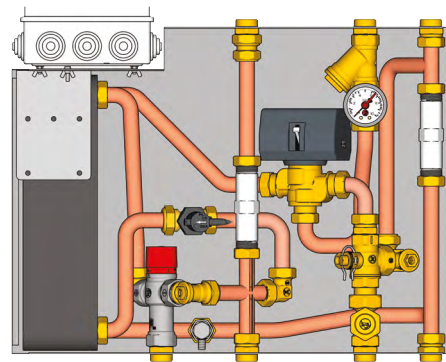


GE556Y301



GE556Y302

Description

The GE556 user Heat Interface Units are the ideal metering solution in condominium systems with the centralised production of heating water and zone-based distribution, where there is a need to produce domestic hot water locally (in each individual apartment).

With the aid of the HIUs, a delivery pipe and a return pipe distribute energy for heating both rooms and domestic water; in addition to this, there is just one pipe for the domestic cold water.

This avoids the need to install pipes for domestic hot water distribution and the relative recirculation.

Versions and product codes

Product code	Main functions	Exchanger power
GE556Y301	Priority valve	44 kW
GE556Y302	Priority valve	58 kW

Technical data

Primary circuit

- Max. working temperature: 90 °C
- Max. working pressure: 16 bar (10 bar with plastic spacer)
- Nominal flow rate on primary circuit: 1000 l/h

Heating circuit

- Max. heating power: can be adjusted via the flow rate adjustment lockshield

Domestic hot water production

- Power for DHW production with inlet 75 °C, flow rate 1000 l/h on the primary circuit and $\Delta T = 35 \text{ °C}$ on the secondary circuit (50-15 °C):
44 kW for GE556Y301
58 kW for GE556Y302
- Corresponding domestic hot water flow rate:
18 l/min for GE556Y301
24 l/min for GE556Y302
- Min. hot water withdrawal: 2,75 l/min

Priority valve

- Power voltage/frequency: 230 Vac / 50 Hz
- Total absorbed electric power: 6 VA
- Hydraulic switchover time: 6 seconds

Main features

- Connections: 3/4"
- Primary side: filter with stainless steel basket and housing for delivery temperature probe.
- Domestic hot water production: flow switch, priority valve, thermostatic mixer for temperature adjustment, and instantaneous heat exchanger.
- Heating side: adjustment lockshield and 3-way motorizable zone valve.
- Box with terminal board for electric connections.
- Suitable for insertion in a template (external or flush-mounting).
- Suitable for installation of thermal energy meter and domestic water meter, via the plastic spacers.

The versions GE556Y301 and GE556Y302 implement the following functions:

- ON-OFF control of the heating system.
- Instantaneous production of domestic hot water via a motorised priority valve and integrated heat exchanger.
- Mixing of domestic water for sending to the users.
- Direct measurement of the heat energy consumption for heating and domestic hot water production.
- Direct measurement of the consumption of domestic cold water.

The HIU components are fitted on a sheet metal frame that can be inserted in the appropriate template for worksite installation. Available in an external version (GE551Y072) or a flush-mounting one (GE551Y073).

On the heating delivery unit there is a filter, a manometer, a balancing lockshield and a motorizable 3-way zone valve. On the return unit there is a plastic spacer for inserting the thermal energy meter.

The insulated stainless steel plate exchanger produces domestic hot water in combination with the motorised priority valve that is activated by the domestic water circuit flow switch.

The thermostatic mixer allows you to adjust the temperature of the domestic water sent to users, within a range of 38÷60 °C.

The difference between the two versions lies in the power of the heat exchanger: 44 kW for the GE556Y301 HIU; 58 kW for the GE556Y302 HIU.

Factory adjustments

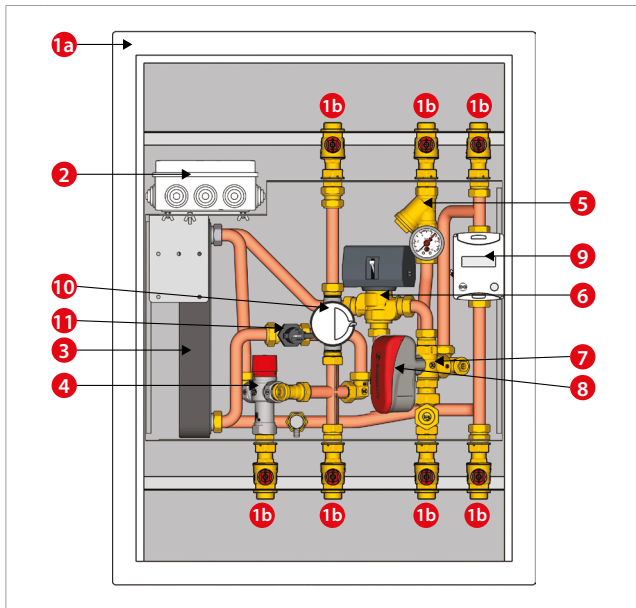
- Thermostatic mixer: position 3 (49 °C).
- Cold side lockshield on thermostatic mixer: 3/4 turn opening.
- Heating lockshield: fully open.
- Primary by-pass lockshield: fully open.



Warning.
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).



Components



Legend

1a	Template for installation on a worksite - external or flush-mounting (optional)
1b	Valves included with the template, for HIU-template connection (optional)
2	Box with terminal board for electric connections
3	Insulated heat exchanger
4	Thermostatic mixer
5	Y-filter
6	Motorised priority valve
7	3-way motorizable zone valve
8	Actuator for 3-way zone valve (optional)
9	Thermal energy meter
10	Domestic cold water meter (optional)
11	Flow switch

Optional accessories

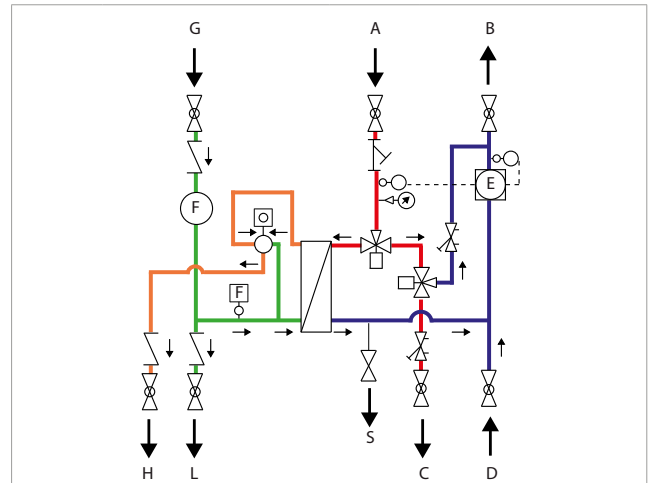
- Thermal energy meter, GE552 series (fig.2-9).
- Domestic water meter, GE552-2 series (fig.2-10).
- Template for external or flush-mounting installation, GE551-2 series (fig.2-1a, 1b).
- Actuator for zone valve, K270 series (fig.2-8).
- Components for data centralisation via M-Bus (GE552-4 series) or via Wireless M-Bus (GE552-W series).



NB:

- Within the HIU there is an adjustment lockshield for balancing the heating circuits.
- No device is envisaged for balancing HSW production circuits: if necessary, you can fit one on the distribution system side.
- If there is no domestic water meter, the cold domestic water inlet in the HIU can be set from below (inlet L in figure 3, with the connection G closed and no check valve).

Operation



Legend

A) Primary delivery	G) Domestic cold water inlet
B) Primary return	H) Mixed domestic hot water outlet
C) Heating system delivery	L) Domestic cold water outlet
D) Heating system return	S) Drainage
	3-way zone valve
	Priority valve
	Thermostatic mixer
	Shut-off valve
	Drain cock
	Balancing lockshield
	Heat exchanger
	Manometer
	Temperature probe
	Flow switch
	Filter
	Thermal energy meter (optional)
	Domestic water meter (optional)
	Check valve (optional)

The inputs from the boiler room are from above, while the outputs to the home are from below. The first unit at the top left (G) relates to domestic water; the water meter (F) measures the total flow rate. Domestic cold water emerges from the second pipe at the bottom left (L); the first (H) feeds out domestic hot water, mixed by means of a thermostatic mixer. The "hot" heating fluid from the centralised utility room enters from above, via the second pipe from the left (A); after passing through a filter, its temperature and pressure (analogue manometer) are measured. Then there is the priority valve that, commanded by the domestic hot water flow switch, deviates the heating fluid (heating side) towards the plate exchanger. When there is no domestic hot water request, the heating fluid (heating side) passes through the priority valve and then meets the 3-way zone heating valve (that may also be 2-way if the bypass with adjustment lockshield is closed). The adjustment lockshield downstream from the zone heating valve regulates the flow rate in heating mode. On the return circuit towards the central unit there is a thermal energy meter (E) with built-in temperature probe.

Thermostatic mixer

- Complying with A.S.S.E. 1017
- Adjustment precision: ± 1 °C

Position	1	2	3	4	5
Mixing temperature [°C]	38	43,5	49	54,5	60

Thermostatic mixer adjustment

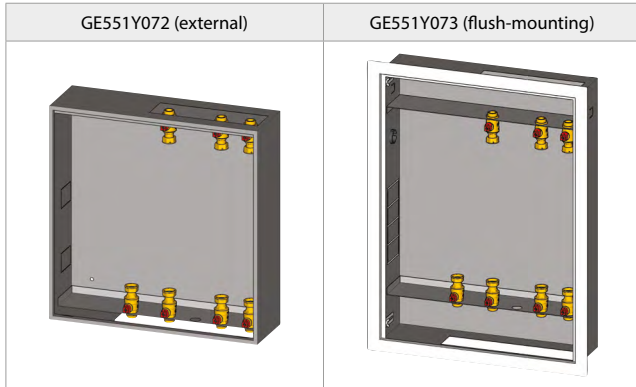
Installation



Warning.
The installation should be undertaken by suitably qualified and authorised personnel only. Observe the EU norms and regulations concerning the use (installation, fixing, etc.), the operation, the recalibration and the replacement the meters. Please refer to the assembly instructions supplied with any meter.

HIU installation usually requires the use of a template for worksite installation of the versions:

- GE551Y072: (external)
- GE551Y073: (flush-mounting)



1) Installing the template.

You are advised to install only the template on the worksite (fig.16), to avoid damaging the meters and so that you can subsequently rinse out the systems and perform the pressure tests.



Warning.
Before connecting the template to the HIU, remove the lock nuts from the threaded connections.

2) Rinsing out the system

You are advised to rinse out the system before installing the thermal energy meters.

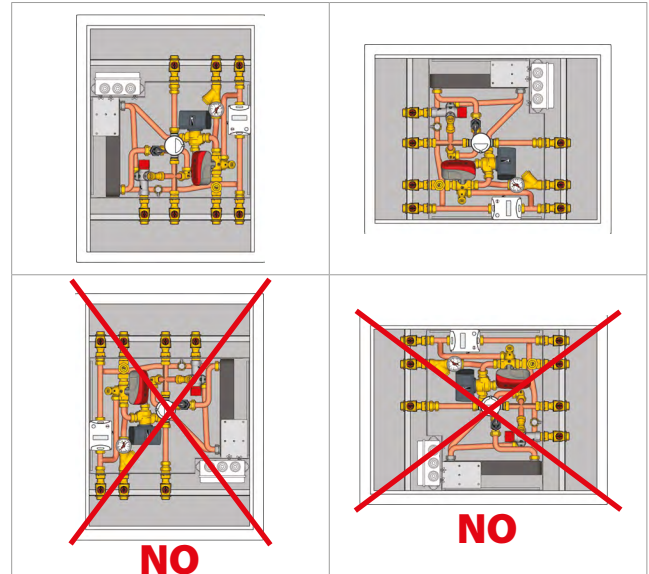
3) Installing the HIU

After rinsing out the system, the HIU can be installed in the template and the energy meter can be assembled.

4) Testing the system

After making the installations, test the pressurised system.

Allowed installation



Domestic hot water 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	29,5	75	580	31,0
			70	700	33,8
			65	880	36,3
			60	1330	40,9
15	900	37,0	75	780	34,2
			70	960	36,9
			65	1260	39,8
17	1020	41,5	75	920	35,8
			70	1140	38,4
			65	1540	41,6
20	1200	49,0	75	1150	38,1
			70	1450	40,8

Power and flow rate data for primary circuit and DHW for GE556Y301

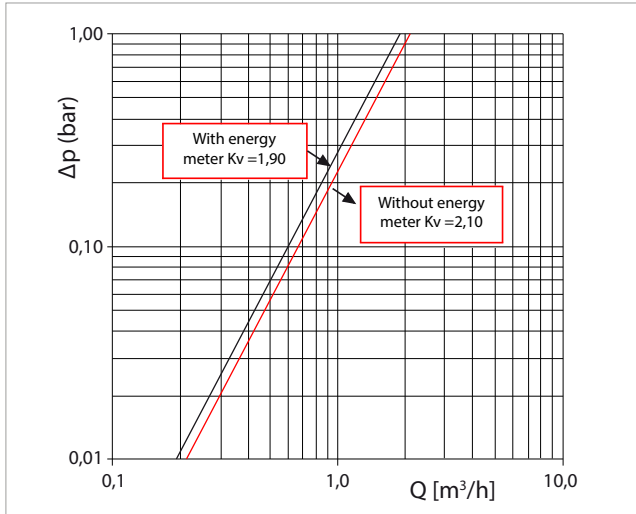
Domestic hot water (Δt 15-50 °C)			Primary circuit working conditions		
Flow rate [l/min]	Flow rate [l/h]	Power [kW]	Inlet T [° C]	Flow rate [l/h]	Outlet T [° C]
12	720	29,5	75	460	20,0
			70	525	21,4
			65	610	23,5
			60	760	26,7
			57	920	29,5
15	900	37,0	75	590	21,2
			70	675	23,0
			65	800	25,3
			60	1000	28,5
			57	1240	31,5
17	1020	41,5	75	680	22,1
			70	775	23,8
			65	925	26,2
			60	1180	29,7
			57	1480	32,8
20	1200	49,0	75	815	23,2
			70	940	25,1
			65	1130	27,7
			60	1480	31,5
			57	1880	34,6
24	1430	58,5	75	1000	24,6
			70	1160	26,7
			65	1420	29,5
			60	1880	33,3

Power and flow rate data for primary circuit and DHW for GE556Y302

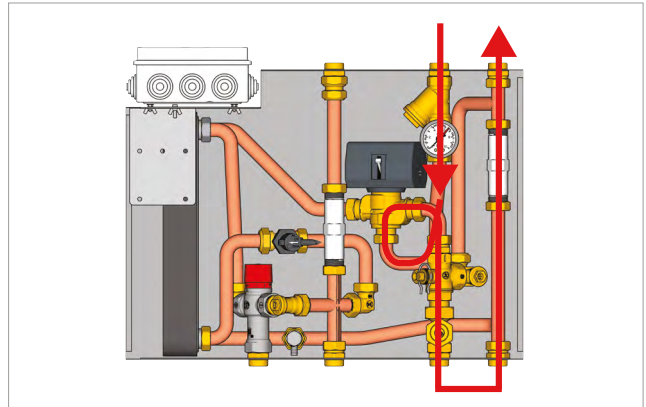


Hydraulic characteristics

Heating function



Heating function – primary side

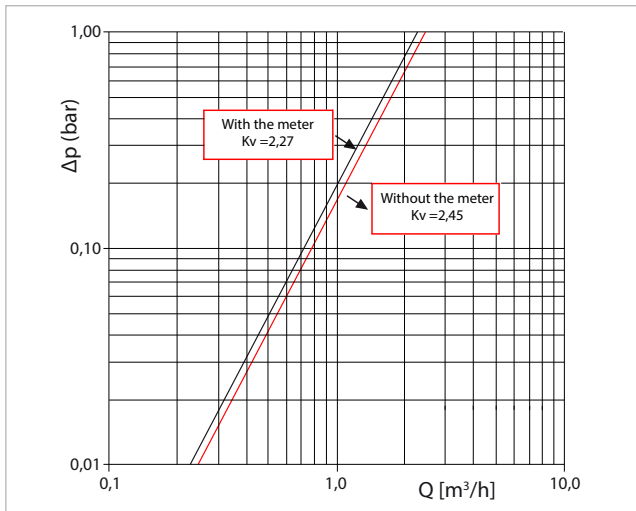


Heating function – primary side

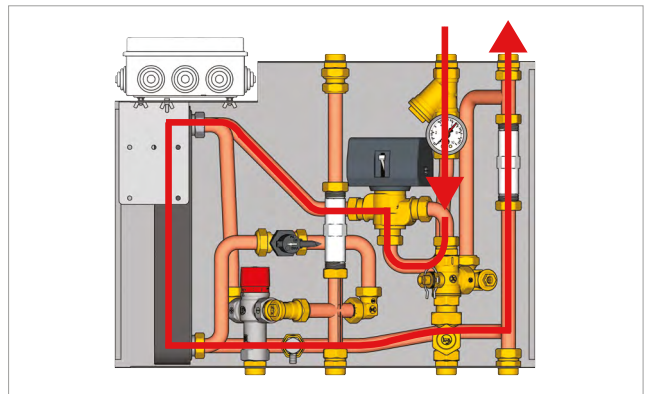


NB:
The instantaneous flow rate can be verified by means of the energy meter, thereby allowing you to adjust the lockshield for the heating function.

Domestic hot water function



Domestic hot water function – primary side

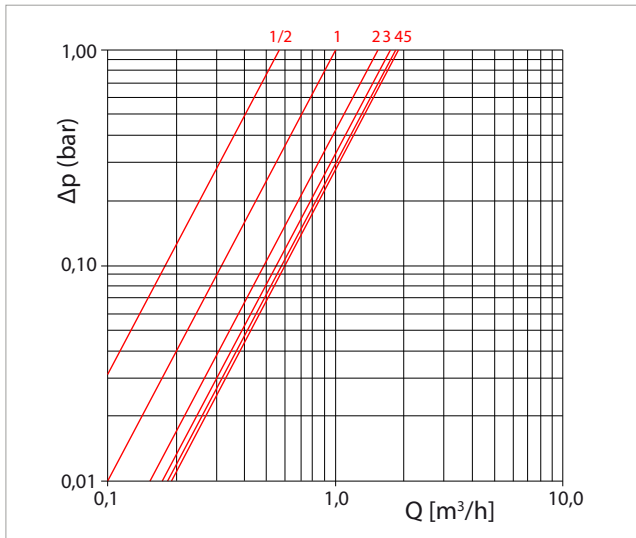


Domestic hot water function – primary side

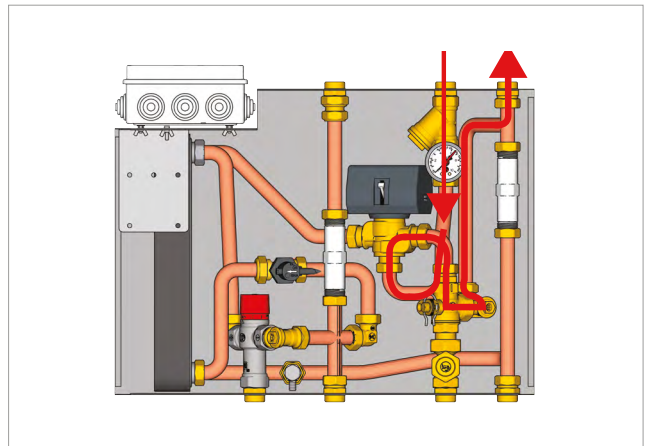


NB:
For the domestic hot water function too, you can use the energy meter to check the instantaneous flow rate. No adjustment devices are envisaged for the hot domestic water function, but you can fit devices on the HIU if necessary.

