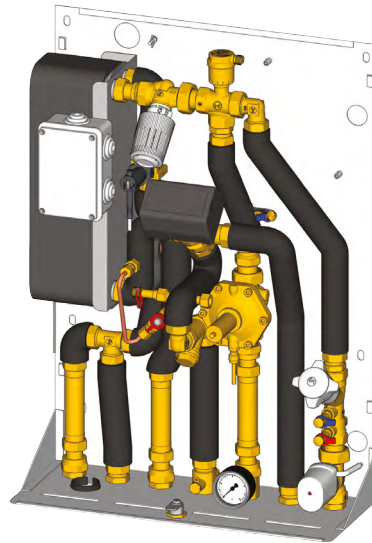



GE556Y320 / GE556Y321

Description

The user Heat Interface Unit (HIU) GE556-4 versions, allows the metering of heat energy consumption for heating and the production of DHW (Domestic Hot Water) in modern autonomous systems with centralised heat production (e.g. district heating).

The management of the HIU is thermostatic. The adopted configurations is an innovative variante with the use of fast thermostatic actuators and a Differential Pressure Controller (DPC) on the primary side.

Versions and product codes

Product code	Connection	Type	Heating side power	DHW heat exchanger rated power	Template with valves
GE556Y320	3/4"	High temperature heating and DHW production	21 kW	56 kW	GE551Y075
GE556Y321				67 kW	

Completion codes

The following components can be installed on each HIU:

- Heat energy meter, GE552 series.
- Domestic water meters, GE552-2 series.
- Template with 7 shut-off valves and 3/4" connections: code GE551Y075



Note.

Use energy meters approved in accordance with the standardized "flow disturbance elements" and provided for by the EN 1434 for null rectilinear section upstream and downstream of the meter, such as the GE552Y122.

Main features

- Thermostatic regulation to manage the DHW temperature.
- Heat exchanger for instantaneous DHW production.
- Flow switch for priority DHW production.
- Motorized three-way priority valve.
- Automatic air vent valve with hygroscopic cap, manometer and filter on the primary side.
- Safety valve with R473 electrical actuator, on the heating side.
- By-pass on the domestic primary side, to maintain the heat exchanger hot.
- Differential pressure controller on the primary side.
- Static balancing valve R206B.
- WRAS-certified components for the domestic circuit.
- Brass spacers for inserting the meters.
- Painted sheet metal cabinet (RAL9010), with key locking.

Technical data

- Max. working temperature: 90 °C
- Max. working pressure: 10 bar



Warning.

Maximum operating differential pressure for the primary side = 2 bar (differential pressure controller)

- Temperature range of the secondary DHW circuit: SET POINT 50 °C
- Nominal flow rate on primary circuit: 1130 l/h @ 70 °C for 56 kW (GE556Y320)
1280 l/h @ 70 °C for 67 kW (GE556Y321)

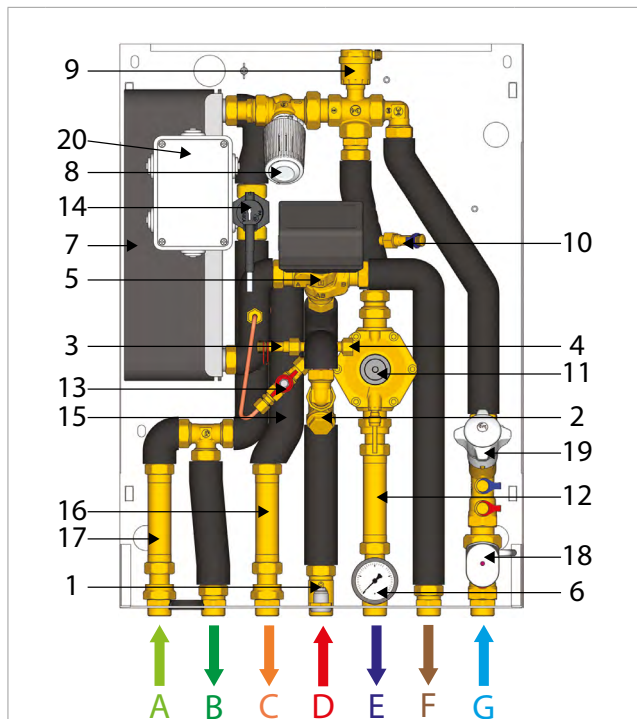


Warning.

