

Air RMU

Data sheet

Air RMU

Application

FGECO 12KV& 24 KV is an air-insulated, three-phase, medium voltage secondary switchgear. The system includes several standardized cubicles which can be delivered either as a complete switchgear or as individual cubicles.

FGECO 12KV& 24 KV secondary switchgear is designed for use in general and industrial applications in 12 KV - 24 kV electrical distribution networks such as:

- Utilities
- Buildings
- Industry
- Infrastructure



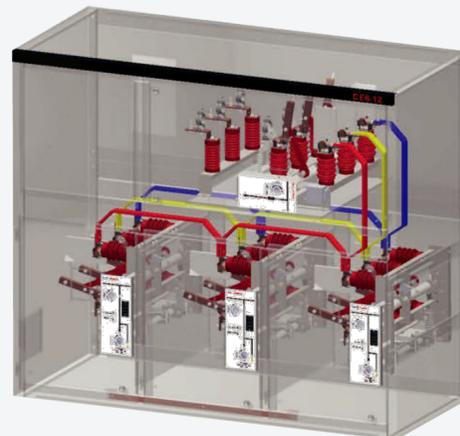
Main Feature

- Compact design.
- High operating reliability.
- Simple maintenance and easy connections.
- Simple mechanism with high no. of operation.
- Safe, with very fast arc damping and Easy for Cable connection
- Flexibility, can be supplied with any configuration as per client request indoor/outdoor, with /without measuring devices
- Can be connected with Scada System

Standard

All Ring Main Unit are designed, Manufactured and tested according to the following IEC Standard

- IEC 62271-200 for Medium Voltage switchgear and control Gear
- IEC 62271-102 For Earthing switch
- IEC 62271-103 For Load Break switch for cable & IEC 62271-105 For Trans- former Load Break switch

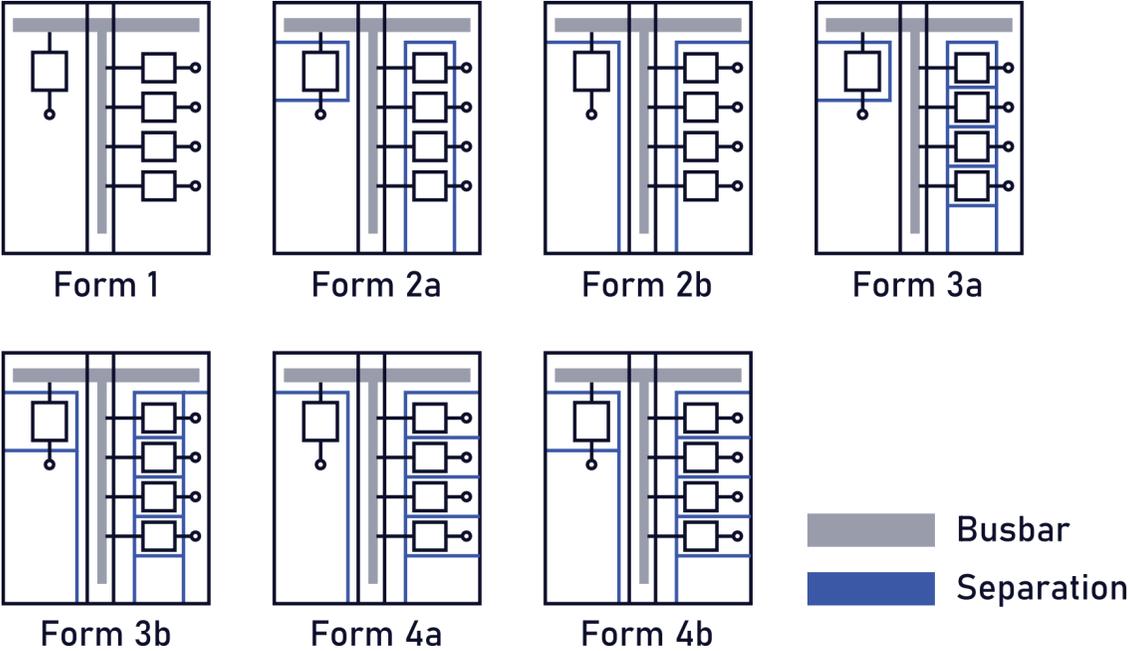


R.M.U Technical Data

Description	12 KV		24KV	
	Incoming LBS	Outgoing LBS	Incoming LBS	Outgoing LBS
IEC standard	IEC 62271-200			
Type designation	CE6-12	CE6-12RAF	CE6-24	CE6-24RAF
Rated voltage	12 KV		24 KV	
Rated frequency	50 KV		50 KV	
Operating voltage	11 KV		22 KV	
Rated lightning impulse withstand voltage	75 KV		125 KV	
Rated power frequency withstand voltage	28 KV		50 KV	
Rated normal current	630 A	400A, 630A	630 A	400A, 630A
Rated short-time withstand current	25 KA/1 Sec		25 KA/1 Sec	
Rated peak withstand current	62.5 KA		62.5 KA	
System Configuration	As per Customer requirement's (1+1), (2+0), (2+1), (3+1), (4+0) indoor/Outdoor type			