Primary by-pass



Primary by-pass, depending on bypass lockshield adjustment



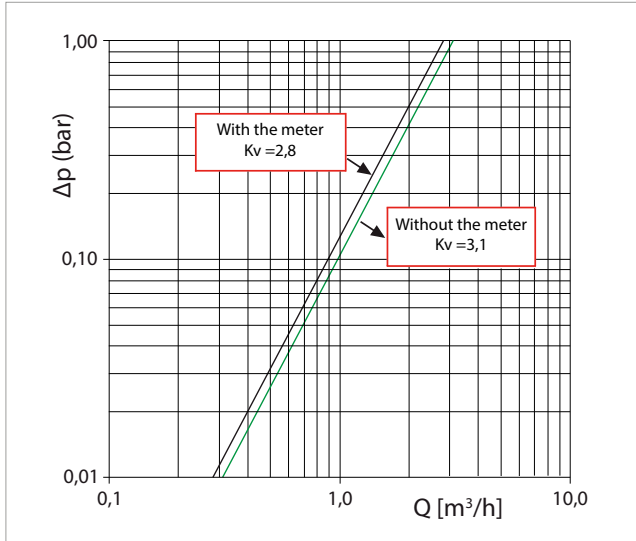
Primary by-pass

By-pass lockshield regulation	0	1/2	1	2	3	4	5
Kv	0	0,57	1,00	1,55	1,75	1,86	1,92

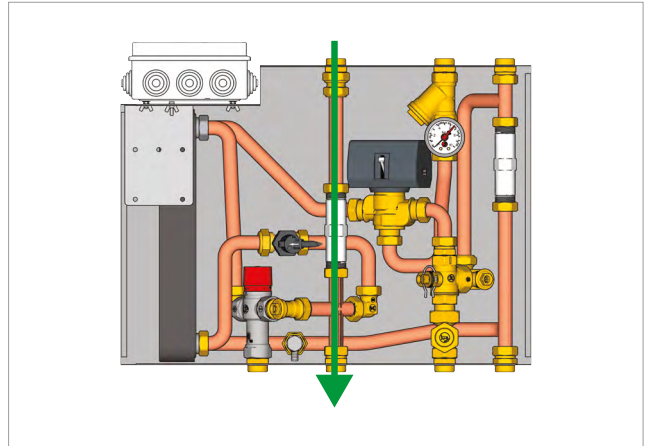
By-pass lockshield adjustment



Domestic cold water



Domestic cold water (DCW)

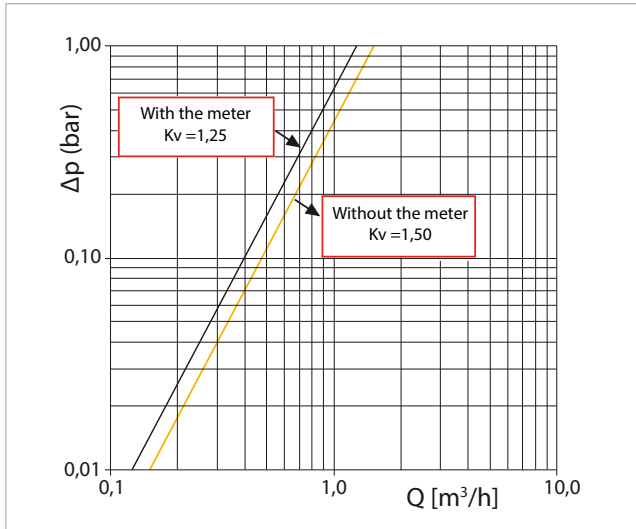


Domestic cold water (DCW)

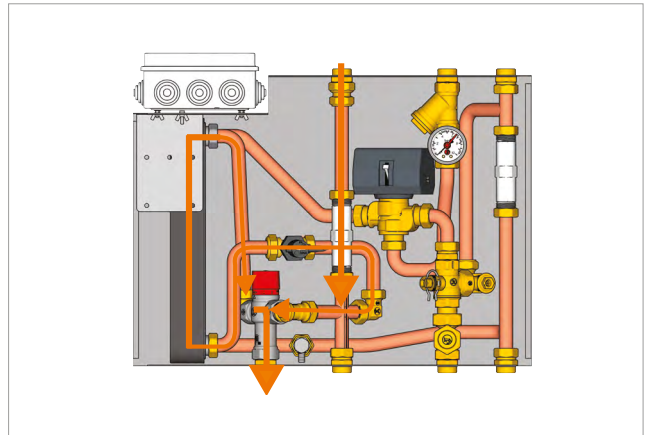


NB:
Hydraulic characteristic of the check valve (to be ordered separately):
Kv = 4,3.

Domestic hot water



Domestic hot water (DHW)

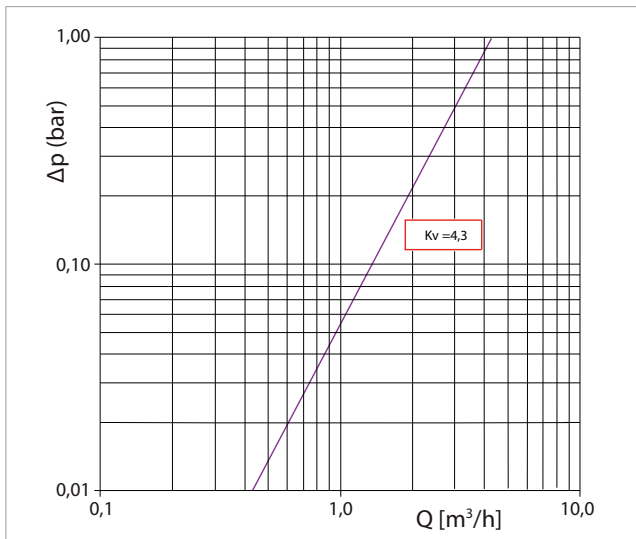


Domestic hot water (DHW)

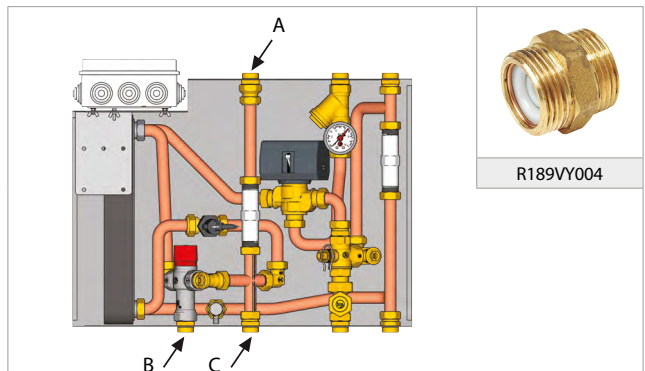


NB:
Hydraulic characteristic of the check valve (to be ordered separately):
Kv = 4,3.

Check valve on domestic water (optional)



Check valve, code R189VY004



Positioning the domestic water check valves (optional)

The R189VY004 domestic water check valve is integrated in a nipple (R189V series). To install the non-return valve on the HIU, replace the original nipple A and/or B and/or C with the R189VY004 nipple fitted with a check valve. Be sure to respect the flow directions (the flows are from the top downwards).



Electrical connections



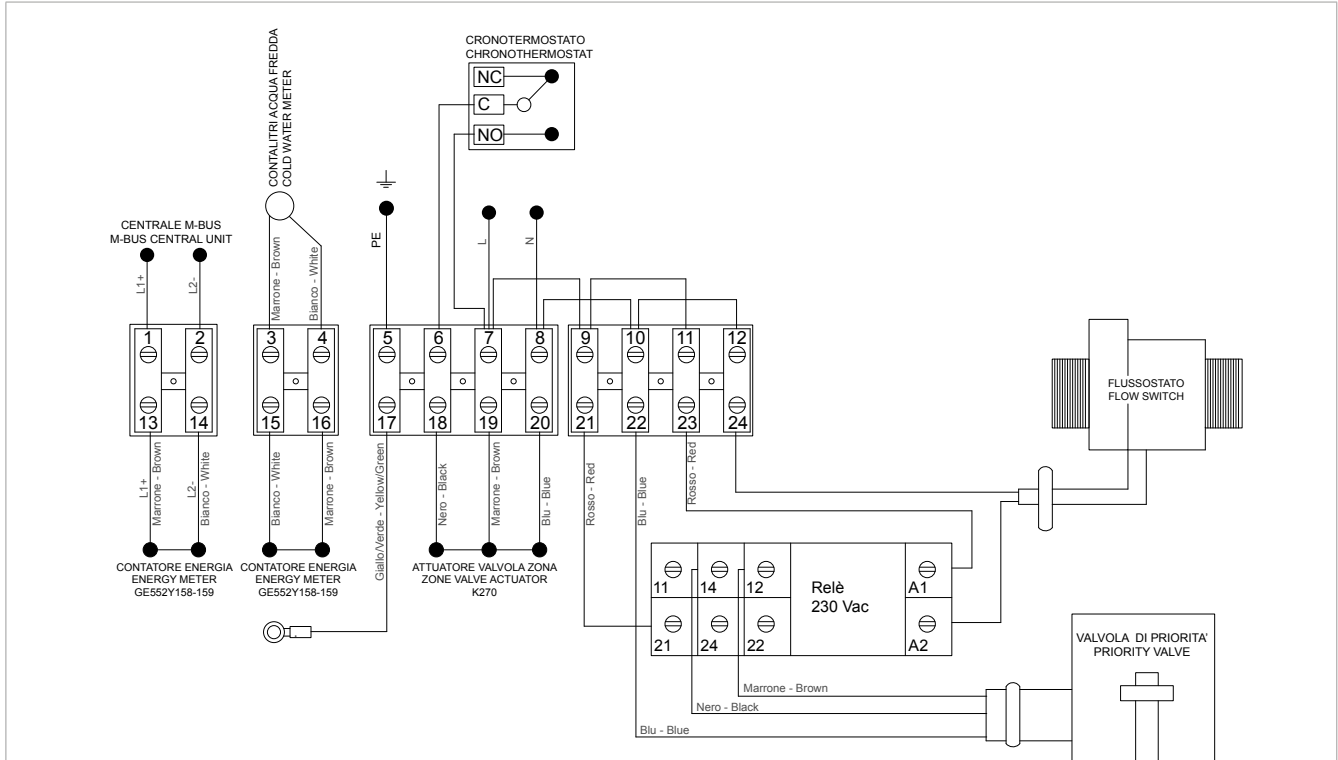
Warning.

Interventions on electrical components must only be carried out by qualified personnel. Ensure that the power supply is suspended while the connections are being carried out.



Nota.

The showed electric scheme is about the connections of GE552Y158, GE552Y159 thermal energy meters. In the case of installation of other energy meters refer to the instructions of the meters themselves.



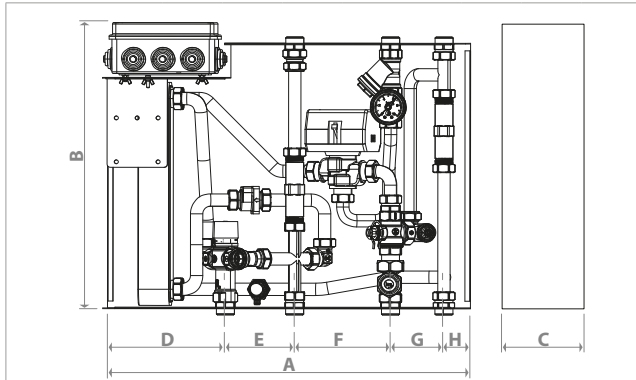
Electric connections of the terminal board

Terminal	Function
1	Cable transmitting M-Bus data to the data concentrator: connection of wire L1+. Cable Ø 0,8 mm, twisted, 2-wire, non-shielded, with a maximum line capacity of 150 pF/m (16 o 18 AWG)
2	Cable transmitting M-Bus data to the data concentrator: connection of wire L2-. Cable Ø 0,8 mm, twisted, 2-wire, non-shielded, with a maximum line capacity of 150 pF/m (16 o 18 AWG)
3	Connection for M-Bus centralization of water meters
4	Connection for M-Bus centralization of water meters
5	Earth
6	Connection to the chronothermostat, to the common C terminal of the internal contact (cable section 0,5 mm ²)
7	Connection of power supply 24 V~ or 230 V~ (cable section 0,5 mm ²) In parallel: connection to the chronothermostat, to the normally open NO terminal of the internal contact (cable section 0,5 mm ²)
8	Connection of power supply 24 V~ or 230 V~ (cable section 0,5 mm ²)
9	-
10	-
11	-
12	-

Terminal	Function
13	Connection of L1+ brown wire of thermal energy meter
14	Connection of L2- white wire of thermal energy meter
15	Connection for M-Bus centralization of water meters
16	Connection for M-Bus centralization of water meters
17	Earth
18	Connection K270 zone valve actuator, black wire
19	Connection K270 zone valve actuator, brown wire
20	Connection K270 zone valve actuator, blue wire
21	Connection to relay, red wire, pos. 21
22	Connection to priority valve, blue wire
23	Connection to relay, red wire, pos. A1
24	Connection to flow switch



Dimensions



Product code	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]
GE556Y301	540	390	155	190	100	140	80	30
GE556Y302								

Reference Standards

- UNI EN 1434
- Directive 2014/32/EU
- EN 60751
- EN 61107
- EN 13757

WRAS certifications

Reference "Components"	Components	Certificate number
-	Gaskets	1509514
3	Heat exchanger	1909083
4	Thermostatic mixer	1709305
11	Flow switch	2111302
Optional	Check valve	1908700

Product specifications

GE556Y301

User HIU for centralised systems, for managing heating and domestic hot water production. 3/4" connections. Primary side: filter with stainless steel basket and housing for delivery temperature probe. Domestic hot water production: flow switch, priority valve, thermostatic mixer for temperature adjustment, and instantaneous heat exchanger with 44 kW power (with Primary: 75°C and 1 m³/h flow rate. Secondary: ΔT = 50 °C -15 °C and 18 l/min flow rate). Heating side: adjustment lockshield and 3-way zone valve motorizable. Suitable for installation of thermal energy meter and domestic water meter, via the plastic spacers (centre distance 110 mm). IP55 box with terminal board for electric connections. Suitable for insertion in a template. Max. working temperature 90 °C. Max. working pressure 16 bar (10 bar with plastic spacer). Frame dimensions 540x390x155 mm (LxHxD). The HIU can be completed by separately ordering: thermal energy meters of the GE552 series. Domestic water meter, GE552-2 series. Template (with shut-off valves) in painted sheet metal (RAL9010) with lockable door and adjustable frame depth; external version code GE551Y072; internal version code GE551Y073. Actuator K270 for 3-way zone valve. Components for centralisation and remote control of consumption data via M-BUS (GE552-4 series), or components for centralisation and remote control of consumption data via Wireless M-BUS (GE552-W series).

GE556Y302

User HIU for centralised systems, for managing heating and domestic hot water production. 3/4" connections. Primary side: filter with stainless steel basket and housing for delivery temperature probe. Domestic hot water production: flow switch, priority valve, thermostatic mixer for temperature adjustment, and instantaneous heat exchanger with 58 kW power (with Primary: 75°C and 1 m³/h flow rate. Secondary: ΔT = 50 °C -15 °C and 24 l/min flow rate). Heating side: adjustment lockshield and 3-way zone valve motorizable. Suitable for installation of thermal energy meter and domestic water meter, via the plastic spacers (centre distance 110 mm). IP55 box with terminal board for electric connections. Suitable for insertion in a template. Max. working temperature 90 °C. Max. working pressure 16 bar (10 bar with plastic spacer). Frame dimensions 540x390x155 mm (LxHxD). The HIU can be completed by separately ordering: thermal energy meters of the GE552 series. Domestic water meter, GE552-2 series. Template (with shut-off valves) in painted sheet metal (RAL9010) with lockable door and adjustable frame depth; external version code GE551Y072; internal version code GE551Y073. Actuator K270 for 3-way zone valve. Components for centralisation and remote control of consumption data via M-BUS (GE552-4 series), or components for centralisation and remote control of consumption data via Wireless M-BUS (GE552-W series).

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.



Safety Warning

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.



Package Disposal

Carton boxes: paper recycling.
Plastic bags and bubble wrap: plastic recycling.



Product Disposal

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.

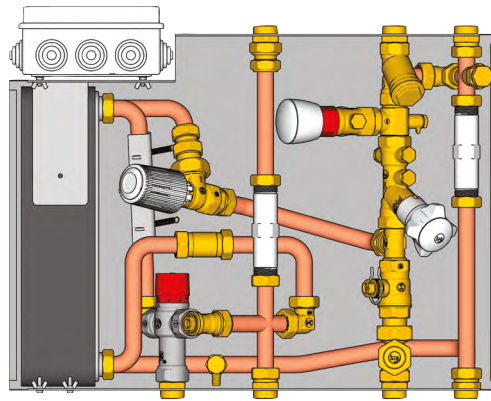
Additional information

For more information, go to www.giacomini.com or contact our technical assistance service: ☎ +39 0322 923372 📠 +39 0322 923255 ✉ consulenza.prodotti@giacomini.com

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Giacomini S.p.A. Via per Alzo, 39 - 28017 San Maurizio d'Opaglio (NO) Italy



GE556Y303

Description

The GE556 user HIUs are the ideal metering solution in condominium systems with the centralised production of heating water and zone-based distribution, where there is a need to produce domestic hot water locally (in each individual apartment).

With the aid of the HIUs, a delivery pipe and a return pipe distribute energy for heating both rooms and domestic water; in addition to this, there is just one pipe for the domestic cold water.

This avoids the need to install pipes for domestic hot water distribution and the relative recirculation.

Versions and product codes

Product code	Main functions	Exchanger power
GE556Y303	Thermostatic command and dynamic balancing	58 kW

Technical data

Primary circuit

- Max. working temperature: 90 °C
- Max. working pressure: 16 bar (10 bar with plastic spacer)
- Max. primary flow rate: 1500 l/h (1000l/h for just domestic hot water production)

Domestic hot water production

- Power for domestic hot water production with inlet 75 °C, flow rate 1000 l/h on the primary and $\Delta T = 35$ °C on the secondary circuit (50-15 °C): 58 kW
- Corresponding domestic hot water flow rate: 24 l/min
- Min. hot water withdrawal: 2,75 l/min



Warning.
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).