The satellite 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

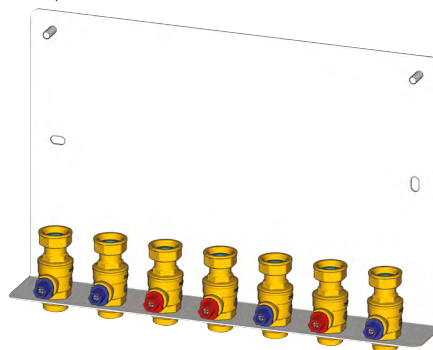
1	Housing for thermal energy meter temperature probe	PRIMARY
2	Filter	
3	Sensor holder for differential pressure	
4	Probe for differential pressure controller	
5	Motorized three-way priority valve for DHW	
6	Manometer	
7	Heat exchanger for the domestic hot water function	
8	Fast thermostatic head, for domestic temperature control	
9	Automatic air vent valve	
10	Sensor holder for differential pressure	
11	Differential pressure controller (DPC)	
12	Brass spacer for energy meter	
13	Primary bypass	
14	Flow switch	DHW PRO- DUCTION
15	Thermostatic head sensor	
16	Brass spacer for domestic hot water	
17	Brass spacer for domestic cold water	HEATING
18	Motorised 2-way zone valve for heating and electric safety	
19	Static balancing valve	OTHERS
20	Electrical box	

A: Domestic cold water inlet	D: Primary inlet
B: Domestic cold water outlet	E: Primary outlet
C: Domestic hot water outlet	F: Heating delivery
	G: Heating return

Completion codes

The following components can be installed on each HIU:

- Heat energy meter, GE552 series.
- Domestic water meters, GE552-2 series.
- Template with 7 shut-off valves and 3/4" connections: code GE551Y075



Checks and Maintenance



Warning. Risk of burns and electric shock. The HIU must only be accessed by skilled personnel, authorised by the building administrator.



Warning. Installation must be carried out by skilled personnel, authorised by the building administrator. Respect the regulations regarding the use (installation, fixing, etc.), operation, recalibration and replacement of the meters. Refer also to the assembly instructions provided with the meter.



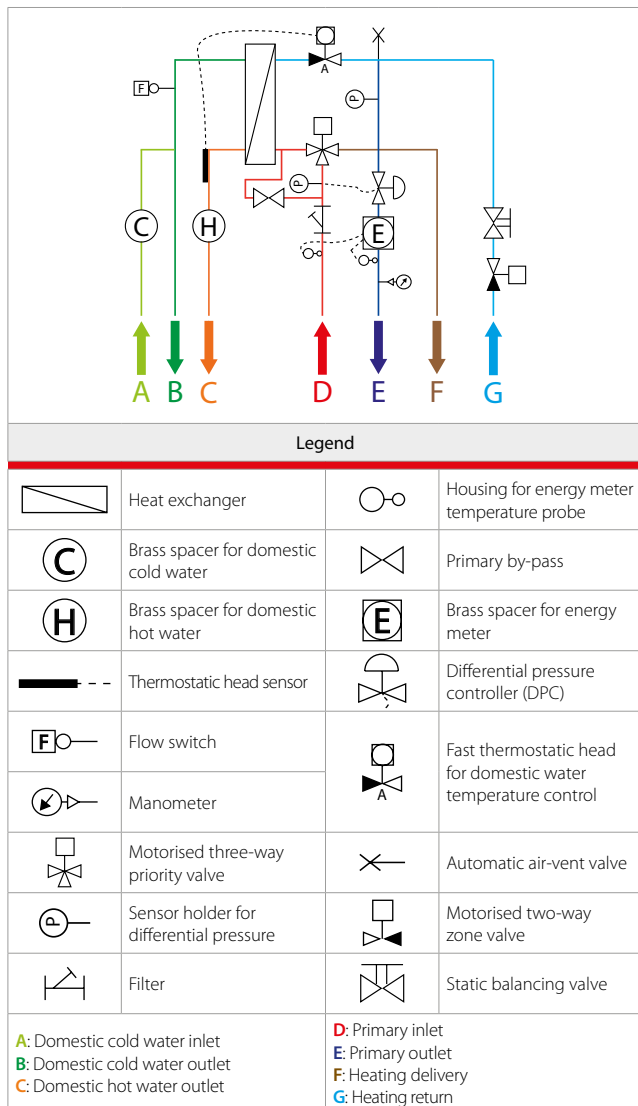
Warning. Before connecting the template to the HIU, remove the lock nuts from the threaded connections.



