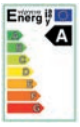
Art. E.623 UK

Description

Module DN25 lowering and controlling fixed point: 30° - 60°C thermostatic temperature, for radiant panel systems, composed of 2 ball valves with thermometer and one way valve, high energy efficiency circulation pump "AlfaMax" with adjustable 6 mt delivery, three way thermostatic valve, allignment spacer and ball valve screw driver adjustment for eventual substitution of pump, manual recharge safety thermostat in case of trouble shooting and insulation shell.
Allows circulation of conducting thermal fluid, coming from the primary circuit, and maintenance of constant set temperature (fixed point) with the help of a mixing valve having a thermostatic element. Finding best use in radiant panel heating.



CIRCULATION PUMP class A energy Coefficient EEI <0.20

Range of products

Arranged for the insertion of a by-pass valve in order to avoid pump over-pressure (Art P.301.03) for power up to 35KW

Art Code	Ø Connections	flow KW
E.623.10	1" F. x 1" M.	3,5
E.623.12	1" F. x 1 1/2" M.	3,5

Characteristics

Working temperature range: 5–90 °C
Max working temperature : 10 bar
Threaded female connections : EN 10226-1
Threaded male connections : ISO 228-1

Wheelbase connections : 125 mm
Pump: Alfamax RS 25/60
Compatible fluids:
water, glycolated solutions(max 50%)

Temperature control range :30-60°C
Factory pre-set : 45 °C
Thermometer scale : 0-120°C

Materials

Extension : brass

T joint:
Brass EN 12165 CW617N

Restaint insertion:
• Body and shutter : POM
• Washer : NBR

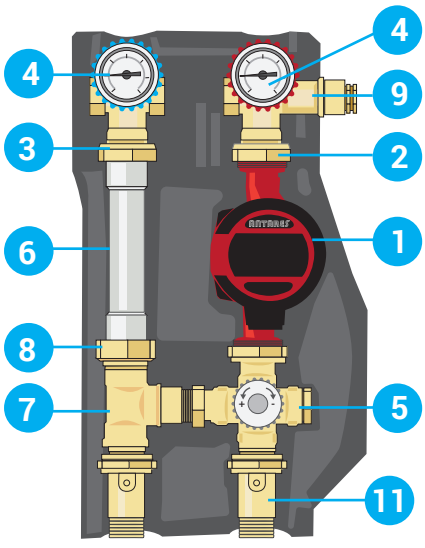
Pump:
• Body : Cast iron
• Feed : 230 V-50/60 Hz
• Protection degree: IP44
• Wheelbase: 180 mm
• Connections: G 1 ½" M (ISO 228-1)

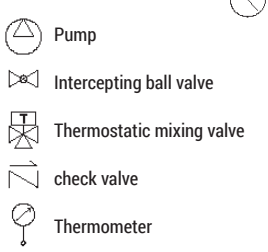
Ball valve:
• Body: brass EN 12165 CW617N
• Washer: PTFE, EPDM, Viton

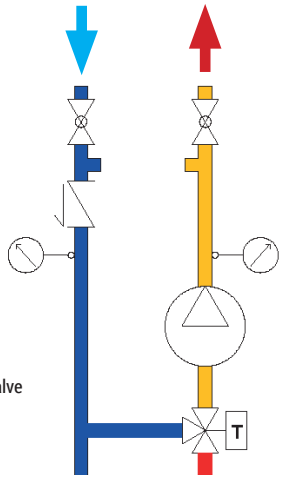
Thermostatic valve:
• Body : brass EN 1982 CB752S (DZR)
• Fitting and cap: brass EN 12165 CW617N
• hydraulic seals EPDM non asbestos
• Spring: stainless steel AISI 302

Insulation:
• Thickness: 80 kg/m3
• Thermal conductivity: 0,049 W/(m·K)

Components







E.623	
1	Pump: Alfamax RS 25/60
2	Intercepting ball valve
3	Intercepting ball valve with check valve
4	Thermometer
5	Thermostatic mixing valve
6	Extension
7	T Joint
8	Insulation
9	Pocket for thermostat bulb
10	Manual reset capillary thermostat 30-70°
11	Ball valve with screw driver adjustment

For instructions on use of the circulator please see specific booklet enclosed.

