

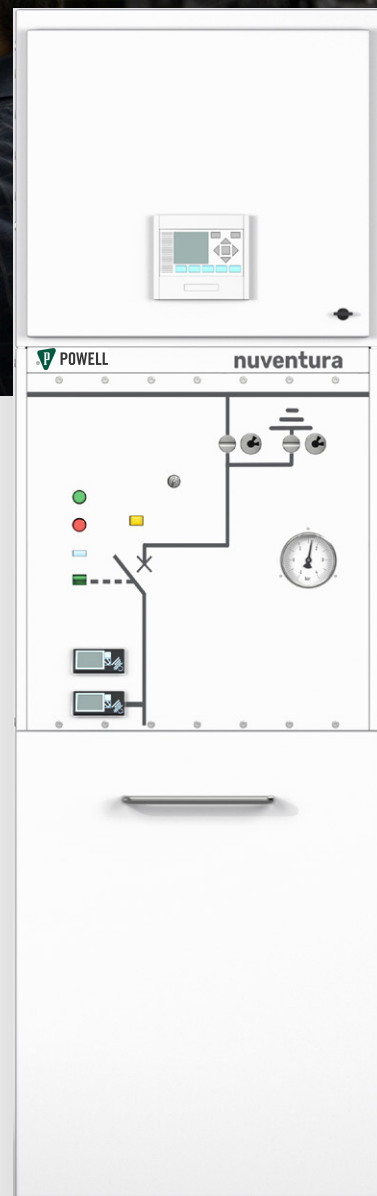
# Powlnu1 – Dry Air GIS

## Primary Distribution up to 36 kV

Powell (UK) Limited and Nuventura (German Based technology company) jointly offers Powlnu1 – SF6 free Dry air Gas-insulated switchgear (GIS) to the UK industrial and commercial markets. Based on Cutting edge 100% SF6 free technology, the product offers compact dimensions, low maintenance and high operation reliability.

### Features and Benefits

- 36kV up to 2000A ratings
- Vacuum interrupter technology for safe and reliable switching
- Wide range of protection schemes available on request
- Hermetically sealed stainless-steel tank, insensitive to atmospheric conditions such as Salt, dust, humidity and condensation
- Fully ready supplied from factory, no on site gas handling for installation or commissioning
- Front Cable termination for ease of cabling
- Smart grid ready with remote operation, monitoring, and diagnostics to track asset health.
- Internal Arc rated to AFLR for maximum operator safety.
- Safe operation in event of dry air pressure loss



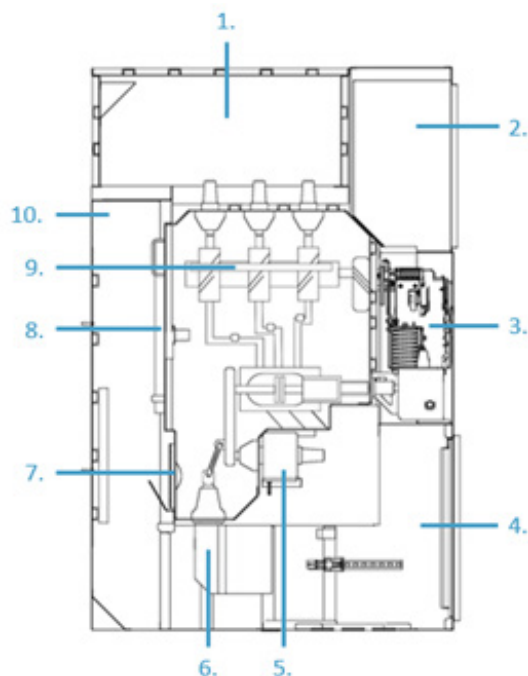
### APPLICATIONS

- Energy Power generation, DNO, IDNO and ICP (Independent connection provider)
- Solar Photo Voltaic Farms
- On-Shore Wind Farms
- Energy Storage BESS
- Hydrogen Production
- Sustainable Aviation Fuel
- Carbon Capture and Storage
- Electric Vehicle Charging
- Data Centre and Commercial Buildings
- Water and Waste Water Facilities
- Airports, Ports, and Railway Infrastructure

### STANDARDS

- IEC 62271-200 AC Metal enclosed switchgear and control gear
- IEC62271-100 Alternating current circuit breakers.
- IEC62271-1 HV switchgear and control gear common specification
- IEC62271-102 Alternating current disconnectors and earthing switches
- IEC60255 Measuring relays and protection equipment.





