



# RODAV

## Remotely Operated De-icing All-weather Vehicle

Using superheated (200°C) steam, RODAV can safely and effectively de ice substation disconnectors—even energized ones—in just minutes. Besides its high heat capacity, superheated steam has insulating properties comparable to air at normal temperature and pressure. RODAV is made up of a steam generator, a 16-m non-conductive telescopic mast on a hydraulic turret and an insulated hose on the mast for aiming the steam. The entire unit is mounted on a truck.

### ***Safe, effective and easy to use***

Using RODAV simply involves feeding steam into the hose and aiming it at the target by orienting the remote-controlled mast. RODAV can quickly de-ice energized equipment such as insulating columns, transformer bushings and other substation structures. It can also be used to de-ice unsheltered equipment in storage, like wood poles and distribution transformers. An industrial version recently developed de ices live equipment at voltages as high as 330 kV. Cleaning energized equipment is also feasible.

RODAV was designed to maximize the safety of crews responsible for de-icing energized equipment. It is operated using a digital remote control unit with indicator lights for key parameters, e.g., those of the steam generator and hydraulic system. A programmable controller manages steam generation, monitors possible leakage currents and warns the operator of incipient problems.



### Versatile technology

RODAV's patented technology is suited to a wide range of applications:

- Removing ice from line disconnectors (up to 330 kV) to ensure proper operation
- Rapid de icing of energized equipment like substation insulators
- Steam cleaning of soiled or contaminated surfaces
- De-icing of wood poles, transformers and other exposed equipment
- Degreasing of mechanical equipment.

### Data sheet

Characteristic	Specifications
Dielectric strength	Dry flashover voltage meeting IEC 60-1: > 800 kV <sub>rms</sub> Withstand capability: 240 kV <sub>rms</sub> in rain 850 kV switching surge in rain
Steam generator	Steam temperature: 200 °C Pressure: 100 psi
Telescopic mast	Fuel: Diesel Rotation: ±110 deg. Elevation: -10 to +90 deg. Length: 3.8 m retracted, 16 m fully extended
Remote control	Range: 300 m

### For information

#### Research

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#### Commercialization

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