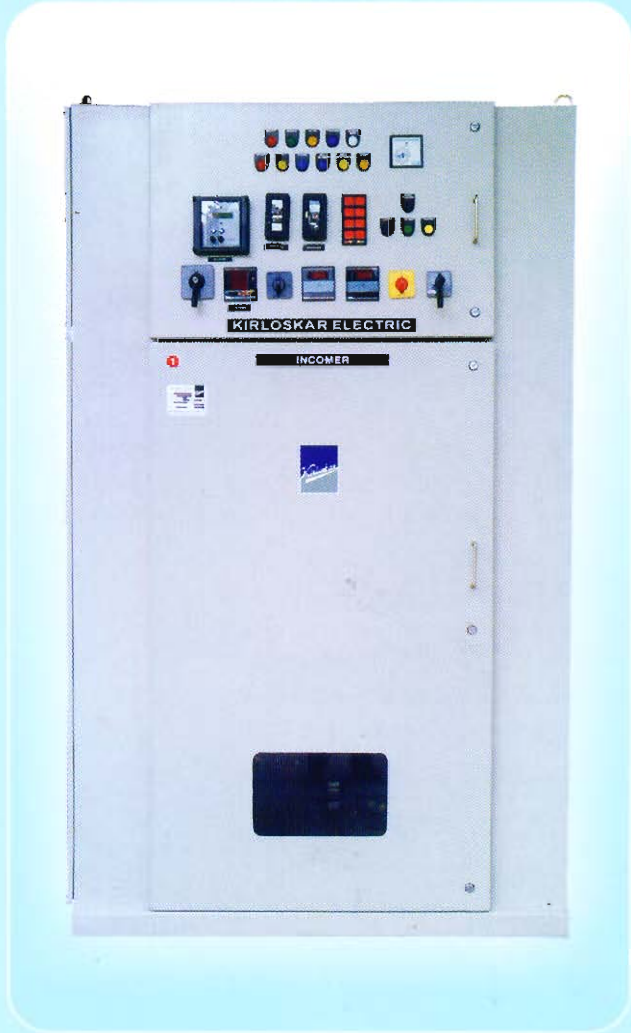
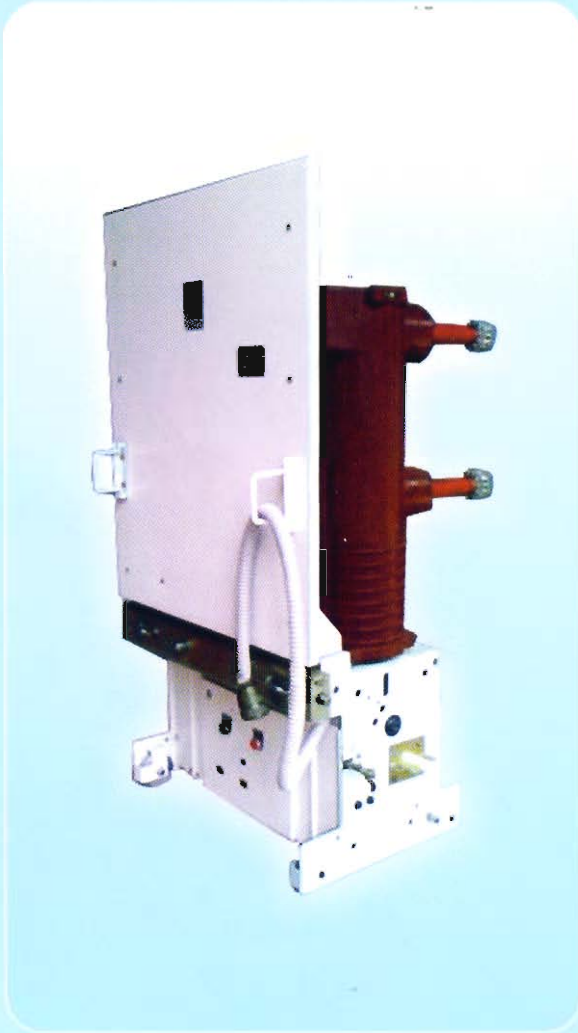


# KIRLOSKAR ELECTRIC



**Medium Voltage switchgear  
with Vacuum Circuit Breaker**  
36kV, 1600A, 26.3 kA

*Kirloskar*

ISO 9001  
BUREAU VERITAS  
Certification



## ABOUT THE COMPANY

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

## THE PRODUCT

36 KV VCB switchgear is manufactured by KEC for wide ranging applications like Indoor/Outdoor substations, Power Generation, Distribution, Commercial / Residential Complexes, IT Parks, Cement, Steel, Paper and other Industries.

## CONSTRUCTION

The VCB 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 extendable on both sides.

- ◆ Metal Clad air insulated switchgear.
- ◆ Draw-out type Circuit Breaker withdrawable at floor level.
- ◆ Test and service position inside the cubicle.
- ◆ Fully enclosed Vacuum interrupter poles.
- ◆ Integrated tulip type draw-out contacts.
- ◆ Simple shutter mechanism.
- ◆ Suitable for rapid auto reclosing duty.

