

# CLEAN AIR CURRENT TRANSFORMER

420 KV / 6000 A

Current Transformers, utilizing **Clean Air as insulation medium**, provide accurate and reliable current transformation, (measurement), merging proven safety with eco-friendliness.



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# CLEAN AIR CURRENT TRANSFORMER

## CHARACTERISTICS

- For voltage levels up to 420 kV
- Rated primary current up to 6000 A
- Clean air as insulation medium

## BENEFITS

- It uses environmentally friendly air instead of mineral oil or SF6
- Explosion-proof design in accordance with IEC 61869-1 Class II verified in tests
- Clean air does not cause or spread fire under any circumstances
- No aging of the insulation gas

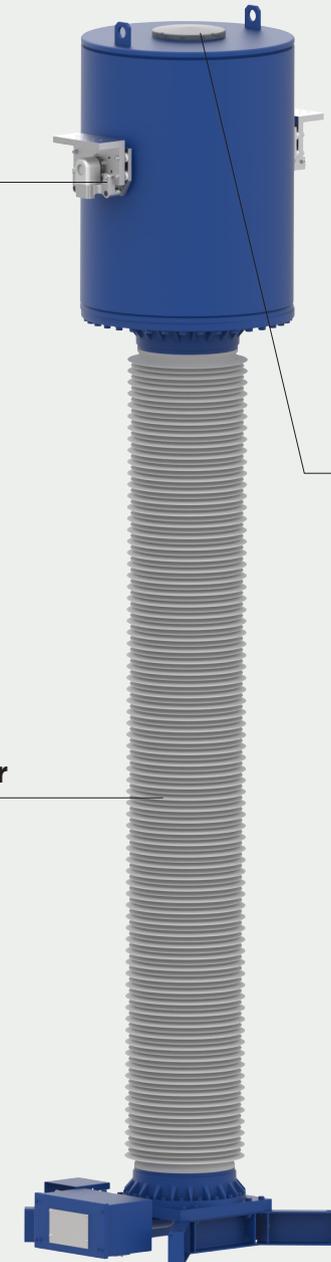
## SUSTAINABILITY

REGENERA® is Trench Group's **Green Quality Label**, awarded to offerings that combine technical excellence with environmental responsibility.

Primary Terminals

Composite Insulator

Rupture Disc  
- explosion proof design



# MAIN FEATURES

Clean Air Current Transformers ensure accurate and reliable current transformation eco-friendly, proven and safe.



## Clean Air

Like the air we breathe, the insulation gas consists of 20 % oxygen and 80 % nitrogen—the most sustainable insulating material for high-voltage devices.



## Environmental

The Current Transformer insulation has a global warming potential (GWP) and an ozone depletion potential (ODP) of 0 and ensures CO<sup>2</sup> savings of 88 % over its entire service life.



## Proven Design

The design is based on the reliable SF6 devices that have been in use for 50 years and of which over 100,000 have been in service.



## Maintenance

Maintenance-free and therefore cost- and time-saving over a service life of more than 30 years.



## High Current

The bar-type primary conductor is designed for high service short-circuit current and prevents high voltage drops in the primary winding.



## Enhanced Operational Safety

Superior Internal arc behaviour, absolutely explosion-proof, in accordance with IEC 61869-1 Class II and proven in tests. The safest insulation technology on the market, as pure air neither triggers nor spreads fire.



## Technical/Finance Advantages

Clean Air is not subject to the F-Gas Regulation leaks do not have to be documented or reported. No specialized personnel are required and there are no additional costs for disposal.



## PRODUCT APPLICATIONS

# INSIDE THE PRODUCT

## Main components of the Clean Air Current Transformer

Clean Air Current Transformers are the only sustainable and cost-saving alternative to SF6 insulation with no GWP or ODP. They are maintenance-free, designed to last for more than 30 years with no emission, operating or recycling costs.



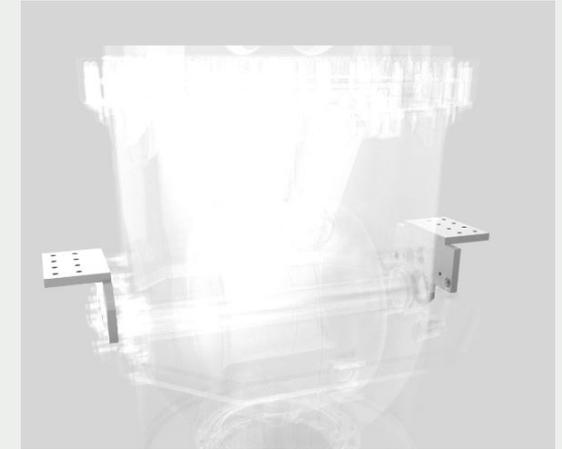
### CORE SHELL

The top CT core design, which is fixed within the core housing, meets a wide range of customer requirements. This is achieved by a top-core tank design, where the housing, including cores and windings, is located at the head of the device, directly above the insulator.



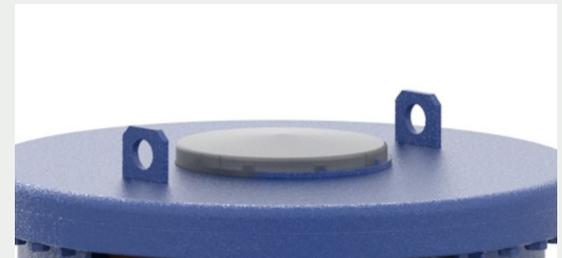
### PRIMARY CONDUCTOR

The bar-type primary conductor of the Clean Air Current Transformers is designed to withstand a much higher short-circuit current and prevents large voltage drops in the primary winding.



### PRIMARY TERMINALS

Depending on the application and requirements, Clean Air Current Transformers can be fitted with customized high voltage connections (HV), designed to IEC and NEMA specifications and others.



### RUPTURE DISK

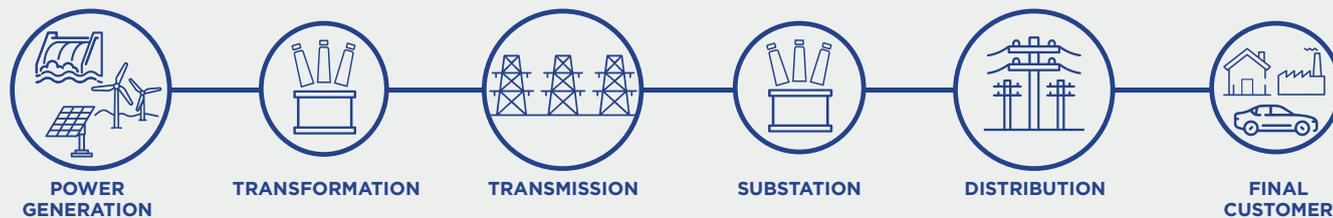
The rupture disc of a Clean Air Current Transformer, in this case with Life Tank, acts as a safety system that is triggered in the event of overpressure and effectively prevents an imminent explosion.

# THE **FUTURE** OF ENERGY IS **NOW** AND IT'S **EXTRAORDINARY**

## THE CRUCIAL ROLE OF POWER TRANSMISSION

**Our vision** of a sustainable future starts with an eco-friendly portfolio of high voltage products and systems, brought to you by our dedicated team of global innomakers.

**Our mission** is to support our customers, from power generation through transmission and distribution to the electricity consumers, in their transition to clean energy and a greener world.





**Get in touch:**

Contact our experts via email  
[sales@trench-group.com](mailto:sales@trench-group.com)



**Trench Group**  
[www.trench-group.com](http://www.trench-group.com)

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