

# GPE

PT Guna Era Manufaktur

CATALOGUE



## GAE GRM

Series SF<sub>6</sub> Extensible Ring Main Unit

## Main Features

### New Design

- Modularity design, simple structure, reliable.
- Strong interrupter
- The metal structure is completely sealed system with 3mm thick stainless steel and welding by the robot arm laser technology, the SF6 gas is hermitically sealed and great good looking from outside.



### Installation

- Reduced dimensions
- Great expansibility
- Can work on any weather or harmful environment



### Extensibility

- The product is design by advance concept; it can be easy expand base on the requirement of customer.
- There are two ways of extend: extend from the side or extend from the top.



### Interface

- Friendly interface, easy instruction, easy to operate
- With big window to observe, the size of window is 100 mm.
- Provide with long life LED light, easy for the operator to observe the status of switch.

### Window

- The operator not only can use window to observe the status of the switch, they can also monitor the main contact position (close / open/ earthing) which can provide the operator reliable information and ease their anxiety about the situation .
- Also the LED light can make sure the operator can clear to observer the situation at any place and any time.

## Normal service conditions

Temperature: maximum +40°C; minimum -25°C

Relative humidity: daily average: ≤ 9.5% Month daily average: ≤ 90%

Max altitude: 2000m

Massive earthquake magnitude: ≤ 8

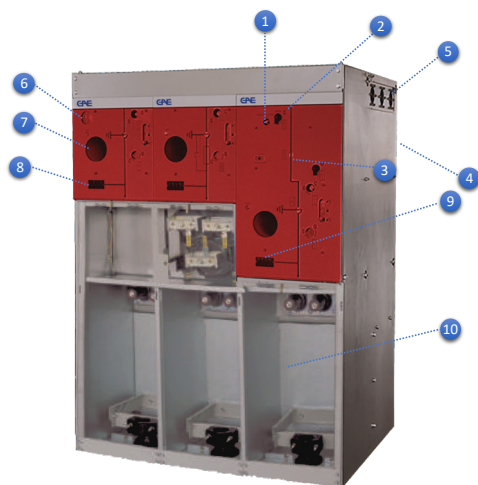
\* If the operating conditions are different to the above please consult with GAE

## Standards and regulations

TEC- SPCB series switch boards comply with the provisions of international standard:

IEC 60298, IEC60694, IEC62271-100, IEC60129, IEC60265.1, IEC60420

## Switchboard Structure

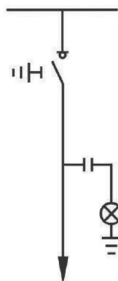


1. Operating mechanism compartment
2. Hole for ES operating
3. Hole for LBS operating
4. Hole for pad-lock
5. Plug in contacts for extension (on request)
6. Manometer
7. Big window
8. Capacitive voltage indicators
9. Fuse chamber
10. Cable compartment

## Electric data

Electrical Data	Unit	Value	
Rated Voltage	kV	12	24
Rated Nominal Frequency	Hz	50/60	
Test Voltage 1 min. 50/60Hz against earth and between the phase	kV	42	50
Test Voltage 1 min. 50/60Hz between the open contact of the switch disconnector	kV	48	60
Impulse withstand voltage against earth and between the phase	kV	75	125
Impulse withstand voltage between the open contact of the switch disconnector	kV	85	145
<b>LBS Electrical Data</b>			
Rated Current	A	630	630
Mainly active load	A	630	630
Rated Short-time withstand current	KA	20	20
Rated Peak withstand current	KA	500	50
Rated Short Circuit Making Current (Peak)	KA	500	50
<b>VCB Electrical Data</b>			
Rated Current	A	630/1250	
Rated Short-time Breaking current	KA	20/25	20
Rated Operating Sequence		O - 0,3s - CO - 180s - CO	
Rated Peak Short time withstand current	KA	20/25	20
Rated Short Circuit Making Current (Peak)	KA	50/63	50

## Typical Cabinet Introduced



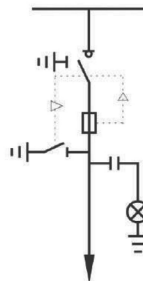
### GRM-K (Load Break Switch Panel)

#### Standard Equipment

- Busbars, 630A
- Three position load break switch with operating mechanism
- Cable bushing horizontal in front, 630A bolted
- Voltage indicating system
- Interlocking system for front cover with earthing switch
- Operating hole with pad-lock
- Earthing bar

