Isolated Phase Bus Systems

Comprehensive solutions to meet global demands.
Isolated Phase Bus Systems

A recognized leader in innovative bus system technology

Designed for applications that demand the highest degree of reliability, AZZ Isolated Phase Bus Systems are found in a wide range of environments around the world. Representing a long history of knowledge and expertise in custom-designed products that deliver proven performance, AZZ solutions continue to be the preferred option for medium- and high-voltage bus ducts.
Engineered for optimal performance
With AZZ system design, each phase is mounted in individual enclosures, with conductors that are air insulated and supported in the center phase by strategically arranged insulators. This configuration eliminates phase-to-phase short circuits, and no current is induced in the steelwork, cables, pipes or other metal structures within close proximity to the bus.

The partner facilities can count on
Deployed as generator main leads extending to GSU transformers and excitation service/auxiliary transformers, AZZ bus systems are a fully integrated, reliable option for multiple applications.
- Hydro plants
- Nuclear power stations
- Combined cycle power plants
- Fossil plants
- Renewable plants

Leading technology to reduce enclosure voltage
AZZ’s isolated phase bus systems represent a no-flux enclosure option that minimizes inductive heating and limits the enclosure voltage relative to ground to the IR drop. Because no-flux systems do not require insulation, voltages generated in the enclosure and appearing between enclosure and ground will be at near-zero levels.

Unmatched experience and on-going commitment
Having developed products that have connected to nearly every manufacturer’s equipment, AZZ can custom-engineer standard interfaces to each facility’s exact requirements.
- Generation terminations
- Main, auxiliary and excitation transformer connections
- In-line switches
- PT/SA cubicles
- Forced-air cooling systems
- Bus monitoring systems

RATINGS
- Current: 600–26,500 (air cooled)
- Up to 50,000 Amps (forced-air cooled)
- Voltage: 15kV–38kV
- Insulation Levels: 110–200kV (BIL)
- Momentary Current: Up to 1,000,000+ Amps Asymmetrical
- Meets or Exceeds ANSI/IEEE and IEC Standards