Main features

- Connections 3/4"
- Primary side: dynamic balancing via static balancing valve and differential pressure control valve; thermostatic valve (R462L series) for controlling the temperature and flow rate on the primary line for domestic water production, stainless steel basket filter and housing for delivery temperature probe.
- Domestic hot water production: thermostatic mixer for temperature adjustment, and instantaneous heat exchanger.
- Heating side: adjustment lockshield valve and 2-way zone valve motorizable.
- Cabinet with terminal board for electric connections.
- Suitable for insertion in a template (external or flush-mounting).
- Suitable for installation of heat energy meter and domestic water litre-counter, via the plastic spacers.

Version GE556Y303 implements the following functions:

- ON-OFF control of the heating system.
- Instantaneous production of domestic hot water via a thermostatic valve and integrated plate heat exchanger.
- Mixing of domestic water for sending to the users.
- Direct measurement of the energy consumption for heating and domestic hot water production.
- Direct measurement of the consumption of domestic cold water.

The HIU components are fitted on a sheet metal frame that can be inserted in the appropriate template for worksite installation. Available in an external version (GE551Y072) or a flush-mounting one (GE551Y073).

On the heating delivery unit there is a filter, a pressure gauge, a balancing valve, a balancing lockshield valve and a 2-way zone valve motorizable.

On the return unit there is a plastic spacer for inserting the heat energy meter. The GE556Y303 HIU has a particular way of producing domestic hot water. The insulated stainless steel plate exchanger works alongside a thermostatic valve with remote bulb. Thanks to the thermostatic control of the water temperature and primary flow rate, operation is entirely mechanical; the lack of electric devices reduces the need for maintenance.

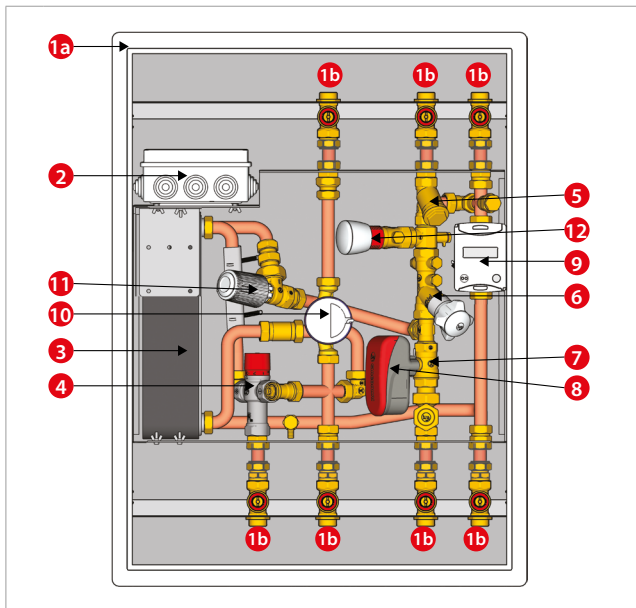
The thermostatic mixer allows you to adjust the temperature of the domestic water sent to users, within a series of 38÷60 °C.

Factory adjustments

- Thermostatic mixer: position 4 (54,5 °C).
- Static balancing valve: fully open.
- Differential pressure control valve, R147N: 5 m H₂O
- Thermostatic mixer lockshield valve: 1/4 turn opening.
- R462L thermostatic head: 56 °C



Components



Legend

1a	Template for installation on a worksite - external or flush-mounting (optional)
1b	Valves included with the template, for HIU-template connection (optional)
2	Cabinet with terminal board for electric connections
3	Insulated exchanger
4	Thermostatic mixer
5	Y-filter
6	Static balancing valve, R206B
7	2-way zone valve, motorizable
8	Actuator for 2-way zone valve (optional)
9	Thermal energy meter (optional)
10	Domestic cold water meter (optional)
11	Thermostatic valve with remote bulb, R462L
12	Differential pressure control valve, R147N

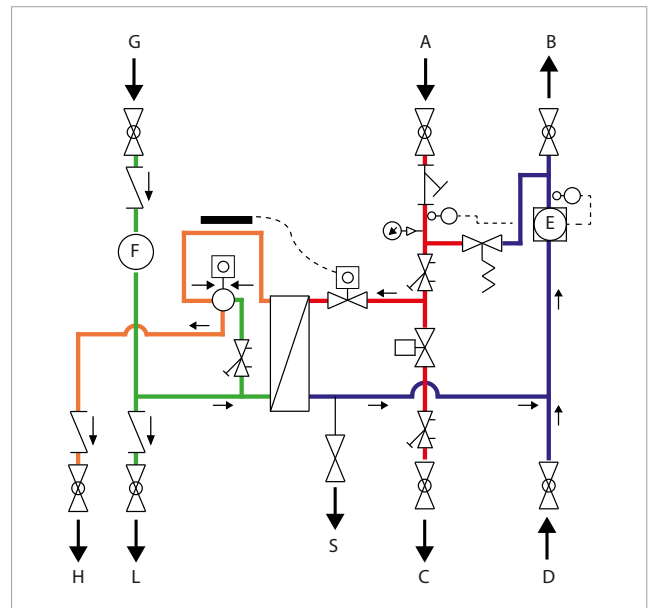
Optional accessories

- Thermal energy meter, GE552 series (fig.2-9).
- Domestic water meter, GE552-2 series (fig.2-10).
- Template for external or flush-mounting installation, GE551-2 series (fig.2-1a, 1b).
- Actuator for zone valve, K270 series (24 V or 230 V) (fig.2-8).
- Components for data centralisation via M-Bus (GE552-4 series) or via Wireless M-Bus (GE552-W series).

Note.

- Within the HIU there is an adjustment lockshield valve for balancing the heating circuits. No device is envisaged for balancing DHW production circuits: if necessary, you can fit one on the distribution system side.
- If there is no domestic water meter, the domestic cold water inlet in the HIU can be set from below (inlet L in figure 3, with the connection G closed and no check valve).

Operation



Legend

A) Primary delivery	G) Domestic cold water inlet		
B) Primary return	H) Mixed domestic hot water outlet		
C) Heating system delivery	L) Domestic cold water outlet		
D) Heating system return	S) Drainage		
	2-way zone valve		Temperature probe
	Thermostatic mixer		Thermostatic valve with remote bulb, R462L
	Shut-off valve		Filter
	Drain tap		Thermal energy meter (optional)
	Balancing lockshield valve/Static balancing valve		Domestic water meter (optional)
	Heat exchanger		Check valve (optional)
	Pressure gauge		Differential pressure control valve

The inputs from the boiler room are from above, while the outputs to the home are from below.

The first unit at the top left relates to domestic water; the water meter (F) measures the total flow rate. domestic cold water emerges from the second pipe at the bottom left; the first feeds out domestic hot water, mixed by means of a thermostatic mixer.

The "hot" heating fluid from the centralised utility room enters from above, via the second pipe from the left; after a filter, there is the housing for the energy meter temperature probe. This is followed by a differential pressure control valve between the delivery and the primary return.

Together with the balancing valve, this valve implements the **dynamic balancing characteristic**.

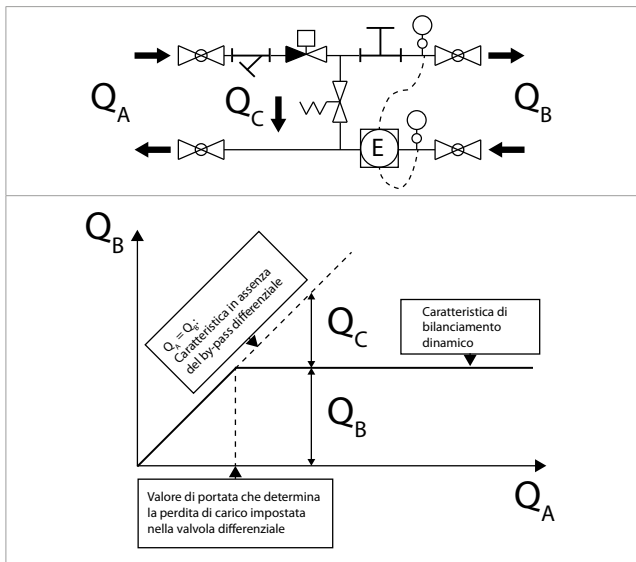
The balancing valve allows the static adjustment of the flow rate to the apartment. The differential bypass valve allows dynamic balancing in addition to static: if the flow rate to the apartment exceeds the threshold value of the differential pressure valve, the latter opens the bypass to automatically re-balance the flow rate.

Downstream from the balancing valve there are - in parallel - the circuits for heating and domestic hot water production which can therefore operate simultaneously, guaranteeing **greater comfort** compared with systems that interrupt the heating function to give priority to domestic water production.

Heating: on the heating side there is a zone valve and an adjustment lockshield valve. The zone valve can be commanded by a K270 actuator (to be ordered separately) that is activated by a thermostat command. The adjustment lockshield valve regulates the primary flow rate part destined for heating, given that the flow rate needed for domestic hot water production is usually greater than that for heating.

Domestic hot water production: a thermostatic valve with remote bulb on the exchanger outlet minimises the primary flow rate while domestic hot water is being produced.

Thermal energy metering: on the return to the central unit there is a connection point for housing an energy meter; the thermal energy meter (E) calculates energy consumption for heating and domestic hot water production. The delivery probe of the energy meter must be installed in the housing on the delivery unit. The meter return temperature probe is integrated in the energy meter body.



Domestic hot water 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]	Return T [°C]
12	720	29,5	75	460	20,0
			70	525	21,4
			65	610	23,5
			60	760	26,7
			57	920	29,5
15	900	37,0	75	590	21,2
			70	675	23,0
			65	800	25,3
			60	1000	28,5
			57	1240	31,5
17	1020	41,5	75	680	22,1
			70	775	23,8
			65	925	26,2
			60	1180	29,7
			57	1480	32,8
20	1200	49,0	75	815	23,2
			70	940	25,1
			65	1130	27,7
			60	1480	31,5
			57	1880	34,6
24	1430	58,5	75	1000	24,6
			70	1160	26,7
			65	1420	29,5
			60	1880	33,3

Dati di potenza e portata circuito primario e produzione acqua sanitaria

Thermostatic mixer

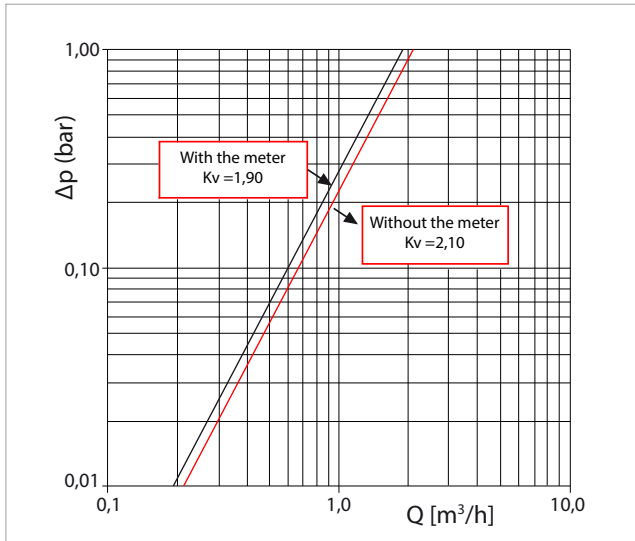
- Complying with A.S.S.E. 1017
- Adjustment precision ± 1 °C

Position	1	2	3	4	5
Mixing temperature	38 °C	43,5 °C	49 °C	54,5 °C	60 °C

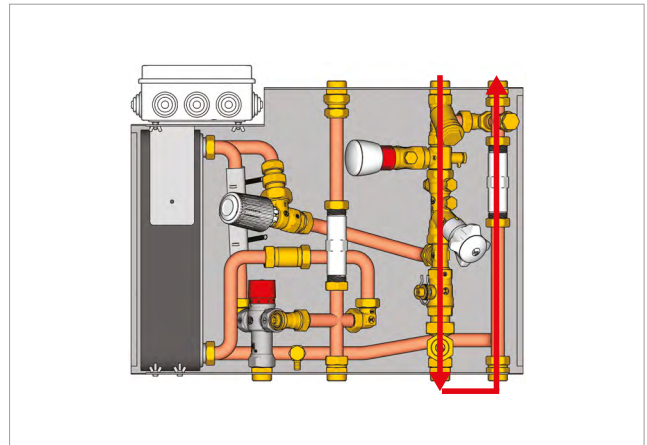


Hydraulic characteristics

Heating function



Heating function – primary side



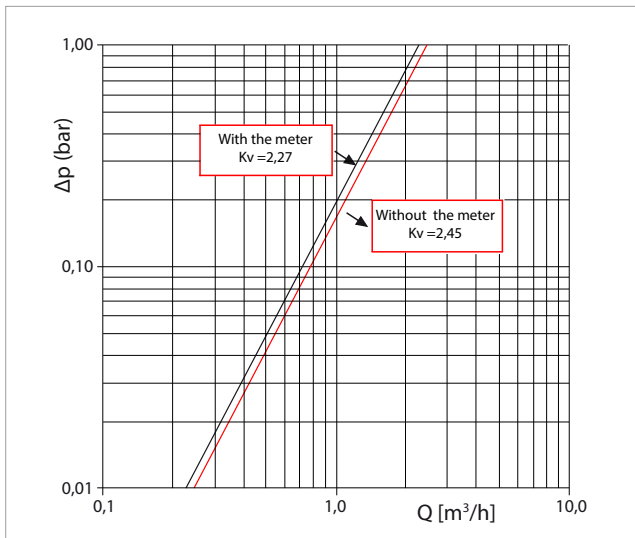
Heating function – primary side



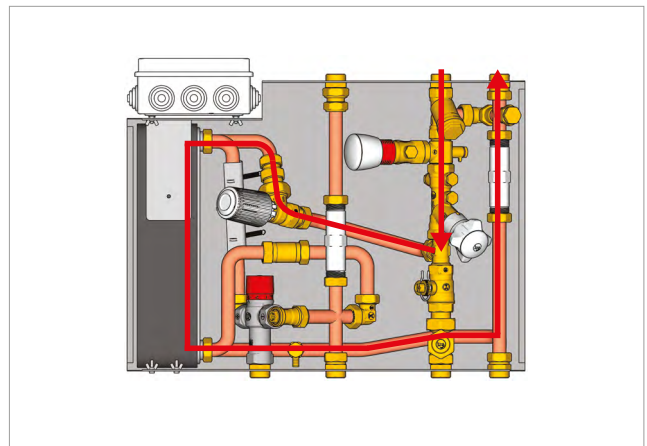
Note.

The instantaneous flow rate can be verified by means of the energy meter, thereby allowing you to adjust the lockshield valve for the heating function.

Domestic hot water function



Domestic hot water function – primary side



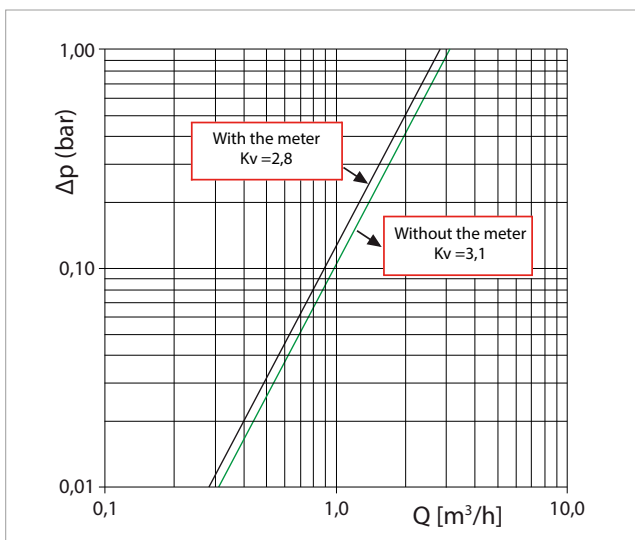
Domestic hot water function – primary side



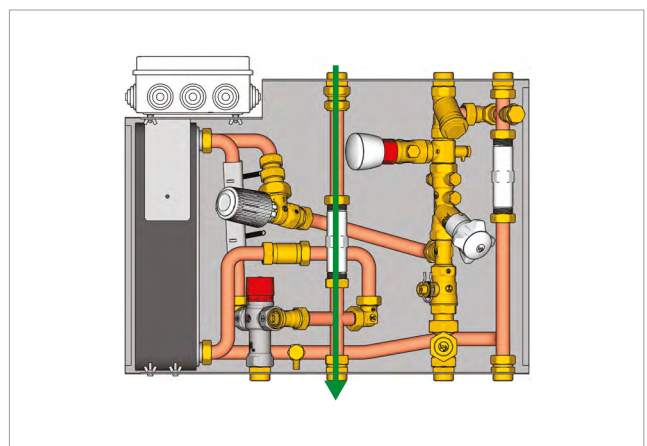
Note.

For the domestic hot water function too, you can use the energy meter to check the instantaneous flow rate. No adjustment devices are envisaged for the domestic hot water function, but you can fit devices on the HIU if necessary.

Domestic cold water



Domestic cold water (DCW)



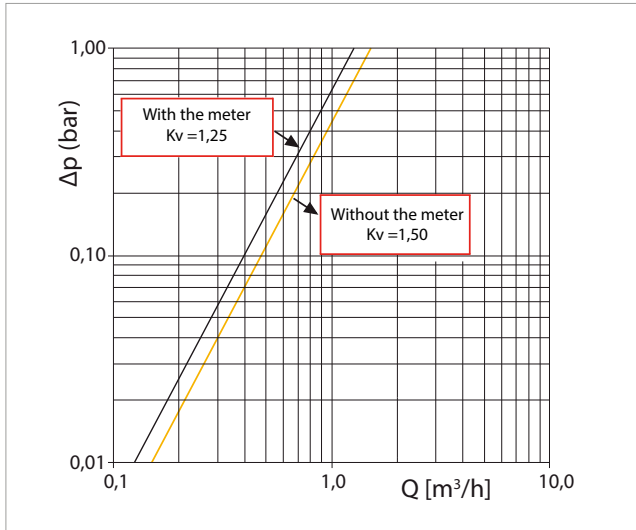
Domestic cold water (DCW)



Note.

Hydraulic characteristic of the check valve (to be ordered separately): Kv = 4,3.

