

SATK 20

heat interface unit



 **CALEFFI**
Hydronic Solutions



LanTen 
metering services

In partnership with:

altecnic

SATK 20 heat interface unit



Introduction

The SATK 20 heat interface unit is the latest 'intelligent' range of HIU from Altecnic.

The SATK 20 is the complete solution for instantaneous hot water production and space heating control.

Design

The single plate design hydraulically separates the domestic water with the space heating supplied directly from the central primary supply.

The on-board electronic control unit ensures maximum efficiency and control but crucially also enables additional important features.

Similar to the indirect version, the SATK 20 can be set to modulate the heating flow circuit for greater efficiency and to compensate for changes in the external environment.

The SATK 20 is available with a heating circuit support pump (all models) if required.

The low temperature heating version, for UFH, includes a heating pump, bypass and safety thermostat, allowing the space heating circuit temperature to be set and controlled as required.

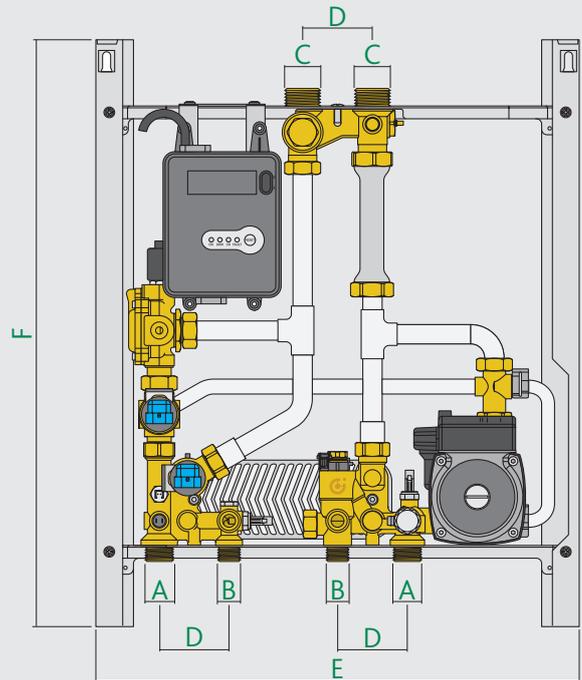
All models with a heating support pump come, as standard, with a pump bypass loop in case of complete radiator TRV shutdown.

The SATK 20 is extremely compact in design and lightweight, benefitting installers and architects alike.

The unit has a fully insulated cover, manufactured from expanded PPE fully insulating the unit and includes a sliding window to allow the tenant to access the integral heat meter (if installed).

The unit can be fitted with an optional isolation module that allows the DHW and heating circuits to be remotely isolated by the building owner/landlord etc. via a PC with internet access.

Dimensions



Connection	A	B	C
Thread	G $\frac{3}{4}$ B	G $\frac{1}{2}$ B	G1B

D	E	F	Depth inc. Cover	kg
65	450	550	265	16

Technical Specification

Component

Frame:	Painted steel
Front cover:	PPE
Connecting pipework:	Stainless steel
Pump:	UPS 15/60
Electronic controller:	230 V -50 Hz

Materials

Performance

Maximum working pressure:	10 bar - primary 10 bar - secondary
Maximum temperature:	85°C
Medium:	Water

Operation

Heating

The temperature setting operates on the principle of set point regulation and can be fixed within application limits.

Set Point -	Low temperature 25 to 45°C
	Medium temperature 45 to 75°C
	High temperature 45 to 85°C

