



SIT Group

# 660 BABYSIT

MULTIFUNCTIONAL GAS CONTROL



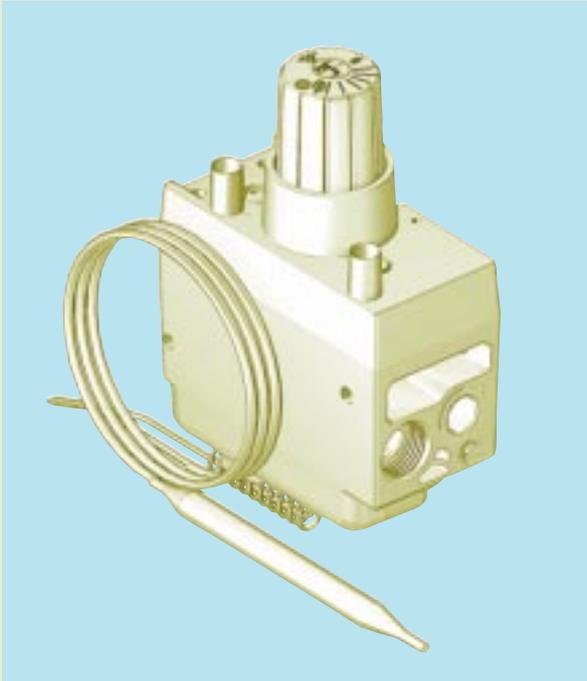
**SINGLE-KNOB CONTROL  
(TEMPERATURE ADJUSTMENT, PILOT, OFF)**

**CONTINUOUS MODULATING THERMOSTAT**

**THERMOELECTRIC SAFETY DEVICE**



## MULTIFUNCTIONAL THERMOSTATIC CONTROL



**Single-knob multifunctional control, with thermoelectric safety device and: interlock to prevent improper operation available, pressure adjuster and continuous modulating thermostat. No external electric power supply required.**

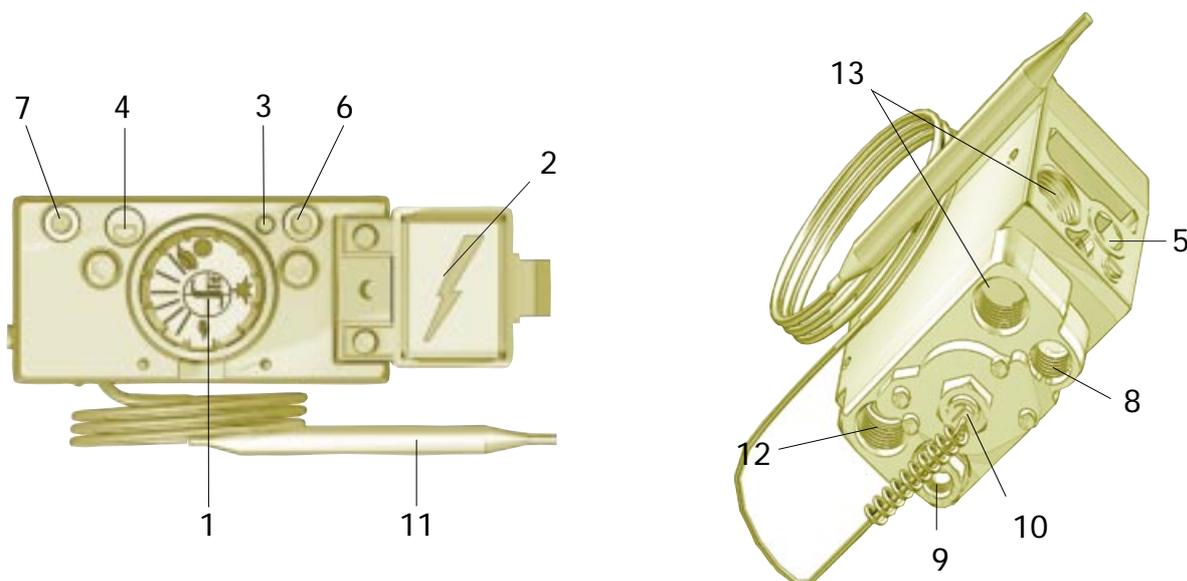
*660 BABYSIT is suitable for use with heaters,  
large stoves and small gas boilers  
(for the home, caravan, etc.).*