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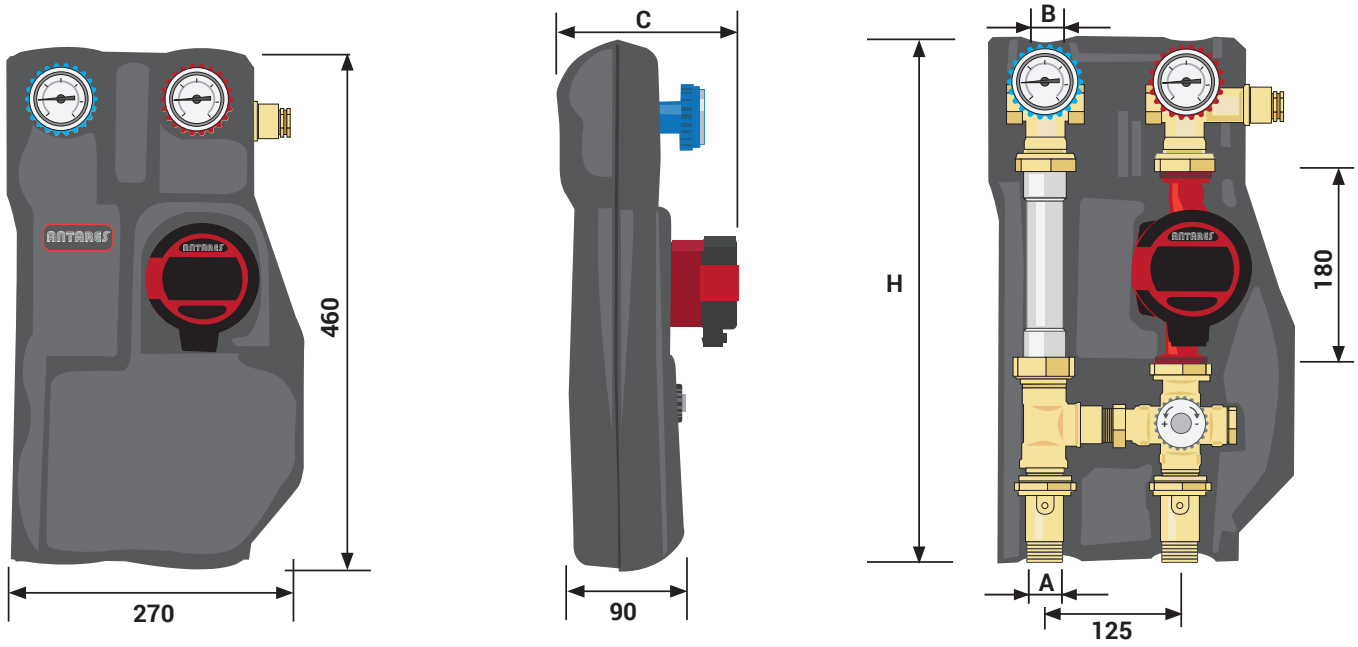
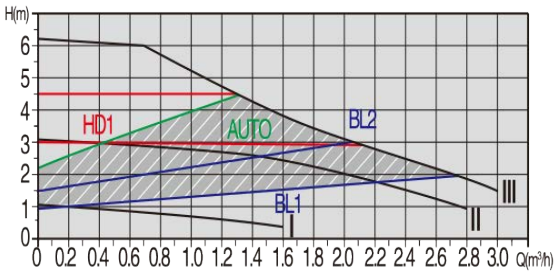
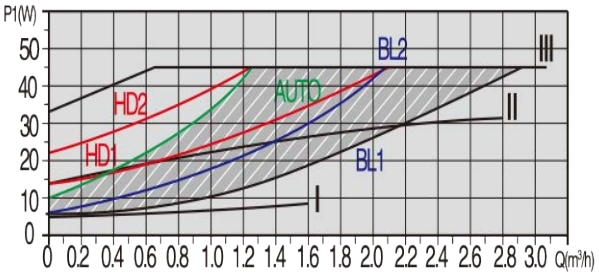
Dimensions

