SITGroup

610 AC3

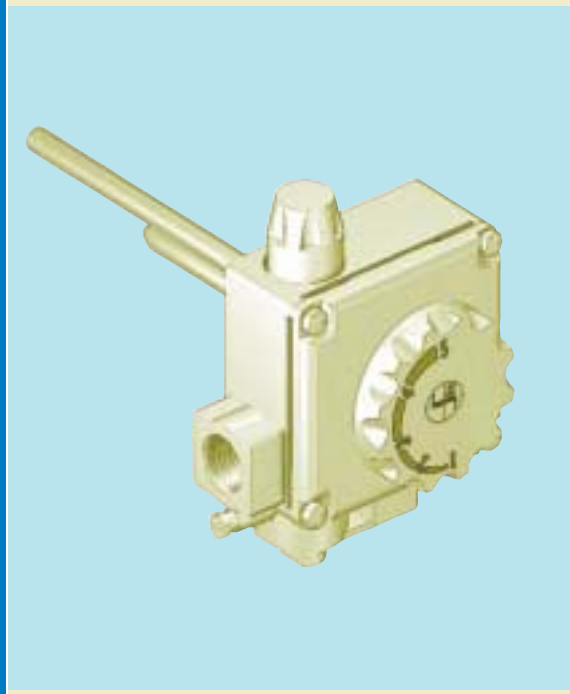
MULTIFUNCTIONAL GAS CONTROL

CONTROL KNOB (OFF, PILOT, ON)

TEMPERATURE SELECTION KNOB
ON-OFF REGULATING THERMOSTAT

9.955.741 01 (08)

THERMOSTATIC MULTIFUNCTIONAL CONTROL



610 AC3 is specifically designed for use with gas water storage heaters.

Multifunctional safety control with thermoelectric flame failure device, pressure adjuster with override device and on-off thermostat.
No external electric power supply required.

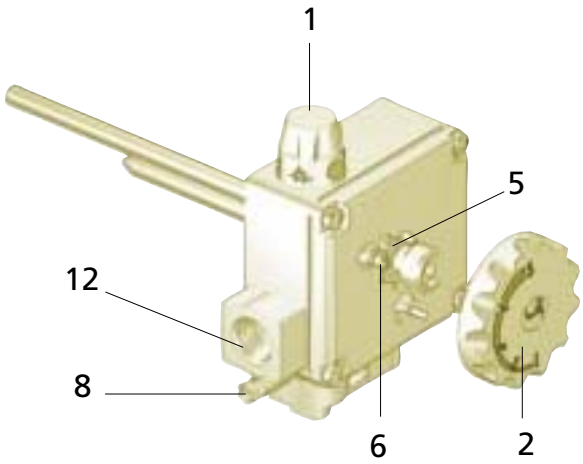
MAIN FEATURES

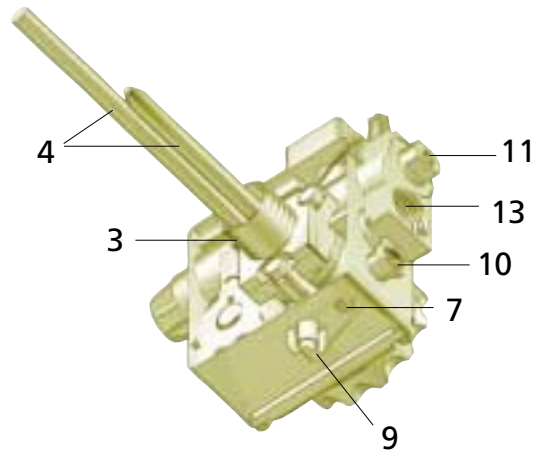
Three-position control knob: off, pilot, on.
Temperature selection knob.
Thermoelectric flame failure device.
Pressure adjuster with override device.
On-off type thermostat.
Resettable safety thermostat.
Pilot outlet with gas flow preselection screw.
Inlet and pilot filters.
Inlet and outlet pressure test points.

Data refer to EN 126

DESCRIPTION

1 Control knob (off, pilot, on)
2 Temperature selection knob
3 Water connection
4 Adjustment and safety thermostat bulbs
5 Outlet pressure adjustment screw (P.R. ADJ.)
6 Pressure adjuster override screw (NO P.R.)
7 Adjustment screw for gas flow to the pilot
8 Inlet pressure test point
9 Outlet pressure test point
10 Pilot outlet
11 Thermocouple connection
12 Gas inlet
13 Gas outlet





