



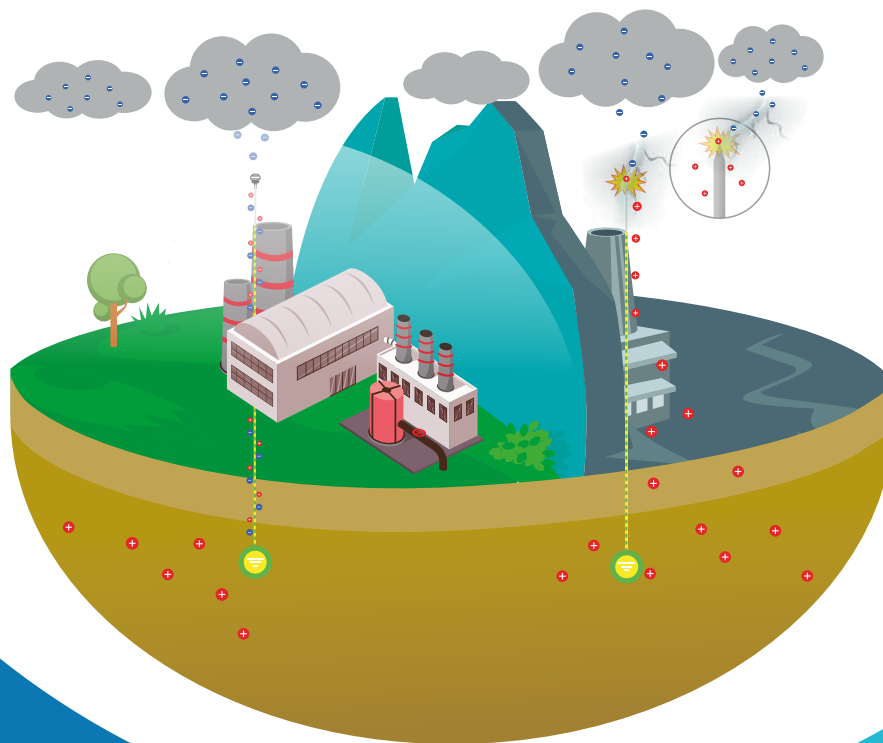
PDCE-CMCE UL

MULTIPLE ELECTRIC
FIELD COMPENSATOR




sertec S.R.L.
Soluciones inteligentes pensando en usted

JUL 2025



SCENERY

In an increasingly unpredictable climate, it is crucial to have reliable protection that minimizes risks and ensures peace of mind in lightning protection. Electrical discharges annually result in significant material and human losses in highly complex infrastructures, industries, residences, vessels, and other types of facilities.

The electric field has been notably increasing worldwide, leading to areas with higher lightning density (lightning strikes per square kilometer) and typical atmospheric events in regions that previously did not experience lightning impacts.

Given this scenario, it is essential to have lightning protection systems that minimize risks and provide safety for both individuals and structures.

PDCE-CMCE-UL

It is a passive capture system designed to balance and compensate the effects of atmospheric electrical phenomena through multiple compensators and the grounding system. The operating principle is based on compensating and stabilizing the existing electric field in its environment, nullifying the formation of the upward leader and neutralizing lightning. A protective shield is generated within its coverage area, and excess electric charges are continuously drained to the grounding system. In simpler terms, it prevents sudden increase or saturation of electric charge in its protection area, avoiding the necessary potential difference for lightning formation.



