

Heating Interface Unit -"HELECTRONIC"

Electronically controlled HIU





Overview

The conventional and hitherto most common method of hot water processing is by using a hot water storage tank. This type of device warms up the water long before it is used, and stores or "saves" it in a hot condition. The inevitable loss of heat incurred (depending on the temperature) in this process necessitates a regular reheating.

The disadvantages of this method of preparing hot water are sufficiently well known. By the use of constructive measures or by changing the method used, the intention is to prevent the occurrence of legionella at the earliest point in this process. All these measures are aimed at avoiding the "saving" of hot water over a time period, in order to prevent the propagation of the legionella. This type of device, which does not require any storage potential in its function, is known by the general heading of a "continuous water heater".



Features

- Complete insulation made of EPP
- Time- and cost-saving installation as only three supply pipes
 are required in one riser for all dwellings
- Hygienic hot potable water preparation according to the continuous flow principle
- No potable water reserve required
- Piping of the station and heat exchanger made of highquality stainless steel
- HIU is a complete package comprising of all components mounted on a frame, factory assembled and tested
- Heat meter can be integrated into the station and allow for an exact calculation of energy consumption for each dwelling

- Electronic control of DHW temperature
- The constant water temperature in the heat exchanger reduces the danger of legionella- and lime formation
- The continuous-flow heating enables a permanent supply when domestic hot water is required
- Minimal space required
- Low return temperature





Functionality

In the stand-by mode the heating water flows from the primary circuit (district heating main) via a bypass which is kept at operating temperature with a return temperature limiter. If hot water is drawn from a tap by a domestic user connected to the system, the control valve for the cold and heating water is opened by stepper motor. Cold water flows through the heat exchanger, is heated up and promptly available as hot water at the domestic hot water tap. The temperature of the domestic hot water is controlled by an electronic controller.



DHW	8 l/min		16 l/min
t °C inlet primary	70	65	70
t °C inlet _{cold water}	10	10	10
t °C _{outlet}	60	60	60
Pressure drop _{min.} [kPa]	50	50	60
Flow rate	510	660	1200

In contrast to the hot water storage method, the HIU only starts working when hot water is required, i.e. "drawn off".

HIUs are designed and optimised for operation in district and local heating grids. They are extremely efficient despite their compact design. Their area of application is focussed on single-family households (e.g. two adults, 2 children) in closed apartments on a multi-storey residential basis - particularly for the common case of subsequent district heating supply. The devices are also ideally suited for use in new buildings and single-family houses.

Depending on the potential of the primary supplier, HERZ HIUs have sufficient power for every application to be able to meet the normal comfort expectations of the consumers. The users' key

criterion of quality in the practical use of these types of devices is the rate of flow of hot water supplied per unit time (minute). Furthermore, the hot water has to be of the temperature required or preset to, and also be maintained at that temperature for the whole time it is drawn-off.

Differential pressure controller
Strainer
Valve with motoric actuator
Summer bypass
Automatic air relief valve
Ball valves heating secondary side
Ball valves heating primary side
DHW and DCW connections
Heat exchanger
Zone valve with actuator
Flow measurement
Electric control unit
Heat meter adapter





Dimensions in mm



▶ HERZ Armaturen GesmbH - Wien 🛛 📊 Herz Armaturen Ges.m.b.H. 🧿 herz.armaturen 👍 Herz Armaturen Ges.m.b.H.



HERZ Armaturen Ges.m.b.H. Richard-Strauss-Straße 22, 1230 Vienna, Austria T: +43 1 616 26 31-0, F: +43 1 616 26 31-227 E-mail: office@herz.eu



