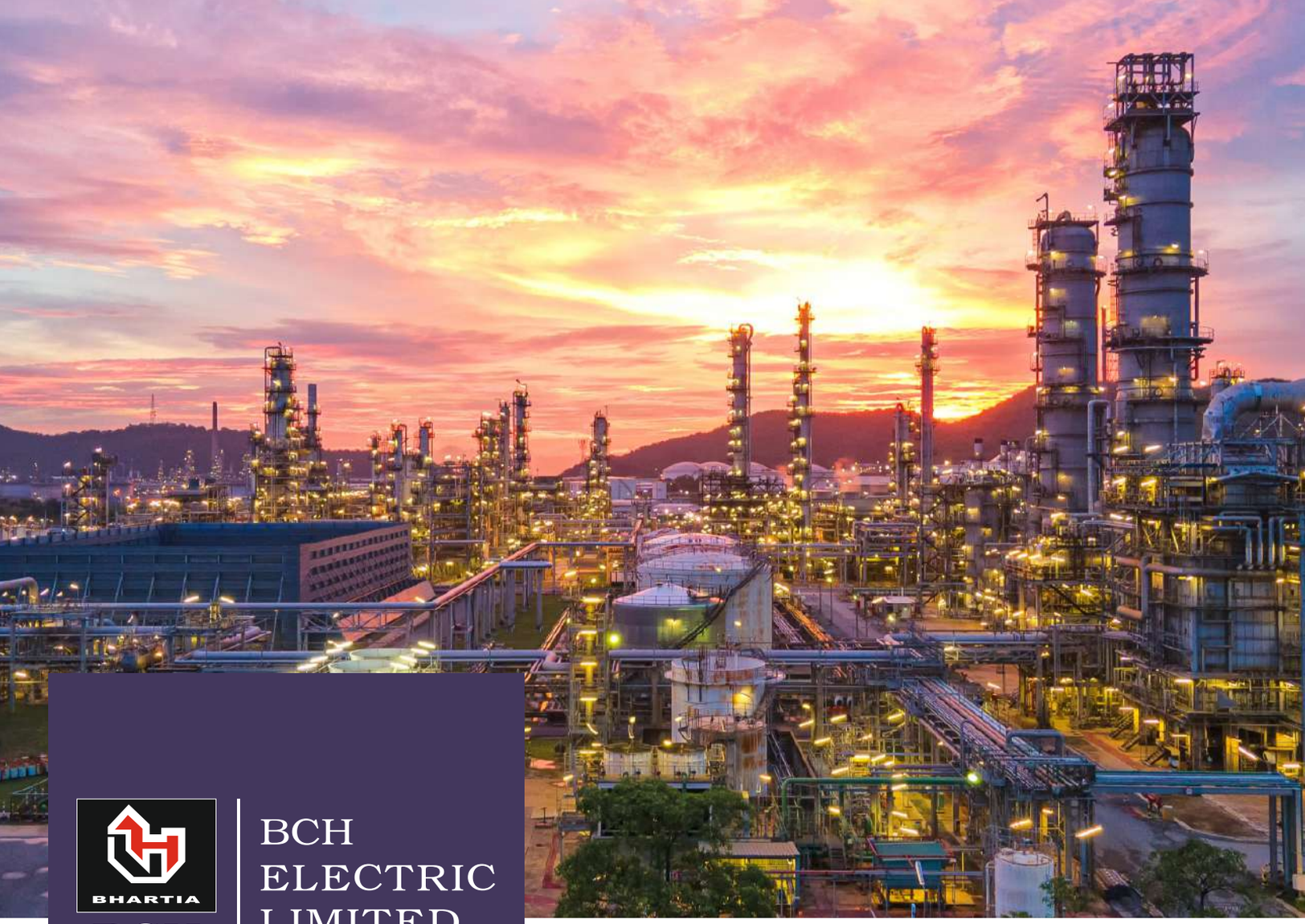


BHARTIA BCH

BCH ELECTRIC LIMITED

# LOW VOLTAGE SWITCHGEAR PRODUCTS

***Price list Effective***

19th August 2026

www.bchindia.com

# Modern facilities at Faridabad & Rudrapur

BHARTIA
BCH

## Our Strengths

- State-of-the-art product development and R&D
- Modern manufacturing facilities
- Tool room with latest facilities
- Serving customers for five decades
- Presence in ~50 locations
- 650 channel partners
- ISO 9001:2015 & ISO 14001:2015, ISO 45001: 2018 certified company

## Core Values

- Integrity
- Nurturing People
- Commitment to Customers
- Striving for Excellence
- Long Term Thinking

## Quality Policy

We as a member of BCH Electric Limited manufacturer of Low Voltage Switchgear & Controlgear products, are fully committed to provide Quality products and service in compliance with applicable Statutory and Regulatory requirements, to meet or exceed the customer need and expectations through -

- Continual improvement
- Involvement of employees
- Setting Quality objectives
- Training and development of employees

## Health & Safety Policy

We as a member of BCH Electric Limited manufacturer of Low Voltage Switchgear & Controlgear products, are fully committed to conduct Business in compliance to applicable Health & Safety legislation and regulation.

We shall continually improve through -

- Provide Safe & Healthy working conditions for the prevention of work related injury and ill health.
- Develop & maintain the Health & Safety objectives & targets and conduct health & safety programs for achieving the objectives and target.
- The prevention of accidents through the identification, assessment and elimination of workplace hazards and the promotion of health & safety awareness among its employees and contractors.
- Encourage employee's participation and consultation in matters affecting the health, safety and well being of our people and seek suggestions from our employees of ways in which health, safety & well being can be furthered.

The Health & safety policy is publicly available on request.

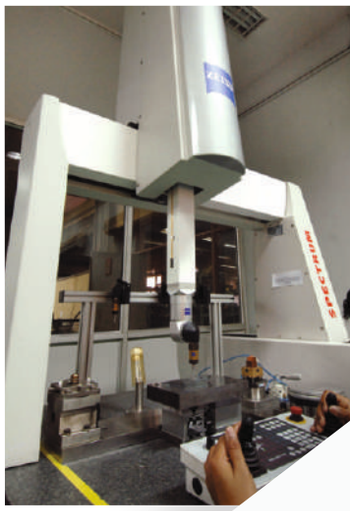
## Environmental Policy

We as a member of BCH Electric Limited manufacturer of Low Voltage Switchgear & Controlgear products, are fully committed to conduct Business in compliance to applicable Environmental legislation and regulation.

We shall continually improve through -

- Provide a framework for setting and reviewing environmental objectives and targets.
- Regularly review the impact of our activities on environment and strive to reduce the pollution/waste.
- Involve employees in our environmental program and provide necessary training to enable them to discharge their responsibilities towards environment management.
- Sustain the program of continual improvement in environment in environmental performance incorporating suitable metrics and monitoring.

The Environment policy is publicly available on request.



www.bchindia.com

# Our Products

Power Distribution

Final Distribution Products

Industrial Control & Protection

Industrial Brakes

Industrial Automation & Safety

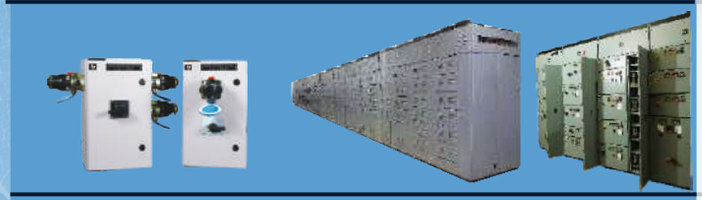
Starters

Enclosures

Wires & Cables

Power Quality & Energy Management

Electric Motors



Switchboards & Solutions

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*Complete range of*

# CIRCUIT BREAKERS

ULTRA POWER

Air Circuit Breakers

BHARTIA

BCH

BCH ELECTRIC LIMITED

# Power Distribution

- Air Circuit Breakers
- MCCBs
- X-Line SDF, FSU, SDFU
- Polycarbonate Plug & Socket BPX Series
- Plug & Sockets
- Plug & Socket Boxes

ULTRA POWER
Air Circuit Breakers

## Range of Air Circuit Breakers

- Complete range conforms to IS/IEC 60947-2
- Current rating from 800A to 6300A in 3 frame sizes
- Available in 3 Pole/4 Pole, Manually & Electrically operated, Fixed/Draw-out version
- Common Height & Depth across the range
- High short time fault withstand capacity, Icu = Ics = Icw for 1 sec for total selectivity
- High mechanical and electrical operating life
- Neutral pole is 100% rated
- In-built Electrical & Mechanical Anti-Pumping
- Modular & snap-fit accessories
- Ease of on-site conversion from Fixed to Draw-out version
- Pollution Degree 4 suitability
- Best in Class Overlap with Bus bars
- Break Time of 25msec
- RoHS Compliant

**Basic Version**

BU - BTX 1.0/1G/1Gi

BU - BTX 1.5G/1.5Gi

**Advanced Version**

BU - BTX 3.5/3.5EC

BU - BTX 3.5H

BU - BTX 4.5

## BTX Release for Protection & Control Unit:

- Available in versions - BTX1.0/1G/1Gi/1.5G/1.5Gi, BTX3.5/3.5H & BTX4.5
- Unique O-LED display for metering
- Touch screen technology in BU-BTX4.5
- Unique withdrawable Communication & Power metering modules
- Dual protection curve settings & Password protection
- Soft-rating plug for precise protection at lower load currents
- Provision for on-load self-diagnosis of Releases & modules
- Power & Harmonics measurement
- Temperature rise monitoring & protection
- Easy to integrate with HMI & PLC
- Add-on modules for advance protections
- Protection Releases conform to EMI/EMC standard

## Breaking Capacities:

Icu = Ics = Icw

| Rated current | 800A | 1000A | 1250A | 1600A | 2000A | 2500A | 3200A | 4000A | 5000A | 6300A |
|---|---|---|---|---|---|---|---|---|---|---|
| N : 50kA | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| S : 65kA | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| H : 80kA | | | | | | | ■ | ■ | | |
| V : 100kA | | | | | | | | | ■ | ■ |
| | BU1-08 | BU1-10 | BU1-12 | BU1-16 | BU1-20 | BU2-25 | BU2-32 | BU2-40 | BU3-50 | BU3-63 |
| | Frame-1 | | | | | Frame-2 | | | Frame-3 | |

## ULTRA POWER Air Circuit Breakers ACB ordering information:

| BU | 1 | 08 | N | X | D | 1 | 2 | 9 | 0 | 0 | BU1 800N 3P ED 1.5G BotV |
|---|---|---|---|---|---|---|---|---|---|---|---|

| Selection for Termination (For Drawout ACBs Only) | |
|---|---|
| Standard Termination | 0 |
| For Top Horizontal (Long), Bottom Vertical for Fr2 & Fr3 | X |
| For Top & Bottom Horizontal (Long) for Fr3 | Y |
| Note: X is applicable for 4000A (Fr2 & Fr3) and 5000A (Fr3).<br>Y is applicable for 4000A (Fr3) & 5000A (Fr3)<br>X & Y recommended for Buscoupler only. | |

| Temperature Rise Monitoring[3] | |
|---|---|
| **Not Required** | **0** |
| Required | 1 |

| Frame Size | |
|---|---|
| **Frame - I** | **1** |
| Frame - II | 2 |
| Frame - III | 3 |

| Selection for P&C Units | |
|---|---|
| B/C (w/o protection) | 0 |
| BU - BTX1.0 | 7 |
| BU - BTX1G | 8 |
| BU - BTX1Gi | B |
| **BU - BTX1.5G** | **9** |
| BU - BTX1.5Gi | C |
| BU - BTX3.5 | 3 |
| BU - BTX4.5 | 5 |
| BU - BTX3.5H | 6 |
| BU - BTX3.5EC | 4 |

| Current Ratings | |
|---|---|
| 400A | 04 |
| 630A | 06 |
| **800A** | **08** |
| 1000A | 10 |
| 1250A | 12 |
| 1600A | 16 |
| 2000A | 20 |
| 2500A[4] | 25 |
| 3200A | 32 |
| 4000A | 40 |
| 5000A | 50 |
| 6300A | 63 |

| Type | |
|---|---|
| Manually Operated | 1 |
| **Electrically Operated** | **2** |

| Selection for control voltage[2] | |
|---|---|
| For Manually Operated | 0 |
| **240V AC ECD & CR & 240V AC SR** | **1** |
| 240V AC ECD & CR & 24V DC SR | 2 |

| Version | |
|---|---|
| **Draw-out** | **D** |
| Fixed | F |

| Selection for No. of Poles | |
|---|---|
| **3 Pole** | **X** |
| 4 Pole 100% N | F |

| Selection for Breaking Capacity (Icu=Ics)[1] | |
|---|---|
| **50kA (Fr-I upto 2000A & Fr-2 upto 3200A)** | **N** |
| 65kA (Fr-I & Fr-II) | S |
| 80kA (Fr-II & Fr-III) | H |
| 100kA (Fr-III) | V |

**Please Note :**
(1) For Icw values please refer product catalogue
(2) Other options of control voltage are available as accessory
(3) Temperature protection is available in BU-BTX3.5/3.5H/4.5
(4) For Fr-1, 2500A selection, please contact the nearest branch

## ULTRA POWER Air Circuit Breakers ACBs are offered with following standard features:

**Draw-out Version:** Ultra power ACBs with BU-BTX release will have inbuilt-
Current Metering (BTX 1.5G/1.5Gi/3.5/3.5EC/3.5H/4.5), Common Fault Indication microswitch, 4NO+4NC Aux. contacts, Smart-racking shutter, Safety shutter assembly, Racking Handle, Door sealing frame, Pad-locking arrangement for ON/OFF button, Rating Error Preventer, Arc shield.
A) For ratings upto 1600A, one side vertical terminal adaptors (Bottom) for Frames 1, 2 & 3.
B) For ratings 2000A & above, both side vertical terminal adaptors (Top & Bottom) for Frames 1, 2 & 3.
C) For rating 4000A and above, operation counter inbuilt for Frames 2 & 3 both.

**Fixed Version:** Ultra power ACBs with BU-BTX release will have inbuilt-
Current Metering (1.5G/1.5Gi/3.5/3.5EC/3.5H/4.5), Common Fault Indication microswitch, 4NO+4NC Aux. contacts, Door sealing frame & Pad-locking arrangement for ON/OFF push button.
A) For ratings upto 1600A, one side vertical terminal adaptors (Bottom) for Frame 1, 2 & 3.
B) For ratings 2000A & above, both side vertical terminal adaptors (Top & Bottom) for Frames 1, 2 & 3.
C) For rating 4000A and above, operation counter inbuilt for Frames 2 & 3 both.
Electrically operated ACB includes ECD (240V AC), CR (240V AC) & SR (240V AC OR 24V DC).

ULTRA POWER Air Circuit Breakers

## ACBs with BU-BTX1G (LSING - BCD Switches) - 3 Pole

**HSN Code : 8536**

| Current Rating | Version | 3 Pole Manual Draw-out ACB with BU-BTX1G | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | N (50kA) | | S (65kA) | | H (80kA) | | V (100kA) | |
| | | Cat. No. | M.R.P. [₹] | Cat. No. | M.R.P. [₹] | Cat. No. | M.R.P. [₹] | Cat. No. | M.R.P. [₹] |
| 800A | MDO | BU108NXD01800 | * | BU108SXD01800 | * | - | - | - | - |
| 1000A | | BU110NXD01800 | | BU110SXD01800 | | | | | |
| 1250A | | BU112NXD01800 | | BU112SXD01800 | | | | | |
| 1600A | | BU116NXD01800 | | BU116SXD01800 | | | | | |
| 2000A | | BU120NXD01800 | | BU120SXD01800 | | | | | |
| 2500A | | BU225NXD01800 | | BU225SXD01800 | | | | | |
| 3200A | | - | | BU232SXD01800 | | BU232HXD01800 | * | | |
| 4000A | | | | - | | BU240HXD01800 | | | |
| 5000A | | | | | | - | - | BU350VXD01800 | * |
| 6300A | | | | | | | | BU363VXD01800 | |

**HSN Code : 8536**

| Current Rating | Version | 3 Pole Manual Fixed ACB with BU-BTX1G | | | |
|---|---|---|---|---|---|
| | | N (50kA) | | S (65kA) | |
| | | Cat. No. | M.R.P. [₹] | Cat. No. | M.R.P. [₹] |
| 800A | MF | BU108NXF01800 | * | - | - |
| 1000A | | BU110NXF01800 | | BU110SXF01800 | * |
| 1250A | | BU112NXF01800 | | BU112SXF01800 | |
| 1600A | | BU116NXF01800 | | BU116SXF01800 | |
| 2000A | | BU120NXF01800 | | BU120SXF01800 | |
| 2500A | | BU225NXF01800 | | BU225SXF01800 | |
| 3200A | | BU232NXF01800 | | BU232SXF01800 | |

| M.R.P. changes for product customization | M.R.P. [₹] |
|---|---|
| MDO to EDO or MF to EF conversion (Includes ECD 240V AC, CR 240V AC & SR 240V AC or 24V DC) | * |
| Buscoupler (without protection release) | |
| BU-BTX1.0 (LSI - BCD Switches) | |
| BU-BTX1Gi (LSING + Inbuilt ZSI - BCD Switches) | |
| BU-BTX1.5G (LSING + Current Metering - BCD Switches) | |
| BU-BTX1.5Gi (LSING + Current Metering + Inbuilt ZSI - BCD Switches) | |
| BU-BTX3.5 (LSING + Current Metering) + can be upgraded for Power Metering & Communication | |
| BU-BTX3.5EC (LSING + Power Metering + Communication) | |
| BU-BTX3.5H (LSING + Power Metering + Harmonic Metering) | |
| BU-BTX4.5 (LSING + Power Metering + Harmonic Metering + Communication with Touch Screen navigation + BU-PS Module) | |
| BU-PS (Auxiliary power supply module for display in No-load or OFF condition) | |
| COM Module (MODBUS) for communication | |
| PM Module for power metering | |

*** Available on request**

ULTRA POWER Air Circuit Breakers

## ACBs with BU-BTX1G (LSING - BCD Switches) - 4 Pole

**HSN Code : 8536**

| Current Rating | Version | 4 Pole Manual Draw-out ACB with BU-BTX1G | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | N (50kA) | | S (65kA) | | H (80kA) | | V (100kA) | |
| | | Cat. No. | M.R.P. [₹] | Cat. No. | M.R.P. [₹] | Cat. No. | M.R.P. [₹] | Cat. No. | M.R.P. [₹] |
| 800A | MDO | BU108NFD01800 | * | - | - | - | - | - | - |
| 1000A | | BU110NFD01800 | | BU110SFD01800 | * | | | | |
| 1250A | | BU112NFD01800 | | BU112SFD01800 | | | | | |
| 1600A | | BU116NFD01800 | | BU116SFD01800 | | | | | |
| 2000A | | BU120NFD01800 | | BU120SFD01800 | | | | | |
| 2500A | | BU225NFD01800 | | BU225SFD01800 | | | | | |
| 3200A | | BU232NFD01800 | | BU232SFD01800 | | BU232HFD01800 | * | | |
| 4000A | | - | - | - | - | BU240HFD01800 | | | |
| 5000A | | | | | | - | - | BU350VFD01800 | * |
| 6300A | | | | | | | | BU363VFD01800 | |

**HSN Code : 8536**

| Current Rating | Version | 4 Pole Manual Fixed ACB with BU-BTX1G | | | |
|---|---|---|---|---|---|
| | | N (50kA) | | S (65kA) | |
| | | Cat. No. | M.R.P. [₹] | Cat. No. | M.R.P. [₹] |
| 800A | MF | BU108NFF01800 | * | - | - |
| 1000A | | BU110NFF01800 | | BU110SFF01800 | * |
| 1250A | | BU112NFF01800 | | BU112SFF01800 | |
| 1600A | | BU116NFF01800 | | BU116SFF01800 | |
| 2000A | | BU120NFF01800 | | BU120SFF01800 | |
| 2500A | | BU225NFF01800 | | BU225SFF01800 | |
| 3200A | | BU232NFF01800 | | BU232SFF01800 | |

### Accessories of Air Circuit Breakers

Draw-out ACBs Terminal Adaptors

**HSN Code : 8538**

| Description | Cat. No. | M.R.P. [₹] |
|---|---|---|
| **Terminal Adaptor for Draw-out ULTRA ACBs** | | |
| Frame-1 400-2000A N/S/H (Vertical / Horizontal) | BLCA60963OOOO | * |
| Frame-2 400-3200A N/S/H (Vertical / Horizontal) | BLCA60964OOOO | |

Operation Counter

Door Interlock

**HSN Code : 8538**

| Description | Cat. No. | M.R.P. [₹] |
|---|---|---|
| **Other Accessories** | | |
| Operation Counter | BLOC90983OOOO | * |
| Door Interlock | BLDI90978OOOO | |
| Electrical Position Indication (EPI) | BLEPI95826OOOO | |
| **Microswitches for Indication** | | |
| Microswitch for Common Fault Indication (CFI) | BLCM90949OOOO | * |
| Microswitch for Ready To Close Indication (RTC) | BLRCM90953OOOO | |
| Microswitch for Shunt Release | BLSM90951OOOO | |
| Microswitch for Undervoltage Release | BLUM90947OOOO | |
| Microswitch for Spring Charging Indication | BLMSC42672OOOO | |

* Available on request

ULTRA POWER Air Circuit Breakers

## Accessories of Air Circuit Breakers

R-Lock

C-Lock

Closing Release

Shunt Release

UV Release

HSN Code : 8538

| Description | Cat. No. | M.R.P. [₹] |
|---|---|---|
| **Mechanical Interlock using Key & Lock** | | |
| R - Lock Type - 1 | BLRL100659OOOO | * |
| R - Lock Type - 2 | BLRL200660OOOO | |
| R - Lock Type - 3 | BLRL300661OOOO | |
| R - Lock Type - 12 | BLRL1200662OOOO | |
| R - Lock Type - 23 | BLRL2300663OOOO | |
| Locking arrangement for OFF button with R - Lock (on breaker) | BLRL90815OOOO | |
| Locking arrangement for ISO position with R - Lock (on Cradle) | BLCLR90865OOOO | |
| Locking arrangement for ANY position with R - Lock (on Cradle) | BLCLR90927OOOO | |
| C - Lock Type - S | BLCLS00664OOOO | |
| C - Lock Type - T | BLCLT00665OOOO | |
| C - Lock Type - ST | BLCLST00666OOOO | |
| C - Lock Type - SS | BLCLSS00667OOOO | |
| C - Lock Type - TT | BLCLTT00668OOOO | |
| Locking arrangement for OFF button with C - Lock (on breaker) | BLCL90814OOOO | |
| Locking arrangement for ISO position for C - Lock (on Cradle) | BLCLC90982OOOO | |
| Locking arrangement for ANY position with C - Lock (on Cradle | BLCLC90981OOOO | |

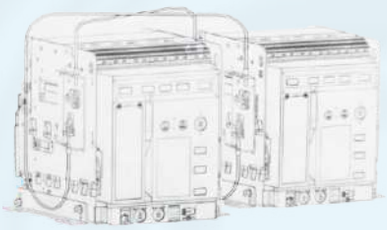
Note : For mechanical interlock using Key & Lock, please order combination of lock & locking arrangement

HSN Code : 8538

| Description | Cat. No. | M.R.P. [₹] |
|---|---|---|
| **Electrical Charging Device (ECD)** | | * |
| 240V AC / 250V DC | BLECD90359OOOO | |
| 415V AC / 400V DC | BLECD90361OOOO | |
| **Closing Release (CR)** | | |
| 220 - 240V AC / 220 - 250V DC | BLCR90817BOOO | |
| 415V AC | BLCR90817DOOO | |
| **Shunt Release (SR)** | | |
| 24-30V DC | BLSH90816O4OO | |
| | | |
| 220 - 240V AC / 220 - 250V DC | BLSH90816OBOO | |
| 415V AC | BLSH90816ODOO | |
| **Under Voltage Release (UVR) with time delay (0-1-3-5 sec)** | | |
| 240V AC / 220V DC | BLUV90818BOOO | |
| 415V AC | BLUV90818DOOO | |

HSN Code : 8538

| Description | Cat. No. | M.R.P. [₹] |
|---|---|---|
| **External Neutral CT for BU-BTX Releases** | | |
| Frame-1, 800A | BLEN00717OOOO | * |
| Frame-1, 1000-1600A | BLEN00718OOOO | |
| Frame-1 2000A | BLEN00719OOOO | |
| Frame-2 & 3 2500-4000A | BLNCT00720OOOO | |



Mechanical Interlock using Bowden Cable

HSN Code : 8538

| Description | Cat. No. | M.R.P. [₹] |
|---|---|---|
| **Mechanical Interlock using Bowden Cable (3 meters length)** | | |
| Between 2 Incomers | BLBC90659OOOO | * |
| Between 2 Incomers & 1 Buscoupler | BLBC90662OOOO | |

Note : Common from 800A to 5000A & can be interlocked between fixed / drawout / mixed version

BU-BTX1.5G

BU-BTX3.5

HSN Code : 8538

| Description | Cat. No. | M.R.P. [₹] |
|---|---|---|
| **BTX Releases** | | |
| BU-BTX1G | BLBTX91971OOOO | * |
| BU-BTX1Gi | BLBTX90562OOOO | |
| BU-BTX1.5G | BLBTX91965OOOO | |
| BU-BTX1.5Gi | BLBTX90552OOOO | |
| BU-BTX3.5 | BLBTX90113OOOO | |
| BU-BTX3.5EC | BLBTX90644OOOO | |
| BU-BTX3.5H | BLBTX91975OOOO | |
| Simulation Kit | BLSK90724OOOO | |

* Available on request

MEGA POWER
Air Circuit Breakers

## S1 Range of Air Circuit Breakers

- Conforms to IS/IEC 60947-2
- Current rating from 800A to 6300A
- Available in 3 Pole/4 Pole, Manually & Electrically operated, Fixed & Draw-out versions
- High short time withstand capacity, Icu = Ics = Icw for 1 sec for total selectivity
- High mechanical and electrical operating life
- 100% rated neutral pole
- Common height and depth across the range
- Protection through Microprocessor releases (BR18G)
- Self diagnostic Microprocessor based Releases with on-load testing through TEST button
- Inbuilt thermal memory
- Protection Releases conform to EMI/EMC standards

Mega power S1 ACB

## Breaking Capacities Offered:

| | Icu = Ics = Icw for 1 sec | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 800A | 1000A | 1250A | 1600A | 2000A | 2500A | 3200A | 4000A | 5000A | 6300A |
| Frame : S1 | 50kA | 50kA | 50kA | 50kA | 50kA | 60kA | | | | |
| Frame : H2 | | | | | | | 75kA | 75kA | | |
| Frame : C | | | | | | | | | 95kA | 95kA |
| | Frame-1 | | | | | Frame-2 | Frame-3 | | Frame-4 | |

### MEGA POWER S1 3 & 4 Pole Draw-out ACBs

HSN Code : 8536

| Rating | Breaking Capacity Icu=Ics=Icw (1 sec) | Version | Microprocessor Based BR18G | | | |
|---|---|---|---|---|---|---|
| | | | 3 Pole | | 4 Pole | |
| | | | Cat. No. | M.R.P.[₹] | Cat. No. | M.R.P. [₹] |
| 800A | 50kA | MDO | BM96042OOOO | * | BM96062OOOO | * |
| 800A | 50kA | EDO | BM96052OOOO | | BM96072OOOO | |
| 1000A | 50kA | MDO | BM96043OOOO | | BM96063OOOO | |
| 1000A | 50kA | EDO | BM96053OOOO | | BM96073OOOO | |
| 1250A | 50kA | MDO | BM96044OOOO | | BM96064OOOO | |
| 1250A | 50kA | EDO | BM96054OOOO | | BM96074OOOO | |
| 1600A | 50kA | MDO | BM96045OOOO | | BM96065OOOO | |
| 1600A | 50kA | EDO | BM96055OOOO | | BM96075OOOO | |
| 2000A | 50kA | MDO | BM96046OOOO | | BM96066OOOO | |
| 2000A | 50kA | EDO | BM96056OOOO | | BM96076OOOO | |
| 2500A | 60kA | MDO | BM96047OOOO | | BM96067OOOO | |
| 2500A | 60kA | EDO | BM96057OOOO | | BM96077OOOO | |

### MEGA POWER S1 3 & 4 Pole Fixed ACBs

HSN Code : 8536

| Rating | Breaking Capacity Icu=Ics=Icw (1 sec) | Version | Microprocessor Based BR18G | | | |
|---|---|---|---|---|---|---|
| | | | 3 Pole | | 4 Pole | |
| | | | Cat. No. | M.R.P.[₹] | Cat. No. | M.R.P. [₹] |
| 630A | 50kA | MF | BM95561OOOO | * | BM95581OOOO | * |
| 630A | 50kA | EF | BM95571OOOO | | BM95591OOOO | |
| 800A | 50kA | MF | BM95562OOOO | | BM95582OOOO | |
| 800A | 50kA | EF | BM95572OOOO | | BM95592OOOO | |
| 1000A | 50kA | MF | BM95563OOOO | | BM95583OOOO | |
| 1000A | 50kA | EF | BM95573OOOO | | BM95593OOOO | |
| 1250A | 50kA | MF | BM95564OOOO | | BM95584OOOO | |
| 1250A | 50kA | EF | BM95574OOOO | | BM95594OOOO | |
| 1600A | 50kA | MF | BM95565OOOO | | BM95585OOOO | |
| 1600A | 50kA | EF | BM95575OOOO | | BM95595OOOO | |

## MEGA POWER H2 3 & 4 Pole Draw-out ACBs

**HSN Code : 8536**

| Rating | Breaking Capacity Icu=Ics=Icw (1 sec) | Version | Type | Microprocessor Based BR18G | | | |
|---|---|---|---|---|---|---|---|
| | | | | 3 Pole | | 4 Pole | |
| | | | | Cat. No. | M.R.P. [₹] | Cat. No. | M.R.P. [₹] |
| 3200A | 75kA | MDO | H2 | BM94822OOOO | * | BM94826OOOO | * |
| 3200A | 75kA | EDO | H2 | BM94824OOOO | | BM94828OOOO | |
| 4000A | 75kA | MDO | H2 | BM94823OOOO | | BM94827OOOO | |
| 4000A | 75kA | EDO | H2 | BM94825OOOO | | BM94829OOOO | |
| 5000A | 95kA | MDO/EDO | C | On request | | On request | |
| 6300A | 95kA | MDO/EDO | C | On request | | On request | |

| M.R.P. changes for product customization w.r.t. BR18G M.R.P. | | M.R.P. [₹] |
|---|---|---|
| Bus-Coupler (w/o protection) | Reduce | * |

### MEGA POWER ACBs are offered with following standard features:

**Mega Power S1 Draw-Out ACB's** will have inbuilt - 2NO+2NC Aux contact for MDO & 6NO+6NC Aux contact for EDO breakers, Safety shutter assembly, Racking handle, Door sealing frame, Push-button cover & Rating error preventor.

