Industrial EDS Systems

Ground fault location for ungrounded systems

Improve uptime and simplify maintenance with Bender EDS ground fault location system. Designed for ungrounded power systems, the fully automated EDS series quickly identifies the exact circuit contributing to a ground fault, eliminating the need for time-consuming manual troubleshooting or sequential load shutdowns.

By pinpointing faults while the system remains energized, the EDS series helps reduce maintenance costs, minimize downtime, and keep critical operations running safely and efficiently.

How does an EDS ground fault location system work?

When an insulation monitoring device (IMD) such as the iso685-D-P detects the occurrence of a ground fault, it activates the EDS440 series ground-fault location system. The IMD generates a defined locating signal that flows to the ground fault. The locating signal is driven by the system voltage and can be detected in the faulted circuit using a permanently installed or clamp-type measuring current transformers. The ground fault location is communicated from the EDS440 module to the iso685 which displays the information, and can send it to the facility data network.

Our technology empowers:

- **Detect and locate faults without interrupting operations -** Electrical issues can be detected and located while keeping the installation fully energized.
- **Reduce maintenance costs** - Significant decrease in maintenance costs due to the accuracy of detection and decreased need for human interaction with the system.
- **Automatically locate faults** - Automatic fault location eliminates the need for maintenance personnel to open branch circuit breakers or disconnect equipment.
- **Clear fault location indication -** Easy-to-read indication of the faulted circuit shown on IMD LC Display and EDS LEDs.

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1 Automatic Ground-Fault Locator ISOSCAN® EDS440 Series

- Automatically locates faults
- Minimizes unplanned outages
- Eliminates the need to interrupt power to identify faulted circuits

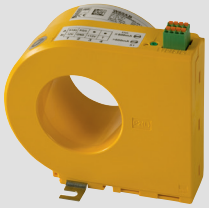
2 Insulation Condition Monitor ISOMETER® iso685-D-P

- Detects the presence of a ground fault and injects a location signal to be detected by an EDS device
- Displays insulation resistance and fault location when paired with EDS440

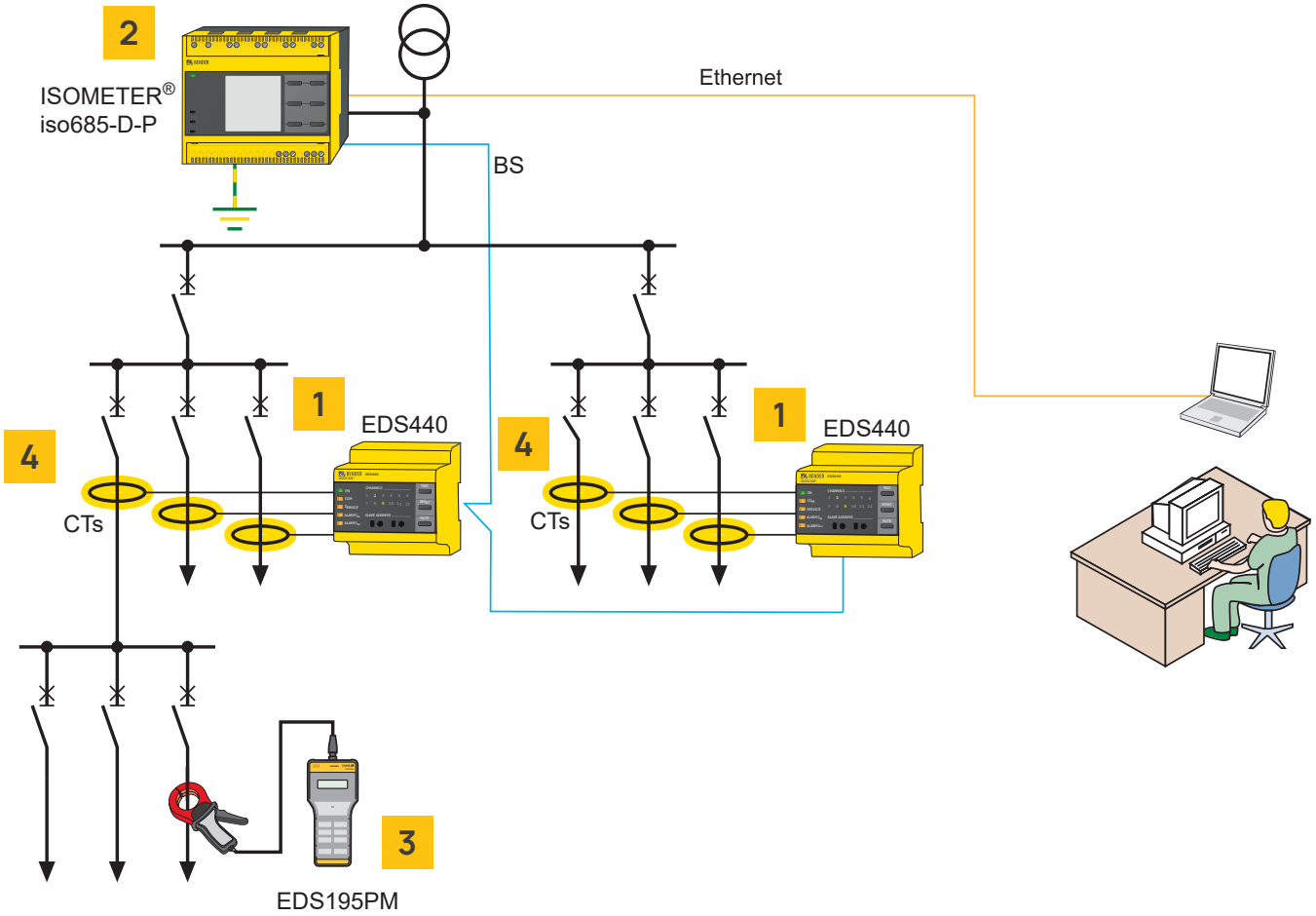
3 Touch Control Panel CP Series

- Pinpoints fault location to load circuits when paired with iso685-D-P
- Final run location after the faulted feeder is automatically alarmed

4 Current Transformers Wx-Sxx Series



- Permanently installed sensors connect to EDS440 to detect fault-locator signal
- Fits any installation



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14.27i.REV.2 I 05.2026