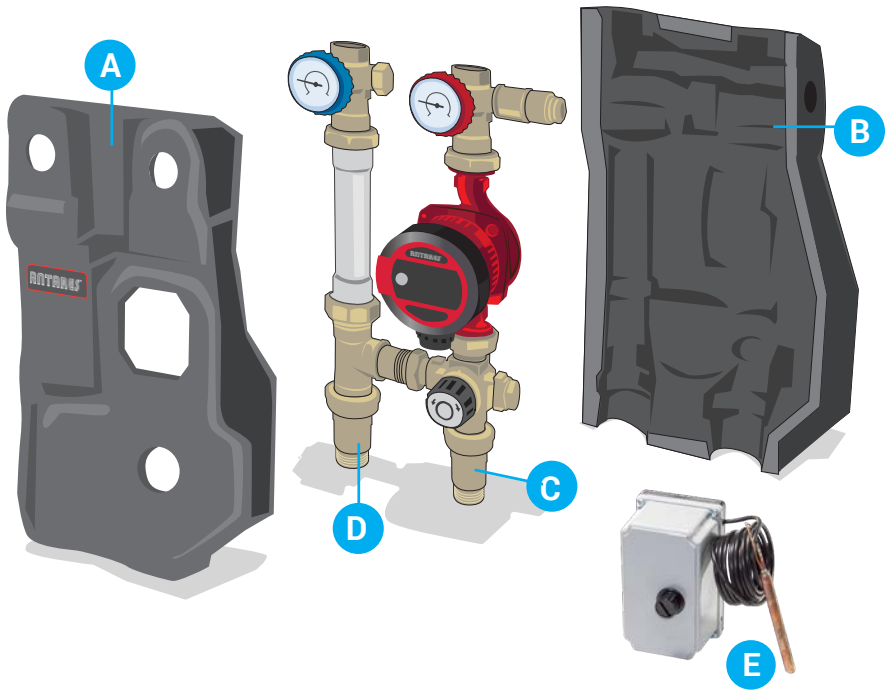


Art Code	P (bar)	A	B	C (mm)	H (mm)	PUMP
E.623.10	10	1" M.	1" F.	180	430	Alfamax RS 25/60
E.623.12	10	1 ½" M.	1" F.	180	430	Alfamax RS 25/60

Delivery and power absorption of pump







The thermostatic control group is composed of:

- Front insulation A
- Rear insultion B
- Flow system C provided with thermostatic mixing valve, intercepting ball valve, thermometer and pump.
- Return system D provided with intercepting ball valve, check valve and thermometer
- Manual reset capillary thermometer E range 30-70°C with switching contact.

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Advantages:

• Energy saving: the front insulation (A) and rear (B) are useful toward the thermal insultion of the group allowing energy saving.

• Safety: the module is equipped with a manual reset capillary thermostat. In case of malfunction and therefore too high a temperature on the flow circuit, to avoid possible damages caused by the circulation of high water temperature, the feed on the pump is interupted. Manual reset allows for human action that will find the cause of the malfunction.

• Compact installation: the wheelbase from 125 mm with the 180 mm pump allow for compact installation.

• Front equipment: all devices like the menu of the pump, the thermometers, interception, and in the mixing groups, the thermostatic valve and servomotor, are up front, allowing rapid function setting and control, and in particular for closely spaced groups.

• By-passable check valve: the groups are equipped with a series of check valves on the return branch on the single block with blue knob. Rotating the blue knobat 45°, one excludes the check function, allowing water flow in both directions, speeding filling up the system. The mixing groups have the T connected to the mixing valve prepared for the insertion of another removable check device.

• Rapid pump substitution: the circulators can be substituted quickly without completely removing the rear part of the insulation.

• Flat seals: the various components are connected with each other across flat air tight sealed fittings. This makes installment faster avoiding the use of hemp and other sealants.

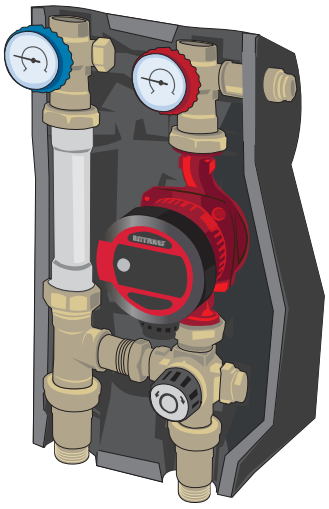
• Access and adjustment to covers: insulation is studied to allow neccessary space to manouver all covers, with appropriate hexagonal clef, without having to remove. This proves particularly easy especially in wall installments where insulation leans on the wall or when pipework passes behind.