TECHNICAL DATA

• Gas connections:	Rp 1/2 ISO 7 (0.75-18 UNS 2B on request)
• Water connections:	Rc 3/4 ISO 7 (3/4 NPT on request)
• Installation position:	any position
• Gas families:	I,II and III
• Maximum gas inlet pressure:	50 mbar
• Outlet pressure range:	3-18 mbar
• Working temperature range:	0-80° C
• Pressure regulator:	Class C

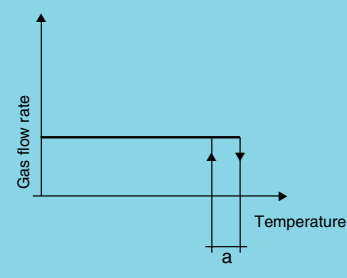
THERMOSTAT

Termostat range	Differential (a)
30-70°C	< 14°C
35-75°C	< 14°C
40-80°C	< 14°C

On request: differential (a) < 11°C

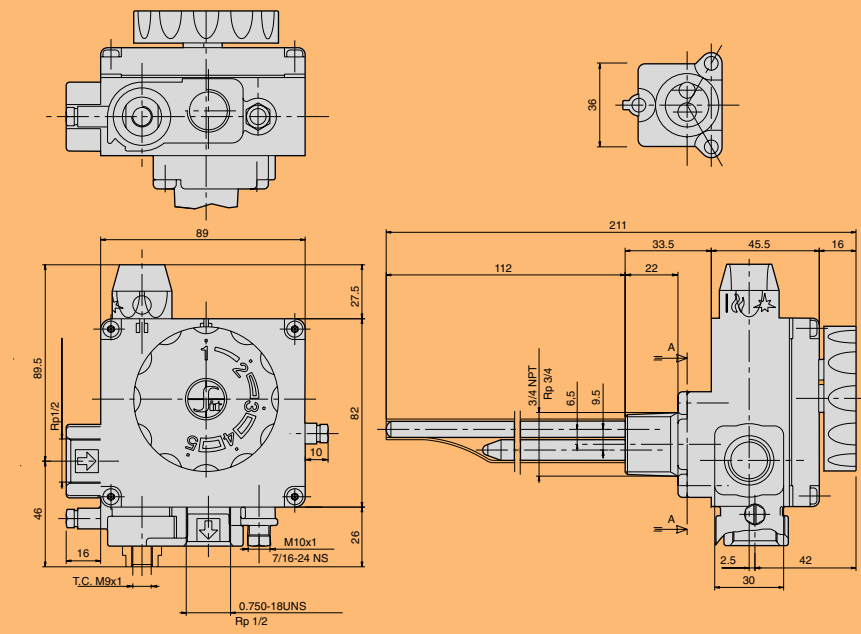
SAFETY THERMOSTAT

Set-point	Differential (a)
92°C	<30°C

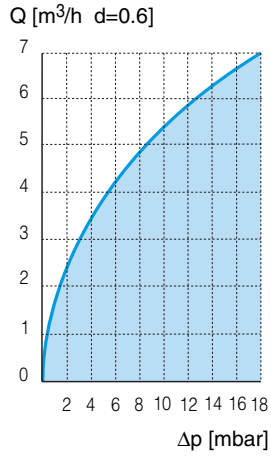


Data refer to EN 126

DIMENSIONS



FLOW RATE AS FUNCTION OF PRESSURE DROP



		Standard	
I	Family (d = 0.45)	Q = 4.3 m^3/h	Δp = 5 mbar
II	Family (d = 0.6)	Q = 3.7 m^3/h	Δp = 5 mbar
III	Family (d = 1.7)	Q = 4.6 kg/h	Δp = 5 mbar

Ignition

Depress and turn the control knob to the pilot position ✸ .
Depress the button and ignite the pilot flame while keeping the knob fully depressed for a few seconds (fig. 1).
Release the knob and check that the pilot flame stays lit. If it goes out, repeat the ignition operation.

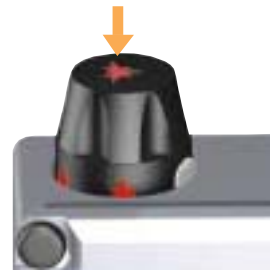


fig. 1

Main burner ignition

Depress and turn the control knob to the position corresponding to symbol ❙ . On release, the knob returns to the ON position 🔥 . Turn the temperature selection knob to the point corresponding to the desired temperature (fig. 3).

fig. 2

Pilot position

To close the main burner and keep the pilot flame on, depress and turn the control knob to the pilot position ✸ (fig. 1).

fig. 3

Shutdown

Turn the control knob to the OFF position ● (fig. 4).

CAUTION: after shutting down, wait at least two minutes before re-igniting so as to allow the flame failure device to return to the safety position.

fig. 4

INSTALLATION

Main gas connection

The connection is made using gas pipes with Rp 1/2 ISO 7 threading (the valve is available with 0.75-18 UNS 2B outlet on request). Torque: 25 Nm.

