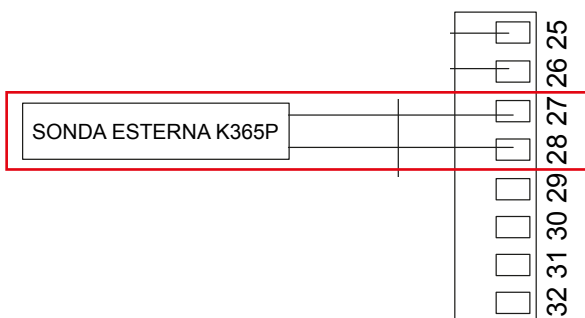


The probe can be installed in two different positions: horizontally or vertically.



Important: the temperature to be measured must not be directly affected by external agents.

Connect the external temperature probe to terminals 27-28 of the electronic card (paragraph 3 "Components" - components 15) with a 0,6 mm² wire. The wire maximum length must be 50 m.



5. HIU standard presetting

The HIU is provided with the following configuration:



- Domestic hot water set point: 50 °C
- Heating set point: 45 °C (low temperature range 25÷45 °C)
- Heating by-pass lockshield valve: fully open
- Compensation coefficient of KD external thermoregulation (P04 parameter): 30

5.1 Parameter programming: variation from low to high temperature

Warning.





Parameter programming must be carried out by qualified personnel authorized by the building administration body. Improper programming may lead to HIU malfunctions and damage the system components.


The heating set point range may be modified from low temperature (25÷45 °C) to high temperature (25÷85 °C) by pressing at the same time the  and  buttons of the K480Y002 remote control for at least 5 seconds till the TSP text appears on the display.

Turn the  knob to T01 parameter number.

Turn the  knob to select the parameter.

Turn the  knob to change the heating temperature range.

Turn the  knob to select the heating temperature range (presetting: 01 = reduced; low temperature range 25÷45 °C).

Press the  button to go back to the initial screen.

Parameter	Range	Description	Default	Selections
T01	00 ÷ 01	Range riscaldamento	1	00 = normal 01 = reduced

6. Remote control/chronothermostat with display, K480Y002




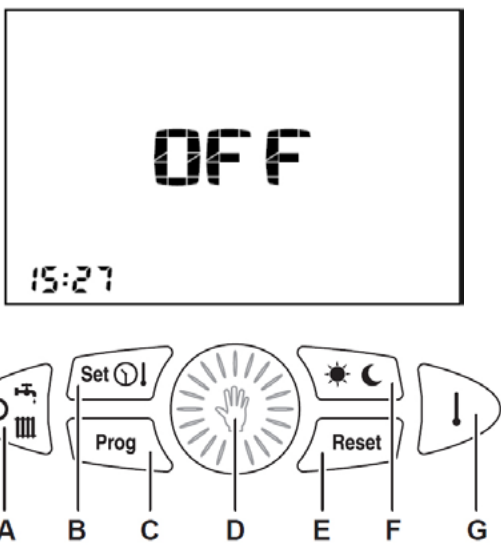






Warning.

Before connection, make sure the HIU is set up for the K480Y002 remote control by referring to the corresponding instructions.




















6.1 Technical characteristics

- Power: by means of communication bus
- Number of temperature levels: 2 (DAYTIME / NIGHT TIME)
- Temperature setting range DAYTIME: 5÷30 °C
- Temperature setting range NIGHT TIME: 5÷30 °C
- Temperature setting range MANUAL: 5÷30 °C
- Setting range for intervention thermal differential (OFF): 0,0÷1,0 °C
- Setting range for intervention thermal differential (ON); -1,0÷ -0,1 °C
- Correct operation range for room temperature probe: -40÷50 °C
- Setting range for low temperature heating: 25÷45 °C
- Setting range for high temperature heating: 25÷85 °C
- Setting range for domestic hot water temperature: 30÷60 °C
- Temperature resolution: 0,1 °C
- Temperature setting range for activation of room anti-freezing function: 0,1÷10,0 °C
- Limit temperature for deactivation of room anti-freezing function: setup value +0,6 °C
- Timer programmer resolution: 30 minutes
- Max. number of daily activations and deactivations: 48
- Number of standard heating programs: 1
- Clock updating time in case of blackout: 1 h
- Operational temperature range: 0÷50 °C
- Stocking room temperature: -10÷50 °C
- Dimensions (LxHxW): 118x85x30 mm
- Max. length of HIU connection wire: 50 m
- HIU connection wire section: 0,5÷1,5 mm²

6.2 Buttons and display

A		Selection of operational status	
B		Time and temperature setting	
C		Weekly programming	
D		Modification of displayed (rotate) – Automatic/manual selection (press)	
E		Alarm reset	
F		Selection of temperature level (daytime/night time)	
G		Temperature displaying	

6.3 LCD display symbols

Icon	Fixed	Blinking
	Current temperature	Anomaly code
	Time/temperature	
	Current day of the week	Day of the week modification
	Domestic water enabled	Domestic water request in progress
	Heating enabled	Heating request in progress
	Manual operation mode	
PROG	Heating program	Heating program modification
	Current room set point	Provisional modification of room set point
	External temperature	
bar	System pressure	
		Time and day of the week set up
		Daytime temperature set up
		Night time temperature set up
	Heating temperature	Heating temperature set up
	Domestic water temperature	Domestic water temperature set up
kd		Kd value set up
	Current temperature level = daytime	
	Current temperature level = night time	
	Anomaly with no restarting attempts left	Anomaly with restarting attempts available
	Anomaly with service request	
	Nigh time level	
	Daytime level	

6.4 General warnings

- Read the warnings included in these instructions thoroughly as they provide important information on use, installation and service safety.
- The system installation must comply to the safety rules in force.
- When unpacking the device, make sure it is not damaged before installation.
- The device should be used only for its specific purpose: any other use must be considered improper.
- Service of the device must be carried out by a qualified support center authorized by the manufacturer.
- Failure to comply with the above warnings may compromise the device safety.
- When installed to control a low temperature zone, a low temperature safety thermostat should be installed on the controlled zone.
- The manufacturer is not liable for possible damages deriving from malfunctions, exceptional events, configuration errors, improper, erroneous and unreasonable use of the device.
- The manufacturer reserves the right to carry out modifications and any other operation deemed necessary for constant improvement of the product.

6.5 Main characteristics

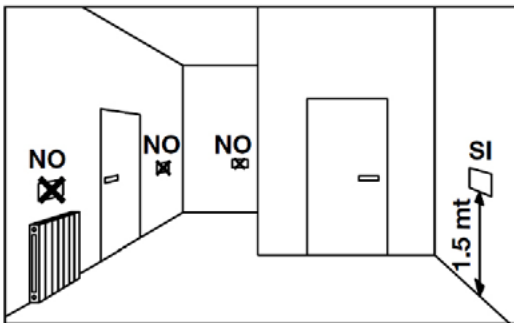
The K480Y002 remote control has been designed to offer ideal temperature conditions at any time of the day, enabling to perform any HIU setting remotely.

The K480Y002 remote control can be easily programmed: a wide LCD display makes this operation extremely easy at any time and the user can both verify and change the settings.

The K480Y002 remote control is electrically connected to the HIU by two unpolarized conductors through which it receives the required power to function and put the two devices in communication.

It can function with the memorized standard program right after installation. The program can be modified according to the user's needs.