**Mega Power S1 Fixed ACB's** will have inbuilt - 2NO+2NC Aux contact for MF & 6NO+6NC Aux contact for EF breakers, Door sealing frame & Push-button cover. Electrical version includes 240V AC Shunt trip coil, Closing coil and Motor for electrical charging.

## Accessories for Mega Power ACB's

**LTPB**

**Shunt Release**

**HSN Code : 8538**

**UV Release**

**HSN Code : 8538**

| Description | Cat. No. | M.R.P. [₹] |
|---|---|---|
| **Lockable Trip Push Button (LTPB)** | | |
| Type AA | BMLP93148OOOA | * |
| Type BB | BMLP93148OOOB | |
| Type CC | BMLP93148OOOC | |
| Type DD | BMLP93148OOOD | |
| **Locking of ACB in Any position (LAP)** | | |
| Type A | BMLP93147OOOA | * |
| Type B | BMLP93147OOOB | |
| Type C | BMLP93147OOOC | |
| Type D | BMLP93147OOOD | |
| **Racking Interlock** | | |
| Type A A | BMRI93149OOOA | * |
| Type B B | BMRI93149OOOB | |
| Type C C | BMRI93149OOOC | |
| Type D D | BMRI93149OOOD | |
| **Other Accessories** | | |
| Door Interlock | BMDI93150OOOO | * |

| Description | Cat. No. | M.R.P. [₹] |
|---|---|---|
| **Shunt Release (SR)** | | |
| Type EA : 24/48V DC | BMSH92718O4OO | * |
| Type EA1 : 240V AC | BMSH92718OBOO | |
| Type EA1 : 415V AC | BMSH92718ODOO | |
| **Under Voltage Release (UVR)** | | |
| Type MV : 240V AC | BMUV92720BOOO | * |
| Type MV : 415V AC | BMUV92720DOOO | |
| **Microswitches for Indication** | | |
| Test or Isolated Position Microswitch - Left (2) | BMTL93145OOOO | * |

**Note :**

a. The Numerical in brackets, against various accessories indicate the SICs required for wiring purpose in Draw-Out breakers

b. Shunt release requires one set of auxiliary contacts

c. Maximum 24 SICs can be fitted on an ACB. In Electrical ACBs 5 SICs are prewired for control circuit purpose

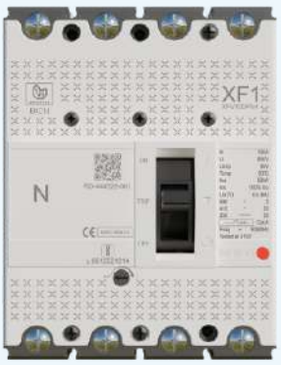
**HSN Code : 8538**

| Description | Cat. No. | M.R.P. [₹] |
|---|---|---|
| **Protection Releases** | | |
| Microprocessor based type BR18G | BMBR96030OOOO | * |

## XF Frame 1 With Thermal - Magnetic Release:

| RATING (A) / Icu (kA) | 16 | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 |
|---|---|---|---|---|---|---|---|---|---|---|
| 10/ 18 / 25 / 36 | XF Frame 1 - 3 Pole & 4 Pole | | | | | | | | | |
| 50 | XF Frame 1 - 3 Pole & 4 Pole | | | | | | | | | |

## XF Frame 1




- Conforms to IS/IEC 60947-2
- Range: 16A - 125A
- Ics = 100% Icu
- Thermal Magnetic Trip unit
  - Overload Setting: 0.7-1.0 In
- High Performance Compact Size
- Suitability for Isolation
- Rated at 50°C
- Line Load Reversibility
- High Electrical & Mechanical Life

| Frame | Release Range (A) | Breaking Cap. Icu/Ics @ 415V AC | 3P Cat. No. | MRP [₹] | 4P Cat. No. | MRP [₹] | Std. Pkg. |
|---|---|---|---|---|---|---|---|
| XF Frame 1 | 16A | 10/10kA (Fixed) | XFE016P | 4035 | XFE016P4N | 6185 | 1 |
| | 20A | | XFE020P | | XFE020P4N | | |
| | 25A | | XFE025P | | XFE025P4N | | |
| | 32A | | XFE032P | | XFE032P4N | | |
| | 40A | | XFE040P | | XFE040P4N | | |
| | 50A | | XFE050P | | XFE050P4N | | |
| | 63A | | XFE063P | | XFE063P4N | 6005 | |
| | 80A | | XFE080P-WT | | XFE080P4N-WT | 5990 | |
| | 80A | | XFE080P# | 4450 | XFE080P4N# | 7200 | |
| | 100A | | XFE100P-WT | 4035 | XFE100P4N-WT | 5990 | |
| | 100A | | XFE100P# | 4450 | XFE100P4N# | 7200 | |
| | 125A | | XFE125P-WT | 5555 | XFE125P4N-WT | 7915 | |
| | 125A | | XFE125P# | 6445 | XFE125P4N# | 9195 | |
| | 16A | 18/18kA | XFR016PV | 8905 | XFR016PV4N | 11440 | |
| | 20A | | XFR020PV | | XFR020PV4N | | |
| | 25A | | XFR025PV | | XFR025PV4N | | |
| | 32A | | XFR032PV | | XFR032PV4N | | |
| | 40A | | XFR040PV | | XFR040PV4N | | |
| | 50A | | XFR050PV | | XFR050PV4N | | |
| | 63A | | XFR063PV | | XFR063PV4N | | |
| | 80A | | XFR080PV-WT | 9075 | XFR080PV4N-WT | | |
| | 100A | | XFR100PV-WT | | XFR100PV4N-WT | | |
| | 125A | | XFR125PV-WT | 11630 | XFR125PV4N-WT | 14355 | |
| | 16A | 25/25kA | XFS016PV | 12210 | XFS016PV4N | 16885 | |
| | 20A | | XFS020PV | | XFS020PV4N | | |
| | 25A | | XFS025PV | | XFS025PV4N | | |
| | 32A | | XFS032PV | | XFS032PV4N | | |
| | 40A | | XFS040PV | | XFS040PV4N | | |
| | 50A | | XFS050PV | | XFS050PV4N | | |
| | 63A | | XFS063PV | | XFS063PV4N | | |
| | 80A | | XFS080PV-WT | 11805 | XFS080PV4N-WT | | |
| | 100A | | XFS100PV-WT | | XFS100PV4N-WT | | |
| | 125A | | XFS125PV-WT | 15835 | XFS125PV4N-WT | 21670 | |
| | 16A | 36/36kA | XFL016PV | 16360 | XFL016PV4N | 20330 | |
| | 20A | | XFL020PV | | XFL020PV4N | | |
| | 25A | | XFL025PV | | XFL025PV4N | | |
| | 32A | | XFL032PV | | XFL032PV4N | | |
| | 40A | | XFL040PV | | XFL040PV4N | | |
| | 50A | | XFL050PV | | XFL050PV4N | | |
| | 63A | | XFL063PV | | XFL063PV4N | | |
| | 80A | | XFL080PV-WT | | XFL080PV4N-WT | | |
| | 100A | | XFL100PV-WT | | XFL100PV4N-WT | | |
| | 125A | | XFL125PV-WT | 17775 | XFL125PV4N-WT | 22930 | |
| | 16A | 50/50kA | XFV016PV | 22325 | XFV016PV4N | 26280 | |
| | 20A | | XFV020PV | | XFV020PV4N | | |
| | 25A | | XFV025PV | | XFV025PV4N | | |
| | 32A | | XFV032PV | | XFV032PV4N | | |
| | 40A | | XFV040PV | | XFV040PV4N | | |
| | 50A | | XFV050PV | | XFV050PV4N | | |
| | 63A | | XFV063PV | | XFV063PV4N | | |
| | 80A | | XFV080PV-WT | 20700 | XFV080PV4N-WT | | |
| | 100A | | XFV100PV-WT | 22145 | XFV100PV4N-WT | | |

Note: Phase barriers are supplied along with all MCCBs.
#Spreader terminals available as standard.
Spreader terminals are available as accessories, unless otherwise specified against cat. nos.
For accessories please refer page No.12 on Table1 & 2

## XF Frame 2 & Frame 3 With Thermal - Magnetic Release:

| RATING (A) / Icu (kA) | 125 | 160 | 200 | 250 | 320 | 400 | 500 | 630 |
|---|---|---|---|---|---|---|---|---|
| 25 | | XF Frame 2 - 3 Pole & 4 Pole | | | | | | |
| 36 / 50 | XF Frame 2 - 3 Pole & 4 Pole | | | | XF Frame 3 - 3 Pole & 4 Pole | | | |

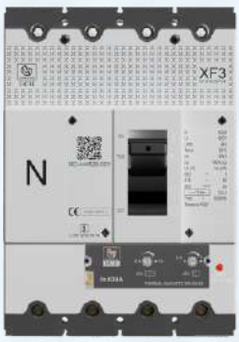
### XF Frame 2

- Conforms to IS/IEC 60947-2
- Range: 125A - 250A
- High Performance Compact Size
- Suitability for Isolation
- Rated at 50°C
- Line Load Interchangeability
- Thermal Magnetic Trip unit
  - Overload Setting: 0.8-1.0 In
  - Short Circuit Setting: Fixed

**HSN Code : 8536**

| Type | Release Range (A) | Breaking Capacity Icu/Ics at 415V AC | 3 Pole | | 4 Pole | | Std. Pkg. |
|---|---|---|---|---|---|---|---|
| | | | Cat. No. | MRP [₹] | Cat. No. | MRP [₹] | |
| XF Frame 2 | 160A | 25/25kA | XF2E160PV-WT | 22765 | XF2E160PV4N-WT | 27320 | 1 |
| | 200A | | XF2E200PV-WT | 27105 | XF2E200PV4N-WT | 33765 | 1 |
| | 250A | | XF2E250PV-WT | 31165 | XF2E250PV4N-WT | 38465 | 1 |
| | 125 A | 36/36kA | XF2N125PV-WT | 24885 | XF2N125PV4N-WT | 31350 | 1 |
| | 160 A | | XF2N160PV-WT | 33165 | XF2N160PV4N-WT | 41040 | 1 |
| | 200A | | XF2N200PV-WT | 34445 | XF2N200PV4N-WT | 43660 | 1 |
| | 250A | | XF2N250PV-WT | 38250 | XF2N250PV4N-WT | 44250 | 1 |
| | 125A | 50/50kA | XF2H125PV-WT | 35045 | XF2H125PV4N-WT | 42050 | 1 |
| | 160A | | XF2H160PV-WT | 40465 | XF2H160PV4N-WT | 48555 | 1 |
| | 200A | | XF2H200PV-WT | 40385 | XF2H200PV4N-WT | 50560 | 1 |
| | 250A | | XF2H250PV-WT | 42190 | XF2H250PV4N-WT | 52305 | 1 |

### XF Frame 3



- Conforms to IS/IEC 60947-2
- Range: 320A - 630A
- High Performance Compact Size
- Suitability for Isolation
- Rated at 50°C
- Line Load Interchangeability
- Thermal Magnetic Trip unit
  - Overload Setting: 0.8-1.0 In
  - Short Circuit Setting: 6-10 In

**HSN Code : 8536**

| Type | Release Range (A) | Breaking Capacity Icu/Ics at 415V AC | 3 Pole | | 4 Pole | | Std. Pkg. |
|---|---|---|---|---|---|---|---|
| | | | Cat. No. | MRP [₹] | Cat. No. | MRP [₹] | |
| XF3 range | 320 | 36/36kA | XF3N320PV-WT | 46140 | XF3N320PV4N-WT | 59885 | 1 |
| | 400 | | XF3N400PV-WT | 46140 | XF3N400PV4N-WT | 59885 | |
| | 500 | | XF3N500PV-WT | 61065 | XF3N500PV4N-WT | 79710 | |
| | 630 | | XF3N630PV-WT | 61065 | XF3N630PV4N-WT | 79710 | |
| | 320 | 50/50kA | XF3H320PV-WT | 51130 | XF3H320PV4N-WT | 68415 | |
| | 400 | | XF3H400PV-WT | 51130 | XF3H400PV4N-WT | 68415 | |
| | 500 | | XF3H500PV-WT | 67275 | XF3H500PV4N-WT | 89940 | |
| | 630 | | XF3H630PV-WT | 67275 | XF3H630PV4N-WT | 89940 | |

Note: Phase barriers are supplied along with all MCCBs.
Spreader terminals are available as accessories.
For accessories please refer page No.12 on Table1 & 2

## XF2 & XF3 Range With Microprocessor Release - LSI & LSIG (3 & 4 Pole)

| RATING (A) / Icu (kA) | 40 | 63 | 100 | 160 | 250 | 400 | 630 |
|---|---|---|---|---|---|---|---|
| 36 / 36 | XF2- LSI / LSIG / LSIG - LCD (3 Pole & 4 Pole) | | | | | XF3- LSIG (3 Pole ) | |
| 50 / 50 | XF2- LSI / LSIG / LSIG - LCD (3 Pole & 4 Pole) | | | | | XF3- LSIG (3 Pole ) | |

**i ETU - 1.0 -LSI Release**

- DIP Switch
- Overload Setting: 0.4 - 1.0 x In
- Short Circuit Setting: 1.5 - 8 x Ir
- Instantaneous Setting: 1.5 - 10 x Ir
- Short Circuit Delay: 100 - 400 ms

New

### XF2 Range With i ETU 1.0 Release - LSI (3 Pole & 4 Pole) — HSN Code : 8536

| Type | Release Range (A) | Breaking Capacity Icu/Ics at 415V AC | 3 Pole Cat. No. | 3 Pole MRP [₹] | 4 Pole Cat. No. | 4 Pole MRP [₹] | Std. Pkg. |
|---|---|---|---|---|---|---|---|
| XF2 range | 16-40 | 36/36kA | XF2N040PE3-1.0 | 31990 | XF2N040PE4-1.0 | 39060 | 1 |
| | 25-63 | | XF2N063PE3-1.0 | 31990 | XF2N063PE4-1.0 | 39060 | |
| | 40-100 | | XF2N100PE3-1.0-WT | 31990 | XF2N100PE4-1.0-WT | 39060 | |
| | 63-160 | | XF2N160PE3-1.0-WT | 37665 | XF2N160PE4-1.0-WT | 52545 | |
| | 100-250 | | XF2N250PE3-1.0-WT | 50780 | XF2N250PE4-1.0-WT | 70310 | |
| | 16-40 | 50/50kA | XF2H040PE3-1.0 | 37105 | XF2H040PE4-1.0 | 51150 | |
| | 25-63 | | XF2H063PE3-1.0 | 37105 | XF2H063PE4-1.0 | 51150 | |
| | 40-100 | | XF2H100PE3-1.0-WT | 37105 | XF2H100PE4-1.0-WT | 51150 | |
| | 63-160 | | XF2H160PE3-1.0-WT | 46595 | XF2H160PE4-1.0-WT | 61195 | |
| | 100-250 | | XF2H250PE3-1.0-WT | 59800 | XF2H250PE4-1.0-WT | 75795 | |

**i ETU - 1.0G LSIG Release**

- DIP Switch
- Overload Setting: 0.4 - 1.0 x In
- Short Circuit Setting: 1.5 - 8 x Ir
- Earth Fault Setting: 0.2 - 0.5 In
- Instantaneous Setting: 1.5-10xIr
- Short Circuit Delay: 100 - 400 ms
- Earth Fault Delay: 100 - 400ms
- Pre Trip Alarm Indication

New

### XF2 Range With i ETU 1.0G Release - LSIG (3 Pole & 4 Pole) — HSN Code : 8536

| Type | Release Range (A) | Breaking Capacity Icu/Ics at 415V AC | 3 Pole Cat. No. | 3 Pole MRP [₹] | 4 Pole Cat. No. | 4 Pole MRP [₹] | Std. Pkg. |
|---|---|---|---|---|---|---|---|
| XF2 range | 16-40 | 36/36kA | XF2N040PE3-1.0G | 53755 | XF2N040PE4-1.0G | 62590 | 1 |
| | 25-63 | | XF2N063PE3-1.0G | 53755 | XF2N063PE4-1.0G | 62590 | |
| | 40-100 | | XF2N100PE3-1.0G-WT | 53755 | XF2N100PE4-1.0G-WT | 62590 | |
| | 63-160 | | XF2N160PE3-1.0G-WT | 61750 | XF2N160PE4-1.0G-WT | 76075 | |
| | 100-250 | | XF2N250PE3-1.0G-WT | 72725 | XF2N250PE4-1.0G-WT | 89280 | |
| XF2 range | 16-40 | 50/50kA | XF2H040PE3-1.0G | 59520 | XF2H040PE4-1.0G | 70960 | |
| | 25-63 | | XF2H063PE3-1.0G | 59520 | XF2H063PE4-1.0G | 70960 | |
| | 40-100 | | XF2H100PE3-1.0G-WT | 59520 | XF2H100PE4-1.0G-WT | 70960 | |
| | 63-160 | | XF2H160PE3-1.0G-WT | 70680 | XF2H160PE4-1.0G-WT | 84630 | |
| | 100-250 | | XF2H250PE3-1.0G-WT | 81840 | XF2H250PE4-1.0G-WT | 99975 | |

**Electronic Trip Unit (ETU)-LSIG for XF3**

- Overload Setting: 0.4-1.0 In
- Short Circuit Setting: 1.5-10 In
- Earth Fault Setting: 0.2-0.55 In
- Instantaneous Setting: 12 In
- Short Circuit Delay: 50-500 ms
- Earth Fault Delay: 50-500 ms
- Pre Trip Alarm Indication

### XF3 Range With Microprocessor Release - LSIG (3 Pole) — HSN Code : 8536

| Type | Release Range (A) | Breaking Capacity Icu/Ics at 415V AC | 3 Pole Cat. No. | 3 Pole MRP [₹] | Std. Pkg. |
|---|---|---|---|---|---|
| XF3 range | 160-400 | 36/36kA | XF3N400PE-LSIG-WT | 76925 | 1 |
| | 250-630 | | XF3N630PE-LSIG-WT | 81650 | |
| XF3 range | 160-400 | 50/50kA | XF3H400PE-LSIG-WT | 82525 | |
| | 250-630 | | XF3H630PE-LSIG-WT | 88270 | |

**i ETU – 2.0GLSIG Release**

- LCD Display
- Overload Setting: 0.4 -1.0 x In
- Short Circuit Setting: 1.5 -10 Ir
- Earth Fault Setting: 0.2 - 1In
- Instantaneous Setting: 1.5 -10 x Ir
- Short Circuit Delay: 50 - 500 ms
- Earth Fault Delay: 100-1000 ms
- Pre Trip Alarm Indication

New

### XF2 Range With i ETU 2.0G Release - LSIG (3 Pole & 4 Pole) — HSN Code : 8536

| Type | Release Range (A) | Breaking Capacity Icu/Ics at 415V AC | 3 Pole Cat. No. | 3 Pole MRP [₹] | 4 Pole Cat. No. | 4 Pole MRP [₹] | Std. Pkg. |
|---|---|---|---|---|---|---|---|
| XF2 range | 16-40 | 36/36kA | XF2N040PE3-2.0G | 67705 | XF2N040PE4-2.0G | 76540 | 1 |
| | 25-63 | | XF2N063PE3-2.0G | 67705 | XF2N063PE4-2.0G | 76540 | |
| | 40-100 | | XF2N100PE3-2.0G-WT | 67705 | XF2N100PE4-2.0G-WT | 76540 | |
| | 63-160 | | XF2N160PE3-2.0G-WT | 75700 | XF2N160PE4-2.0G-WT | 90025 | |
| | 100-250 | | XF2N250PE3-2.0G-WT | 86675 | XF2N250PE4-2.0G-WT | 103230 | |
| | 16-40 | 50/50kA | XF2H040PE3-2.0G | 73470 | XF2H040PE4-2.0G | 84910 | |
| | 25-63 | | XF2H063PE3-2.0G | 73470 | XF2H063PE4-2.0G | 84910 | |
| | 40-100 | | XF2H100PE3-2.0G-WT | 73470 | XF2H100PE4-2.0G-WT | 84910 | |
| | 63-160 | | XF2H160PE3-2.0G-WT | 84630 | XF2H160PE4-2.0G-WT | 98580 | |
| | 100-250 | | XF2H250PE3-2.0G-WT | 95790 | XF2H250PE4-2.0G-WT | 113925 | |

Note: Phase barriers are supplied along with all MCCBs.
Spreader terminals are available as accessories.
For accessories please refer page No.12 on Table1 & 2

# XF MCCB

## MCCB for Motor back-up protection

HSN Code : 8536

- **XF1, XF2 & XF3 Frame**
- Conforms to IS/IEC 60947-2
- Range: 32A - 630A
- $I_{cu}$/ $I_{cs}$ = 50/50kA
- High Performance Compact Size
- Suitability for Isolation
- Rated at 50°C
- Line Load Interchangeability
- Double Insulation
- Magnetic Trip unit

| Type | Release Range (A) | Breaking Capacity Icu/Ics at 415V AC | 3 Pole | | Std. Pkg. |
|---|---|---|---|---|---|
| | | | Cat. No. | MRP [₹] | |
| XF1 range | 32 | 50/50kA | XFV032P-MO | 9875 | 1 |
| | 40 | | XFV040P-MO | 9875 | 1 |
| | 50 | | XFV050P-MO | 9875 | 1 |
| | 63 | | XFV063P-MO | 9875 | 1 |
| | 80 | | XFV080P-MO-WT | 9300 | 1 |
| | 100 | | XFV100P-MO-WT | 12005 | 1 |
| XF2 range | 125 | 50/50kA | XF2H125P-MO-WT | 16190 | 1 |
| | 160 | | XF2H160P-MO-WT | 25040 | 1 |
| | 200 | | XF2H200P-MO-WT | 29715 | 1 |
| | 250 | | XF2H250P-MO-WT | 34725 | 1 |
| XF3 range | 320 | 50/50kA | XF3H320P-MO-WT | 43450 | 1 |
| | 400 | | XF3H400P-MO-WT | 43450 | 1 |
| | 500 | | XF3H500P-MO-WT | 49965 | 1 |
| | 630 | | XF3H630P-MO-WT | 52900 | 1 |

Note: Phase barriers are supplied along with all MCCBs.
Spreader terminals are available as accessories.
For accessories please refer page No.12 on Table1 & 2

# MCCB Accessories

## XF Range MCCBs:

Shunt Release

UV Release

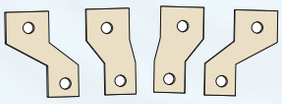
ATAC

Extended Rotary Handle

DIN Rail

**Table 1** HSN Code : 8538

| Description | Internal | | |
|---|---|---|---|
| | Cat. No. | MRP [₹] | Std. Pkg. |
| **Auxiliary + Trip Alarm Contact** | | | |
| 1 C/O + 1C/O (F1, F2 & F3) | XFALAX11 | 2705 | 1 |
| 2 C/O (F1, F2 & F3) | XFAX2 | 2660 | |
| **Shunt Release** | | | |
| 220V - 415V F1 | XFSHT220V | 2330 | 1 |
| 220V - 415V F2 | XF2SHT220V | 2375 | |
| 220V - 415V F3 | XF3SHT220V | 3850 | |
| **Under Voltage Release** | | | |
| 240V F1 | XFUV240VA | 3045 | 1 |
| 240V F2 | XF2UV240VA | 3080 | |
| 240V F3 | XF3UV240VA | 4810 | |
| 415V F1 | XFUV415VA | 3500 | |
| 415V F2 | XF2UV415VA | 3540 | |
| 415V F3 | XF3UV415VA | 4810 | |

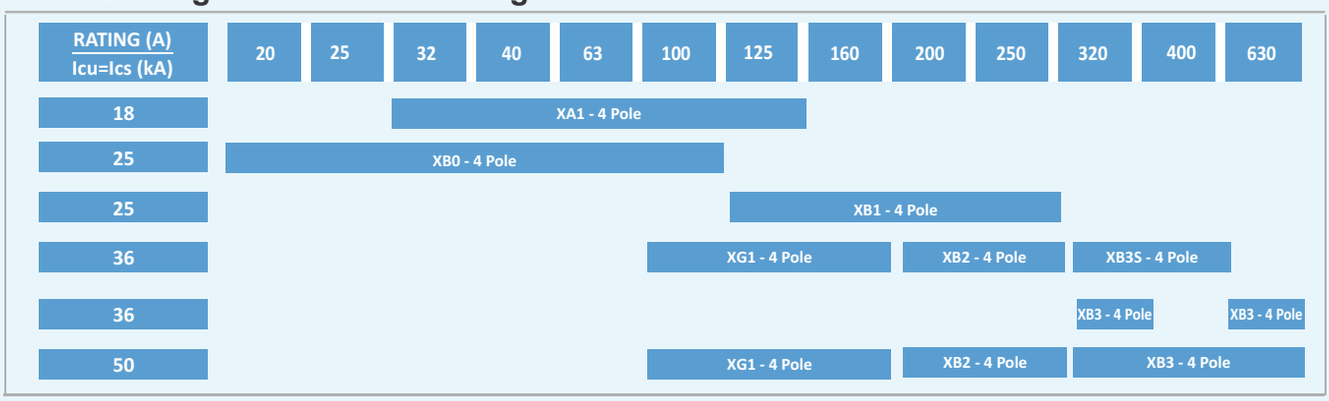


Spreader Terminals

**Table 2** HSN Code : 8538

| Description | Current (A) | External | | |
|---|---|---|---|---|
| | | Cat. No. | MRP [₹] | Std. Pkg. |
| Spreader Terminals | 50 | ACMF1TP050-6T | 670 | Set of 6 (3P) |
| | 100 | ACMF1TP100-6T | 670 | |
| | 125 | ACMF1TP125-6T | 790 | |
| | 50 | ACMF1FP050-8T | 965 | Set of 8 (4P) |
| | 100 | ACMF1FP100-8T | 1015 | |
| | 125 | ACMF1FP125-8T | 1255 | |
| | 160 | ACMF2TP160-6T | 2620 | Set of 6 (3P) |
| | 250 | ACMF2TP250-6T | 2620 | |
| | 160 | ACMF2FP160-8T | 3285 | Set of 8 (4P) |
| | 250 | ACMF2FP250-8T | 3470 | |
| | 400 | ACMF3TP400-6T | 5350 | Set of 6 (3P) |
| | 630 | ACMF3TP630-6T | 6800 | |
| | 400 | ACMF3FP400-8T | 8580 | Set of 8 (4P) |
| | 630 | ACMF3FP630-8T | 9240 | |
| Extended Rotary Handle | - | XF1ROHE | 3315 | 1 |
| | - | XF2ROHE | 3545 | |
| | - | XF2ROHE-LSIG | 3545 | |
| | - | XF3ROHE | 6835 | |
| Direct Rotary Handle | - | XF1ROHD | 2095 | |
| | - | XF2ROHD | 2175 | |
| Din Rail | - | F1DIN | 410 | |
| MCCB Enclosure | - | F1EU3P | 1770 | 1 |
| | - | F2EU3P | 3820 | |
| | - | F1EU4P | 2300 | |
| | - | F2EU4P | 4945 | |

## XG1/XB Range With Thermal - Magnetic Release:




## XA1 Frame - 4 Pole

- Conforms to IS/IEC 60947-2
- Range: 25A to 125A, 4P
- Ics=100% of Icu
- High Electrical & Mechanical life
- Thermal Magnetic Release
- Compact size
- Adjustable overload setting : 0.8-1.0 x In
- Wide range of snap fit internal & external accessories

XA1 Frame :
$I_{cu}/I_{cs}$ = 18/18 kA

## XG1 Frame - 4 Pole

- Conforms to IS/IEC 60947-2
- 84A to 160A, 4P
- 36kA & 50kA breaking capacities
- Ics= 100% of Icu
- Adjustable overload settings: 0.67 - 1.0 x In
- Adjustable short-circuit settings: 6 - 12 x In
- Transparent sealable release cover
- Compact size
- Wide range of accessories

XG1 Frame :
$I_{cu}/I_{cs}$ = 36/36, 50/50 kA

## XB Range - 4 Pole

- Conforms to IS/IEC 60947-2
- 80A to 630A, 4P
- 25kA, 36kA, 50kA breaking capacities
- Ics= 100% of Icu*
- Adjustable overload settings: 0.8 - 1.0 x In
- Manual, Rotary and Motorised versions
- Adjustable short-circuit settings: 6 - 10 x In**
- Wide range of accessories

XB Frame :
$I_{cu}/I_{cs}$ = 25/25, 36/18, 36/36, 50/50 kA

### XA1/XG1/XB Range With Thermal - Magnetic Release - 4 Pole

**HSN Code : 8536**

| Type | Release Range (A) | Breaking Capacity Icu/Ics | 4 Pole Cat. No. | 4 Pole MRP [₹] | Std. Pkg. |
|---|---|---|---|---|---|
| XA1 | 32 | 18/18kA | XA1R032PV4 | - | 1 |
| | 40 | | XA1R040PV4 | - | |
| | 63 | | XA1R063PV4 | - | |
| | 100 (w/o spreader) | | XA1R100PV4 | - | |
| | 125 | | XA1R125PV4 | - | |
| XB0 | 20 | 25/25kA | XB0S020PV4 | - | |
| | 25 | | XB0S025PV4 | - | |
| | 32 | | XB0S032PV4 | - | |
| | 40 | | XB0S040PV4 | - | |
| | 63 | | XB0S063PV4 | - | |
| | 100 | | XB0S100PV4 | - | |
| XB1 | 125 | | XB1E125PV4 | - | |
| | 160 | | XB1E160PV4 | - | |
| | 200 | | XB1E200PV4 | - | |
| | 250 | | XB1E250PV4 | - | |
| XG1 | 100 | 36/36kA | XG1N100PV4 | - | |
| | 125 | | XG1N125PV4 | - | |
| | 160 | | XG1N160PV4 | - | |
| XB2 | 200 | | XB2N200PV4 | - | |
| | 250 | | XB2N250PV4 | - | |
| XB3S | 320 | | XB3SN320PV4 | - | |
| | 400 | | XB3SN400PV4 | - | |
| XB3 | 320 | | XB3N320PV4 | - | |
| | 630 | | XB3N630PV4 | - | |
| XG1 | 100 | 50/50kA | XG1H100PV4 | - | |
| | 125 | | XG1H125PV4 | - | |
| | 160 | | XG1H160PV4 | - | |
| XB2 | 200 | | XB2H200PV4 | - | |
| | 250 | | XB2H250PV4 | - | |
| XB3 | 320 | | XB3H320PV4 | - | |
| | 400 | | XB3H400PV4 | - | |
| | 630 | | XB3H630PV4 | - | |

**General Information**

- Use of phase barriers is mandatory. These are supplied along with MCCBs
- It is recommended to use spreader terminals for enhancing termination capacity
- Spreader terminals are available as accessories, unless otherwise specified against cat. nos.