Domestic hot water



Domestic hot water (DHW)

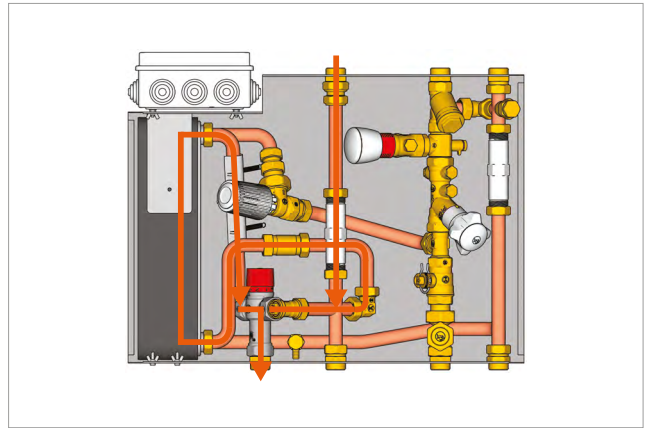
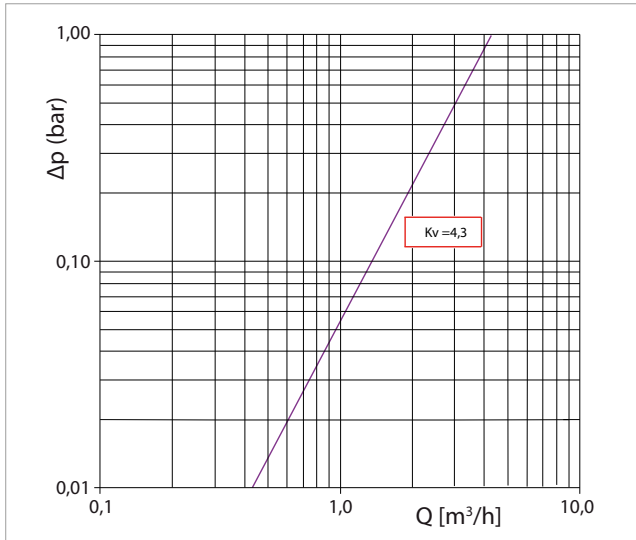


Figure 11 – Domestic hot water (DHW)

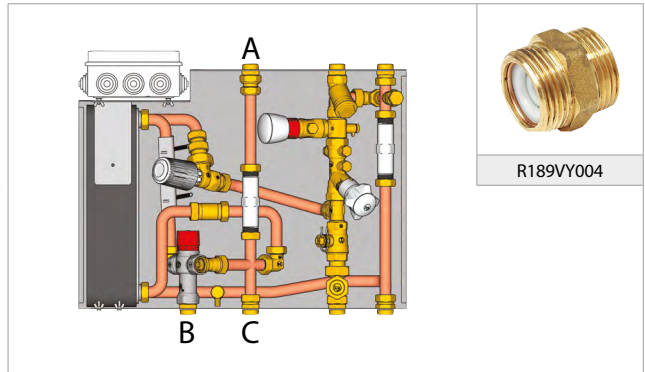


Note.
Hydraulic characteristic of the check valve (to be ordered separately):
Kv = 4,3.

Check valve on domestic water circuit (optional)



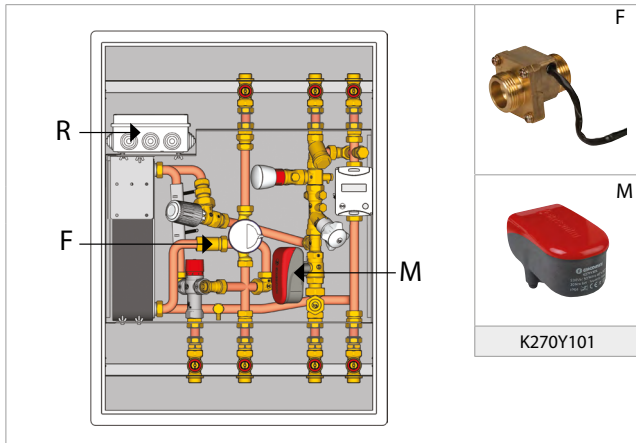
Check valve, code R189VY004



Positioning the domestic water check valves (optional)

The R189VY004 domestic water check valve is integrated in a nipple (R189V series). To install the check valve on the HIU, replace the original nipple A and/or B and/or C with the R189VY004 nipple fitted with a check valve. Be sure to respect the flow directions (the flows are from the top downwards).

Priority management of domestic water



Positioning of optional accessories for priority domestic water management

The GE556Y303 HIU can house a flow switch (F) GE500Y311 for managing DHW production as a priority over the heating function, via the actuator of the zone valve (M) (K270 at 230 V).

In this way, the flow rate - and hence the primary power request - is reduced. It should be noted that when the zone valve is closed and there is no DHW production request, the energy meter still gives a count equal to the dissipation in the HIU.

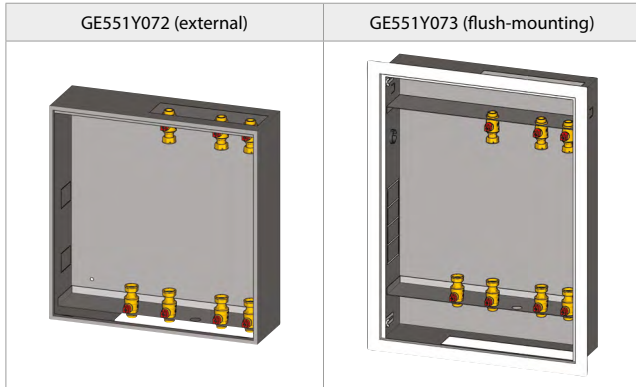
Installation



Warning.
The installation should be undertaken by suitably qualified and authorised personnel only. Observe the EU norms and regulations concerning the use (installation, fixing, etc.), the operation, the recalibration and the replacement the meters. Please refer to the assembly instructions supplied with any meter.

HIU installation usually requires the use of a template for worksite installation of the versions:

- GE551Y072: (external)
- GE551Y073: (flush-mounting)



1) Installing the template.

You are advised to install only the template on the worksite (fig.16), to avoid damaging the meters and so that you can subsequently rinse out the systems and perform the pressure tests.



Warning.
Before connecting the template to the HIU, remove the lock nuts from the threaded connections.

2) Rinsing out the system

You are advised to rinse out the system before installing the thermal energy meters.

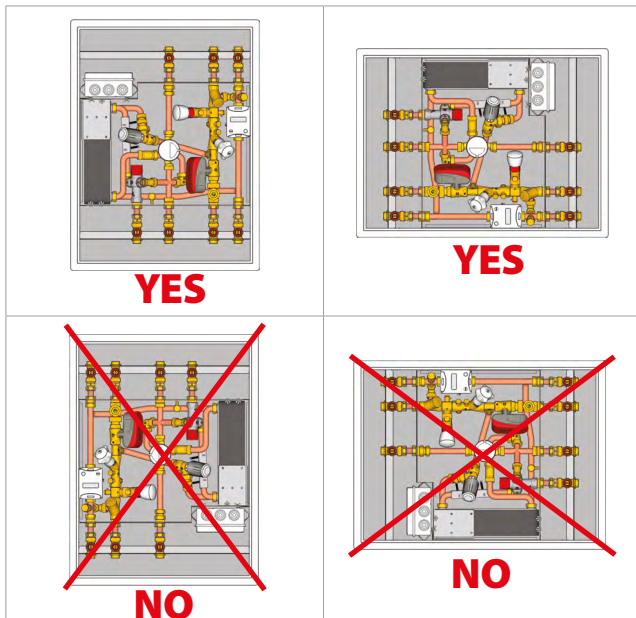
3) Installing the HIU

After rinsing out the system, the HIU can be installed in the template and the energy meter can be assembled.

4) Testing the system

After making the installations, test the pressurised system.

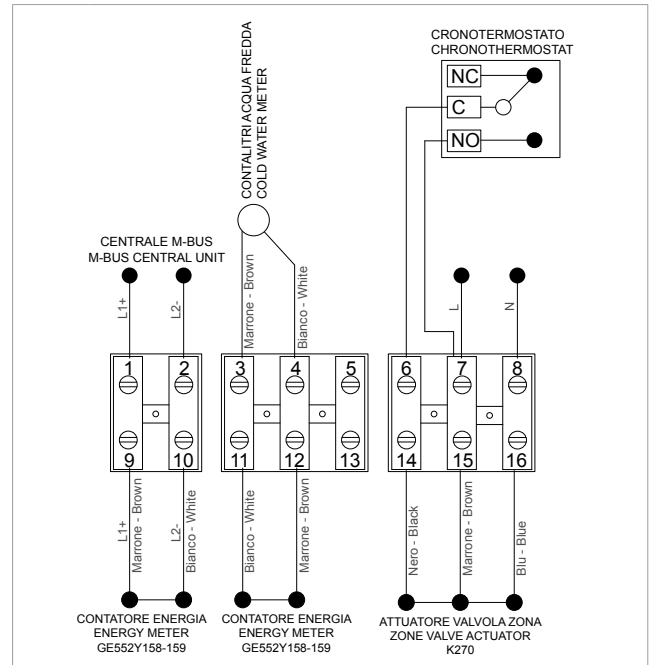
Allowed installation



Electrical connection



Warning.
Interventions on electrical components must only be carried out by qualified personnel. Ensure that the power supply is suspended while the connections are being carried out.

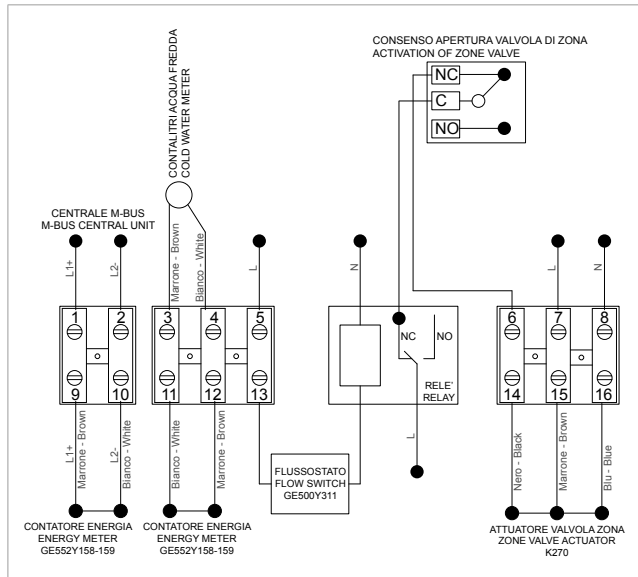


Terminal	Function
1	Cable transmitting M-Bus data to the data concentrator: connection of wire L1+. Cable Ø 0,8 mm, twisted, 2-wire, non-shielded, with a maximum line capacity of 150 pF/m (16 o 18 AWG)
2	Cable transmitting M-Bus data to the data concentrator: connection of wire L2-. Cable Ø 0,8 mm, twisted, 2-wire, non-shielded, with a maximum line capacity of 150 pF/m (16 o 18 AWG)
3	Connection for M-Bus centralization of water meters
4	Connection for M-Bus centralization of water meters
5	-
6	Connection to the chronothermostat, to the common C terminal of the internal contact (cable section 0,5 mm ²)
7	Connection of power supply 24 V~ or 230 V~ (cable section 0,5 mm ²)
8	In parallel: connection to the chronothermostat, to the normally open NO terminal of the internal contact (cable section 0,5 mm ²)
9	Connection of power supply 24 V~ or 230 V~ (cable section 0,5 mm ²)
10	Connection of L1+ brown wire of thermal energy meter
11	Connection of L2- white wire of thermal energy meter
12	Connection for M-Bus centralization of water meters
13	-
14	Connection K270 zone valve actuator, black wire
15	Connection K270 zone valve actuator, brown wire
16	Connection K270 zone valve actuator, blue wire



Nota.
The showed electric scheme is about the connections of GE552Y158, GE552Y159 thermal energy meters. In the case of installation of other energy meters refer to the instructions of the meters themselves.

Electrical scheme if the flow switch is used



Electric connections of the terminal board, with flow switch

Note.
Additional relay "R", not supplied by Giacomini

Dimensions

Product code	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]
GE556Y303	530	428	160	177	101	140	78	34

Reference Standards

- UNI EN 1434
- Directive 2014/32/EU
- EN 60751
- EN 61107
- EN 13757

WRAS certifications

Reference "Components"	Components	Certificate number
-	Gaskets	1509514
3	Heat exchanger	1909083
4	Thermostatic mixer	1709305
Optional	Check valve	1908700

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.



Safety Warning

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.



Package Disposal

Carton boxes: paper recycling.
Plastic bags and bubble wrap: plastic recycling.



Product Disposal

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.

Additional information

For more information, go to www.giacomini.com or contact our technical assistance service: ☎ +39 0322 923372 📠 +39 0322 923255 ✉ consulenza.prodotti@giacomini.com

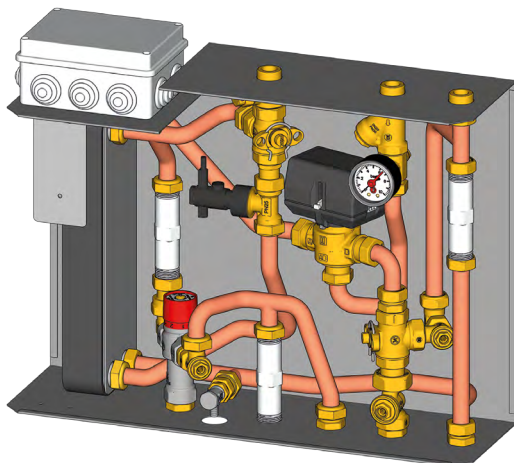
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Giacomini S.p.A. Via per Alzo, 39 - 28017 San Maurizio d'Opaglio (NO) Italy

HIU GE556Y308 with heat pump integration

Datasheet/Instructions
0979EN 10/2022
047U58228



GE556Y308

HIUs GE556 are the ideal solution for condominial metering with centralized heating-water production and zone distribution to produce domestic hot water locally (for each residential unit).

These HIUs include only two pipes (delivery and return) that provide room heating and heating of domestic hot water; the only additional pipe required is for domestic cold water entering the HIU.

No pipes are therefore required for distribution and recirculation of domestic hot water.

HIU GE556Y308 features an additional inlet of domestic water preheated by the heat pump.

➤ Versions and product codes

PRODUCT CODE	MAIN FUNCTION	EXCHANGER POWER
GE556Y308	DHW integration from heat pump	44 kW

▲ WARNING. The HIU is fit for installation indoors and in boiler rooms, and use with non-aggressive fluids (water, glycol-based water complying with VDI 2035/ONORM 5195).

Completion codes

- GE552: thermal energy meter
- GE552-2: domestic water meters
- K270: ON/OFF actuator for zone valve control
- GE551Y072: surface-mounting template
- GE551Y073: flush-mounting template
- GE500Y253: additional valve for DCW outlet
- K373Y011: safety thermostat
- Components for M-Bus data centralization GE552-4 or Wireless M-Bus data centralization GE552-W

➤ Technical data

Primary circuit

- Max. working temperature: 90 °C
- Max. working pressure: 16 bar (10 bar with plastic spacer)
- Primary nominal flow rate: 1000 L/h

Heating circuit

- Max. heating power: controllable through flow rate control lockshield

Domestic hot water production

- Power of domestic hot water production with inlet at 75 °C, 1000 L/h flow rate on primary circuit and ΔT 35 °C on secondary circuit (50-15 °C): 44 kW
- Corresponding domestic hot water flow rate: 18 L/min
- Min. hot water flow rate at usage point: 4 L/min

Priority valve

- Supply voltage/frequency: 230 Vac / 50 Hz
- Total electric power absorbed: 6 VA
- Hydraulic commutation time: 6 seconds

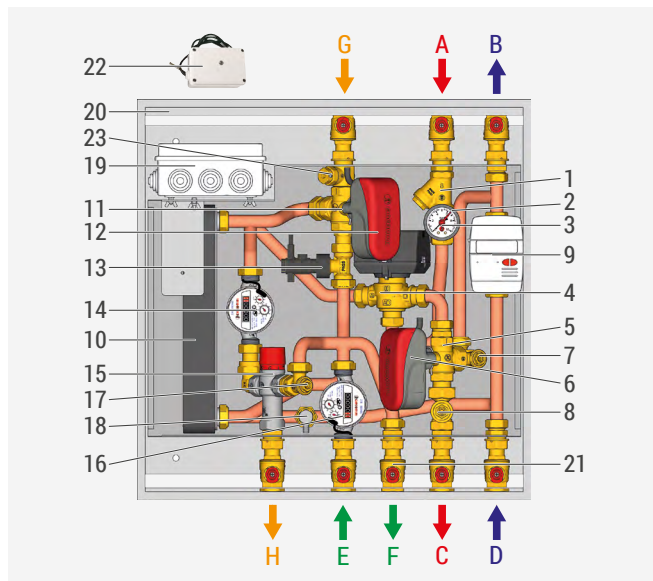
➤ Main features

- Hydraulic connections: G 3/4" M.
- DHW instant production through motorized priority valve and integrated plate heat exchanger.
- Additional inlet for domestic water preheated by heat pump.
- Domestic water mixing for delivery to usage points.
- Heating circuit: control lockshield and motorizable 3-way zone valve for ON-OFF control of heating system.

- Preset for installation of thermal energy meter and domestic water meters through plastic spacers.
- Box with electric strip terminal.

The HIU components are installed on a sheet metal frame that can be fitted on site in the special installation template, available for surface-mounting (GE551Y072) or flush-mounting (GE551Y073).