### MAIN FEATURES

- 3-position control knob: temperature adjustment, pilot, off.
  - Thermostat with continuous modulating action.
  - Maximum flow adjustment screw (on request).
  - Minimum flow adjustment screw.
  - Ignition enabling device; ignition possible only with the knob in the pilot position (on request).
  - Adjuster for gas flow to the pilot burner (on request).
  - Shutdown device with interlock device to prevent improper operation (on request).
  - Inlet and outlet pressure test points (on request).
  - Piezo-electric igniter (on request).
  - Inlet filters.
  - Pilot filter (on request).
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## DESCRIPTION

- |   |   |
|---|---|
| 1 Control and temperature selection knob                  | 7 Outlet pressure test point (on request) |
| 2 Piezoelectric ignition button (on request)              | 8 Pilot outlet                            |
| 3 Maximum flow adjustment screw                           | 9 Thermocouple connection                 |
| 4 Minimum flow adjustment screw                           | 10 Thermostat bulb connection             |
| 5 Adjustment screw for gas flow to the pilot (on request) | 11 Thermostat bulb                        |
| 6 Inlet pressure test point (on request)                  | 12 Gas inlet                              |
|   | 13 Alternative gas outlet                 |



## TECHNICAL DATA

- Gas connections:
- Installation position:
- Gas families:
- Maximum gas inlet pressure:
- Working temperature range:

Rp 3/8 ISO 7  
any position  
I, II and III  
50 mbar  
0 - 80°C

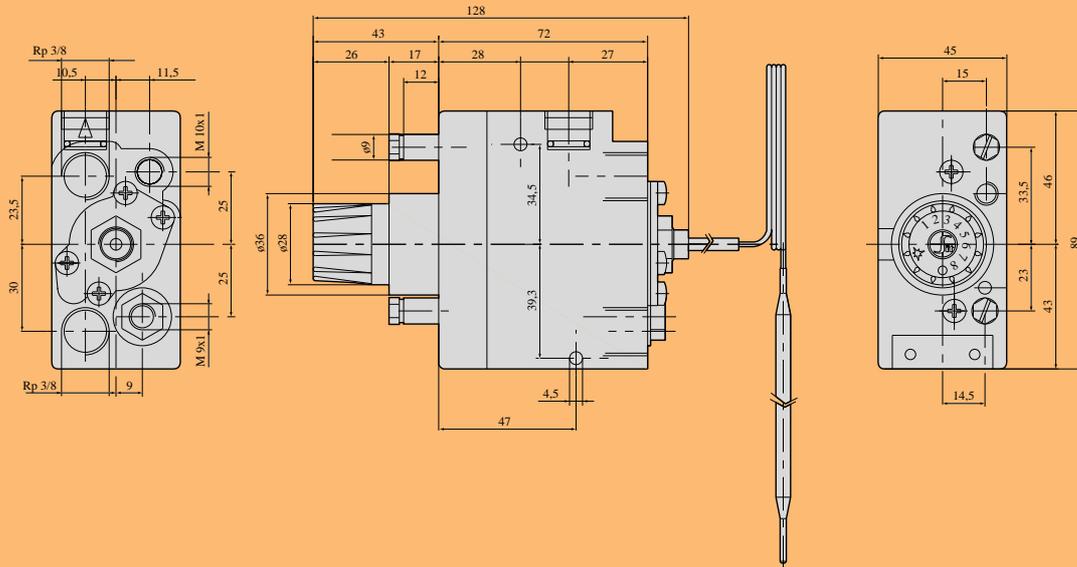
Thermostat range  
18-38 °C  
30-90 °C  
75-315 °C

*Other ranges are available on request*



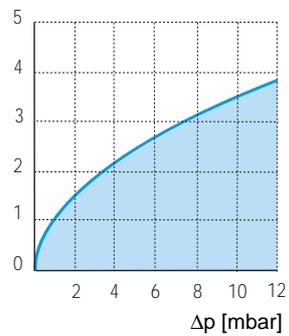
Data refer to EN 126

## DIMENSIONS



## FLOW RATE AS A FUNCTION OF PRESSURE DROP

$Q$  [ $m^3/h$   $d=0.6$ ]



I Family ( $d = 0.45$ )	$Q = 2.7\ m^3/h$	$\Delta p = 5\ mbar$
II Family ( $d = 0.6$ )	$Q = 2.4\ m^3/h$	$\Delta p = 5\ mbar$
III Family ( $d = 1.7$ )	$Q = 3.0\ kg/h$	$\Delta p = 5\ mbar$

## **Ignition**

Turn the knob to the pilot position .