6.6 Remote control positioning

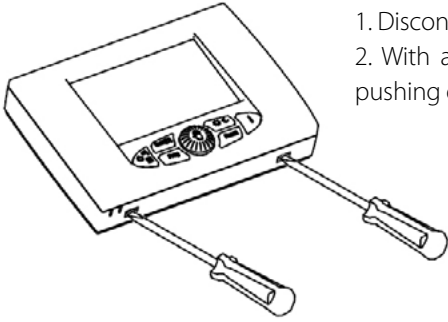


The K480Y002 remote control must be installed by qualified personnel. For proper installation, set up a dedicated power line to connect the remote control according to the rules in force for electric systems. Should this be unfeasible, possible interference by other electric wires may cause malfunctions to the remote control. Install the K480Y002 remote control at a height of about 1,5 m in a position suitable to read the room temperature correctly. Do not install in niches, behind doors or curtains, near heating sources, under direct sun light or water sprays.

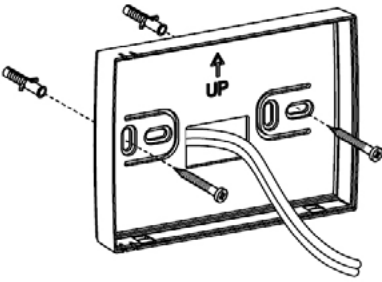


6.7 Remote control installation

1. Disconnect the HIU from the power line.
2. With a screwdriver, slide out the remote control from the back fitting template slightly pushing on the lower tabs.

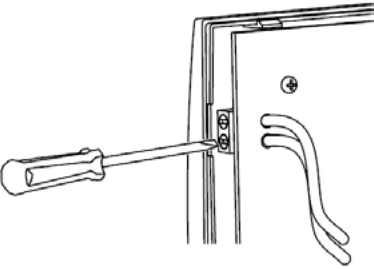


3. Fit the two ends of the connection wire in the corresponding hole of the fitting template. Install the K480Y002 remote control, through the special holes, directly on the wall or in a wall-mount box, using the included screws and making sure to respect the "UP" reference.

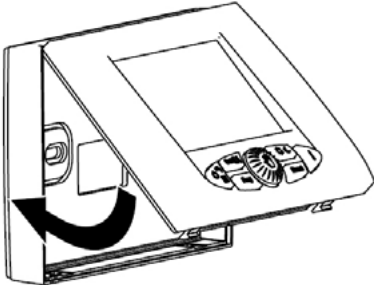


4. Carry out the electric connection with the terminal board.

NOTE: The connection is unpolarized



5. Connect the remote control to the fitting template first inserting the top side and pushing on it till it is completely closed.

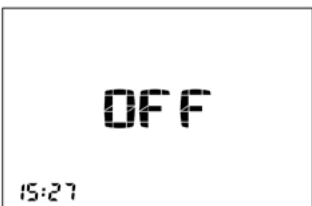


6. Connect the other two ends of the wire to terminals 23-24 of the electronic card (paragraph 3 "Components" - component 15).

7. Feed the HIU.
The installation is now complete.
The remote control is powered and the LCD display will show the message below for a few seconds:



Once connected, regular operation will start:



6.8 Configuring the operational parameters



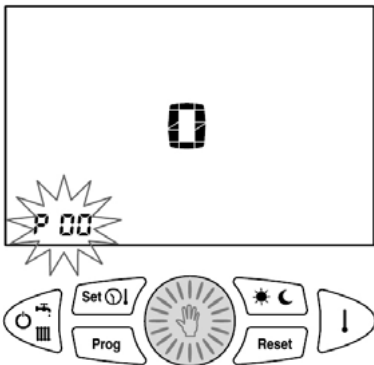
Warning.






This operation must be performed only by technical assistance operators. Erroneous configuration of the K480Y002 remote control may cause malfunctions.

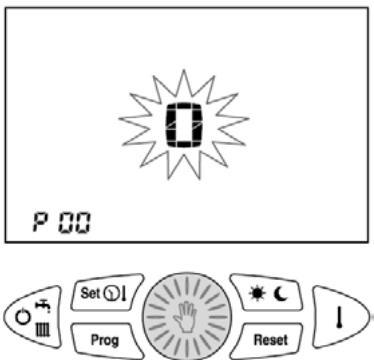
This operation is required to configure the remote control for use with the HIU and the corresponding system to which it is connected.

1. Set the remote control on **OFF**.
2. Press and hold the  and  buttons pressed till **PAr** shows on the display.
3. Press the  button to confirm the function.

The display will show the parameter number in place of the time and the value associated to the parameter in place of the temperature. The parameter number will blink.



4. Turn the knob  to select the parameter number to be displayed. The temperature display shows the value associated to the corresponding parameter.
5. To change the value push the  knob: the value associated to the parameter will start blinking.
6. Turn the  knob to change the displayed value.
7. If no other button is pressed for 30 seconds, regular operation will be restored without saving the last modification.
8. Press the  button to save the value.
9. Repeat step 4 to change the parameter.
10. To exit the configuration ambient press .



Below are the modifiable parameters:

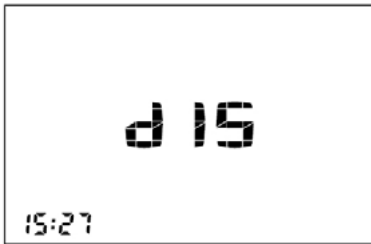
- **P00 - Correction of room temperature probe**
 Value to be added to / subtracted from (-5,0°C ÷ +5,0°C) the displayed room temperature to adjust possible errors.
- **P01 - Intervention temperature for room anti-freezing function**
 Start temperature for room anti-freezing function (0,1 ÷ + 10,0 °C).
 NOTE: 0.0 = function disabled.
- **P02 - Intervention thermal differential (OFF)**
 Value to be added to the programmed room set point which ends the heating request.
 Eg.: Set pointT = 20,0 °C - P02 = 0,5 °C - Set pointT + P02 = 20,0 + 0,5 = 20,5 °C
 The heat request ends when RoomT exceeds 20,5 °C.
- **P03 - Intervention thermal differential (ON)**
 Value to be subtracted from the programmed room set point which starts the heating request.
 Eg.: Set pointT = 20,0 °C - P03 = 0,5 °C - Set pointT - P03 = 20,0 - 0,5 = 19,5 °C
 The heat request starts when RoomT is lower than 19,5 °C.

• P04 - Remote room modulation type


0 = on-off	User sets the heating set point
1 = modulating on ambient probe	User sets the max. limit for heating set point Remote control calculates the heating set point using the room temperature
2 = modulating on external probe	User sets the max. limit for the heating set point User sets Kd Remote control calculates the heating set point using the external temperature and the preset Kd
3 = modulating on ambient + external probe	User sets the max. limit for the heating set point User sets the Kd Remote control calculates the heating set point using room temp. , external temp. and preset Kd
4 = climate regulator disabled	Remote control does not generate a heating request. Used when the remote control is installed in an ambient where calculation of the room temperature is not required (cellar, boiler room, etc...) The display shows d IS instead of the room temperature




6.9 Disabling the climatic regulator

Should the remote control be installed in a room where there is no need for temperature control (cellars, boiler rooms, garages ...) the heating request can be disabled directly through the remote control. It is therefore important to set the P04 = 4 parameter (see "Configuring the operational parameters"). The display will show **d IS** instead of the room temperature.



6.10 Selecting the operational mode

Select the HIU operational mode by repeatedly pushing the  button.
 Below are the operational modes available:

SELECTED STATUS	IDENTIFICATION ICONS
OFF	OFF
SUMMER	
WINTER	
HEATING ONLY	

1. OFF: all HIU operational requests are disabled.



2. SUMMER: the HIU activates only the production of domestic hot water.



3. WINTER: the HIU activates both the production of domestic hot water and the heating mode.








4. HEATING ONLY: the HIU activates only the heating mode.



The room anti-freezing function is always enabled despite the type of selection (see chapter of reference).

