ECO1000BREL CONVENTIONAL RELAY BASES

FEATURES:

- Accepts ECO1000 range of detectors
- 12V Non-Latching, 12V and 24V Latching versions
- Compatible with Fire & Security Systems
- Tamper resistant feature
- Detector removal detection (2 wire system)
- Remote LED option
- Extended warranty

DESCRIPTION:

The ECO1000BREL range of relay bases are part of System Sensor's ECO1000 range of conventional detectors. ECO1000 is a range of conventional fire detectors, which have been designed using the latest in manufacturing technology and incorporate an array of advanced features, making them 'better by design'.

The ECO1000BREL range comprises of 12V non-latching, 12V latching and 24V latching versions to suit an array of fire and security applications. All bases are fitted with a shorting spring to permit circuit testing prior to fitting the detector and circuit continuity when a detector is removed during normal system operation. There is also a tamper resistant feature, which when activated prevents the removal of the detector without the use of a tool.

ECO1000BREL12NL (12V Non-Latching)

The ECO1000BREL12NL has been designed to provide interfacing between an ECO1000 detector and 12V Security Control Panels that do not provide a reset facility, as the relay base is self-resetting. Therefore, the relay base will automatically reset the ECO1000 detector when a fire alarm condition no longer exists. While the detector is in alarm the LED will be on, although it will flash when an alarm check is performed. This base is also ideal for control of electrical apparatus such as air conditioning systems or that utilise a 12V power supply instead of a Control Panel.

ECO1000BREL12L (12V Latching)

The ECO1000BREL12L has been designed to provide interfacing between an ECO1000 detector and 12V Fire Systems or Security Control Panels that require an external contact to activate an ancillary piece of equipment. The relay is controlled directly from the ECO1000 detector. Therefore, in an alarm condition both the detector and relay base will latch into alarm, and can only be reset by removing the supply voltage from the detector. The base can be used with 4 wire Security Systems that have a reset facility.

ECO1000BREL24L (24V Latching)

The ECO1000BREL24L has been designed to provide interfacing between an ECO1000 detector and 24V system Fire Control Panels or Power Supplies that require an external contact to activate an ancillary piece of equipment. The relay is controlled directly from the ECO1000 detector. Therefore, in an alarm condition both the detector and relay base will latch into alarm, and can only be reset by removing the supply voltage from the detector. A break off tab allows the base to be connected to a range of Fire Control Panels. This tab should be broken when there is no current limiting resistor, such as when used as a stand-alone system powered by a 24V supply.

All System Sensor products are covered by our extended 3 year warranty.

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Specification:

Electrical	12L	12NL	24L
Operating Voltage	10 to 15VDC *	10 to 15VDC *	15 to 31VDC**
Typical Standby Current	1µA***	20µA***	1µA***
Maximum Permissible Alarm Current	25mA	30mA	30mA
Contact Rating	1A DC	1A DC	1A DC

* - Nominal 12VDC
** - Nominal 24VDC
*** - Does not include detector current

Environmental	
Operating Temperature Range	−30ºC to 80ºC
Humidity	5 to 95% Relative Humidity (non-condensing)

Mechanical	
Height	33mm
Diameter	102mm
Weight	70g
Max Wire Gauge for Terminals	2.0mm^2
Colour	Approximates to RAL9016
Material	ABS

Base Compatibility Table

Nominal Panel Voltage	System Type	Panel Reset Facility	Suitable Base
12V	4 wire	No Reset	ECO1000BREL12NL
12V	4 wire	Reset	ECO1000BREL12L
24V	4 wire	Reset	ECO1000BREL24L (tab broken*)
24V	2 wire	Reset	ECO1000BREL24L