➤ Components



A Primary inlet

B Primary outlet

C Heating delivery circuit

D Heating return circuit

E Domestic cold water inlet

F Domestic cold water outlet

G Inlet for heat pump-preheated domestic water

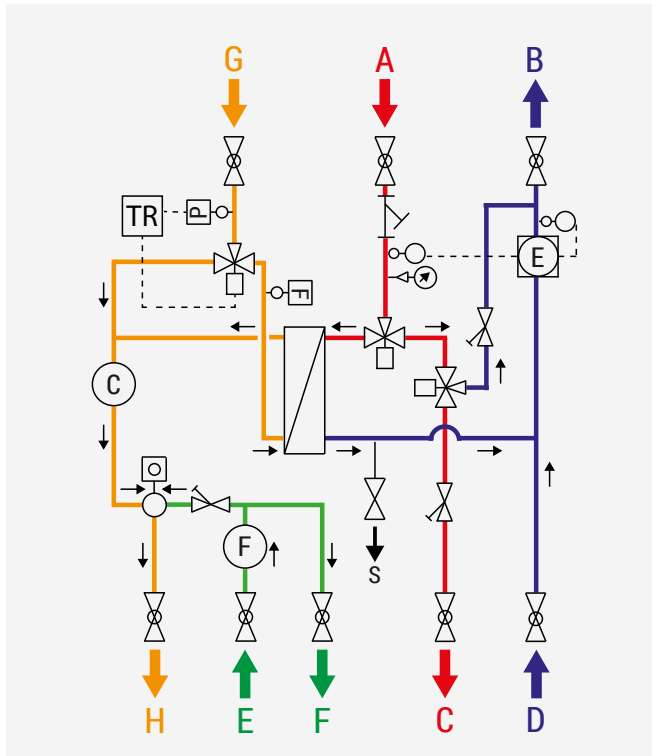
H Domestic hot water outlet

- | | |
|-----|---|
| 1 | Filter |
| 2 | Probe housing for thermal energy meter |
| 3 | Pressure gauge |
| 4 | Motorized priority valve |
| 5 | 3-way zone valve, heating circuit |
| 6* | Actuator for 3-way zone valve, heating circuit |
| 7 | By-pass lockshield |
| 8 | Balancing lockshield, heating circuit |
| 9* | Thermal energy meter |
| 10 | Heat exchanger |
| 11 | 3-way zone valve, domestic water circuit |
| 12* | Actuator for 3-way zone valve, domestic water circuit |
| 13 | Flow switch |
| 14* | Domestic hot water meter |
| 15 | Thermostatic mixer |
| 16* | Domestic cold water meter |
| 17 | Balancing lockshield, domestic water circuit |
| 18 | Drain cock |
| 19 | Cabinet with electric connection terminals |
| 20* | Metal template with ball valves for HIU installation |
| 21* | Additional valve for domestic cold water |
| 22* | Safety thermostat |
| 23 | Housing for safety thermostat temperature probe |

* Completion codes

- GE552: thermal energy meter
- GE552-2: domestic water meters
- K270: ON/OFF actuator for zone valve control
- GE551Y072: surface-mounting template including 7 shut-off valves with 3/4" F nut
- GE551Y073: flush-mounting template including 7 shut-off valves with 3/4" F nut
- GE500Y253: additional valve for domestic cold water outlet, for installation on template
- K373Y011: safety thermostat
- Components for M-Bus data centralization GE552-4 or Wireless M-Bus data centralization GE552-W

Operation



The water from the primary circuit columns (A, B) enters the HIU and is diverted directly into the heating system (C, D) through a motorized priority valve or into the heat exchanger for instant production of domestic hot water.

The domestic water (G) preheated by the heat pump (or by the solar panel) enters the HIU and is channeled in two possible directions by the diverting valve, managed by the K373 regulation thermostat:

- directly to the thermostatic mixer if already at the desired temperature;
 - first to the heat exchanger for further heating and then to the thermostatic mixer and domestic water usage points (H).
- The domestic cold water enters from the inlet (E) and is channeled in part into the thermostatic mixer and in part to the domestic water usage points (F).

Thermostatic mixer

- Setting accuracy $\pm 1^\circ\text{C}$

POSITION	1	2	3	4	5
Mixing temperature [$^\circ\text{C}$]	38	43,5	49	54,5	60

Factory settings

- Thermostatic mixer: position 3 (49°C).
- Cold circuit lockshield on thermostatic mixer (ref.17): 3/4 turn opening.
- Heating lockshield (ref.8): fully open.
- Primary by-pass lockshield (ref.7): fully closed.

	Mechanical priority valve / 3-way zone valve
	Thermostatic mixer
	Shut-off ball valve
	Drain cock
	Balancing lockshield
	Heat exchanger
	Pressure gauge
	Temperature probe
	Flow switch
	Filter
	Thermal energy meter
	Domestic hot water meter
	Domestic cold water meter
	Regulation thermostat
A	Primary inlet
B	Primary outlet
C	Heating delivery circuit
D	Heating return circuit
E	Domestic cold water inlet
F	Domestic cold water outlet
G	Inlet for heat pump-preheated domestic water
H	Domestic hot water outlet
S	Drain

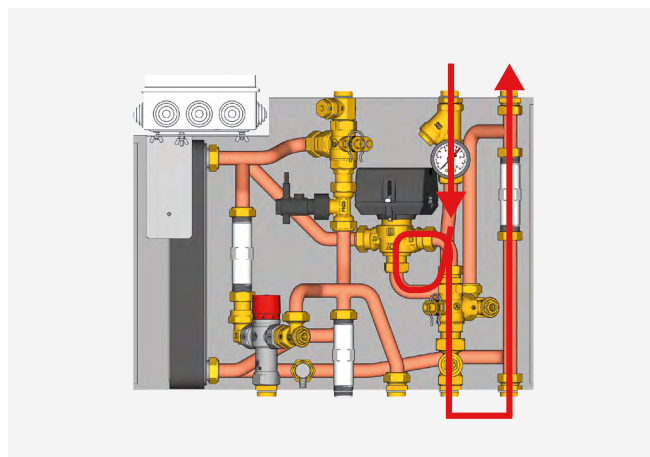
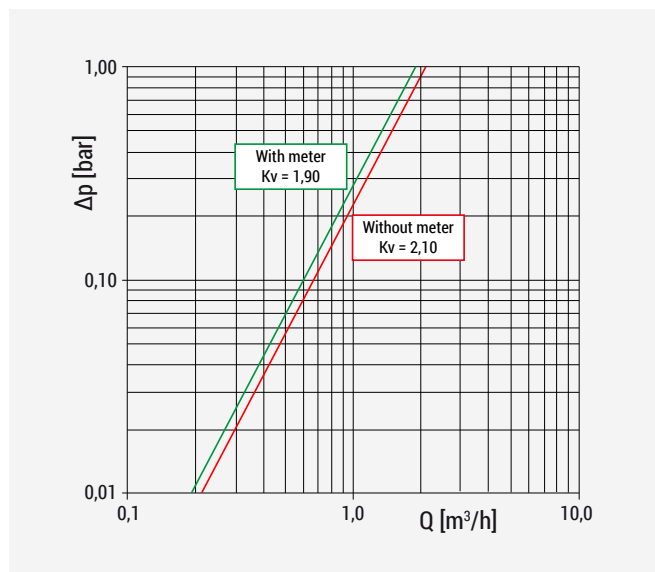
Domestic hot water production

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	29,5	75	580	31,0
			70	700	33,8
			65	880	36,3
			60	1330	40,9
15	900	37,0	75	780	34,2
			70	960	36,9
			65	1260	39,8
17	1020	41,5	75	920	35,8
			70	1140	38,4
			65	1540	41,6
18	1080	44,0	75	1000	36,6
			70	1240	39,3
			65	1700	42,6

Primary circuit power/flow rate and DHW production for GE556Y308

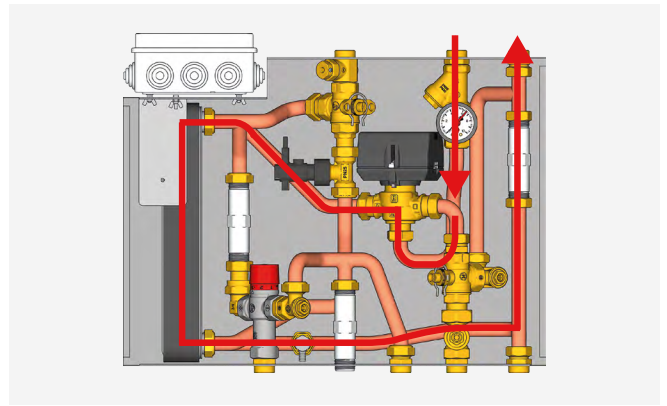
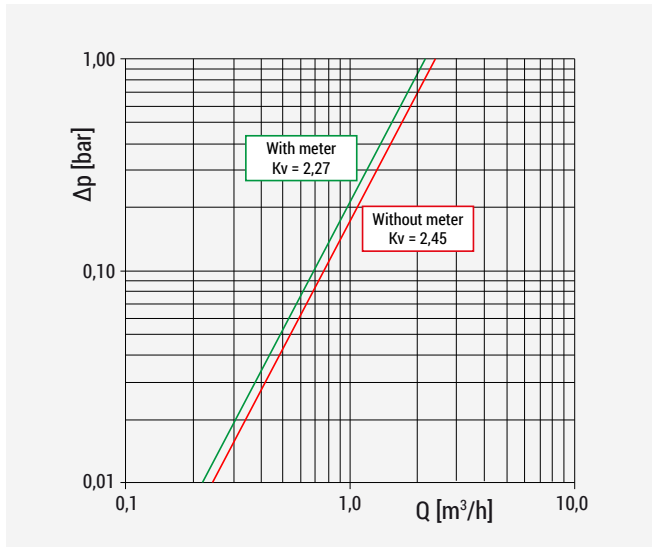
Hydraulic characteristics

Primary circuit heating function



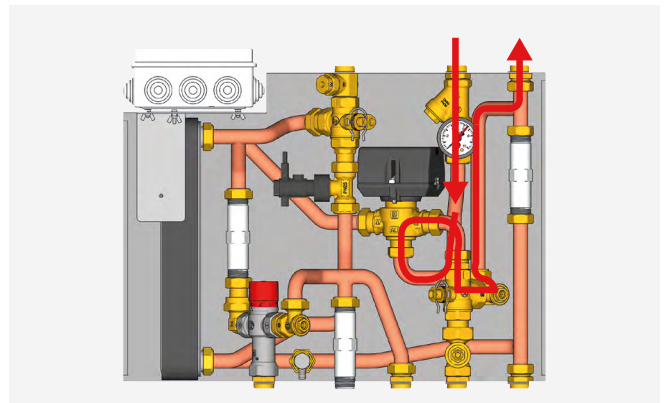
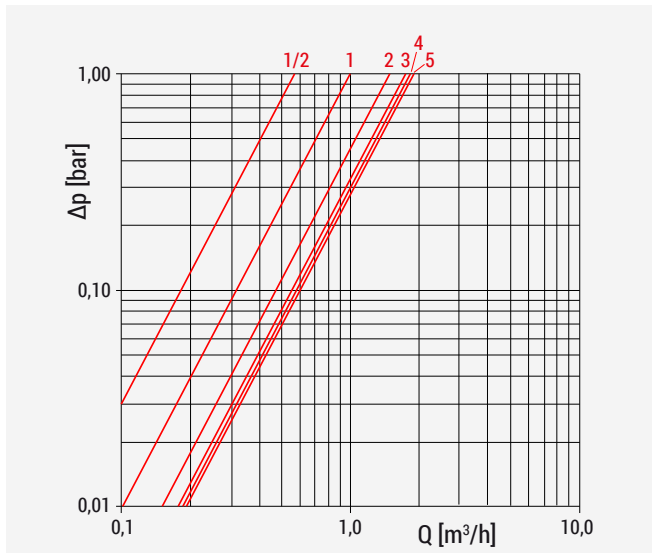
NOTE. The instant flow rate can be verified through the energy meter so as to control the lockshield for the heating function.

Domestic hot water function, primary circuit



NOTE. The instant flow rate can be verified through the energy meter so as to control the lockshield for the heating function. There is no setting device provided for the DHW function. Use devices external to the HIU when required.

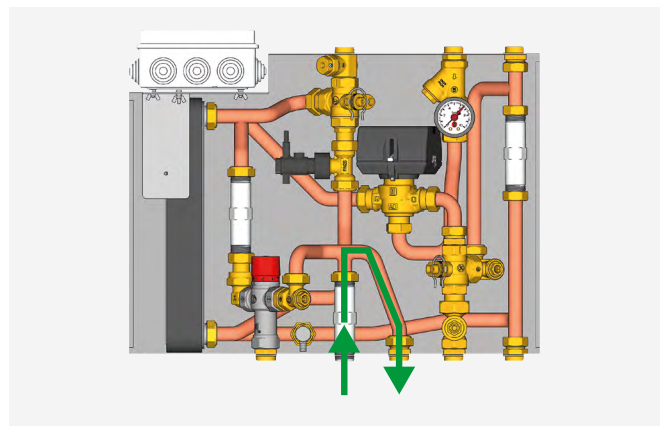
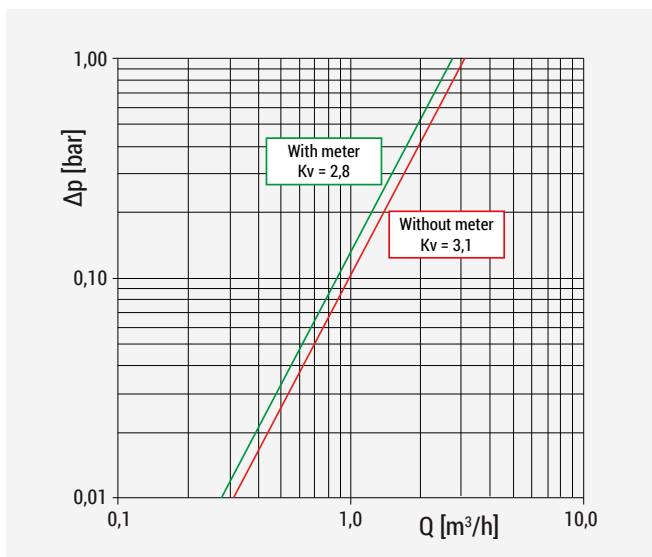
Primary circuit by-pass based on by-pass lockshield control



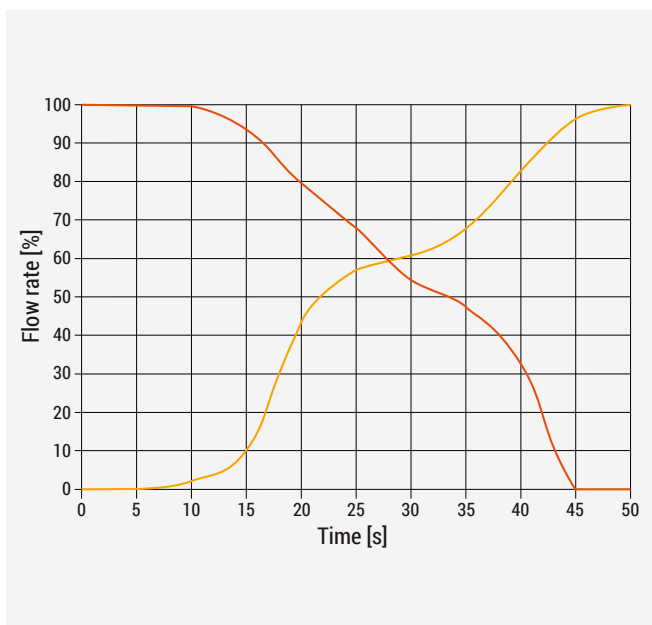
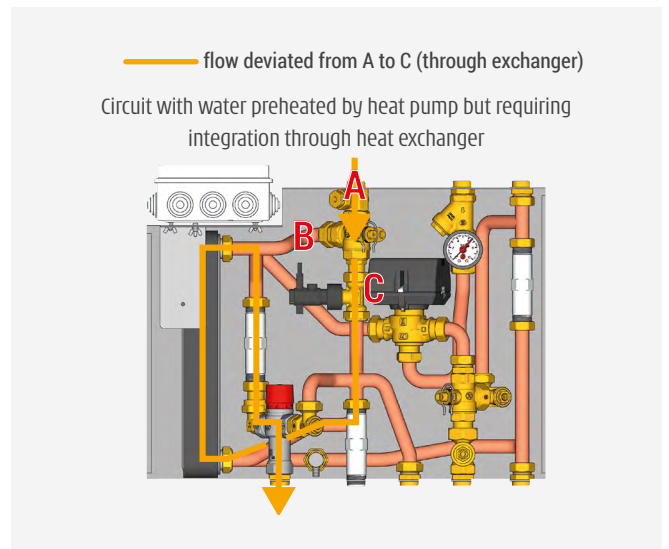
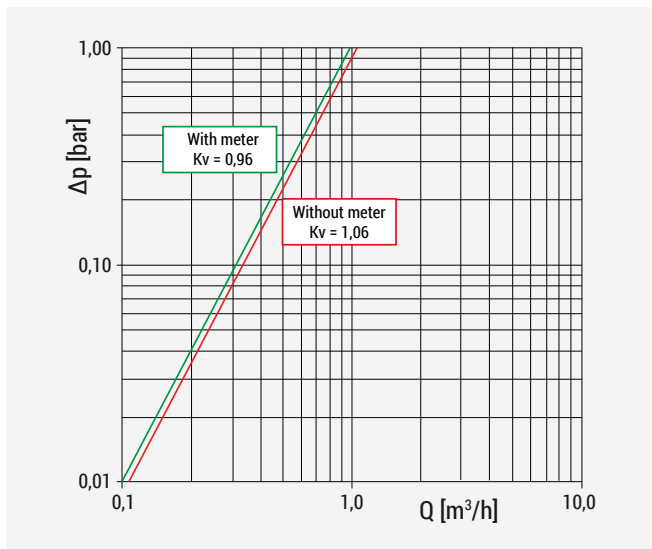
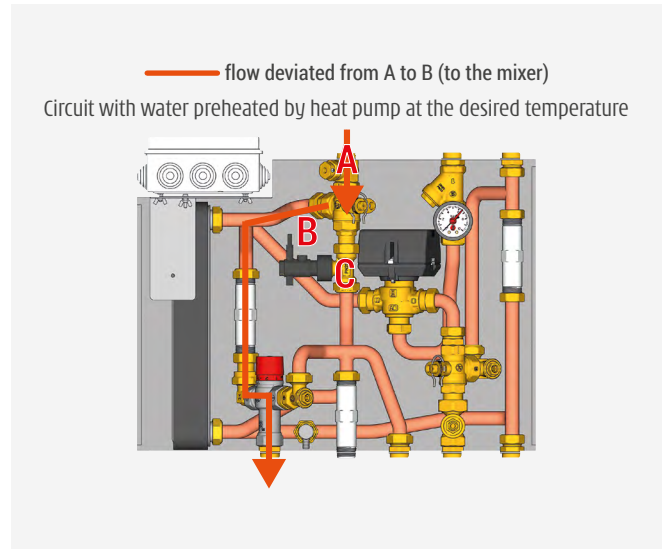
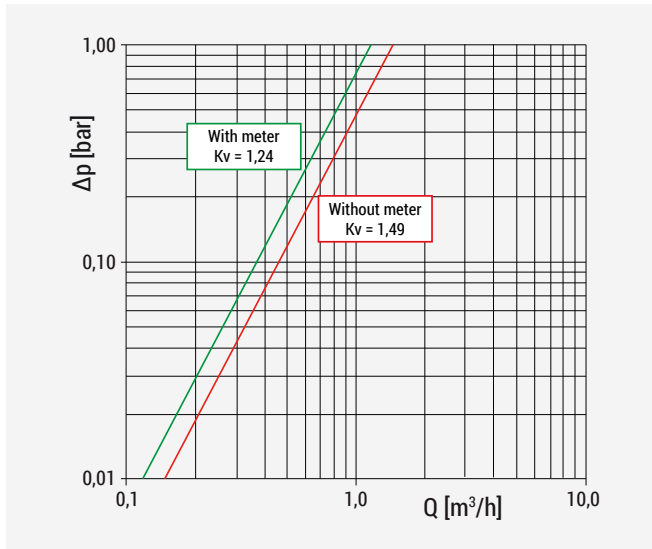
NOTE. The HIU is factory configured with a lockshield by-pass (ref.7) fully closed. If it is necessary to activate the by-pass function open the lockshield according to the table below.