6.11 Setting the time and temperatures

Time and temperature set points of the remote control and HIU can be set by pressing repeatedly the  button based on the menu below:

SELECTED STATUS	IDENTIFICATION ICONS	SELECTED STATUS	IDENTIFICATION ICONS
CLOCK		HEATING TEMPERATURE	
DAY TEMPERATURE		Domestic TEMPERATURE	
NIGHT TEMPERATURE		EXTERNAL PROBE KD	kd


The numeric value is displayed in the lower left corner, in place of the time, together with the corresponding blinking identification icon. To complete set up press the button until all identification icons are off.

6.11.1 Time setting

1. Press the  button: the hour value will blink.




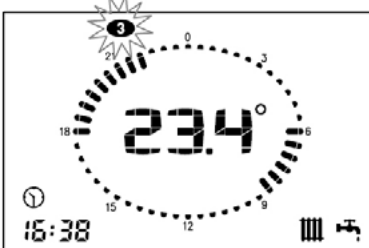
2. Turn the  knob to set the desired value.


3. Press the  knob to confirm. The hour value will stop blinking and the minutes will blink.





4. Turn the  knob to set the desired value.




5. Press the  knob to confirm. The minutes will stop blinking and the day of the week will blink.



6. Turn the  knob to set the desired value.




7. Turn the  knob to confirm. The day will stop blinking and the  icon will turn off.

6.11.2 Setting the room temperature DAYTIME

1. Press the  button until the  icon starts blinking.
2. Turn the  knob to set the desired value.






6.11.3 Setting the room temperature NIGHTTIME

1. Press the  button until the  icon starts blinking.
2. Turn the  knob to set the desired value.



6.11.4 Setting the temperature HEATING

When the remote control is configured as modulating, this parameter sets the max. heating temperature based on the modulation algorithm.

1. Press the  button until the  icon starts blinking.
2. Turn the  knob to set the desired value.



6.11.5 Setting the temperature Domestic WATER

1. Press the button until the icon starts blinking.
2. Turn the knob to set the desired value.



6.11.6 Setting the external probe KD value

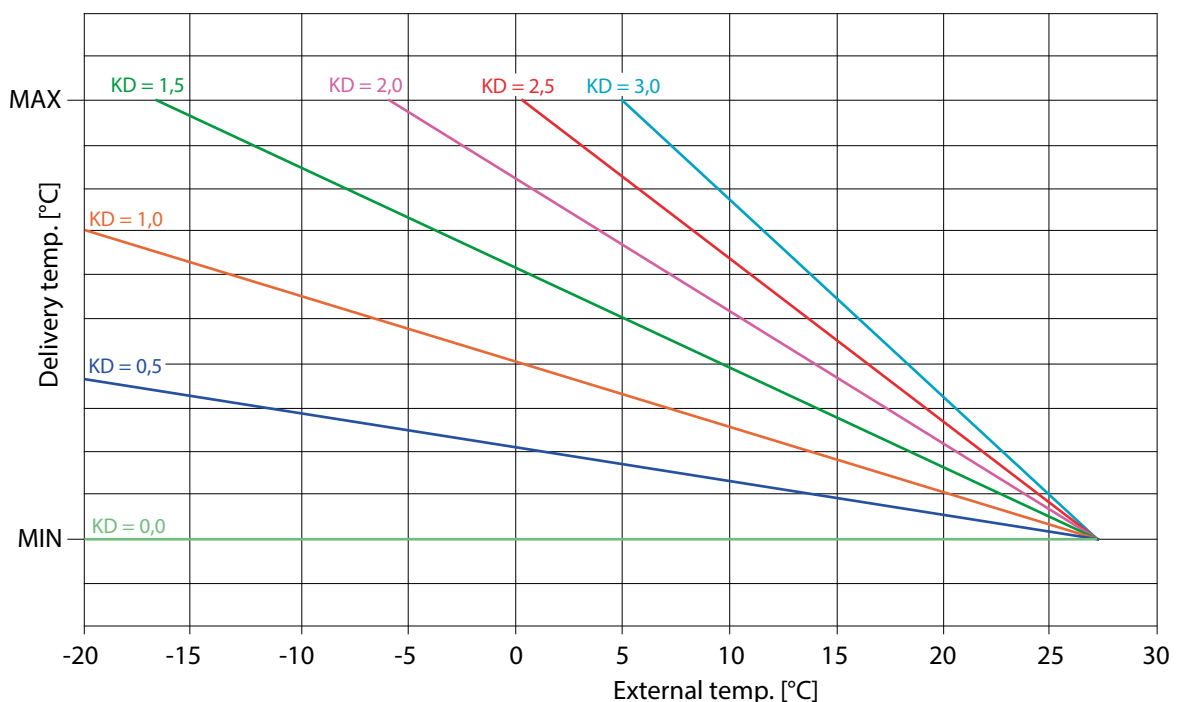
This setting is available only if the external probe is connected, the remote control is set as modulating and the external probe is enabled for modulation (P04 = 2 or 3).

This parameter enables to select a curve which determines the ratio between the external temperature and the calculated heating temperature. It features a range between 0,0 and 3,0. The greater the value set, the greater the influence of the external temperature when calculating the heating temperature set.

1. Press the button until the **kd** icon starts blinking.
2. Turn the knob to set the desired value.



Delivery temperature calculation diagram




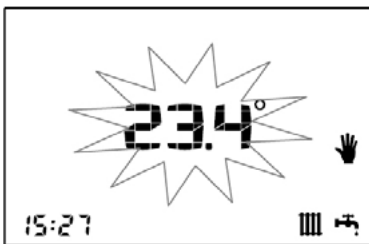
6.12 Setting the time and temperatures

When selecting the WINTER or HEATING ONLY operational mode, the K480Y002 remote control offers two ways to control the room temperature: MANUAL and AUTOMATIC.




- In the MANUAL mode, the user selects the desired room temperature that will be maintained till a new value is entered.
- In the AUTOMATIC mode, the room temperature set point is determined by the correspondence between time/day and the weekly program.

6.12.1 MANUAL mode

1. Press the  button till the  icon is shown.
- The central digits blink showing the temperature set.
2. Turn the  knob to set the desired temperature.
3. After a 30 sec time-out the central display will show again the current temperature.
4. The temperature set may be modified by turning the  knob.
5. The temperature set can be displayed by pressing the  button.



6.12.2 AUTOMATIC mode

1. Press the  button till the heating clock is shown.
2. The  or  icon will turn on to show the temperature level currently set.




6.13 Heating weekly program

The remote control enables the AUTOMATIC mode by selecting the WINTER or HEATING ONLY mode where a preset program controls the room temperature throughout the day.

The room temperature can be controlled on two independent levels: DAYTIME ☀️ and NIGHT TIME 🌙 which distribution throughout the day is managed by the heating weekly program.






The remote control features a standard program for the room temperature control which the user can display and modify.

The heating program display / modification mode can be activated by pressing the button and confirmed when the  icon turns on.

FUNCTION	IDENTIFICATION ICONS
HEATING PROGRAM DISPLAY	PROG FIX
HEATING PROGRAM MODIFICATION	PROG BLINKING












To exit, press the  button again once completed the required modifications .

6.13.1 Displaying the heating program

1. Press the  button. The **PROG** and  icons will appear on the display showing the first day of the week. The ☀️/🌙 icons and the jumpers are ON  or OFF  near the DAYTIME/NIGHT TIME level associated to the displayed time.
2. Turn the  knob to scroll through day times and days.