#### Optional equipment and accessories

- Bushing for external busbars
- Bushing for connection of extend cabinet lighting arrester
- Cable connector
- Integrated capacitor for voltage indication and sensors for current and voltage monitoring
- Fault indicators
- Motor operation for load break switch
- Auxiliary switch
- Humidity automatic control
- Low voltage compartment/top entry box



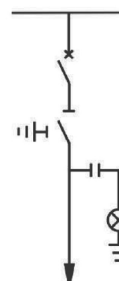
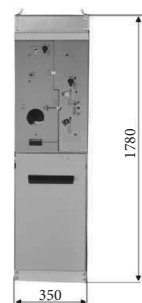
### GRM-T (Switch Fuse Panel)

#### Standard Equipment

- Busbars, 630A
- Three position load break switch with operating mechanism
- Fuse canisters
- Cable bushing horizontal in front, 630A bolted
- Voltage indicating system
- Interlocking system for front cover with earthing switch
- Operating hole with pad-lock
- Earthing bar

#### Optional equipment and accessories

- Bushing for external busbars
- Bushing for connection of extend cabinet lighting arrester
- Cable connector
- Integrated capacitor for voltage indication and sensors for current and voltage monitoring



### GRM-V (Vacuum Circuit Breaker Panel)

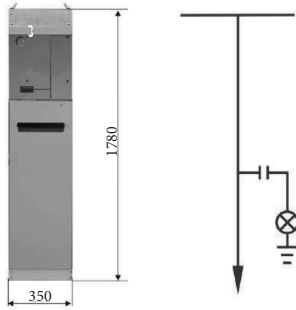
#### Standard Equipment

- Busbars, 630A/1250A
- Three position disconnector with operating mechanism
- 630A/1250A vacuum circuit breaker (manual or motor operation)
- Cable bushing horizontal in front, 630A bolted
- Voltage indicating system
- Interlocking system for front cover with earthing switch
- Operating hole with pad-lock
- Earthing bar

#### Optional equipment and accessories

- Bushing for external busbars
- Bushing for connection of extend cabinet lighting arrester
- Cable connector
- Integrated capacitor for voltage indication and sensors for current and voltage monitoring
- Fault indicators
- Protection relay
- Auxiliary switch
- Trip coil
- Humidity automatic control
- Low voltage compartment/top entry box

## Typical Cabinet Introduced



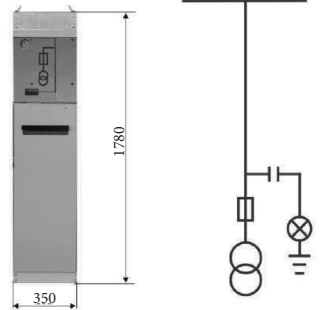
### GRM-C (Cable Panel)

#### Standard Equipment

- Busbars, 630A
- Cable bushing horizontal in front, 630A bolted.
- Voltage indicating system
- Earthing bar

#### Optional equipment and accessories

- Bushing for external busbars
- Bushing for connection of extend cabinet lighting arrester
- Cable connector
- Integrated capacitor for voltage indication and sensors for current and voltage monitoring
- Fault indicators
- Humidity automatic control
- Low voltage compartment/top entry box



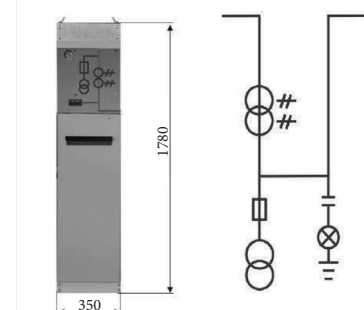
### GRM-PT (PT Panel)

#### Standard Equipment

- Busbars, 630A
- Voltage transformer
- Fuse
- Voltage indicating system
- Earthing bar

#### Optional equipment and accessories

- Three position load break switch with operating mechanism
- Voltmeter
- Humidity automatic control
- Low voltage compartment/top entry box



### GRM-M (Metering Panel)

#### Standard Equipment

- Busbars, 630A
- Current transformers
- Voltage transformers
- Fuse
- Voltage indicating system
- Earthing bar

#### Optional equipment and accessories

- Multifunction electric meter
- Voltmeter
- Ammeter
- Humidity automatic control
- Low voltage compartment/top entry box



## Extensibility

Extensible function can go through cable compartment via 3 pc/set special design convertor from two side or top to extend. Elastic plastic protectors material provide complete sealing and avoid discharge.