Water connection

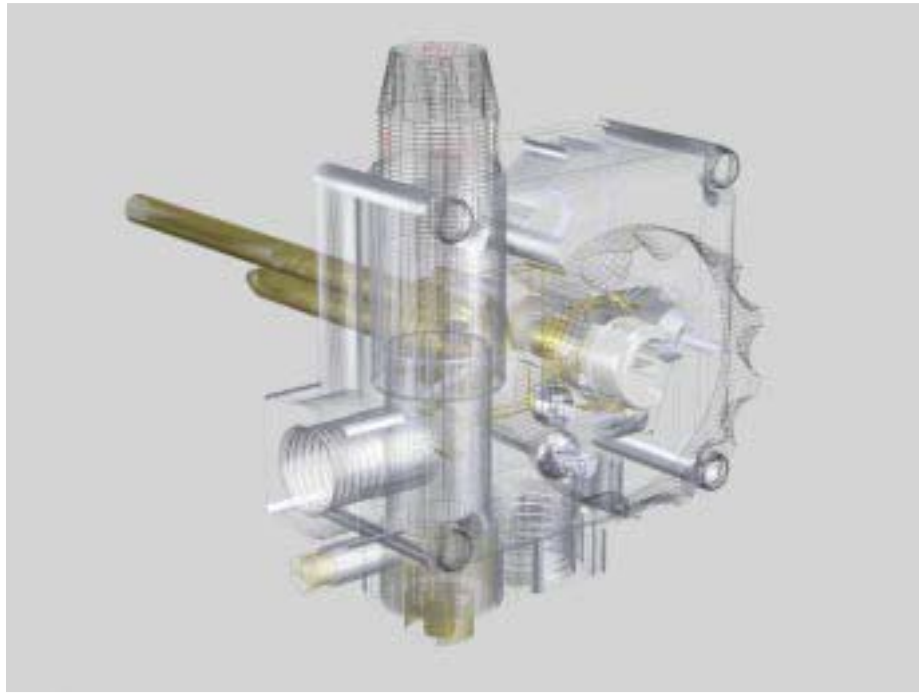
The connection flange threading is Rc 3/4 ISO 7 (3/4 NPT on request).

Connection to the pilot burner

Pipes with a 4 mm, 6 mm or 1/4 diameter can be used. Use a nut and olive of appropriate dimensions. Tighten to 7 Nm torque.

Thermocouple connection

Connect the thermocouple to the magnet unit, checking that the fixing connection is properly dimensioned. Torque: 3 Nm.
After making the gas connections, check tightness and that the appliance is operating properly.



Adjusting the outlet pressure

This adjustment must be made with the thermostat bulb cold and the knob in position 5.

Take off the temperature adjustment knob (A). Check that the pressure adjustment override screw (NO P.R.) is screwed out completely. Screw in the screw (P.R. ADJ.) to increase the outlet pressure or screw it out to reduce it.

Overriding the pressure adjuster

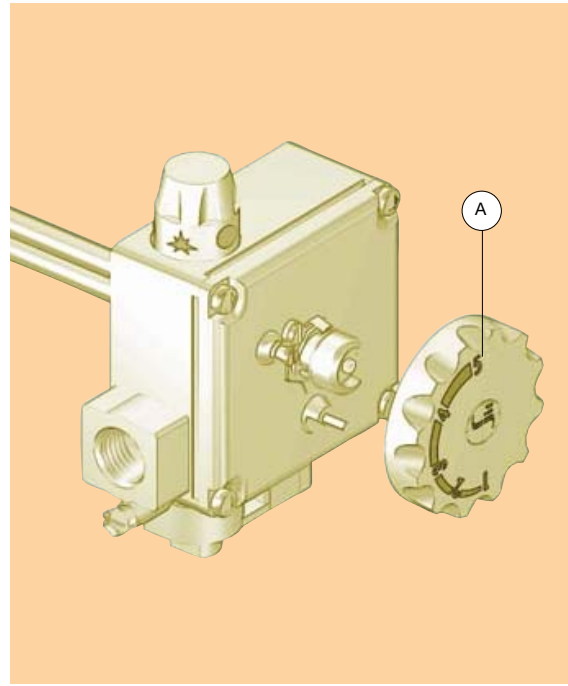
Screw the screw (NO P.R.) fully in.

