

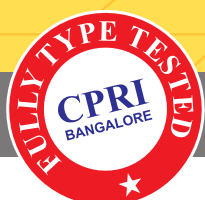
BK POWER

The Electric Switchgear Company

An ISO 9001-2015 Certified Company



Power - Fx Vacuum Circuit Breaker



Thanks for your visit
ELECRAMA
we are all about electricity

Hall No. **H3A** Stall No. **H3AA39**

10-14 MARCH 2018 INDIA EXPO MART, GREATER NOIDA, NCR, INDIA



BK POWER

The Electric Switchgear Company

An ISO 9001-2015 Certified Company

BK is best known for **Quality, Innovation** and **Safety** solution providing company Established in 1987 by an Entrepreneur Shanmugam Balakrishnan alias 'BK'.

BK has launched a new range of Vacuum Circuit Breaker named **Power-FX**. **Power-FX** is withdrawal type Circuit Breaker rated for a Voltage of 12kV/24kV/36kV and a maximum current up to 1250A for application in both indoor and outdoor switchgear panels. The product is conformed to IEC62271-100/62271-200 Standard and is best suited for Control and protection in MV Distribution systems.

BK Power is well equipped office, factory, stores, lab and other facilities located in spacious premises at Coimbatore, Tamil Nadu, South India. With an ever present commitment to customer satisfaction, BK enjoys reputation for quality products and superior service for the changing industry.

The strength of BK Power Success lies in the expertise of a fine team of professionals and strong relationship with associates. The name of our firm "BK" has become a synonym for '**Absolute Reliability, Efficiency, Quality and Promptness**'.

Today's BK combines extensive research and development with ISO 9001 certified quality systems in both its manufacturing and design process. We utilize modern complex software packages to provide very best design. We bring world class, state-of-the-art technology solutions to provide complete range of Medium Voltage Switchgear for primary and secondary distribution developed from customer requirements.

BK's diverse portfolio highlights successful projects across multiple market sectors, including:

- Commercial / Hotel / Hospital Buildings
- High Rise Buildings
- Residential Townships and Apartments
- Cultural and Educational Institutions
- Environmental Facilities
- Solar Energy Installations
- Metal & Mining Industries
- Electrified Railway and Underground Subway
- Engineering Industries and Power Plants
- Textile Mills & Hosiery Garment Industry
- Food & Cold storage Industries
- Data Centers / IT Office Facilities etc.

VISION

The vision is to extend hard work and capabilities through creation of new technology and knowledge.

MISSION

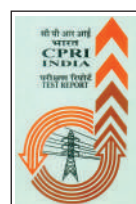
The mission is to offer genuine products, maintenance free and safety electrical installations.



Appreciation from AFNHB



Appreciation from AFNHB



CPRI Type Tested



Member - IGBC

The Policy : BK considers your Electrical System to be an Asset. Built for lifetime

Power in control

Medium Voltage Metal Clad Switchgear Panel with Vacuum Circuit Breaker

Type **POWER - Fx** - 12/24/36 KV - Air Insulated

MODEL DESCRIPTION

- Duty – Outdoor Weather Proof Kiosk / Indoor
- TYPE – SINGLE / MULTIPLE Line-up Cubicle Panels.

STANDARDS

- IS - 13118 (1991)
- IEC 62271-100
- IEC 62271-200

FEATURES & BENEFITS

- TYPE – SINGLE / MULTIPLE Line-up Cubicle Panels
- Suitable for rated currents of 630/800/1250A
- Suitable for fault currents up to 26.3kA
- Simple and compact design
- BEL Make Hermetically-sealed vacuum interrupters
- Breaker – Manual Draw out type truck assembly Designed comply with IEC 62271-100 & IEC 62771-200 standards
- Spring charged mechanism with shunt trip feature
- Easy access, High reliability, safety of operation and less maintenance with optimized mechanical design
- Metal clad, fully enclosed design with High Efficient Resin cast CTs / PTs
- Extendable on both sides
- Automatic safety shutters ensuring safeguard of operating personnel
- Floor-mounting & free-standing type
- Wide range of breaker tripping/closing control supply

APPLICATIONS:

Primary side (High Voltage) Control and Protection of Distribution Transformers in Commercial, Industrial Buildings, Townships etc.
Control and protection of overhead lines, cables, HV Motors, arc furnaces and HV Capacitor banks.

