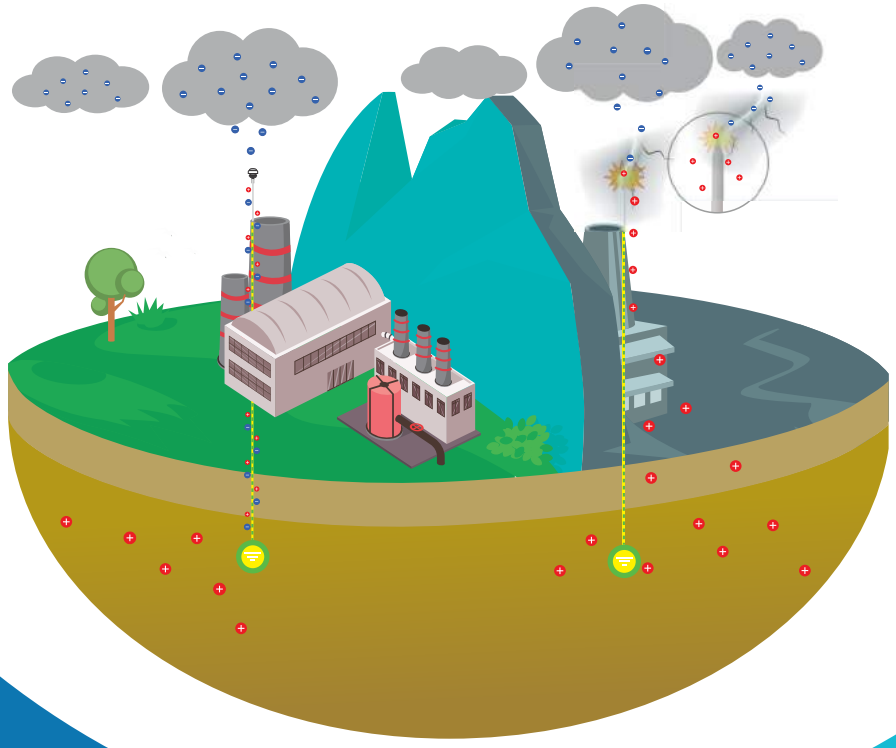
CMCE

MULTIPLE ELECTRIC FIELD COMPENSATOR

PARAGUAY

sertec S.R.L.

Soluciones inteligentes pensando en usted



CMCE-SERTEC

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.

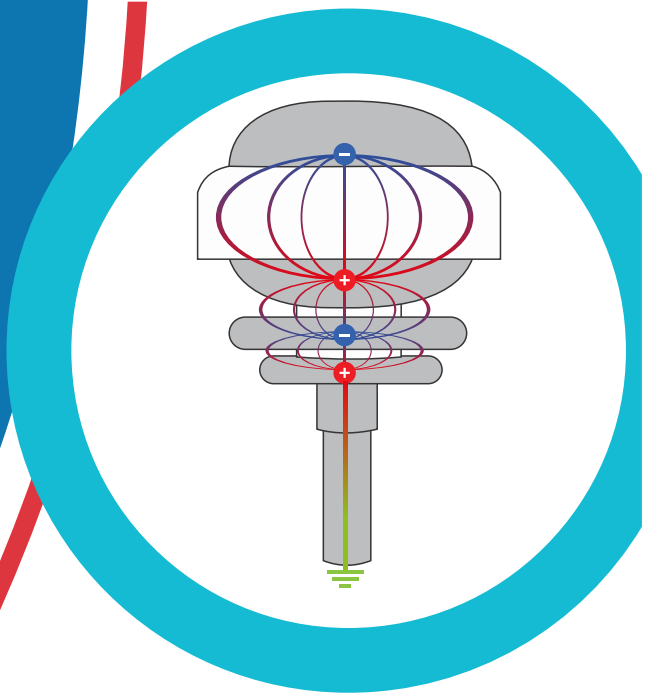
OPERATING PRINCIPLE

It is a passive capture system designed to balance and deionize the effects of atmospheric electrical phenomena through multiple compensators and the grounding system. Its 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 in harmless milliamperes.

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

Protection radius ranging from 25 to 120 meters depending on the model used.



APPLICATIONS

- HOSPITALS AND SANATORIUMS.
- FACTORIES
- CONSTRUCTIONS
- SPORTS COMPLEXES
- TELECOMMUNICATIONS
- MINES, PETROCHEMICAL AND EXPLOSIVE ATMOSPHERES
- BUILDINGS AND SHOPPING CENTERS
- AIRPORTS, RADARS, AND CONTROL TOWERS
- MONUMENTS AND HISTORICAL SITES

MODELS OF CMCE SERTEC

The versatility and adaptability of the different models make it the ideal choice for a wide range of structures and applications.