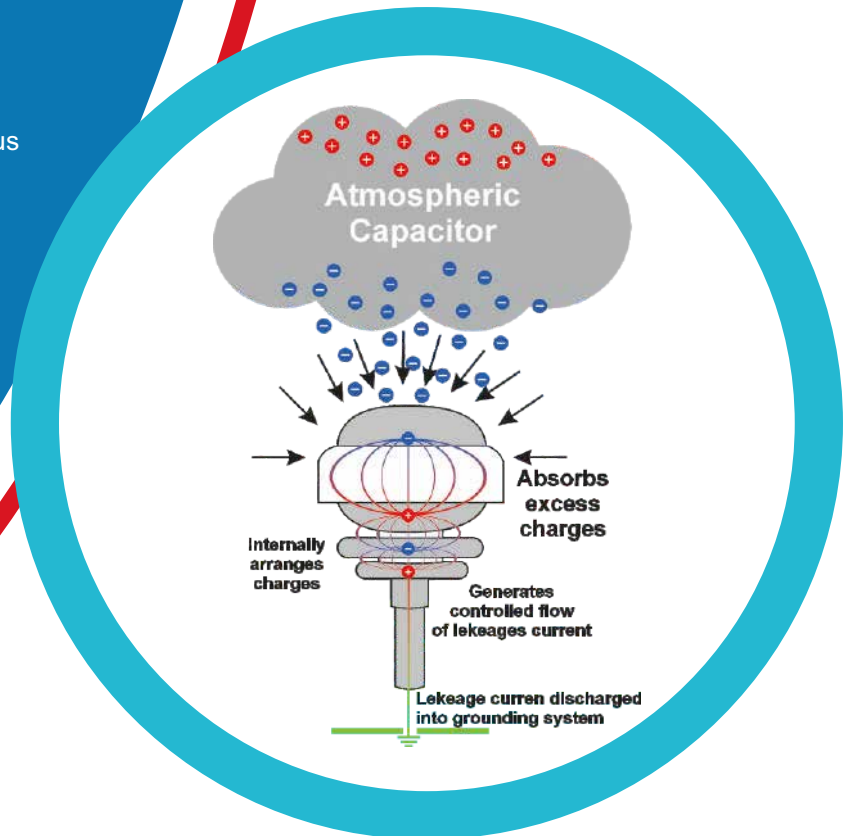
Draining of current to the ground fluit.



Controls and balances the electric field in its multiple compensators, neutralizing lightning formation within its protection area.



Wide protection radius



APPLICATIONS



FACTORIES



CONSTRUCTIONS



SPORTS COMPLEXES



TELECOMMUNICATIONS



HOSPITALS



MINES,
PETROCHEMICAL



BUILDINGS AND
SHOPPING CENTERS



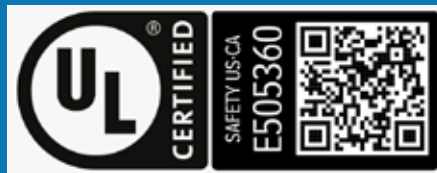
AIRPORTS, RADARS,
AND CONTROL TOWERS



MONUMENTS AND
HISTORICAL SITES



THE PDCE-CMCE UL



APPLICATIONS

Buildings, large complexes, mining, electrical substations, sports fields, airports, telecommunications and structures that can be covered by its protection radius.

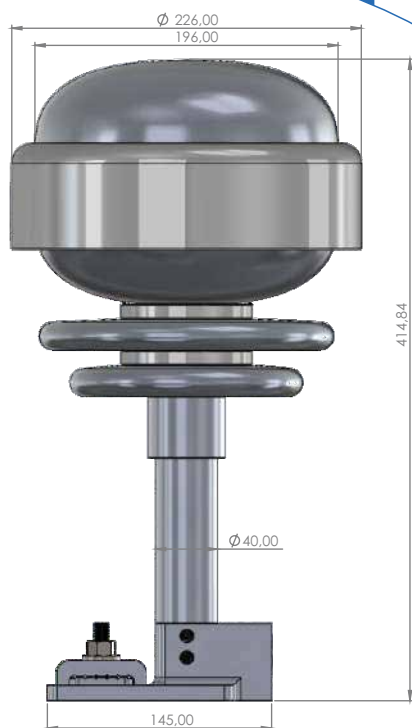
PRODUCT WARRANTY

5 years, subject to annual maintenance. Coverage in the event of a direct lightning strike on the product. This coverage does not cover any effects that may occur on the protected structure resulting from indirect effects caused by externally induced overvoltages or from failure to comply with the manufacturer's installation requirements, such as grounding, assembly, materials, and correct technical practices **(specified in the installation manual)**.