* - Used if there is no current limiting

Product Range

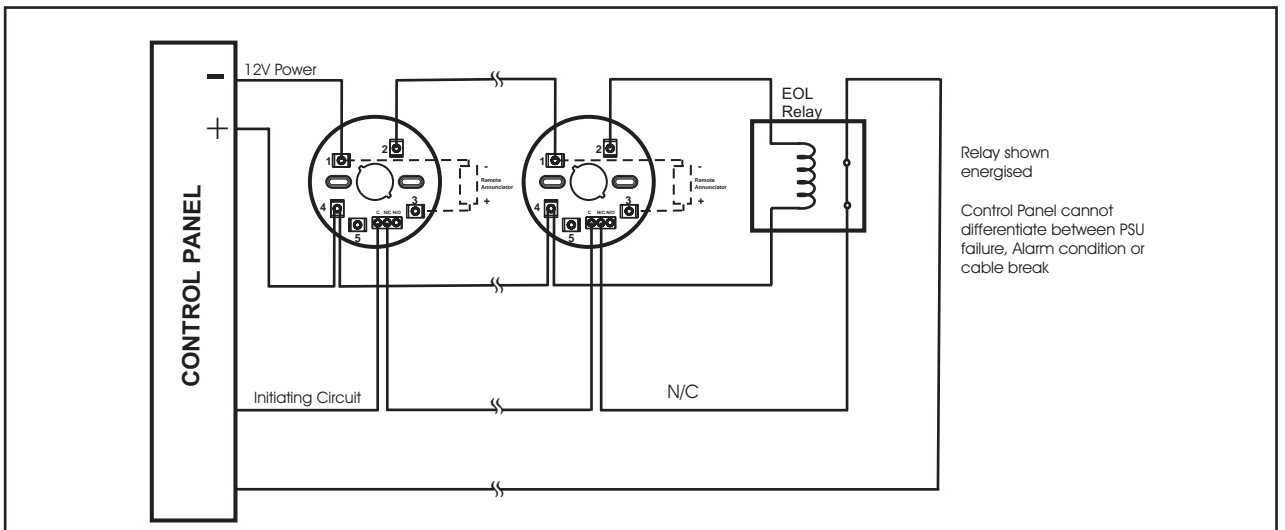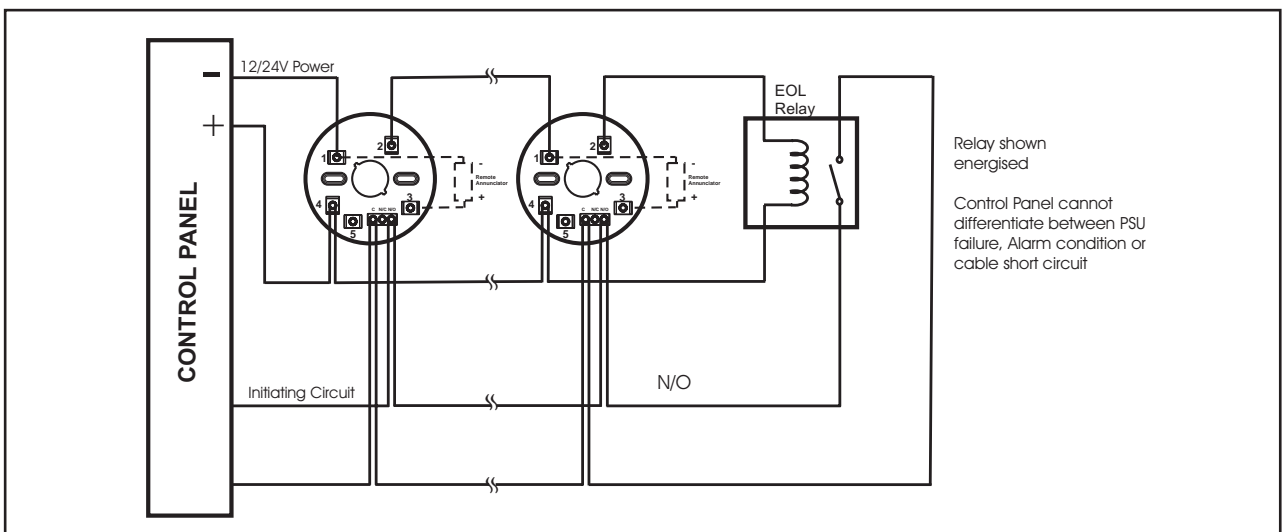| Detectors	ECO1002 Photoelectric Smoke/Thermal Detector
	ECO1003 Photoelectric Smoke Detector
	ECO1005 Rate of Rise and Fixed Temperature Thermal Detector
	ECO1005T Fixed Temperature Thermal Detector
Other Bases (see note*)	ECO1000B Standard Base
	ECO1000BSD Standard Base with Schottky Diode
	ECO1000BR Resistor Base 470 ohm
	ECO1000BRSD Resistor Base 470 ohm with Schottky Diode
Accessories	ECO1000RTU Remote Test Unit

* - Bases with other resistor values to those shown are also available. Please contact System Sensor Europe for more information.
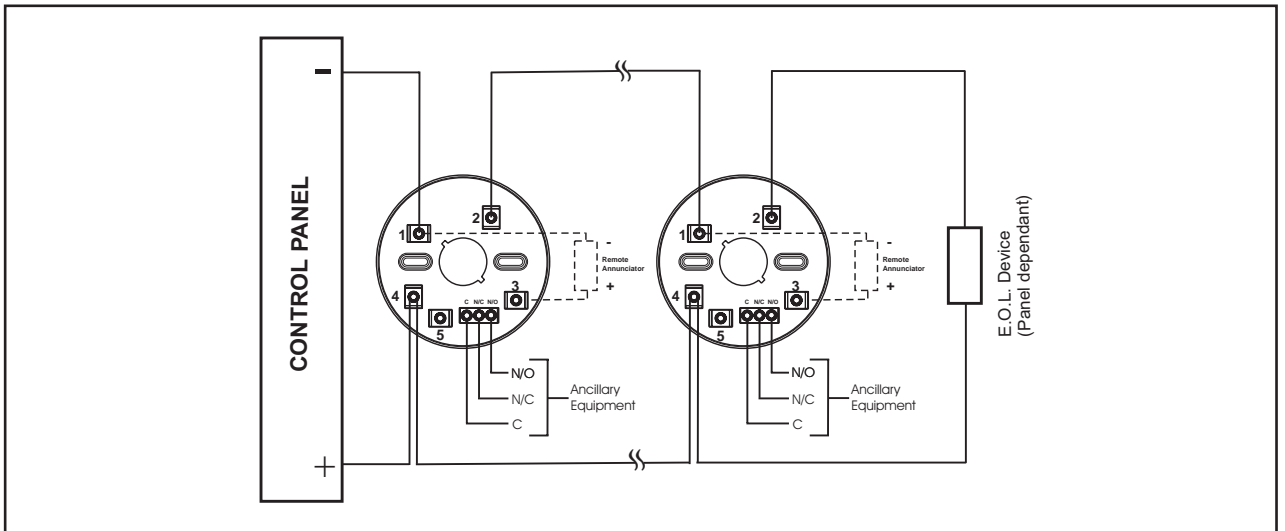
Typical 2 Wire System using ECO1000BREL12L or ECO1000BREL24L

Relay shown energised

Control Panel cannot differentiate between PSU failure, Alarm condition or cable break

Typical 4 Wire Security System with normally closed contacts using ECO1000BREL12NL or ECO1000BREL12L

Relay shown energised

Control Panel cannot differentiate between PSU failure, Alarm condition or cable short circuit

Typical 4 Wire Fire System with normally open contacts using ECO1000BREL12L or ECO1000BREL24L

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102mm

33mm