



SIT Group

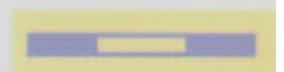
630 EUROSIT

MULTIFUNCTIONAL GAS CONTROL

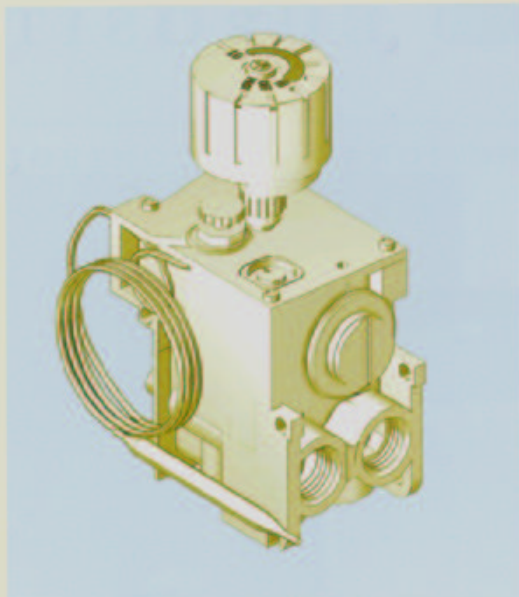


**SINGLE-KNOB CONTROL
(TEMPERATURE ADJUSTMENT, PILOT, OFF)**

**COMBINED MODULATING-SNAP ACTION
ON/OFF THERMOSTAT AT LOW SETTING**



MULTIFUNCTIONAL THERMOSTATIC CONTROL



Single-knob multifunctional control with thermoelectric safety device and: interlock device to prevent improper operation, pressure regulator and combined modulating-ON/OFF thermostat. No external power supply required.

630 EUROSIT is suitable for use with space heaters, convectors, storage water heaters, boilers, catering equipment and all gas appliances requiring temperature control.

MAIN FEATURES

Manually operated gas valve. (Single knob operation)
Thermoelectric flame failure device.
Snap acting ON/OFF and modulating thermostat. (Optional)
Latching device (Interlok) which prevents incorrect ignition operation.
Pilot outlet suitable for 3/16" or 1/4" tubing.
Pilot flame adjustment.
Inlet and pilot filter.
3/8" NPT threaded gas inlets and outlets.
Inlet/Outlet pressure test ports.
Remote adaptor. (Optional)
Pressure regulator. (Optional)

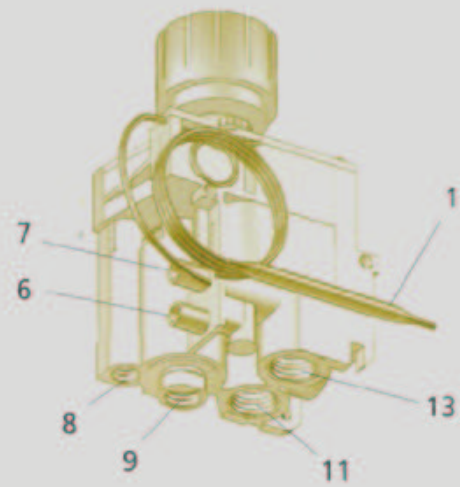
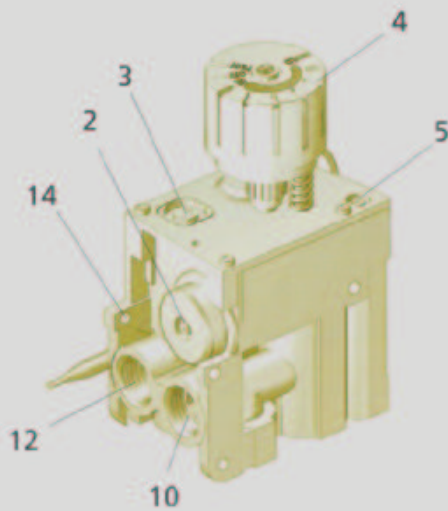
ACCESSORIES

Main accessories available upon request:

- cover
- cover with piezoelectric ignitor
- pilot shear off nut and olive
- remote adaptor
- cables for piezoelectric ignitor
- threaded plugs to close inlets and outlets which are not used

