

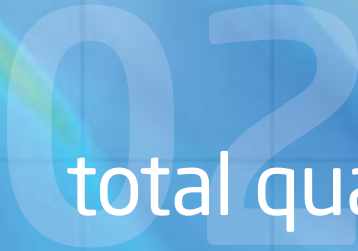
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## Product Guide

# BANiCO

Controls



# total quality, total support, worldwide

**World-class instruments for control, regulation and protection, all backed by an exceptional technical customer support service.**



Combining vast technical experience with a service designed to give you all of the help, advice and support needed, Banico provides a single UK manufacturing source for a total range of control solutions for the heating, ventilation, air conditioning, automation and process industries.

## **CUSTOMISED SOLUTIONS TO YOUR EXACT NEEDS**

In addition to the standard controls featured on these pages, we can supply customised products, designed and manufactured to meet your exact specifications for worldwide distribution, as required. We can also badge controls to meet your particular marketing requirements.



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# 03 gas solenoid valves

Approved to EN161 - Meet British gas industry requirements  
Class A. EN161 & Din3391 to 3394. Normally closed.

## AUTOMATIC ON/OFF - SUPPLY VOLTAGE 230 VAC

ZEV10	3/8"	BSP	230 Vac
ZEV15	1/2"	BSP	230 Vac
ZEV20	3/4"	BSP	230 Vac
ZEV25	1"	BSP	230 Vac
ZEV32	1 1/4"	BSP	230 Vac
ZEV40	1 1/2"	BSP	230 Vac
ZEV50	2"	BSP	230 Vac
ZEV65	2 1/2"	BSP	230 Vac
ZEV80	3"	BSP	230 Vac
ZEVF65	65mm (2 1/2")	flanged PN16	230 Vac
ZEVF80	80mm (3")	flanged PN16	230 Vac
ZEVF100	100mm (4")	flanged PN16	230 Vac
ZEVF125	125mm (5")	flanged PN16	230 Vac
ZEVF150	150mm (6")	flanged PN16	230 Vac



## AUTOMATIC ON/OFF - SUPPLY VOLTAGE 110 VAC

ZEV10-110	3/8"	BSP	110 Vac
ZEV15-110	1/2"	BSP	110 Vac
ZEV20-110	3/4"	BSP	110 Vac
ZEV25-110	1"	BSP	110 Vac
ZEV32-110	1 1/4"	BSP	110 Vac
ZEV40-110	1 1/2"	BSP	110 Vac
ZEV50-110	2"	BSP	110 Vac
ZEV65-110	2 1/2"	BSP	110 Vac
ZEV80-110	3"	BSP	110 Vac
ZEVF65-110	65mm (2 1/2")	flanged PN16	110 Vac
ZEVF80-110	80mm (3")	flanged PN16	110 Vac



## AUTOMATIC ON/OFF - SUPPLY VOLTAGE 24 VAC

ZEV10-24	3/8"	BSP	24 Vac
ZEV15-24	1/2"	BSP	24 Vac
ZEV20-24	3/4"	BSP	24 Vac
ZEV25-24	1"	BSP	24 Vac
ZEV32-24	1 1/4"	BSP	24 Vac
ZEV40-24	1 1/2"	BSP	24 Vac
ZEV50-24	2"	BSP	24 Vac
ZEV65-24	2 1/2"	BSP	24 Vac
ZEV80-24	3"	BSP	24 Vac
ZEVF65-24	65mm (2 1/2")	flanged PN16	24 Vac
ZEVF80-24	80mm (3")	flanged PN16	24 Vac





# 04 gas solenoid valves

## AUTOMATIC ON/OFF WITH FLOW REGULATOR

ZEVR10	3/8"	BSP	230 Vac
ZEVR15	1/2"	BSP	230 Vac
ZEVR20	3/4"	BSP	230 Vac
ZEVR25	1"	BSP	230 Vac
ZEVR32	1 1/4"	BSP	230 Vac
ZEVR40	1 1/2"	BSP	230 Vac
ZEVR50	2"	BSP	230 Vac
ZEVR65	2 1/2"	BSP	230 Vac
ZEVR80	3"	BSP	230 Vac
ZEVRF65	65mm (2 1/2")	flanged PN16	230 Vac
ZEVRF80	80mm (3")	flanged PN16	230 Vac
ZEVRF100	100mm (4")	flanged PN16	230 Vac