Warning. Close the cap of the air vent valve when rinsing out and filling the system, to prevent impurities from entering the mechanisms of the valve and damaging it.

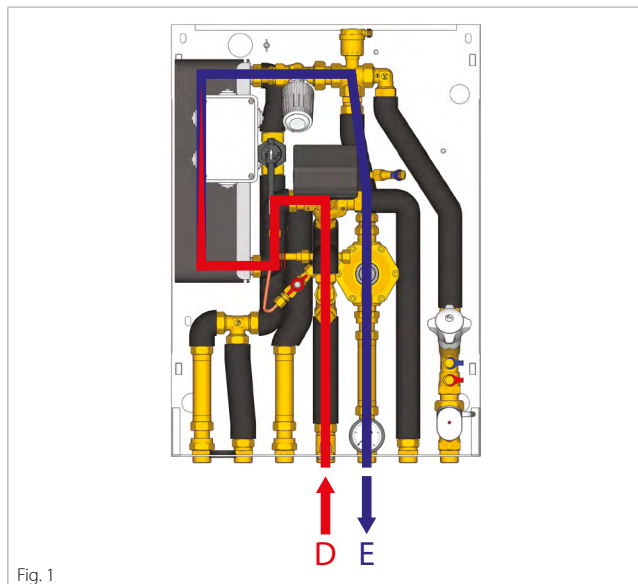


Operation



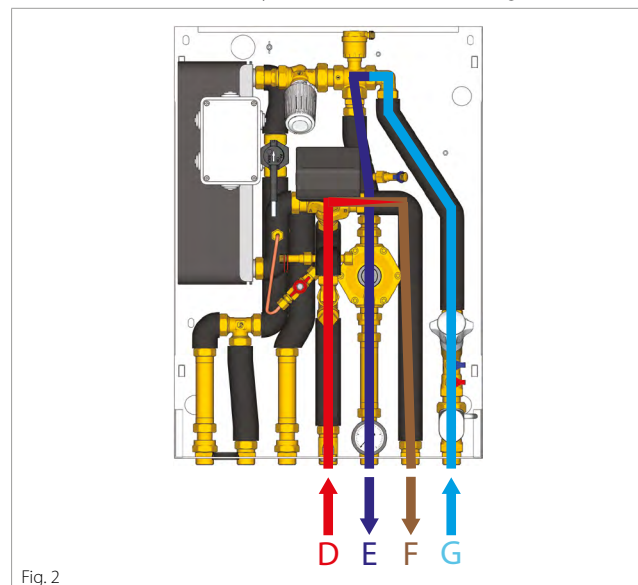
Primary

Inlet (D) and return (E). The primary circuit is composed of a bypass, Y-filter, sensor holder for differential pressure, motorized three-way priority valve, automatic air vent valve, heat exchanger, manometer, minimum pressure switch, a fast thermostatic head for domestic temperature control and a differential pressure controller (DPC). The energy meter can be installed in place of the brass spacer, fitting its temperature probe in the relative housing (**component n° 1**).



Heating

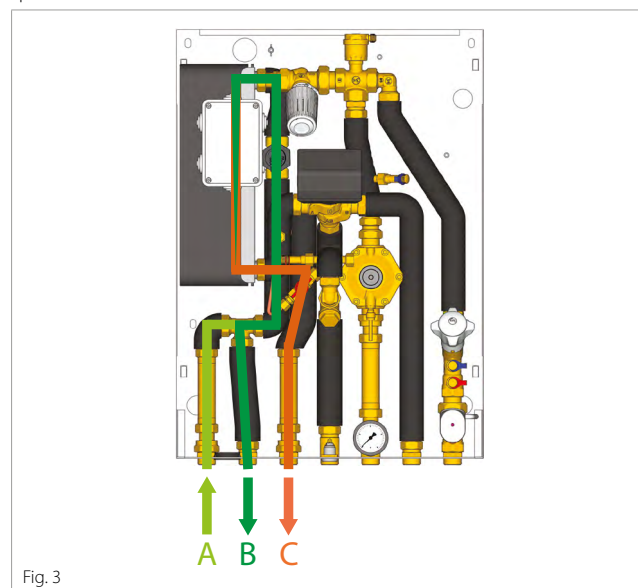
Delivery (F) and return (G). The heating circuit is composed of a zone valve with thermal and electric safety function and static balancing valve.