Separation Forms

Technical Data



Form	IEC Standard Definition	Specific Recommendations
1	No Internal separation	Protection over busbar for customer safety
2a	Separation of busbars from the functional units	Terminals not separated from busbars
2b	Separation of busbars from the functional units	Terminals separated from busbars
3a	Separation of busbars from the functional units and of all functional units from each other	Terminals not separated from busbars
3b	Separation of busbars from the functional units and of all functional units from each other	Terminals separated from busbars
4a	Separation of busbars from the functional units and of all functional units from each other, also separation of terminals from any functional unit	Terminals in the same compartment as associated functional units
4b	Separation of busbars from the functional units and of all functional units from each other, also separation of terminals from any functional unit	Terminals are not in the same compartment as the associated functional units

Ingress Protection (IP)

Standard IEC 60529 (February 2001) indicates the degree of protection provided by electrical equipment enclosures against accidental direct contact with live parts and against the ingress of solid foreign objects or water.

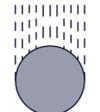
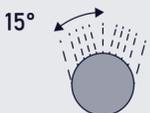
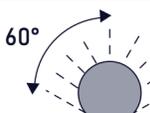
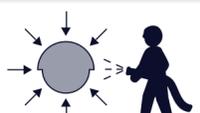
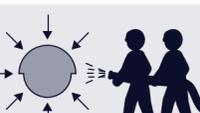
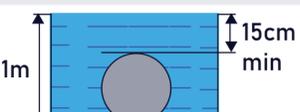
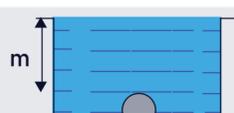
The IP code comprises 2 characteristic numerals and may include an additional letter when the actual protection of persons against direct contact with live parts is better than that indicated by the first numeral.

The first numeral characterizes the protection of the equipment against penetration of solid objects and the protection of people. The second numeral characterizes the protection of the equipment against penetration of water with harmful effects.

Protection Against Solid Bodies Data Table

Protection of Equipment		Protection of Persons	
No.	Tests	Non-protected	Non-protected
1	$\Phi 50\text{mm}$ 	Protected against the penetration of solid objects having a diameter greater than or equal to 50 mm	Protected against direct contact with the back of the hand (accidental contacts).
2	$\Phi 12.5\text{mm}$ 	Protected against the penetration of solid objects having a diameter greater than or equal to 12.5 mm.	Protected against direct finger contact.
3	$\Phi 2.5\text{mm}$ 	Protected against the penetration of solid objects having a diameter greater than or equal to 2.5 mm.	Protected against direct contact with a $\Phi 2.5\text{ mm}$ tool.
4	$\Phi 1\text{mm}$ 	Protected against the penetration of solid objects having a diameter greater than or equal to 1 mm.	Protected against direct contact with a $\Phi 1\text{ mm}$ wire.
5		Dust protected (no harmful deposits).	Protected against direct contact with a $\Phi 1\text{ mm}$ wire.
6		Dust tight.	Protected against direct contact with a $\Phi 1\text{ mm}$ wire.

Protection Against Liquids Data Table

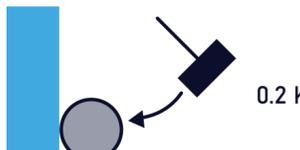
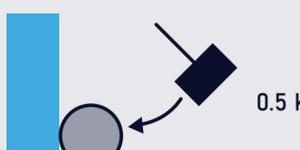
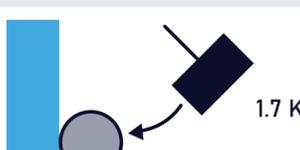
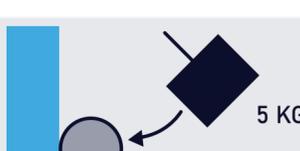
No.	Tests	Non-protected
1		Protected against vertical dripping water, (condensation).
2		Protected against dripping water at an angle of up to 15°.
3		Protected against rain at an angle of up to 60°.
4		Protected against splashing water in all directions.
5		Protected against water jets in all directions.
6		Protected against powerful jets of water and waves.
7		Protected against the effects of temporary immersion.
8		Protected against the effects of prolonged immersion under specified conditions.

Protected Against Access To Hazardous Parts With

Level	Tests
A	With the back of the hand.
B	With the finger.
B	With a ϕ 2.5 mm tool.
C	With a ϕ 1 mm tool.

IK Code “Mechanical Impact Test”

The European standard EN 50102/IEC 62262 defines a coding system (IK code) for indicating the degree of protection provided by electrical equipment enclosures against external mechanical impact.

No.	Tests	Non-protected	
		H (cm)	Energy (J)
01		7.5	0.15
02		10	0.2
03		17.5	0.35
04		25	0.5
05		35	0.7
06		20	1
07		40	2
08		30	5
09		20	10
10		40	20

Standard NF C 15-100 (May 1991 edition), section 512, table 51 A, provides a cross-reference between the various degrees of protection and the environmental conditions classification, relating to the selection of equipment according to external factors.

Practical guide UTE C 15-103 contains tables showing the specifications required for electrical equipment (including minimum degrees of protection), according to the locations in which they are installed.