## SLOW OPENING (SOFT START) WITH FLOW REGULATOR

ZEVS10	3/8"	BSP	230 Vac
ZEVS15	1/2"	BSP	230 Vac
ZEVS20	3/4"	BSP	230 Vac
ZEVS25	1"	BSP	230 Vac
ZEVS32	1 1/4"	BSP	230 Vac
ZEVS40	1 1/2"	BSP	230 Vac
ZEVS50	2"	BSP	230 Vac



## MANUAL RESET

ZEVM15	1/2"	BSP	230 Vac
ZEVM20	3/4"	BSP	230 Vac
ZEVM25	1"	BSP	230 Vac
ZEVM32	1 1/4"	BSP	230 Vac
ZEVM40	1 1/2"	BSP	230 Vac
ZEVM50	2"	BSP	230 Vac
ZEVM65	2 1/2"	BSP	230 Vac
ZEVM80	3"	BSP	230 Vac
ZEVMF65	65mm (2 1/2")	flanged PN16	230 Vac
ZEVMF80	80mm (3")	flanged PN16	230 Vac
ZEVMF100	100mm (4")	flanged PN16	230 Vac



## CLOSED POSITION INDICATION (CPI) SWITCH

CPI-20/25	Valve size 3/4" and 1"
CPI-32/40	Valve size 1 1/4" and 1 1/2"
CPI-50	Valve size 2"
CPI-65/80	Valve size 2 1/2" and 3" BSP & Flanged
CPI-100	Valve size 4" Flanged
CPI-125/150	Valve size 5" and 6" Flanged



# 05 valves with visual indicator

## AUTOMATIC ON/OFF WITH LIGHT

ZEVL10	3/8"	BSP	360 mbar
ZEVL15	1/2"	BSP	360 mbar
ZEVL20	3/4"	BSP	360 mbar
ZEVL25	1"	BSP	360 mbar
ZEVL32	1 1/4"	BSP	360 mbar
ZEVL40	1 1/2"	BSP	360 mbar
ZEVL50	2"	BSP	360 mbar
ZEVL65	2 1/2"	BSP	360 mbar
ZEVL80	3"	BSP	360 mbar
ZEVFL65	65mm (2 1/2")	flanged PN16	360 mbar
ZEVFL80	80mm (3")	flanged PN16	360 mbar
ZEVFL100	100mm (4")	flanged PN16	360 mbar
ZEVFL125	125mm (5")	flanged PN16	200 mbar
ZEVFL150	150mm (6")	flanged PN16	200 mbar



## WITH FLOW ADJUSTER WITH LIGHT

ZEVRL10	3/8"	BSP	360 mbar
ZEVRL15	1/2"	BSP	360 mbar
ZEVRL20	3/4"	BSP	360 mbar
ZEVRL25	1"	BSP	360 mbar
ZEVRL32	1 1/4"	BSP	360 mbar
ZEVRL40	1 1/2"	BSP	360 mbar
ZEVRL50	2"	BSP	360 mbar
ZEVRL65	2 1/2"	BSP	360 mbar
ZEVRL80	3"	BSP	360 mbar
ZEVRLF65	65mm (2 1/2")	flanged PN16	360 mbar
ZEVRLF80	80mm (3")	flanged PN16	360 mbar



## SLOW OPENING WITH LIGHT

ZEVSL10	3/8"	BSP	360 mbar
ZEVSL15	1/2"	BSP	360 mbar
ZEVSL20	3/4"	BSP	360 mbar
ZEVSL25	1"	BSP	360 mbar
ZEVSL32	1 1/4"	BSP	360 mbar
ZEVSL40	1 1/2"	BSP	360 mbar
ZEVSL50	2"	BSP	360 mbar
ZEVSL65	2 1/2"	BSP	360 mbar
ZEVSL80	3"	BSP	360 mbar
ZEVSFL65	65mm (2 1/2")	flanged PN16	360 mbar
ZEVSFL80	80mm (3")	flanged PN16	360 mbar



