



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_{rms} Withstand capability: 240 kV_{rms} in rain 850 kV switching surge in rain
Steam generator	Steam temperature: 200°C Pressure: 100 psi Fuel: Diesel
Telescopic mast	Rotation: ±110 deg. Elevation: -10 to +90 deg. Length: 3.8 m retracted, 16 m fully extended
Remote control	Range: 300 m

For information

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Patent

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