Installation

Possible installations of the group is:

• Wall installment
• Installment on manifold

The group can be installed on distribution manifolds with incorporated hydraulic separator, on standard manifolds with separate installment of hydraulic separator, on manifolds connected with storage.

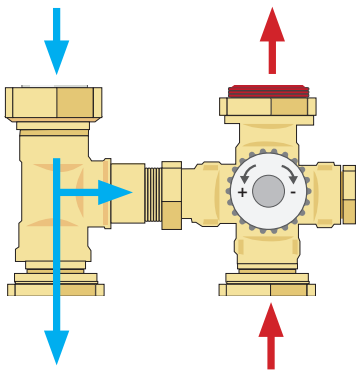


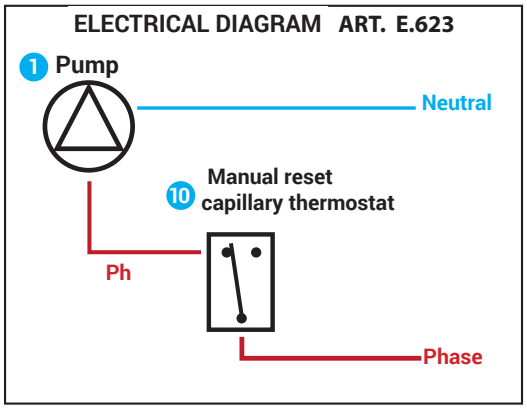
Art. E.700

Setting the thermostatic valve

The thermostatic mixing valve maintains constant water temperature flowing to the system. The setting at fixed point is obtained by a thermostatic sensor that moves thanks to the thermal expansion of the wax within. The thermostatic sensor incorporated in the valve allows for major reliability and precision as opposed to the thermostatics with external capillary tube.

The knob is equiped with an anti tampering system that makes rotation difficult, preventing involontary variations on setting. The mechanism is disactivated loosening the locking screws.





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FIRST START-UP OF THE SYSTEM. The fixed point mixing temperature can be set with the knob before installing the group or, after having installed, soley ON COLD SYSTEM.

1) The numerical scale on the knob of the valve corrisponds to the temperature values indicated in the table.

2) With a screw driver slightly loosen the locking screws, holding the knob with yourhand.

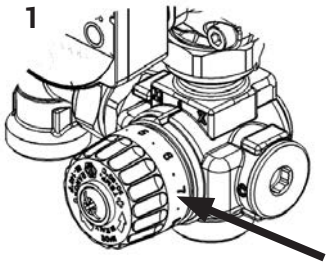
3) Set a temperature value of mixed water slightly lower than that designed. Activate the generator and wait to reach working temperature designed (superior to valve set) Activate the group pump. Wait for mixing temperature to settle controlling the flow manometer.

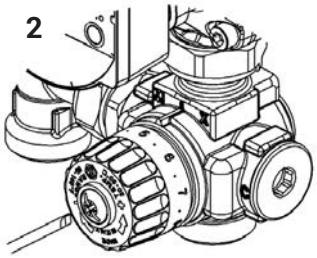
4) Slowly rotate anticlockwise the knob towards rising temperatures and always wait for temperature to settle checking on the flow manometer. Proceed until your each the flow temperature of mixed water as designed. Once desired temperature is reached, close the locking screws holding the knob with your hand.

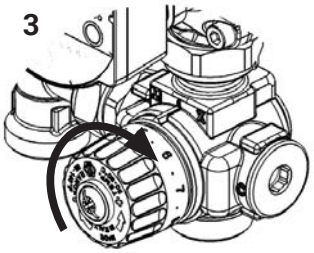
NEXT SETTING If at another time should it be neccessary change set valve preceed as follows:

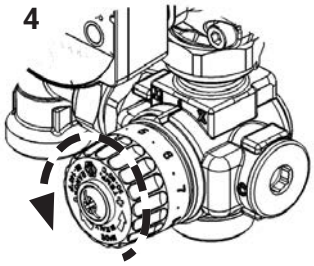
Situation n. 1 : temperature inferior to actual setting. Let the system cool at least until the return temperature is inferior to the new to be set on the valve. Follow points 1,2,3,4 and 5.

Situation n. 2 : temperature superior to actual setting. In this case the rearrangement can be done whilst the system is already active, as well as cool. Follow points 1,2,4 and 5.









Plant schemes