## MANUAL RESET WITH LIGHT

ZEVML10	3/8"	BSP	500 mbar
ZEVML15	1/2"	BSP	500 mbar
ZEVML20	3/4"	BSP	500 mbar
ZEVML25	1"	BSP	500 mbar
ZEVML32	1 1/4"	BSP	500 mbar
ZEVML40	1 1/2"	BSP	500 mbar
ZEVML50	2"	BSP	500 mbar
ZEVML65	2 1/2"	BSP	500 mbar
ZEVML80	3"	BSP	500 mbar
ZEVML65	65mm (2 1/2")	flanged PN16	500 mbar
ZEVML80	80mm (3")	flanged PN16	500 mbar
ZEVML100	100mm (4")	flanged PN16	500 mbar



# interlock system / xenon beacon

## STAND ALONE GAS MINDER (INTERLOCK SYSTEM PACK)

Mandatory requirement for commercial kitchens

GM-III	Control unit complies with all current Corgi gas regulations for commercial kitchens. IP56 rated control box ensures there is no gas flow to burners unless air extraction is present.
ISP-2	System pack comprises of: GM-III control unit + DP5A-20 pressure switch + DK-1 duct kit + EM-1 remote emergency stop button

Note: This unit to be used with 230 Vac ZEV gas solenoid valve



## XENON BEACON

White polycarbonate body

BCR-1	Red	230 Vac	3W 1 sec pulses
BCY-1	Amber	230 Vac	3W 1 sec pulses



# emergency stop button / thermal links

## EMERGENCY STOP BUTTON

10 (6) at 230 Vac Volt free contact.

EM-1	Push to break circuit - Turn to reset
EM-1K	Push to break circuit - Use key to reset

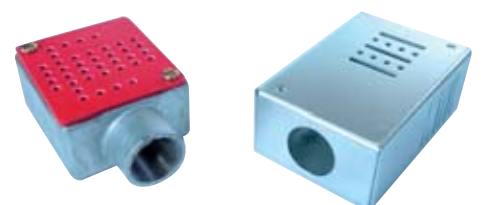


## THERMAL LINK

Rating 24 Vac/dc 110 Vac, 230 Vac 10A

TL-1	Fuse melting Temp <72°	IP20 20mm Conduit entry in one end
TL-2	Fuse melting Temp <72°	IP20
F-1	Spare Fuse	

The unit should be mounted so that the perforated cover faces downwards and the ventilation holes in the back/side of the box must not be obstructed.



# diverter / shunt valves

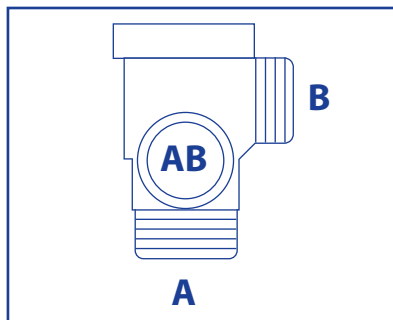
## 3 WAY VALVES FOR COMBI BOILERS WITH 2 AUXILIARY MICRO SWITCHES

Can replace all models in the market, simply set angles of top section by rotation

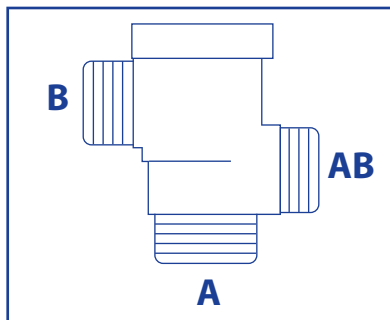
Secondary Circuit connections  $\frac{1}{2}$ " x  $\frac{1}{2}$ " can be set at various angles by rotation

Primary circuit connections 1" x  $\frac{3}{4}$ " x  $\frac{3}{4}$ "

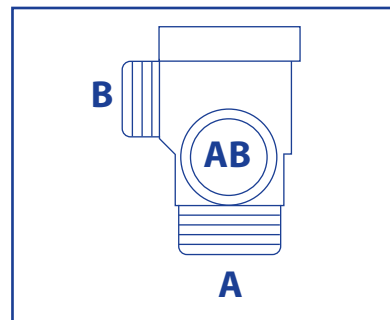
### STANDARD UNIVERSAL VALVES



mut "S" Giannoni "F"



mut "O" Giannoni "D"



mut "D" Giannoni "E"

