

DIRECT ACTING URINAL FLUSHING CONTROLS

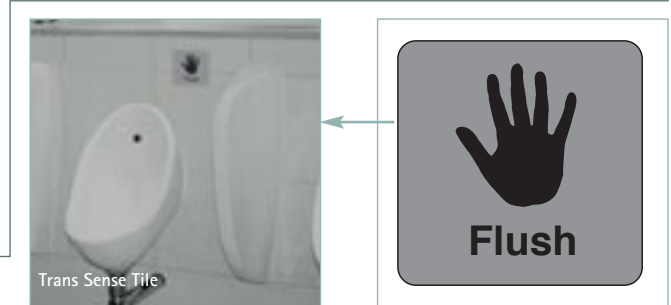
ECO EU13CT(ht), ECO EU11TS, ECO EU14TA

eco-logic uk

Controlling urinal flush cycles is a highly cost effective way to prevent excessive water wastage, whilst maintaining hygiene requirements. ECO-Logic Urinal Controllers deliver high quality and cost efficient installations that fully comply with water regulations. They are simple to install and setup. Payback times on average are within 6 months (over unregulated systems). Direct acting urinal flushing systems can use a variety of ECO-Logic sensors to initiate a flush cycle following use. There are two groups:

- One Touch Sensors** ECO Touch Sense – a robust solid state sensor
ECO React – a light press action switch sensor
- Non Touch Sensors** ECO Trans Sense – the sensor is hidden behind finished surface (i.e tiles). It senses close proximity of the users hand or a light touch. A very vandal resistant fitting.

Direct acting systems can control banks of urinal bowls either individually or in groups, or alternatively troughs or stalls.



'Non Touch' Range

ECO EU13CT(ht) ECO Trans Sense

'One Touch' Range

ECO EU11TS(PL85/85) ECO Touch Sense – Plate Mounted

ECO EU14TA(PL85/85) ECO React Sense – Plate Mounted

ECO EU11TS(D50) ECO Touch Sense – Disc Mounted

ECO EU14TA(D50) ECO React Sense – Disc Mounted

All sensor packs are supplied with complete with appropriate Solenoid Valves.



Features

- Easy to operate
- Anti-tamper lockout facility
- Secure sensor systems and fittings
- Duty Flush activates if not used within 24 hours.
- Two year guarantee on electronic components.
- Long life lithium battery power or reduced-mains power.
- Extra safe 6vDC power.
- Excellent payback periods and ongoing water savings.
- Controllers can be multi-functional (i.e. basins and WCs)

Benefits

- Proven water and water cost savings
- Safe operation and hygienic flushing
- Low maintenance systems
- Extra secure sensor options.

Function

Users initiate the flush cycle by touching the Touch or React sensor, or by placing hands close to the 'Non Touch' sensor. Depending on the operational mode setup by management the flush will start immediately, or a delayed flush cycle will be activated. With immediate flush cycles only a small amount of water will be released to rinse the bowls. Urinal troughs usually have a single sensor, but longer troughs may require two or more sensors to release water over different sections, all controlled by the same ECO Controller. The number of urinal flushing valves controlled will dictate the size of the ECO Controller required.

An optional Blockage Alert sensor can be fitted to the urinal waste pipe which prevents flushing when a blockage is detected, avoiding flooding of contaminated water and maintaining hygiene standards. A warning light, alarm or BMS signal notifies management. After clearing the blockage, the system is restarted using a reset button on the Controller or remotely.

ECO-Logic Controllers and Sensors

ECO Controllers provide the link between the sensors, valves and outlets. Flow/flush times, operational modes, temperature monitoring, lockouts and anti-tamper controls can all be set on the Controller. **Controller choice depends on several factors and early consultation with ECO-Logic is recommended.**

Single Controllers – some integrated with a sensor.

Multi-Channel Controllers

- to control banks of the same item
- to control a number of different outlets. Typically in a bathroom with a WC, Basin and Shower.