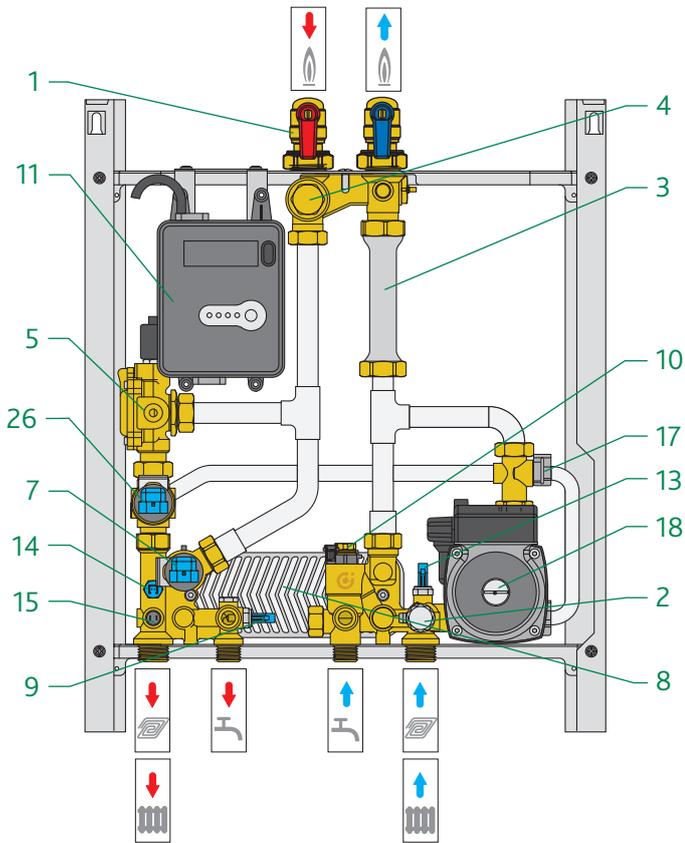
Domestic Hot Water - DHW

The DHW function takes priority over the heating function controlled by the DHW priority flow switch (component 14).

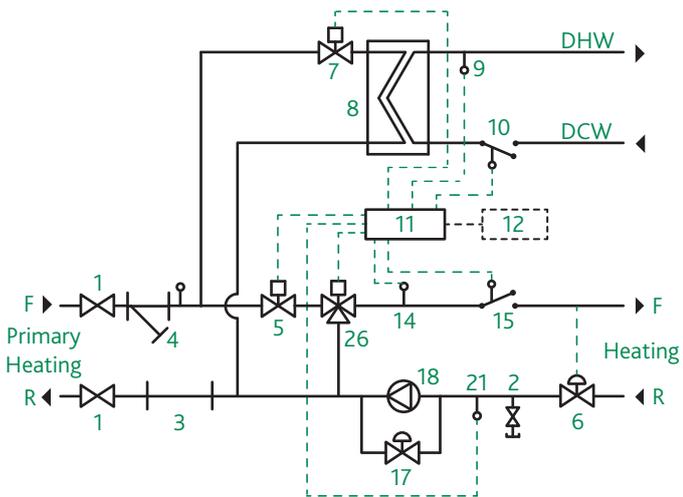
Set Point -	DHW temperature 42 to 60°C
Heat exchanger capacity -	up to 50 kW

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Components



Schematic SATK 20103



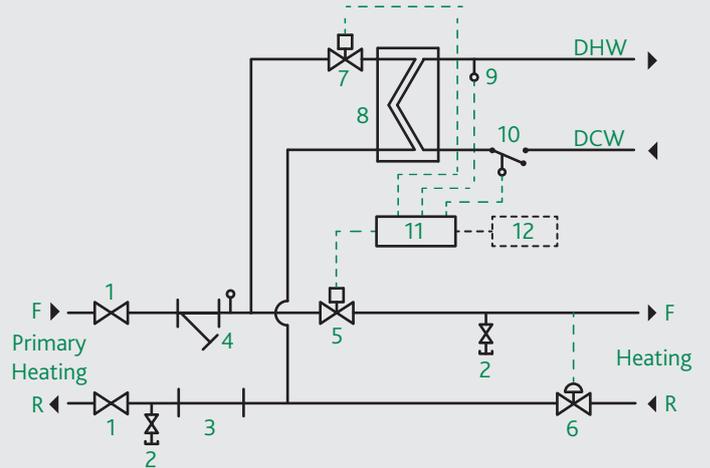
Products

Product Code	Description
SATK 20103	Low temperature
SATK 20203	Medium temperature
SATK 20303	High temperature
SATK 20403	High temperature with pump

Components

Item	Component
1	Primary isolation valve
2	Drain cock
3	Heat meter spool piece - replaced by heat meter when fitted
4	Primary filter and heat meter probe pocket
5	Heating circuit on/off valve
6	Differential pressure control valve (DPCV)*
7	Modulating primary control valve (DHW)
8	Plate heat exchanger (DHW)
9	DHW temperature sensor
10	DHW flow switch
11	Electronic control unit
12	Room controller (not supplied)
14	Heating flow temperature sensor
15	Temperature control stat
17	Pump safety bypass and DP switch
18	Pump
26	Modulating heating control valve
*	Not shown on Components illustration

