



Diamond Controls

Leak Detection & Trace Heating Systems

DATASHEET



Low-cost solution for residential and commercial applications



Compact design suits installation in multiple applications



For water, fuel oil and chemicals using sensing cable or probes



100 to 240Vac operation



WATER LEAK DETECTION

ECO-1

Single Zone Panel

The EcoLeak™ Eco-1 leak detection alarm panel is designed for use with all AquiTron and TraceTek sensing cables and sensors for detection of water, acid, hydrocarbon liquids (fuels) leaks. The Eco-1 single zone alarm panel now incorporates fault/cable break monitoring for added protection and peace of mind.





SIMPLE OPERATION

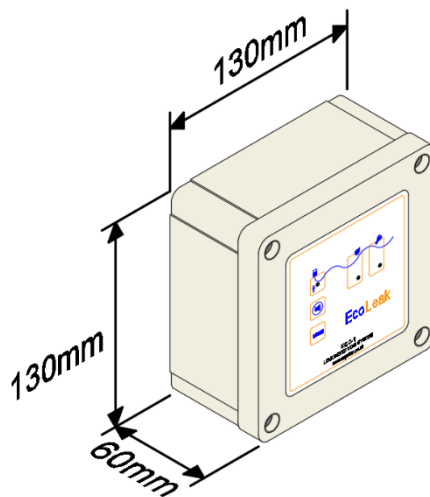
The LED's located on the faceplate indicate Power, Leak alarm and Cable break. In the event of a leak or fault, the alarm sounds and the corresponding LED illuminates. The operator silences the alarm by pressing the MUTE button. Once the alarm has been silenced, the Leak or Cable break LED will continue to be illuminated. Once the cause of the alarm has been located and rectified the panel can be reset and the corresponding LED will be extinguished. Resetting the panel also resets the volt free alarm relay contacts. The Eco-1 also has an 'auto-reset' feature. If enabled it will allow the panel to reset itself once the leak or fault has been cleared. Any loss of system integrity, whether caused by an interruption of power or a break in a sensing circuit, will cause the Break/Fault relay to operate.

VERSATILE DESIGN

The Eco-1's compact enclosure can be easily mounted to a wall or other flat surface. Providing both visual and audible indication for stand-alone applications. External equipment connectivity is provided by two volt free relays "Leak" and "Common". These can be used for connection to local solenoid valves, BMS or any other remote monitoring systems. A remote alarm panel (AT-RAP) can be added to the system for indication of alarm in separate locations such as reception areas and security rooms.

APPLICATIONS

The Eco-1 is ideally suited to projects where cost effective leak detection solutions are required, such as smaller commercial spaces or individual residential properties. Suitable areas include, Commercial buildings - tea points, vending areas, kitchens, FCU's, lift pits, plant rooms, tank and pump rooms. Residential Buildings - high risk areas such as, kitchens, bathrooms, WC's, utility rooms and risers.



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Procedure:	OPS08	Document ref:	ECO1	Publish date:	01/05/24	Approved by:	Lee Blackett	Review date:	As Required
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TECHNICAL INFORMATION

Sensing cable compatibility	All EcoLeak and TraceTek sensing cable (TT1000, 1100, 3000, 5000, 5001 series)
Probe Compatability	All EcoLeak and AquITron probes
Detection Probes	1 x AT-MPS-R or 4 x AT-PROBE per zone
Maximum sensing circuit	30 metres of TraceTek sensing cable
Maximum length of jumper cable	300 metres of jumper cable
Number of Zones	1
Sensing Circuit	2 or 4 wire sensing.
Enclosure	Polycarbonate, colour RAL 7035 matt
Dimensions & Weight	130 x 130 x 60, WxHxD mm. 0.40kg
Ingress Protection	IP66 - Indoor use only
Working Temperature Range	5°C to 40°C
Humidity	5% to 80% non-condensing
Power supply	110 to 240 Vac, 50-60 Hz, 3 watts
Relays	Volt free relay contacts one for leak, one for leak/break/ power failure (Common, N/Open & N/Closed)
Relay Output	3A 250Vac / 24Vdc. SPDT. Volt free relay contacts activated by leak or cable fault (NC/COM or NO/COM)
Status LED	Power Mains-Green, Leak-Red, Cable break-Yellow
Audible alarm	90dB at 10cm

APPROVALS

Electromagnetic compatibility (EMC)		
	Compliant with standards for emissions	BS EN 61326-1
	Compliant with standards for immunity	EN50081-1 residential/commercial) BS EN 61326-1
CFR 47 Pt 15 B Class A - Radio Frequency Devices - Unintentional Radiators		

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ORDERING INFORMATION

Catalogue Number	Product Description
6124	Eco-1 Single zone alarm Panel 230Vac

WATER LEAK DETECTION KITS



Catalogue Number	Product Description
6510	EcoLeak Kit Eco-1, 10m Leader/1m Sensor, Clips/Tags
6525	EcoLeak Kit Eco-1, 10m Leader/3m Sensor, Clips/Tags
6540	EcoLeak Kit Eco-1, 10m Leader/5m Sensor, Clips/Tags
6555	EcoLeak Kit Eco-1, 10m Leader/10m Sensor, Clips/Tags
6570	EcoLeak Kit Eco-1, 10m Leader/15m Sensor, Clips/Tags
6585	EcoLeak Kit Eco-1, 10m Leader/20m Sensor, Clips/Tags
6590	EcoLeak Kit Eco-1, 10m Leader/25m Sensor, Clips/Tags
6595	EcoLeak Kit Eco-1, 10m Leader/30m Sensor, Clips/Tags
6575	EcoLeak Kit Eco-1 with Mini Probe

Important: All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application.

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