

# KIRLOSKAR

# ELECTRIC



*Kirloskar*

**MV Switchgear with  
Vacuum Circuit Breaker**  
11kV, 3150A, 40 kA

Certified ISO 9001:2000 by



**BVI**

## ABOUT THE COMPANY

Kirloskar Electric is one of the leading manufacturers of electrical engineering equipment over past five decades. Our product range includes AC & DC Motors, Transformers, Power electronics and Switchgear. Our commitment to innovation and excellence has resulted in constant up-gradation of technology.

## THE PRODUCT

VCBs and metal clad switchgear manufactured by KEC has wide ranging applications from Indoor & Outdoor substations, Electricity boards, commercial / residential establishments, construction, mining, power generation, cement, steel industries and for all types of loads like motors, transformers, capacitors, power station auxiliaries etc.

The Breaker and switchboard is of compact design, sturdy construction and simple in operation with proven motorized spring operated mechanism. It has built in mechanical and electrical interlocks for safety. The panels are fully compartmentalized and are extensible on both sides.

## ADVANTAGES OF VCB

- Proven hermetically sealed and maintenance free vacuum interrupters
- Low contact erosion
- Fast recovery of di-electric strength
- Suitable for Auto-reclosing duty
- Small stroke length and less moving parts.

## CONFORMITY WITH STANDARDS

KEC make VCB meet the requirements of the national & international standards: IEC-62271-100, 2003 / IS: 13118,1991. The switchboard conforms to IEC-60298, IS: 12729.

## TESTS

The Switchgear is type tested at CPRI as per IEC 62271-100 / IS 13118. The Switchgear is subjected to routine test as per IEC / IS standards

## SALIENT FEATURES

### CIRCUIT BREAKER

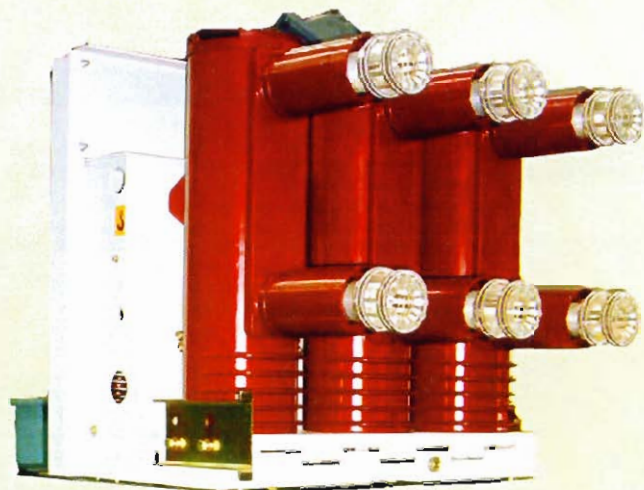
- Maintenance free design
- Horizontal Drawout and Isolation
- Positive racking mechanism
- Interlocks to prevent insertion/withdrawal of closed CB
- CB can operated in test or service position only
- Indentically rated CBs fully interchangeable
- Easy retro fitting with Cassette System
- Fully type tested as per IEC60056/ IS 13118 / IEC 62271-100

### OPERATING MECHNISM

- Proven Spring Operated Mechanism
- Designed to close and latch
- Manual/ Motorised Option
- In built Trip Free Mechanism
- In built Anti Pumping feature
- Mechanical ON/OFF Indications

### INDOOR/OUTDOOR CUBICLE

- Air Insulated, Metal clad construction using high quality steel
- Durable Epoxy Powder Coated Finish
- Compartmentalised and Compact design
- Easy accessibility for maintenance
- Meters, Relays and Controls located at convenient height
- Extensible on both sides
- Side Cable Box for Single panels
- Compatible with State of the art Numerical Protection Systems
- Fully type tested as per IEC60298/IS3427