DESCRIPTION

- | | |
|--|--|
| <ul style="list-style-type: none"> 1 Temperature sensing bulb 2 Outlet pressure adjustment screw
(Version with pressure regulator) 3 Minimum rate screw 4 Temperature setting knob 5 Pilot adjustment screw | <ul style="list-style-type: none"> 6 Inlet pressure test point 7 Outlet pressure test point 8 Pilot outlet 9 Thermocouple connection 10-11 Gas inlet 12-13 Gas Outlet 14 Mounting holes |
|--|--|



TECHNICAL DATA

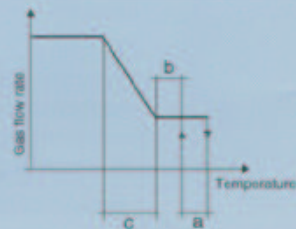
- Gas connections:
- Mounting position:
- Gas types:
- Maximum inlet pressure:
- Outlet pressure setting range:
- Working temperature range:

3/8" NPT X 3/8" NPT
 Multipoise
 NG and LPG
 1/2 PSIG
 3.5" to 8.0" W.C. NG (8.0"-12.0" LPG)
 32 °F - 175 °F.

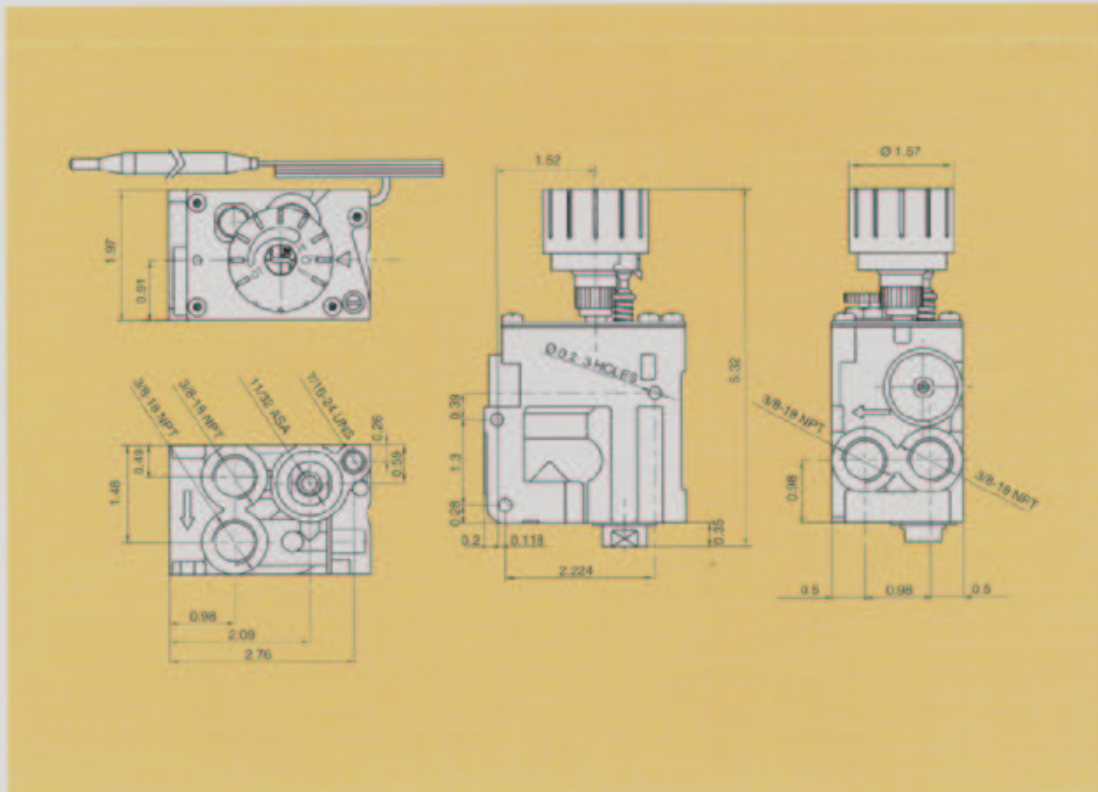
Thermostat FEATURES

Thermostat range	a	b	c
55-100 °F	2.7	2.7	1.8
55-118 °F	4.5	4.5	2.7

Other ranges are available on request



DIMENSIONS



CAPACITY

Capacity [BTU/hr]

	NG No Pressure Regulator	NG Pressure Regulator
	55,000	40,000

The above capacities are based on Natural gas having a heating value of 1,000 BTU per cu. ft., and a specific gravity of 0.84 at a pressure drop of 1" W.C.

For Propane, (Liquefied Petroleum Gas), multiply by 1.62.