### VALVES TO FIT SPECIFIC BOILER

DVS-F1	Ravenheat RSF	20/20E, 25/20E, 25/25E, 82E 82ET, 84E, 84ET, 100E, 100ET
DVS-F2	Ravenheat RSF	820/20, RSF 820/20T, CF 10/20, CF 10/25
DVO-D1	Glow Worm Halstead Servowarm Sime	Fuel Saver CF Quattro, Quattro Gold, TRIO Elite80 (Servotomic) FriendlyE, Friendly Super 80E Murelle, Super 90 Mk1, Super 102
DVO-D2	Worcester	9.24 Heat Slave
DVO-D3	Potterton	Lynx 1
DVO-D4	Stelrad-Ideal	Sprint RS75P, Sprint 80F
DVD-E1	Worcester	230, 240
DVD-E2	Ariston	Styx SX20 Euro combi SX20 Mffi CE Ed 1&2, DIA20 Mffi CE Ed 1&2 DIA24 Mffi CE Ed 1&2, Challenger 80E
DVD-E3	Worcester	9.24 Electronic



### UNIVERSAL DIAPHRAGM

RK - 1	Repair Kit - Diaphragm with spindle and Spring	
WP-1	Fibre Washer Pack	$\frac{1}{2}$ " (2) $\frac{3}{4}$ " (2) 1" (1)





# 08 solenoid valves

## DIRECT ACTING NORMALLY CLOSED SOLENOID VALVE BODIES

Water, Air & Oil -10°C to +140°C. Two Way. Normally Closed

20B	¼"	140°C	NC	0 to 16 bar
20C	⅜"	140°C	NC	0 to 6 bar
20D	½"	140°C	NC	0 to 6 bar
20E	¾"	140°C	NC	0 to 2.5 bar
20F	1"	140°C	NC	0 to 2.5 bar

\*Coils and Connectors are not included in valve body prices.



## SERVO-ASSISTED DIAPHRAGM NORMALLY CLOSED SOLENOID VALVE BODIES

Water, Air & Oil -10°C to +90°C. Two Way. Normally Closed

23C	⅜"	90°C	NC	0.1 to 20 bar
23D	½"	90°C	NC	0.1 to 20 bar
23E	¾"	90°C	NC	0.1 to 20 bar
23F	1"	90°C	NC	0.1 to 20 bar
23G	1¼"	90°C	NC	0.1 to 10 bar
23H	1½"	90°C	NC	0.1 to 10 bar
23I	2"	90°C	NC	0.1 to 10 bar

Steam & Superheated Water -10°C to +140°C. Two Way. Normally Closed

63C	⅜"	140°C	NC	0.1 to 4 bar
63D	½"	140°C	NC	0.1 to 4 bar
63E	¾"	140°C	NC	0.1 to 4 bar
63F	1"	140°C	NC	0.1 to 4 bar
63G	1¼"	140°C	NC	0.1 to 4 bar
63H	1½"	140°C	NC	0.1 to 4 bar
63I	2"	140°C	NC	0.1 to 4 bar

\*Coils and Connectors are not included in valve body prices.



## SERVO-ASSISTED DIAPHRAGM NORMALLY OPEN SOLENOID VALVE BODIES

Water, Air & Oil -10°C to +90°C. Two way Normally open

29C	⅜"	90°C	NO	0.1 to 20 bar
29D	½"	90°C	NO	0.1 to 20 bar
29E	¾"	90°C	NO	0.1 to 20 bar
29F	1"	90°C	NO	0.1 to 20 bar
29G	1¼"	90°C	NO	0.1 to 10 bar
29H	1½"	90°C	NO	0.1 to 10 bar
29I	2"	90°C	NO	0.1 to 10 bar

\*Coils and Connectors are not included in valve body prices.

\*Only available with 24 Vac and 230 Vac coils.





## DIRECT ACTING NORMALLY CLOSED SOLENOID VALVE BODIES

Refrigeration & Air Conditioning -40°C to +180°C. Two way Normally closed  
Medium R134a, R22, R404a 2.5mm orifice 3.5 l/min KV

21B	¼" SAE Flare	180°C	NC	0 to 30 bar MOPD
21C	⅜" SAE Flare	180°C	NC	0 to 30 bar MOPD
22B	¼" ODF Solder	180°C	NC	0 to 30 bar MOPD
22C	⅜" ODF Solder	180°C	NC	0 to 30 bar MOPD

\*Coils and Connectors are not included in valve body prices.



## 30BAR, DIRECT ACTING, NORMALLY CLOSED

Two way High Pressure 30bar for water, air and oil

20B30	¼"	140°C	NC	0 to 30 bar
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\*Coils and Connectors are not included in valve body prices.