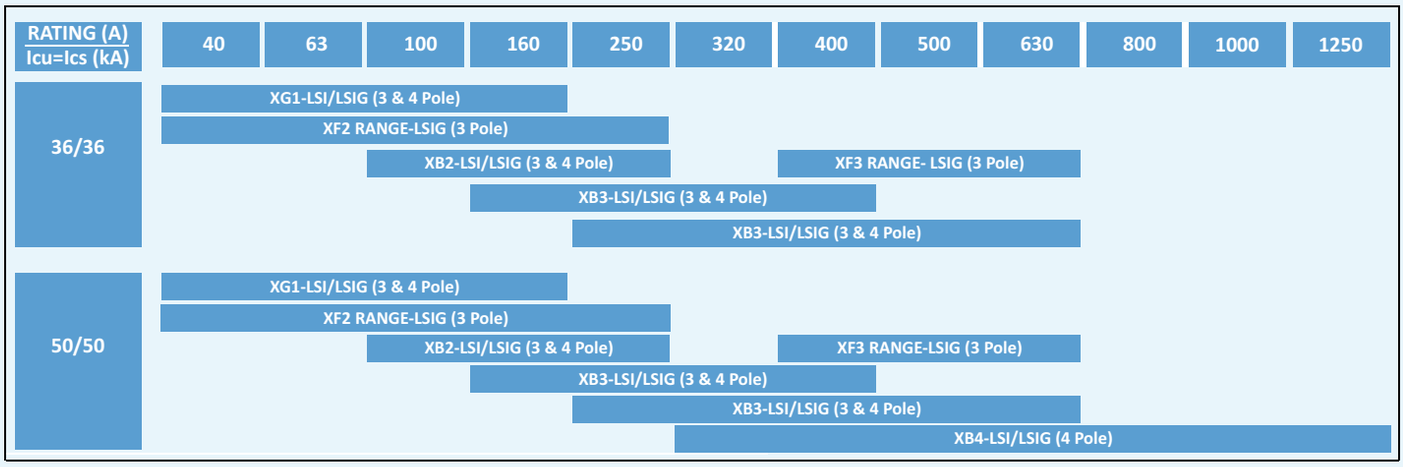
**Special Applications**

- XB range MCCBs with TM release can be used for DC application (4 Pole)
- XB range MCCBs can be used for Capacitor back-up protection

@ Motorized version available for XB2 AND XB3 Frames
* XB0 : Ics = 50% Icu
** For XB0, XB1, XB3S Short circuit setting : 9 In

For accessories please refer page No.16 on Table 1, 2 & 3

## XG1/XB Range With Microprocessor Release:




## With Microprocessor Release BMR & GMR - LSI (3 & 4 Pole)

XB Frame - BMR :
$I_{cu}/I_{cs}$ = 36/36, 50/50 kA

### XB-BMR (LSI)

- Conforms to IS/IEC 60947-2
- 250A to 1250A, 3P & 4P
- 36kA, 50kA breaking capacities
- Adjustable overload setting from 0.4 to 1.0 x In
- Ics=100% Icu
- Adjustable short-circuit setting from 1.5 to 8 x Ir
- Inbuilt instantaneous Protection
- Switchable thermal memory
- Variable trip class
- Front LED Indication
- Manual, Rotary and Motorised versions available@
- Wide range of accessories

XG1 Frame - GMR :
$I_{cu}/I_{cs}$ = 36/36, 50/50 kA

### XG1-GMR (LSI)

- Conforms to IS/IEC 60947-2
- 16A to 160A, 3P & 4P
- 36kA & 50kA breaking capacities
- Ics=100% Icu
- Adjustable overload setting from 0.25 to 1.0 x In
- Adjustable short-circuit setting from 1.5 to 12 x Ir
- Instantaneous setting from 1.5 to 12 x In
- Switchable thermal memory
- Variable trip class
- Transparent sealable release cover
- Compact size
- Adjustable overload setting from 0.25 to 1.0 x In
- Wide range of accessories

**HSN Code : 8536**

| Type | Release Range (A) | Breaking Capacity Icu/Ics | 3 Pole | | 4 Pole | | Std. Pkg. |
|---|---|---|---|---|---|---|---|
| | | | Cat. No. | MRP [₹] | Cat. No. | MRP [₹] | |
| XG1 | 10-40 | 36/36kA | XG1L040PE3-LSI | - | XG1L040PE4-LSI | - | 1 |
| | 16-63 | | XG1L063PE3-LSI | - | XG1L063PE4-LSI | - | |
| | 25-100 | | XG1L100PE3-LSI | - | XG1L100PE4-LSI | - | |
| | 40-160 | | XG1N160PE3-LSI | - | XG1N160PE4-LSI | - | |
| XB2 | 100-250 | | XB2N250PE3-LSI | - | XB2N250PE4-LSI | - | |
| XB3 | 160-400 | | XB3N400PE3-LSI | - | XB3N400PE4-LSI | - | |
| | 250-630 | | XB3N630PE3-LSI | - | XB3N630PE4-LSI | - | |
| XG1 | 10-40 | 50/50kA | XG1V040PE3-LSI | - | XG1V040PE4-LSI | - | |
| | 16-63 | | XG1V063PE3-LSI | - | XG1V063PE4-LSI | - | |
| | 25-100 | | XG1V100PE3-LSI | - | XG1V100PE4-LSI | - | |
| | 40-160 | | XG1H160PE3-LSI | - | XG1H160PE4-LSI | - | |
| XB2 | 100-250 | | XB2H250PE3-LSI | - | XB2H250PE4-LSI | - | |
| XB3 | 160-400 | | XB3H400PE3-LSI | - | XB3H400PE4-LSI | - | |
| | 250-630 | | XB3H630PE3-LSI | - | XB3H630PE4-LSI | - | |
| XB4 | 320-800 | | XB4H800PE3-LSI | - | XB4H800PE4-LSI | - | |
| | 400-1000 | | XB4H1000PE3-LSI | - | XB4H1000PE4-LSI | - | |
| | 500-1250 | | XB4H1250PE3-LSI | - | XB4H1250PE4-LSI | - | |

@ Motorized version available for XB2 and XB3 Frames (please refer page no.16)

For accessories please refer page No.16 on Table1, 2 & 3

**General Information**

- Use of phase barriers is mandatory. These are supplied along with MCCBs
- It is recommended to use spreader terminals for enhancing termination capacity
- Spreader terminals are available as accessories, unless otherwise specified against cat. nos.

XB Frame - BMR :
$I_{cu}/I_{cs}$ = 36/36, 50/50 kA

## XB-BMR (LSIG)

- Conforms to IS/IEC 60947-2
- 40A to 1250A, 3P & 4P
- 36kA, 50kA breaking capacities
- Ics=100% Icu
- Adjustable overload setting from 0.4 to 1.0 x In
- Adjustable short-circuit setting from 1.5 to 8 x Ir
- Inbuilt instantaneous Protection
- Inbuilt ground fault protection from 20%-50% of In
- Adjustable neutral overload protection from 50% to 150% of Ir
- Switchable thermal memory
- Variable trip class
- Front LED Indication
- Panel mounted display for current metering & trip record
- Manual, Rotary and Motorised versions available@
- Wide range of accessories

XG1 Frame - GMR :
$I_{cu}/I_{cs}$ = 36/36, 50/50 kA

## XG1-GMR (LSIG)

- Conforms to IS/IEC 60947-2
- 16A to 160A, 3P & 4P
- 36kA & 50kA breaking capacities
- Ics=100% Icu
- Adjustable overload setting from 0.25 to 1.0 x In
- Adjustable short-circuit setting from 1.5 to 10 x Ir
- Adjustable Instantaneous setting, 6 In & 12 In
- Inbuilt ground fault protection from 20%-70% of In
- Adjustable neutral overload protection from 50% to 200% of Ir
- Switchable thermal memory
- Provision for release testing
- Individual fault indication LEDs
- Transparent sealable release cover
- Compact size
- Wide range of accessories

## With Microprocessor Release BMR & GMR - LSIG (3 & 4 Pole)

**HSN Code : 8536**

| Type | Release Range (A) | Breaking Capacity Icu/Ics | 3 Pole | | 4 Pole | | Std. Pkg. |
|---|---|---|---|---|---|---|---|
| | | | Cat. No. | MRP [₹] | Cat. No. | MRP [₹] | |
| XG1 | 10-40 | 36/36kA | XG1L040PE3-LSIG | - | XG1L040PE4-LSIG | - | 1 |
| | 16-63 | | XG1L063PE3-LSIG | - | XG1L063PE4-LSIG | - | 1 |
| | 25-100 | | XG1L100PE3-LSIG | - | XG1L100PE4-LSIG | - | 1 |
| | 40-160 | | XG1N160PE3-LSIG | - | XG1N160PE4-LSIG | - | 1 |
| XB2 | 40-100 | 36/36kA | - | - | XB2V100PE4-LSIG | - | 1 |
| | 63-160 | | - | - | XB2N160PE4-LSIG | - | 1 |
| | 100-250 | | XB2N250PE3-LSIG | - | XB2N250PE4-LSIG | - | 1 |
| XB3 | 160-400 | 36/36kA | XB3N400PE3-LSIG | - | XB3N400PE4-LSIG | - | 1 |
| | 250-630 | | XB3N630PE3-LSIG | - | XB3N630PE4-LSIG | - | 1 |
| XG1 | 10-40 | 50/50kA | XG1V040PE3-LSIG | - | XG1V040PE4-LSIG | - | 1 |
| | 16-63 | | XG1V063PE3-LSIG | - | XG1V063PE4-LSIG | - | 1 |
| | 25-100 | | XG1V100PE3-LSIG | - | XG1V100PE4-LSIG | - | 1 |
| | 40-160 | | XG1H160PE3-LSIG | - | XG1H160PE4-LSIG | - | 1 |
| XB2 | 40-100 | 50/50kA | - | - | XB2L100PE4-LSIG | - | 1 |
| | 63-160 | | - | - | XB2H160PE4-LSIG | - | 1 |
| | 100-250 | | XB2H250PE3-LSIG | - | XB2H250PE4-LSIG | - | 1 |
| XB3 | 160-400 | 50/50kA | XB3H400PE3-LSIG | - | XB3H400PE4-LSIG | - | 1 |
| | 250-630 | | XB3H630PE3-LSIG | - | XB3H630PE4-LSIG | - | 1 |
| XB4 | 320-800 | 50/50kA | XB4H800PE3-LSIG | - | XB4H800PE4-LSIG | - | 1 |
| | 400-1000 | | XB4H1000PE3-LSIG | - | XB4H1000PE4-LSIG | - | 1 |
| | 500-1250 | | XB4H1250PE3-LSIG | - | XB4H1250PE4-LSIG | - | 1 |

@ Motorized version available for XB2 and XB3 Frames

For accessories please refer page No.16 on Table 1, 2 & 3

**General Information**

- Use of phase barriers is mandatory. These are supplied along with MCCBs
- It is recommended to use spreader terminals for enhancing termination capacity
- Spreader terminals are available as accessories, unless otherwise specified against cat. nos.

## Accessories - XB/XG1 Range MCCBs:

Auxiliary Contact

ATAC

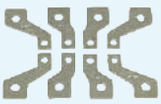
Shunt Release

UV Release

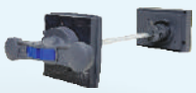
### Table 1

HSN Code : 8538

| Description | External | | |
|---|---|---|---|
| | Cat. No. | MRP [₹] | Std. Pkg. |
| **Rotary Handle** | | | |
| XA1, XB0 Direct ROM | XB0A1ROHD | - | 1 |
| XA2, XB1 Direct ROM | XB1A2ROHD | - | 1 |
| XG1 Direct ROM | XG1ROHD | - | 1 |
| XB2 Direct ROM | XB2ROHD | - | 1 |
| XA3, XB3S, XB3 Direct ROM | XB3A3ROHD | - | 1 |
| XA1, XB0 Extended ROM | XB0A1ROHE | - | 1 |
| XA2, XB1 Extended ROM | XB1A2ROHE | - | 1 |
| XG1 Extended ROM | XG1ROHE | - | 1 |
| XB2 Extended ROM | XB2ROHE | - | 1 |
| XA3, XB3S, XB3 Extended ROM | XB3A3ROHE | - | 1 |
| XB4 Extended ROM | XB4ROHE | - | 1 |
| **Stored Energy Electrical Operating Mechanism** | | | |
| XB2 - 240V AC* | - | | |
| XB3 - 240V AC* | - | | |


Spreader Terminals

Direct ROM


Extended ROM

### Table 2

HSN Code : 8538

| Description | Internal | | |
|---|---|---|---|
| | Cat. No. | MRP [₹] | Std. Pkg. |
| **Auxiliary Contact** | | | |
| XA1, XA2, XB0, XB1 - 1 C/O - Right | XB01A12AUX1 | - | 1 |
| XA1, XA2, XB0, XB1 - 2 C/O - Right | XB01A12AUX2 | - | 1 |
| XG1 - 1 C/O | XG1AUX1 | - | 1 |
| XA3, XB2, XB3S, XB3, XB4 - 1 C/O | XB234A3AUX1 | - | 1 |
| XA3, XB2, XB3S, XB3, XB4 - 2 C/O | XB234A3AUX2 | - | 1 |
| **Trip Alarm Contact** | | | |
| XA1, XA2, XB0, XB1 - 1 C/O - Right | XB01A12ALR1 | - | 1 |
| XG1 - 1 C/O | XG1AUX1 | - | 1 |
| XA3, XB2, XB3S, XB3, XB4 - 1 C/O - Right | XB234ALR1 | - | 1 |
| **Auxiliary 1 C/O + TAC 1 C/O** | | | |
| XA1, XA2, XB0, XB1 - Right | XB01A12ALAX1 | - | 1 |
| XA3, XB2, XB3S, XB3, XB4 - Right | XB234ALAX1 | - | 1 |
| **Shunt Release** | | | |
| XA1, XA2, XB0, XB1 - 24V DC - Left | XB01A12SHT24V | - | 1 |
| XA1, XA2, XB0, XB1 - 240/415V AC - Left | XB01A12SHTUNI | - | 1 |
| XG1 - 240V AC | XG1SHT240V | - | 1 |
| XA3, XB2, XB3S, XB3, XB4 - 110/240/415V AC, 110/220V DC | XB234A3SHTUNI | - | 1 |
| **Under Voltage Release** | | | |
| XA1, XA2, XB0, XB1 - 240V AC - Left | XB01A12UV240V | - | 1 |
| XG1 - 240V AC | XG1UV240V | - | 1 |
| XA3, XB2, XB3S, XB3 - 240V AC - Left | XB23UV240V | - | 1 |
| XB4 - 240V AC - Left | XB4UV240V | - | 1 |

** Use these catcode of UV with they look MCCBs only

### Table 3

HSN Code : 8538

| Description | External | | |
|---|---|---|---|
| | Cat. No. | MRP [₹] | Std. Pkg. |
| **Spreader Terminals - 3 Pole** | | | |
| XA1, XB0-100 - 3 Pole | XB0A1100TPST | - | Set of 6 |
| XA1, XB0-125D - 3 Pole | XB0A1125TPST | - | Set of 6 |
| XG1 - 160 - 3 Pole | XG160TPST | - | Set of 6 |
| XA2, XB1, XB2 - 250 - 3 Pole | XB12A2250TPST | - | Set of 6 |
| XA3, XB3S/XB3-400 - 3 Pole | XB3400TPST | - | Set of 6 |
| XB3-630 - 3 Pole | XB3630TPST | - | Set of 6 |
| XB4-800 - 3 Pole | XB4800TPST | - | Set of 6 |
| XB4-1000 - 3 Pole | XB41000TPST | - | Set of 12 |
| XB4-1250 - 3 Pole | XB41250TPST | - | Set of 6 |
| **Spreader Terminals - 4 Pole** | | | |
| XA1, XB0-100 - 4 Pole | XB0A1100FPST | - | Set of 8 |
| XA1, XB0-125D - 4 Pole | XB0A1125FPST | - | Set of 8 |
| XG1 - 160 - 4 Pole | XG160FPST | - | Set of 8 |
| XA2, XB1, XB2 - 250 - 4 Pole | XB12A2250FPST | - | Set of 8 |
| XA3, XB3S/XB3-400 - 4 Pole | XB3400FPST | - | Set of 8 |
| XB3-630 - 4 Pole | XB3630FPST | - | Set of 8 |
| XB4-800 - 4 Pole | XB4800FPST | - | Set of 8 |
| XB4-1000 - 4 Pole | XB41000FPST | - | Set of 16 |
| XB4-1250 - 4 Pole | XB41250FPST | - | Set of 8 |

Note: Phase barriers are supplied along with MCCBs

* Available as customised factory fitted solutions, please contact nearest sales office

## X-Line TPN S-D-F suitable for DIN fuse-link (TPN & FP) in open execution

- Range 32A to 800A, 415V, AC 23A
- Conforms to IS/IEC 60947-3
- Terminal Shrouds on both sides and Phase Barriers included
- Telescopic shaL for depth adjustment
- TPN SDF has isolable neutral
- 4P SDF has Switched Neutral Pole and is 100% rated
- Door interlock & padlock facility

**HSN Code : 8537**

| Size | Rated Current (A) | Suitable Fuse link for reference | | Open Execution type TPN SDF - Suitable for DIN Fuse - link | | | | Open Execution type FP SDF - Suitable for DIN Fuse -link | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Type | Range (A) | Type | Cat No. | MRP [₹] | Std. Pkg (Nos.) | Type | Cat No. | MRP [₹] | Std. Pkg (Nos.) |
| Frame 1 | 32 | HF Size 14x51 | 2 to 32 | 32 TPN / FP | BXL95518 | - | 1 | 32 TPN / FP | BXL95518 | - | 1 |
| | 32 | HF Size 14x51 | 2 to 32 | 32 TPN / FP CE* | BXL95703* | - | 1 | 32 TPN / FP CE* | BXL95703 | - | 1 |
| | 63 | HF Size 14x51 | 2 to 63 | 63 TPN / FP | BXL95421 | - | 1 | 63 TPN / FP | BXL95421 | - | 1 |
| | 63 | HF Size 14x51 | 2 to 63 | 63 TPN / FP CE* | BXL95704* | - | 1 | 63 TPN / FP CE* | BXL95704 | - | 1 |
| Frame 2 | 100 | Size 000/00 | 63 to 100 | 100 TPN | BXL95568 | - | 1 | 100 FP | BXL90496 | - | 1 |
| | 125 | Size 000/00 | 63 to 125 | 125 TPN | BXL95001 | - | 1 | 125 FP | BXL90497 | - | 1 |
| | 160 | Size 000/00 | 63 to 160 | 160 TPN | BXL95713 | - | 1 | 160 FP | BXL90498 | - | 1 |
| Frame 3 | 200 | Size 0 | 80 to 200 | 200 TPN | BXL95418 | - | 1 | 200 FP | BXL90471 | - | 1 |
| | 250 | Size 1 | 125 to 250 | 250 TPN | BXL95642 | - | 1 | 250 FP | BXL90472 | - | 1 |
| Frame 4 | 315 | Size 1 | 125 to 315 | 315 TPN | BXL95461 | - | 1 | 315 FP | BXL90473 | - | 1 |
| | 400 | Size 2 | 200 to 400 | 400 TPN | BXL95481 | - | 1 | 400 FP | BXL90480 | - | 1 |
| Frame 5 | 630 | Size 3 | 315 to 630 | 630 TPN | BXL95521 | - | 1 | 630 FP | BXL90481 | - | 1 |
| | 800 | Size 3 | 315 to 800 | 800 TPN | BXL95679 | - | 1 | 800 FP | BXL90482 | - | 1 |

* 'CE' handle has door interlock facility without defeat feature

Note: Add a suffix "OOOO" for all the above mentioned catcodes

## X - Line TPN SDF in SS Enclosure

- Range 32A to 800A, 415V, AC 23A
- Spacious Sheet Steel Enclosure
- Separate cable gland box not required
- Terminal Shrouds on both sides and Phase Barriers included
- Conforms to IS/IEC 60947-3
- Suitable for Cylindrical/DIN fuse-link
- Door interlock & padlock facility

**HSN Code : 8537**

| Size | Rated Current (A) | Suitable Fuse link for reference | | In sheet steel Enclosure Type TPN SDF Suitable for DIN Fuse -link | | | |
|---|---|---|---|---|---|---|---|
| | | Type | Range (A) | Type | Cat No. | MRP (₹) | Std. Pkg (Nos.) |
| Frame 1 | 32 | HF Size 14x51 | 2 to 32 | 32 TPN / FP CE* | BXLENC90483* | - | 1 |
| | 63 | HF Size 14x51 | 2 to 63 | 63 TPN / FP CE* | BXLENC90484* | - | 1 |
| Frame 2 | 100 | Size 000/00 | 63 to 100 | 100 TPN | BXLENC90485 | - | 1 |
| | 125 | Size 000/00 | 63 to 125 | 125 TPN | BXLENC90486 | - | 1 |
| | 160 | Size 000/00 | 63 to 160 | 160 TPN | BXLENC90487 | - | 1 |
| Frame 3 | 200 | Size 0 | 80 to 200 | 200 TPN | BXLENC90488 | - | 1 |
| | 250 | Size 1 | 125 to 250 | 250 TPN | BXLENC90489 | - | 1 |
| Frame 4 | 315 | Size 1 | 125 to 315 | 315 TPN | BXLENC90490 | - | 1 |
| | 400 | Size 2 | 200 to 400 | 400 TPN | BXLENC90491 | - | 1 |
| Frame 5 | 630 | Size 3 | 315 to 630 | 630 TPN | BXLENC90492 | - | 1 |
| | 800 | Size 3 | 315 to 800 | 800 TPN | BXLENC90493 | - | 1 |

* 'CE' handle has door interlock facility without defeat feature
Note: Add a suffix "OOOO" for all the above mentioned catcodes

- Range 32A to 630A, 415V, AC 23A
- Conforms to IS/IEC 60947-3
- Terminal Shrouds on both sides and Phase Barriers included
- Telescopic shaL for depth adjustment
- Door interlock & padlock facility
- Also for 220V DC & 240V AC appluca on

**HSN Code : 8537**

| Size | Rated Current (A) | Suitable Fuse link for reference | 2P SDF Suitable for DIN Fuse link - Open Execution | | | |
|---|---|---|---|---|---|---|
| | | | Type | Cat No. | MRP [₹] | Std. Pkg (Nos.) |
| Frame 1 | 32 | HF Size 14x51 | 32 2P | BXL95594 | - | 1 |
| | 63 | HF Size 14x51 | 63 2P | BXL95595 | - | 1 |
| Frame 2 | 100 | Size 000/00 | 100 2P | BXL35086 | - | 1 |
| | 125 | Size 000/00 | 125 2P | BXL35087 | - | 1 |
| | 160 | Size 000/00 | 160 2P | BXL35088 | - | 1 |
| Frame 3 | 200 | Size 0 | 200 2P | BXL35089 | - | 1 |
| | 250 | Size 1 | 250 2P | BXL31674 | - | 1 |
| Frame 4 | 315 | Size 1 | 315 2P | BXL38930 | - | 1 |
| | 400 | Size 2 | 400 2P | BXL31676 | - | 1 |
| Frame 5 | 630 | Size 3 | 630 2P | BXL35090 | - | 1 |

Note: Add a suffix "OOOO" for all the above mentioned catcodes

**2 Pole - Din Type Fuse link**

## X-Line SDF suitable for BS fuse-link (TPN) in open execution

- Range 32A to 630A, 415V, AC 23A
- Conforms to IS/IEC 60947-3
- Terminal Shrouds on both sides and Phase Barriers included
- Telescopic shaL for depth adjustment
- Door interlock & padlock facility

**HSN Code : 8537**

| Size | Rated Current (A) | Suitable Fuse link for reference | TPN SDF Suitable for BOLTED Fuse link - Open Execution | | | |
|---|---|---|---|---|---|---|
| | | | Type | Cat No. | MRP [₹] | Std. Pkg (Nos.) |
| Frame 1 | 32 | A1L | 32 TPN | BXL95653 | - | 1 |
| | 63 | A1L | 63 TPN | BXL95651 | - | 1 |
| Frame 2 | 100 | A4 | 100 TPN | BXL95570 | - | 1 |
| | 125 | A4 | 125 TPN | BXL95009 | - | 1 |
| | 160 | A4 | 160 TPN | BXL95714 | - | 1 |
| Frame 3 | 200 | B1 / B2 | 200 TPN | BXL95588 | - | 1 |
| | 250 | B2 / B3 | 250 TPN | BXL95682 | - | 1 |
| Frame 4 | 315 | B3 | 315 TPN | BXL95590 | - | 1 |
| | 400 | B4 | 400 TPN | BXL95591 | - | 1 |
| Frame 5 | 630 | C2 | 630 TPN | BXL95592 | - | 1 |

Note: Add a suffix "OOOO" for all the above mentioned catcodes

**TPN Bolted Type Fuse link**

## X-Line SDF - Spares & Accessories

**HSN Code : 8538**

| Description | | | Type | Cat No. | MRP [₹] | Std. Pkg (Nos.) |
|---|---|---|---|---|---|---|
| | Auxiliary Contact Kit (1NO + 1 NC) | | 32/63 | BXL91302 | - | 1 |
| | | | 100/125/160 | BXL91328 | - | 1 |
| | | | 200/250 | BXL91329 | - | 1 |
| | | | 315/400/630/800 | BXL91330 | - | 1 |
| | 2nd Aux. Contact (1NO + 1NC) | | 32/63 | BXL90670 | - | 1 |
| | | | 100 to 1000 | BXL90696 | | 1 |
| | Earthing Link | | 32 to 1000@ | BXL90396 | - | 1 |
| Terminal Shroud Kit | | | 32/63 | BXL91190 | - | 1 |
| | | | 100/125/160 | BXL91137 | - | 1 |
| | | | 200/250 | BXL91335 | - | 1 |
| | | | 315/400 | BXL91346 | - | 1 |
| | | | 630/800 | BXL91347 | - | 1 |
| | Handle Assembly - A | | 32/63 | BXL91257 | - | 1 |
| | | | 100 to 250 | BXL91258 | - | 1 |
| | | | 315/400/630/800 | BXL91259 | - | 1 |
| | Handle Assembly - B | | 32/63 | BXL91277 | - | 1 |
| | | | 100 to 250 | BXL91278 | - | 1 |
| | | | 315/400/630/800 | BXL91279 | - | 1 |
| | Handle Assembly - CE | | 32/63 | BXL91337 | - | 1 |
| Interphase Barrier Kit | | | 200 | BXL91343 | - | 1 |
| | | | 315/400 | BXL91344 | - | 1 |
| | | | 630/800 | BXL91345 | - | 1 |
| | Castell Type Lock | A | 100/125/160/200/250 | BXL00333 | - | 1 |
| | | B | | BXL00334 | - | 1 |
| | | C | | BXL00335 | - | 1 |
| | | D | | BXL00336 | - | 1 |
| | | A | 315/400/630/800 | BXL00345 | - | 1 |
| | | B | | BXL00346 | - | 1 |
| | | C | | BXL00347 | - | 1 |
| | | D | | BXL00348 | - | 1 |
| | Switched Neutral Kit | | 100/125/160 | BXL95233 | - | 1 |
| | | | 200/250 | BXL95516 | - | 1 |
| | | | 315/400 | BXL95517 | - | 1 |
| | | | 630/800 | BXL95546 | - | 1 |