RANGE OF PRODUCTS - MEDIUM VOLTAGE SWITCHGEARS :

Unitized Substation, RMGs, Load Break Switches-LBS, Vacuum Contactor, RMUs



Unitized Substation



RMG



Load Break Switches-LBS



3.6 / 7.2 / 12 KV Vacuum Contactor



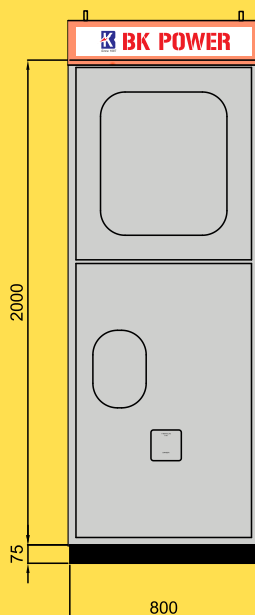
12kV 1250A 26.3kA
Indoor Single VCB Panel

GUARANTEED TECHNICAL PARTICULARS of VCB (12KV,1250A,26.3KA)

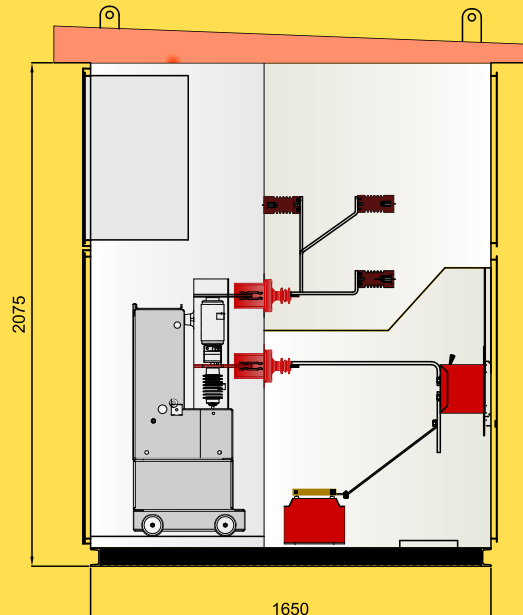
DESCRIPTION	PARAMETERS
Nominal System Voltage	11 KV
Highest System Voltage	12 kV
Frequency	50 HZ
Normal Current Ratings	1250 Amps
Short time Current rating for 3 Sec.	26.3KA (rms)
Dynamic Peak withstand capacity	65.75 KA peak
Short circuit Making Capacity	65.75 KA peak
Lightning impulse wave withstand test voltage	75 kV peak
Power Frequency withstand test voltage (60.0 sec)	28.0 kV /32.0 rms (ph to earth / across open contact)
No. of Poles	Three
No. of Breaks in circuit per pole	Single
Rated operating sequence	O-300ms-CO-3min-CO
Opening Time	< 50 mSec
Making Time	< 60 mSec
Satisfactory Closing operation Voltage	85% - 110% of Control Supply
Satisfactory Tripping operation Voltage	70-110% Control Supply
Electrical life at rated current	10,000 operations
Electrical life at Full fault breaking	100 operations
Mechanical life	20000 operations
Type of mechanism	Spring operated
Aux supply	110V DC
Minimum Clearance in air a) Between Phases b) Between Live parts & earth	Adequate to withstand BIL of system.
VCB Class	E1/C1/M2
Capacitor switching capacity	400A
Cable charging current capacity.	25A
Out of phase switching current	6.575KA
Standard to which conforms	IEC 62271-100/200 IS - 13118 (1991)