6.13.2 Modifying the heating program

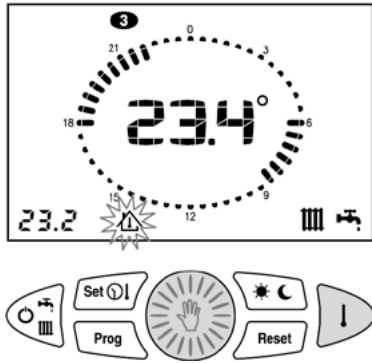
1. Press the  button. The **PROG** and  icons will appear on the display showing the first day of the week. The ☀️/🌙 icons and the jumpers are ON  or OFF  near the DAYTIME/NIGHT TIME level associated to the displayed time.
2. Press the  button to go to the program modification screen: the **PROG** icon and the day of the week will blink.
3. Turn the  knob to select the desired day.
4. Press the  knob to confirm the selected day and then set the time. The day of the week will stop blinking and the time will start blinking.
5. Turn the  knob to select the desired time.
6. Press the  button to change the DAYTIME / NIGHT TIME temperature level associated to the actual time.
7. Turn the  knob till you reach the time for which you wish to maintain the current level.
8. Press the  button to change level and so on.
9. Repeat step 2 to change the day.

6.14 Provisional modification of room temperature set point

When the AUTOMATIC mode is selected, the preset DAYTIME (☀) / NIGHT TIME (☾) room temperature set point can be temporarily increased or decreased. This modification will be active up to the next change of level (DAYTIME - NIGHT TIME) to be then cancelled.

1. Press the button to display the preset room temperature
2. Turn the knob to select the value. The icon will blink for the entire duration of the modification to show the set point change.

To deactivate the function before expiry, disable the heating function by pressing the button.



6.15 Displaying the values

By repeatedly pressing the button, the K480Y002 remote control can display the values listed below:

SELECTED VALUE	IDENTIFICATION ICONS
PRESET ROOM TEMPERATURE	
Domestic PROBE TEMPERATURE	
DELIVERY PROBE TEMPERATURE	
EXTERNAL PROBE TEMPERATURE	
SYSTEM WATER PRESSURE	bar

The measurement value is displayed in the left bottom corner, in place of the time, and identified by the corresponding icon.

6.15.1 Displaying the preset room temperature

This is the temperature set for the active temperature level (DAYTIME - NIGHT TIME - MANUAL).





6.15. Displaying the domestic probe temperature

This is the temperature read by the domestic probe on the HIU.



6.15.3 Displaying the delivery probe temperature

This is the temperature read by the delivery probe on the HIU.



6.15.4 Displaying the external probe temperature

This is the temperature read by the external probe connected to the HIU.



6.15.5 Displaying the system water pressure

This is the the system water pressure.



6.16 Restoring default values


If required, the user can restore the original factory values of the remote control settings.

The restored values are:

- DAYTIME temperature: 20 °C
- NIGHT TIME temperature: 16 °C
- MANUAL temperature: 20 °C

Weekly heating program settimanale

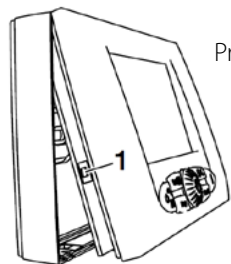
Days of the week	Night time	Daytime
Monday – Friday	00.00 ÷ 06.00 08.00 ÷ 16.30 22.00 ÷ 00.00	06.00 ÷ 08.00 16.30 ÷ 22.00
Saturday - Sunday	00.00 ÷ 07.00 23.00 ÷ 00.00	07.00 ÷ 23.00

1. Turn the remote control OFF.
2. Press and hold the  and  buttons for at least 5 Sec.
3. The operation will be confirmed when **dEF** is shown on the display.



6.17 Full reset

Anomalies or other technical issues may require “full reset” of the remote control. To carry out this operation, remove the remote control from its template: with a screwdriver force slightly on the lower tabs.



Press button (1).

After “full reset” the user must reset the time and day of the week.

6.18 Ambient anti-freezing function

The K480Y002 remote control features an ambient anti-freezing function (disableable) which, with any selected operational mode, controls the HIU activation when the temperature read by the room probe is lower that the preset value (P01), thus protecting the system from freezing.

6.19 Anomaly alerts

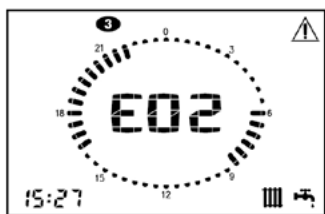
Anomalies are displayed on the remote control in place of the temperature with the blinking **Exx** code.




Refer to the table below to identify the type of anomaly.

Anomalies include two types: restartable and non-restartable by the user.

6.19.1 Restartable anomalies

Anomaly	Error code	Operation restoring
Eeprom memory corrupted	E94	Manual (reducing pressure)
Thermostat intervention for low temperature limit	E69	Automatic
Low H2O pressure	E71	Automatic
Floor protection error (60 sec after low temp. thermostat intervention finalization)	E51	Automatic
Heating circuit probe	E67	Automatic
Domestic circuit probe	E68	Automatic
R473 safety valve error	E76	Automatic



Restartable errors are identified by the blinking  icon and can be restored by pressing the  button. Should the restart attempts for the current anomaly run out, the  icon will turn on. Contact technical support for assistance in this case.



Error E94: Eeprom memory corrupted

Cause: general malfunction

Action: depressurize the HIU and press the  button.

Error E69: Thermostat intervention for low temperature limit

Cause: preset temperature limits exceeded.

Action: the anomaly is restored automatically when the heating temperature value returns within the preset limits.

Error E71: Low H2O pressure

Cause: system pressure lower than 0,8 bar.

Action: verify if pressure decrease is caused by leakages on the HIU or within the heating system. Once possible leakages are excluded, by means of the filling system, restore the system correct pressure.

Error E51: Floor protection error (60 sec after low temp. thermostat intervention finalization)

Cause: resetting of low temp. thermostat intervention.

Action: none required. This is just an alarm indicating the correct operational temperature has been reset.

Error E67: Heating circuit probe

Cause: malfunctioning of heating circuit temperature probe.

- Action:
- make sure the probe is properly connected
 - make sure the probe connection wire is not damaged
 - make sure the wire is correctly connected to the electronic card
 - if there are no wrong wire connections, disconnections or damages, replace the temperature probe.

Error E68: Domestic circuit probe

Cause: malfunctioning of the domestic circuit temperature probe.

- Action:
- make sure the probe is properly connected
 - make sure the probe connection wire is not damaged
 - make sure the wire is correctly connected to the electronic card
 - if there are no wrong wire connections, disconnections or damages, replace the temperature probe.

Error E76: R473 safety valve error (paragraph 3 “Components” - component 12)

Cause: malfunctioning of R473 safety valve: thermo-electric actuator locked or damaged.

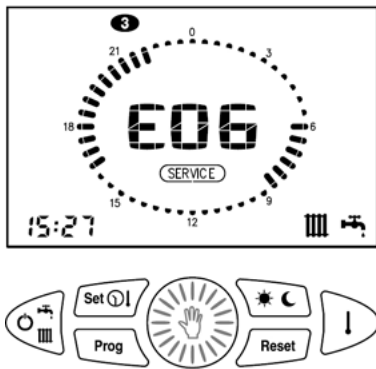
Action: - make sure the red tab at the base of thermo-electric actuator is pressed, if not, push it inside.

- make sure the actuator runs all the way through: after 3 minutes from activation of the heating system, the white peg indicator must extend from the top of the thermo-electric actuator. If it doesn't, replace the thermo-electric actuator.

- actuator not correctly wired on the card. Check compliance with the electric connection diagram (paragraph 8 “Electric installations”).

