

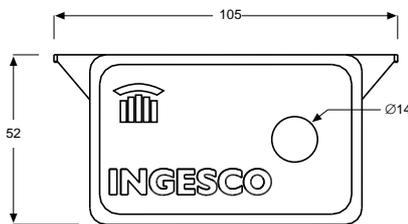
# CDR-HS

## HIGH SENSITIVITY LIGHTNING STRIKE COUNTER

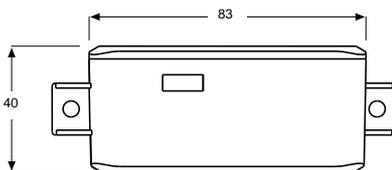


Ref. 432027

Top view



Front view



Dimensions in mm.

### TECHNICAL SPECIFICATIONS

Ref.: 432027	
Dimensions	83 x 52 x 40 mm.
Weight	300 gr.
Current discharge range	100A (8/20) · 100kA (10/350)
Counter range	of 0-999 pulses.
Temperature range	range -20°C to 65°C.
Protection rating	IP 65.
For conductor Type	Cable: 50-95 mm <sup>2</sup> . Rod: Ø 8-12 mm.
Minimum torque	10 Nm.

### PRODUCT

High sensitivity electro-mechanical lightning strike counter, designed specifically for conductive mesh or protective down conductors in contact with metal walls in an external protection system.

### APPLICATIONS

The CDR-HS high sensitivity lightning strike counter is designed to detect electro-atmospheric discharge impacts through the downconductor of the external protection system. The high sensitivity in the current detection makes the CDR-HS the ideal solution for protection systems as conductive mesh and protective down conductors in contact with metal walls. These kind of protection systems are characterized by having various current return paths which make more difficult the detection of lightning of low and medium intensity by an Standard lightning counter (based on the Standard EN 50.164-6).

The use of the CDR-HS is recommended in:

- Faraday cage with various current return paths.
- Down conductors in contact with metal walls, in case that metal walls are grounding.
- When the down conductor has various anchor sets in a metal wall and the lightning counter is situated in the middle of them.

### CHARACTERISTICS

- Register up to 999 impulses
- Display on screen
- Detection of impulses from:
  - Intensity min.: 100 A 8/20 µs (1 kA 8/20 µs according EN 50.164-6:2009)
  - Intensity max.: 100 kA 10/350 µs (100 kA 10/350 µs according EN 50.164-6:2009)

## CDR-HS

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▶ CDR-HS in a Faraday cage system.



▶ CDR-HS in a lightning rod installation fixed in a metallic mall.

### OPERATION

When a lightning strike goes down through the grounding system, it appears an energy that is detected by the lightning strike counter CDR-HS.

The counter registers this energy and increases one unit the digits shown by the device. CDR-HS can detect lightning strike currents 10 times lower than the standard counters, maintaining the ability to detect direct lightning strikes according with EN 50.164-6. With the CDR-HS it is possible to detect low lightning strike currents as a consequence of structures with several paths to ground.

The CDR-HS lightning strike counter is fully autonomous and requires no maintenance. It uses the lightning energy for its operation.

### GUARANTEES & BENEFITS

- Designed according to the EN 50.164-6:2009 Standard, with range extension of low currents up to 100 A.
- Suitable for round or flat down conductors.
- It allows controlling the lightning rod conditions.
- Works in any atmospheric condition (from -20°C to 65°C).
- Offers updated and reliable information.
- It does not need power supply.
- Easy installation and operation.

### STANDARDS

The use of counters is recommended by the NF C 17-102:2011 and EN 62.305 standards, with a view to monitoring the discharges.



#### Remember...

According with the NFC 17.102, UNE 21.186 and EN 62.305 standards, each lightning protection system should be periodically checked, especially after a lightning strike impact on it.

Ingesco® reserves the right to modify the design without prior notice.