Domestic hot water

Cold water inlet (A), cold water outlet (B) and hot water outlet (C).

The DHW circuit is composed of a flow switch, heat exchanger and brass spacers for the introduction of the cold and hot water meters.





Operating data


Note.

Operating data valid with differential pressure controller set to 50 kPa.

Heating

Nominal flow rate of high temperature heating circuit:
 540 l/h @ ΔT 15 °C (65-50 °C) for 9,5 kW
 1200 l/h @ ΔT 15 °C (65-50 °C) for 21 kW
 410 l/h @ ΔT 20 °C (70-50 °C) for 9,5 kW
 910 l/h @ ΔT 20 °C (70-50 °C) for 21 kW

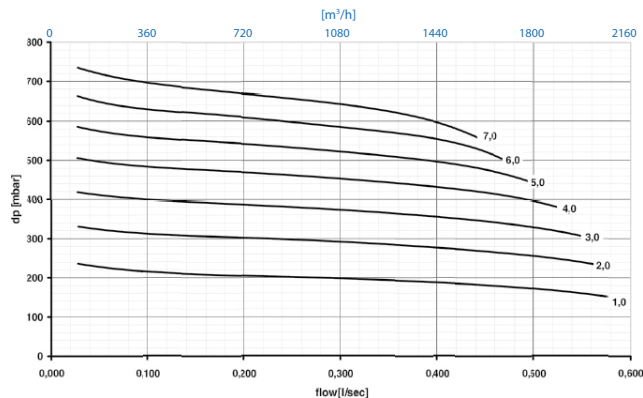
DHW production

Domestic hot water GE556Y320 (Δt 10-50 °C)			Primary circuit working conditions		
Flow rate [l/min]	Flow rate [l/h]	Power [kW]	Inlet T [°C]	Flow rate [l/h]	Outlet T [°C]
12	720	33,6	70	620	23
			65	730	25
15	900	42	70	800	24
			65	940	26
17	1020	47,6	70	940	26
			65	1090	27
20	1200	56	70	1130	27

Domestic hot water GE556Y321 (Δt 10-50 °C)			Primary circuit working conditions		
Flow rate [l/min]	Flow rate [l/h]	Power [kW]	Inlet T [°C]	Flow rate [l/h]	Outlet T [°C]
12	720	33,5	70	580	20
			65	670	22
15	900	42	70	750	22
			65	880	24
17	1020	47,5	70	880	23,5
			65	1020	25
20	1200	56	70	1050	24,2
			65	1230	26
22	1320	61,5	70	1160	24,6
24	1440	67	70	1280	25

