## **SIEMENS** COCCY

# Our portfolio of surge arresters & composite insulators



siemens-energy.com/arresters siemens-energy.com/solutions-for-overheadlines

## Surge arresters and composite insulators for medium- and high-voltage

Experience is most essential when it comes to reliability in medium- and high-voltage applications. Siemens Energy has been designing and manufacturing medium- and high-voltage surge arresters for standard and special applications since 1925. Siemens Energy has an outstanding arrester and insulator footprint with his two factories in Berlin, Germany and Wuxi, China. This constellation allows short delivery times and a perfect distribution of competencies. Valuable equipment, such as transformers, arresters, circuit breakers, generators, motors, capacitors, traction vehicles, bushings and complete switchgear, is ideally protected against overvoltages.

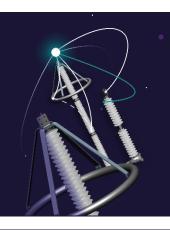
Siemens Energy surge arresters have been designed to meet the requirements of a wide range of common installation environments, from arctic cold to the heat of the desert and the dampness of tropical climates. They are available for any application from 3 kV up to 1,200 kV including special applications such as high-voltage direct current (HVDC) and FACTS systems as well as all kinds of compensation systems for electric power networks.

Continuous research and development, the wealth of Siemens Energy know-how and comprehensive worldwide experience give Siemens Energy surge arresters a leading edge in overvoltage protection. Their uncompromising quality ensures a long service life and reliability in any application.

Siemens Energy composite insulators combine the highest levels of electrical insulation and mechanical strength in a compact, lightweight one-piece housing design with two different sealing options depending on the customer requirements. All insulators are designed and tested in compliance with the latest versions of relevant IEC & ANSI standards.

- Development in Germany
- Worldwide support direct from local Siemens Energy office and the global center of competence in Berlin
- Type tested portfolio according to IEC & IEEE standard
- Siemens Energy is one of the few suppliers who offers insulators and arresters for overhead lines as a complete solution
- The innovative Sensarrester<sup>TM</sup> –system allows a 24/7 real time access to surge arrester monitoring data and integration to the Sens-family

## For any application, Siemens Energy has a competitive portfolio for your requirement of surge arresters and composite insulators





## **High-voltage transmission**

- For applications up to 1,200 kV
- Most complete portfolio in the market
- Suitable as station and line surge arrester
- Meet competitive and high requirements
- 3EL silicone surge arresters with cage design
- 3EQ surge arresters with tube design
- 3EP porcelain surge arresters
- → More information you can find on our webpage.





## Medium-voltage distribution

- Outdoor and indoor versions (shedless housing)
- Typical applications up to 72.5 kV
- 3EK distribution surge arresters
- 3EJ surge arresters for motor and generator protection
- 3EH4 plug-in surge arresters
- Non-explosive disconnector (non dangerous good)
- → More information you can find on our webpage.





### Overhead line solutions

- Composite insulators 3FL up to 800 kV
- Post insulators 3FS and 3FT (indoor & outdoor)
- Non-gapped line surge arresters (NGLA)
- Externally gapped line arresters (EGLA)
- Innovative line compaction
- Innovative line uprating
- → More information you can find on our webpage.

## For any application, Siemens Energy has a competitive portfolio for your requirement of surge arresters and composite insulators



## Surge arresters for GIS & HVDC/ FACTS

#### Gas-insulated switchgear (GIS)

- For AC/ DC system voltages from 72.5 kV up to 800 kV
- Clean air surge arrester available
- Oil-SF<sub>6</sub> surge arresters for protection of transformers

#### **HVDC/FACTS**

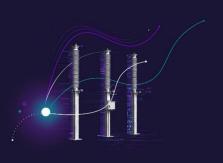
- For AC/ DC voltages up to 1,100 kV
- For highest energy requirements
- According to latest standards





## Rolling stock & rail electrification Rail surge arresters

- Cage design or tube design
- Silione rubber housing
- For AC systems up to 25 kV
- For DC systems up to 3 kV
- Travel speed up to 420 km/h
- Short circuit current 65 kA
- → More information you can find on our webpage.





## Sensarrester™ – 24/7 monitoring

- 24/7 real-time data access of actual arrester condition and historical data, via app or web browser
- Live alert function for critical arrester conditions via email or push notification
- Historical data within a chosen time period
- Event log showing leakage current curve and weather condition at surge event
- → More information you can find on our webpage.

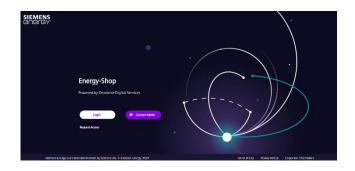
## The Energy-Shop

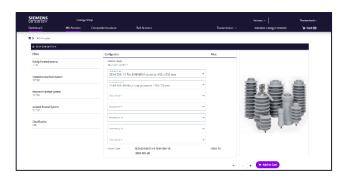
You have the possibility to purchase our surge arresters online, in our Energy Shop. There you can select your individual surge arrester and order directly.

Please klick on the link or use the QR-code and register yourself.



Please klick on the link or use the QR-code and register yourself. https://shop.siemensenergy.com/transmission/en





### **Published by**

Siemens Energy Global GmbH & Co. KG Switching Products & Systems Freyeslebenstraße 1 91058 Erlangen, Germany

For more information, please visit our website: siemens-energy.com/arresters or siemens-energy.com/solutions-for-overheadlines or contact us Email: arrester.energy@siemens-energy.com or

Email: <a href="mailto:arrester.energy@siemens-energy.com">arrester.energy@siemens-energy.com</a> or Email: <a href="mailto:insulators.energy@siemens-energy.com">insulators.energy@siemens-energy.com</a> or Email: <a href="mailto:arrester.energy@siemens-energy.com">arrester.energy@siemens-energy.com</a> or Email: <a href="mailto:arrester.energy@siemens-energy.com">arrester.energy.com</a> or Email: <a href="mailto:arrester.energy@siemens-energy.com">arrester.energy.com</a> or Email: <a href="mailto:arrester.energy@siemens-energy.com">arrester.energy.com</a> or Emailto: <a href="mailto:arrester.energy.com">arrester.energy.com</a> or Emailto: <a href="mailto:arrester.energy.com">arrester.energy.com</a>

#### For the U.S. published by

Siemens Energy, Inc Switching Products & Systems 444 Hwy 49 South Richland, MS 39218, USA

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

Siemens Energy is a trademark licensed by Siemens AG.