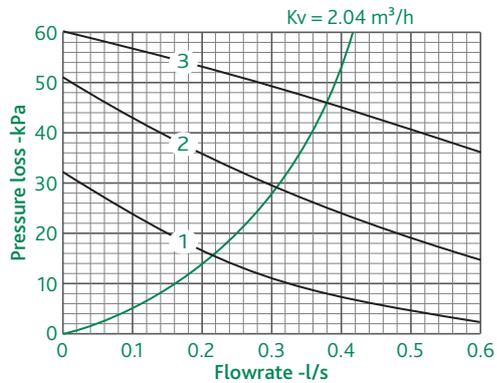
Schematic SATK 20303



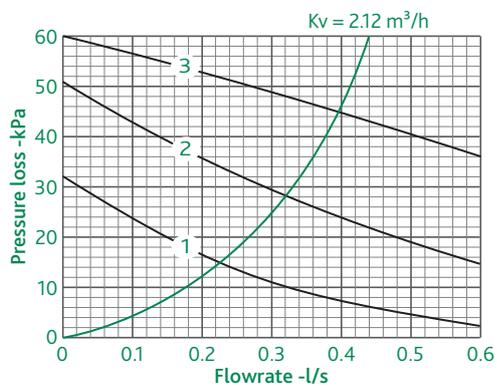
SATK 20 heat interface unit

Hydraulic Characteristics - Heating Function

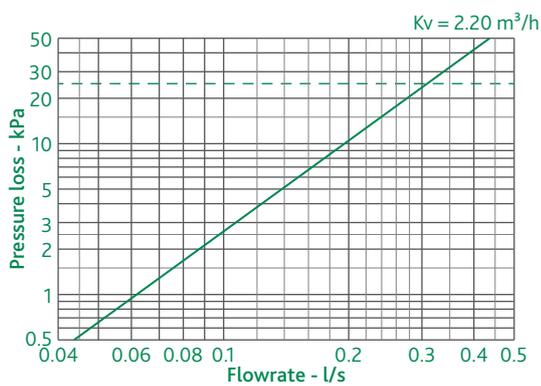
SATK 20103 - low temperature unit - UPS 15-60 pump settings



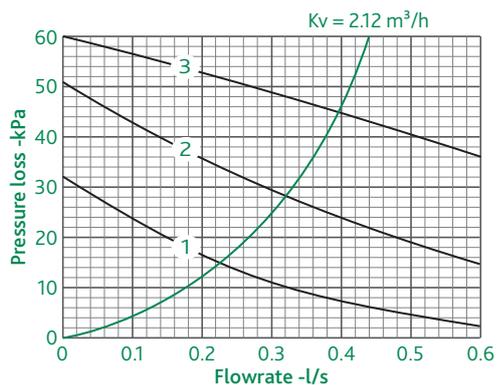
SATK 20203 - medium temperature unit - UPS 15-60 pump settings