SETTING OF BY-PASS LOCKSHIELD	1/2	1	2	3	4	5
Kv	0,57	1,00	1,55	1,75	1,86	1,92

Domestic cold water



Domestic hot water



Flow deviation times		
t [s]	% of deviated flow from A-B to A-C	% of deviated flow from A-C to A-B
0	100,0	0,0
5	100,2	0,0
10	99,6	2,1
15	93,5	9,9
20	79,6	43,2
25	67,9	56,7
30	54,5	60,7
35	47,4	67,6
40	32,5	82,7
45	0,0	96,3
50	0,0	100,0

➤ Installation

⚠ IMPORTANT WARNING.

Transport vibrations may loosen the hydraulic connections which must ALL be checked and tightened prior to installation and start up.

⚠ WARNING. Risk of burns and electric shocks.

Installation must be carried out by qualified operators authorized by the building manager.

Refer to specific standards for use (installation, fixing, etc...), operation, recalibration and replacement of meters.

Also refer to assembly instructions provided with each meter.

⚠ WARNING. Flush all pipes before installing the HIU on the template.

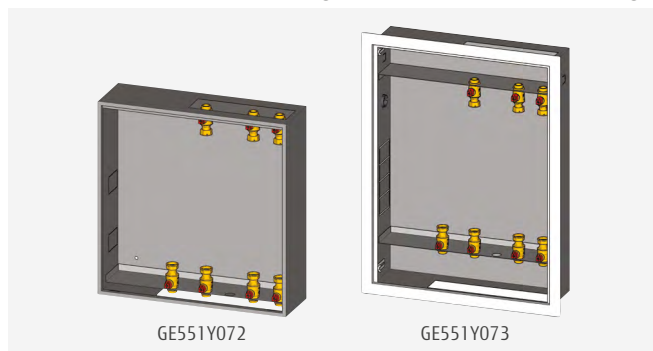
⚠ WARNING. Before connecting the template to the HIU, remove the lock nuts from the threaded connections.

⚠ WARNING. Unused connections and ball valves must be closed with a cap.

⚠ WARNING. Provide for any hydraulic backflow preventer in compliance with the regulations of the place of installation.

The HIU generally requires a template for installation on site for versions:

GE551Y072: surface mounting; GE551Y073: flush mounting



1) Template installation.

We recommend installing the template only on site so as to prevent damages to the meters and for proper flushing and pressurized start up of the system.

🔗 NOTE. Install additional valve GE500Y253 for DCW outlet.

2) System flushing.

We recommend flushing the system before installing the thermal energy meters.

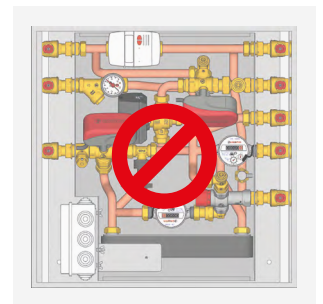
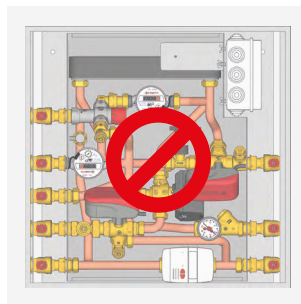
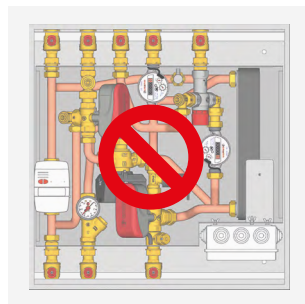
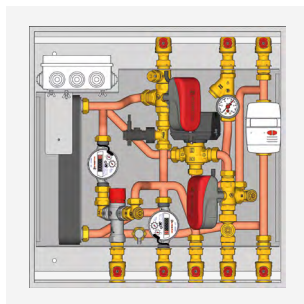
3) HIU installation.

The HIU can be installed in the template and the energy meter can be mounted after flushing the system.

4) System testing.

Test the pressurized system after installation.

Possible installations

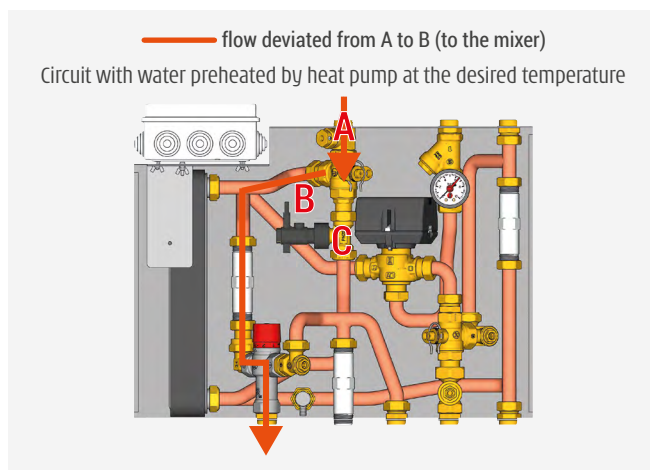
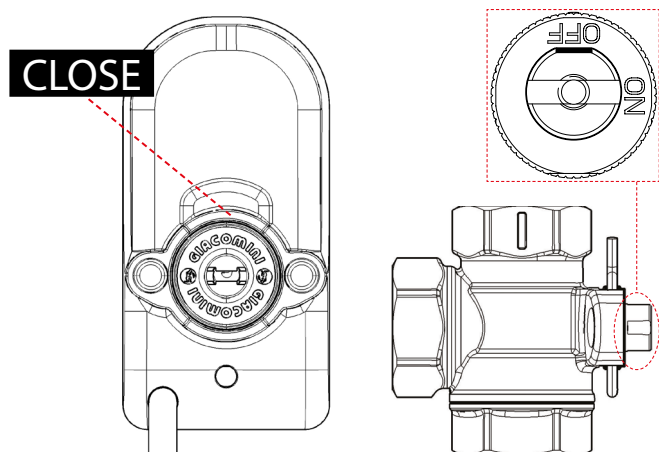


⚠ WARNING. Zone valve actuators cannot be installed upside down.

Installation of K270 actuator for 3-way zone valve, domestic water circuit (components - ref. 12)

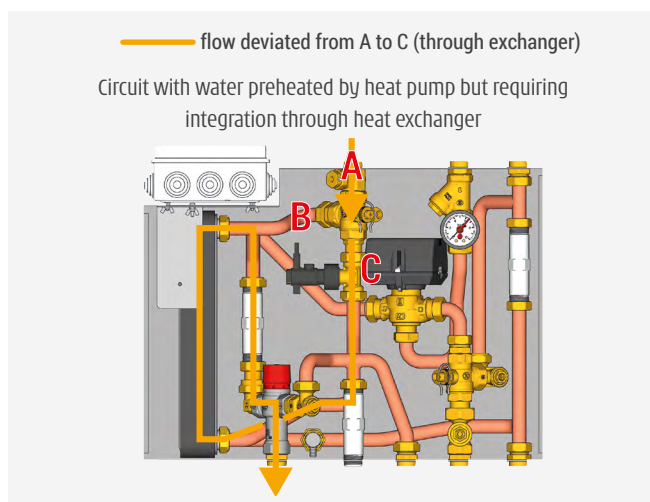
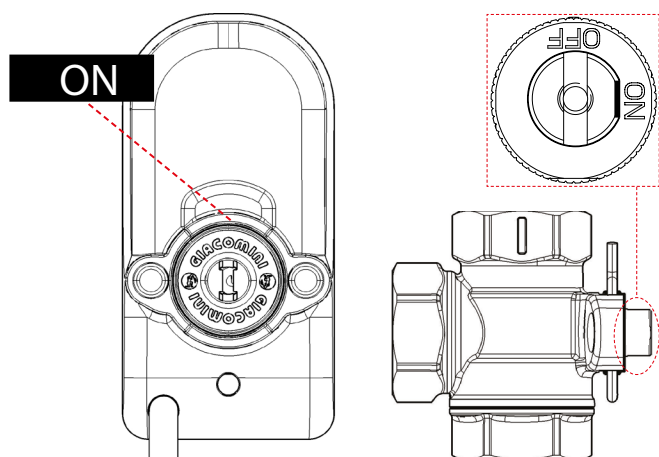
Before installing the K270 actuator make sure that it is in the closed position and the chamfer on the valve is facing the fluid inlet side (OFF mark).

In this condition, the preheated water at the desired temperature coming from the heat pump is diverted from A to B.

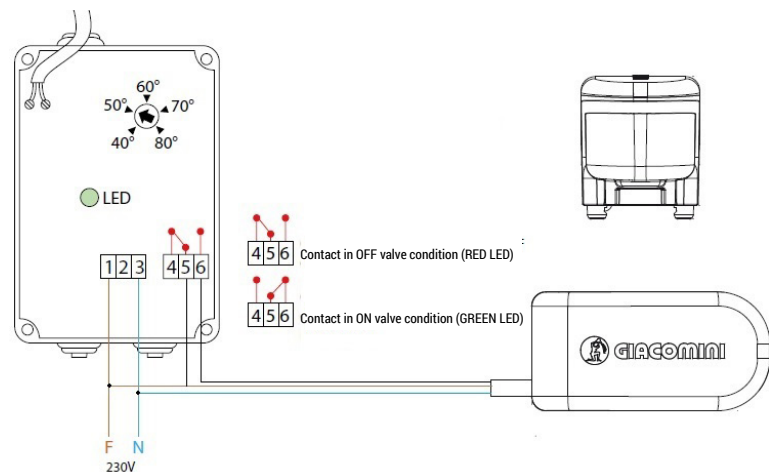


When the K270 actuator receives the opening signal, it rotates clockwise and the chamfer on the valve is positioned at the mark ON.

In this condition, the water not yet at the desired temperature coming from the heat pump is diverted from A to C to be heated by the heat exchanger.



Connection diagram for K270 actuator - K373Y011 safety thermostat

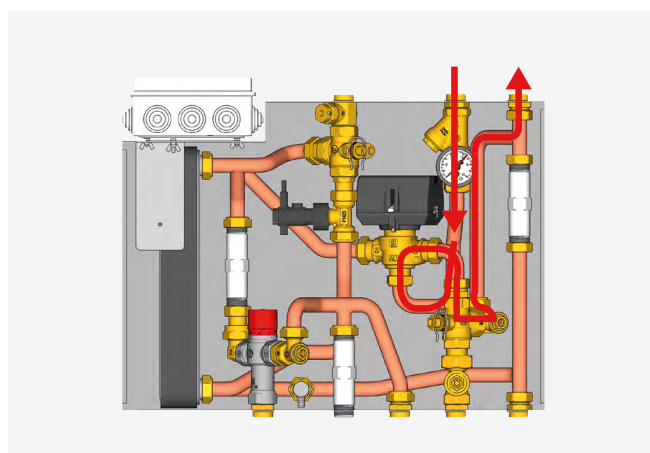
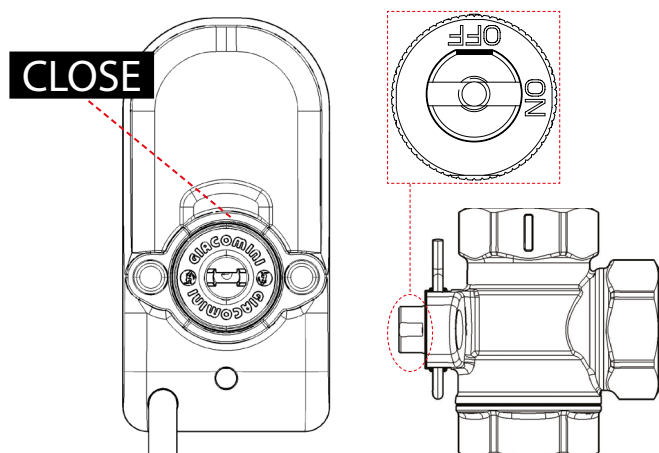


LED	OPERATION
Red	Valve in OFF position. The heat pump water temperature is higher than the SET value on the thermostat.
Green	Valve in ON position. The heat pump water temperature is lower than the SET value on the thermostat. There is a request for DHW heating via a heat exchanger.

Installation of K270 actuator for 3-way zone valve, heating circuit (components - ref. 6)

Before installing the K270 actuator make sure that it is in the closed position and the chamfer on the valve is facing the fluid inlet side (OFF mark).

In this condition, the hot water from the boiler room is diverted through the by-pass and returns to the boiler room.

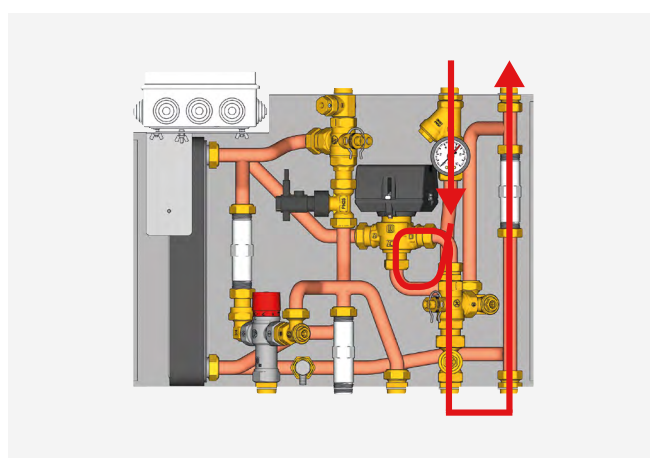
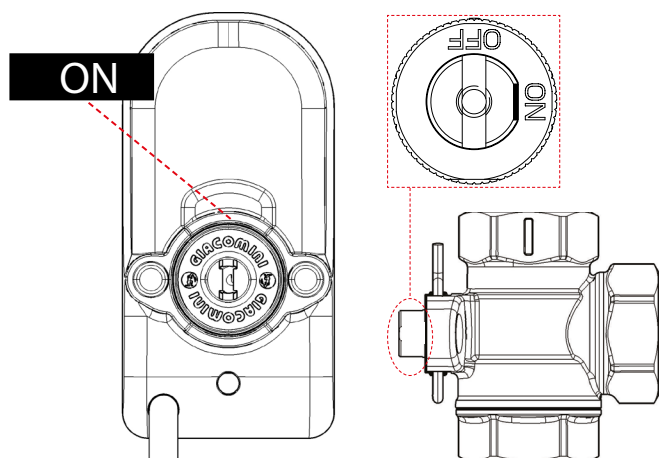


NOTE. The HIU is factory configured with a lockshield by-pass (ref.7) fully closed. If it is necessary to activate the by-pass function open the lockshield according to the table below.

SETTING OF BY-PASS LOCKSHIELD	1/2	1	2	3	4	5
Kv	0,57	1,00	1,55	1,75	1,86	1,92

When the K270 actuator receives the opening signal, it rotates clockwise and the chamfer on the valve is positioned at the mark ON.

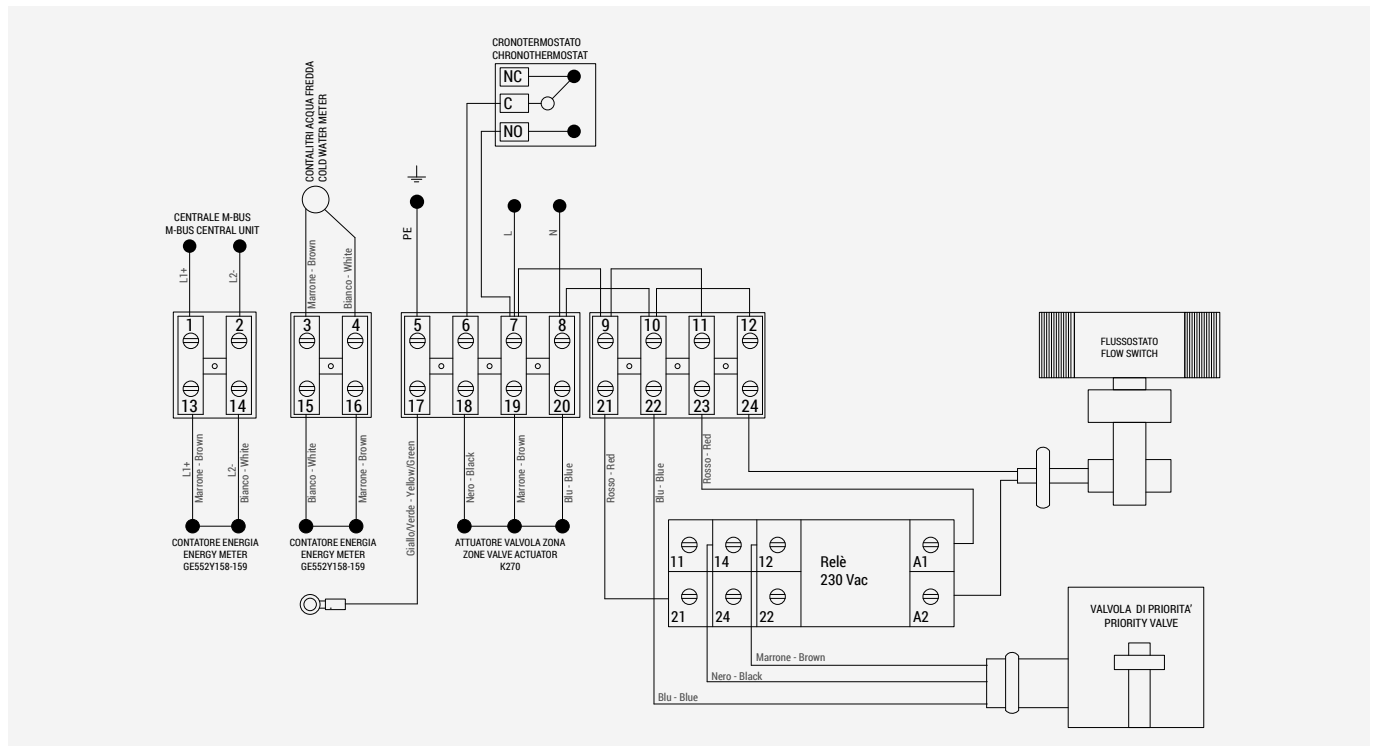
In this condition, the hot water from the boiler room goes directly to the heating system.



Electric connections

WARNING. Only professional operators should carry out interventions on the electric components. Make sure the power supply is OFF during connection.