## 3/2 WAY, DIRECT ACTING, NORMALLY CLOSED

Used in applications which require actuation and automatic discharge in the  
Sterilisers, Air compressors, Espresso coffee machines, Pilot valves, Diesel oil burners,  
Polyurathane plants and Water treatment plants.

20B141	¼"	140°C	NC	0 to 7 bar
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\*Coils and Connectors are not included in valve body prices.



## COILS FOR SOLENOID VALVE BODY TYPES 20,23 & 63

C12DC	12 Vdc	12W
C24DC	24 Vdc	12W
C24AC	24 Vac	14W
C110	110 Vac	9W
C230	230 Vac	14W



## CONNECTORS FOR ABOVE COILS

1578501	Rotational adaptor	DIN 43650
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# 10 motorised zone / diverting valves

## MOTORISED SPRING RETURN VALVES

230 Vac (24 Vac and 110 Vac on request), 6 W power consumption

Auxiliary microswitch 3A - 250 Vac. Max amp temp 60°C media temp 5 to 88°C

### ZONE VALVES

ZV22	22mm Compression	2 port
ZV28	28mm Compression	2 port
ZV3/4C	¾" Comp (Irish pipe)	2 port
ZV1C	1" Comp (Irish pipe)	2 port
ZV1/2	½" BSP female	2 port
ZV3/4	¾" BSP female	2 port
ZV1	1" BSP female	2 port



### DIVERTER VALVES

ZVD22	22mm Compression	3 port
ZVD28	28mm Compression	3 port
ZVD3/4C	¾" Comp (Irish pipe)	3 port
ZVD1C	1" Comp (Irish pipe)	3 port
ZVD1/2	½" BSP female	3 port
ZVD3/4	¾" BSP female	3 port
ZVD1	1" BSP female	3 port



### MID-POSITION VALVES

ZVM22	22mm Compression	3 port
ZVM28	28mm Compression	3 port
ZVM3/4C	¾" Comp (Irish pipe)	3 port
ZVM1C	1" Comp (Irish pipe)	3 port
ZVM3/4	¾" BSP female	3 port
ZVM1	1" BSP female	3 port



### REPLACEMENT HEAD

H-ZV	Fits all above 2-port zone valves except ½"
H-ZVD	Fits all above 3-port diverter valves
H-ZVM	Fits all above 3-port mid-position valves



### SYNCHRON MOTOR

6W, Standard Universal Motors

SM-1	230 Vac
SM-110	110 Vac
SM-24	24 Vac



# motorised zone / diverting valves

## ZONE VALVES

ZV22P	22mm Compression	2 port
ZV28P	28mm Compression	2 port
ZV3/4CP	¾" Comp (Irish pipe)	2 port
ZV1CP	1" Comp (Irish pipe)	2 port
ZV3/4P	¾" BSP female	2 port
ZV1P	1" BSP female	2 port



## DIVERTER VALVES

ZVD22P	22mm Compression	3 port
ZVD28P	28mm Compression	3 port
ZVD3/4CP	¾" Comp (Irish pipe)	3 port
ZVD1CP	1" Comp (Irish pipe)	3 port
ZVD3/4P	¾" BSP female	3 port
ZVD1P	1" BSP female	3 port



## MID-POSITION VALVES

ZVM22P	22mm Compression	3 port
ZVM28P	28mm Compression	3 port
ZVM3/4CP	¾" Comp (Irish pipe)	3 port
ZVM1CP	1" Comp (Irish pipe)	3 port
ZVM3/4P	¾" BSP female	3 port
ZVM1P	1" BSP female	3 port



## ZONE VALVES WITH VISUAL INDICATOR

ZV22L	22mm Compression	2 port
ZV28L	28mm Compression	2 port
ZV3/4CL	¾" Comp (Irish pipe)	2 port
ZV1CL	1" Comp (Irish pipe)	2 port
ZV3/4L	¾" BSP female	2 port
ZV1L	1" BSP female	2 port





# 12 flow controls

## AIR FLOW, HEAVY DUTY WITH STEEL COVER

Adjustable sensitivity, test switch, weatherproof to IP54 SPDT switch

FSA-1	Connection plate	IP45
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## WATER FLOW

Adjustable sensitivity 1" BSP brass connection, test switch  
Heavy duty with steel cover

