

# Lightning flash counter

## Lightning flash counter

Ref 8011



### Description

The lightning flash counter is designed to keep a record of all direct lightning strikes on the external lightning protection system (Prevectron, single rod, meshed cage, ...). The digital display (6 digits) allows a direct and comfortable reading of the number of recorded impacts.

Lightning discharges counting and saving requires no external power supply and is not thus dependent on the life cycle of the internal battery. The internal long duration lithium battery is only required for displaying strikes figure when the button located on the front panel is pressed.

### Tests

According to the UTE C 17-106 Guide, the lightning flash counter was subjected to several test procedures in high voltage laboratory. The values indicated below are based on the LCIE test report (available on request). Moreover, following its unique policy of research & development in real lightning conditions, INDELEC has successfully submitted the lightning flash counter to real lightning discharges during the 2004-2005 test campaign in Cachoeira Paulista (Brazil).

The average value of the lightning strike currents was 45 kA. During this campaign, the lightning flash counter has demonstrated its reliability (counting) and its robustness under these extreme lightning strike conditions.

### Installation

The lightning flash counter is fixed directly on the down-conductor using 2 mounting flanges located on the back face. No interruption of the down conductor is necessary, thus allowing an excellent electrical continuity of the installation down from the rod to earthing the system.

The counter records the lightning current by induction at the time of passage in the down conductor.

### Checking & Maintenance

In the meantime, INDELEC has developed a new specific testing device : this new portable tool allows to test on site, after installation and without disassembling, the digital lightning flash counter internal circuit functions.

In order not to affect the real record of lightning strikes shown by the lightning flash counter, it includes a specific menu making it possible to temporarily switch to a test mode. Within the framework of regular maintenance and checking procedures of installations of external lightning protection systems, all parts and accessories of the system can now be controlled (test box for Prevectron, visual checking of the installation, earth resistance meter and the new lightning flash counter testing device).



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## Technical data

References	8011	
Minimal detectable current	Id	1 kA
Maximal detectable current	I <sub>max</sub>	100 kA
Minimum current sensitivity (id/3)	I <sub>nd</sub>	333 A
Protection class	IP	54
UTE C 17-106 Guide compliant		certificate 2005-291 A

## Schematic (mm)