@For terminating earth busbar upto 25mm width. Order Qty 1 for 10 earthing links
Note: Add a suffix "OOOO" for all the above mentioned catcodes

## Switch Disconnector Fuse Units

Suitable for DIN / BOLTED fuses in open execution

TUFLINE 11

**HSN Code : 8536**

| Rating (A) AC-23A | Cat No. | Fuse Type | Type | MRP [₹] |
|---|---|---|---|---|
| 32A | PSFS323ND00 | DIN | TPN | 3635 |
| 32A | PSFS323ND000 | DIN | TPN | 3635 |
| 32A | PSFS323NB | Bolted | TPN | 3635 |
| 32A | PSFS323B | Bolted | TP | 3780 |
| | | | | |
| 63A | PSFS633ND00 | DIN | TPN | 5170 |
| 63A | PSFS633ND000 | DIN | TPN | 5170 |
| 63A | PSFS633NB | Bolted | TPN | 5030 |
| 63A | PSFS633B | Bolted | TP | 5170 |
| | | | | |
| 100 | PSFS1003* | DIN/Bolted | TP | 11465 |
| 100 | PSFS1003N* | DIN/Bolted | TPN | 11465 |
| 125 | PSFS1253* | DIN/Bolted | TP | 15500 |
| 125 | PSFS1253N* | DIN/Bolted | TPN | 15500 |
| 160 | PSFS1603* | DIN/Bolted | TP | 15890 |
| 160 | PSFS1603N* | DIN/Bolted | TPN | 17250 |
| 200 | PSFS2003B | Bolted | TP | 17910 |
| 200 | PSFS2003NB | Bolted | TPN | 18480 |

* Use suffix 'D' for DIN type, 'B' for bolted type

## Switch Disconnector

**HSN Code : 8536**

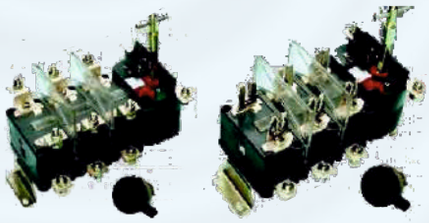
| Rating (A) AC-23A | Cat No. | Fuse Type | Type | MRP [₹] |
|---|---|---|---|---|
| 32A | PSSD323N | - | TPN | 3415 |
| 63A | PSSD633N | - | TPN | 4675 |
| 100A | PSSD1003N | - | TPN | 10635 |
| 125A | PSSD1253N | - | TPN | 13205 |
| 160A | PSSD1603N | - | TPN | 14885 |
| 200A | PSSD2003N | - | TPN | 15570 |

## Fuse Switch Units Type FS

**HSN Code : 8538**

| Rating (A) AC-23A | Cat No. | Fuse Type | Type | MRP [₹] |
|---|---|---|---|---|
| 32A | FS0N | BOLTED | TP | 4780 |
| 63A | FS1N | BOLTED | TP | 6415 |
| Shroud | AC21TS | | | 360 |
| 1NO+1NC | AC21EB11 | for FS0 / FS1N | | 1175 |
| Neutral | AC21L | for FS0 / FS1N- | | 505 |
| Handle assembly-32A | SP21FS0H | for FS0 | | 700 |
| Handle assembly-63A | SP21FS1H | for FS1 | | 700 |

On/Off indication from top window



**Switch Disconnector Fuse**

- Conforms to IS 13947-3
- TPN/TP version
- AC 23A duty
- Mechanism with 4 Breaks per pole
- Handle with door interlock and padlock

Facility to lock the contact carrier

BHARTIA BCH

## BPX Range of Plugs/Socket/Connector- 16A to 125A:

Conform to International standards EN/IEC 60309-1 & 2

**HSN Code : 8536**

### Panel Mounted Straight Socket - IP44

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1PSS341 | | 10 | 1005 |
| | 4 | | BPX1PSS442 | 10 | 1605 |
| | 5 | | BPX1PSS542 | 10 | 1625 |
| 32 | 3 | BPX2PSS341 | | 10 | 1725 |
| | 4 | | BPX2PSS442 | 10 | 1970 |
| | 5 | | BPX2PSS542 | 10 | 1990 |
| 63 | 3 | BPX3PSS341 | | 5 | 6850 |
| | 4 | | BPX3PSS442 | 5 | 7000 |
| | 5 | | BPX3PSS542 | 5 | 7050 |

**HSN Code : 8536**

### Panel Mounted Straight Socket - IP67

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1PSS371 | | 10 | 2085 |
| | 4 | | BPX1PSS472 | 10 | 2260 |
| | 5 | | BPX1PSS572 | 10 | 2275 |
| 32 | 3 | BPX2PSS371 | | 10 | 2600 |
| | 4 | | BPX2PSS472 | 10 | 2965 |
| | 5 | | BPX2PSS572 | 10 | 2990 |
| 63 | 3 | BPX3PSS371 | | 5 | 7675 |
| | 4 | | BPX3PSS472 | 5 | 7695 |
| | 5 | | BPX3PSS572 | 5 | 7730 |
| 125 | 3 | BPX4PSS371 | | 2 | 26140 |
| | 4 | | BPX4PSS472 | 2 | 26270 |
| | 5 | | BPX4PSS572 | 2 | 26420 |

### Panel Mounted Angled Socket - IP44

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1PAS341 | | 10 | 1005 |
| | 4 | | BPX1PAS442 | 10 | 1620 |
| | 5 | | BPX1PAS542 | 10 | 1640 |
| 32 | 3 | BPX2PAS341 | | 10 | 1725 |
| | 4 | | BPX2PAS442 | 10 | 2000 |
| | 5 | | BPX2PAS542 | 10 | 2020 |
| 63 | 3 | BPX3PAS341 | | 5 | 6850 |
| | 4 | | BPX3PAS442 | 5 | 7050 |
| | 5 | | BPX3PAS542 | 5 | 7085 |

### Panel Mounted Angled Socket - IP67

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1PAS371 | | 10 | 2085 |
| | 4 | | BPX1PAS472 | 10 | 2260 |
| | 5 | | BPX1PAS572 | 10 | 2280 |
| 32 | 3 | BPX2PAS371 | | 10 | 2600 |
| | 4 | | BPX2PAS472 | 10 | 2965 |
| | 5 | | BPX2PAS572 | 10 | 2985 |
| 63 | 3 | BPX3PAS371 | | 5 | 7675 |
| | 4 | | BPX3PAS472 | 5 | 7695 |
| | 5 | | BPX3PAS572 | 5 | 7730 |
| 125 | 3 | BPX4PAS371 | | 2 | 26140 |
| | 4 | | BPX4PAS472 | 2 | 26270 |
| | 5 | | BPX4PAS572 | 2 | 26420 |

### Surface Mounted Socket - IP44

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1WS341 | | 10 | 1605 |
| | 4 | | BPX1WS442 | 10 | 1775 |
| | 5 | | BPX1WS542 | 10 | 1790 |
| 32 | 3 | BPX2WS341 | | 10 | 2000 |
| | 4 | | BPX2WS442 | 10 | 2175 |
| | 5 | | BPX2WS542 | 10 | 2205 |
| 63 | 3 | BPX3WS341 | | 3 | 7835 |
| | 4 | | BPX3WS442 | 3 | 7850 |
| | 5 | | BPX3WS542 | 3 | 7885 |

### Surface Mounted Socket - IP67

16A - 63A

125A

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1WS371 | | 10 | 2710 |
| | 4 | | BPX1WS472 | 10 | 3430 |
| | 5 | | BPX1WS572 | 10 | 3450 |
| 32 | 3 | BPX2WS371 | | 10 | 3360 |
| | 4 | | BPX2WS472 | 10 | 4135 |
| | 5 | | BPX2WS572 | 10 | 4170 |
| 63 | 3 | BPX3WS371 | | 3 | 9845 |
| | 4 | | BPX3WS472 | 3 | 9885 |
| | 5 | | BPX3WS572 | 3 | 9955 |
| 125 | 3 | BPX4WS371 | | 1 | 32140 |
| | 4 | | BPX4WS472 | 1 | 35255 |
| | 5 | | BPX4WS572 | 1 | 35410 |

### Standard Connector - IP44

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1SC341 | | 10 | 1245 |
| | 4 | | BPX1SC442 | 10 | 1470 |
| | 5 | | BPX1SC542 | 10 | 1480 |
| 32 | 3 | BPX2SC341 | | 10 | 1605 |
| | 4 | | BPX2SC442 | 10 | 2015 |
| | 5 | | BPX2SC542 | 10 | 2025 |
| 63 | 3 | BPX3SC341 | | 5 | 8405 |
| | 4 | | BPX3SC442 | 5 | 8420 |
| | 5 | | BPX3SC542 | 5 | 8455 |

### Standard Connector - IP67

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1SC371 | | 10 | 2620 |
| | 4 | | BPX1SC472 | 10 | 3120 |
| | 5 | | BPX1SC572 | 10 | 3140 |
| 32 | 3 | BPX2SC371 | | 10 | 3615 |
| | 4 | | BPX2SC472 | 10 | 4055 |
| | 5 | | BPX2SC572 | 10 | 4075 |
| 63 | 3 | BPX3SC371 | | 5 | 8545 |
| | 4 | | BPX3SC472 | 5 | 8575 |
| | 5 | | BPX3SC572 | 5 | 8610 |
| 125 | 3 | BPX4SC371 | | 1 | 27420 |
| | 4 | | BPX4SC472 | 1 | 27960 |
| | 5 | | BPX4SC572 | 1 | 28110 |

## BPX Range of Plugs/Socket/Connector- 16A to 125A:

Conform to International standards EN/IEC 60309-1 & 2

**HSN Code : 8536**

### Standard Plug - IP44

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1SP341 | | 10 | 825 |
| | 4 | | BPX1SP442 | 10 | 1150 |
| | 5 | | BPX1SP542 | 10 | 1165 |
| 32 | 3 | BPX2SP341 | | 10 | 1395 |
| | 4 | | BPX2SP442 | 10 | 1685 |
| | 5 | | BPX2SP542 | 10 | 1705 |
| 63 | 3 | BPX3SP341 | | 5 | 6535 |
| | 4 | | BPX3SP442 | 5 | 6575 |
| | 5 | | BPX3SP542 | 5 | 6615 |

**HSN Code : 8536**

### Standard Plug - IP67

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1SP371 | | 10 | 1820 |
| | 4 | | BPX1SP472 | 10 | 2450 |
| | 5 | | BPX1SP572 | 10 | 2475 |
| 32 | 3 | BPX2SP371 | | 10 | 2790 |
| | 4 | | BPX2SP472 | 10 | 2965 |
| | 5 | | BPX2SP572 | 10 | 3005 |
| 63 | 3 | BPX3SP371 | | 5 | 7505 |
| | 4 | | BPX3SP472 | 5 | 7545 |
| | 5 | | BPX3SP572 | 5 | 7580 |
| 125A | 3 | BPX4SP371 | | 1 | 23585 |
| | 4 | | BPX4SP472 | 1 | 23630 |
| | 5 | | BPX4SP572 | 1 | 23785 |

### Phase Inverter Plug - IP44

| Amp | Poles | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|
| 16 | 5 | BPX1PIP542 | 10 | 1925 |
| 32 | 5 | BPX2PIP542 | 10 | 2715 |

### Phase Inverter Plug - IP67

| Amp | Poles | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|
| 16 | 5 | BPX1PIP572 | 10 | 3820 |
| 32 | 5 | BPX2PIP572 | 10 | 4540 |

### Panel Mounted Plug - IP44

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1PP341 | | 10 | 1300 |
| | 4 | | BPX1PP442 | 10 | 1780 |
| | 5 | | BPX1PP542 | 10 | 1825 |
| 32 | 3 | BPX2PP341 | | 10 | 1885 |
| | 4 | | BPX2PP442 | 10 | 2200 |
| | 5 | | BPX2PP542 | 10 | 2245 |
| 63 | 3 | BPX3PP341 | | 5 | 6835 |
| | 4 | | BPX3PP442 | 5 | 6890 |
| | 5 | | BPX3PP542 | 5 | 6995 |

### Panel Mounted Plug - IP67

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1PP371 | | 10 | 2750 |
| | 4 | | BPX1PP472 | 10 | 3650 |
| | 5 | | BPX1PP572 | 10 | 3710 |
| 32 | 3 | BPX2PP371 | | 10 | 3550 |
| | 4 | | BPX2PP472 | 10 | 3815 |
| | 5 | | BPX2PP572 | 10 | 3885 |
| 63 | 3 | BPX3PP371 | | 5 | 7590 |
| | 4 | | BPX3PP472 | 5 | 7645 |
| | 5 | | BPX3PP572 | 5 | 7675 |
| 125A | 3 | BPX4PP371 | | 2 | 25520 |
| | 4 | | BPX4PP472 | 2 | 27245 |
| | 5 | | BPX4PP572 | 2 | 27630 |

### Surface Mounted Plug - IP44

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1WP341 | | 10 | 2410 |
| | 4 | | BPX1WP442 | 8 | 3235 |
| | 5 | | BPX1WP542 | 10 | 3275 |
| 32 | 3 | BPX2WP341 | | 10 | 3985 |
| | 4 | | BPX2WP442 | 10 | 4625 |
| | 5 | | BPX2WP542 | 10 | 4710 |
| 63 | 3 | BPX3WP341 | | 2 | 9170 |
| | 4 | | BPX3WP442 | 2 | 9235 |
| | 5 | | BPX3WP542 | 2 | 9375 |

### Surface Mounted Plug - IP67

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1WP371 | | 10 | 3405 |
| | 4 | | BPX1WP472 | 8 | 4370 |
| | 5 | | BPX1WP572 | 10 | 4440 |
| 32 | 3 | BPX2WP371 | | 10 | 7605 |
| | 4 | | BPX2WP472 | 10 | 7810 |
| | 5 | | BPX2WP572 | 10 | 7930 |
| 63 | 3 | BPX3WP371 | | 2 | 10295 |
| | 4 | | BPX3WP472 | 2 | 10340 |
| | 5 | | BPX3WP572 | 2 | 10490 |

## BPX Range of Socket Outlet with Switch and Mechanical Interlock

Conform to International standards EN/IEC 60309-1 & 2

**HSN Code : 8536**

### Socket Outlet with Switch and Mechanical Interlock

#### Horizontal Type - IP44

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1MIH341 | | 4 | 11525 |
| | 4 | | BPX1MIH442 | 4 | 16215 |
| | 5 | | BPX1MIH542 | 4 | 16300 |

#### Horizontal Type - IP67

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1MIH371 | | 4 | 11725 |
| | 4 | | BPX1MIH472 | 4 | 16515 |
| | 5 | | BPX1MIH572 | 4 | 16575 |

#### Vertical Type - IP44

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1MIV341 | | 1 | 14130 |
| | 4 | | BPX1MIV442 | 1 | 19780 |
| | 5 | | BPX1MIV542 | 1 | 19850 |
| 32 | 3 | BPX2MIV341 | | 1 | 18450 |
| | 4 | | BPX2MIV442 | 1 | 22445 |
| | 5 | | BPX2MIV542 | 1 | 22520 |
| 63 | 3 | BPX3MIV341 | | 1 | 40185 |
| | 4 | | BPX3MIV442 | 1 | 42025 |
| | 5 | | BPX3MIV542 | 1 | 42090 |

#### Vertical Type - IP67

16A - 63A

125A

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1MIV371 | | 1 | 14130 |
| | 4 | | BPX1MIV472 | 1 | 20075 |
| | 5 | | BPX1MIV572 | 1 | 20150 |
| 32 | 3 | BPX2MIV371 | | 1 | 18755 |
| | 4 | | BPX2MIV472 | 1 | 22740 |
| | 5 | | BPX2MIV572 | 1 | 22820 |
| 63 | 3 | BPX3MIV371 | | 1 | 40555 |
| | 4 | | BPX3MIV472 | 1 | 42390 |
| | 5 | | BPX3MIV572 | 1 | 42470 |
| 125 | 3 | BPX4MIV371 | | 1 | 133795 |
| | 4 | | BPX4MIV472 | 1 | 145820 |
| | 5 | | BPX4MIV572 | 1 | 145895 |

**HSN Code : 8536**

### Socket Outlet with Duo Interlock and DIN Rail

#### Vertical Type - IP44

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1MID341 | | 1 | 15435 |
| | 4 | | BPX1MID442 | 1 | 22825 |
| | 5 | | BPX1MID542 | 1 | 23585 |
| 32 | 3 | BPX2MID341 | | 1 | 18270 |
| | 4 | | BPX2MID442 | 1 | 26255 |
| | 5 | | BPX2MID542 | 1 | 26275 |
| 63 | 3 | BPX3MID341 | | 1 | 37210 |
| | 4 | | BPX3MID442 | 1 | 40665 |
| | 5 | | BPX3MID542 | 1 | 43125 |

#### Vertical Type - IP67

16A - 63A

125A

| Amp | Poles | 230V~ 50-60Hz | 415V~ 50-60Hz | Lot size | MRP (₹) / Unit |
|---|---|---|---|---|---|
| 16 | 3 | BPX1MID371 | | 1 | 15745 |
| | 4 | | BPX1MID472 | 1 | 23275 |
| | 5 | | BPX1MID572 | 1 | 24030 |
| 32 | 3 | BPX2MID371 | | 1 | 18590 |
| | 4 | | BPX2MID472 | 1 | 26580 |
| | 5 | | BPX2MID572 | 1 | 26655 |
| 63 | 3 | BPX3MID371 | | 1 | 37600 |
| | 4 | | BPX3MID472 | 1 | 41115 |
| | 5 | | BPX3MID572 | 1 | 43520 |
| 125 | 3 | BPX4MID371 | | 1 | 138685 |
| | 4 | | BPX4MID472 | 1 | 149650 |
| | 5 | | BPX4MID572 | 1 | 149715 |

## Metal Clad - Plugs & Sockets Type 'MP' & 'MS'

**HSN Code : 8536**

| Rating | Pins | Type | Cat No. | MRP [₹] |
|---|---|---|---|---|
| 20A, 250V | 2P + E | Plug<br>Socket | MP20<br>MS20 | 415<br>465 |
| 30A, 440V | 3P + E | Plug<br>Socket | MP30<br>MS30 | 955<br>1005 |

- Self Locking design : Extremely safe
- Plug cannot be pulled out in fully engaged position
- Auto closing socket shutter
- Reliable Earthing
- Shrouded Terminals for safety

## Plastic Plugs & Socket Type 'PS'

**HSN Code : 8536**

| Rating | Pins | Type | Cat No. | MRP [₹] |
|---|---|---|---|---|
| 20A, 250V | 3 | Plug<br>Flush Mounting Socket<br>Socket with Wall Mounting Box | PS16AA7<br>PS16BA7<br>PS16DA7 | 485<br>670<br>830 |
| 20A, 415V | 4 | Plug<br>Flush Mounting Socket<br>Socket with Wall Mounting Box | PS16AA1<br>PS16BA1<br>PS16DA1 | 585<br>875<br>1020 |
| 32A, 415V | 3 | Plug<br>Socket | PS32AA7<br>PS32BA7 | 1090<br>1090 |
| | 4 | Plug<br>Socket | PS32AA1<br>PS32BA1 | 1140<br>1140 |
| | 5 | Plug<br>Socket | PS32AA5<br>PS32BA5 | 1220<br>1220 |

**Heavy duty Metal-Control 'SS'**

## Heavy Duty Metal - Control Plugs & Sockets Type 'SS'

**HSN Code : 8536**

| Rating | Pins | Type | Cat No. | MRP [₹] |
|---|---|---|---|---|
| 12A, 415V<br>(Control) | 12 | Panel Mounting Socket<br>Plug with inclined Handle | 2499/12<br>299/12B | 4130<br>2980 |

**Heavy duty Metal-Power 'SS'**

## Heavy Duty Metal - Power Plugs & Sockets Type 'SS'

**HSN Code : 8536**

| Rating | Pins | Type | Cat No. | MRP [₹] |
|---|---|---|---|---|
| 30A, 415V | 3 | Panel Mounting Socket<br>Plug with inclined Handle | 2415B<br>215B | 1525<br>1505 |
| 30A, 415V | 4 | Panel Mounting Socket<br>Plug with inclined Handle | 2413B<br>213B | 1600<br>1565 |
| 30A, 415V | 5 | Panel Mounting Socket<br>Plug with inclined Handle | 2417B<br>217B | 1670<br>1625 |

**Note** : *Loose Conduit Box Straight (Cat. No. 9J101) MRP - Rs. 575/- each
*Spare Handle Inclined (Cat. No. 9J108) MRP -Rs. 275/- each.

**HSN Code : 8538**

## Heavy Duty Metal Plug & Sockets Type 'DS' - 5 Pin (with Integral Switching Device)

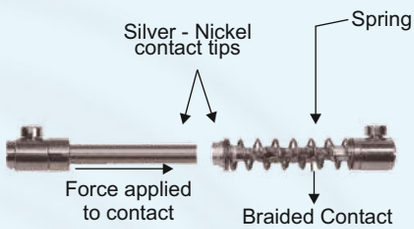
**HSN Code : 8536**

| Rating | Pins | Type | Cat No. | MRP[₹] |
|---|---|---|---|---|
| 16A, 415V | 5 | Plug<br>Socket<br>Handle Assembly | DS1A7A1<br>DS1B7A1<br>SP91PH | 2270<br>2815<br>445 |
| 32A, 415V | 5 | Plug<br>Socket<br>Handle Assembly | DS3A7A1<br>DS3B7A1<br>SP93PH | 3710<br>4505<br>460 |
| 63A, 415V | 5 | Plug<br>Socket<br>Handle Assembly | DS6A7A1<br>DS6B7A1<br>SP96PH | 5900<br>8135<br>635 |
| 125A, 415V | 5 | Plug<br>Socket<br>Handle Assembly | DS9A7A1<br>DS9B7A1<br>SP99PH | 16980<br>24275<br>1555 |

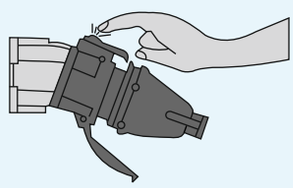
Note : Power Receptacles with or without SFU/SDFU/MCB/MCCB having loop-in / loop-out facility is available on request.

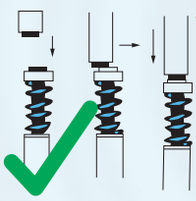
- Range from 16A to 125 A
- 5 Pin configuration ( 3P+N+E)
- Plug cannot come out in ON condition ( Integral Interlocking)

**- Spring loaded Butt type contacts**
**- Self aligning and self wiping**




**Quick Disconnect**





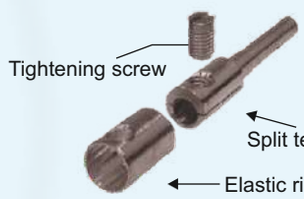
Sparkless Butt type contact

- Self aligning self wiping
- Spring loaded for consistent pressure
- Silver nickle material for extremely low temperature rise

**Safety Disk**

No access to live parts

**Vibration proof termination**



## Metal Clad - Plug & Socket Box Type 'MPSEU'

**HSN Code : 8536**

| Rating | Pins | Mounting | Type | Cat No. | MRP [₹] |
|---|---|---|---|---|---|
| 20A, 250V | 2P + E | Universal | Plug & Socket Box - SP-MCB Cutout | MPSEU201 | 1830 |
| 20A, 250V | 2P + E | Universal | Plug & Socket Box - DP-MCB Cutout | MPSEU202 | 1830 |
| 30A, 415V | 3P + E | Universal | Plug & Socket Box - TPN-MCB Cutout | MPSEU301 | 4580 |

20A

20A

30A

## Plastic - Plug & Socket Box Type 'PSEU / PSEF'

**HSN Code : 8536**

| Rating | Pins | Mounting | Type | Cat No. | MRP [₹] |
|---|---|---|---|---|---|
| 20A, 250V | 3 | Universal | Plug & Socket Box with SP MCB Cutout<br>Plug & Socket Box with DP-MCB Cutout | PSEU201<br>PSEU202 | 2200<br>2255 |
| | | Flush | Plug & Socket Box with SP MCB Cutout<br>Plug & Socket Box with DP-MCB Cutout | PSEF201<br>PSEF202 | 2200<br>2255 |
| 32A, 415V | 4<br>5 | Universal | Plug & Socket Box with 4P MCB Cutout | PSEU324<br>PSEU325 | 4860<br>4955 |
| | 4<br>5 | Flush | Plug & Socket Box with 4P MCB Cutout | PSEF324<br>PSEF325 | 4860<br>4955 |

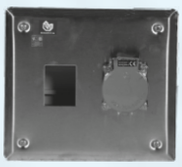
## Heavy Duty Metal - Plug & Socket Box Type 'SSEU'

**HSN Code : 8536**

| Rating | Pins | Mounting | Type | Cat No. | MRP [₹] |
|---|---|---|---|---|---|
| 30A, 415V | 3 | Universal | Plug & Socket Box with SP MCB Cutout | SSEU303-MCB1P | 5485 |
| | 3 | Universal | Plug & Socket Box with DP MCB Cutout | SSEU303 | 5485 |
| | 4<br>5 | Universal | Plug & Socket Box with 4P MCB Cutout | SSEU304<br>SSEU305 | 5625<br>5750 |

## Stainless Steel Cover Plug & Socket Box Type 'PSEU-SSC'/SSEU-SSC'

**HSN Code : 8536**



| Rating | Pins | Mounting | Type | Cat No. | MRP [₹] |
|---|---|---|---|---|---|
| 20A, 250V<br>32A, 415V | 3<br>5 | Universal | P&S Box with 'PS' P&S and SP MCB Cutout<br>P&S Box with 'PS' P&S and 4P MCB Cutout | PSEU201-SSC<br>PSEU325-SSC | 2745<br>5670 |
| 30A, 415V | 3 | Universal | Plug & Socket Box with SP MCB Cutout | SSEU303-SSC-MCB1P | 6295 |
| | | | Plug & Socket Box with DP MCB Cutout | SSEU303-SSC | 6295 |
| | 4 | Universal | Plug & Socket Box with 4P MCB Cutout | SSEU304-SSC | 6440 |
| | 5 | Universal | Plug & Socket Box with 3P MCB Cutout | SSEU305-SSC-MCB3P | 6570 |
| | | | Plug & Socket Box with 4P MCB Cutout | SSEU305-SSC | 6570 |