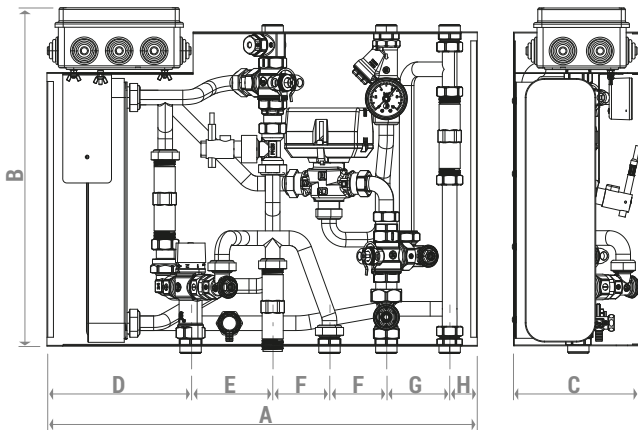
NOTE. The electric diagram shown refers to connections of energy meters GE552Y158, GE552Y159. Should other meters be installed refer to their specific instructions.



TERMINAL	FUNCTION
1	Wire for M-Bus data transmission to data concentrator, connection of wire L1+. Ø 0,8 mm wire, twisted to 2 unscreened wires with max. line capacity 150 pF/m (16 or 18 AWG)
2	Wire for M-Bus data transmission to data concentrator, connection of wire L2+. Ø 0,8 mm wire, twisted to 2 unscreened wires with max. line capacity 150 pF/m (16 or 18 AWG)
3	Connection for M-Bus centralization of water meters
4	Connection for M-Bus centralization of water meters
5	Ground
6	Connection to room chronothermostat, to terminal C shared with internal contact (wire section 0,5 mm ²)
7	Power connection 24 V~ or 230 V~ (wire section 0,5 mm ²) In parallel: connection to room chronothermostat, to terminal NO of internal contact generally open (wire section 0,5 mm ²)
8	Power connection 24 V~ or 230 V~ (wire section 0,5 mm ²)
9	-
10	-
11	-
12	-

TERMINAL	FUNCTION
13	Connection of thermal energy meter brown wire L1+
14	Connection of thermal energy meter white wire L2+
15	Connection for M-Bus centralization of water meters
16	Connection for M-Bus centralization of water meters
17	Ground
18	Connection of actuator K270 for zone valve, black wire
19	Connection of actuator K270 for zone valve, brown wire
20	Connection of actuator K270 for zone valve, blue wire
21	Connection to relays, red wire, pos. 21
22	Connection to diverting valve, blue wire
23	Connection to relays, red wire, pos. A1
24	Connection to flow switch

➤ Dimensions



PRODUCT CODE	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]
GE556Y308	530	417	155	176	100	70	78	34

➤ WRAS certifications

REFERENCE IN "COMPONENTS" PARAGRAPH	COMPONENTS	CERTIFICATE NUMBER
-	Gaskets	1509513
10	Heat exchanger	1904702
13	Flow switch	2111302
15	Thermostatic mixer	1709305

➤ Product specifications

GE556Y308

Heat interface unit for centralized systems dedicated to heating control and domestic hot water production. For control of boiler preheated by heat pump or solar panels and distribution circuit of domestic hot water to usage points. Consisting of: thermostatic mixer with 38+60 °C setting; motorizable brass diverting valve; check valves and filters. 3/4" connections. Primary circuit: filter with stainless steel basket and delivery temperature probe housing. Domestic hot water production: flow switch, priority valve, thermostatic mixer for temperature control and instant heat exchanger with 44 kW power (Primary circuit: 75 °C and 1 m³/h flow rate. Secondary circuit: ΔT = 50-15 °C and 18 l/min flow rate). Heating circuit: control lockshield and 3-way motorizable zone valve. Preset for installation of thermal energy meter and domestic hot and cold water meter through plastic spacers (center distance 110 mm). IP55 box with electric strip terminal. Preset for template fitting. Max. working temperature 90 °C. Max. working pressure 16 bar (10 bar with plastic spacer). Frame dimensions 540x390x155 mm (LxHxW).

OPTIONAL ACCESSORIES (not included with product code GE556Y308): the HIU can be completed with separate purchase of: thermal energy meters GE552. Domestic water meter for hot and cold water, GE552-2. Metal template including shut-off valves, varnished sheet metal (RAL9010) with key lock door and width-adjustable frame, surface-mounting version GE551Y072; flush-mounting version GE551Y073. Actuator K270 for 3-way zone valve - heating control. Actuator K270 for 3-way zone valve - control of domestic hot water production. Safety thermostat K373Y011. Components for M-Bus centralization and remoting of consumption data through M-Bus, GE552-4, or through Wireless M-Bus, GE552-W.

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.

⚠ Safety Warning. 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.

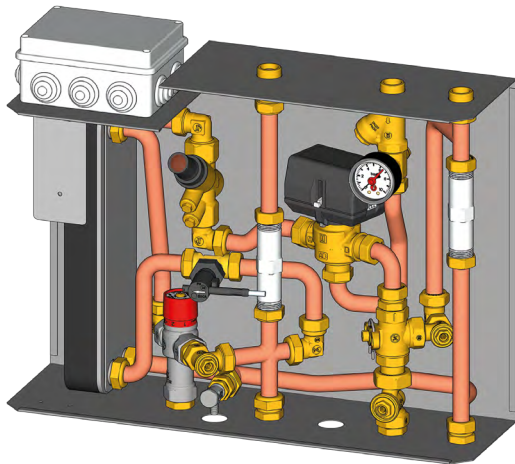
♻ Package Disposal. Carton boxes: paper recycling. Plastic bags and bubble wrap: plastic recycling.

ℹ Additional information. For more information, go to giacomini.com or contact our technical assistance service. This document provides only general indications. Giacomini S.p.A. may change at any time, without notice and for technical or commercial reasons, the items included herewith. The information included in this technical sheet do not exempt the user from strictly complying with the rules and good practice standards in force.

♻ Product Disposal. 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.

HIU GE556Y309 with flow rate dynamic balancing valve

Datasheet/Instructions
1000EN 04/2022
047U58278



GE556Y309

HIUs GE556 are the ideal solution for condominial metering with centralized heating-water production and zone distribution to produce domestic hot water locally (for each residential unit).

The HIUs include a delivery pipe and a return pipe to distribute energy for both room heating and domestic hot water; the only additional pipe required is for domestic cold water.

No pipes are therefore required for distribution and recirculation of domestic hot water.

HIU GE556Y309's key feature is the flow rate dynamic balancing valve installed on the domestic water primary circuit.

➤ Versions and product codes

PRODUCT CODE	MAIN FUNCTION	EXCHANGER POWER
GE556Y309	Flow rate dynamic balancing valve	44 kW

▲ WARNING. The HIU is fit for installation in indoor rooms and boiler rooms and for use with non-aggressive fluids (water, glycol-based water complying with VDI 2035/ONORM 5195).

Completion codes

- GE552: thermal energy meter
- GE552-2: domestic water meters
- K270: ON/OFF actuator for zone valve control
- GE551Y072: surface-mounting template
- GE551Y073: flush-mounting template
- R189VY004: check valve for DCW outlet
- Components for M-Bus data centralization GE552-4 or Wireless M-Bus data centralization GE552-W

➤ Technical data

Primary circuit

- Max. working temperature: 90 °C
- Max. working pressure: 16 bar (10 bar with plastic spacer)
- Primary nominal flow rate: 1000 L/h

Heating circuit

- Max. heating power: controllable through flow rate control lockshield

Domestic hot water production

- Domestic hot water production power with inlet at 75 °C, 1000 L/h flow rate on primary circuit and ΔT 35 °C on secondary circuit (50-15 °C): 44 kW
- Domestic water circuit max. power: control through dynamic balancing valve R206A
- Corresponding domestic hot water flow rate: 18 L/min
- Minimum hot water distribution: 2,75 L/min

Priority valve

- Supply voltage/frequency: 230 Vac / 50 Hz
- Total electric power absorbed: 6 VA
- Hydraulic commutation time: 6 seconds

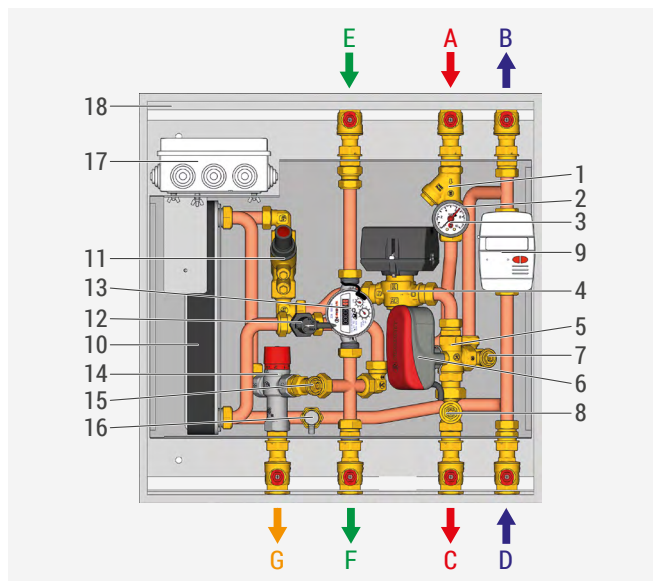
➤ Main features

- Hydraulic connections: 3/4" M (G, ISO 228).
- Primary circuit: filter with stainless steel basket and delivery temperature probe housing.
- Domestic water primary circuit: flow rate dynamic balancing valve R206A
- Domestic hot water production: flow switch, priority valve, thermostatic mixer for temperature control and instant heat exchanger.
- Heating circuit: control lockshield and motorizable 3-way zone valve for ON-OFF control of heating system.

- Box with electric terminal strip.
- Preset for installation of thermal energy meter and domestic water meter through plastic spacers.

The HIU components are installed on a sheet metal frame that can be fitted on site on the special installation template, available for surface-mounting (GE551Y072) or flush-mounting (GE551Y073).

➤ Components



A Primary inlet

B Primary outlet

C Heating delivery circuit

D Heating return circuit

E Domestic cold water inlet

F Domestic cold water outlet

G Domestic hot water outlet

1 Filter

2 Probe housing for thermal energy meter

3 Pressure gauge

4 Motorized priority valve

5 3-way zone valve, heating circuit

6* Actuator for 3-way zone valve, heating circuit

7 By-pass lockshield

8 Balancing lockshield, heating circuit

9* Thermal energy meter

10 Heat exchanger

11 Dynamic balancing valve R206A

12 Flow switch

13* Domestic cold water meter

14 Thermostatic mixer

15 Balancing lockshield, domestic water circuit

16 Drain cock

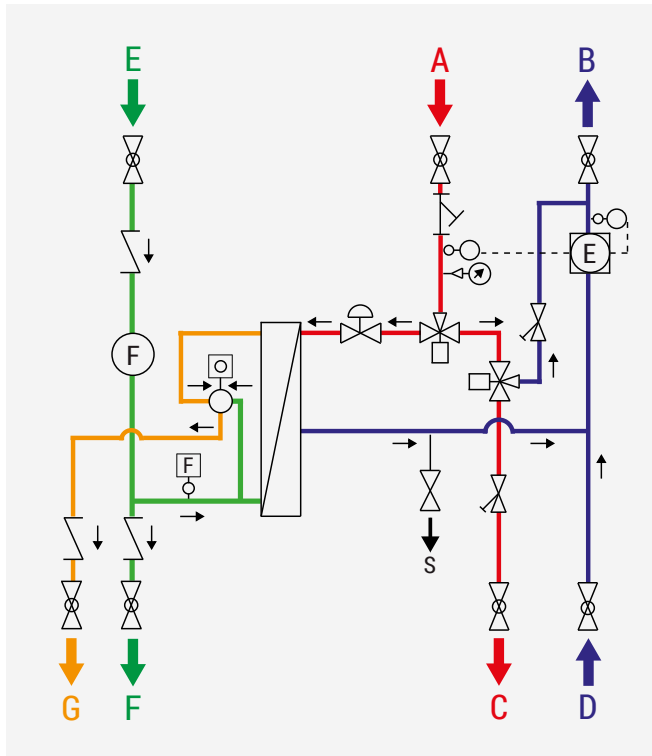
17 Cabinet with electric connection terminals

18* Metal template with ball valves for HIU installation

* Completion codes

- GE552: thermal energy meter
- GE552-2: domestic water meters
- K270: ON/OFF actuator for zone valve control
- GE551Y072: surface-mounting template including 7 shut-off valves with 3/4" F nut
- GE551Y073: flush-mounting template including 7 shut-off valves with 3/4" F nut
- R189VY004: check valve for domestic cold water outlet
- Components for M-Bus data centralization GE552-4 or Wireless M-Bus data centralization GE552-W

Operation



The water from the primary circuit columns (A, B) enters the HIU and is diverted directly into the heating system (C, D) through a motorized priority valve or into the heat exchanger for instant production of domestic hot water.

When there is no demand for domestic hot water, the heat transfer fluid passes the priority valve and finally reaches the heating 3-way zone valve (which can be turned into a 2-way valve by closing the by-pass with setting lockshield).

The setting lockshield downstream to the heating zone sets the heating flow rate.

The thermal energy meter with built-in temperature probe is positioned on the boiler room return circuit.

Thermostatic mixer

- Setting accuracy ± 1 °C

POSITION	1	2	3	4	5
Mixing temperature [°C]	38	43,5	49	54,5	60

Factory settings

- Thermostatic mixer (ref. 14): position 3 (49 °C).
- Cold circuit lockshield on thermostatic mixer (ref. 15): 3/4 turn opening.
- Heating lockshield (ref. 8): fully open.
- Primary by-pass lockshield (ref. 7): fully open.
- Dynamic balancing valve (ref.11): position 4.2

	Mechanical priority valve / 3-way zone valve
	Thermostatic mixer
	Shut-off ball valve
	Drain cock
	Balancing lockshield
	Dynamic balancing valve
	Heat exchanger
	Pressure gauge
	Temperature probe
	Flow switch
	Filter
	Thermal energy meter
	Domestic cold water meter
A	Primary inlet
B	Primary outlet
C	Heating delivery circuit
D	Heating return circuit
E	Domestic cold water inlet
F	Domestic cold water outlet
G	Domestic hot water outlet
S	Drain

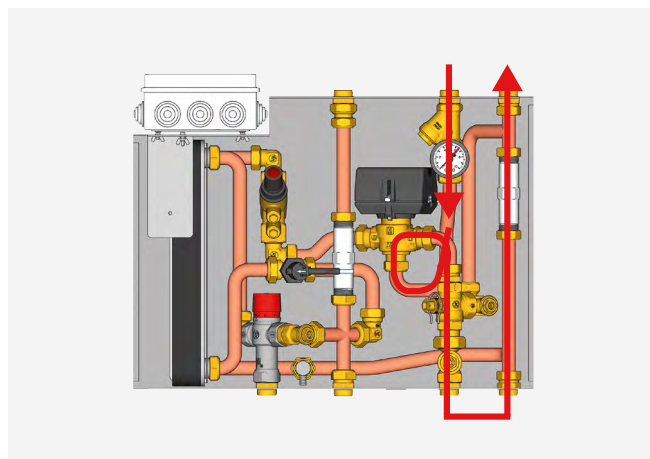
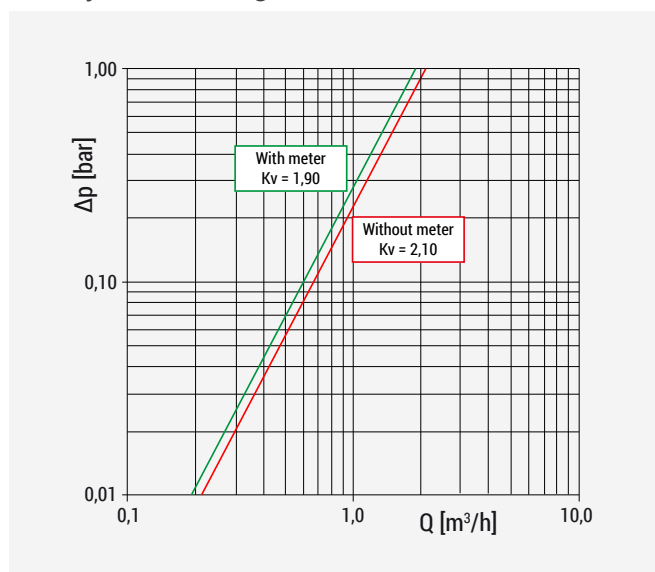
Domestic hot water production

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	29,5	75	580	31,0
			70	700	33,8
			65	880	36,3
15	900	37,0	75	780	34,2
			70	960	36,9
			65	1260	39,8
17	1020	41,5	75	920	35,8
			70	1140	38,4
			75	1000	36,6
18	1080	44,0	70	1240	39,3
			75	1070	37,4
			75	1150	38,1

Primary circuit power and flow rate and DHW production for GE556Y309

Hydraulic characteristics

Primary circuit heating

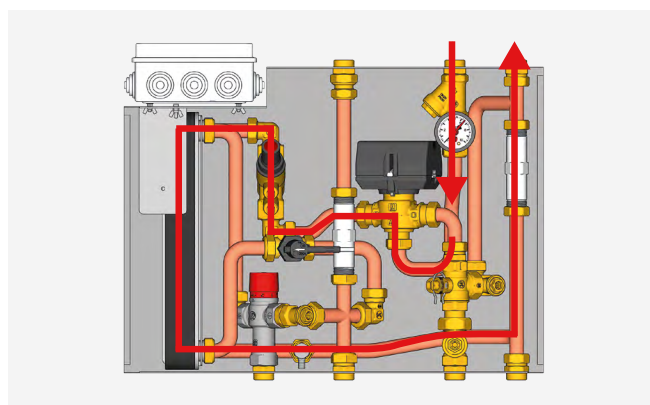


NOTE. THE instant flow rate can be verified through the energy meter so as to control the lockshield for heating.

Domestic hot water, primary circuit

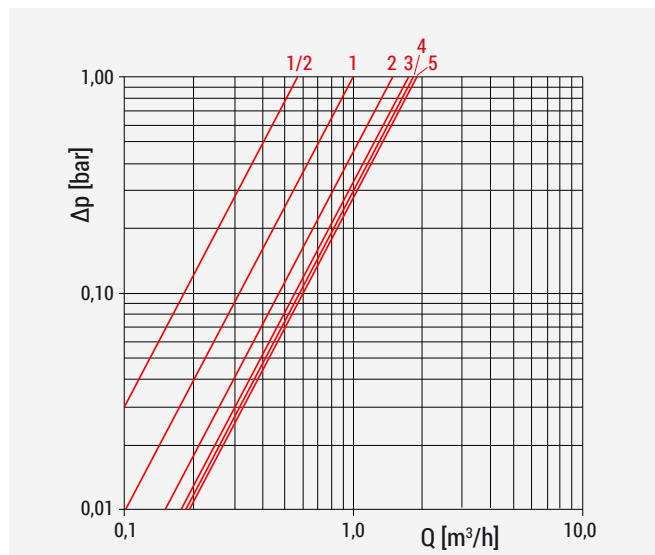
Setting	l / h
1.0	406
1.5	513
2.0	621
2.5	728
3.0	836
3.5	943
4.0	1050
4.2 (default)	1090
4.5	1160
5.0	1270

NOTE. Setting of balancing valve R206A to achieve the power required on the domestic hot water primary circuit.
Refer to datasheet 0520EN of valve R206A for other setting values.

