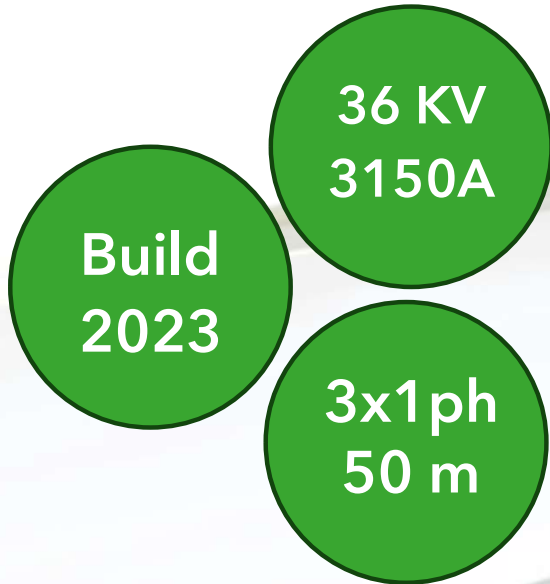


Pressurized Air Cable 36 kV, 3150 A

Pilot installation in concrete trench



Main ratings

- ⌘ Transmission power: 180 MW
- ⌘ Rated voltage: 36 kV
- ⌘ Rated current: 3000 A
- ⌘ Enclosure type: Single-phase
- ⌘ Isolation medium: Pressurized Air
- ⌘ Rated pressure: 10 bar
- ⌘ Country: DE

Project description

This project was a pilot installation of pressurized air cables for 36 kV, 3150 A on a test station of a German utility. The cable was installed by Hivoduct in a concrete rectangular 500x400 mm trench of casted concrete elements. The system was pressurized, on-site HV tested by VLF cable testing equipment and grid connected for 1-year of successful operation. Before disassembling, a high-current tests at 3000 A was conducted for 1-day as a heat-run test. Pressure and temperature was monitored during 1-year operation and showed a minor leakage in one phase on one of the fittings. The installation has been disassembled and the aluminum recycled. The project confirmed the use of pressurized air cables as a replacement of parallel XLPE cables for medium-voltage and high current cable connections.

"This project confirmed the viability of pressurized air cable at the medium voltage level as a replacement for XLPE cables in high-current cable connections"
W. Holaus, CEO Hivoduct