# Final Distribution Products

- MCB
- DC MCB
- Isolators
- RCCB
- MCB Distribution Boxes

BHARTIA BCH

**HSN Code : 8536**

| Pole | Standard pack of | Rating | B Curve Cat. No. | MRP [₹] | C Curve Cat. No. | MRP [₹] | Rating | Lower Rating Cat. No. | MRP [₹] |
|---|---|---|---|---|---|---|---|---|---|
| 1P | 12 units | 6A | BCHX10SPB06 | 355 | BCHX10SPC06 | 355 | 0.5A | BCHX10SPCL5 | 600 |
| | | 10A | BCHX10SPB10 | 355 | BCHX10SPC10 | 355 | 1A | BCHX10SPC01 | 600 |
| | | 16A | BCHX10SPB16 | 355 | BCHX10SPC16 | 355 | 2A | BCHX10SPC02 | 600 |
| | | 20A | BCHX10SPB20 | 355 | BCHX10SPC20 | 355 | 3A | BCHX10SPC03 | 600 |
| | | 25A | BCHX10SPB25 | 355 | BCHX10SPC25 | 355 | 4A | BCHX10SPC04 | 600 |
| | | 32A | BCHX10SPB32 | 355 | BCHX10SPC32 | 355 | 5A | BCHX10SPC05 | 600 |
| | | 40A | BCHX10SPB40 | 865 | BCHX10SPC40 | 865 | | | |
| | | 50A | BCHX10SPB50 | 920 | BCHX10SPC50 | 920 | | | |
| | | 63A | BCHX10SPB63 | 920 | BCHX10SPC63 | 920 | | | |
| 1P+N | 6 units | 6A | | | BCHX10SNC06 | 1220 | | | |
| | | 10A | | | BCHX10SNC10 | 1220 | | | |
| | | 16A | | | BCHX10SNC16 | 1220 | | | |
| | | 20A | | | BCHX10SNC20 | 1220 | | | |
| | | 25A | | | BCHX10SNC25 | 1220 | | | |
| | | 32A | | | BCHX10SNC32 | 1220 | | | |
| | | 40A | | | BCHX10SNC40 | 1770 | | | |
| | | 50A | | | BCHX10SNC50 | 2000 | | | |
| | | 63A | | | BCHX10SNC63 | 2000 | | | |
| 2P | 6 units | 6A | BCHX10DPB06 | 1275 | BCHX10DPC06 | 1275 | 0.5A | BCHX10DPCL5 | 1780 |
| | | 10A | BCHX10DPB10 | 1275 | BCHX10DPC10 | 1275 | 1A | BCHX10DPC01 | 1780 |
| | | 16A | BCHX10DPB16 | 1275 | BCHX10DPC16 | 1275 | 2A | BCHX10DPC02 | 1780 |
| | | 20A | BCHX10DPB20 | 1275 | BCHX10DPC20 | 1275 | 3A | BCHX10DPC03 | 1780 |
| | | 25A | BCHX10DPB25 | 1275 | BCHX10DPC25 | 1275 | 4A | BCHX10DPC04 | 1780 |
| | | 32A | BCHX10DPB32 | 1275 | BCHX10DPC32 | 1275 | 5A | BCHX10DPC05 | 1780 |
| | | 40A | BCHX10DPB40 | 1890 | BCHX10DPC40 | 1890 | | | |
| | | 50A | BCHX10DPB50 | 2130 | BCHX10DPC50 | 2130 | | | |
| | | 63A | BCHX10DPB63 | 2130 | BCHX10DPC63 | 2130 | | | |
| 3P | 4 units | 6A | BCHX10TPB06 | 2010 | BCHX10TPC06 | 2010 | 0.5A | BCHX10TPCL5 | 2515 |
| | | 10A | BCHX10TPB10 | 2010 | BCHX10TPC10 | 2010 | 1A | BCHX10TPC01 | 2515 |
| | | 16A | BCHX10TPB16 | 2010 | BCHX10TPC16 | 2010 | 2A | BCHX10TPC02 | 2515 |
| | | 20A | BCHX10TPB20 | 2010 | BCHX10TPC20 | 2010 | 3A | BCHX10TPC03 | 2515 |
| | | 25A | BCHX10TPB25 | 2010 | BCHX10TPC25 | 2010 | 4A | BCHX10TPC04 | 2515 |
| | | 32A | BCHX10TPB32 | 2010 | BCHX10TPC32 | 2010 | 5A | BCHX10TPC05 | 2515 |
| | | 40A | BCHX10TPB40 | 2990 | BCHX10TPC40 | 2990 | | | |
| | | 50A | BCHX10TPB50 | 3120 | BCHX10TPC50 | 3120 | | | |
| | | 63A | BCHX10TPB63 | 3120 | BCHX10TPC63 | 3120 | | | |
| 3P+N | 3 units | 6A | | | BCHX10TNC06 | 2570 | | | |
| | | 10A | | | BCHX10TNC10 | 2570 | | | |
| | | 16A | | | BCHX10TNC16 | 2570 | | | |
| | | 20A | | | BCHX10TNC20 | 2570 | | | |
| | | 25A | | | BCHX10TNC25 | 2570 | | | |
| | | 32A | | | BCHX10TNC32 | 2570 | | | |
| | | 40A | | | BCHX10TNC40 | 3495 | | | |
| | | 50A | | | BCHX10TNC50 | 3715 | | | |
| | | 63A | | | BCHX10TNC63 | 3715 | | | |
| 4P | 3 units | 6A | BCHX10FPB06 | 2845 | BCHX10FPC06 | 2845 | 0.5A | BCHX10FPCL5 | 3485 |
| | | 10A | BCHX10FPB10 | 2845 | BCHX10FPC10 | 2845 | 1A | BCHX10FPC01 | 3485 |
| | | 16A | BCHX10FPB16 | 2845 | BCHX10FPC16 | 2845 | 2A | BCHX10FPC02 | 3485 |
| | | 20A | BCHX10FPB20 | 2845 | BCHX10FPC20 | 2845 | 3A | BCHX10FPC03 | 3485 |
| | | 25A | BCHX10FPB25 | 2845 | BCHX10FPC25 | 2845 | 4A | BCHX10FPC04 | 3485 |
| | | 32A | BCHX10FPB32 | 2845 | BCHX10FPC32 | 2845 | 5A | BCHX10FPC05 | 3485 |
| | | 40A | BCHX10FPB40 | 3900 | BCHX10FPC40 | 3900 | | | |
| | | 50A | BCHX10FPB50 | 4045 | BCHX10FPC50 | 4045 | | | |
| | | 63A | BCHX10FPB63 | 4045 | BCHX10FPC63 | 4045 | | | |

New

# R10 DC MCB

- **Range :** 6A to 63A
- **Pole :** 1P, 2P, 3P & 4P
- **Breaking Capacity :** 10 kA
- **Energy Limiting Class :** 3
- **Voltage : upto1000V DC**
- **Ergonomic Lever**
- **Bi Connecting Terminals**
- **ON/OFF Contact Position Indicator**
- **Standard Conformity IS/IEC 60947**-2

BHARTIA
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BCH
ELECTRIC
LIMITED

# R10 DC MCB

New

| Pole | Rating | Cat No. | MRP [₹] | Standard Packing |
|---|---|---|---|---|
| 1 | 6A | BCHR10DCSP06-250 | 765 | 12 Units |
| | 10A | BCHR10DCSP10-250 | 765 | |
| | 16A | BCHR10DCSP16-250 | 765 | |
| | 20A | BCHR10DCSP20-250 | 765 | |
| | 25A | BCHR10DCSP25-250 | 765 | |
| | 32A | BCHR10DCSP32-250 | 765 | |
| | 40A | BCHR10DCSP40-250 | On request | |
| | 50A | BCHR10DCSP50-250 | On request | |
| | 63A | BCHR10DCSP63-250 | On request | |
| 2 | 6A | BCHR10DCDP06-500 | 1650 | 6 Units |
| | 10A | BCHR10DCDP10-500 | 1650 | |
| | 16A | BCHR10DCDP16-500 | 1650 | |
| | 20A | BCHR10DCDP20-500 | 1650 | |
| | 25A | BCHR10DCDP25-500 | 1650 | |
| | 32A | BCHR10DCDP32-500 | 1650 | |
| | 40A | BCHR10DCDP40-500 | On request | |
| | 50A | BCHR10DCDP50-500 | On request | |
| | 63A | BCHR10DCDP63-500 | On request | |
| 3 | 6A | BCHR10DCTP06-750 | On request | 4 Units |
| | 10A | BCHR10DCTP10-750 | On request | |
| | 16A | BCHR10DCTP16-750 | On request | |
| | 20A | BCHR10DCTP20-750 | On request | |
| | 25A | BCHR10DCTP25-750 | On request | |
| | 32A | BCHR10DCTP32-750 | On request | |
| | 40A | BCHR10DCTP40-750 | On request | |
| | 50A | BCHR10DCTP50-750 | On request | |
| | 63A | BCHR10DCTP63-750 | On request | |
| 4 | 6A | BCHR10DCFP06-1000 | On request | 3 Units |
| | 10A | BCHR10DCFP10-1000 | On request | |
| | 16A | BCHR10DCFP16-1000 | On request | |
| | 20A | BCHR10DCFP20-1000 | On request | |
| | 25A | BCHR10DCFP25-1000 | On request | |
| | 32A | BCHR10DCFP32-1000 | On request | |
| | 40A | BCHR10DCFP40-1000 | On request | |
| | 50A | BCHR10DCFP50-1000 | On request | |
| | 63A | BCHR10DCFP63-1000 | On request | |

**HSN Code : 8536**

| Poles | Standard Pack of | Rating | Cat. No. | MRP[₹] |
|---|---|---|---|---|
| 2P | 6 units | 40A | BCHISODP40 | 890 |
| | 6 units | 63A | BCHISODP63 | 1110 |
| 3P | 4 units | 40A | BCHISOTP40 | 1715 |
| | 4 units | 63A | BCHISOTP63 | 1920 |
| 4P | 3 units | 40A | BCHISOFP40 | 1955 |
| | 3 units | 63A | BCHISOFP63 | 2155 |

## RCCB 10kA

**RCCB, Double Pole** **HSN Code : 8536**

| Description | Cat. No. | MRP [₹] |
|---|---|---|
| 25A - 30mA | BCHRCBR030DPC25 | 4695 |
| 40A - 30mA | BCHRCBR030DPC40 | 4800 |
| 63A - 30mA | BCHRCBR030DPC63 | 6440 |
| 25A - 100mA | BCHRCBR100DPC25 | 4745 |
| 40A - 100mA | BCHRCBR100DPC40 | 4920 |
| 63A - 100mA | BCHRCBR100DPC63 | 6580 |
| 25A - 300mA | BCHRCBR300DPC25 | 4745 |
| 40A - 300mA | BCHRCBR300DPC40 | 5265 |
| 63A - 300mA | BCHRCBR300DPC63 | 6580 |

All above RCCB's are 'AC' type

**RCCB, Four Pole** **HSN Code : 8536**

| Description | Cat. No. | MRP [₹] |
|---|---|---|
| 25A - 30mA | BCHRCBR030FPC25 | 6045 |
| 40A - 30mA | BCHRCBR030FPC40 | 6220 |
| 63A - 30mA | BCHRCBR030FPC63 | 7000 |
| 25A - 100mA | BCHRCBR100FPC25 | 6220 |
| 40A - 100mA | BCHRCBR100FPC40 | 6490 |
| 63A - 100mA | BCHRCBR100FPC63 | 7000 |
| 25A - 300mA | BCHRCBR300FPC25 | 6220 |
| 40A - 300mA | BCHRCBR300FPC40 | 6520 |
| 63A - 300mA | BCHRCBR300FPC63 | 7000 |

All above RCCB's are 'AC' type

| ***Zone:*** | ***Effects*** |
|---|---|
| ***Zone 1:*** | Usually no reactions. |
| ***Zone 2:*** | Usually no harmful effects. |
| ***Zone 3:*** | Muscle cramps can occur. There is normally no danger of ventricular fibrillation. |
| ***Zone 4:*** | Ventricular fibrillation may occur which can be fatal. |

## RCCB, Double Pole

**HSN Code : 8536**

| Description | Cat. No. | MRP [₹] |
|---|---|---|
| 25A - 30mA | BCHRCB030DPC25 | On Request |
| 40A - 30mA | BCHRCB030DPC40 | On Request |
| 63A - 30mA | BCHRCB030DPC63 | On Request |
| 25A - 100mA | BCHRCB100DPC25 | On Request |
| 40A - 100mA | BCHRCB100DPC40 | On Request |
| 63A - 100mA | BCHRCB100DPC63 | On Request |
| 25A - 300mA | BCHRCB300DPC25 | On Request |
| 40A - 300mA | BCHRCB300DPC40 | On Request |
| 63A - 300mA | BCHRCB300DPC63 | On Request |

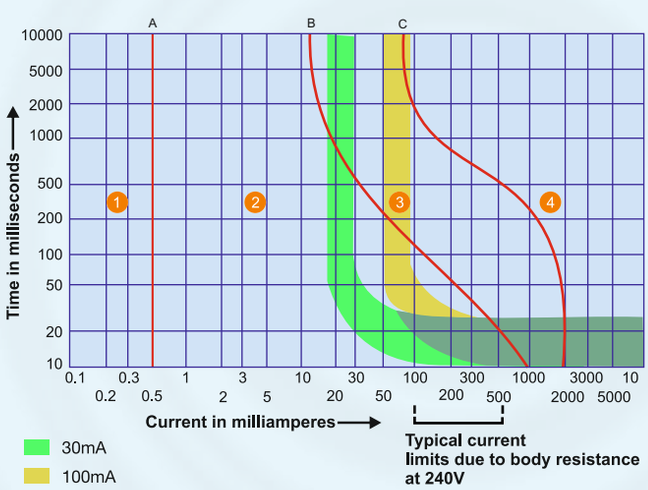
All above RCCB's are 'AC' type

## RCCB, Four Pole

**HSN Code : 8536**

| Description | Cat. No. | MRP [₹] |
|---|---|---|
| 25A - 30mA | BCHRCB030FPC25 | On Request |
| 40A - 30mA | BCHRCB030FPC40 | On Request |
| 63A - 30mA | BCHRCB030FPC63 | On Request |
| 25A - 100mA | BCHRCB100FPC25 | On Request |
| 40A - 100mA | BCHRCB100FPC40 | On Request |
| 63A - 100mA | BCHRCB100FPC63 | On Request |
| 25A - 300mA | BCHRCB300FPC25 | On Request |
| 40A - 300mA | BCHRCB300FPC40 | On Request |
| 63A - 300mA | BCHRCB300FPC63 | On Request |

All above RCCB's are 'AC' type




## Effect of Current

| Zone | Effects |
|---|---|
| Zone 1 | Usually no reactions |
| Zone 2 | Usually no harmful effects |
| Zone 3 | Muscle cramps can occur. There is normally no danger of ventricular fibrillation. |
| Zone 4 | Chances of ventricular fibrillation increased upto 5% (Curve C2) upto 50% (Curve C3) and above 50% beyond Curve C3. Effects such as cardiac arrest, breathing arrest and heavy burns may also occur. |

**HSN Code : 8537**

| No. Of Way | No. of Modules (Incoming + Outgoing) | Cat. No. (Single Door) | MRP [₹] |
|---|---|---|---|
| 4 WAY | 4 | BCHPSPNSD04W | 1715 |
| 6 WAY | 6 | BCHPSPNSD06W | 1835 |
| 8 WAY | 8 | BCHPSPNSD08W | 2150 |
| 12 WAY | 12 | BCHPSPNSD12W | 2820 |
| 16 WAY | 16 | BCHPSPNSD16W | 3605 |

| No. Of Way | Cat. No. (Double Door) | MRP [₹] |
|---|---|---|
| 4 WAY | BCHPSPNDD04W | 2765 |
| 6 WAY | BCHPSPNDD06W | 2825 |
| 8 WAY | BCHPSPNDD08W | 3240 |
| 12 WAY | BCHPSPNDD12W | 4335 |
| 16 WAY | BCHPSPNDD16W | 5535 |

| No. Of Way | No. of Modules (Incoming + Outgoing) | Cat. No. (Single Door) | MRP [₹] |
|---|---|---|---|
| 4 WAY | 4 | BCHPHTPNSD04W | 5565 |
| 6 WAY | 6 | BCHPHTPNSD06W | 6670 |
| 8 WAY | 8 | BCHPHTPNSD08W | 7335 |

| No. Of Way | Cat. No. (Double Door) | MRP [₹] |
|---|---|---|
| 4 WAY | BCHPHTPNDD04W | 6970 |
| 6 WAY | BCHPHTPNDD06W | 8665 |
| 8 WAY | BCHPHTPNDD08W | 10760 |

**HSN Code : 8537**

| Description | No. of Modules (Incoming + Outgoing) | Cat. No. (Single Door) | MRP [₹] | | MRP [₹] |
|---|---|---|---|---|---|
| 4 WAY, SPN DB | 4 | BCHSPNSD04W | 1750 | BCHSPNDD04W | 2840 |
| 6 WAY, SPN DB | 6 | BCHSPNSD06W | 1865 | BCHSPNDD06W | 2905 |
| 8 WAY, SPN DB | 8 | BCHSPNSD08W | 2185 | BCHSPNDD08W | 3330 |
| 12 WAY, SPN DB | 12 | BCHSPNSD12W | 2860 | BCHSPNDD12W | 4450 |
| 16 WAY, SPN DB | 16 | BCHSPNSD16W | 3655 | BCHSPNDD16W | 5690 |

**HSN Code : 8537**

| Description | No. of Modules (Incoming + Outgoing) | Cat. No. (Single Door) | MRP [₹] | Cat. No. (Double Door) | MRP [₹] |
|---|---|---|---|---|---|
| 4 WAY, HTPN DB | 8+12 | BCHHTPNSD04W | 5715 | BCHHTPNDD04W | 7160 |
| 6 WAY, HTPN DB | 8+18 | BCHHTPNSD06W | 6855 | BCHHTPNDD06W | 8905 |
| 8 WAY, HTPN DB | 8+24 | BCHHTPNSD08W | 7545 | BCHHTPNDD08W | 11060 |
| 12 WAY, HTPN DB | 8+36 | BCHHTPNSD12W | 10000 | BCHHTPNDD12W | 15810 |

**HSN Code : 8537**

| Description | Cat. No. | No. of Modules (Incoming + Outgoing) | MRP [₹] |
|---|---|---|---|
| 4 WAY, DD, MCB I/C, VERTICAL TPN DB | BCHVTPNDD04W-A | 8+12 | 16210 |
| 6 WAY, DD, MCB I/C, VERTICAL TPN DB | BCHVTPNDD06W-A | 8+18 | 20290 |
| 8 WAY, DD, MCB I/C, VERTICAL TPN DB | BCHVTPNDD08W-A | 8+24 | 22860 |
| 12 WAY, DD, MCB I/C, VERTICAL TPN DB | BCHVTPNDD12W-A | 8+36 | 29200 |

**HSN Code : 8537**

| Description | Cat. No. | Suitable for MCCB Frame | MRP [₹] |
|---|---|---|---|
| 4 WAY, DD, 125A, 3P MCCB I/C VERTICAL TPN DB | BCHVTPNDD04W-B | FRAME 1 | 22090 |
| 8 WAY, DD, 125A, 3P MCCB I/C VERTICAL TPN DB | BCHVTPNDD08W-B | FRAME 1 | 25315 |
| 12 WAY, DD, 125A, 3P MCCB I/C VERTICAL TPN DB | BCHVTPNDD12W-B | FRAME 1 | 34290 |
| 4 WAY, DD, 250A, 3P MCCB I/C VERTICAL TPN DB | BCHVTPNDD04W-C | FRAME 2 | 26910 |
| 8 WAY, DD, 250A, 3P MCCB I/C VERTICAL TPN DB | BCHVTPNDD08W-C | FRAME 2 | 32885 |
| 12 WAY, DD, 250A, 3P MCCB I/C VERTICAL TPN DB | BCHVTPNDD12W-C | FRAME 2 | 38390 |

Note:- XF series MCCB's are suitable as incomer in above DB's

All above DB's are double door

**HSN Code : 8537**

| Description | Cat. No. | Suitable for MCCB Frame | MRP [₹] |
|---|---|---|---|
| 4 WAY, DD 125A 4P MCCB I/C, VERTICAL TPN DB | On request | FRAME 1 | On request |
| 8 WAY,DD,125A,4P MCCB I/C, VERTICAL TPN DB | On request | FRAME 1 | On request |
| 12 WAY,DD,125A,4P MCCB I/C,VERTICAL TPN DB | On request | FRAME 1 | On request |
| 4 WAY, DD 250A 4P MCCB I/C, VERTICAL TPN DB | On request | FRAME 2 | On request |
| 8 WAY,DD,250A,4P MCCB I/C, VERTICAL TPN DB | On request | FRAME 2 | On request |
| 12 WAY,DD,250A,4P MCCB I/C,VERTICAL TPN DB | On request | FRAME 2 | On request |

Note:- XF series MCCB's are suitable as incomer in above DB's

All above DB's are double door

**HSN Code : 8537**

| Description | Cat. No. | No. of Modules (Incoming + Outgoing) | MRP [₹] |
|---|---|---|---|
| 4 WAY, DD,7 SEGMENT PHASE SEGREGATED DB | BCHPHSGDD04W | 8+12+12 | 23225 |
| 6 WAY, DD,7 SEGMENT PHASE SEGREGATED DB | BCHPHSGDD06W | 8+12+18 | 26160 |
| 8 WAY, DD,7 SEGMENT PHASE SEGREGATED DB | BCHPHSGDD08W | 8+12+24 | 29215 |
| 12 WAY, DD,7 SEGMENT PHASE SEGREGATED DB | BCHPHSGDD12W | 8+12+36 | 37115 |

All above DB's are double door

★ All above DB's are Non Stockable

# MCB DISTRIBUTION BOX

**HSN Code : 8537**

| Description | Cat. No. | MRP [₹] |
|---|---|---|
| 4 WAY, 40A, DD, PHASE SELECTOR DB | BCHPHSLDD04W-40 | 23890 |
| 6 WAY, 40A, DD, PHASE SELECTOR DB | BCHPHSLDD06W-40 | 24525 |
| 8 WAY, 40A, DD, PHASE SELECTOR DB | BCHPHSLDD08W-40 | 27465 |
| 12 WAY, 40A, DD, PHASE SELECTOR DB | BCHPHSLDD12W-40 | 31295 |
| 4 WAY, 63A, DD, PHASE SELECTOR DB | BCHPHSLDD04W-63 | 24080 |
| 6 WAY, 63A, DD, PHASE SELECTOR DB | BCHPHSLDD06W-63 | 24910 |
| 8 WAY, 63A, DD, PHASE SELECTOR DB | BCHPHSLDD08W-63 | 28615 |
| 12 WAY, 63A, DD, PHASE SELECTOR DB | BCHPHSLDD12W-63 | 31805 |

All above DB's are double door

**HSN Code : 8537**

| Description | Cat. No. | No. of Modules (Incoming + Outgoing) | MRP [₹] |
|---|---|---|---|
| 2 ROW, 13 MODULE, DD, ROW DB | BCHROWDB2R13 | 13 | 10620 |
| 3 ROW, 13 MODULE, DD, ROW DB | BCHROWDB3R13 | 13 | 12515 |
| 4 ROW, 13 MODULE, DD, ROW DB | BCHROWDB4R13 | 13 | 13865 |

All above DB's are double door

**HSN Code : 8537**

| Description | Cat. No. | No. of Modules (Incoming + Outgoing) | MRP [₹] |
|---|---|---|---|
| SPN-10A, P&S DB | BCHPSDBSPN10 | | 2150 |
| SPN-20A, P&S DB | BCHPSDBSPN20 | | 2150 |
| TPN-20A, P&S DB | BCHPSDBTPN20 | | 6150 |
| TPN-30A, P&S DB | BCHPSDBTPN30 | | 6150 |

**HSN Code : 8537**

| Description | Cat. No. | No. of Modules (Incoming + Outgoing) | MRP [₹] |
|---|---|---|---|
| SP, ONE WAY MCB DB | BCHOWMCBDBSP | | 890 |
| DP, ONE WAY MCB DB | BCHOWMCBDBDP | | 890 |
| TP, ONE WAY MCB DB | BCHOWMCBDBTP | | 970 |
| FP, ONE WAY MCB DB | BCHOWMCBDBFP | | 970 |

★ All above DB's are Non Stockable

# Industrial Control & Protection

- AC Contactors, Accessories & Spares
  - BRAVO Contactor & OLR
  - Freedom Contactor
  - Freedom Capacitor Duty Contactor
  - Freedom Overload Relays
  - Special Purpose Contactors:
    NHD Contactor, Definite Purpose Contactor
  - Citation Contactor
  - Citation Overload Relays
  - Mini Contactor & OLR
- BOCR 2.0 & 4.0
- Electronic Overcurrent Relays (EOCR)
- Motor Protection Circuit Breakers (MPCB)
- Solid State Relays
- DC Contactors
- DC Magnetic Overload Relays
- Push Buttons, Indicating Lights, LEDs
- Punched Grid Resistors

## FREEDOM / FS1 RANGE

- Conforms to IEC 60947-4-1 / IS 13947
- No derating upto -20°C to 60°C
- 2 Pole, 3 Pole and 4 Pole versions
- Widest Range from 6A to 1200A in 7 frame sizes
- Snap Open design for easy inspection
- Self Lifting Screws for quick termination
- Superior grade material with high temperature withstand capacity : Ideal for stringent applications
- Most compact design
- Low VA burden coils
- Successfully tested for Type - 2 coordination

- Range : 5 to 60 KVAR
- Enhanced equipment life
- Compact design
- Conforms to IEC 60947-4-1 & IS 13947-4-1 (AC-6b) utilization category

### BCH Series : 400A to 1200A

- Conforms to IEC60947-4-1 / IS 13947
- Insulation voltage upto 1000V
- Universal Control : Same coil for AC and DC Supply
- Delayed Drop Off feature for networks with transient power problem ensuring continuity of power supply
- Special magnet design for reduced shock and vibration
- Front open design for ease of inspection

**BRAVO Series**
CONTACTOR

New

- Range: 6A to 95A (3P & 4P)
- Common accessories
- Wide band coil as standard
- AC/DC coil voltages

# BRAVO Series

# CONTACTOR

New

- Range: 6A to 95A (3P & 4P)
- Common accessories
- Wide band coil -30% to +20%
- Operating Temp - 20ºC to +55ºC

BHARTIA
BCH

BCH
ELECTRIC
LIMITED

**BR318**

- Range 6A to 95A, 3Pole 415V AC3 / 20A to 125A 4 Pole 415V AC1
- Conforms to IS / IEC 60947-4-1
- No of Built in Poles - 3Poles + 1NO/NC Aux Contact
- Rated Operational Voltage 415V
- Rated Insulation Voltage 690V
- Rated Impulse Voltage 6kV
- **Ambient Temp - 20$^{0}$C to +55 C**
- **Wide Band Coil -30% to +20%**

BR4250

BR46500

## 3 Pole Contactor

**HSN Code : 8536**

| Size | AC1 Rating | AC3 Rating 415V AC | | | AC Coil | | | DC Coil (dual coil design) New | |
|---|---|---|---|---|---|---|---|---|---|
| | | Amp | HP | KW | Aux Contact | Cat Code | MRP [₹] | Cat Code | MRP [₹] |
| Frame 1 | 20 | 6 | 3 | 2.2 | 1NO | BR30610* | 1850 | - | - |
| | | | | | 1NC | BR30601* | | | |
| | 25 | 9 | 5.5 | 4 | 1NO | BR30910* | 2115 | BR3009DDC* | 3065 |
| | | | | | 1NC | BR30901* | | | |
| | 25 | 12 | 7.5 | 5.5 | 1NO | BR31210* | 2290 | BR3012DDC* | 3330 |
| | | | | | 1NC | BR31201* | | | |
| | 32 | 18 | 12 | 9 | 1NO | BR31810* | 2675 | BR3018DDC* | 3830 |
| | | | | | 1NC | BR31801* | | | |
| | 40 | 25 | 15 | 11 | 1NO | BR32510* | 3665 | BR3025DDC* | 5130 |
| | | | | | 1NC | BR32501* | | | |
| Frame 2 | 50 | 32 | 20 | 15 | 1NO | BR33210* | 7785 | - | - |
| | | | | | 1NC | BR33201* | | | |
| | 50 | 38 | 25 | 18.5 | 1NO | BR33810* | 8570 | - | - |
| | | | | | 1NC | BR33801* | | | |
| | 50 | 40 | 30 | 22 | 1NO | BR34010* | 10765 | - | - |
| | | | | | 1NC | BR34001* | | | |
| Frame 3 | 60 | 40 | 30 | 22 | 1NO+1NC | BR34011* | 12650 | - | - |
| | 70 | 50 | 34 | 25 | 1NO+1NC | BR35011* | 13725 | | |
| | 80 | 65 | 50 | 37 | 1NO+1NC | BR36511* | 19595 | | |
| Frame 4 | 110 | 80 | 60 | 45 | 1NO+1NC | BR38011* | 24915 | | |
| | 120 | 95 | 60 | 45 | 1NO+1NC | BR39511* | 29700 | | |

* Refer Coil Voltage Table below

## 4 Pole Contactor (AC Control)

**HSN Code : 8536**

| Size | AC1 Rating | Main Pole Configuration | Cat Code | MRP [₹] |
|---|---|---|---|---|
| Frame 1 | 20 | 4NO | BR4060* | 2435 |
| | 25 | 4NO | BR4090* | 2650 |
| | 32 | 4NO | BR4120* | 2875 |
| | 40 | 4NO | BR4180* | 3655 |
| | 50 | 4NO | BR4250* | 5115 |
| Frame 2 | 55 | 4NO | BR4320* | 10300 |
| | 60 | 4NO | BR4380* | 11180 |
| Frame 3 | 60 | 4NO | BR44000* | 14175 |
| | 80 | 4NO | BR46500* | 19175 |
| Frame 4 | 100 | 4NO | BR48000* | 24295 |
| | 125 | 4NO | BR49500* | 27385 |

* Refer Coil Voltage Table below

## Control Relay (AC Control)

| Aux Contact Combination | Cat Code | MRP [₹] |
|---|---|---|
| 2NO+2NC | BRCR22* | 2140 |
| 3NO+1NC | BRCR31* | 2140 |
| 4NO | BRCR40* | 2140 |

* Refer Coil Voltage Table below

## * Coil Voltage Table

| AC 50HZ | 24 | 48 | 110 | 220 | 240 | 415 |
|---|---|---|---|---|---|---|
| AC | U | W | A | B | K | M |
| DC | U3 | W3 | A3 | B3 | - | - |

# BRAVO Series Capacitor Duty Contactor

BHARTIA BCH

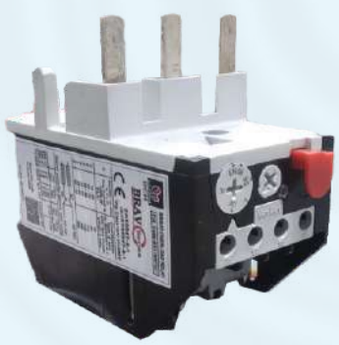
- Ratings available (kVAR) :#
  05, 07, 10, 12.5, 15, 20, 25
- Inbuilt Aux Contacts : 1NO+1NC
- Conforms to IS/IEC : 60947-4-1 AC6B
- Unique inrush current limiting design

New

# BRAVO Series Thermal Overload Relays

Frame 1

- Range 0.25A to 80A
- Conforms to IEC : 60947-4-1
- Relay Class : 10A
- Bult in Single Phasing Protection
- Ambient Temprature Compensated
- Test Button for Checking Trip Mechanism
- Field convertible auto manual reset
- Contactor mounting type