Pilot flow rate 2.5 "Ft³ /hr at 0.5" Pressure Drop

OPERATION

Start up procedure

Turn knob to the OFF position; wait 5 minutes, turn knob until it stops in the pilot position (PILOT) (fig. 1). Depress knob and light the pilot, keeping the knob depressed for about 60 seconds. Release the knob and check that the pilot flame stays on. If it goes out, repeat the ignition operations.



fig. 1

Temperature setting

Turn the knob to the desired temperature setting. The maximum temperature is obtained with the knob turned fully counter-clockwise (HI position) (fig. 2).

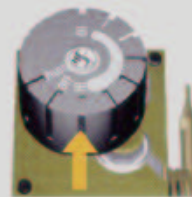


fig. 2

Temporary shut-down procedure

To turn off the main burner only, turn the knob clockwise to the pilot position (PILOT).

Complete shut-down procedure

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

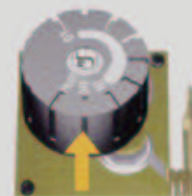


fig. 3

WARNING:

This control has an interlock device; after shutting off all gas flow, relighting of the pilot burner can not occur until the thermocouple has cooled; allowing the electromagnet to be released (approx. 60 seconds).

The gas control knob is designed to be used by hand. DO NOT use any tools during this operation. Damaged knobs may result in serious injury.

REGULATOR CHARACTERISTICS

Range	Minimum Regulated Capacity (BTU/hr.)	Maximum Regulated Capacity (BTU/hr.)
NG 3.5"-8.0" W.C.	10.000	40.000



INSTALLATION

630 EUROSIT valves conform to all current safety standards. All operations of installation, calibration, or regulation must be undertaken exclusively by qualified personnel following the instructions specified in this catalog and those in the instruction manual of the appliance in which this valve is installed. Any other operation should be avoided.

WARNING

This control is not field serviceable, all adjustments must be done in the O.E.M. factory.

Mechanical connections

General recommendations: do not tamper with sealed parts. Do not loosen assembly screws. Do not remove labels. Avoid shocks to the valve (impact, falls, etc.) Remove inlet/outlet dust caps only at the time of installation. Do not exceed recommended torque values. Ensure that gas flow follows arrows on the valve body. Prevent foreign matter from entering the valve during mounting. In particular, check that the inlet/outlet pipes are clean. Mounting of Eurosit is to be done using the three mounting holes.

Main gas connection

The connection must be made using properly reamed pipes with 3/8" NPT thread. Apply a moderate amount of a good quality pipe dope and apply 23 Lb./Ft. of torque. The multi-functional control is provided with two main inlets and outlets. It is therefore necessary to close the inlet and outlet which are not used, by screwing the provided plug fully in. Torque 5.2 Lb./Ft.. Do not overtorque as this could cause distortion of pipe, leakage, and or malfunction of control.

Pilot gas connection

Connect pilot gas tubing using proper 1/4" or 3/16" shear off nut and olive. Tighten finger tight, plus one turn with a wrench to assure a good seal.

Thermocouple connection

Insert threaded end of thermocouple into control. Tighten the fixing nut finger tight, plus 1/4 turn with a wrench to assure a good electrical connection.

Testing

After all connections have been made, check all seals and gas connections for leaks, then set the appliance into operation to assure it is functioning correctly.

SETTINGS AND ADJUSTMENTS

Pressure readings

Inlet pressure can be checked by turning captured screw (6) counterclockwise 2 or 3 turns then placing tube from gauge over test point. Outlet can be checked in the same manner as above, except by using captured screw (7). Warning: After taking pressure readings, be sure to turn captured screws clockwise firmly to reseal. Do not overtorque.

Setting the thermostat

The thermostat (1) is set and sealed at the factory.