Components details

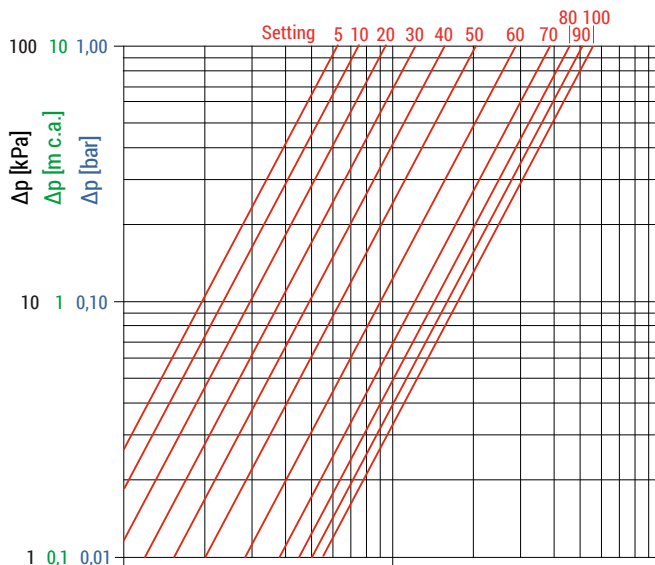
Differential pressure controller



Kv: 4,36

Differential pressure range setting: 25÷60 kPa

Static balancing valve R206BY004

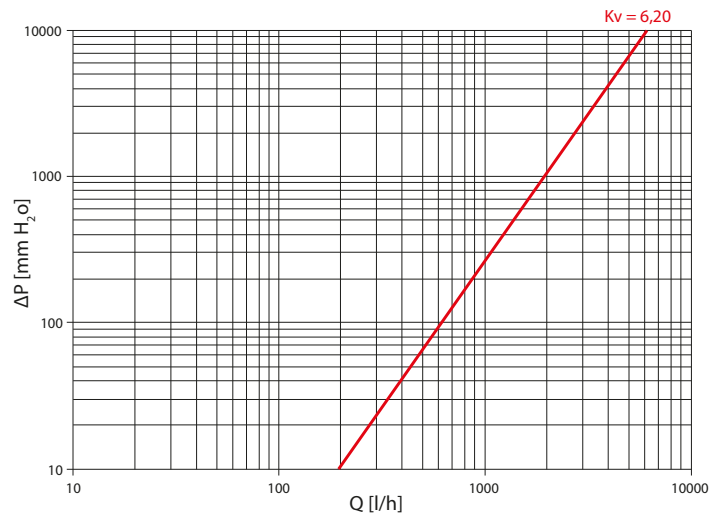
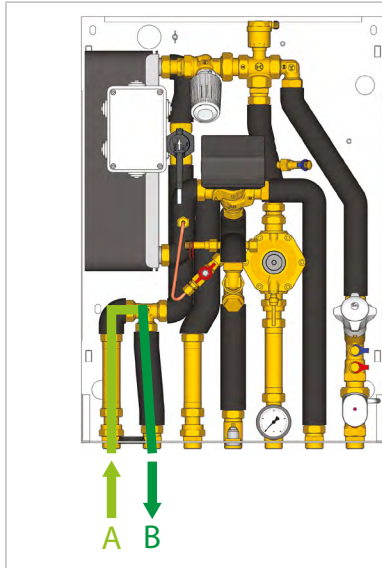


Setting	Kv
100	5,50
95	5,20
90	5,00
85	4,80
80	4,57
75	4,35
70	3,95
65	3,50
60	2,88
55	2,37
50	2,00
45	1,81
40	1,58
35	1,39
30	1,24
25	1,10
20	0,96
15	0,85
10	0,75
5	0,62

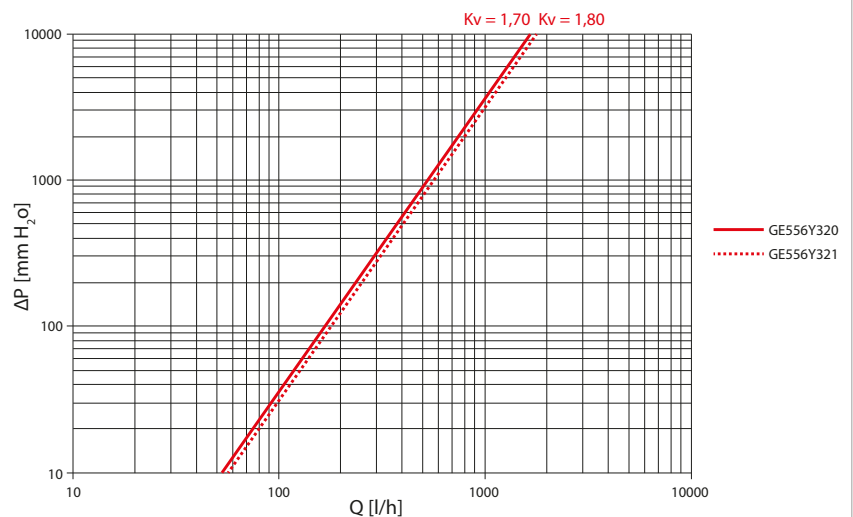
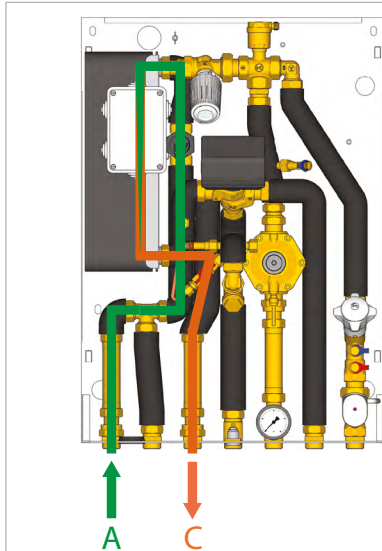