6.19.2 Non-restartable anomalies

These anomalies are identified by the **SERVICE** icon and the user cannot reset them as they require intervention by technical support. The **E66** code is part of this error group (remote control room temperature probe damaged), and also the **E31** (communication error with main board).



7. Circulator typical curves

Automodulating circulator 15/6 (230 V)	Operation	
 		Automatic operation with constant pressure (recommended).
		Automatic operation with variable pressure.
		Automatic operation for air ejection (duration 10 minutes): the circulator increases and reduces its speed to aggregate the air bubbles and support their ejection through the air vent valve (not included with the circulator).
	LED - errors	
	Regular operation.	
	Automatic operation for air ejection.	
	Temporary anomalous situation: 1) incorrect voltage 2) incorrect fluid or room temperature	
	Circulator stopped (permanent error: the circulator must be reset manually). The circulator may need to be replaced.	
	Electric power failure: 1) circulator not powered: check cable connection 2) damaged LED: check if circulator is working 3) electronic card damaged: replace circulator	

8. Electric installations



Warning.

Before any connection, make sure the electric power is disconnected.

All electric connections must be carried out by qualified personnel according to the local or national regulations and provisions in force.

The HIU is provided fully wired.

Connections comply with the EC regulations and have been tested for safety and regular operation.

For permanent installations, the HIU must be connected through an omnipolar disconnection switch.

Do not combine the remote control to other thermostats in the same room.

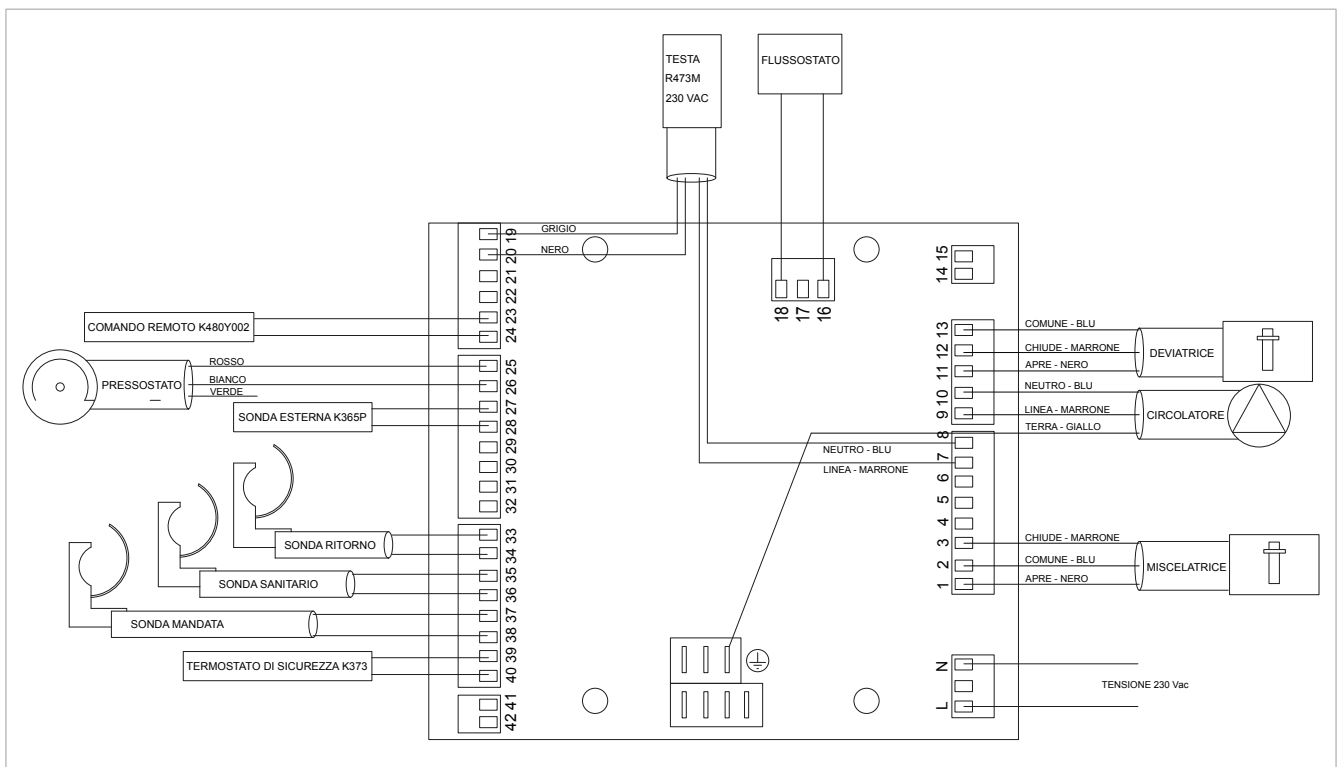
There is an IP55 electric cabinet (paragraph 3 "Components" - component 15) in the upper right side of the HIU, including the electronic control card.

- Connect the remote control (K480Y002) to the HIU electronic card using a 2-conductor cable with 0,6 mm² section and max. length 50 m. The remote control/chronothermostat (K480Y002) must be connected to terminals 23-24 of the electronic card.
- Connect the external temperature probe (K365PY002) to terminals 27-28 of the electronic card.
- Connect any optional safety thermostat (K373/K373I) to terminals 39-40 of the electronic card.
- Now the HIU can be powered by connecting the 230 V network to terminals L and N of the electronic card.



Warning.

Make sure the entire HIU is properly connected to the grounding network through the terminal board





9. Troubleshooting

9.1 Domestic hot water temperature too low

- Cause: wrong temperature set-point value for domestic hot water.
 Action: make sure the set-point on the remote control (paragraph 3 "Components" - component 16) corresponds to the one required, if not reset with the desired value.
- Cause: primary system delivery temperature too low.
 Action: check the primary system temperature through the energy meter. The min. temperature must be 60 °C. If not, contact the boiler room manager.
- Cause: primary circuit filter clogged (paragraph 3 "Components" - component 2).
 Action: close the interception valves on the template (primary and heating circuit), then remove the filter cap and pull out the filtering drum. Rinse the drum and reinsert the filter in reverse order. Screw on the cap using a 20 Nm max. torque. Open the interception valves on the template and make sure there are no leakages.
- Cause: primary flow too low.
 Action: check the instantaneous flow on the energy meter. Make sure the filter (paragraph 3 "Components" - component 2) is not clogged and if necessary clean it according to the instructions of the previous paragraph. Should the primary flow still be too low, contact the boiler room manager.
- Cause: 2-way modulating mixing valve not working (paragraph 3 "Components" - component 8).
 Action: make sure the Molex electric connector of the actuator is properly connected, if not reconnect it. Visually check that the actuator position indicator moves every time there is a domestic hot water request, if not try removing and reinstalling the actuator according to the diagram of paragraph 4.6. If it's still not working, replace the actuator.
- Cause: domestic hot water temperature probe not working.
 Action: make sure the temperature probe is properly connected, if not reconnect it. Using a tester, make sure the temperature probe shows a resistance value included between 4000 and 20000 Ω, if the resistance values are not within this range, replace the probe.
- Cause: flow switch not working (paragraph 3 "Components" - component 10).
 Action: make sure the position indicator of the 3-way priority valve actuator moves every time there is a domestic hot water request, if not make sure the resistance value on the flow switch terminals is higher than 0 using a tester.
- Cause: 3-way diverter priority valve not working (paragraph 3 "Components" - component 3).
 Action: make sure the Molex electric connector of the actuator is properly connected, if not reconnect it. Check visually that the actuator position indicator moves every time there is a domestic hot water request, if not try removing and reinstalling the actuator according to the diagram of paragraph 4.6. If it's still not working, replace the actuator.