Gas flow

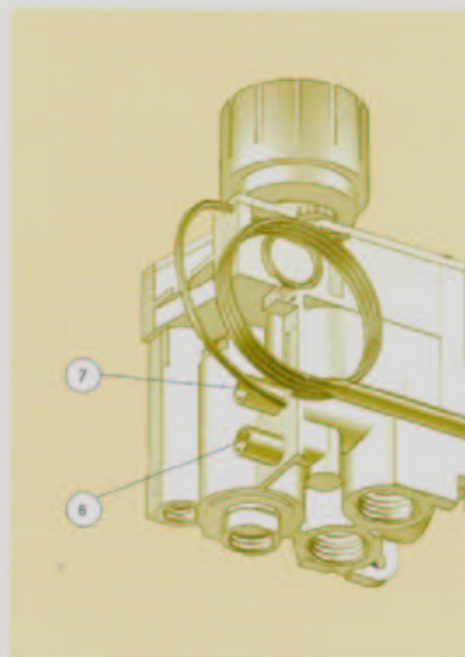
(Vented Units Only)

Maximum flow rate can be checked by cooling the thermostatic bulb below room temperature and turning the knob (4) counterclockwise to the HI position. Minimum flow rate can be checked by cooling the thermostatic bulb below room temperature and slowly turning the knob counterclockwise and stopping when you hear the snap. This flow rate is preset by the O.E.M. at the design stage, and is set with a pre-drilled minimum rate screw.

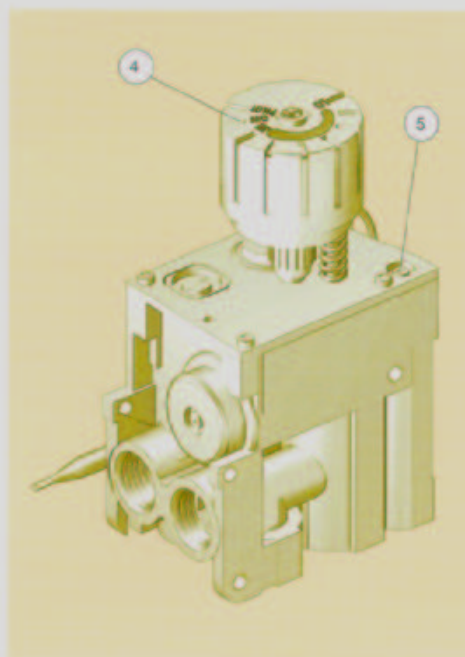
Pilot adjustment

(Vented Units Only)

Use a screwdriver to adjust the screw (5) to achieve the desired pilot flame. Clockwise decreases the amount of gas to the pilot.



Pressure readings

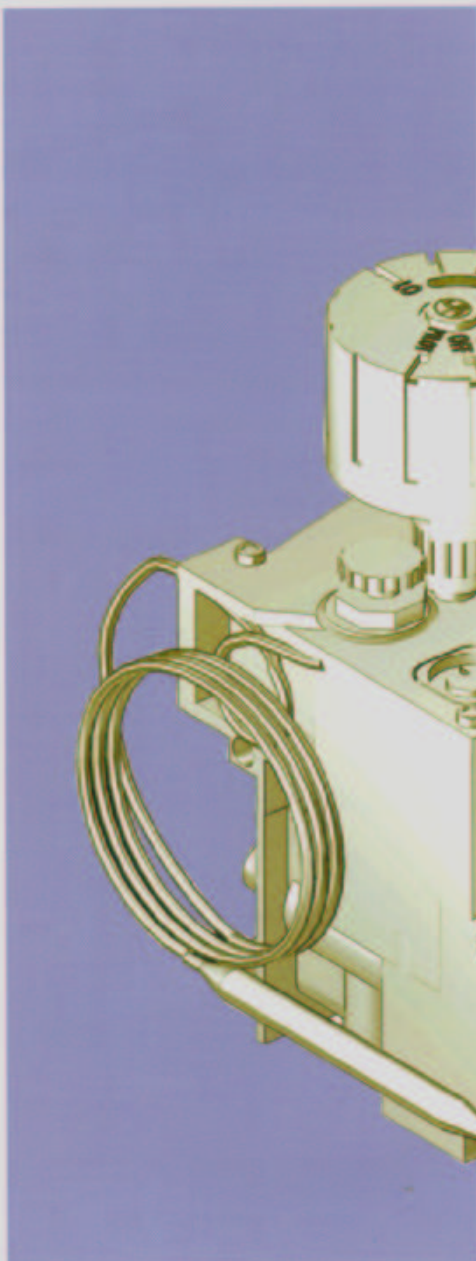


Adjusting the pilot gas flow

630 EUROSIT



Single-knob multifunctional control with combined modulating-ON/OFF thermostat, for gas appliances without external electric power supply.



S.I.T. Controls USA, Inc.
Subsidiary of SIT La Precisa Srl
8100 - G Arrowridge Blvd., Charlotte, N.C. 28273 USA
Telephone: (704) 522.6325 - Telefax (704) 522.7945