## VACUUM CIRCUIT BREAKER TYPE :VRK 12-4

1. Rated voltage (kV)	:	12
2. Rated frequency (Hz)	:	50
3. Rated power frequency withstand voltage (1min) kV	:	28
4. Rated impulse withstand voltage (kV peak)	:	75
5. Rated current (A) up to	:	3150
6. Short time with stand current (kA) for 3 sec.	:	40
7. Rated peak withstand current (kAp)	:	80
8. Rated breaking capacity (kA)	:	40
9. Opening time (ms)	:	<50
10. Closing time (ms)	:	<70
11. Operating sequence	:	O-3min-CO-3min CO
12. Close / Trip coil (VDC)	:	24/30/48/110/220
13. Dimensions (Approx) WxDxH (mm)	:	770 x 465 x 632



## TECHNICAL SPECIFICATIONS - PANEL TYPE : MYK 12-4

1. Rated voltage (kV)	:	12
2. Rated frequency (Hz)	:	50
3. Rated power frequency withstand voltage (1min) kV	:	28
4. Rated impulse withstand voltage (kV peak)	:	75
5. Rated Busbar current (A) up to	:	3150
6. Short time with stand current (kA) for upto 3 sec.	:	40
7. Degree of Protection	:	IP4X
8. Dimensions (Approx) WxDxH (mm)	:	1000 x 1500 x 2300

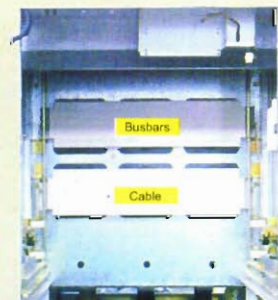


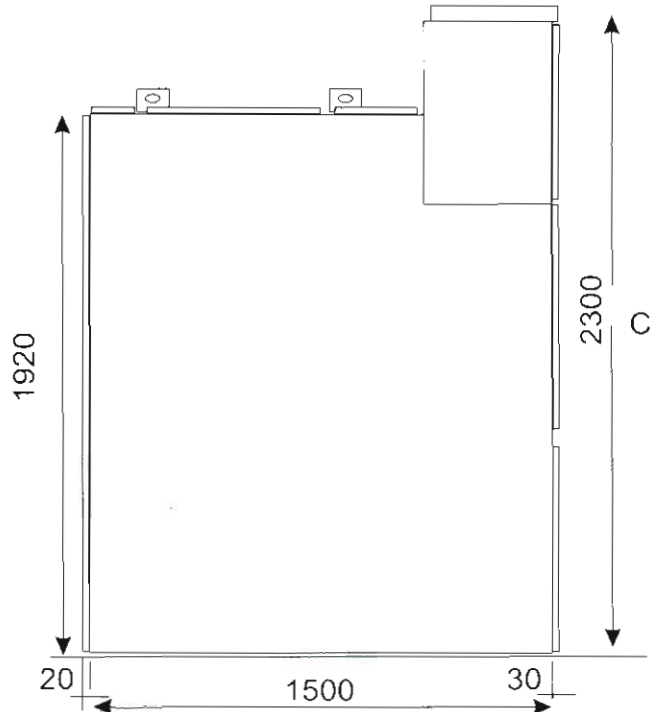
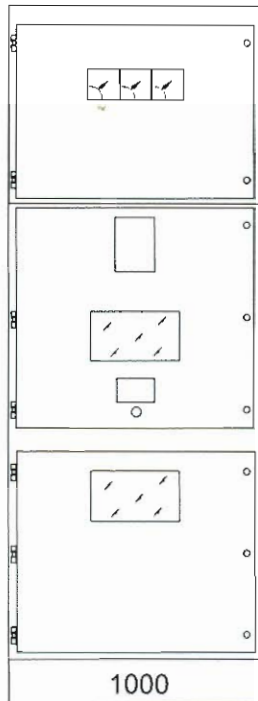
The enclosure of the switchgear is made of high quality sheet steel with modular construction. The compartmentalized design of the panel provides isolation between Breaker compartment, busbar compartment, cable compartment and metering compartment. The compartments are provided with pressure relief passages for safety.

## SAFETY INTERLOCKS

The Panel is provided with safety interlocks to prevent:

- Withdrawal or insertion of the circuit breaker in closed condition.
- Closing of Circuit Breaker when earthing switch / earthing truck is engaged.
- Removal of the LT control plug after the Circuit Breaker is closed.
- Access to live terminals when CB is withdrawn from the cubicle.





We reserve the right to make changes in the product specifications / dimensions in the course of development

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