Adjusting the gas flow rate to the pilot

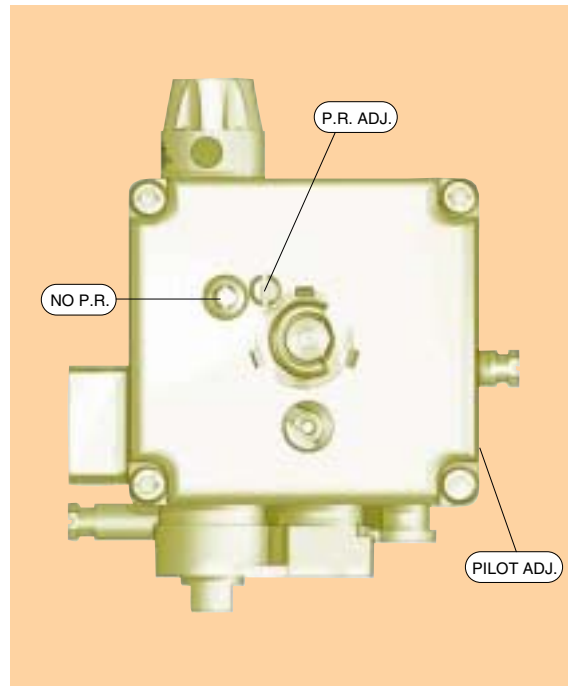
Screw in the screw (PILOT ADJ.) to reduce the flow, or screw it out to increase it. To put the pilot gas flow adjuster out of service, fully screw in the screw (PILOT ADJ.) and then screw it back two complete turns.

IMPORTANT

At the end of all setting and adjustment operations, check gas tightness and that the appliance is operating properly.



Taking off temperature adjustment knob

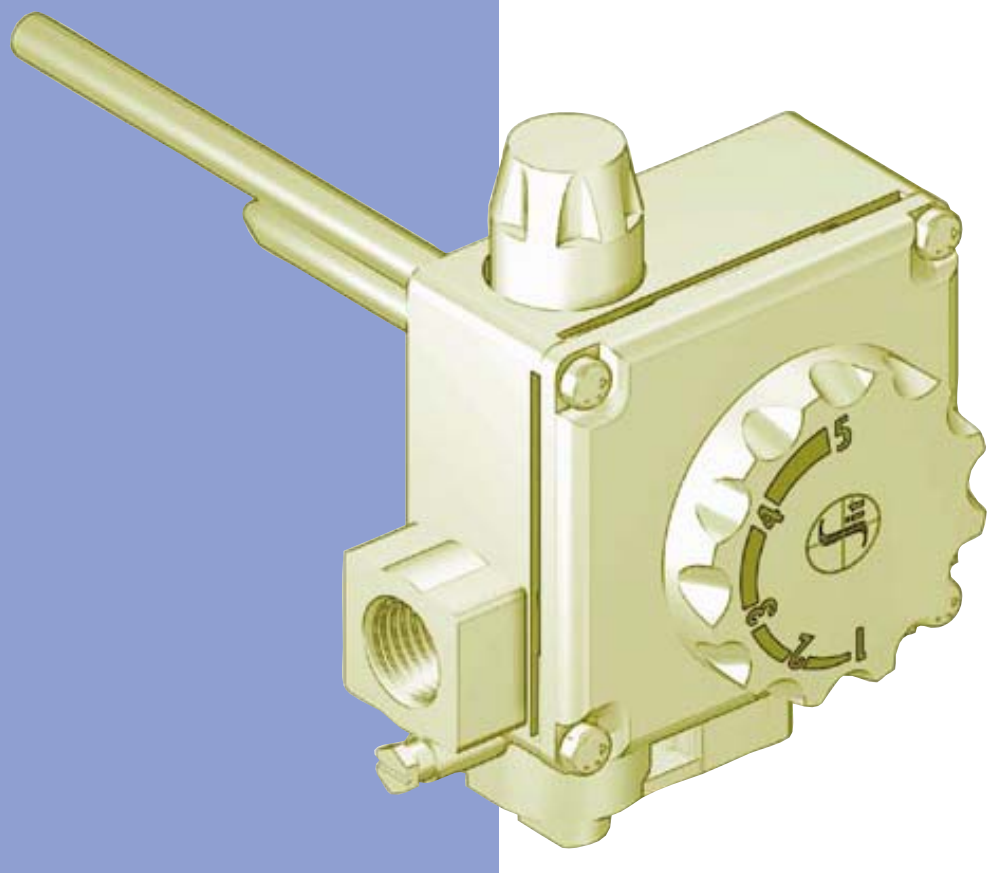


Adjusting the outlet pressure and the flow rate to the pilot

Implement the provisions in the Use and Maintenance manual - code 9.956.610 - for installation, adjustment and use

610 AC3

Multifunctional control with on-off thermostat and temperature control knob, for gas water storage heaters.



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