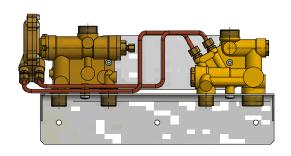


# Wall-mounted heat interface unit, instantaneous domestic hot water production

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# INSTRUCTIONS FOR INSTALLATION, COMMISSIONING AND MAINTENANCE



## **Function**

The SATK series HIU allows independent control of heating and domestic hot water production within centralised heating systems.

## **Technical specifications**

#### **Materials**

Frame: galvanised steel
Heat exchanger: braze welded stainless steel
Fitting pipes: copper
Components: brass EN 12165 CW617N

# Performance

Medium: water, max. 30% glycol Maximum medium temperature: 85°C Maximum operating pressure: - primary circuit: 10 bar - domestic hot water circuit: 10 bar Nominal DHW heat exchanger net output: 40 kW DHW circuit flow rate: min  $1.8 \pm 0.3$  l/min max 18 l/min Hydraulic characteristics: primary/heating circuit: kv 2.9 Weight: 6 kg

# **Component specifications**

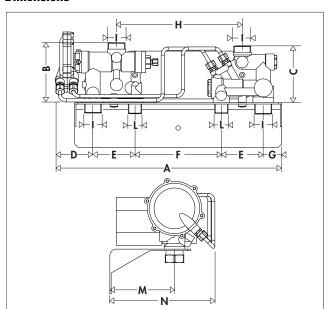
Connections: - primary circuit: 3/4" M

- heating circuit: 3/4" M - domestic hot water circuit: 1/2" M

# Contents of pack:

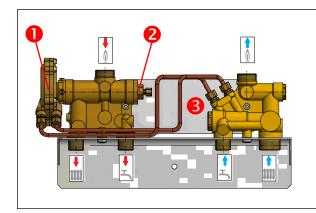
- HIU
- Instruction sheet

#### **Dimensions**



Α	В	С	D	E	F
350	93	88	58	65	134
G	Н	I	L	М	N
28	194,5	3/4"	1/2"	100	163

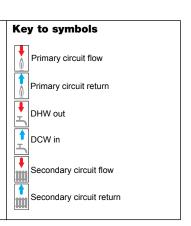
# Characteristic components



- 1 DHW priority valve
- 2 Manual by-pass
- 3 40 kW brazed heat exchanger

The DHW priority valve (1) controls priority of the production of domestic hot water in the presence of a DHW circuit demand.

The heating circuit is always active when there is no DHW tapping; we recommend the use of a zone valve or thermostatic valve on the heating circuit.



## Installation

The SATK series HIU is designed for installation in a sheltered domestic environment (or similar), therefore it cannot be installed or used outdoors, i.e. in areas directly exposed to the elements. Outdoor installation may cause malfunctioning and hazards.

If the device is enclosed inside or between cabinets, sufficient space must be provided for routine maintenance procedures. It is advisable to avoid positioning electrical devices under the HIU as they may be damaged in the event of leaks from hydraulic fittings. If this advice is not heeded, the manufacturer cannot be held responsible for any resulting damage. In the event of a malfunction, fault or incorrect operation, the device should be deactivated; contact a qualified technician for assistance.

#### Preparation

After having established the point of installation of the device, perform the following operations:

- Mark the holes required to secure the HIU to the wall
- Mark the position of the hydraulic connections

Check the measurements again and begin laying the following lines:

- 1. connection to the centralised line
- 2. heating circuit connection
- 3. domestic water circuit connection.

Before installation, it is recommended to carry out accurate flushing of all the pipes of the system in order to remove any residue or impurities that could endanger correct operation of the HIU. Fix the HIU to the wall.

N.B.: the wall anchors can only guarantee effective support if inserted correctly (in accordance with good technical practice) into walls made of solid or semi-solid bricks. If working with walls built using perforated bricks or blocks, mobile dividing panels or any masonry walls other than those indicated, a preliminary static test must be carried out on the support system.

## Hydraulic connections

Hydraulic connections to the centralised line must be made using manual shut-off valves which allow any necessary maintenance work to be carried out without having to empty the centralised system. It is advisable to install manual shut-off valves also on the lower terminals for connection to the apartment heating system. Make sure all connections are perfectly watertight.

### Commissioning

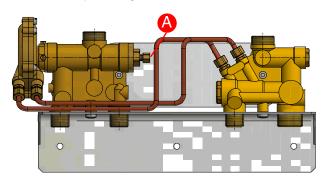
## Filling the central heating system

Open the shut-off valves (not supplied) on the connections to the centralised line and, in the central heating system, proceed with filling the system to the design pressure. Once these procedures are complete, vent the system and check its pressure again (repeat the filling process if necessary).

### **Exchanger preheating function**

In order to keep pipe sections between the risers and the apartment heating system from cooling and consequently to speed up the response to demands for DHW production, SATK12313 HIU is equipped with a manual by-pass that makes it possible to maintain a minimum flow of water circulating through the heat exchanger primary circuit.

To activate the preheating function turn knob (A).



#### Maintenance

All maintenance procedures should be carried out by an authorised

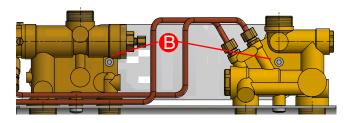
Regular maintenance guarantees better efficiency and helps to save energy.

Before carrying out any maintenance, repairs or replacement of parts, proceed as follows:

- Close the shut-off valves
- Empty the HIU.

# Heat exchanger replacement

- Remove the heat exchanger by loosening the 2 hex socket fixing
- Replace the heat exchanger and the O-rings.
- Tighten the two fixing screws to a maximum torque of 3 N·m (B).



# **SAFETY INSTRUCTIONS**

## WARNINGS



These instructions must be read and understood before installing and maintaining the device.

CAUTION! FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN A SAFETY HAZARD!

# THE PRODUCT SUPPLIED WITH THIS INSTRUCTION SHEET WILL BE DESIGNATED "DEVICE" HEREINAFTER

- 1 The device must be installed, commissioned and maintained by qualified technical personnel in accordance with national regulations and/or applicable local bylaws. 2 If the device is not installed, commissioned and maintained correctly in accordance with the instructions provided in this manual, it may not work properly and may endanger the user.
- 3 Clean the pipes of any particles, rust, incrustations, limescale, welding slag and any other contaminants. The hydraulic circuit must be clean.
- 4 Make sure all connection fittings are watertight.
- 5 When connecting water pipes make sure the threaded connections are not mechanically overstressed. Over time this may result in breakage, causing water damage and/or personal injury.
- 6 Water temperatures higher than 50°C can cause severe burns. When installing, commissioning and servicing the device, take the necessary precautions so that these temperatures do not constitute a threat for personal safety.
- 7 In the case of particularly hard or impure water, there must be suitable provision for filtering and treating the water before it enters the device, in accordance with statutory legislation. Otherwise the device may be damaged and will not work properly.
- 8 Any use of the device other than its intended one is prohibited.
- 9 Any combination of the device with other system components must be made taking the operational characteristics of both units into consideration. An incorrect combination could impair operation of the device and/or system.

LEAVE THIS MANUAL AS A REFERENCE GUIDE FOR THE USER. DISPOSE OF THE PRODUCT IN COMPLIANCE WITH CURRENT LEGISLATION

THE MANUFACTURER RESERVES THE RIGHT TO CEASE PRODUCTION AT ANY TIME AND TO MAKE ANY CHANGES DEEMED USEFUL OR NECESSARY WITHOUT THE OBLIGATION OF PRIOR NOTICE.