FSL-1	1" to 6" pipe	Stainless Steel Paddles	IP45
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Weather proof to IP65 with Plastic cover

FSL-65	1" to 6" pipe	Stainless Steel Paddles	IP65
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## WATER FLOW, IN LINE

Adjustable sensitivity, test switch

FSP15	½" BSP	Brass body	IP45
FSP20	¾" BSP	Brass body	IP45



# automatic bypass valve

ABV-22	22mm Compression	0.1 to 0.6 bar diff pressure
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Max pressure 3 bar. Max flow temperature 110°C  
High capacity, up to 50 litres per minute  
Locking: Once set, the valve can be locked in position by tightening the screw in the cap



## PRESSURE SWITCHES

WATER / STEAM / AIR / OIL

PS12CF	-0.5 to 6bar	0.6 to 4 bar adj diff	¼" BSPfemale
PS12CM	-0.5 to 6bar	0.6 to 4 bar adj diff	¼" BSPmale
PS12DF	5 to 16bar	2 to 4 bar adj diff	¼" BSPfemale

Tamper-proof concealed adjusting

PS12CFC	-0.5 to 6bar	0.6 to 4 bar adj diff	¼" BSPfemale
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With cover



## DIFFERENTIAL PRESSURE SWITCHES, WATER

WATER

24V-250Vac 3A SPDT, ¼" BSPfemale, IP30

DPS113-5	0.5 to 4bar	0.1bar diff	¼" BSPfemale
DPS113-2	0.2 to 4bar	0.1bar diff	¼" BSPfemale



## DIFFERENTIAL PRESSURE SWITCHES, AIR

Air / gasses (non-flammable and non-aggressive)

Ambient temp -20°C to 85°C, 6mm push on connection, IP54

DPSA-20	0.2 - 2 mbar ( 20-200pa )	0.1 mbar diff ( 10pa )	250V 1.5A(0.4)A SPDT
DPSA-50	0.5 - 5 mbar ( 50-500pa )	0.2 mbar diff ( 20pa )	250V 1.5A(04)A SPDT
DK1	Duct kit, PVC hose and 2 plastic duct adapters		



## temperature controls

### STRAP ON THERMOSTATS FOR PIPES AND CYLINDERS

Liquid expansion sensing element for accurate and quick sensing

TPS-1	0°C to 90°C	SPDT volt free
TPS-1C	0°C to 90°C	as TPS-1 tamper proof with concealed knob



### CAPILLARY THERMOSTAT

For boilers, air conditioning, domestic appliances, Ovens, cooling systems

TCS-1	0°C to 90°C	1m capillary	SPDT volt free
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### IMMERSION THERMOSTATS

For boilers and heating systems

TIS-1	0°C to 90°C	copper bulb and pocket (1/2" thread)
TIS-1C	as TIS-1	tamper proof with concealed knob



### DUAL IMMERSION THERMOSTAT

For boilers and heating systems

TDS-1	0°C to 90°C	cut off action 100°C copper bulb and pocket (1/2" thread)
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## ROOM THERMOSTAT

2-wire connection, vapour pressure sensing

RS-1	10°C to 30°C	0.5K diff	6A(3)	SPDT
RS-2	as RS-1 with Heating-Cooling switch			



## FROST THERMOSTAT

RS-1F	-5°C to 10°C	frost stat with 16A (resistive)		SPDT
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## PROGRAMMABLE ROOM THERMOSTAT

Wall mounting intelligent thermostat

RS-5	0°C to 50°C	7 days or 5-2 days programme selectable		
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The RS-5 is a stylish 5/2 or 7 day programmable room thermostat, which has been designed to provide automatic time and temperature control of all domestic central heating applications. The RS-5 can switch circulating pumps, boilers and motorised valves. Intended where the householder has a variety of heating needs from day to day, the RS-5 thermostat gives you a feature packed unit but still maintains simplicity for the user.

### Features:

- Volt free contacts
- 5/2 or 7 day programming flexibility
- Built-in start up programming for quick installation
- Battery powered with replacement indicator
- Frost protection
- Large, easy to read LCD with blue back light
- 5 time/temperature changes
- Burner on symbol
- Easy access battery door
- Industry standard back plate for ease of wiring
- User friendly



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# product guide



ISO9001:2000 approved. No. GB00568

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