Frame 2

## Thermal Overload Relays

HSN Code : 8536

| | Protection Adjustment Range | For Use With Contactor | Cat Code | MRP [₹] | Accessories |
|---|---|---|---|---|---|
| OLR Frame 1 | 0.25-0.40A | BR306 to BR340 | BR318F13C | 2835 | - |
| | 0.63-1.00A | BR306 to BR340 | BR318F13E | | |
| | 1.0-1.40A | BR306 to BR340 | BR318F13F | | |
| | 1.30-1.80A | BR306 to BR340 | BR318F13G | | |
| | 1.7-2.4A | BR306 to BR340 | BR318F13H | | |
| | 2.2-3.1A | BR306 to BR340 | BR318F13J | | |
| | 2.8-4.0A | BR306 to BR340 | BR318F13K | | |
| | 3.5-5.0A | BR306 to BR340 | BR318F13L | | |
| | 4.5-6.5A | BR306 to BR340 | BR318F13M | | |
| | 6.0-8.5A | BR306 to BR340 | BR318F13N | | |
| | 7.5-11A | BR306 to BR340 | BR318F13P | | |
| | 10.0-14.0A | BR306 to BR340 | BR318F13Q | | |
| | 13.0-19.0A | BR306 to BR340 | BR318F13R | 3125 | |
| | 18.0-25.0A | BR306 to BR340 | BR318F13S | | |
| | 24.0-32.0A | BR306 to BR340 | BR318F13T | 4250 | |
| OLR Frame 2 | 22.0-32.0A | BR34011 to BR39511 | BR318GF23B | 4835 | Adaptor for individual mounting Cat No.BRADP318GF2 MRP ₹ 895/- |
| | 29.0-42.0A | BR34011 to BR39511 | BR318GF23C | 4850 | |
| | 36.0-52.0A | BR34011 to BR39511 | BR318GF23D | 6555 | |
| | 45.0-63.0A | BR34011 to BR39511 | BR318GF23E | 7300 | |
| | 60.0-80.0A | BR34011 to BR39511 | BR318GF23F | 8980 | |

# Available from October 2026.

BRTAC11

BRTAC22

BRMIH640

BRSRG48V

## Accessories for Contactors

| Description | For Use With | Mounting | Contacts | Cat Code | MRP [₹] |
|---|---|---|---|---|---|
| Auxilary Contact Block | BR306..95 & BR4060..49500 | Top | 1NO | BRTAC10 | 495 |
| | | Top | 1NC | BRTAC01 | |
| | | Top | 1NO+1NC | BRTAC11 | 745 |
| | | Top | 2NO | BRTAC20 | |
| | | Top | 2NC | BRTAC02 | |
| | | Top | 2NO+2NC | BRTAC22 | 1185 |
| | | Top | 3NO+1NC | BRTAC31 | |
| | | Top | 1NO+3NC | BRTAC13 | |
| | | Top | 4NO | BRTAC40 | |
| | | Top | 4NC | BRTAC04 | |
| Mechanical Interlock | BR306..365 & BR4060..4380 | Side | - | BRMIH640 | 745 |
| | BR38011..39511 & BR44000..49500 | Side | - | BRMIH4095 | 1320 |
| Surge Suppressor RC type | BR306....BR395 BR4060....BR49500 | 24-48V AC | | BRSRG48V | 1045 |
| | | 110-240V AC | | BRSRG240V | |
| | | 380-415V AC | | BRSRG415V | |

## Spare Coil AC

| AC Coil For Contactor | Cat Code | MRP [₹] |
|---|---|---|
| BR06F1 to 25F1 3P&4P | MCBRF134P* | 590 |
| BR32F2 to 40F2 3P | MCBRF2A3P* | 740 |
| BR25F2 to 38F2 4P | MCBRF2B4P* | 740 |
| BR34011 to 36511 3P | MCBRF33P* | 825 |
| BR38011 to 39511 3P | MCBRF43P* | 990 |
| BR44000 to 46500 4P | MCBRF34P* | |
| BR48000 to 49500 4P | MCBRF44P* | |

* Refer coil voltage table

## * Coil Voltage Table

| AC 50HZ | 24 | 48 | 110 | 220 | 240 | 415 |
|---|---|---|---|---|---|---|
| AC | U | W | A | B | K | M |
| DC | U3 | W3 | A3 | B3 | - | - |

# Freedom Series
# CONTACTOR

*Exceptional Performance*

*Unmatched Reliability*

- **Highly reliable operation**
- **No deration up to 60˚C (AC3 duty)**
- **Time tested for heavy duty applications for 2 decades**

BHARTIA
BCH

BCH
ELECTRIC
LIMITED

## 3 Pole Contactor (AC Control)

**HSN Code : 8536**

| Size | AC1 Rating | AC3 Rating 415 V | | | Aux. Contact | Cat. No. | MRP [₹] |
|---|---|---|---|---|---|---|---|
| | | A | HP | KW | | | |
| A | 20 | 6 | 3 | 2.2 | 1NO | CE15ANS3 ▪ B-N | 2465 |
| | | | | | 1NC | CE15ANC3 ▪ B-N | |
| B | 20 | 9 | 5.5 | 4 | 1NO | CE15BNS3 ▪ B-N | 2545 |
| | | | | | 1NC | CE15BNC3 ▪ B-N | |
| C | 20 | 12 | 7.5 | 5.5 | 1NO | CE15CNS3 ▪ B-N | 2930 |
| | | | | | 1NC | CE15CNC3 ▪ B-N | |
| D | 32 | 16 | 10 | 7.5 | 1NO | CE15DN3.▪.B10-N | 3280 |
| | | | | | 1NC | CE15DN3.▪.B01-N | |
| | 32 | 18 | 10 | 7.5 | 1NO | CE15D1N3.▪.B10-N | 3290 |
| | | | | | 1NC | CE15D1N3.▪.B01-N | |
| E | 40 | 25 | 15 | 11 | 1NO | CE15EN3.▪.B10-N | 4595 |
| | | | | | 1NC | CE15EN3.▪.B01-N | |
| F | 40 | 32 | 20 | 15 | 1NO | CE15FN3.▪.B10-N | 9105 |
| | | | | | 1NC | CE15FN3.▪.B01-N | |
| G | 60 | 40 | 30 | 22 | 1NO+1NC | CE15GN3 ▪ | 13490 |
| | | | | | - | CE15GN3 ▪ NB | 12780 |
| H | 75 | 50 | 33.5 | 25 | 1NO+1NC | CE15HN3 ▪ | 16960 |
| | | | | | - | CE15HN3 ▪ NB | 16315 |
| J | 80 | 65 | 50 | 37 | 1NO+1NC | CE15JN3 ▪ | 23050 |
| | | | | | - | CE15JN3 ▪ NB | 22400 |
| K | 80 | 73 | 50 | 37 | 1NO+1NC | CE15KN3 ▪ | 23680 |
| | | | | | - | CE15KN3 ▪ NB | 22935 |
| | 80 | 75 | 50 | 37 | 1NO+1NC | CE15K1N3 ▪ | 23890 |
| | | | | | - | CE15K1N3 ▪ NB | 23050 |
| | 115 | 80 | 53 | 40 | 1NO+1NC | BCH15KT.3.11.▪ | 26410 |
| L | 125 | 95 | 62 | 47 | 1NO+1NC | BCH15LT.3.11. ▪ | 31910 |
| # M | 135 | 110 | 80 | 60 | 1NO+1NC | BCH15MT.3.11.▪ | 39185 |
| # N | 230 | 150 | 100 | 75 | 1NO+1NC | BCH15NT.3.11.▪ | 52120 |
| # P | 250 | 175 | 125 | 95 | 1NO+1NC | BCH15PT.3.11.▪ | 64950 |
| # P1 | 250 | 185 | 125 | 95 | 1NO+1NC | BCH15P1T.3.11.▪ | 68885 |
| R | 300 | 200 | 150 | 100 | 1NO+1NC | MCE15RN3 ▪ 7 | 91105 |
| S0 | 315 | 265 | 186 | 140 | 1NO+1NC | MCE15S0N3 ▪ 7 | 93275 |
| @ S | 315 | 300 | 220 | 160 | 1NO+1NC | MCE15SN3 ▪ 7 | 102995 |

# With Universal AC/DC coil, In BCH15MT-220V DC coil Not Available
@ 325A, AC3 rating is also available on request

## 3 Pole Contactor (AC/DC Control)

**HSN Code : 8536**

| Size | AC1 Rating(A) | AC3 Rating 415 V | | | Aux. Contact | Cat. No. | MRP [₹] |
|---|---|---|---|---|---|---|---|
| | | A | HP | KW | | | |
| BCH54 | 600 | 400 | 320 | 240 | 2NO+2NC | BCH54.3.22. ▪ | 132125 |
| BCH55 | 600 | 450 | 320 | 240 | 2NO+2NC | BCH55.3.22. ▪ | 169875 |
| BCH57 | 760 | 550 | 420 | 315 | 2NO+2NC | BCH57.3.22. ▪ | 191475 |
| BCH62 | 1000 | 700 | 533 | 400 | 2NO+2NC | BCH62.3.22. ▪ | 339840 |
| BCH64 | 1000 | 860 | 666 | 500 | 2NO+2NC | BCH64.3.22. ▪ | On request |
| BCH76 | 1200 | 1000 | 800 | 600 | 1NO+2NC | BCH76.3.12. ▪ | On request |
| BCH78 | 1350 | 1200 | 933 | 700 | 1NO+2NC | BCH78.3.12. ▪ | On request |

▪ For Standard Coil Voltage Codes refer page 57
▪ For Non Standard Coil Voltages, please contact nearest sales office.

Dual DC

Pure DC

## 3 Pole Contactor (DC Control)

**HSN Code : 8536**

| AC3 (A) at 415VAC | KW | Dual Coil DC | | | Pure DC | | |
|---|---|---|---|---|---|---|---|
| | | Aux Contact | Cat No. | MRP[₹] | Aux Contact | Cat No. | MRP[₹] |
| 6 | 2.2 | 1NC | CE15ANC3■-N | 3500 | – | – | – |
| | | 1NO | CE15ANS3■-N | | | | |
| 9 | 4.4 | 1NC | CE15BNC3■-N | 3705 | 1NC | CE16BNC3*B | 3885 |
| | | 1NO | CE15BNS3■-N | | 1NO | CE16BNS3*B | |
| 12 | 5.5 | 1NC | CE15CNC3■-N | 3905 | 1NC | CE16CNC3*B | 4095 |
| | | 1NO | CE15CNS3■-N | | 1NO | CE16CNS3*B | |
| 16 | 7.5 | – | CE15DN3■-N | 4725 | 1NO+1NC | CE16DN3*B | 4980 |
| 25 | 11 | – | CE15EN3■-N | 6400 | 1NO+1NC | CE16EN3*B | 6850 |
| 32 | 15 | – | CE15FN3■-N | 13515 | 1NO+1NC | CE16FN3*B | 14245 |
| 40 | 22 | – | CE15GN3■ | 16000 | – | – | – |
| 50 | 25 | – | CE15HN3■ | 20405 | – | – | – |
| 65 | 37 | – | CE15JN3■ | 24255 | – | – | – |
| 73 | 37 | – | CE15KN3■ | 28550 | – | – | – |
| 75 | 37 | – | CE15K1N3■ | 28550 | – | – | – |

■ For Coil Voltage Codes refer Table on page 57

## Control Relays

**HSN Code : 8536**

| Size | Contact Configuration | Cat No. | AC Coil | Dual Coil DC | Pure DC Coil | |
|---|---|---|---|---|---|---|
| | | | MRP [₹] | | Cat No. | MRP [₹] |
| CR | 2NO+2NC | D15CR22■-N | 2780 | 4255 | D16CR22* | 4455 |
| | 3NO+1NC | D15CR31■-N | | | D16CR31* | |
| | 4NO | D15CR40■-N | | | D16CR40* | |

## 3 Pole Other Contactors (AC Control)

**With / Without Aux Contacts**

**HSN Code : 8536**

| Size | AC1 Rating | AC3 Rating 415 V | | | Aux. Contact | Cat. No. | MRP[₹] |
|---|---|---|---|---|---|---|---|
| | | A | HP | KW | | | |
| D | 32 | 16 | 10 | 7.5 | 1NO+1NC | CE15DN3■B-N | 3705 |
| | | | | | - | CE15DN3■-N | 3065 |
| | 32 | 18 | 10 | 7.5 | 1NO+1NC | CE15D1N3■B-N | 3730 |
| | | | | | - | CE15D1N3■-N | 3085 |
| E | 40 | 25 | 15 | 11 | 1NO+1NC | CE15EN3■B-N | 5020 |
| | | | | | - | CE15EN3■-N | 4275 |
| F | 40 | 32 | 20 | 15 | 1NO+1NC | CE15FN3■B-N | 9530 |
| | | | | | - | CE15FN3■-N | 8640 |

#■ For Standard Coil Voltage Codes refer page 57

***Coil Codes : Pure DC**

| 24V | 48V | 110V | 220V |
|---|---|---|---|
| U1 | W1 | A1 | B1 |

Note: For Non Standard Coil Voltages, please contact nearest sales office.

## 4 Pole Contactor (AC Control)

**HSN Code : 8536**

| AC1 rating (A) | Cat No. | Aux Contact | MRP [₹] |
|---|---|---|---|
| 20 | CE15CN4■B-N | # | On request |
| 40 | BCH4040■ | # | |
| 63 | BCH4063■ | # | |
| 80 | BCH4080■ | # | |
| 100 | BCH4100■ | # | |
| 130 | BCH4130■ | # | 29500 |
| 160 | BCH15MN0.4.11.■ | 1NO+1NC | 41700 |
| 200 | BCH15MN.4.11.■ | 1NO+1NC | 49380 |
| 250 | BCH15NN.4.11.■ | 1NO+1NC | 55565 |
| 300 | BCH15PN.4.11.■ | 1NO+1NC | 96230 |
| 400 | BCH4400■ | 2NO+2NC | 162470 |
| 500 | BCH4500■ | 2NO+2NC | 205750 |

*DC coils also available on request # Aux contacts to order separately*

- 20A to 500A AC1 (4 Pole)
- As per IS/IEC 60947-4-1
- Wide band coil 40A to 100A AC1

## Capacitor duty contactor (AC Control)

**HSN Code : 8536**

| kVAR rating at 415V 3Ph 50Hz | Size | Cat No. | Aux Contacts | MRP [₹] |
|---|---|---|---|---|
| 5 | B | CCD.05.11.▪ | 1NO+1NC | 4895 |
| 10 | C | CCD.10.11.▪ | 1NO+1NC | 5310 |
| 15 | E | CCD.15.11.▪ | 1NO+1NC | 7760 |
| 20 | F | CCD.20.11.▪ | 1NO+1NC | 9105 |
| 26 | G | CCD.26.11.▪ | 1NO+1NC | 11155 |
| 30 | H | CCD.30.11.▪ | 1NO+1NC | 17710 |
| 40 | K | CCD.40.11.▪ | 1NO+1NC | 26975 |
| 50 | KT | CCD.50.21.▪ | 2NO+1NC | 28345 |
| 60 | LT | CCD.60.21.▪ | 2NO+1NC | 31815 |

▪ For Standard Coil Voltage Codes refer page 57

Note: For Non Standard Coil Voltages, please contact nearest sales office.

## Add-on accessories for sizes A to K, CR, BCH15KT to BCH15PT, R, S0 & S

**HSN Code : 8538**

Horizontal Mechanical Interlocks

Vertical Mechanical Interlocks

| Accessories | Configuration | Cat No. | Contactor Type | MRP [₹] |
|---|---|---|---|---|
| Aux. Contact Block (side Mounting) | 1NO | C320KGSR10 | CE15 & CR | 465 |
| | 1NO+1NC | C320KGSR11 | | 1085 |
| | 1NC | C320KGSR01 | | 465 |
| | 2NO | C320KGSR20 | | 1085 |
| | 1NO+1NC | BCH15S11 | BCH15 | 1305 |
| | 1NO+1NC | MC320KB11 | MCE15R | 1715 |
| | 1NO+1NC (Late break type) | MC320KAS11 | MCE15S0 & MCE15S | 1660 |
| | 2NO+2NC | EF22 | BCH54 to BCH64 | 13175 |
| | 1NO+1NC | EB11 | BCH76 to BCH78 | 20470 |
| | 1NO+1NC (1st left)^ | BCH4A04041SL11 | BCH4040 | 1560 |
| | 1NO+1NC (1st right)^ | BCH4A04041SR11 | BCH4040 | 1560 |
| | 1NO+1NC (1st left)^ | BCH4A06131SL11 | BCH4063-130 | 1665 |
| | 1NO+1NC (1st right)^ | BCH4A06131SR11 | BCH4063-130 | 1665 |
| 4th Neutral Switching Pole | 800A | NP800/5 | BCH54 to 57 | 67555 |
| | 1000A | NP1000/6 | BCH62 to 64 | 81080 |
| | 1000A | NP1000/7 | BCH76 to 78 | 92300 |
| Aux. Contact Block (Front Mounting) | 1NO | C320KGTC10 | CE15, CR | 465 |
| | 1NC | C320KGTC01 | | |
| | 2NO | C320KGT*20 | | 655 |
| | 2NC | C320KGT*02 | | |
| | 1NO+1NC | C320KGT* 11 | | |
| | 2NO+2NC | C320KGT*22 | | 1130 |
| | 3NO+1NC | C320KGT*31 | | |
| | 4NO | C320KGT*40 | | |
| | 1NO+3NC | C320KGT*13 | | |
| | 4NC | C320KGT*04 | | |
| | 4NO | BCH15T40 | BCH15 | 2500 |
| | 3NO+1NC | BCH15T31 | | |
| | 2NO+2NC | BCH15T22 | | |
| | 1NO+1NC | BCH15T11 | | 2000 |
| | 1NO | BCH15T10 | | 700 |
| | 1NC | BCH15T01 | | |
| | 1NO+1NC^ | BCH4A0413T11 | BCH4040-063 | 1020 |
| Pneumatic Timer Block "ON/OFF" Delay site selectable | 1NO+1NC (0.1 to 30 sec) | C320TP1 | CE15 & CR | 3045 |
| | 1NO+1NC (10 to 180 sec) | C320TP2 | | |
| Mechanical Interlocks | - | C321KM60 | CE15 & CR | 1005 |
| | - | MC321KM3 | MCE15R to MCE15S | 2905 |
| | Horizontal | BM5H | BCH54 to 57 | 17375 |
| | | BM6H | BCH62 to 64 | 30380 |
| | | BM7H | BCH76 to 78 | 80410 |
| | Vertical | BM5V | BCH54 to 57 | 17375 |
| | | BM6V | BCH62 to 64 | 30380 |
| | | BM7V | BCH76 to 78 | 71375 |
| | Horizontal | BM0H | BCH15KT/LT/MT | 990 |
| | | BM3H | BCH15NT/PT/MN/NN/PN | 1070 |
| | | BCH4M0404 | BCH4040 | 1040 |
| | | BCH4M0608 | BCH4063-080 | 2090 |
| | | BCH4M1013 | BCH4100-130 | 9670 |
| | | BCH4M4040 | BCH4400 | 16445 |

*^ Minimum order qty 10 nos.*

*# Mech. Interlock for BCH4100 / 130 comes with 2 left & 2 right side add-on aux. contact blocks i.e. 4NO + 4NC*

*Add suffix C for power contactors, R for control relays. The suffix C/R denote terminal marking as per standard EN5001 on BS5583 on add on aux. contact blocks used with contactors / control relays

## Add-on accessories for sizes A to K, CR, BCH15KT to BCH15PT, R, S0 & S

**HSN Code : 8538**

| Accessories | Configuration | Cat No. | Contactor Type | MRP [₹] |
|---|---|---|---|---|
| Coil Surge Suppressors | 24-48V (50/60Hz) | MC320LR11 | CE15, CR | 970 |
| | 110-240V (50/60Hz) | MC320LR12 | | |
| Mechanical latch # | to complete the cat no. suffix code given | AM5- $ | BCH54 to BCH57 | 48180 |
| | | AM6 $ | BCH62 to BCH64 | 68140 |

# Mechanical latch are supplied with AC coils only

## $Coil Voltage suffix code for Mechanical latch AM5 & AM6

| Coil voltage | 110-120 | 220-240 | 380-415 | 440-480 |
|---|---|---|---|---|
| Suffix Code | AW4 | BA4 | LB4 | CB4 |

## Spare Contacts set

**HSN Code : 8538**

| Size | Consisting of | Cat. No. | MRP [₹] | Size | Consisting of | Cat. No. | MRP [₹] |
|---|---|---|---|---|---|---|---|
| A | Complete top housing Consisting of fixed & moving contacts | SBANS3 | 2070 | BCH15PT | Complete set of 6 fixed & 3 moving contacts with hardware, contact springs, spring retainers and arc runners | CP-BCH15PT-3 | 20625 |
| | | SBANC3 | | - | | CP-BCH15P1T-3 | 21240 |
| | | SBAN4 | | BCH15MN0 | | CP-BCH15MN0-4 | 24830 |
| B | | SBBNS3 | 2190 | BCH15MN | | CP-BCH15MN-4 | 26585 |
| | | SBBNC3 | | BCH15NN | | CP-BCH15NN-4 | 29145 |
| | | SBBN4 | | BCH15PN | | CP-BCH15PN-4 | 30455 |
| C | | SBCNS3 | 2385 | R | 6 Fixed contacts 3 Moving contacts 12 CSK screws & washers 3 Springs Spring retainers Self tapping screws & washers, 6 Arc Chute assly & screws | 6-288 | 40475 |
| | | SBCNC3 | | | | | |
| | | SBCN4 | | S0 | | 6-286-S0 | 50780 |
| D | | SBDN3 | 2850 | | | | |
| E | | SBEN3 | 3345 | S | | 6-286 | 51235 |
| F | | SBFN3 | 6530 | | | | |
| G | 6 Fixed contacts 3 Moving Contacts 3 springs 6 Arc Bonnets 3 Spring Retainer | 6-65-4 | 5735 | BCH54 | Complete set of 6 fixed & 3 moving contacts with hardware, contact springs, spring retainers and arc runners | CP-BCH54-3 | 59370 |
| H | | 6-65-6 | 7075 | BCH55 | | CP-BCH55-3 | 68445 |
| J | | 6-65-15 | 9625 | BCH57 | | CP-BCH57-3 | 96415 |
| K | | 6-65-17 | 9950 | BCH62 | | CP-BCH62-3 | 176180 |
| BCH15KT | Complete set of 6 fixed & 3 moving contacts with hardware, contact springs, spring retainers and arc runners | CP-BCH15KT-3 | 10120 | BCH64 | | CP-BCH64-3 | 236250 |
| BCH15LT | | CP-BCH15LT-3 | 11620 | BCH76 | | CP-BCH76-3 | 515180 |
| BCH15MT | | CP-BCH15MT-3 | 12500 | BCH78 | | CP-BCH78-3 | 578910 |
| BCH15NT | | CP-BCH15NT-3 | 20625 | BCH4 | Contact kit BCH4040 | - | - |
| - | | | | | Contact kit BCH4063 | BCH4K06 | 5980 |
| | | | | | Contact kit BCH4080 | BCH4K08 | 8335 |
| | | | | | Contact kit BCH4100 | BCH4K10 | 10355 |
| | | | | | Contact kit BCH4130 | BCH4K13 | 12650 |
| | | | | | Contact kit BCH4400 | BCH4K40 | 64820 |

## Spare Coil - size CR, A to K, BCH4, MCE15R, MCE15S0, MCE15S, BCH15KT to BCHPT, BCH54 to BCH78

**HSN Code : 8538**

| Size | For Size | Cat. No. | MRP [₹] |
|---|---|---|---|
| Magnetic coil | CR, A,B, C | MC15CW ■ | 1090 |
| | CE16, D16 (Pure DC) | MC16FW ■ | 1735 |
| | D, E, F | MC15FW ■ | 1210 |
| | G, H, J, K | MC15KW ■ | 3120 |
| | BCH15KT/LT | B02. ■ | 2915 |
| | BCH15MT | B022. ■ | 4975 |
| | BCH15NT / PT / MN / NN / PN | B031. ■ | 9900 |
| | R, S0, S | 9-2412- ■ | 8990 |
| | BCH4040 | BCH4C0404 ■ | 975 |
| | BCH4063-080 | BCH4C0608 ■ | 1070 |
| | BCH4100-130 | BCH4C1013 ■ | 2990 |
| | BCH4400 | BCH4C4040 ■ | 18345 |
| Magnetic coil (set of two) | BCH54/ BCH55/ BCH57 | B51. ■ | 20170 |
| Feeder group | | FG51. ■ | 20535 |
| Magnetic coil (set of two) | BCH62/ BCH64 | B61. ■ | 59615 |
| Feeder group | | FG61. ■ | 69015 |
| Magnetic coil (set of two) | BCH76/ BCH78 | B8- ■ | 157925 |
| Feeder group | | FG78- ■ | 158550 |

■ For Standard Coil Voltage Codes refer page 57, for Non Standard Coil Voltages, please contact nearest sales office.
Note : Coil set for BCH54 to BCH78 contactors consists of 2 half coils. Magnetic coil & Feeder group must have the same control voltage.
For eg. If coil voltage is changed from 110V to 220V then Feeder group should also be changed to 220V

MC318ANA

- Range : From 0.1A to 80A
- IEC:60947-4-1
- Relay class-10A
- Built in Single Phasing Protection
- Ambient temperature compensated
- Test button for checking tripping mechanism
- Field convertible auto manual reset
- Contactor mounting / Individual Mounting

MC318GNAB

## Thermal Overload Relays

**HSN Code : 8536 HSN Code : 8538**

| Relay Range (A) | Suitable for Direct Mounting | Cat. No. | MRP [₹] | Accessories |
|---|---|---|---|---|
| 0.25-0.40 | CE15A to CE15F | MC318ANA3C | 2905 | Adaptor for Individual mounting Cat. No. **C318F1** MRP Rs. 835 |
| 0.40-0.63 | | MC318ANA3D | | |
| 0.63-1.00 | | MC318ANA3E | | |
| 1.0-1.40 | | MC318ANA3F | | |
| 1.3-1.80 | | MC318ANA3G | | |
| 1.7-2.4 | | MC318ANA3H | | |
| 2.2-3.1 | | MC318ANA3J | | |
| 2.8-4.0 | | MC318ANA3K | | |
| 3.5-5.0 | | MC318ANA3L | | |
| 4.5-6.5 | | MC318ANA3M | | |
| 6.0-8.5 | | MC318ANA3N | | |
| 7.5-11 | | MC318ANA3P | | |
| 10.0-14.0 | | MC318ANA3Q | | |
| 13.0-19.0 | | MC318ANA3R | 3310 | |
| 18.0-25.0 | | MC318ANA3S | | |
| 24.0-32.0 | | MC318ANA3T | 4560 | |
| 22.0-32.0 | CE15G to CE15K1 | MC318GNA3B | 4945 | Adaptor for Individual mounting Cat No. C318F2 MRP Rs.920 |
| 29.0-42.0 | | MC318GNA3C | 4960 | |
| 36.0-52.0 | | MC318GNA3D | 6705 | |
| 45.0-63.0 | | MC318GNA3E | 7460 | |
| 60.0-80.0 | | MC318GNA3F | 9175 | |

# Special Purpose Contactors

BHARTIA BCH

### 2 Pole Contactors

- 12, 16, 20, 25, 32 and 40 A rating
- Wide termination space

## 'NHD' Series 2 Pole Contactor

**HSN Code : 8536**

The Real 2 Pole Contactor

| Ith (A) | AC3 (A) 240V AC | Cat. No. | MRP [₹] |
|---|---|---|---|
| 20 | 12 | CPG 212 ▪ | 2365 |
| 25 | 16 | CPG 216 ▪ | 2805 |
| 35 | 20 | CPG 220 ▪ | 3815 |
| 40 | 25 | CPG 225 ▪ | 4365 |
| 40 | 32 | CPG 232 ▪ | 5335 |
| 50 | 40 | CPG 240 ▪ | 6350 |

▪ For Coil Voltage Codes refer Table on page 57

### 4 Pole Contactors

- Superior Weld Resistant Contacts
- Rugged and heavy duty
- High Grade moulding for extremely long life
- Encapsulated Coil
  : Shock Proof & Moisture Proof
  : Withstand large voltage fluctuations

## 'NHD' Series 4 Pole Contactor

**HSN Code : 8536**

| Size | AC1 (A) | AC3 Rating at 415 V | | | Cat. No. | MRP [₹] |
|---|---|---|---|---|---|---|
| | | (A) | HP | KW | | |
| CP12 | 20 | 12 | 7.5 | 5.5 | CP12N ▪ | 4930 |
| 00 | 20 | 16 | 10 | 7.5 | C00N ▪ | 5490 |
| CP20 | 30 | 20 | 12.5 | 9.3 | CP20N ▪ | 6775 |
| New CP22 | 30 | 22 | 12.5 | 9.3 | CP22N ▪ | On request |
| 0 | 32 | 25 | 15 | 11 | N0N ▪ | 10110 |
| 01 | 40 | 32 | 20 | 15 | N01N ▪ | 14105 |
| 1 | 50 | 40 | 25 | 18.5 | N1N ▪ | 17920 |

**HSN Code : 8538**

| Description | Orientation | Cat. No. | MRP[₹] |
|---|---|---|---|
| Auxiliary Contact Blocks - NHD | 1NO | 001CB10 | 630 |
| | 1NO+1NC | 001CB11 | 750 |
| | 2NO | 001CB20 | |
| | 2NC | 001CB02 | |

▪ Standard coil voltages are 24, 110, 220/240 & 380/415 VAC, 50 Hz. For voltage codes refer Table on page 57

## 'NHD' Series 1 Aux+3P Contactor*

**HSN CODE : 8536**

| Size | AC1 (A) | AC3 Rating at 415 V | | | Cat. No. | MRP [₹] |
|---|---|---|---|---|---|---|
| | | (A) | HP | KW | | |
| CA12 | 20 | 12 | 7.5 | 5.5 | CA12N | Refer latest Motor Starters Price list |
| CA16 | 20 | 16 | 10 | 7.5 | CA16N | |
| CA20 | 30 | 20 | 12.5 | 9.3 | CA20N | |
| New CA22 | 30 | 22 | 12.5 | 9.3 | CA22N | |
| NA25 | 32 | 25 | 15 | 11 | NA25N | |
| NA32 | 40 | 32 | 20 | 15 | NA32N | |
| NA40 | 50 | 40 | 25 | 18.5 | NA40N | |