Depress the knob and ignite the pilot flame, keeping the pilot flame fully depressed for a few seconds (fig. 1). In versions with a piezoelectric igniter, ignition is carried out by depressing the button  while the knob is depressed. Release the knob and check that the pilot flame stays on. If it goes out, repeat the ignition operations.



fig. 1

## **Normal operation**

Turn the knob to the desired temperature (fig. 2). The maximum temperature is obtained with the knob turned fully anticlockwise.

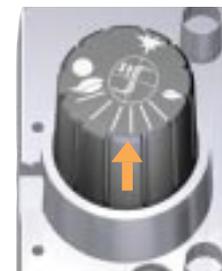


fig. 2

## **Pilot position**

To turn off the main burner and keep the pilot burner on, turn the knob clockwise to the pilot position .

## **Shutdown**

Turn the knob to the OFF position  (fig. 3).



fig. 3

## **Versions with ignition interlock**

In these versions: the piezoelectric igniter only generates sparks when the control knob is in the pilot position  and is fully depressed. If the control knob is in any other position, the ignition interlock interrupts the electrical circuit to the plug and prevents sparking. Improper ignition operations are therefore impossible.

**ATTENTION:** the restart interlock prevents re-ignition of the appliance until the flame failure device has cut off the gas flow. At the end of this period (after closure of the magnet unit) the ignition operation can be carried out once again.

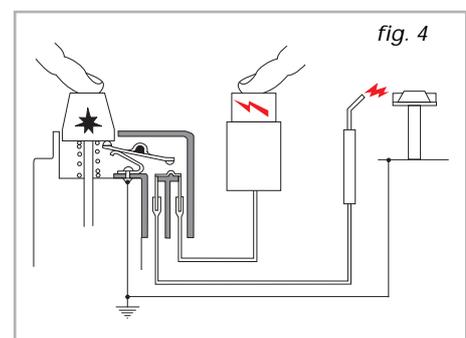


fig. 4

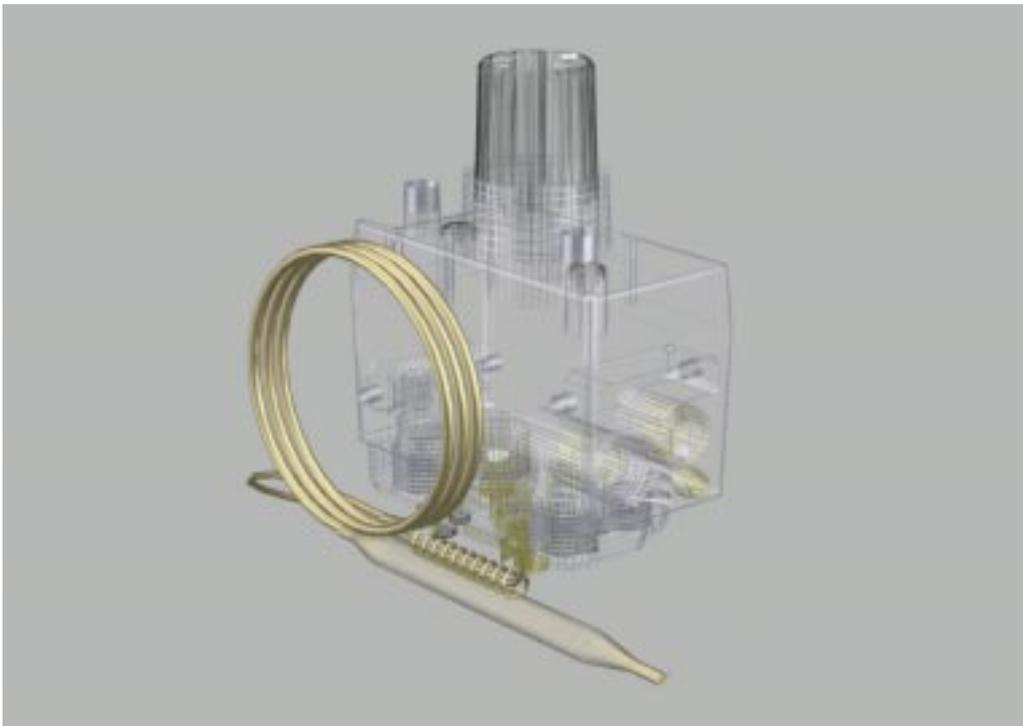
## INSTALLATION

### ***Main gas connection***

The connection should be made using gas pipes with Rp 3/8 ISO 7 threading. Torque: 25 Nm. Alternatively, it is possible to use nut and olive connections for Ø 12 mm pipes. Torque: 15 Nm. The multifunctional control is provided with one main gas inlet and two outlets. It is therefore necessary to close the outlet which is not used, by screwing the plug provided fully in. Torque: 7 Nm.