#### Technical data acc. to IEC 62271-200

| Rated voltage                | kV | 24         | 36        |
|------------------------------|----|------------|-----------|
| Testing voltage (PF/Impulse) | kV | 50/125     | 70/170    |
| Rated frequency              | Hz | 50/60      | 50/60     |
| Rated busbar current         | A  | 2500       |           |
| Rated feeder current         | A  | 1250/2000* |           |
| Rated short time current     | kA | 31.5 (3s)  | 31.5 (3s) |
| Internal arc protection AFLR | kA | 31.5 (1s)  | 31.5 (1s) |

#### Dry air insulation medium

|                                |     |              |              |
|--------------------------------|-----|--------------|--------------|
| Filling pressure (rel.)        | kPa | 100 at 20 °C | 200 at 20 °C |
| Min. operating pressure (rel.) | kPa | 80 at 20 °C  | 180 at 20 °C |
| Operating temperature          | °C  | -5 ... +40   |              |

#### Dimensions

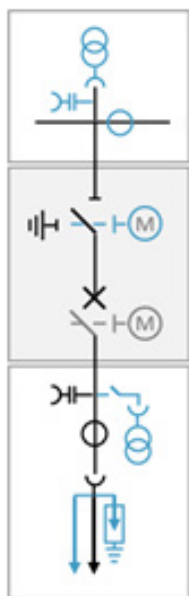
|                      |    |         |         |
|----------------------|----|---------|---------|
| Width   1250A/2000A  | mm | 650/900 | 650/900 |
| Height   1250A/2000A | mm | 2360    | 2360    |
| Depth                | mm | 1500    | 1500    |

\*Available in Q4 2024

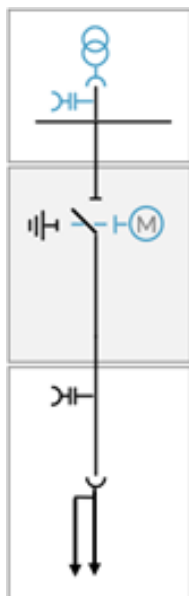
#### POWLNUI CROSS-SECTION

- |                            |                              |
|----------------------------|------------------------------|
| 1. Busbar compartment      | 6. Voltage transformers      |
| 2. Low voltage compartment | 7. Pressure relief disc      |
| 3. Drive compartment       | 8. Gas tank door             |
| 4. Cable compartment       | 9. Three-position disconnect |
| 5. Current transformer     | 10. Pressure relief duct     |

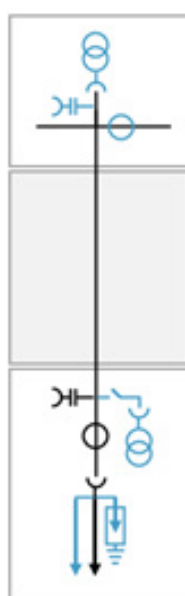
#### Circuit-Breaker Panel



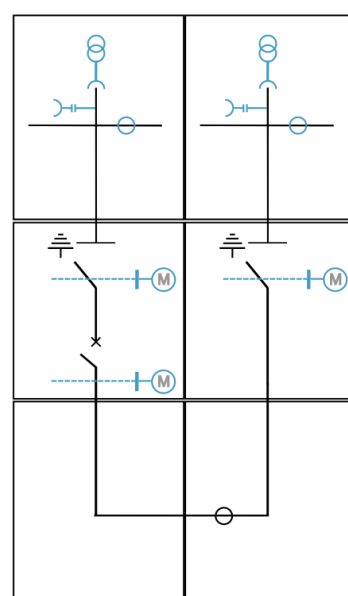
#### Disconnect Panel



#### Direct Connection Panel



#### Bus Sectionaliser Panel



**OTHER VARIANTS:** Busbar Earthing & Metering Panel Available