*Auxiliary contact is at left side in 1 Aux+ 3P Contactor

- Quick connect plugin terminals
- Specially designed low VA coil

## Definite Purpose Contactors

**HSN Code : 8536**

| 1 Pole | | | | 2 Pole | | | |
|---|---|---|---|---|---|---|---|
| AC3 (A) | Type | Cat. No. | MRP [₹] | AC3 (A) | Type | Cat. No. | MRP [₹] |
| 25 | 1 Pole | CPD251CK | 1380 | 20 | 2P, 140-200VAC | CPDN202BL | 1515 |
| 25 | 1 Pole with Neutral | CPD251NCK | 1405 | 25 | 2P, 220-240VAC | CPD252H | 1590 |
| 40 | 1 Pole | CPD401CK | 1485 | 25 | 2P, 415VAC | CPD252M | |
| 40 | 1 Pole with Neutral | CPD401NCK | 1590 | 40 | 2P, 220-240VAC | CPD402H | 1675 |
| - | - | - | - | 40 | 2P, 415VAC | CPD402M | |

*wide band AC coil voltages for Defintie purpose Contactor

| Contactor | Cat No. | Voltage | | |
|---|---|---|---|---|
| | | 170-240VAC | 290-415VAC | 140V-200VAC |
| 25A 1P | CPD251* | KL | ML | BL |
| 20A 2P | CPD202* | | | |
| 40A 1P | CPD401* | | | |

## KIT for NHD

HSN CODE : 8538

| Contactor Rating (AC-3) | 4P KIT Cat Code | MRP[₹] | 1 Aux + 3P KIT Cat. No. | MRP[₹] | 1P KIT Cat. No. | MRP[₹] |
|---|---|---|---|---|---|---|
| 12A | SP90E1 | 1980 | SP90E2 | Refer latest Motor Starters pricelist | SP90E01 | Refer latest Motor Starters pricelist |
| 16A | SP90A1 | 2500 | SP90A2 | | SP90A01 | |
| 20A | SP90F1 | 3295 | SP90F2 | | SP90F01 | |
| 25A | SP90B1 | 5550 | SP90B2 | | SP90B01 | |
| 32A | SP90D1 | 6570 | SP90D2 | | SP90D01 | |
| 40A | SP90C1 | 8060 | SP90C2 | | SP90C01 | |

* 4P Kit consist of - 8 Fixed main contacts, 4 moving main contacts, 4 springs & 4 retainers
* 1 Aux + 3P Kit consist of - 6 Fixed main contacts, 3 moving main contacts, 2 Aux main contacts, 1 Aux moving contact, 4 springs & 4 retainers

## KIT for CPG

HSN CODE : 8538

| Contactor Rating | Cat. No. | MRP [₹] |
|---|---|---|
| 12A | CPG122PSP | 1105 |
| 16A | CPG162PSP | 1280 |
| 20A | CPG202PSP | 1990 |
| 25A | CPG252PSP | 2975 |
| 32A | CPG322PSP | 3095 |
| 40A | CPG402PSP | 4650 |

* 2P Kit consist of - 4 Fixed contacts, 2 moving contacts, 2 springs & 2 retainers

## 2P Contactor

HSN CODE : 8536

| Rating | Cat. No. | MRP [₹] |
|---|---|---|
| 16A | CPGN216* | 2165 |
| 20A | CPGN220* | 2440 |
| 25A | CPGN225* | 2880 |

## 2P Contactor Kit

HSN CODE : 8538

| Rating | Cat. No. | MRP [₹] |
|---|---|---|
| 16A | CPGN162PSP | 555 |
| 20A | CPGN202PSP | 600 |
| 25A | CPGN252PSP | 680 |

* 2P Kit consist of - 4 Fixed contacts, 2 moving contacts, 2 springs & 2 retainers

## Spare Coil & Carrier

HSN CODE : 8538

| Product | Cat. No. | MRP [₹] |
|---|---|---|
| Coil for NHD / CPG | SP90MC* | 725 |
| Carrier for NHD | SP90CC | 170 |
| Carrier for CPG | CPG2PCC | 110 |

# CITATION CONTACTOR

- Encapsulated plug in coil
- Front accessibility with ease of contact, coil inspection & replacement
- Wide operating temp. range -5°C to +55°C
- High performance & rugged contacts
- Suitable for AC4 duty applications

BHARTIA
BCH

BCH
ELECTRIC
LIMITED

MC10DN11

MCE15MN

## 3 Pole AC Control

**HSN Code : 8536**

| Size | AC3 Rating at 415 V | | | Cat. No. (with Aux. contact 2NO+2NC) | MRP [₹] | Cat. No. (with Aux. contact 1NO+1NC) | MRP [₹] | Cat. No. (without Aux. contact) | MRP [₹] |
|---|---|---|---|---|---|---|---|---|---|
| | Amps | HP | KW | | | | | | |
| C4 | 32 | 20 | 15 | C4NE22 ■ | 12305 | C4NE11 ■ | 11510 | C4NE00 ■ | 10205 |
| D | 40 | 30 | 22 | MC10DN22 ■ | 19470 | MC10DN11 ■ | 17135 | MC10DN00 ■ | 17015 |
| D1 | 50 | 33.5 | 25 | MC10D1N22 ■ | 22905 | MC10D1N11 ■ | 21550 | MC10D1N00 ■ | 20200 |
| D2 | 55 | 33.5 | 25 | MC10D2N22 ■ | 24060 | MC10D2N11 ■ | 22725 | MC10D2N00 ■ | 21830 |
| E | 70 | 50 | 37 | MC10EN22 ■ | 34850 | MC10EN11 ■ | 34135 | MC10EN00 ■ | 33475 |
| E1 | 75 | 50 | 37 | MC10E1N22 ■ | 36385 | MC10E1N11 ■ | 35610 | MC10E1N00 ■ | 34865 |

| Size | AC1 Rating | AC3 Rating 415 V | | | Aux. Contact | Cat. No. | MRP [₹] |
|---|---|---|---|---|---|---|---|
| | | A | HP | KW | | | |
| L | 140 | 80 | 53 | 40 | 1NO+1NC | MCE15LN3 ■ 5 | 37905 |
| M | 150 | 95 | 62 | 47 | 1NO+1NC | MCE15M0N3 ■ 5 | 43890 |
| M-5 | 150 | 110 | 80 | 60 | 1NO+1NC | MCE15MN3 ■ 5 | 53710 |
| N | 300 | 140 | 100 | 75 | 1NO+1NC | MCE15NN3 ■ 7 | 80085 |
| Q | 300 | 185 | 120 | 90 | 1NO+1NC | MCE15QN3 ■ 7 | 90670 |

■ For coil voltage codes refer Table on page 57

## Accessories for Citation contactors size - L, M, M-5, N, Q, C4, D & E type

**HSN Code : 8538**

| Accessories | Configuration | Cat No. | Contactor Type | MRP [₹] |
|---|---|---|---|---|
| Aux. block side mounting | 1NO+1NC | C320KGM11 | L, M & M-5 | 1475 |
| | 1NO+1NC | MC320KB11 | N, Q, R & S | 1715 |
| Aux. block add-on (Late break type) | 1NO+1NC | MC320KAS11 | L, M, M-5, N & Q | 1660 |
| | 1NO+1NC | AC34EA11 | C4, D & E | 1205 |
| Mechanical Interlock | | MC321KM1 | C4 & D | 1230 |
| | | MC321KM2 | L, M, M-5 & E | 1320 |
| | | MC321KM3 | N & Q | 2905 |
| Base block | 1NO+1NC | MC320KB2 | C4 & D | 1345 |
| | 1NO+1NC | AC35EB11 | E | 1305 |

## Spare Coil Citation Contactors

| Description | Cat. No. | MRP [₹] |
|---|---|---|
| Magnetic coil for MCE15L, MCE15M0, MCE15M | 9-2268- ■ | 4090 |
| Magnetic coil for MCE15N & MCE15Q | 9-2412- ■ | 8990 |
| Magnetic coil for C4 & MC10D | 9-2267- ■ | 2555 |
| Magnetic coil for MC10E type | 9-2268- ■ | 4090 |

■ For coil voltage codes refer Table on page 57

## Spare Contacts set for Citation Contactors

**HSN Code : 8538**

| Size | Consisting of | Cat.No. | MRP [₹] |
|---|---|---|---|
| C4 | 6 Fixed main contacts, 6 Pan head screws 6 Helical lock washers | SP34K | 5495 |
| MC10D | 6 Fixed Main Contacts, 3 Compression springs, 3 Retainers | 6-334 | 7865 |
| MC10E | Same as above plus 6, Blow outs 6 M5/M4 self tapping screws | 6-335 | 14820 |
| L | 6 Fixed Contacts, 6 Pan Head Screws 6 Helical Lock Washers, 3 Moving contacts 3 Springs, 3 Retainers 6 Blowouts, 6 self tapping screws | 6-385-L0 | 11815 |
| M | | 6-385-M | 13295 |
| M-5 | | 6-385 | 13440 |
| N | 6 Fixed contacts, 12 CSK screws & washers 3 Moving contacts 3 Springs, Spring Retainers, Self tapping screws & Washers | 6-293 | 35640 |
| Q | | 6-288-Q | 39090 |

# Citation Thermal Overload Relay

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### Citation Overload Relay

- Wide range : From 0.195 A to 600 A
- Built in Single Phasing Protection
- Ambient temperature compensated
- Test button for checking tripping mechanism
- Field convertible auto/manual reset
- Snap on setting protection cover
- Special Mechanism ensuring closest protection to motor
- Contactor mounting & separate mounting
- Suitable for use with other contactors of 45mm width

## Overload Relays (Direct Mounting)

HSN Code : 8536 | HSN Code : 8538

| Relay Range | Cat. No. | MRP [₹] | Terminal Block for individual mounting | MRP [₹] |
|---|---|---|---|---|
| 0.195 - 0.31 | MC305ANA3A | 3090 | (Incoming) MC305TB1<br>(Outgoing) MC305TB3 | 440 |
| 0.30 - 0.48 | MC305ANA3B | | | |
| 0.47 - 0.75 | MC305ANA3C | | | |
| 0.72 - 1.14 | MC305ANA3D | | | |
| 1.07 - 1.70 | MC305ANA3E | | | |
| 1.58 - 2.50 | MC305ANA3F | | | |
| 2.40 - 3.80 | MC305ANA3G | | | |
| 3.80 - 6.00 | MC305ANA3H | | | |
| 6.00 - 9.30 | MC305ANA3J | | | |
| 8.90 - 13.50 | MC305ANA3K | | | |
| 13.20 - 20.00 | MC305ANA3L | 3410 | (Incoming) MC305TB2<br>(Outgoing) MC305TB3 | |
| 17.40 - 24.00 | MC305ANA3M | 3770 | | |
| 22.00 - 30.00 | MC305ANA3N* | 4860 | | |
| 23.00 - 32.00 | MC305ANA3P* | 4905 | (Incoming) MC305TB2<br>(Outgoing) MC305TB3 | |
| 26.00 - 40.00 | MC305ANA3Q* | 5320 | | |

* Overload relay type "N, P & Q" must be used with terminal block MC305TB3

## DIN rail mounting kit with incoming terminal block

HSN Code : 8538

| Relay Range (A) | Cat. No. | MRP [₹] |
|---|---|---|
| A to K | MC305DM1 | 525 |
| L to N | MC305DM2 | 540 |

### CT Operated Overload Relay

## CT Operated Overload Relays-Individual Mounting

HSN Code : 8536

| Relay Range (A) | Cat. No. | MRP [₹] |
|---|---|---|
| 24.4-39.0 | CT1MC305ANA3C | 9005 |
| 37.6-60.0 | CT2MC305ANA3C | 11625 |
| 56.4-90.0 | CT3MC305ANA3C | 13050 |
| 84.6-135.0 | CT4MC305ANA3C | 13245 |
| 112.8-180.0 | CT5L1MC305ANA3C | 20310 |
| 131.6-210.0 | CT5MC305ANA3C | 20975 |
| 188.0-300.0 | CT6MC305ANA3C | 24035 |
| 263.2-420.0 | CT7MC305ANA3C | 24845 |
| 376.0-600.0 | CT8MC305ANA3C | 28840 |

### WP 2 Pole Overload Relay

- Perfect protection to single phase Motors against overloads
- Ambient temperature compensated

## 2 Pole Overload Relays (Direct Mounting)

HSN Code : 8536

| Relay Range (A) | Cat. No. | MRP [₹] |
|---|---|---|
| 1.58-2.50 | MC307ANA2F | Refer latest Motor Starters Price list |
| 2.40-3.80 | MC307ANA2G | |
| 3.80-6.00 | MC307ANA2H | |
| 6.00-9.30 | MC307ANA2J | |
| 8.90-13.50 | MC307ANA2K | |
| 13.20-20.00 | MC307ANA2L | |
| 17.40-24.00 | MC307ANA2M | |
| 22.00-30.00 | MC307ANA2N | |
| 23.00-32.00 | MC307ANA2P | |
| 28.00-40.00 | MC307ANA2Q | |

### WP Overload Relay

- Designed to withstand wide fluctuations in agricultural applications
- Appropriately sensitive relay for increased pump performance

## WP Overload Relays for WP & Oil Starter

HSN Code : 8536

| Relay Range (A) | Cat. No. (WP Starter / Oil Starter) | MRP [₹] |
|---|---|---|
| 6.00 - 9.30 | MC307ANA3J / MC307ANA3J-OS | Refer latest Motor Starters Price list |
| 8.90 - 13.50 | MC307ANA3K / MC307ANA3K-OS | |
| 13.20 - 20.00 | MC307ANA3L / MC307ANA3L-OS | |
| 17.40 - 24.00 | MC307ANA3M / MC307ANA3M-OS | |
| 22.00 - 30.00 | MC307ANA3N | |
| 23.00 - 32.00 | MC307ANA3P (Spare for Oil Starter) | |

# MINI CONTACTORS & MINI OLR

- Range : 7A to 16A AC3 (3 Pole)
- Built in Aux. contact 1NO / 1NC
- As per IS/IEC 60947-4-1
- Rated Insulation Voltage at 50/60 Hz. : 690V AC
- Ambient Operating Temp Range : -50$^{0}$C to +40$^{0}$C
- Coil voltages available : 24V AC to 600V AC, 12V DC to 250V DC
- Mini Control Relays with various aux combinations
- Mini Overload Relays: Range: 0.28A to 17A

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## 3 Pole Contactor

HSN Code : 8536

CP1512

| Rating AC3 | Aux Contact (NO/NC) | AC Coil | | DC Coil | |
|---|---|---|---|---|---|
| | | Cat no. | MRP[₹] | Cat no. | MRP[₹] |
| 07 | 1NC | CA1507P3001A***F | 2325 | CA1507P3001D*** | 3390 |
| 07 | 1NO | CA1507P3010A***F | | CA1507P3010D*** | |
| 09 | 1NC | CA1509P3001A***F | 2515 | CA1509P3001D*** | 3520 |
| 09 | 1NO | CA1509P3010A***F | | CA1509P3010D*** | |
| 12 | 1NC | CA1512P3001A***F | 2670 | CA1512P3001D*** | 3865 |
| 12 | 1NO | CA1512P3010A***F | | CA1512P3010D*** | |
| 16 | 1NC | CA1516P3001A***F | 3160 | CA1516P3001D*** | 4255 |
| 16 | 1NO | CA1516P3010A***F | | CA1516P3010D*** | |

*** Replace with suitable coil voltage given in Table below

## Control Relays

HSN Code : 8536

CR1516

| Rating AC1 | Aux Contact (NO/NC) | AC Coil | | DC Coil | |
|---|---|---|---|---|---|
| | | Cat no. | MRP[₹] | Cat no. | MRP[₹] |
| 16 | 22 | CR1516P0022A***F | 2700 | CR1516P0022D*** | 3580 |
| 16 | 31 | CR1516P0031A***F | | CR1516P0031D*** | |
| 16 | 13 | CR1516P0013A***F | | CR1516P0013D*** | |
| 16 | 40 | CR1516P0040A***F | | CR1516P0040D*** | |
| 16 | 04 | CR1516P0004A***F | | CR1516P0004D*** | |

*** Replace with suitable coil voltage given in Table below

**Coil Voltage Table**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **AC, 50 Hz** | 24 | 48 | 110 | 120 | 230 | 400 | 415 | 480 | 600 |
| **DC** | 12 | 24 | 110 | 125 | 250 | | | | |

## Thermal Overload Relays

MC15BRM18

| Description | Cat no. | MRP[₹] |
|---|---|---|
| 0.28 - 0.4A | MC15BRL40 | 3160 |
| 0.4 - 0.63A | MC15BRL63 | |
| 0.56 - 0.8A | MC15BRL80 | |
| 0.8 - 1.2A | MC15BRM12 | |
| 1.2 - 1.8A | MC15BRM18 | |
| 1.8 - 2.8A | MC15BRM28 | |
| 2.8 - 4A | MC15BRM40 | 3190 |
| 4 - 06.3A | MC15BRM63 | |
| 5.6 - 8A | MC15BRM80 | |
| 7 - 10A | MC15BRH10 | |
| 8 - 12.5A | MC15BRH12 | 3260 |
| 10 - 15A | MC15BRH15 | |
| 11 - 17A | MC15BRH17 | |

## Accessories

HSN Code : 8538

MA15AF22

**Auxiliary Contacts Front Mounted for Mini Contactor**

| Description | Cat no. | MRP [₹] |
|---|---|---|
| 2 NO | MA15AF20 | 740 |
| 1 NO + 1 NC | MA15AF11 | |
| 2 NC | MA15AF02 | |
| 4 NO | MA15AF40 | 1150 |
| 2 NO + 2 NC | MA15AF22 | |
| 4 NC | MA15AF04 | |
| 3 NO + 1 NC | MA15AF31 | |
| 1 NO + 3 NC | MA15AF13 | |

**Auxiliary Contacts Front Mounted for Control Relay**

| Description | Cat no. | MRP [₹] |
|---|---|---|
| 2 NO | MR15AF20 | 740 |
| 1 NO + 1 NC | MR15AF11 | |
| 2 NC | MR15AF02 | |
| 4 NO | MR15AF40 | 1150 |
| 2 NO + NC | MR15AF22 | |
| 4 NC | MR15AF04 | |
| 3 NO + 1 NC | MR15AF31 | |
| 1 NO + 3 NC | MR15AF13 | |

M15AMIL

**Mechanical Interlock**

| Description | Cat no. | MRP [₹] |
|---|---|---|
| Front Mounted Mech. Interlock | M15AMIL | 665 |

M15A16LDRW

**Reversing Wiring Module**

| Description | Cat no. | MRP [₹] |
|---|---|---|
| Reversing Power Wiring Module | M15A16LDRW | 605 |
| | M15A16LNRW | |

M15ASSR024

## Surge Supressor RC Type

| Description | Cat no. | MRP [₹] |
|---|---|---|
| 12-24V AC 50/60Hz | M15ASSR024 | 1105 |
| 24-48V AC 50/60Hz | M15ASSR048 | |
| 48-127V AC 50/60Hz | M15ASSR127 | |
| 127-250V AC 50/60Hz | M15ASSR250 | |
| 250-380V AC 50/60Hz | M15ASSR380 | |
| 380-510V AC 50/60Hz | M15ASSR510 | |

## Surge Supressor Varistor Type

| Description | Cat no. | MRP [₹] |
|---|---|---|
| 12-48V AC/12-60V DC | M15ASSV048 | 1090 |
| 50-127V AC/60-180V DC | M15ASSV127 | |
| 130-275V AC/80-300V DC | M15ASSV275 | |
| 270-380V AC/300-510V DC | M15ASSV380 | |
| 400-510V AC | M15ASSV510 | |

| Description | Cat no. | MRP [₹] |
|---|---|---|
| Surge Supr. Diode 12-600VDC | M15FSSD600 | 345 |

## Spare coil

| Cat No. | Description | MRP [₹] |
|---|---|---|
| M15CA*** | Spare coil AC | 835 |
| M15CD*** | Spare coil DC | 1375 |

*** Replace with suitable coil voltage given in Table

**Coil Voltage Table**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **AC, 50 Hz** | 24 | 48 | 110 | 120 | 230 | 400 | 415 | 480 | 600 |
| **DC** | 12 | 24 | 110 | 125 | 250 | | | | |

## COIL VOLTAGE:MASTER TABLE

| | COIL VOLTAGE | 24V | | 48V | | 110V | | 160-220V | 170-240V | 220V | | 220-240V | 230-360V | 240V | 190-400V | 230-420V | 260-400V | 275-420V | 310-400V | 380V | 380-415V | 415V | 440V | 550V $ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PRODUCT | AC | DC | AC | DC | AC | DC | AC | AC | AC | DC | AC | AC | AC | AC | AC | AC | AC | AC | AC | AC | AC | AC | AC |
| CR RELAY | #CR Relay | U | U3 | W | W3 | A | A3 | - | - | B | B3 | - | - | K | - | - | - | - | - | L | - | M | C | D |
| FREEDOM | #CE15A-F, CN14B-F1* | U | U3 | W | W3 | A | A3 | - | - | B | B3 | - | - | K | - | - | - | - | - | L | - | M | C | D |
| | #CE15G-K, CN14G-K2* | U | U3 | W | W3 | A | A3 | - | - | B | B3 | - | - | K | - | - | - | - | - | L | - | M | C | D |
| | CCD.05-60 | - | - | - | - | A | - | - | - | B | - | - | - | K | - | - | - | - | - | - | - | M | C | - |
| | BCH15KT-LT | U | - | W | - | A | - | - | - | B | - | - | - | K | - | - | - | - | - | L | - | M | C | D |
| | BCH15MT | 24 | - | 48 | - | 110 | 110 | - | - | - | B3 | 220 | - | - | - | - | - | - | - | - | 380 | - | 440 | 550 |
| | BCH15NT-PT | 24 | 24 | 48 | 48 | 110 | 110 | - | - | - | - | 220 | - | - | - | - | - | - | - | - | 380 | - | 440 | 550 |
| | BCH15MN-PN | 24 | 24 | 48 | 48 | 110 | 110 | - | - | - | - | 220 | - | - | - | - | - | - | - | - | 380 | - | 440 | 550 |
| | BCH4040-400 | - | - | - | - | A | - | - | - | B | - | - | - | K | - | - | - | - | - | - | - | M | - | - |
| | MCE15R-S | U | U3 | - | - | A | A3 | - | - | B | - | - | - | K | - | - | - | - | - | L | - | M | C | D |
| | BCH54-64 | - | - | - | - | 110 | 110 | - | - | 220 | 220 | 220 | - | 220 | - | - | - | - | - | 380 | 380 | 380 | 440 | - |
| | BCH76&78 | - | - | - | - | A7 | - | - | - | B7 | - | - | - | - | - | - | - | - | - | - | L7 | - | - | - |
| NHD | CP12N,C00N, CP20N, N0N | U | - | - | - | A | - | - | - | - | - | H | LV | - | - | - | G | MB | - | - | N | - | C | D |
| | N01N & N1N | U | - | - | - | A | - | - | - | - | - | H | - | - | - | - | - | - | WB | - | N | - | C | - |
| Shakti | Shakti DOL | - | - | - | - | - | - | - | - | - | - | H | - | - | Z | ZB | - | - | - | - | N | - | - | - |
| | Shakti Star Delta | - | - | - | - | - | - | - | - | - | - | - | - | - | | | G | - | - | - | N | - | - | - |
| 2P | CPG - All range | U | - | - | - | A | - | BW | BBW | - | - | H | - | - | - | - | G | - | - | - | N | - | - | - |
| | CPGN 16,20,25 | - | - | - | - | - | - | BW | BBW | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CITATION | C4 & D | - | - | - | - | A | - | - | - | B | - | - | - | K | - | - | - | - | - | L | - | M | C | D |
| | MC10EN | U | - | - | - | A | - | - | - | B | - | - | - | K | - | - | - | - | - | L | - | M | C | D |
| | MCE15L-M5 | U | - | W | - | A | - | - | - | B | - | - | - | K | - | - | - | - | - | L | - | M | C | D |
| | MCE15N-Q | U | U3 | - | - | A | A3 | - | - | B | - | - | - | K | - | - | - | - | - | L | - | M | C | D |

1. For other coil voltages & wide band coil option please contact nearest sales office
*-CN14 is not available in DC coils

#The Interchangeability between AC & DC Coil of CE15 / D15 type contactors is not possible at site. Only Company fitted DC control is available for this range.

$Please check nearest sales office for delivery period

# BOCR 2.0 & 4.0

New

- Range: 0.25A to 60A
- Protections covered:
  Over-load, Under-load, Short Circuit,
  Phase Reversal, Phase Unbalance, Locked rotor
  Motor Stall, Earth Fault & Contactor Failure
- Auto Full Load Current Detection
- Type C USB Port
- Thermal Memory
- Trip class selection
  Class: 05/15/25/10/20/30
- VFD Compatible
- Last five fault records
- Last Three start Stop record
- Motor Trip Count
- Password Protection
- MODBUS Communication
- Remote Start/Stop Function
- Remote Trip reset Function
- 4-20mA Output for PLC
- RTD Temperature Input for trip

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# BOCR 2.0 & 4.0

New

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## BOCR2.0

- Range: 0.25A to 60A
- Protections covered:
  Overload, Underload, Short Circuit, Phase Reversal, Phase Unbalance, Locked rotor, Earth Fault
- Trip class selection
  Class: 05/15/25/10/20/30
- VFD Compatible
- Last five fault records
- Password Protection

## BOCR4.0

- 4-20mA Output for PLC
- MODBUS Communication
- Remote Trip reset Function

**HSN Code : 8536**

| Model | Current Range (A) | Cat code | Type | MRP[₹] |
|---|---|---|---|---|
| BOCR 2.0 | 0.25 - 5.0 | BOCR2.0-05N* | EOCR2.0, 0.25 to 5A with Inbuilt Display | 18700 |
| | | BOCR2.0-05Z35* | EOCR 2.0 , 0.25-5.0A with Inbuilt Display+Ground Fault+ZCT35mmID | 24200 |
| | | BOCR2.0-05Z50* | EOCR 2.0 , 0.25-5.0A with Inbuilt Display+Ground Fault+ZCT50mmID | 24200 |
| | | BOCR2.0-05Z90* | EOCR 2.0 , 0.25-5.0A with Inbuilt Display+Ground Fault+ZCT90mmID | 25300 |
| | | BOCR2.0-05Z150* | EOCR 2.0 , 0.25-5.0A with Inbuilt Display+Ground Fault+ZCT150mmID | 25300 |
| | 2.5 - 60 | BOCR2.0-60N* | EOCR2.0, 2.5-60A with Inbuilt Display | 18700 |
| | | BOCR2.0-60Z35* | EOCR 2.0, 2.5 -60A with Inbuilt Display+Ground Fault+ZCT35mmID | 24200 |
| | | BOCR2.0-60Z50* | EOCR 2.0, 2.5 -60A with Inbuilt Display+Ground Fault+ZCT50mmID | 24200 |
| | | BOCR2.0-60Z90* | EOCR 2.0, 2.5 -60A with Inbuilt Display+Ground Fault+ZCT90mmID | 25300 |
| | | BOCR2.0-60Z150* | EOCR 2.0, 2.5 -60A with Inbuilt Display+Ground Fault+ZCT150mmID | 25300 |
| BOCR 4.0 | 0.25 - 5.0 | BOCR4.0-05NN* | EOCR4.0.0, 0.25-5.0A with Ext. Display+ Cable | 24200 |
| | | BOCR4.0-05NM* | EOCR4.0.0, 0.25-5.0Amp with Ext. Display+ Cable+Comm | 28600 |
| | | BOCR4.0-05Z35N* | EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT35mmID | 30800 |
| | | BOCR4.0-05Z50N* | EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT50mmID | 31350 |
| | | BOCR4.0-05Z90N* | EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT90mmID | 31900 |
| | | BOCR4.0-05Z150N* | EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT150mmID | 32450 |
| | | BOCR4.0-05Z35M* | EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT35mmID+Comm | 35200 |
| | | BOCR4.0-05Z50M* | EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT50mmID+Comm | 35750 |
| | | BOCR4.0-05Z90M* | EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT90mmID+Comm | 36300 |
| | | BOCR4.0-05Z150M* | EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT150mmID+Comm | 36850 |
| | 2.5 - 60 | BOCR4.0-60NN* | EOCR4.0.0, 2.5A-60A with Ext. Display+ Cable | 24200 |
| | | BOCR-4.0-60NM* | EOCR4.0.0, 2.5A-60 with Ext. Display+ Cable+Comm | 28600 |
| | | BOCR-4.0-60Z35N* | EOCR4.0, 2.5A-60A with Ext. Display+Ground Fault+ZCT35mmID | 30800 |
| | | BOCR-4.0-60Z50N* | EOCR4.0, 2.5A-60A with Ext. Display+Ground Fault+ZCT50mmID | 31350 |
| | | BOCR-4.0-60Z90N* | EOCR4.0, 2.5A-60A with Ext. Display+Ground Fault+ZCT90mmID | 31900 |
| | | BOCR-4.0-60Z150N* | EOCR4.0,2.5A-60A with Ext. Display+Ground Fault+ZCT150mmID | 32450 |
| | | BOCR-4.0-60Z35M* | EOCR4.0, 2.5A-60A with Ext. Display+Ground Fault+ZCT35mmID+Comm | 35200 |
| | | BOCR-4.0-60Z50M* | EOCR4.0,2.5A-60A with Ext. Display+Ground Fault+ZCT50mmID+Comm | 35750 |
| | | BOCR-4.0-60Z90M* | EOCR4.0, 2.5A-60A with Ext. Display+Ground Fault+ZCT90mmID+Comm | 36300 |
| | | BOCR-4.0-60Z150M* | EOCR4.0, 2.5A-60A with Ext. Display+Ground Fault+ZCT150mmID+Comm | 36850 |

* For Control Voltage refer the Table Below
■ Above 60A external CT to be used with base unit range 0.25A - 5.0A

***Control Voltage Table**

| Voltage Range | Control Supply Code |
|---|---|
| 85-280V AC/DC | A |

**3 Phase External CT**

**HSN Code : 8536**

| Cat No. | Description | MRP[₹] |
|---|---|---|
| 3CTB-100-5 | BCH EOCR CT 100/5 | 5500 |
| 3CTB-150-5 | BCH EOCR CT 150/5 | 5500 |
| 3CTB-200-5 | BCH EOCR CT 200/5 | 6600 |
| 3CTB-300-5 | BCH EOCR CT 300/5 | 7150 |
| 3CTB-400-5 | BCH EOCR CT 400/5 | 7700 |

# Electronic Overcurrent Relay

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## SS

## SSD

- Over Current
- Locked Rotor
- Phase Loss

## 3DE

- Over Current
- Under Current
- Phase Loss
- Phase imbalance
- Phase Reversal
- Locked Rotor

## 3EZ

- Over Current
- Under Current
- Phase Loss
  Phase Unbalance
- Phase Reversal
- Locked Rotor
- Ground Fault

## PMZ

- Over Current
- Under Current
- Phase Loss
- Phase Unbalance

## PFZ

- Phase Reversal
- Locked Rotor
- Ground Fault
- 4-20mA analog outpur
- RS-485 Comm.

