

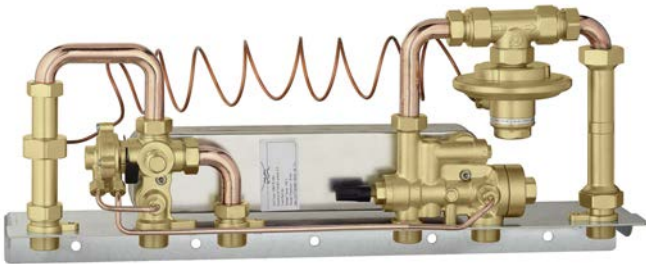
# Wall-mounted Heat Interface Unit - HIU

## Instantaneous domestic hot water production - Mechanical control

© Copyright 2013 Caleffi

### SATK15313 ABC

## INSTALLATION, OPERATION AND MAINTENANCE MANUAL



#### Function

The SATK Heat Interface Unit (HIU) independently controls the heating and domestic hot water generation in an individual apartment within a centralised boiler or district heating system.

#### Product Range

SATK15313 ABC HIGH temperature wall-mounted HIU instantaneous production of DHW, mechanical regulation with 30 kPa DPCV.

#### Technical specifications

##### Materials

Frame: steel plate  
 Exchanger: brazed  
 Connection pipes: copper  
 Components: brass EN12165 CW617N

##### Performances

Medium: water, max. 30% glycol  
 Maximum medium temperature: 85°C  
 Max. pressure: - primary circuit: PN 10 bar  
 - domestic hot water circuit: PN 10 bar  
 DHW exchanger capacity: 40 kW  
 Domestic hot water flow rate: min. 1,8 ± 0,3 l/min  
 max. 18 l/min

##### HIU connections:

Primary circuit: 3/4" M  
 Heating circuit: 3/4" M  
 DHW circuit: 3/4" M

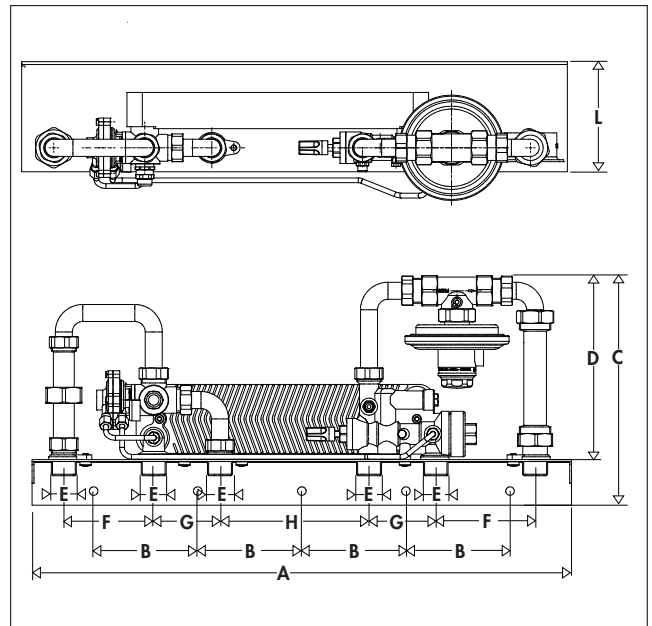
##### Box contents:

- HIU
- instructions
- fixing screws
- DPCV 30 kPa

##### Weight

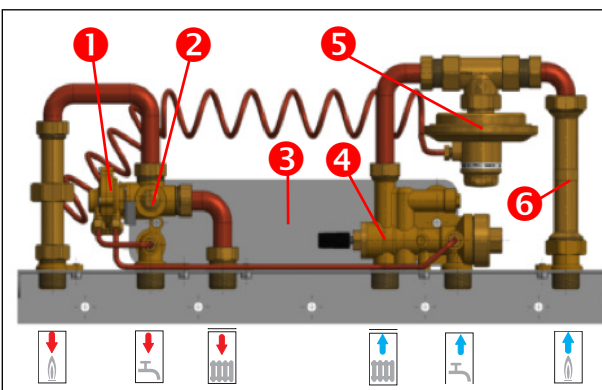
code SATK15313 ABC: 8 Kg

#### Dimensions

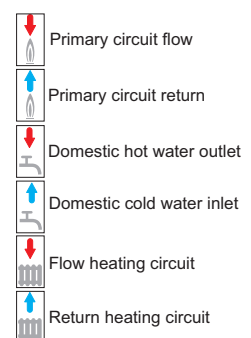


<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
570	110	243	195	3/4"	105
<b>G</b>	<b>H</b>	<b>L</b>			
70	157,5	157			

#### Characteristic components



- 1 - DHW Differential pressure priority valve
- 2 - Manual air vent
- 3 - 40 kW Brazed exchanger
- 4 - Mechanical modulating valve with manual pre-set
- 5 - DPCV (differential pressure control valve)
- 6 - Heat meter template spacer



## Installation

The SATK series is designed for installation in a sheltered domestic environment (or similar), therefore cannot be installed or used outdoors, i.e. in areas directly exposed to atmospheric agents. 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 recommended that electrical devices are NOT placed underneath the HIU, as they may be damaged in the event of leaks occurring at the hydraulic fittings.

