

## SERIES 24, 25, 28 & 29 RANGE AUTOMATIC SHUT OFF VALVES AND MULTIFUNCTIONAL CONTROLS FOR GAS BURNING APPLIANCES INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

### INSTALLATION

This control must be installed in accordance with the rules in force eg use of a Gas Safe registered engineer.

Remove packing and port plugs.

Multifunctional controls with bypass jet; ensure jet is drilled to correct size and install into body through outlet port.

Ensure gas supply is off and that all debris has been removed from connecting pipework. Install control into pipework, noting direction of flow as denoted by arrow on the control body. Ports are tapped to accept male taper pipe or fittings with R designated threads to BS EN 10226 and threads must be sealed using an approved thread sealing compound eg Calortite or Hylomar. Mounting orientation is universal provided the coil is in the upper hemisphere. Do not tighten valve using coils, use the spanner flats provided on the control body.

Auxiliary eg pilot connections may be made to body tappings as appropriate to control. These are tapped to accept R1/8 male fittings; observe same sealing practices as main ports.

This control must be earthed. Ensure electrical supply is not protected; check voltage rating on control.

Oriente coils as required and make electrical connection as follows:

Models with flying lead: brown=LIVE, blue=NEUTRAL, earth=GREEN/YELLOW

Models with socket connector: viewed on coil, right hand tab=LIVE, left hand tab=NEUTRAL, top (flat) tab=EARTH. Unscrew the connector retaining screw, pull off the connector and gasket, remove the centre section, strip connecting cable, feed through strain relief bush and wire into screw terminals. Refit centre section, tighten strain relief bush, refit gasket and connector onto coil and retighten retaining screw.

### COMMISSIONING

Leak test gas connections to the control. Turn on the gas supply. Test points (where fitted) may be used to establish static pressure of gas supply.

Energise valve to open; de-energise to close.

Multifunctional controls governor adjustment: remove plastic cap from governor (on side of control). Energise control and adjust screw until desired outlet pressure is achieved. Refit cap.

### MAINTENANCE

There are no user serviceable parts inside the control other than strainer cleaning (where fitted). To gain access to the strainer for cleaning purposes, proceed as follows.

Automatic shut off valves: isolate gas and electrical supplies, remove coil and unscrew flange tube from body, retaining armature assembly and spring within the tube. Remove strainer, clean and refit. Re-assemble and leak test valve before turning on gas supply.

Multifunctional controls: isolate gas and electrical supplies, remove coils and unscrew 6 screws around the top cover. Remove top cover from body, retaining armature assemblies and springs within the tubes and o rings within grooves in the top cover. Remove strainer, clean and refit. Re-assemble and leak test control before turning on gas supply.

In the event of coil failure, replacement coils are available. Quote valve or control part number and voltage when ordering.

### SPECIFICATION

Media: non corrosive dry gases and air. Approved for combustible gas families 1, 2 & 3

Media temperature range: -10 to 60°C

Ambient temperature range: -10 to 60°C

Inlet pressure range and class (shut off):

24 & 25 series: 1/8" & 1/4" 0-100mbar class A  
3/8" & 1/2" 0-60mbar class B

28 series: 0-100mbar class A

29 series: 0-500mbar class A

Opening speed: all models <1 second

Closing speed: all models <1 second

Electrical: 24V 50Hz, 110V 50Hz and 230V 50Hz versions

Electrical ratings:

24 series: 9VA per coil

25 series: 20VA per coil

28 series 1/8" & 1/4": 12VA per coil, 3/8" & 1/2": 23VA per coil,

3/4": 40VA,

29 series: 23VA per coil

Mounting: vertical or horizontal, coil in upper hemisphere

Connections: connection ports threaded to BS EN 10226 designated Rp, suitable for connection to R designated external taper pipework or fittings

Strainer: optional on all models

Pressure test points:

1/8" and 1/4" valves: Rp1/8 test point with plug fitted, downstream of valve, on underside of body. Optional nipple

3/8" and 1/2" valves: Rp1/8 test point with plug fitted, upstream of valve, on right hand side of body (viewed on inlet). Optional other test points/nipples

Multifunctional controls: supplied with or without Rp1/8 test points/nipples upstream & downstream of first valve, downstream of second valve, on right hand side or left hand side of body, depending on model

Governor (multifunctional controls): optional, class C, available in the following pressure ranges

