



CMR Electrical Ltd  
Bolton House  
Five Chimneys Lane  
Hadlow Down  
East Sussex  
TN22 4DX  
Tel: 01825 733600

## Single and Two Zone Water Leak Detection Alarm Type LD2-3 and LD2-3V



The LD2-3 range has been designed to monitor critical areas for water leaks via spot sensors or linier cable. Any number of spot sensors or a maximum of 50 metres of linier water detection cable can be connected to each zone. The range comes as standard with monitoring of the interconnecting cable between the sensors and the control unit. Any disconnection of the sensors from the controller will instigate a "Sensor Fault" alarm. Complete with an audible warning device, mute push button. The alarm type and location are displayed on a back lit alpha numeric display unit.

### *Standard and Optional Features*

- 💧 **Water leak detection cable or spot probe or a combination of both can be used**
- 💧 **Alpha numeric display for ease of Alarm identification from a distance**
- 💧 **On board audible warning device to alert local operators of a problem**
- 💧 **Alarms latched until Mute operated to give indication of transient water leaks**
- 💧 **As standard, a common zone fault or power fault relay for onward signalling to a BMS**
- 💧 **As standard, a common water detected alarm relay for onward signalling to a BMS**
- 💧 **Monitoring of each zone cable and sensor to ensure continuity and integrity**
- 💧 **Individual Zone sensitivity adjustment allowing any zone to be set for high to low sensitivity**
- 💧 **A Bi-directional DC signal in the sensors to stop electrolyses and polarisation**
- 💧 **Zone Alarm test push button located inside to panel**
- 💧 **Optional; Zone 1 and or zone 2 alarm output relay contact for onward alarm signalling**
- 💧 **Optional; Output to flashing beacon or sounder/beacon**
- 💧 **Optional; SMS text messaging to one or two mobiles**
- 💧 **Optional; Remote repeat alarm unit type SCA with independent "Mute" alarm button**
- 💧 **Optional; Battery backup**



Once a water leak has been detected, the display will flash showing the leak location, the audible warning device will start and the common alarm relay will close. The unit will remain in this condition even if the water is removed from the sensor. Muting the alarm will stop the sounder and stop the display flashing. Providing water has been removed from the sensor, after pressing the “Mute” alarm button the display will return to normal mode and the common alarm relay de-energise. However, if water is still being detected only the audible warning will stop leaving the display showing the location of the leak and the alarm relay energised. As standard all LD2-3 units have a common alarm and common zone fault / power fault set of volt free for onward signalling to Building Management Systems (BMS) or control system.

### OPTIONAL FEATURES

The following options can be added to the standard unit, please advise options at the time of ordering;

- 1) Individual zone alarm volt free output contacts
- 2) Output to flashing Beacon
- 3) Output to Beacon sounder that stops when the “Mute” push button is operated
- 4) Text messaging when an alarm is generated
- 5) Remote repeat alarm unit with separate “Mute” push button type SCA
- 6) Water valve shutdown using our LD2-2V range
- 7) 12 hour Battery backup

Each zone is provided with a sensitivity potentiometer, this has been provided to allow individual zones to be set to high sensitivity for sensitive areas or low sensitivity for areas known to experience high humidity or water splashes. Unlike some other water detection units on the market, the LD2-3 range from CMR electrical uses a bi-directional (AC) signal within the sensors. Using alternating current stops electrolyses which causes the sensors to disintegrate and a system unable to detect water. The use of alternating current also allows the sensors to be continually monitored even when submersed in water. This allows the system to self reset after water has been removed for the sensor.

### Water Leak Sensors



**Detection cable in any length up to 50m**



**Spot Probes for bundled areas**

#### Specification

Housing type .....	ABS, colour light grey similar to RAL7035 rated at (IP50)
Mounting .....	Wall, flush or surface
Access into Housing .....	Bottom or bottom back
Size Standard unit .....	180mm wide x 130mm high x 80mm deep
Input power .....	50 Hz single phase 230VAC +10% - 6%
Burden .....	< 4VA
Power termination .....	Internal 3way terminal block
Voltage to sensor .....	Bi-directional 5VDC
Connections to sensor .....	Internal plug-in terminal block
Common Alarm output contacts .....	Changeover contact rated at 1amp 30VAC/DC
Common Fault output contacts .....	Changeover contact rated at 1amp 30VAC/DC
Individual Alarm output contacts .....	Changeover contacts rated at 1amp 30VAC/DC
Display character size .....	White backlit 5.95mm high x 3.2mm wide

Continual development may result in products and specifications being changed without prior notice