**GAE GRM - KK/TE**  
**Extend from top**

**GAE GRM - KK/TE**



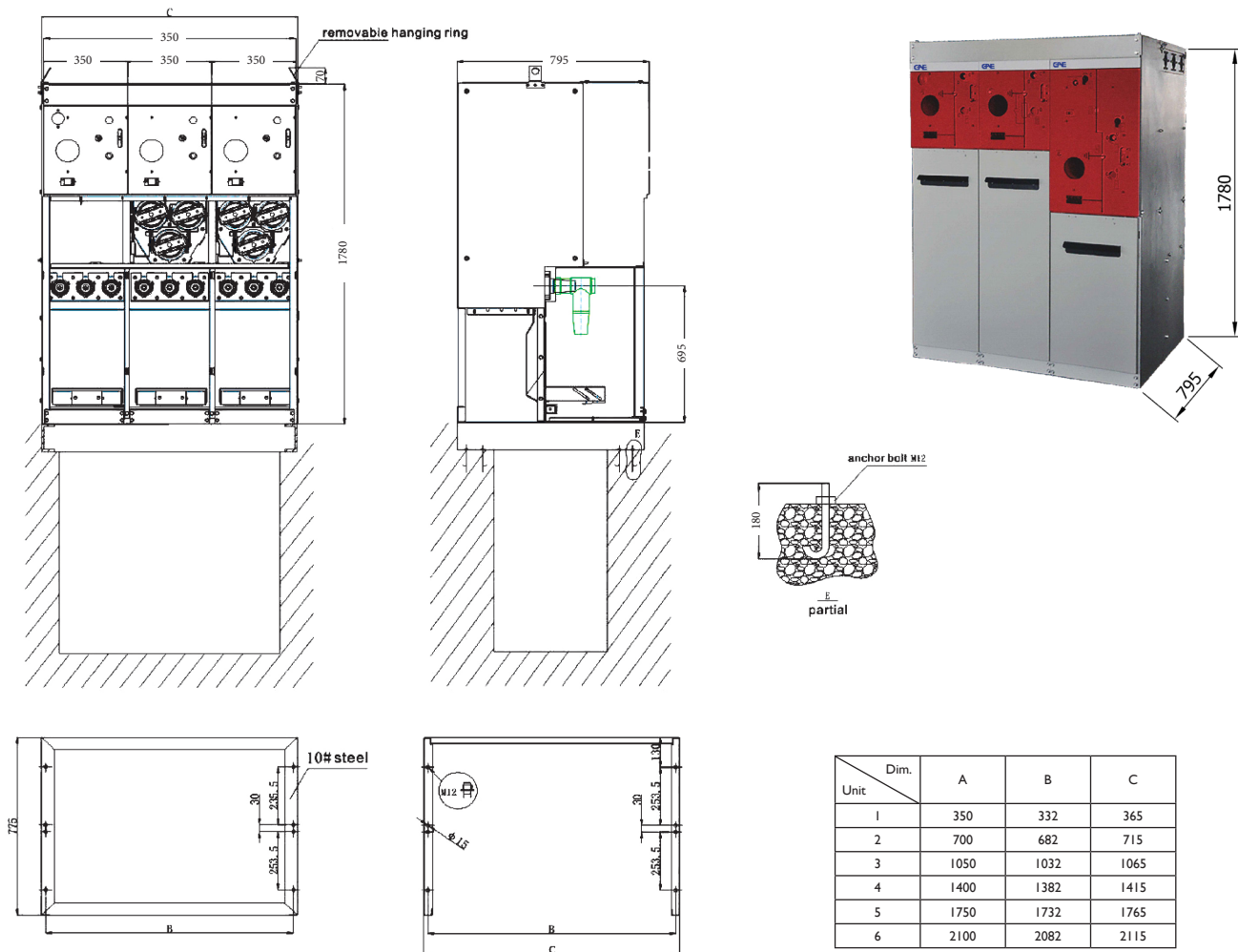
**GAE GRM - KK/RO**  
**Extend from right**



**GAE GRM - KK/RE**  
**Extend from side**

**GAE GRM - KK/KE**

## Typical Cabinet Dimension



## Order Instruction

Customer should submit following information when place order:

1. the product name, type, unit and order quantity
2. rated voltage, rated current, rated short circuit making current
3. any name/ quantity of optional equipment and accessories
4. other special requirements please advice in advance





**PT Guna Era Manufaktur**

Jl Jati Raya Blok J2 No 1-3  
Newton Techno Park, Lippo Cikarang  
Bekasi 17550  
Indonesia

T +62 21 8990 7620  
F +62 21 8990 7959

E [info@gae-gae.co.id](mailto:info@gae-gae.co.id)  
W [www.gae.co.id](http://www.gae.co.id)