Hydraulic characteristics

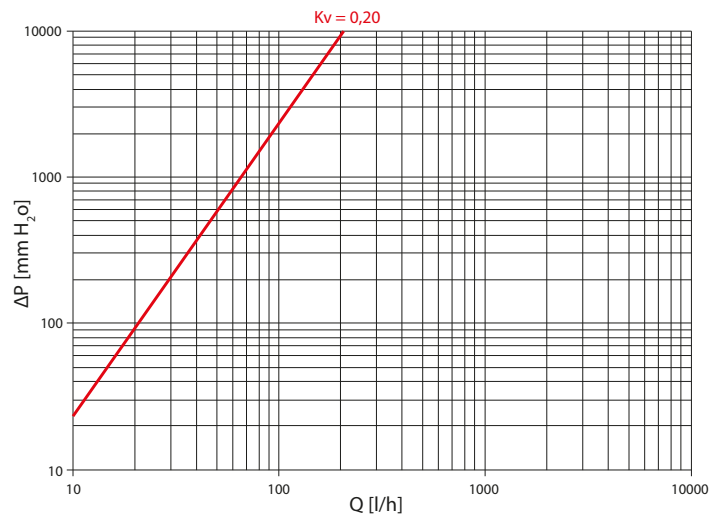
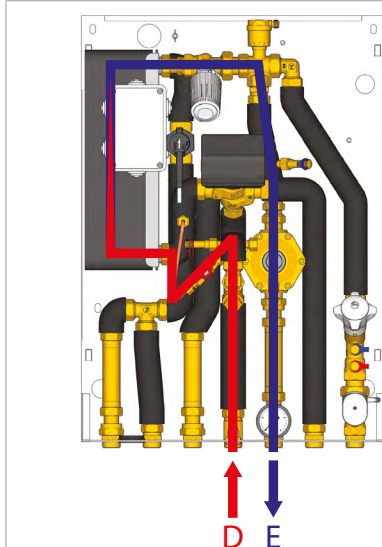
Domestic cold water circuit



Domestic hot water circuit

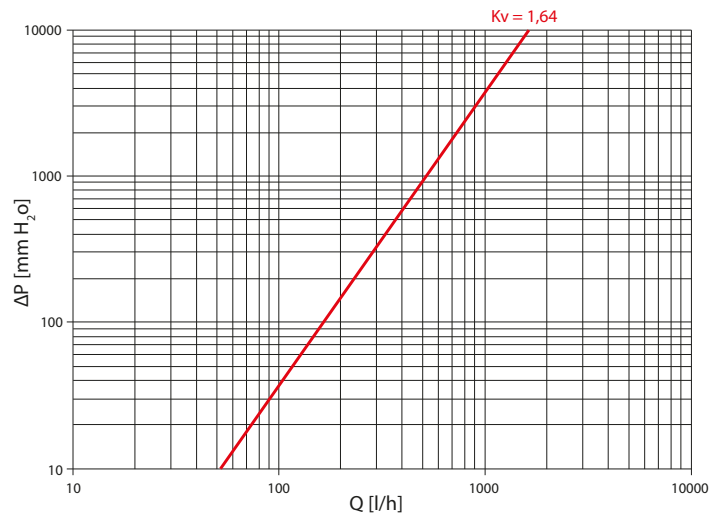
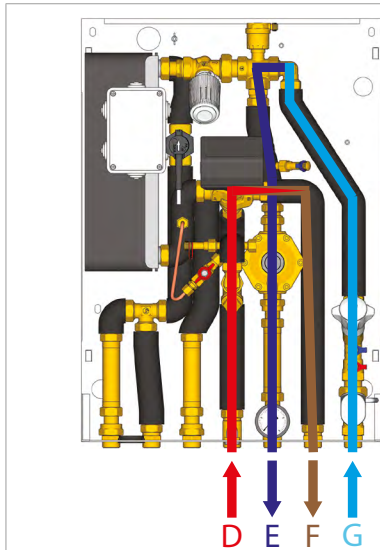