9.2 Domestic hot water temperature too high

- Cause: wrong domestic hot water temperature set-point value.
 Action: make sure the preset set-point on the remote control (paragraph 3 "Components" - component 16) corresponds to the required one, if not reset the desired value.
- Cause: 2-way modulating mixing valve not working (paragraph 3 "Components" - component 8).
 Action: make sure the Molex electric connector of the actuator is properly connected, if not reconnect it. Visually check that the actuator position indicator moves every time there is a domestic hot water request, if not try removing and reinstalling the actuator according to the diagram of paragraph 4.6. If it's still not working, replace the actuator.
- Cause: domestic hot water temperature probe not working.
 Action: make sure the temperature probe is properly connected, if not reconnect it. Using a tester, make sure the temperature probe shows a resistance value included between 4000 and 20000 Ω, if the resistance values are not within this range replace the probe.

9.3 Heating circuit water temperature too low

- Cause: wrong heating temperature set-value.
Action: make sure the set-point set on the remote control (paragraph 3 “Components” - component 16) corresponds to the required one, if not reset the desired value.
- Cause: primary system delivery temperature too low.
Action: check the primary system temperature through the energy meter. The min. temperature must be 60 °C. If not, contact the boiler room manager.
- Cause: primary circuit filter clogged (paragraph 3 “Components” - component 2).
Action: close the interception valves on the template (primary and heating circuit), then remove the filter cap and pull out the filtering drum. Rinse the drum and reinsert the filter in reverse order. Screw on the cap using a 20 Nm max. torque. Open the interception valves on the template and make sure there are no leakages.
- Cause: primary flow too low.
Action: check the instantaneous flow on the energy meter. Make sure the filter (paragraph 3 “Components” - component 2) is not clogged and if necessary clean it according to the instructions of the previous paragraph. Should the primary flow still be too low, contact the boiler room manager.
- Cause: 2-way modulating mixing valve not working (paragraph 3 “Components” - component 8).
Action: make sure the Molex electric connector of the actuator is properly connected, if not reconnect it. Visually check that the actuator position indicator moves every time there is a domestic hot water request, if not try removing and reinstalling the actuator according to the diagram of paragraph 4.6. If it’s still not working, replace the actuator.
- Cause: heating delivery water temperature probe not working.
Action: make sure the temperature probe is properly connected, if not reconnect it. Using a tester, make sure the temperature probe shows a resistance value included between 4000 and 20000 Ω, if the resistance values are not within this range, replace the probe.
- Cause: external temperature probe (K365P) not working (paragraph 3 “Components” - component 17).
Action: make sure the external temperature probe is properly connected, if not reconnect it. Using a tester, make sure the temperature probe shows a resistance value included between 3600 and 100000 Ω, if the resistance values are not within this range, replace the probe.

9.4 Heating circuit water temperature too high

- Cause: wrong heating temperature set-point value.
Action: make sure the set-point set on the remote control (paragraph 3 “Components” - component 16) corresponds to the required one, if not reset the desired value.
- Cause: 2-way modulating mixing valve not working (paragraph 3 “Components” - component 8).
Action: make sure the Molex electric connector of the actuator is properly connected, if not reconnect it. Visually check that the actuator position indicator moves every time there is a domestic hot water request, if not try removing and reinstalling the actuator according to the diagram of paragraph 4.6. If it’s still not working, replace the actuator.
- Cause: heating delivery water temperature probe not working.
Action: make sure the temperature probe is properly connected, if not reconnect it. Using a tester, make sure the temperature probe shows a resistance value included between 4000 and 20000 Ω, if the resistance values are not within this range, replace the probe.
- Cause: external temperature probe (K365P) not working (paragraph 3 “Components” - component 17).
Action: make sure the external temperature probe is properly connected, if not reconnect it. Using a tester, make sure the temperature probe shows a resistance value included between 3600 and 100000 Ω, if the resistance values are not within this range, replace the probe.



9.5 Heating circuit down

- Cause: 2-way modulating mixing valve not working (paragraph 3 "Components" - component 8).
Action: make sure the Molex electric connector of the actuator is properly connected, if not reconnect it. Visually check that the actuator position indicator moves every time there is a domestic hot water request, if not try removing and reinstalling the actuator according to the diagram of paragraph 4.6. If it's still not working, replace the actuator.
- Cause: motorized 2-way zone valve with thermo-electric actuator (R473M) not working (paragraph 3 "Components" - component 12).
Action: make sure the thermo-electric actuator wires are properly connected to the corresponding terminals of the electronic card (see paragraph 8 "Electric installations"), if not reconnect them. Visually check that the position indicator on top of the thermo-electric actuator moves every time there is a heating request, if not make sure the red lever at the base of the actuator is properly pressed in. If it's still not working, replace the thermo-electric actuator.
Remove the thermo-electric actuator and make sure the 2-way zone valve stem moves all the way through, if not replace the valve.
- Cause: circulator not working (paragraph 3 "Components" - component 14).
Action: make sure the Molex electric connector of the actuator is properly connected, if not reconnect it. Make sure the light indicator on the front panel is ON, if not replace the circulator.
- Cause: remote control (K480Y002) not working (paragraph 3 "Components" - component 16).
Action: make sure the remote control is ON, if not turn it ON and make sure the electric network is powered.
Make sure the remote control is properly set, if not check the chronothermostat settings.
- Cause: primary circuit filter clogged (paragraph 3 "Components" - component 2).
Action: close the interception valves on the template (primary and heating circuit), then remove the filter cap and pull out the filtering drum. Rinse the drum and reinsert the filter in reverse order. Screw on the cap using a 20 Nm max. torque. Open the interception valves on the template and make sure there are no leakages.

9.6 Noise in the heating system

- Cause: circulator lift too high (paragraph 3 "Components" - component 16).
Action: set the correct lift according to the diagram of paragraph 7 "Circulator typical curves".
- Cause: air in the heating system.
Action: release the air through the manual air vent valve on the HIU (paragraph 3 "Components" - component 6).
- Cause: circulator motor or components damaged.
Action: replace the circulator.

10. Inspections and service



Warning.

State-of-the-art inspections and service carried out on a regular basis, as well as using only original spare parts are essential to prevent anomalies and guarantee a long life to your HIU. Yearly service recommended. Refer to provisions of regional/national regulations.



Warning.

Failure to carry out inspections and service may damage people and objects.

We recommend stipulating an inspection and service contract. Inspections are required to establish the actual operational conditions of a device and compare them to the optimal status. This is achieved through measurement, control, observation. Service is required to eliminate any difference between the actual and optimal status. This is generally obtained through cleaning, setting and replacing single components subject to wear and tear.

10.1 Recommended service operations

- Periodically check (recommended every year) the heating circuit pressure value using the gauge: the pressure value must be maintained above 1 bar (pressure values lower than 1 bar may damage the circulator by cavitation). A pressure switch set at 0,8 bar is included to protect the circulator.



Warning.

The HIU turns OFF and the remote control display shows the E71 error when the pressure is lower than 0,8 bar. Refill the system to restart the HIU.

Provide for a heating filling system, that is a connection between the domestic water circuit and the heating circuit using a proper disconnecter.



Warning.

Scald hazard. Use the manual air vent valve to remove air from the circuit.

