









# Air ring main unit

Our Air Ring Main Unit for secondary distribution is a factory-built, metal-encapsulated switchgear; suitable for either indoor or outdoor installation.

They integrate from 1 to 4 load-break switches for cables or transformer, an earth-fault indicator and an arc-extinguishing device.

The ARMU also has the option for installing Metering devices.

#### Main Features:

- High operating reliability.
- Simple maintenance & inspection.
- No isolating partitions.
- High dynamic & thermal strength.
- Tested by international laboratories
- Encapsulated extinguishing device.
- Current interruption without visible arc.
- High number of operation, simple mechanism.
- Easy cable connection.
- Possible to be connected with any SCADA system.

## Design Standards:

The Air Ring Main Units are designed, manufactured and tested according to the following IEC & VDE standards

- IEC publication 200-60271
- IEC publication 60694
- IEC publication 102-60271
- IEC publication 420
- IEC publication 265
- IEC publication 129
- DIN VDE 0670

## Applications:

The Air Ring Main Unit is suitable for use in:

- Transmission & Distribution
- Buildings
- Industry
- Infrastructure



# SF-6insulated Ring Main Unit:

- Our SF-6insulated Ring Main Unit for secondary distribution is a type-tested, factory-built, metal-encapsulated switchgear in block/modular construction; for indoor installation.
- All the switching devices are fully-insulated with SF6 gas and comprise; load-break switches, earthing switches, metering, bus riser, bus sectionalized panels, SF6 circuit breakers as well as blocks.
- Our SF6 Ring Main Units are ready to be integrated with SCADA systems, and other forms of remote controlling whether via compact remote controlling units or for larger switchgear rooms in need of such control.

#### Main Features:

- Climatic resistance; because all the live parts are insulated in SF6 gas.
- Compact size when compared to the Air-insulated RMU.
- Easy accessibility of cables & fuse arrangement.
- All the live parts are insulated in a stainless steel tank of IP65.
- German technology.
- High level of function reliability.
- Comprehensive personnel safety.
- Connectable to SCADA system.

## Design Standards:

- IEC publication 103-62271) 1-60265)
- IEC publication 1-62271 (IEC 60694)
- IEC publication 100-62271
- IEC publication 102-62271
- IEC publication 105-62271
- IEC publication 60298) 200-62271)
- IEC publication 1-60282
- VDE 0670 Part 301 (VDE 0671 Part 103)
- VDE 0670 Part 1000 (VDE 0671 Part 1)
- VDE 0671 Part 100
- VDE 0671 Part 102
- VDE 0671 Part 105
- VDE 0671 Part 200 (VDE 0670 Part 6)
- VDE 0670 Part 4

## Applications:

The SF6 Ring Main Unit is suitable for use in:

- Transmission & Distribution
- Buildings
- Industry
- Renewable Energy

# Package substation:

Our Package Substations are metallic enclosures of multiple compartments that are interconnected but clearly separated.

Package Substation exists in 3 Compartment Structures in the following forms:

MV Switchgear - Transformer - MV Switchboard

MV Switchgear - Transformer - LV Switchgear

### Main Features:

- Can integrate Air or SF6 insulated Ring Main Units with various configurations.
- Can integrate Oil or Dry-type transformers.
- Integrated metering and protection (optional).
- Provisions for remote monitoring and control of switching devices on MV or LV compartments.
- High climate & corrosion resistance.
- High operation reliability.
- Operating personnel safety.
- Easy installation of power transformer.
- Rapid Installation for under urbanization sites.
- Available with digital electronic locks which can be remotely controlled.
- All interconnecting equipment between Medium Voltage and Transformer and Low Voltage are factory tested.
- Adequate space for inspection and maintenance of transformer or capacitor banks (walk-in accessibility).
- Can be connected with SCADA system.

## Design Standards:

Our Package Substations are manufactured according to the following IEC & VDE standards

- IEC publication 102-62271.
- IEC publication 60420
- IEC publication 60265
- DIN VDE 0670

# Suitable for the following applications:

- Buildings
- Real Estate Development Projects
- Infrastructure
- Industry

## Air Insulated Metal Clad

Our Medium Voltage Switchgear for primary distribution has a rated voltage of up to  $24\ kV$ .

Our two types of metal clad switchgear include AMC & MCM, up to 17.5 kV & 24 kV respectively and uses Vaccum Circuit Breakers as a breaking medium.

#### Main Features:

- Switchgear in withdrawal technique.
- Four metal-clad compartments.
- All standard types of protection and control systems can be used.
- Cable connection compartment with separate access door.
- High reliability.
- High security of supply.
- Maximum personnel safety.
- Low-maintenance switchgear.
- Options for customer-specific equipment.
- Easy-to-install panel structure.

## Design Standards:

The Air Insulated Metal Clad Switchgear are manufactured according to the following IEC & VDE standards:

- IEC publication 200-62271.
- IEC publication 60694
- IEC publication 100-62271
- IEC publication 102-62271
- DIN VDE 0671 Part 200
- DIN VDE 0670 Part 1000

## Applications:

Air Insulated Switchgear is suitable for use in switching stations for power generation and power distribution for:

- Transmission & Distribution
- Combined heat and power stations
- Main distribution substations
- Industry

Head Office and Factories

☑ P.O.Box 1017

∇ Tenth of Ramadan city, Egypt

+20 - 15 - 410 201/2

**+** +20 - 15 - 410203

Website: www.gad-industries.com email: info@gad-industries.com

**f** GAD.Industries

Sales Service Office

♀ 36 Rushdi St. Abdin, Cairo, Egypt

+202 - 239 193 60

**+202 - 239 207 60**