### ***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.



### **Setting the thermostat**

The thermostat is set and sealed in the factory.

### **Adjusting the minimum flow**

Screw in the screw (MIN) to reduce the flow; screw it out to increase it.

Minimum flow adjustment screws with calibrated holes are available; these screws must be screwed fully in and sealed.

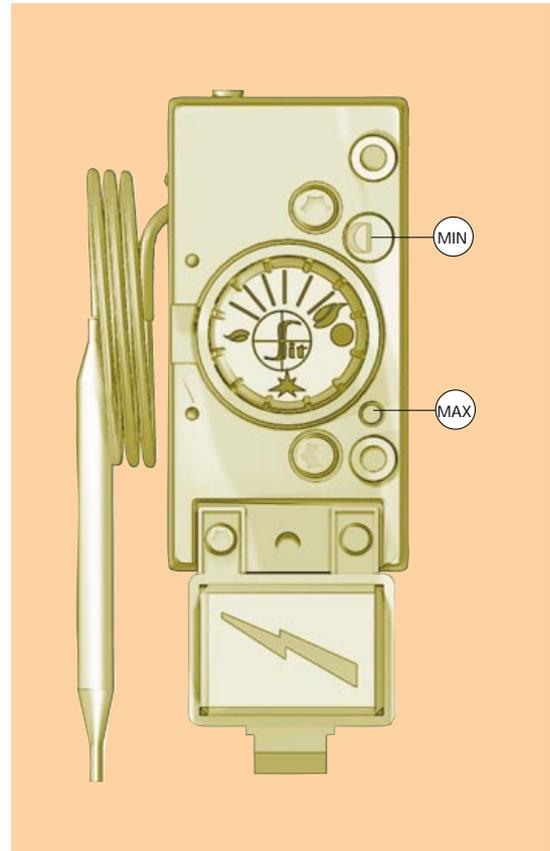
### **Adjusting the maximum flow**

Screw in the screw (MAX) to reduce the flow; screw it out to increase it.

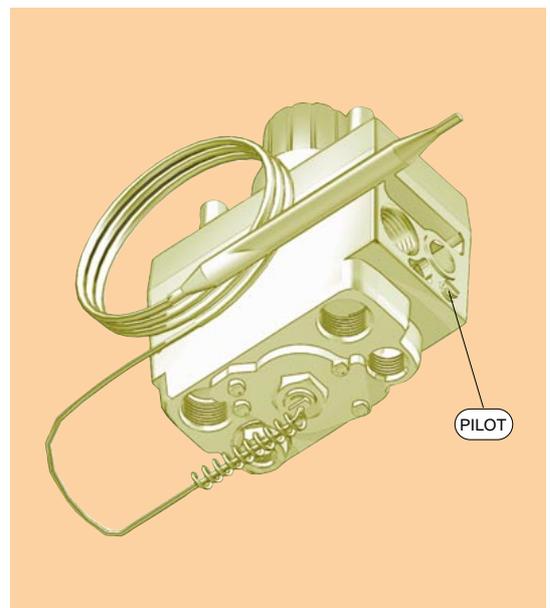
The maximum flow adjuster must be overridden by screwing out the screw (MAX) until it stops.

### **Adjustment of the gas flow to the pilot**

Screw in the provided screw (PILOT) to reduce the flow and screw it out to increase. To override gas flow adjustment to the pilot, fully screw in the adjustment screw and then screw it out two complete turns.



*Adjustment of minimum and maximum gas flow*



*Adjustment of gas flow to the pilot*

Implement the provisions in the Use and Maintenance manual - code 9.956.660 - for installation, adjustment and use

# 660 BABYSIT



Single-knob multi-functional control with continuous modulating thermostat for small gas appliances without external electric power supply.