Modular Controllers – offering total management control for accommodation or washrooms. Can include water, heating, lighting, communication, audio/visual and security systems. All with ECO BMS links.

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Installation Notes

Installation is subject to different water regulations in each country, but usually urinal flushing is direct from mains CWS (For bore hole water, recycled water or treated sea water seek advice from ECO-Logic UK on suitable solenoid valves).

Electronics

All ECO-Logic Controllers are powered by ECO 6vDC lithium battery packs or mains-reduced power via an ECOTrans transformer (230v/6vDC) with automatic battery backup. ECO battery packs should provide 3-4 years use. With regard to ECO Trans Sense Sensors it is important that all metal in the room is bonded to earth and that the back of the sensing

surface and sensor plate are securely fixed in direct contact with each other.

Plumbing

In some countries (i.e. UK), if mains cold water is used, a backflow pipe interrupter fitting must be installed on the supply to the urinal (ECO Ref: 256A-015). Dedicated tanks do not require a backflow fitting, but if the tank also supplies other CWS outlets then a pipe interrupter will be needed. For typical installation guidance see page 3.

Technical Information

Control Box Material	ABS White Plastic Box
Sensor Types	<ul style="list-style-type: none"> • Trans Sense – Capacitance • Touch Sense/React – Stainless Steel
Operating Voltage	6vDC (Battery or Mains-Reduced)
Battery Type	Lithium Cell 1.3 AH
Mains Power Transformer	ECO 230v/6vDC Transformer c/w battery backup
Flush Intervals	Adjustable to 75 minutes
Cistern Fill Time/Flush Time	Adjustable to 264 minutes
Valve Type	Solenoid coil magnetic latching
Valve Connections	15mm
Mode of Operation	Normally fail closed
Operating Pressure	<ul style="list-style-type: none"> • Standard. ECO 02 Valve 0-12 bar • Low. ECO 04 Valve 0-2 bar
Flow Rate	0-8.5 litres per minute. Pressure Dependent *
Cable type	Trans Sense – 3 Core 0.5 mm ² to BS218234 Touch Sense/React – 2 Core 0.5mm ² to BS21823Y
Water Regulation	Schedule 2, Section 9, Para 25.9b

All valves have WRAS approvals. * Dependent on valve type selected.

Related Product Sheets

Automatic Urinal Flushing	ECO Trans Sense EU13CT	U14
	ECO PIR EU9/EU10	U12
Secure Sanitaryware	ECO Polymer	POL16
	ECO Stainless Steel	ELC17
Transformers	ECOTrans 230v6vDC	TR15
Backflow Prevention	Type 256A-015	

ECO-Logic provide solutions for:-

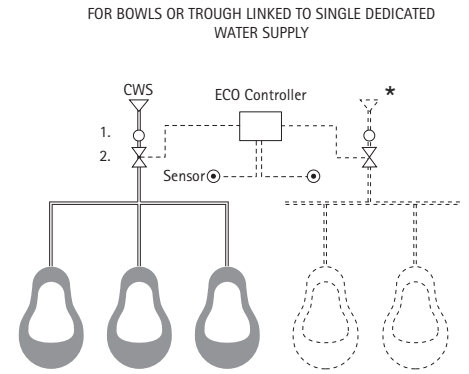
Handwashing • Bathfills • Showering • Flushing • Kitchens

Multi-Channel & Modular Controls for Ensuite Bathrooms & Washrooms

Secure sanitaryware • Lockout Systems • Shutdown Controls • BMS Links

Download at www.ecologicuk.com

FIG 1



1. Isolation Valve
2. Solenoid Valve

* Options for additional sensors/valves on same controller.

Warranties

ECO-Logic Controllers and sensor electronics 2 years

ECO-Logic solenoid Valves (Strainer Protected) 2 years

Brassware and other fittings 1 year

All ECO electronic products are designed, tested and manufactured in the UK to CE standards.