Inlet 18-25mbar, outlet 5-10mbar

Inlet 18-25mbar, outlet 8-18mbar

Inlet 25-45mbar, outlet 20-35mbar

Inlet 55-85mbar, outlet 25-50mbar

Construction: group 2

Approvals: approved to BS EN 161, BS EN 126 and BS EN 88

Manufactured in England by Watts Industries UK Ltd in conformity with the requirements of the Gas Appliance Regulation 2016/426

## EU Declaration of Conformity (DoC)

We

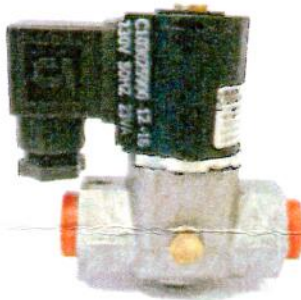
Company name: *Watts Industries UK Ltd*  
 Postal address: *Colmworth Business Park*  
 Postcode and city: *St. Neots, PE19 8YX*  
 Telephone number: *+44 (0) 1480 407074*  
 E-Mail address: *wattsuk@wattswater.com*

Declare that this Declaration of Conformity is issued under our sole responsibility and belong to the following products:

Apparatus model/products: *Automatic Shut-off Valves and Multifunctional Controls*  
 Type: *24, 25, 28 & 29 Series*  
 Batch: */*  
 Serial number: */*

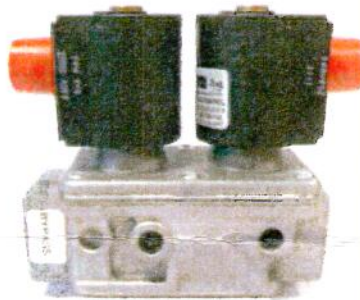
Object of the declaration

Identification of the apparatus  
**Single Valves**



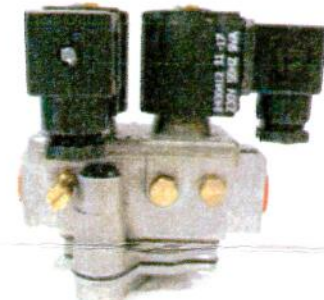
Technology: *Electro-Magnetic*  
 Rated Voltage: *24V, 110V or 230V 50Hz*  
 Fully Opened Power Rating: *7.5 - 23VA*  
 Ambient & Media Temp range: *-10 - 60 °C*  
 Class: *A & B*  
 Combustible Gases: *Families 1, 2 & 3*  
 Opening Speed: *<1 Second*  
 Closing Speed: *< 1 Second*  
 Connection: *1/8", 1/4", 3/8" & 1/2"*  
 Max Pressure: *500, 100 & 60 mbar*  
 Feature: *Fast Opening*  
*Vertical or Horizontal Mounting*  
*Removable Strainer*  
*Pressure Test Points Available*

Identification of the apparatus  
**Multifunction Controls**



Technology: *Electro-Magnetic*  
 Rated Voltage: *24V, 110V or 230V 50Hz*  
 Fully Opened Power Rating: *15 - 46VA*  
 Ambient & Media Temp range: *-10 - 60 °C*  
 Class: *A & B*  
 Combustible Gases: *Families 1, 2 & 3*  
 Opening Speed: *<1 Second*  
 Closing Speed: *< 1 Second*  
 Connection: *3/8" & 1/2"*  
 Max Pressure: *500, 100 & 60 mbar*  
 Feature: *By-pass Available*  
*Fast Opening*  
*Vertical or Horizontal Mounting*  
*Removable Strainer*  
*Pressure Test Points Available*

Identification of the apparatus  
**Multifunction Controls with Governor**



Technology: *Electro-Magnetic*  
 Rated Voltage: *24V, 110V or 230V 50Hz*  
 Fully Opened Power Rating: *15 - 46VA*  
 Ambient & Media Temp range: *-10 - 60 °C*  
 Class: *A & B*  
 Combustible Gases: *Families 1, 2 & 3*  
 Opening Speed: *<1 Second*  
 Closing Speed: *< 1 Second*  
 Connection: *3/8" & 1/2"*  
 Max Pressure: *500, 100 & 60 mbar*  
 Feature: *Adjustable Governor*  
*By-pass Available*  
*Fast Opening*  
*Vertical or Horizontal Mounting*  
*Removable Strainer*  
*Pressure Test Points Available*