# Carbon Monoxide Alarm

## Mains 230V~ with Rechargeable **Battery Back-up**

#### **Model Ei261DENRC**

- Proven Electrochemical sensor
- Tamper proof rechargeable Lithium battery back-up
- Unique easy to replace sensor module
- Digital display shows amount of CO present
- Memory feature records if Carbon Monoxide (CO) has been detected
- Easy to use Test/Hush button
- Easi-fit base
- Pre alarm LED and display gives early warning of CO
- Loud distinctive alarm sound (85db(A) at 3 meters)
- Power, alarm and fault indicator lights
- Kitemarked to BS EN50291:2001
- 5 Year Guarantee



#### **Product Description**

The Ei261DENRC is a Carbon Monoxide (CO) alarm powered by 230V AC mains. The rechargeable Lithium cell back-up is designed to have a ten-year life and outlast the life of the alarm. They will provide at least 30 days of operation without mains power

The alarm has a high performance electrochemical sensor to sense CO presence. The sensor can be replaced after 5 years to provide a combined 10 year protection against CO

The alarm has a digital display which, if CO is present (over 50ppm), indicates the amount in Parts Per Million (ppm)

The alarm can be interconnected with any combination of Ei Electronics mains powered alarms and ancillaries (up to 20 units). See overleaf for further details

The alarm also has Remote Control capability, allowing the alarm to be controlled via a Remote Control Switch (Ei1529RC). This allows remote Test, Locate and Silence functions to be performed on all RC enabled alarms in the system. A Manual Call Point (MCP401RC) is also available

The alarm is supplied with an Easi-fit base that allows quick and simple installation of the alarm, combined with simple removal and replacement. The Easi-fit base automatically connects both mains power and battery back-up as the alarm slides on to the base

#### Operation

- The green indicator will illuminate to show mains power is
- When in alarm, the alarm will send an interconnect signal to all other Smoke, Heat or CO alarms it is linked with (only the triggered alarm will flash a red indicator)
- The horn will sound, the red indicator will flash at different speeds and the digital display will give a readout to indicate the presence of various levels of CO gas
- The horn will beep every 40 seconds to indicate the battery back-up is depleted and needs recharging
- The horn will beep and the amber indicator will flash every 40 seconds to indicate a fault on the sensor
- The "Test/Hush" button will either silence false alarms (if briefly pressed) or perform a unit self test (if pressed and held). Note that the alarm cannot be silenced when sensing a CO level of 300ppm or above
- Memory Feature after the unit has been in alarm, the red indicator will flash every 40 seconds at a rate indicating the CO level previously detected. Pressing the "Test/Hush" button will cause the red indicator to flash and the digital display will show what level of CO was present



### **Model Ei261DENRC**

#### **Technical Specification**

- 1. The CO Alarm carries the BSI Kitemark to indicate type testing to BS EN 50291:2001. It is CE marked to indicate conformance to Low Voltage and Electromagnetic Compatibility Directives.
- 2. New generation electrochemical cell type Carbon Monoxide sensor checks CO level every 70 seconds. Each unit is calibrated and tested in CO gas to ensure accuracy. Sensor module plugs into base of unit and should be replaced after 5 years. The amber 'Fault' light will flash once every 40 seconds (without a beep) to indicate the sensor should be replaced. Replacement sensor modules, Ei261MEN, are readily available at modest cost. Does not require an electrician to change the sensor.
- 3. High level of selectivity. No false alarms when exposed to the following interference gases for 2 hours: (as per UL2034 sec.38) Methane 500ppm, Butane 300ppm, Heptane 500ppm, Ethyl Acetate 200ppm, Isopropyl Alcohol 200ppm and Carbon Dioxide 1000ppm.
- 4. 220 240V AC, 50Hz mains powered. Power: 1 Watt, 60mA. Supplied complete with sealed-in tamper proof Panasonic Rechargeable Vanadium Pentoxide Lithium standby cells, designed to last at least 10 years without the need for replacement and can power the unit for a minimum 30 days in the event of mains failure. The rechargeable cells are monitored and if they start to be depleted (i.e. with mains off) or if they become defective the unit will beep every 40 seconds. The cell manufacturer has endorsed a minimum 10 yr life expectation for the rechargeable cells.
- 5. Supplied with 'Easi-fit' surface mounting plate, with integral terminal block, cable cover and fixing screws. Terminal block is permanently fitted to mounting plate. Built-in rechargeable cells connect as unit is slid on to mounting plate. Conduit (up to 25 x 16mm) can be attached to the top or bottom of the unit for surface wiring. Ceiling or wall mountable.
- 6. Interconnection capability such that if one alarm sounds all interconnected alarms sound. Up to 20 units can be interconnected. Additionally, can be interconnected with 2100, 160RC and 140RC Series Smoke and Heat alarms provided an Ei1529RC Remote Control switch is used.
- 7. On first power up the Red and Amber LED's flash once; after 2 minutes settling, the unit operates normally.
- 8. Green LED indicator light confirms integrity of mains power supply.
- 9. Low and high level indicators red LED indicator light flashes every 2 seconds at 50ppm CO (sounder operates within 60-90 mins); flashes twice every second at 100ppm CO (sounder operates within 10-40 mins); flashes 4 times per second at 350ppm CO (sounder operates within 3 minutes)
- 10. Digital display activates at CO levels above 50ppm. Pressing the Test/Hush button for 20 seconds resets reading to zero.
- 11. Fault indicator amber LED flashes and horn beeps every 40 seconds if a fault is detected.
- 12. Manual Test/Hush button press and hold to test circuitry and horn. Pressing and releasing the button when the unit is sensing CO will silence the alarm for 4 minutes. It will only silence once until the gas clears. At 300ppm CO the unit cannot be silenced due to the increased danger.
- 13. Remote test facility via Ei1529RC Remote Control Switch to test circuitry, sensor and horn (red LED on alarm cover will flash rapidly) and to activate all interconnected alarms in the system. See separate specification sheet for more information on this option.
- 14. Quick CO Gas Test reduces the time for testing with CO from at least 4 5 minutes to less than 10 seconds.
- 15. Memory feature pressing the Test/Hush button records if CO has been detected during a period of absence: the CO level recorded, if any, will show on the digital readout. Pressing the Test/Hush button for 20 seconds resets the memory. Automatic reset of alarm test when button is released and after an alarm state when CO gas clears.
- 15. Built in sounder to give a minimum output of 85dB(A) at 3 metres. Modulated sound output 3 rapid pulses followed by a 1½ second pause, repeated until reset. This easily differentiates it from a typical Smoke/Heat alarm.
- 16. Tamper resistant cover, which cannot be removed from mounting plate without releasing catch with a small screwdriver. An optional locking screw can be screwed into the side to prevent removal. The rechargeable cells are not suitable for use with other products and are soldered on to the circuit board.
- 17. Operating temperature range: -10°C to +40°C (14°F 104°F). 15% to 95% relative humidity (non-condensing).
- 18. Dimensions: 126mm x 150mm x 42mm. Weight: 360g.
- 19. Remote 5 Amp relay (Ei128RBU plus Ei128COV) available as an optional extra, switchable for constant or pulse operation for use with a solenoid gas shut off valve, or for signaling a remote device
- 20. 5 Year Guarantee.
- 21. Manufactured in Ireland.



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