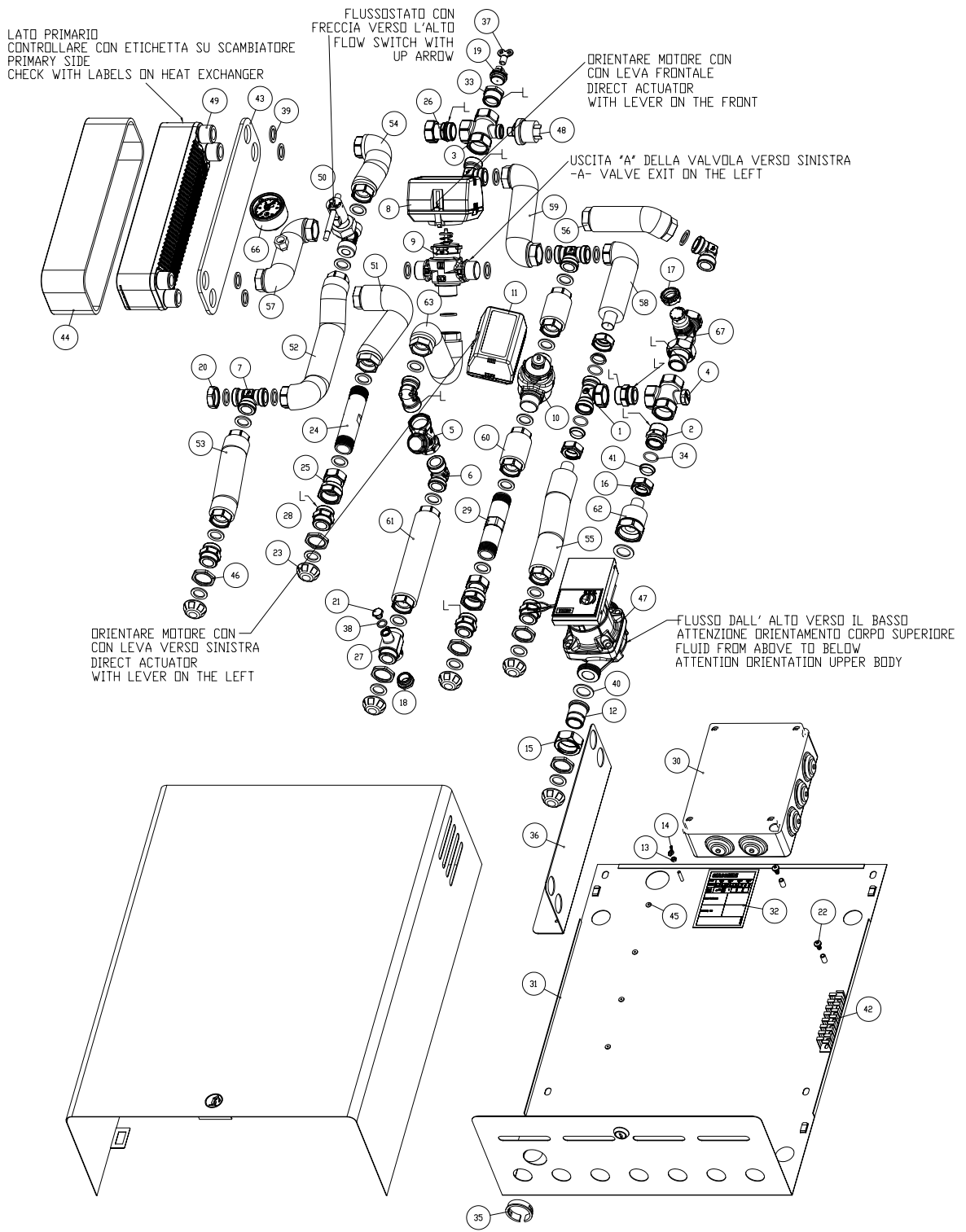
- Periodically inspect the sealing elements for possible leakages from joints and glued parts (recommended every two years).
- Periodically check correct hydraulic functioning (recommended every two years).
- Periodically check efficiency of the electric and electronic components (recommended every two years).

11. Spare parts

11.1 GE556Y0401 - GE556Y402 HIU spare parts

CODICE CODE	SCAMBIATORE (RIF.39) HEAT EXCHANGER (REF.39)	COIBENTAZIONE (RIF.44) INSULATION (REF.44)
GE556Y401	26 PIASTRE/PLATES - 077S02038	062P08108
GE556Y402	34 PIASTRE/PLATES - 077S02048	062P00858

67	R402FX004	1
66	R225Y002	1
65	K480Y002	1
64	K365Y002	1
63	085A05638	1
62	085A03928	1
61	085A03918	1
60	085A03908	2
59	085A03888	1
58	085A03878	1
57	085A03868	1
56	085A03858	1
55	085A03838	1
54	085A03828	1
53	085A03818	1
52	085A03808	1
51	085A03798	1
50	077S02208	1
49	077S02038	1
48	077S01838	1
47	076S00218	1
46	075A00212	6
45	065S00008	4
44	062P08108	1
43	062P04058	1
42	062P00848	1
41	061A00082	3
40	057G00068	2
39	057F00918	34
38	057F00098	1
37	056A00000	1
36	055S01758	1
35	053P00018	1
34	051G19488	3
33	050A15012	1
32	047E60258	1
31	040S01488	1
30	040P0067P	1
29	029P33874	1
28	029A08723	5
27	029A08273	1
26	029A0442P	1
25	029A0373P	2
24	029A03712	1
23	026P00034	6
22	024S00508	2
21	023A01232	1
20	023A00612	1
19	023A0017S	1
18	023A0003P	1
17	020P00074	1
16	018A00113	3
15	018A00043	1
14	017S00768	1
13	017A15018	1
12	015A00633	1
11	010ASP053	1
10	010ASP052	1
9	010ASP042	1
8	010ASP041	1
7	010A48203	2
6	010A48193	4
5	010A4551P	1
4	010A3094P	1
3	010A30413	1
2	010A03082	1
1	010A01563B	1
PDS.	CODICE CODE	N.

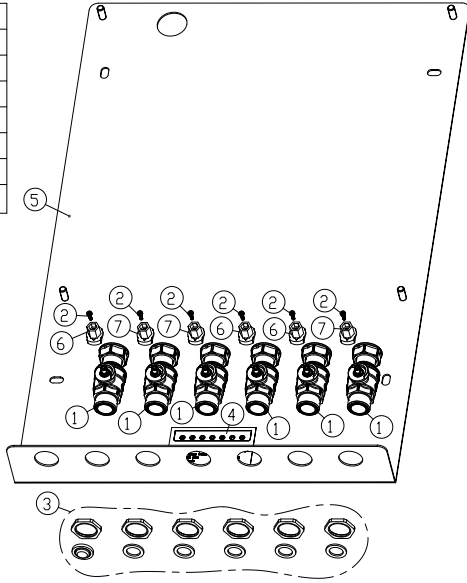


L = INCOLLARE CON LOCTITE 638
L = GLUE WITH LOCTITE 638



11.2 GE551Y074 template spare parts

7	W22R06088	3
6	W22A06088	3
5	055501808	1
4	049A99198	1
3	047P0055Z	1
2	024S00738	6
1	010A2967P	6
PDS.	CODICE CODE	N.



12. Compliance statements



San Maurizio d'Opaglio, 21/07/2014

SUPPLIER CONFORMITY DECLARATION
(according to ISO/IEC 17050-1)

Giacomini S.p.A. company, manufacturer of components for heating, cooling and sanitary distribution systems, located in San Maurizio d'Opaglio (NO), via per Alzo n. 39, whose design and production processes comply with the requirements of the UNI EN ISO 9001:2008 standard,

STATES that
the heat metering satellites

GE556Y401/402

- are properly designed and manufactured,
- are manufactured using components:
 - In compliance with the requirements of the European Directives
 - LVD 2006/95/EC
 - EMC 2004/108/EC
 - Approved according to the European harmonized standards
 - EN60730-1 + EN60730-2-6 + EN60730-2-8
 - EN60335-1-2-51
 - EN55104
 - EN61000-6-2 + EN61000-3-2 + EN61000-3-3
 - EN50081-1
 - EN55014
 - EN62321

Marco Rosa Brusin

Technical Manager

DICHIARAZIONE NUMERO: dich1_12_04_00_GB



IT AVVERTENZE PER IL CORRETTO SMALTIMENTO DEL PRODOTTO

Questo prodotto rientra nel campo di applicazione della Direttiva 2012/19/UE riguardante la gestione dei rifiuti di apparecchiature elettriche ed elettroniche (RAEE). L'apparecchio non deve essere eliminato con gli scarti domestici in quanto composto da diversi materiali che possono essere riciclati presso le strutture adeguate. Informarsi attraverso l'autorità comunale per quanto riguarda l'ubicazione delle piattaforme ecologiche atte a ricevere il prodotto per lo smaltimento ed il suo successivo corretto riciclaggio.