WEIGHT/MEASUREMENTS OF THE PDCE – CMCE UL

Weight: 10.4kg

Measurements: Ø 22.6 cm x 41,48 cm.

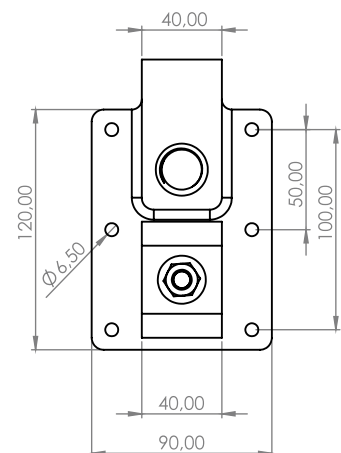
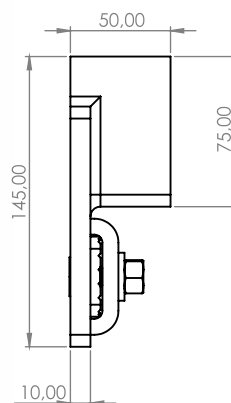


PROTECTION EFFICIENCY

99% reduction in direct lightning strikes on protected structures. In case of impact (1%), it has the capacity to derive and transmit the discharge to ground according to current impulse tests 10/350 us with 100KA, minimizing electromagnetic effects. In such event, SERTEC S.R.L. is only responsible for the replacement of the affected CMCE unit and the corresponding technical assistance under warranty. No coverage is provided for material damages to the structure installation site, or any other related systems. Labor and civil works are also excluded.

PDCE-CMCE-SERTEC UL ENHANCED FASTENING SYSTEM

Unlike the traditional model, the PDCE-CMCE-UL incorporates an innovative support system that optimizes the device's stability and safety. This model features an aluminum base support designed to allow for both vertical and horizontal installation, adapting to various structural configurations. The base includes a robust fixing connector, which secures the downconductor with a minimum tensile strength of 200 lbs (890 N), complying with UL 96A standards. It is also equipped with six M6 screws that guarantee a firm fixing to the contact surface. This design allows the PDCE-CMCE-SERTEC UL to be installed at the highest point of the protected structure, ensuring its optimal performance as an electroatmospheric protector. On uneven or unlevel surfaces, alternative fixing methods are contemplated to maintain the device's verticality.



TECHNOLOGY CERTIFICATIONS

The PDCE-CMCE-UL is certified and has been recommended by field engineers and lightning protection specialists for its superior performance and reliability. This adds a layer of confidence to its application in protecting critical infrastructure such as wind turbines.



ISO 9001-2015 Certification: This certification establishes fundamental quality management principles that help control and improve performance and lead to efficiency, product excellence, and optimized customer service.



ISO 14001-2015 Certification: We care about the environment and strive to minimize our environmental impact. This certification validates our commitment to sustainable and responsible practices.



TESLA Institute: SERTEC devices are approved by the Tesla Institute in Belgrade as an evolution of Tesla's patent, a pure capacitance device capable of operating at different frequencies.



Compliance with IEC, EN, UNE-EN and BS-EN 62305 Part 1, 2, 3, 4 standards.
This document was made based on regulations 61400-24.



Approval within the NATO Cataloguing System (NOC) with the NCAGE code SFKU3: This recognition demonstrates the ability to provide reliable and secure solutions for applications in military and government environments within NATO.



The company manufacture have DUNS Registration Number 955067967.



CE Marking and UKCA Marking on all CMCE models: The devices meet the safety and quality requirements established by the European Union and the United Kingdom, ensuring their compliance with the regulations of these markets.



Type Approval Certificate ELE281223XG. For specific line production.



Lloyd's Register Type Approval Certificate Certificate No: LR2514641TA. For specific line production.



UL-96-A E505360 Certification on a specific model.



ADVANTAGES OF THE PDCE-CMCE-UL



It doesn't require a power source.



It's compatible with existing grounding systems, subject to technical approval.



It doesn't contain electronic or flux materials.



5-year manufacturing warranty subject to maintenance.



Extended lifespan, over 10 years with maintenance.



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PRESENCE IN MORE THAN

60
COUNTRIES



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