Maintenance

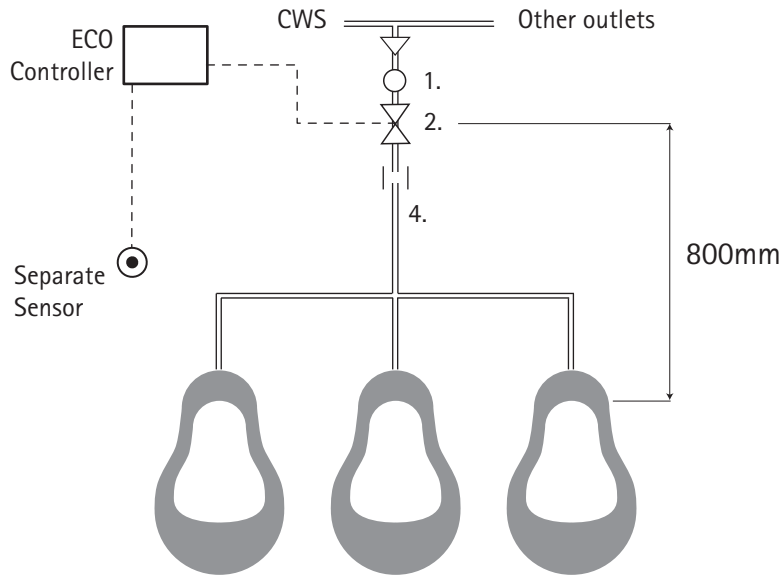
- Replacement parts, batteries and service kits are available direct from ECO-Logic UK.
- Allow access to Sensors, Solenoid Valves and ECO Controllers
- Maintenance requirements are very low. All product warranties are dependent on fittings being installed in accordance with ECO-Logic instructions.
- Battery life usually between 3 – 5 years (not Infra Red). Battery in ECOTrans transformers should last up to 10 years, depending on usage.
- All ECO-Logic Controllers have a non-volatile memory which retain setup programmes if power is lost/switched off for maintenance.
- Solenoid Valves should be installed with service valves and strainers to allow inspection and cleaning.
- Spares advice on individual products are provided in maintenance manuals.



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FIG 2

FOR SUPPLIES FROM SHARED WATER SUPPLY

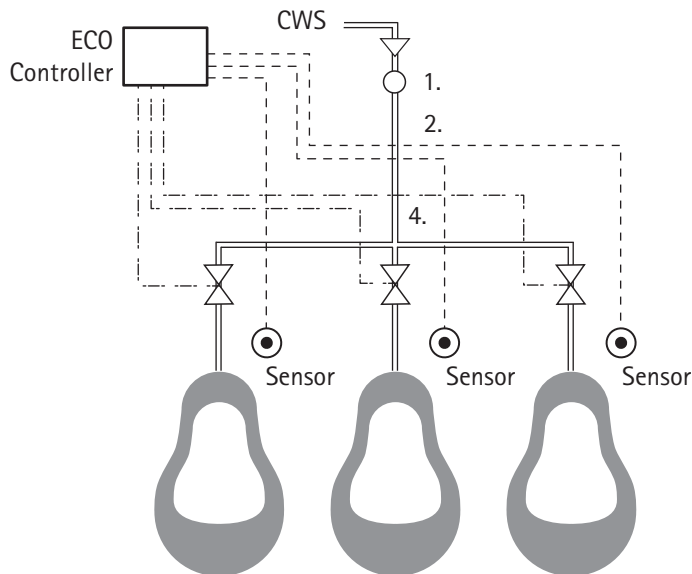


Code

- 1. Isolation valve
- 2. Flushing valve
- 3. Pipe interrupter
- 4. Flush pipes
22mm diameter to urinals

FIG 3

FOR INDIVIDUAL BOWLS LINKED TO A DEDICATED CWS PIPE



Note: If CWS is a shared supply, pipe interrupter fittings will usually be needed to each urinal bowl after the Solenoid Valve, as shown in fig 2.