Si ricorda, inoltre, che a fronte di acquisto di apparecchio equivalente, il distributore è tenuto al ritiro gratuito del prodotto da smaltire.

Il prodotto non è potenzialmente pericoloso per la salute umana e l'ambiente, ma se abbandonato nell'ambiente impatta negativamente sull'ecosistema.

Leggere attentamente le istruzioni prima di utilizzare l'apparecchio per la prima volta.

Si raccomanda di non usare assolutamente il prodotto per un uso diverso da quello a cui è stato destinato, essendoci pericolo di shock elettrico se usato impropriamente.

Il simbolo del bidone barrato, presente sull'etichetta posta sull'apparecchio, indica la rispondenza di tale prodotto alla normativa relativa ai rifiuti di apparecchiature elettriche ed elettroniche.

L'abbandono nell'ambiente dell'apparecchiatura o lo smaltimento abusivo della stessa sono puniti dalla legge.

EN IMPORTANT INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT

This product falls into the scope of the Directive 2012/19/EU concerning the management of Waste Electrical and Electronic Equipment (WEEE).

This product shall not be disposed in to the domestic waste as it is made of different materials that have to be recycled at the appropriate facilities.

Inquire through the municipal authority regarding the location of the ecological platforms to receive the product for disposal and its subsequent correct recycling.

Furthermore, upon purchase of an equivalent appliance, the distributor is obliged to collect the product for disposal free of charge.

The product is not potentially dangerous for human health and the environment, but if abandoned in the environment can have negative impact on the environment.

Read carefully the instructions before using the product for the first time.

It is recommended that you do not use the product for any purpose rather than those for which it was intended, there being a danger of electric shock if used improperly.

The crossed-out wheeled dustbin symbol, on the label on the product, indicates the compliance of this product with the regulations regarding Waste Electrical and Electronic Equipment.

Abandonment in the environment or illegal disposal of the product is punishable by law.

FR AVERTISSEMENTS POUR L'ÉLIMINATION CORRECTE DU PRODUIT

Ce produit entre dans le champ d'application de la directive 2012/19 / UE relative à la gestion des déchets équipements électriques et électroniques (DEEE).

L'appareil ne doit pas être jeté avec les ordures ménagères car il est fait de différents matériaux pouvant être recyclés dans des centres appropriés.

Renseignez-vous auprès de l'autorité locale concernant l'emplacement des plates-formes écologiques appropriées pour recevoir le produit pour sa destruction et son recyclage correct ultérieur.

Il convient également de rappeler que, en cas d'achat d'un appareil équivalent, le distributeur est tenu de collecter le produit à détruire.

Le produit n'est potentiellement pas dangereux pour la santé humaine et l'environnement, mais s'il est abandonné dans l'environnement, il a un impact négatif sur l'écosystème.

Lisez attentivement les instructions avant d'utiliser l'appareil pour la première fois.

Il est interdit d'utiliser le produit pour un usage différent de celui auquel il était destiné, il y a risque de choc électrique si utilisé incorrectement.

Le symbole de la poubelle barrée sur l'étiquette de l'appareil indique sa correspondance produit à la législation relative aux déchets d'équipements électriques et électroniques.

L'abandon dans l'environnement de l'équipement ou l'élimination illégale de l'équipement est punissable par la loi.

DE WICHTIGE HINWEISE ZUR KORREKTEN ENTSORGUNG DES PRODUKTS

Dieses Produkt fällt in den Anwendungsbereich der Richtlinie 2012/19/EU über die Entsorgung von Elektro- und Elektronik - Altgeräten (WEEE).

Dieses Produkt darf nicht in den Hausmüll entsorgt werden, da es aus verschiedenen Materialien besteht, die in entsprechenden Einrichtungen recycelt werden müssen.

Erkundigen sie sich bei ihrer Gemeinde nach dem Standort des nächsten Recyclinghofs bzw. der nächsten Annahmestelle, um das Produkt dem Recycling zuzuführen bzw. fachgerecht zu entsorgen.

Darüber hinaus ist der Händler verpflichtet, das Produkt beim Kauf eines gleichwertigen Geräts kostenlos zu entsorgen.

Das Produkt ist für die menschliche Gesundheit und die Umwelt potenziell nicht gefährlich.

Diese können sich aber, falls sie in der Umwelt gelangen, negativ auf diese auswirken.

Lesen Sie daher vor dem ersten Gebrauch des Produkts die Inbetriebnahme-, Bedienungs- und Entsorgungsanweisungen sorgfältig durch. Es wird empfohlen, dass Sie das Produkt nur für den vorgesehenen Zweck verwenden.

Bei unsachgemäßer Verwendung bzw. Fehlgebrauch besteht die Gefahr eines elektrischen Schlags.

Das Symbol der durchgestrichenen Mülltonne auf dem Etikett des Produkts weist auf die Konformität dieses Produkts zu den Vorschriften für Elektro- und Elektronik-Altgeräte hin.

Das Ablagern in der Umwelt oder die illegale Entsorgung des Produkts ist strafbar.

Avvertenza per la sicurezza - Safety Warning
 L'installazione, la messa in servizio e la periodica manutenzione del prodotto devono essere eseguite da personale professionalmente abilitato, in accordo con i regolamenti nazionali e/o i requisiti locali. L'installatore qualificato deve adottare tutti gli accorgimenti necessari, incluso l'utilizzo di Dispositivi di Protezione Individuale, per assicurare la propria incolumità e quella di terzi. L'errata installazione può causare danni a persone, animali o cose nei confronti dei quali Giacomini S.p.A. non può essere considerata responsabile.
Installation, commissioning and periodical maintenance of the product must be carried out by qualified operators in compliance with national regulations and/or local standards. A qualified installer must take all required measures, including use of Individual Protection Devices, for his and others' safety. An improper installation may damage people, animals or objects towards which Giacomini S.p.A. may not be held liable.

Smaltimento imballo - Package Disposal
 Scatole in cartone: raccolta differenziata carta. Sacchetti in plastica e pluriball: raccolta differenziata plastica.
Carton boxes: paper recycling. Plastic bags and bubble wrap: plastic recycling.

Smaltimento del prodotto - Product Disposal
 Alla fine del suo ciclo di vita il prodotto non deve essere smaltito come rifiuto urbano. Può essere portato ad un centro di riciclaggio gestito dall'autorità locale o ad un rivenditore autorizzato che offre questo servizio.
Do not dispose of product as municipal waste at the end of its life cycle. Dispose of product at a special recycling platform managed by local authorities or at retailers providing this type of service.

Altre informazioni - Additional information
 Per ulteriori informazioni consultare il sito www.giacomini.com o contattare il servizio tecnico: ☎ +39 0322 923372 📠 +39 0322 923255 ✉ consulenza.prodotti@giacomini.com
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