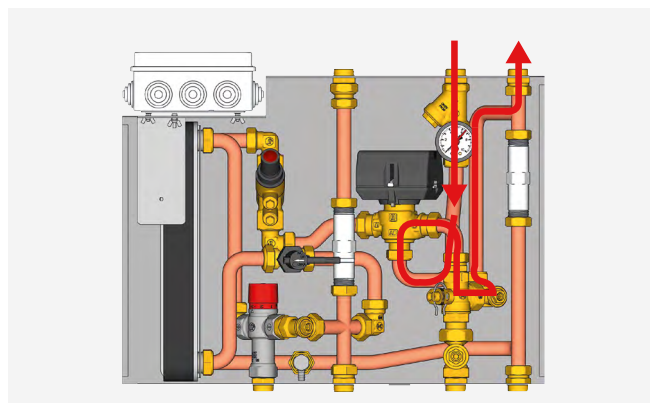


NOTE. The instant flow rate can be verified through the energy meter so as to control the lockshield for heating. There is no setting device provided for the DHW function. Use devices external to the HIU when required.

Primary circuit by-pass based on by-pass lockshield control

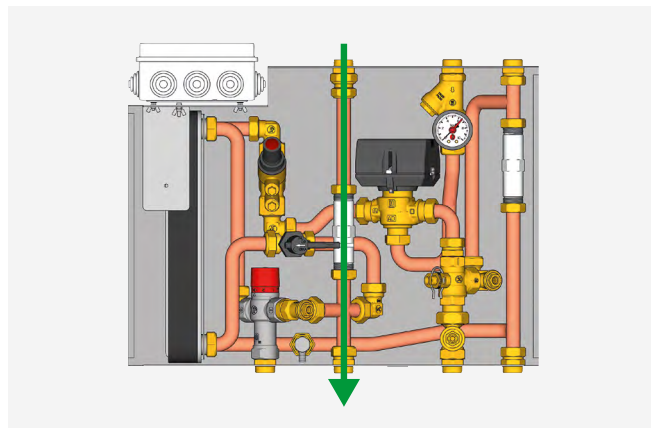
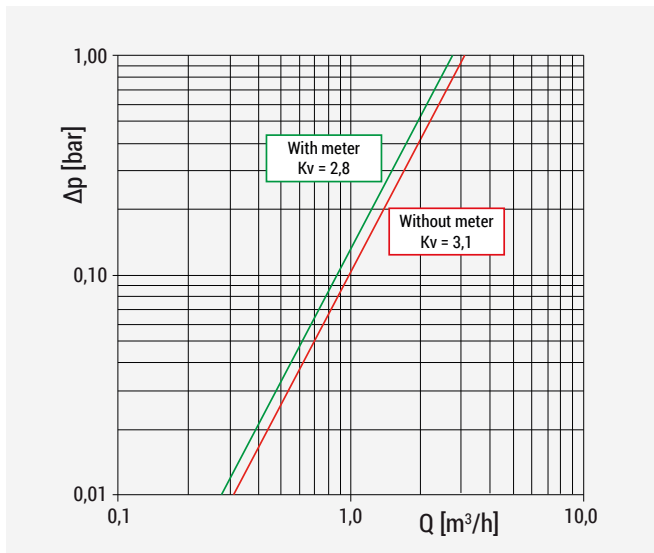


NOTE. The HIU features factory settings with by-pass lockshield (ref.7) fully closed. Should the by-pass function be required, open the lockshield according to the chart below.

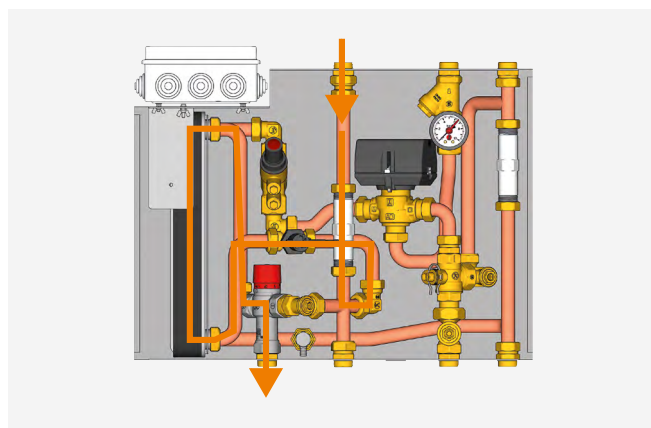
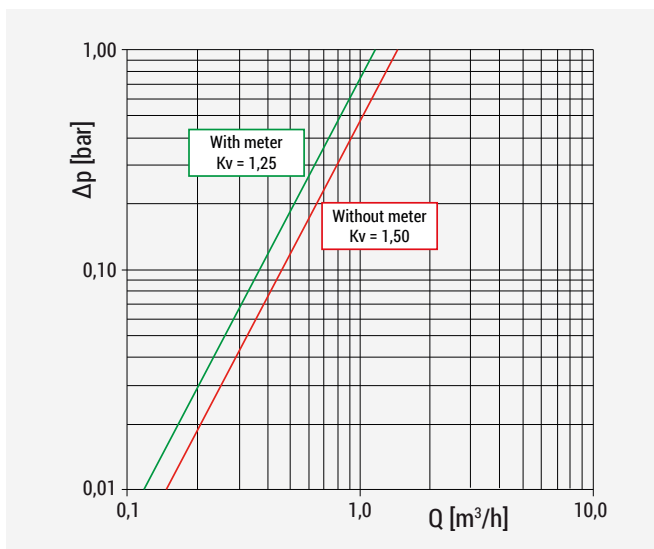


CONTROL OF BY-PASS LOCKSHIELD	1/2	1	2	3	4	5
Kv	0,57	1,00	1,55	1,75	1,86	1,92

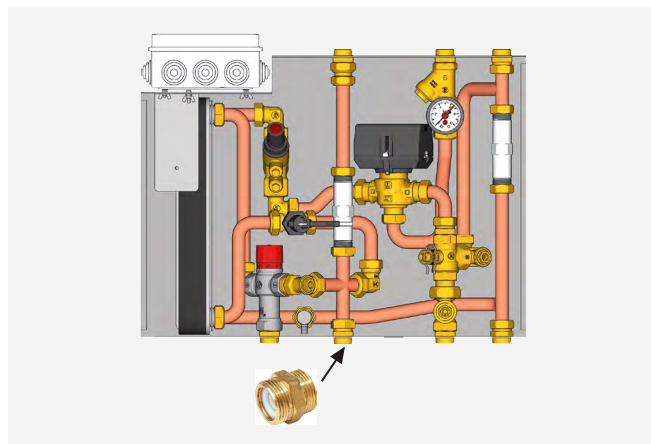
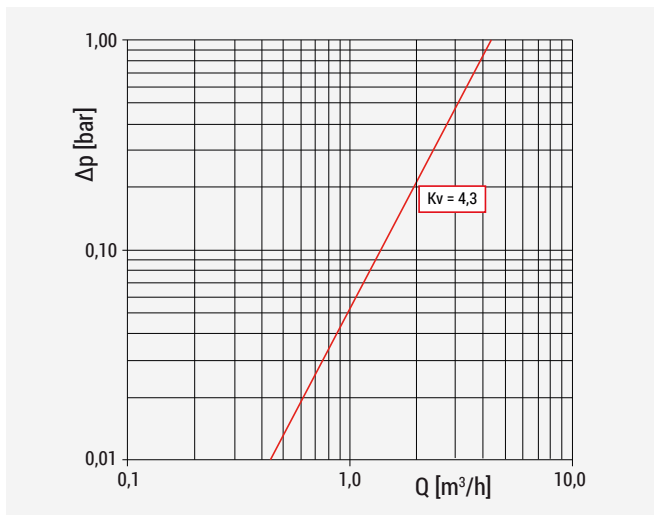
Domestic cold water



Domestic hot water



Installation of check valve on domestic water circuit (optional)



NOTE. Positioning of domestic water check valve R189VY004 (optional)

Installation

IMPORTANT WARNING. Transport vibrations may loosen the hydraulic connections which must ALL be checked and tightened prior to installation and start up.

WARNING. Risk of burns and electric shocks.

Installation must be carried out by qualified operators authorized by the building manager.

Refer to specific standards for use (installation, fixing, etc...), operation, recalibration and replacement of meters.

Also refer to assembly instructions provided with each meter.

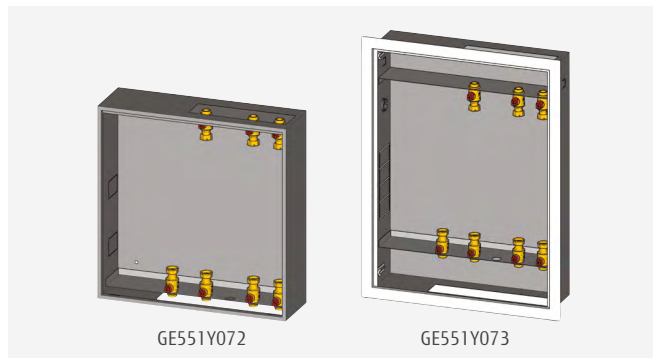
WARNING. Flush all pipes before installing the HIU on the template.

WARNING. Before connecting the template to the HIU, remove the lock nuts from the threaded connections.

WARNING. Unused connections and ball valves must be closed with a cap.

The HIU generally requires a template for installation on site for versions:

GE551Y072: surface mounting; GE551Y073: flush mounting



1) Template installation.

We recommend installing on site the template only, to prevent damages to the meters and for proper flushing and pressurized start up of the system.

2) System flushing

We recommend flushing the system before installing the thermal energy meters.

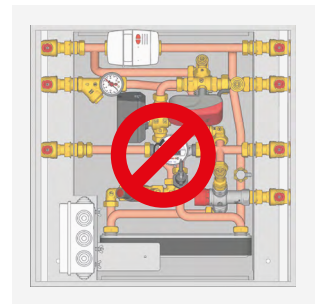
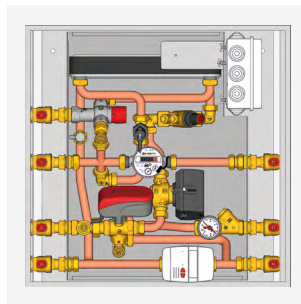
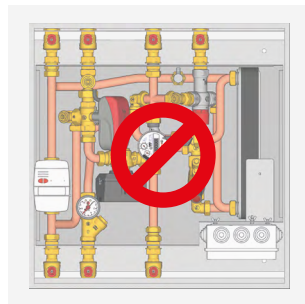
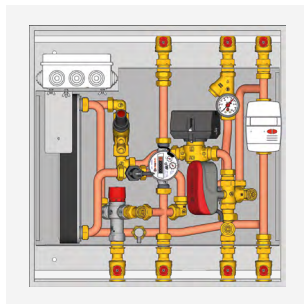
3) HIU installation

The HIU can be installed on the template and the energy meter can be mounted after flushing the system.

4) System testing

Test the pressurized system after installation.

Possible installations

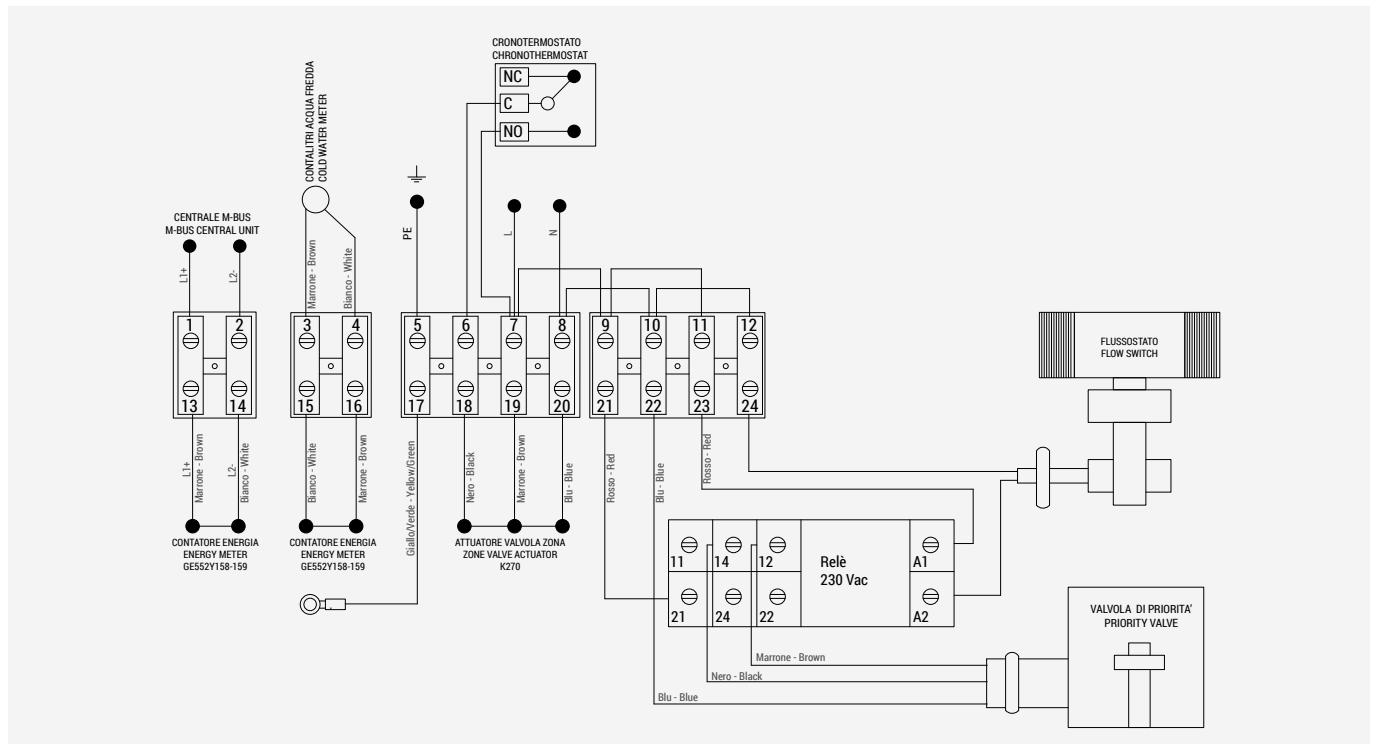


WARNING. Zone valve actuators may not be installed upside down.

Electric connections

⚠ WARNING. Only professional operators should carry out interventions on the electric components. Make sure to disconnect the power supply during connection.

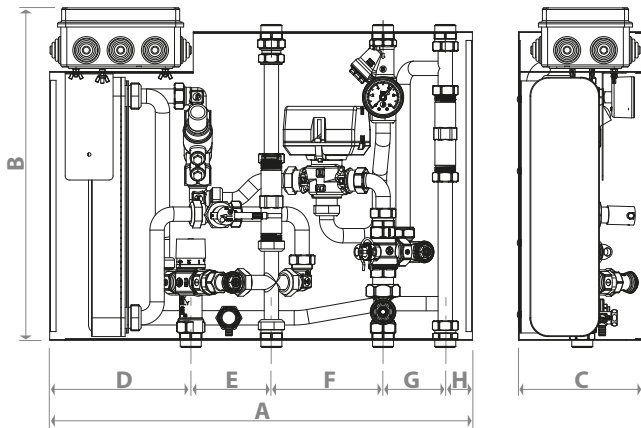
🔗 NOTE. The electric diagram shown refers to connections of energy meters GE552Y158, GE552Y159. Should other meters be installed refer to their specific instructions.



TERMINAL	FUNCTION
1	Wire for M-Bus data transmission to data concentrator, connection of wire L1+. Ø 0,8 mm wire, twisted to 2 unscreened wires with max. line capacity 150 pF/m (16 or 18 AWG)
2	Wire for M-Bus data transmission to data concentrator, connection of wire L2+. Ø 0,8 mm wire, twisted to 2 unscreened wires with max. line capacity 150 pF/m (16 or 18 AWG)
3	Connection for M-Bus centralization of water meters
4	Connection for M-Bus centralization of water meters
5	Ground
6	Connection to room chronothermostat, to shared terminal C of internal contact (wire section 0,5 mm ²)
7	Power connection 24 V~ or 230 V~ (wire section 0,5 mm ²) In parallel: connection to room chronothermostat, to generally open terminal NO of internal contact (wire section 0,5 mm ²)
8	Power connection 24 V~ or 230 V~ (wire section 0,5 mm ²)
9	-
10	-
11	-
12	-

TERMINAL	FUNCTION
13	Connection of brown wire L1+ of thermal energy meter
14	Connection of white wire L2+ of thermal energy meter
15	Connection for M-Bus centralization of water meters
16	Connection for M-Bus centralization of water meters
17	Ground
18	Connection of actuator K270 for zone valve, black wire
19	Connection of actuator K270 for zone valve, brown wire
20	Connection of actuator K270 for zone valve, blue wire
21	Connection to relays, red wire, pos. 21
22	Connection to diverting valve, blue wire
23	Connection to relays, red wire, pos. A1
24	Connection to flow switch

➤ Dimensions



PRODUCT CODE	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]
GE556Y309	530	417	155	178	100	140	78	34

➤ WRAS certifications

REFERENCE IN "COMPONENTS" PARAGRAPH	COMPONENTS	CERTIFICATE NUMBER
-	Gaskets	1509513
10	Heat exchanger	1909083
12	Flow switch	2111302
14	Thermostatic mixer	1709305
OPTIONAL	Check valve	1908700

➤ Product specifications

GE556Y309

Heat interface unit for centralized systems dedicated to heating control and domestic hot water production. 3/4" connections. Primary circuit: filter with stainless steel basket and delivery temperature probe housing. Flow rate dynamic balancing valve on domestic water primary circuit. Domestic hot water production: flow switch, priority valve, thermostatic mixer for temperature control and instant heat exchanger with 44 kW power (with primary circuit: 75 °C and 1 m³/h flow rate. Secondary circuit: ΔT = 50-15 °C and 18 l/min flow rate). Heating circuit: control lockshield and 3-way motorizable zone valve. Preset for installation of thermal energy meter and domestic water meter through plastic spacers (center distance 110 mm). IP55 box with electric terminal strip. Preset for template fitting. Max. working temperature 90 °C. Max. working pressure 16 bar (10 bar with plastic spacer). Frame dimensions 530x390x155 mm (LxHxW).

The HIU can be completed by purchasing separately: thermal energy meters GE552. Domestic water meters GE552-2. Metal template including shut-off valves, varnished sheet metal (RAL9010) with key lock door and width-adjustable frame, surface-mounting version GE551Y072; flush-mounting version GE551Y073. Actuator K270 for 3-way zone valve. Components for M-Bus centralization and remoting of consumption data through M-Bus GE552-4, or through Wireless M-Bus GE552-W.

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.



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