## ADVANTAGES OF VCB

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

## CONFORMITY WITH STANDARDS

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

## TESTS

The Switchgear with VCB 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 be operated in test or service position only
- Identically rated CBs fully interchangeable
- Fully type tested as per IEC60056/ IS 13118 / IEC 62271-100

### OPERATING MECHANISM

- 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 panel
- Compatible with State of the Art Numerical Protection Systems
- Fully type tested as per IEC60298/IS3427

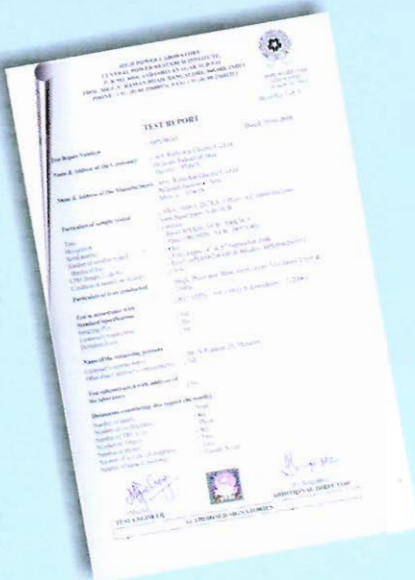




## ISO 9001 CERTIFICATE



## CPRI TEST CERTIFICATE



## TECHNICAL SPECIFICATIONS OF CUBICLE

1. Rated voltage	: 36kV
2. Rated frequency	: 50Hz
3. Rated power frequency withstand voltage (1min)	: 70kV
4. Rated impulse withstand voltage	: 170kV peak
5. Rated Busbar current up to	: 1600A
6. Short time with stand current for 3 sec.	: 26.2 kA
7. Rated peak withstand current	: 80kAp
8. Rated breaking capacity	: 26.2kA
9. Protection level	: IP4X
10. Dimensions (Approx) WxDxH (mm)	: 1500 x 2250 x 2400

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

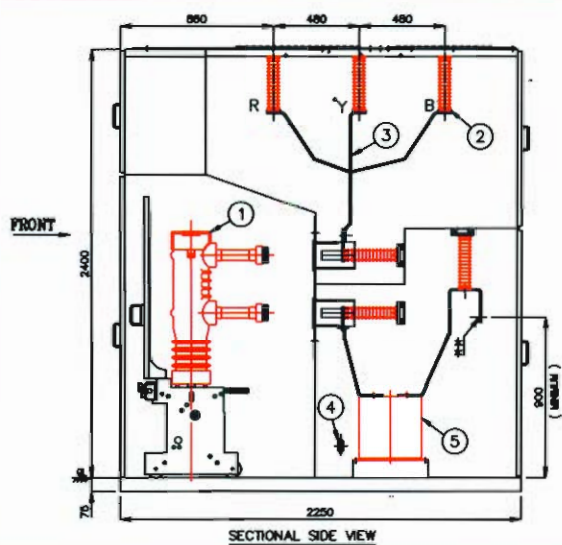
## TECHNICAL SPECIFICATIONS OF VCB - VRK 36 - 3

1. Rated voltage	: 36kV
2. Rated frequency	: 50Hz
3. Rated power frequency withstand voltage (1min)	: 70 kV
4. Rated impulse withstand voltage	: 170 kV peak
5. Rated current up to	: 1600 A
6. Short time with stand current for 3 sec.	: 26.2kA
7. Rated peak withstand current	: 80 kAp
8. Rated breaking capacity	: 26.2kA
9. Operating sequence	: O-0.3s-CO-180s- CO
10. Opening time	: 20-60ms
11. Closing time	: 45-100ms
12. Close / Trip coil	: 24/110/220V DC
13. Dimensions (Approx) WxDxH (mm)	: 892' x 647 x1580

Maximum values are indicated for ratings.

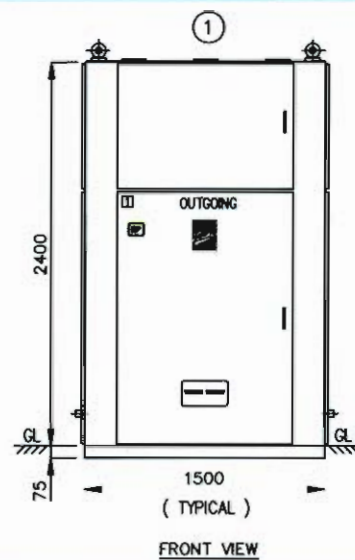






Legend :-

1.	VACUUM CIRCUIT BREAKER
2.	BUSBARS - ALUMINIUM - COPPER
3.	RAISERS - ALUMINIUM - COPPER
4.	EARTH BUS - COPPER
5.	CURRENT TRANSFORMER



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

### INFORMATION REQUIRED ALONG WITH ENQUIRY

Service requirement	: Indoor / Outdoor duty	CT & PT	: Ratio and other details.
Rate Voltage	: kV	System Earthing	: Earthed / Unerthed / Resistance Earthed
Rated Current	: A	Metering required	: A / V / KW / Hz. / PF / KWH / TVM etc
Rated Capacity	: kA or MVA	Type of Protection	: Relays required
Short time rating	: 1 second / 3 seconds	Auxiliary Equipment	: Alarm Scheme, Annunciator etc.
DC Control supply	: 24 / 30 / 48 / 110 / 220 V DC		
Application	: Type of Load		

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