CMCE 25

Device designed for small traffic lights, small radars, road cameras, control booths, and other structures that can be covered by its protection radius.

Protection Radius: 25 meters.

CMCE 55

Device designed to protect residences, tanks, medium-sized telecommunication towers, storage facilities, and other structures that can be covered by its protection radius.

Protection Radius: 55 meters

CMCE 120

Device designed to protect buildings, industrial plants, mining sites, electrical substations, rural establishments, airports, telecommunications, and other structures that can be covered by its protection radius.

Protection Radius: 120 meters

CMCE AT 120

Device with specific application and thermal resistance up to 400°C for high-temperature areas such as industrial chimneys, distillation towers, structures near refinery burners, among others.

Protection Radius: 120 meters

PROTECTION EFFICACY

99% reduction in direct lightning strikes on protected structures.
In case of lightning strike impact (1%), the CMCE behaves as a thermal fuse, absorbing part of the lightning energy as heat through component melting, minimizing electromagnetic effects. In this case, SERTEC S.R.L. covers only equipment replacement and technical assistance under warranty (not labor costs).

CMCE HIGH VIBRATION

Device with specific application and anti-fall system for vibrating structures and structures near the vibrating source. Especially suitable for drilling towers, asphalt plants, and any industry with vibrating machinery.

Protection Radius: 120 meters

HIGH RESISTANCE

Device with specific application for highly corrosive environments, made of stainless steel with high corrosion resistance. Especially suitable for the chemical industry where corrosive processes are present.

Protection Radius: 120 meters

CMCE GRAPHENE

Device with specific application typically used in military settings, the innovation is based on the high electrical conductivity properties of Graphene and the advantage of being undetectable by radars.

Protection Radius: 120 meters

CMCE BLACK

The CMCE Black is an innovative and stylish variant of SERTEC's CMCE 120 model. The CMCE Black features a special coating that gives it a darker tone. Specifically designed for implementation in open spaces and outdoor environments, this dark coating aims to prevent glare and minimize the visual impact that brightness could cause.

Protection Radius: 120 meters

CMCE UL

CERTIFIED

Device with the same electrical features as the CMCE 120, manufactured under the UL 96A standard. Suitable for projects requiring the device and installation based on this American Canadian standard.

Protection Radius: 120 meters

CMCE TWIN MAX

Device that surpasses the high efficiency of its inspiring base, the CMCE 120, for application in the most extreme electric field conditions such as wind turbines, solar parks, structures located above 4000 meters above sea level, and high ceraunic level areas. It has a laboratory record high voltage of 840KV at one meter without lightning formation.

Protection Radius: 120 meters

CERTIFICATIONS

Sertec is a leading company in the field of lightning and atmospheric phenomenon protection, and takes pride in having multiple certifications that endorse the quality and effectiveness of its products. Our lightning protection system CMCE-SERTEC has undergone rigorous testing and assessments to obtain the most recognized certifications in the industry.

ISO 9001-2015 Certificate: This certification establishes fundamental principles of quality management that help control and improve their performance and lead them towards efficiency, the excellence of their products and the optimization of their 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.

High Voltage Laboratory Tesla Institute: Sertec's devices are approved by the Tesla Institute in Belgrade as an evolution of Tesla's patent, with devices of pure capacitance and capability to operate at various frequencies.

Compliance with IEC, EN, UNE-EN, and BS-EN 62305 Part 1, 2, 3, 4 standards.

Homologation within the NATO Codification System (NCS) with NCAGE code SFKU3: This recognition demonstrates the ability to provide reliable and secure solutions for military and governmental applications within NATO.

DUNS Registration Number 955067967.

CE Marking and UKCA Marking on all CMCE models: The devices comply with safety and quality requirements set by the European Union and the United Kingdom, ensuring their conformity with regulations in these markets.

ADVANTAGES OF THE CMCE

- It doesn't require a power source.
- It's compatible with existing grounding systems, subject to technical approval.
- It doesn't generate sparks, recommended for ATEX zones.
- It doesn't contain electronic or flux materials.
- 5-year manufacturing warranty subject to maintenance.
- Extended lifespan, over 10 years with maintenance.

sertec S.R.L.

Soluciones inteligentes pensando en usted

ADDRESS

CENTRAL OFFICE
Av. Gral Santos 2555 c/ 18 de Julio
CP:001310
Asunción Paraguay

INDONESIA OFFICE
PT. ANUGERAH BASWARA MEGAH
Pacerakkang Raya 150A- Birinkanaya
Makassar - Sulawesi Selatan

Check the Country in the Distributors Area.

PHONE

+62 817-4147-477

MAIL

sales@baswarasolution.com

PRESENCE IN MORE THAN

60

COUNTRIES

Check your country on our website