If this advice is not respected, 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 establishing the device installation point proceed as follows:

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

Check the measurements again and begin laying the following pipelines:

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

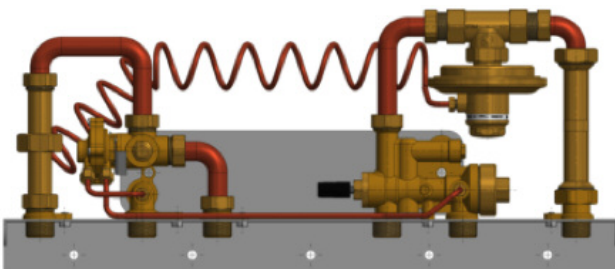
Before installation it's recommended to carry out accurate flushing of the pipes of the system in order to remove any residue or impurities that could endanger correct operation of the HIU.

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 built using 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 centralized line must be implemented using the shut-off valves, which allow any necessary maintenance work to take place without having to empty the centralized system. It is advisable to also install manual shut-off valves on the lower terminals for connection to the apartment heating system.



## Initial operation

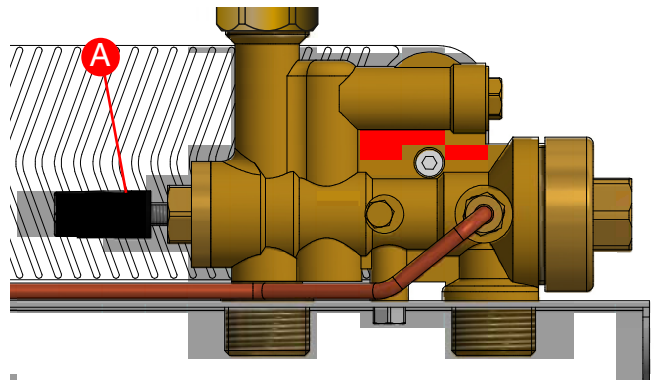
### Filling the central heating system

Open the shut-off valves on the connections to the centralized line and, in the central heating system, proceed with charging 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).

### Setting domestic hot water temperature

Open the domestic hot water taps, while the central heating system is working, and set the required temperature turning the blue handle (A).



## Maintenance

All maintenance procedures should be carried out by an authorized technician.

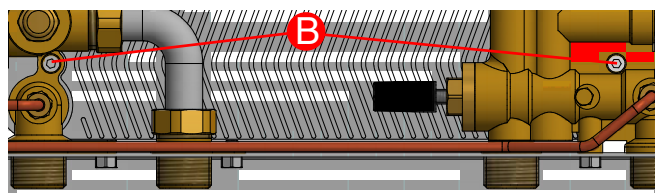
Regular maintenance guarantees better efficiency and helps to save energy.

Before carrying out any maintenance, repair or part replacement work, proceed as follows:

- Close the shut-off valves
- Empty the HIU using the cocks provided.

### Exchanger replacement

- Remove the exchanger using the 2 hex head screws fixing it in place (B)
- Replace the exchanger, fitting new O-rings
- Tighten the two fixing screws with maximum torque of 3 N-m (B).



## SAFETY INSTRUCTIONS

### Warnings



These instructions must be read and understood before installing and maintaining the device. The symbol means:

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

### Warnings

**CAUTION!**

**YOUR SAFETY IS INVOLVED. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN INJURY**

**THE PRODUCT SUPPLIED WITH THIS INSTRUCTION SHEET IS REFERRED TO BELOW AS 'DEVICE'**

1 The device must be installed, pre-run checked and maintained by qualified technical personnel in accordance with national regulations and/or relevant local requirements. 2 If the device is not installed, pre-run checked 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 that all connection fittings are watertight. 5 When connecting water pipes, make sure that threaded connections are not mechanically overstressed. With time this may result in breakage with water leakage, causing damage and/or personal injury. 6 Water temperatures higher than 50°C may cause severe burns. When installing, pre-run checking and servicing the device, take the necessary precautions so that these temperatures will not be hazardous for people. 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 current legislation. Otherwise the device may be damaged and will not work properly. 8 Any use of the device other than its intended use is prohibited. 9 Any coupling of the device with other system components must be made while taking the operational characteristics of both units into consideration. An incorrect coupling could compromise the 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