By-pass on primary domestic circuit

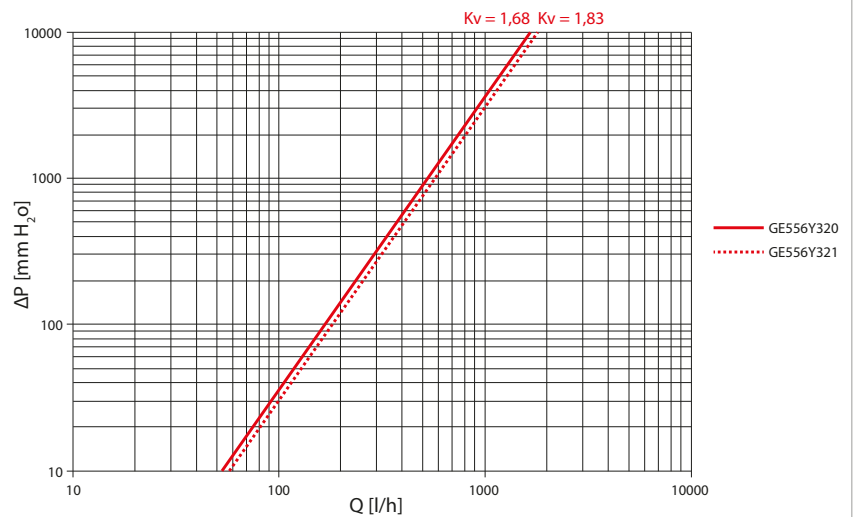
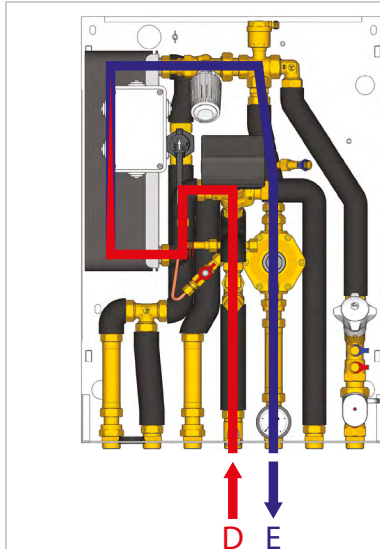




Primary circuit - heating side



Primary circuit - domestic side



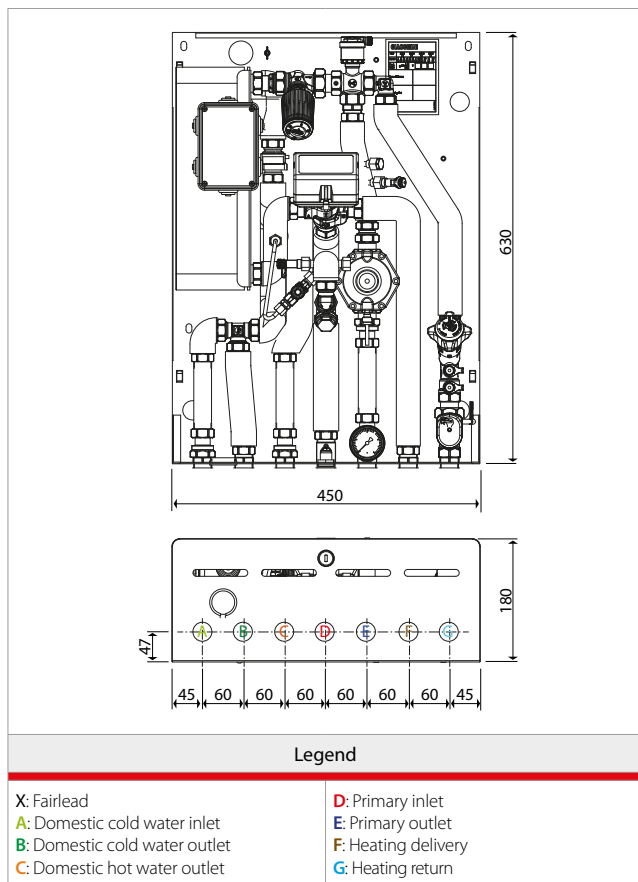
**HIGH-TEMPERATURE HEAT INTERFACE UNIT WITH
THERMOSTATIC CONTROL GE556Y320, GE556Y321
GE556-4 SERIES**



GIACOMINI
WATER E-MOTION



Dimensions



Dimensions in mm

Reference standards

- UNI EN 1434
- EN 60751
- EN 61107
- Measuring Instruments Directive 2014/32/EU (MID)
- ErP Directive 2009/22/EC

WRAS certifications

Ref. "Components"	Components	Certificate number
-	Gaskets	1509514
14	Flow switch	2111302
7	Heat exchanger	1909083

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 plateformes 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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