SATK 20303 - high temperature unit

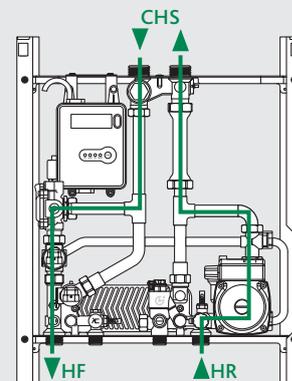


SATK 20403 - high temperature unit - UPS 15-60 pump settings

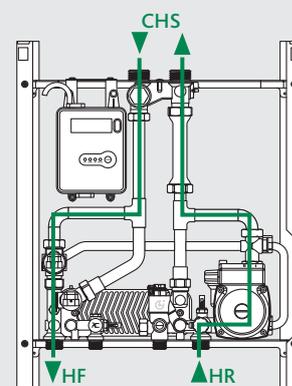


Flow Path

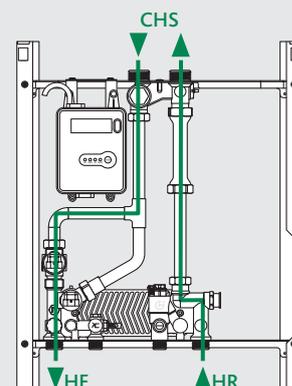
SATK 20103 - low temperature unit



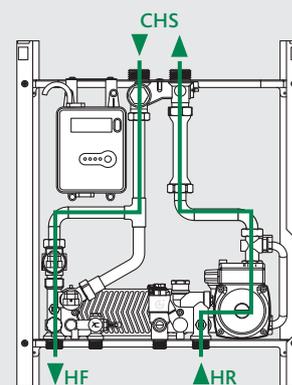
SATK 20203 - medium temperature unit



SATK 20303 - high temperature unit

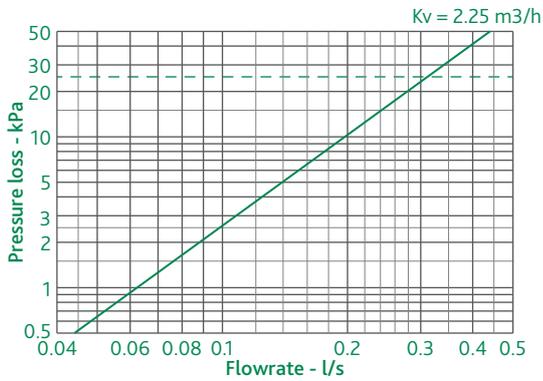


SATK 20403 - high temperature unit

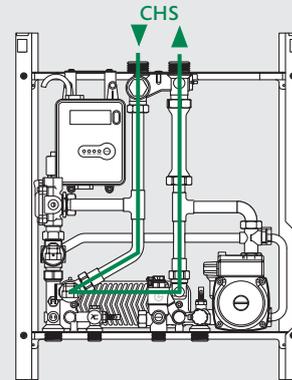


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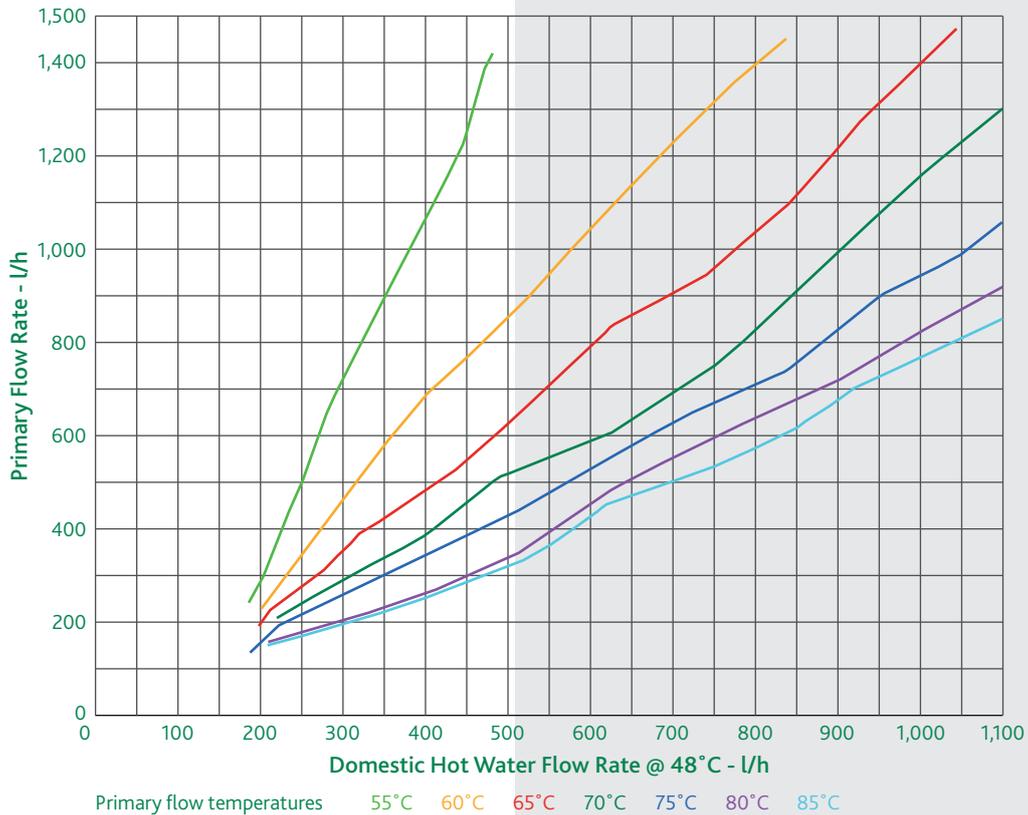
Hydraulic Characteristics DHW - heat exchanger



Flow Path DHW - heat exchanger



Domestic Hot Water Output



E & O.E