Power-Fx Vacuum Circuit Breaker



Front View



Sectional Side View

Load Break Switch Up to 630 A 12/24/36 KV

Complies with IEC - 265/IS-9920

AVAILABLE COMBINATIONS:

Ring Feeder or Incomer	: Load Break Switch + Earth Switch (LBS+ES)
Ring Feeder or Incomer with Earth Leakage Relay	: Load Break Switch + Earth Switch with CBCT & Earth Leakage Relay (LBS+ES+ELR)
Tee-Off Feeder or Outgoing	: Load Break Switch + HT HRC Fuse + Earth Switch (LBS+FT+ES)
Tee-Off Feeder or Outgoing	: Load Break Switch + HT HRC Fuse + Earth Switch with CBCT & Earth Leakage Relay (LBS+FT+ES+ELR)

FEATURES & BENEFITS

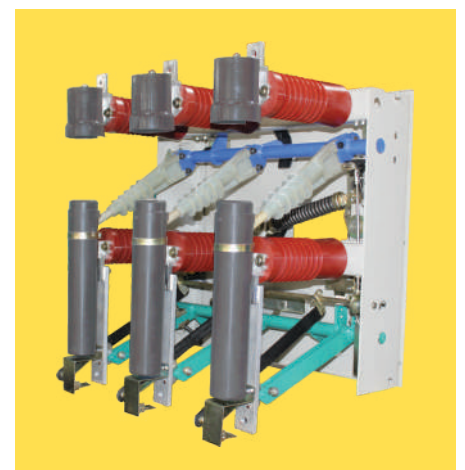
Operating Mechanism	Spring Assisted	VCB Mechanism
Operating Method	Manual	Manual / Motor

- Compact / Reliable / Safety Interlocks
- Extinguishing the arc by a Self developed air blast technology
- Position viewing glass window to analyze contact position
- Tripping Options: Remote trip, Manual, Shunt coil & Fuse trip arrangement
- Space heater with thermostat
- Indicating Lamps & illumination Lamp
- Available in both Indoor and Outdoor version



TECHNICAL SPECIFICATIONS:

DESCRIPTION	PARAMETERS
Type of break	Air
Rated Voltage	12 KV
Nominal System voltage	11 KV
Rated Current	630 A
Power Freq. withstand Voltage	28 KV rms
Impulse Withstand Voltage	75 KV
Rated Frequency	50/60 Hz
Number of Phases	3
Rated Short time withstand Current	26.3 KA/1 Sec
Rated making Capacity	63 KA
Panel height	1820mm
Panel Depth	1460mm
Panel Width	700 mm
Structure	2mm sheet with Powder painting RAL:7032
Installation	Indoor & Outdoor
Cable termination IN & OUT	Bottom cable entry



ADVANTAGES :

- Safe due to direct access to live parts is not possible
- Used in RMU with Multi panel configuration
- Main switch & Earth switch are mechanically interlocked
- Easy to access the Fuse in HT Fuse Chamber
- Easily repairable on site
- Completely closed door operation for operator safety
- Reliable & Robust Mechanism

Instrument Transformers

MV INDOOR RESIN CAST CTs, NCTs, PTs, RVTs

CTs, NCTs

TECHNICAL SPECIFICATIONS:

Operating voltage	: Up to 36 kV
Primary Current	: Up to 4000 A
Secondary Current	: 0.577A, 1 A, 2.87A, 5A
Rated Burden	: 5, 10, 15, 20, 30, 60 VA
Short Time Current Rating	: Up to 40 kA for 1sec
Class of Accuracy	: 0.1, 0.2s, 0.2, 0.5s, 0.5, 1, 5P, 10P, PS
Accuracy Limit Factor	: 5, 10, 15, 20
Frequency	: 50 Hz
Reference Standards	: IS - 2705, IEC- 61869



Type tested



Single Phase CT

PTs , RVTs

TECHNICAL SPECIFICATIONS:

Construction Features	: 1 ϕ , 2 ϕ , 3 ϕ , HV Fuses PTs, RVTs
Operating voltage	: up to 36 kV System Voltage
Secondary Voltage	: 110, 110/ $\sqrt{3}$, 110/3, 12, 190 V
Rated Burden	: up to 300 VA
Voltage Factor	: 1.2 cont. and 1.5 for 30 sec / 1.9 for 30 sec / 1.9 for 8 hrs.
Class of Accuracy	: 0.1, 0.2s, 0.2, 0.5s, 0.5, 1, 5P, 10P, PS
Frequency	: 50 Hz
Reference Standards	: IS - 3156, IEC- 61869



Single Phase PT

OTHER RANGE OF PRODUCTS :

- MV Outdoor Oil Cooled CTs, NCTs, PTs, RVTs
- Outdoor Oil Cooled CT-PT metering unit
- Outdoor / Indoor HT Metering cubicle
- Low Tension CTs, PTs, Summation CTs, Core Balance CTs,
- Control Transformers

APPLICATIONS:

Switching of Transformers, Overhead lines, Capacitors, Cables & Ring mains.



MV Indoor Potential Transformers



MV Indoor Current Transformers

Low Voltage Switchgear Panels

upto 5000 Amps 50 KA Short Circuit rated




POWER-Mx Modular Enclosure Systems

Using a few standard profile and parts to construct an Enclosure to suit Control & Protection Panel requirements. This world class, state-of-the-art technology is enable us to deliver Fast., Robust & Reliable switchgear assembly Panels with Endless possibilities to integrate all leading brand switchgears.

Having work shop facilities with equipments comprising of CNC Shearing Machine, Press Brake machine, Punching Machine, Welding (Inverter, TIG, MIG, Arc etc.)

 **ATS BY-PASS Solutions with Socomec**

 **DG Synchronizing/Load Management developed with DEIF PLC**

 **Transient Surge Protection with OBO Bettermann SPD**

 **Auto - PF Correction systems with Beluk , UK**

CUSTOMIZED FABRICATION :

Trouble-free installation, reduced construction times, and long-term dependability.

OUR RANGE OF PRODUCTS :

- EB / Genset Changeover Panels
- Power cum Motor Control Centre
- Distribution Boards, Feeder pillars
- DG, AMF, SYN & PLC Panels
- Rising Mains and Bus Ducts
- Auto - PF Correction systems
- Active and Passive Harmonic filter panels
- Distribution Boards, Feeder pillars
- Rising Mains and Bus Duct

Robust Infrastructure



CNC Press Break M/c



NC Shearing M/c



Fabrication



100kV HV Tester



OUR CLIENTS

 World's 2nd Highest rated Green Building	 Sakthi Constructions	 ARIMA	 Ananya's Nana Nani Homes	 NIVASAN HOMES Viveka	 AIR FORCE NAVAL HOUSING BOARD	 SAHARA CITY HOMES Johann Banerjee Bharti
 SAFFRON SHELTERS (P) LTD.	 HOTEL CHENTHUR PARK	 THE ARCADIA A BOUTIQUE HOTEL	 HOTEL VIJAY ELANZA	 ITC HOTELS RESPONSIBLE LUXURY	 MAHARAJA Marriage Hall	 RR HOUSING (INDIA) PVT. LTD.
 SSVM WORLD SCHOOL Approved by CBSE, Delhi	 Gedee Public School Creating Creativity	 SARATHA EDUCATION INSTITUTIONS	 Innovation for Excellence	 Audi Madurai	 Ashtamsa Varadha Anjaneyar Temple Coimbatore	 SARAVANA POLY THREADS
 WATERTEC Simply Better	 AMF Ammarun Foundaries	 GD CAR MUSEUM	 ERBATECH ERBATECH GmbH - Textile Plant & Equipment	 UR UNIQEROOF	 VOLTAS LIMITED	 Sree Ayyappan Temple Coimbatore
 Jupiter Knitting Company	 BEST	 BOSCH	 India's Biggest Retailer Lakshmi Ceramics Bringing Life to Life...	 DELL	 Unilever	 ADITHYA AQUA SOLUTIONS Leaders in Purification



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