## IFDM/IFDZ

- Over Current
- Under Current
- Phase Loss
- Phase Unbalance
- Phase Reversal
- Locked Rotor
- Ground Fault *(in IFDZ model)*
- RS-485 communication

## Electronic Overcurrent Relay

**HSN Code : 8536**

| Model | Current Range | Cat. No. | Type | MRP [₹] |
|---|---|---|---|---|
| SS 05 | 0.5-6A | MP21SS005 ■ | Analog model | 7365 |
| SS 30 | 3.0 -30A | MP21SS030 ■ | | |
| SS 60 | 5.0-60A | MP21SS060 ■ | | |
| SSD 05 | 0.5-6A | MP22SSD005 ■ | Digital model/ Inbuilt display | 13320 |
| SSD 30 | 3.0 -30A | MP22SSD030 ■ | | |
| SSD 60 | 10-60A | MP22SSD060 ■ | | |
| 3DE 05 | 0.5-7.0A | MP353DE05D ■H | buit-in display, bottom hole | 40640 |
| 3DE 80 | 5.0-80A | MP353DE80D ■H | | |
| FDE 05 | 0.5-7.0A | MP35FDE05D ■H | Flush mounted display #, bottom hole | 46000 |
| FDE 80 | 5.0-80A | MP35FDE80D ■H | | |
| 3EZ 05 | 0.5-7.0A | MP363EZ05A ■H | buit-in display, bottom hole, G/F protection | 44230 |
| 3EZ 80 | 5.0-80A | MP363EZ80A ■H | | |
| FEZ 05 | 0.5-7.0A | MP36FEZ05A ■H | Flush mounted display #, bottom hole, G/F protection | 50085 |
| FEZ 80 | 5.0-80A | MP36FEZ80A ■H | | |
| PMZ | 0.5-100A | MP37PMZWRD■H | 4-20mZ analog output, buit-in display | On request |
| PFZ | 0.5-100A | MP37PFZWRD ■H | 4-20mZ analog output, Flush mounted display# | On request |
| IFDM | 0.5-60A | MP39-IFDM400H ■ | RS-485 comm./ Flush mounted display# | On request |
| IFDZ | 0.5-60A | MP39-IFMZ400H ■ | RS-485 comm./Earth fault/ Flush mounted display# | On request |

*Note : MP32 & MP34 Models are discontinued, please contact nearest sales office for availability till stock lasts*

■ **Control Voltage suffix**

| Model no. | Control voltage | | | | |
|---|---|---|---|---|---|
| | 24-240 VAC/DC | 380-440 VAC | 100-240 VAC | 24 VDC | 100-240 VAC/DC |
| SS | S4 | W1 | - | - | - |
| SSD | S4 | W4 | - | - | - |
| 3DE/FDE | - | - | Z4 | - | - |
| 3EZ/FEZ | - | - | Z4 | - | - |
| PMZ/PFZ | - | - | - | - | U |
| IFDM/IFDZ | - | - | - | - | U4 |
| DSD/DRD/DZD | - | - | YES | - | - |

## CTs

**HSN Code : 8536**

| Cat No. | Description | MRP[₹] |
|---|---|---|
| 2CT-D1-100-C | 2CT EP 100/5 | 5350 |
| 2CT-DH-150-C | 2CT EP 150/5 | |
| 2CT-D2-200-C | 2CT EP 200/5 | |
| 3CT-H1-100-C | 3CT version 100/5 | 8220 |
| 3CT-HH-150-C | 3CT version 150/5 | 8545 |
| 3CT-H2-200-C | 3CT version 200/5 | 9005 |
| 3CT-H3-300-C | 3CT version 300/5 | 9560 |
| 3CT-H4-400-C | 3CT version 400/5 | 10135 |
| ZCT-035 | ZCT version 35mm hole | 9750 |
| ZCT-080 | ZCT version 80mm hole | 12695 |
| ZCT-120 | ZCT version 120mm hole | 22480 |

*ZCT must be used for ground Fault protection alongwith EOCR*

## # Cable for separate display Models

**HSN Code : 8536**

| Cat No. | For model | Range | MRP [₹] |
|---|---|---|---|
| CABLE-RJ45-003 | FDEFEZ/PFZ IFDM/IFDZ | CABLE-RJ45 3m EOCR-IFD model | 2785 |

*Note : Cable must be ordered separately along with the EOCR*

## MPH range (0.1 to 63A)

- ON/OFF Rotary knob with manual operation
- Clear trip indication with rotary knob
- 1 NO + 1 NC - Front & side mounted Aux. Contact
- Trip indicator for visual discrimination between short circuit & over load tripping
- Undervoltage / Shunt Release
- PAD Lock facility
- Extended Handle
- Mag only version also available
- Plastic Enclosures

MPH32 MPH63

**HSN Code : 8536**

| Frame | Cat code | Thermal release range (A) | Icu (kA) 415V, 50Hz | MRP [₹] | Cat code | Rating (A) | Icu (kA) 415V, 50Hz | MRP [₹] |
|---|---|---|---|---|---|---|---|---|
| 32A | **Thermal-Magnetic release** | | | | **With magnetic trip only (No thermal release)** | | | |
| | MPH32-0.16 | 0.1- 0.16 | 100kA | 6265 | MPH32M-0.16 | 0.16 | 100kA | 6115 |
| | MPH32-0.25 | 0.16-0.25 | 100kA | | MPH32M-0.25 | 0.25 | 100kA | |
| | MPH32-0.4 | 0.25-0.4 | 100kA | | MPH32M-0.4 | 0.4 | 100kA | |
| | MPH32-0.63 | 0.4-0.63 | 100kA | 6615 | MPH32M-0.63 | 0.63 | 100kA | 6455 |
| | MPH32-1.0 | 0.63-1.0 | 100kA | 6870 | MPH32M-1.0 | 1.0 | 100kA | |
| | MPH32-1.6 | 1.0-1.6 | 100kA | 7000 | MPH32M-1.6 | 1.6 | 100kA | 6315 |
| | MPH32-2.5 | 1.6-2.5 | 100kA | | MPH32M-2.5 | 2.5 | 100kA | |
| | MPH32-4.0 | 2.5-4.0 | 100kA | 7110 | MPH32M-4.0 | 4.0 | 100kA | 6695 |
| | MPH32-6.3 | 4.0-6.3 | 100kA | 7310 | MPH32M-6.3 | 6.3 | 100kA | 6870 |
| | MPH32-10 | 6.3-10 | 100kA | 7395 | MPH32M-10 | 10 | 100kA | 6985 |
| | MPH32-16 | 10-16 | 50kA | 8575 | MPH32M-16 | 16 | 50kA | 7750 |
| | MPH32-20 | 16-20 | 50kA | 9775 | MPH32M-20 | 20 | 50kA | 7955 |
| | MPH32-25 | 20-25 | 50kA | 10475 | MPH32M-25 | 25 | 50kA | 7890 |
| | MPH32-32 | 25-32 | 50kA | 16440 | MPH32M-32 | 32 | 50kA | 13775 |
| 63A | MPH63-16 | 11-16 | 50kA | 17815 | MPH63M-16 | 16 | 50kA | 17135 |
| | MPH63-20 | 14-20 | 50kA | | MPH63M-20 | 20 | 50kA | |
| | MPH63-25 | 18-25 | 50kA | | MPH63M-25 | 25 | 50kA | |
| | MPH63-32 | 22-32 | 50kA | 29945 | MPH63M-32 | 32 | 50kA | 29590 |
| | MPH63-40 | 28-40 | 50kA | | MPH63M-40 | 40 | 50kA | |
| | MPH63-45 | 36-45 | 50kA | | MPH63M-45 | 45 | 50kA | |
| | MPH63-50 | 40-50 | 50kA | 31800 | MPH63M-50 | 50 | 50kA | 31385 |
| | MPH63-63 | 45-63 | 50kA | | MPH63M-63 | 63 | 50kA | |

## Accessories for MPH MPCB

**HSN Code : 8538**

Front mounted aux contact

Side mounted aux contact

Trip indicator - side mounted

UV/Shunt - side mounted

Extended handle - 32A MPCB

Plastic enclosure - 32A MPCB

| Cat code | Description | MRP [₹] |
|---|---|---|
| MPHF11 | Front aux contact 1NO+1 NC MPCB | 1235 |
| MPHS11 | Side aux contact 1NO+1 NC MPCB | 1590 |
| MPHT11 | MPCB Trip Indicator | 1870 |
| MPH024UR | UV Rel. 24V 50HZ MPCB | 3175 |
| MPH020UR | UV Rel. 20V 50HZ MPCB | |
| MPH115UR | UV Rel. 110-115V 50HZ MPCB | |
| MPH180UR | UV Rel. 180V 50HZ MPCB | |
| MPH240UR | UV Rel. 230-240V 50HZ MPCB | |
| MPH380UR | UV Rel. 380V 50HZ MPCB | |
| MPH415UR | UV Rel. 400-415V 50HZ MPCB | |
| MPH500UR | UV Rel. 500V 50HZ MPCB | |
| MPH024SR | Shunt Rel. 20-24V 50/60HZ MPCB | |
| MPH048SR | Shunt Rel. 40-48V 50/60HZ MPCB | |
| MPH240SR | Shunt Rel. 200-240V 50/60HZ MPCB | |
| MPH440SR | Shunt Rel. 365-440V 50/60HZ MPCB | |
| MPH127SR | Shunt Rel. 100-127V 50/60HZ MPCB | |
| MPH34 | Extnd rotary handle for 32A | 2500 |
| B31SMA1 | Plastic enclosure for MPH32 MPCB | 3325 |
| MPH64 | Extnd Rotary Handle for MPH 63A MPCB | 2560 |
| MPHT11F2 | LHS Trip Indicator for 63A F2 MPCB | 3430 |

- Electronic Switching of loads - silent operation
- Life Over 100 million operations
- High Switching Frequency
- Ideal for dusty & corrosive atmosphere
- Impact & Vibration resistant
- Direct compatibility with PLC
- LED Indication as option

## Solid State Relays (SSR)
## Single Phase SSR's for Heating Applications
## SC9 Series 1-Phase ZERO CROSS Without LED

**HSN Code : 8536**

| Cat. No. | MOQ | AC51 Rating | $I^2t$ ($A^2S$) | Peak Voltage | Operating Voltage | Control Voltage | MRP [₹] |
|---|---|---|---|---|---|---|---|
| SC941110L | 5 | 12A | 72 | 600V AC | 12-280V AC | 4-30V DC | 3295 |
| SC942110L | 5 | 25A | 288 | 600V AC | 12-280V AC | 4-30V DC | 3850 |
| SC944110L | 5 | 40A | 612 | 600V AC | 12-280V AC | 4-30V DC | 5680 |

MOQ - Minimum Order Qty.

## SC9 Series 1-Phase ZERO CROSS With LED

**HSN Code : 8536**

| Cat. No. | MOQ | AC51 Rating | $I^2t$ ($A^2S$) | Peak Voltage | Operating Voltage | Control Voltage | MRP [₹] |
|---|---|---|---|---|---|---|---|
| SC941160L | 5 | 12A | 72 | 600V AC | 12-280V AC | 4-30V DC | 3320 |
| SC942160L | 5 | 25A | 288 | 600V AC | 12-280V AC | 4-30V DC | 3895 |
| SC944160L | 5 | 40A | 612 | 600V AC | 12-280V AC | 4-30V DC | 5765 |
| SC945160L | 5 | 50A | 1500 | 600V AC | 12-280V AC | 4-30V DC | 10270 |
| SC947160L | 5 | 75A | 5000 | 600V AC | 12-280V AC | 4-30V DC | 11405 |

MOQ - Minimum Order Qty.

**Innovation - Performance-Design**

- Removable IP20 flaps.
- Only 29 mm height.
- Designed for all types of loads.
- TMS$^2$ Technology with very long life expectancy.
- Control Status LED.
- Very low zero cross level.
- UL/cUL, VDE (EN60950), IEC/EN60947-4-3, CE marking

## SO9 Series 1-Phase ZERO CROSS With LED in okpac® Housing IP20 Protection

**HSN Code : 8536**

| Cat. No. | MOQ | AC51 Rating | $I^2t$($A^2S$) | Peak Voltage | Operating Voltage | Control Voltage | MRP [₹] |
|---|---|---|---|---|---|---|---|
| SO942560* | 19 | 25A | 600 | 600V AC | 12-280V AC | 7-30V DC | 8760 |
| SO963460* | 19 | 35A | 1250 | 1200V AC | 24-600V AC | 3.5-32V DC | 11340 |
| SO945460* | 19 | 50A | 2500 | 600V AC | 12-280V AC | 3-32V DC | 12055 |
| SO965460* | 19 | 50A | 2800 | 1200V AC | 24-600V AC | 3.5-32V DC | 12630 |
| SO967460* | 19 | 90A | 7200 | 1200V AC | 24-600V AC | 3.5-32V DC | 14565 |

MOQ - Minimum Order Qty.

## SU Range

- Designed for resistive load
- With pluggable connector on input
- IP20 protection with Removable
- For mounting on Heat sink or panel mount
- Over voltage protection on input
- Control Status LED
- Very low zero cross level
- Quick and easy connection

### SU9 Series 1-Phase ZERO CROSS With LED in okpac® Housing IP20 Protection

**HSN Code : 8536**

| Cat. No. | MOQ | AC51 Rating | Peak Voltage | Operating Voltage | Control Voltage | MRP [₹] |
|---|---|---|---|---|---|---|
| SU942460* | 36 | 25A | 600V AC | 12-280A AC | 3-32V DC | 8230 |
| SU963460* | 36 | 35A | 1200V AC | 24-600V AC | 3.5-32V DC | 10205 |
| SU965460* | 36 | 50A | 1200V AC | 24-600V AC | 3.5-32V DC | 10905 |
| SU967460* | 36 | 75A | 1200V AC | 24-600V AC | 3.5-32V DC | 13555 |

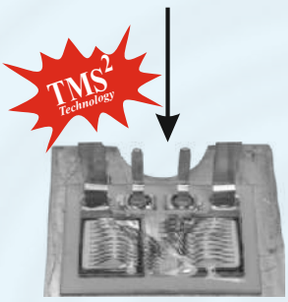
### Single Phase SSR's for Capacitor Control Applications SO8 Series 1-Phase With LED in okpac® Housing IP20 Protection

**HSN Code : 8536**

| Cat. No. | MOQ | AC51 Rating | $I^2t(A^2S)$ | Peak Voltage | Operating Voltage | Control Voltage | MRP [₹] |
|---|---|---|---|---|---|---|---|
| SO842074* | 19 | 25A | 600 | 600V AC | 12-275V AC | 3-32V DC | 10655 |
| SO863070* | 19 | 35A | 1250 | 1200V AC | 24-510V AC | 3.5-32V DC | 11745 |
| SO845070* | 19 | 50A | 2500 | 600V AC | 12-275V AC | 3-32V DC | 12595 |
| SO848070* | 19 | 95A | 14400 | 600V AC | 12-275V AC | 3-32V DC | 18950 |
| SO889060* | 19 | 125A | 24000 | 1600V AC | 24-600V AC | 3.5-32V DC | 50280 |

MOQ - Minimum Order Qty.

**Direct Copper Bonding Technology**




- Fewer joints, fewer layers results in better thermal characteristics
- Extremely low temperature rise ensures long life

- IP20-RC and VDR Protection
- Designed for all types of load
- Thyristor technology

## Three Phase SSR's
## SGT Series 3-Phase With LED (ZERO CROSS) IP20 Protection

**HSN Code : 8536**

| Cat. No. | MOQ | AC51 Rating | AC53 Rating | $I^2t(A^2S)$ | Peak Voltage | Operating | Control Voltage | MRP [₹] |
|---|---|---|---|---|---|---|---|---|
| **DC CONTROL** | | | | | | | | |
| SGT8850200 | 16 | 50A | 12A | 2800 | 1600VAC | 24-640VAC | 4-30VDC | 52045 |
| SGT8670500 | 16 | 75A | 16A | 7200 | 1600VAC | 24-520VAC | 4-30VDC | 57240 |
| SGT8690500 | 16 | 125A | 32A | 22000 | 1600VAC | 24-520VAC | 4-30VDC | 70235 |
| **AC/DC CONTROL** | | | | | | | | |
| SGT8658500 | 16 | 50A | 12A | 2800 | 1600VAC | 24-520VAC | 24-255VAC/DC | 54590 |
| SGT8678500 | 16 | 75A | 16A | 7600 | 1600VAC | 24-520VAC | 24-255VAC/DC | 59975 |
| SGT8698500 | 16 | 125A | 32A | 22000 | 1600VAC | 24-520VAC | 24-255VAC/DC | 72950 |

MOQ - Minimum Order Qty.

Common IP20 Protective Cover for SC series SSR.

## Accessories for SSR

**HSN Code : 8538**

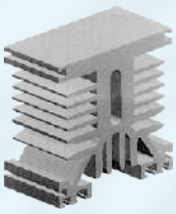
| Cat. No. | MOQ | Description | MRP [₹] |
|---|---|---|---|
| SC1K4600 | 20 | IP20 Cover SC* | 160 |
| SCHS6 DIN | 20 | Din Clip | 400 |
| SCHS2200 | 5 | Heat Sink 2.2K/W | 2060 |
| SCHS1100 | 5 | Heat Sink 1.1 K/W | 6635 |
| SCHS0900 | 5 | Heat Sink 0.9 K/W | 7805 |
| SCHS0300 | 5 | Heat Sink 0.3K/W | 12740 |

*IP20 Protective Cover for complete SC range
Refer to nearest branch office for heat sink selection

## Suggested Heat Sink Rth values (K/W) for load rating at diff. Ambient Temperature

| SSR Rating (A) | 25°C | 35°C | 45°C | 55°C |
|---|---|---|---|---|
| 12A | 2.2 | 2.2 | 2.2 | 1.1 |
| 25A | 1.1 | 1.1 | 0.3 | 0.3 |
| 40A | 0.3 | 0.3 | 0.3 | 0.3 |
| 50A | 0.3 | 0.3 | 0.3 | 0.3 |
| 75A | 0.3 | 0.3 | 0.3 | 0.3 |
| 95A | 0.3 | 0.3 | 0.3 | - |
| 125A | 0.3 | 0.3 | - | - |

* For Heat Sink Selection of SO7 / SO8 / SO9 / SG4 / SG5 ranges refer to nearest sales office



**Heat Sink - 65 mm**

- Wide range of Heat sinks offers perfect coordination with all SSRs

Note: Apply heat sink compound between SSR base and external heat sink. In case of closely packed units the ambient temperature condition should be considered carefully. For proper protection, short-circuit protection device (SCPD) (having $I^2t$ rating lower than that of SSR $I^2t$) must be used.

# DC Mill Duty Contactors

- Range : 50A-600A at 600VDC
- Ready to use mechanically inter locked versions
- Normally closed versions available
- Hold on coil for time delay
- Mechanical life : 20 million operations
- Electrical life : 1 million operations

BHARTIA
BCH

BCH
ELECTRIC
LIMITED

## DC Mill Duty Contactor

**HSN Code : 8536**

| No. of poles | (A) | Auxilliary Contacts | Cat. No. | MRP [₹] |
|---|---|---|---|---|
| 50 Amperes | | | | |
| Single pole Normally Open | 15A<br>25A<br>50A | 2NO+2NC<br>2NO+2NC<br>2NO+2NC | 912x1522 ▪<br>912x2522 ▪<br>912x5022 ▪ | On request<br>On request<br>57735 |
| Double pole Normally Open | 15A<br>25A<br>50A | 2NO+2NC<br>2NO+2NC<br>2NO+2NC | D912x1522 ▪<br>D912x2522 ▪<br>D912x5022 ▪ | On request<br>On request<br>124070 |
| Mechanically Interlocked 2 Nos. SP NO | 15A<br>25A<br>50A | 2NO+2NC<br>2NO+2NC<br>2NO+2NC | M912x1522 ▪<br>M912x2522 ▪<br>M912x5022 ▪ | On request<br>On request<br>137595 |
| 150 Amperes | | | | |
| Single pole Normally Open | 150A | 2NO+2NC | 914x22 ▪ | 98555 |
| Double pole Normally Open | 150A | 2NO+2NC | D914x22 ▪ | 211280 |
| Mechanically Interlocked 2 Nos. SP NO | 150A | 2NO+2NC | M914x22 ▪ | 222955 |
| Single pole Normally Closed | 150A | 1NO+1NC | 924x11 ▪ | 101520 |
| Double Pole Normally Closed | 150A | 2NO+2NC | D924x22▪ | 215350 |
| Single pole Normally Open with Holdout Coil # | 150A | 1NO+1NC | 934x11▪ /# | 106840 |
| Single pole Normally Open with AC Blow out Coil | 150A | 2NO+2NC | 974x22 ▪ | 124940 |
| 300 Amperes | | | | |
| Single pole Normally Open | 300A | 2NO+2NC | 915x22 ▪ | 143110 |
| Double pole Normally Open | 300A | 2NO+2NC | D915x22▪ | 304740 |
| Mechanically Interlocked 2 Nos. SP NO | 300A | 2NO+2NC | M915x22 ▪ | 316825 |
| Single pole Normally Closed | 300A | 1NO+1NC | 925x11 ▪ | 143820 |
| Double Pole Normally Closed | 300A | 2NO+2NC | D925x22 ▪ | 310650 |
| Single pole Normally Open with Holdout Coil # | 300A | 1NO+1NC | 935x11▪ /# | 155280 |
| Single pole Normally Open with AC Blow out Coil | 300A | 2NO+2NC | 975x22 ▪ | 180940 |

- From 50 A to 600 A
- Conforms to NEMA Standards
- Ready to use mechanically interlocked version
- Normally closed version
- Hold on coil for time delay
- Mechanical life : 20 million operation
- Electrical life : 1 million operation

Unique Arc quenching system with blow out coils for switching heavy duty loads

## DC Mill Duty Contactor

**HSN Code : 8536**

| No. of poles | (A) | Auxilliary Contacts | Cat. No | MRP [₹] |
|---|---|---|---|---|
| 600 Amperes | | | | |
| Single pole Normally Open | 600A | 2NO+2NC | 916x22 ▪ | 318890 |
| Double pole Normally Open | 600A | 2NO+2NC | D916x22▪ | 662135 |
| Mechanically Interlocked 2 Nos. SP NO | 600A | 2NO+2NC | M916x22▪ | 672860 |
| Single pole Normally Closed | 600A | 1NO+1NC | 926x11 ▪ | 327785 |
| Single pole Normally Open with Holdout Coil# | 600A | 1NO+1NC | 936x11▪ /# | 405130 |
| Single pole Normally Open with AC Blow out Coil | 600A | 2NO+2NC | 976x22 ▪ | 416975 |

# For 934 / 935 / 936 with holdout coil use hold out suffix code from table on page no.10
▪ For coil voltage refer table on page no.10
⁎ 150, 300 & 600 Amps replace 'x' by 'y' for surface mounting rear connection, 'z' for elevated mounting rear connection
* Add Rs. 6660/- for AC Control

## Double Pole DC Mill Duty Contactor

**HSN Code : 8536**

| A | Auxilliary Contacts | Cat. No. | Unit Price [₹] |
|---|---|---|---|
| 150A | 2NO+2NC | 954x22 ▪ | 301560 |
| 300A | 2NO+2NC | 955x22 ▪ | 351850 |

## DC Mill Duty Contactors - Spares

**HSN Code : 8538**

| Description | Qty. Reqd. | 50A | | 150A | | 300A | | 600A | |
|---|---|---|---|---|---|---|---|---|---|
| | | Cat. No. | MRP [₹] | Cat. No. | MRP [₹] | Cat. No. | MRP [₹] | Cat. No. | MRP [₹] |
| DC Arc Chute Assy. Consisting of<br>a. LH Arc Shield<br>b. RH Arc Shield<br>c. DC Blow Out Arc Horn<br>d. DC Blow Out Arc Piece<br>e. DC Blow Out Spacer Assy.<br>f. Polarity Wire<br>g. Latch Strips (Top & Bottom)<br>h. Hardware for Polarity Wire & Latch | 1 Set | 9C9J101* | 30530 | 9C9P101 | 52280 | 9C9T101 | 75780 | 9C9V101 | 164915 |
| AC Arc Chute Assy. Consisting of<br>a. LH Arc Shield<br>b. RH Arc Shield<br>c. AC Blow Out Pole Piece<br>d. AC Blow Out Spacer Assy.<br>e. Polarity Wire<br>f. Latch Strips (Top & Bottom)<br>g. Hardware for Polarity Wire & Latch | 1Set | - | - | 9C9P102 | On request | 9C9T102 | On request | 9C9V102 | On request |
| Fixed & Moving Contacts | 1 Set | 9C9J105 | 6945 | 9C9P105 | 9560 | 9C9T105 | 15480 | 9C9V105 | 42080 |
| Contact Lever with Braid (for Single Pole) | 1 No. | 9C9J106 | 8445 | 9C9P106 | 13760 | 9C9T106 | 18210 | 9C9V106 | 31565 |
| Contact Lever with Braid (for Double Pole)+ | 1 No. | 9C9J106 | 8445 | 9C9P106 | 13760 | 9C9T106 | 18210 | 9C9V103 | 31565 |
| Set of Armature Spares Consisting of<br>a. Adjusting Pin<br>b.Contact lever spring<br>c. Contact lever spring pin with circlip<br>d. Armature hinge pin<br>e. Armature Securing pin | 1 Set | 9C9J107 | 2895 | 9C9P107 | 4000 | 9C9T107 | 5760 | 9C9V107 | 8355 |
| Set of Armature Spares for<br>924, 925, 926 Consisting of<br>a. Adjusting Pin<br>b. Contact lever spring<br>c. Contact lever spring pin with circlip<br>d. Armature hinge pin<br>e. Armature Securing pin<br>f. Armature spring<br>g. Spring retaining washer | 1 Set | - | - | 9C9P108 | 4870 | 9C9T108 | 8580 | 9C9V108 | 10350 |
| Set of Armature Spares for<br>934/935/936 Consisting of<br>a. Adjusting pin<br>b. Contact lever spring<br>c. Contact lever hinge pin<br>d. Armature hinge pin<br>e. Armature securing pin<br>f. Armature spring<br>g. Spring retaining washer<br>h. Adjusting screw | 1 Set | - | - | 9C9P109 | 5825 | 9C9T109 | 8580 | 9C9V109 | 10990 |
| Terminal Block | 1 | 9C9J110 | 3900 | 9C9P110 | 5095 | 9C9T110 | 7125 | 9C9V110 | 8895 |
| No Volt Coil for 912, 914, 915,<br>916, 934, 935 & 936<br>**Suffix voltage code | 1 | 9C9J111▪ | 15590 | 9C9P111▪ | 23825 | 9C9T111 ▪ | 31345 | 9C9V111▪ | 53985 |
| No Volt Coil for 924, 925, 926<br>**Suffix voltage code | 1 | - | - | 9C9P112▪ | 31345 | 9C9T112 ▪ | 48670 | 9C9V112▪ | 78610 |
| Coil clamp for 914 & 934 | 1 | - | - | 9C9P118 | 560 | - | - | - | - |
| Coil clamp for 924, 915, 935,<br>916 & 936 | 1 | - | - | 9C9P118 | 560 | 9C9T118 | 560 | 9C9V118 | On request |

▪ Suffix coil voltage code refer table
▪ Please add Rs.6660 for AC control

* Only item a to e is supplied in this set
+ For two Poles, need to order for 2 Nos.

## DC Mill Duty Contactors - Spares & Accessories

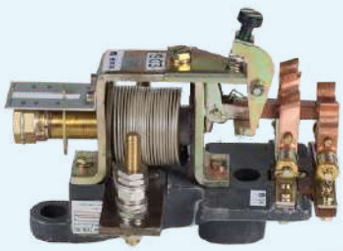
**HSN Code : 8538**

| Description | Cat. No. | MRP [₹] |
|---|---|---|
| 1NO+1NC Auxilliary Contact Block | AC10E11 | 12170 |
| 2NO Auxilliary Contact Block | AC10E20 | 12170 |
| 2NC Auxilliary Contact Block | AC10E02 | 12170 |
| Single unit driver with mounting plate (50A) | 9C9J115 | 1935 |
| Double unit driver with mounting plate (50A) | 9C9J116 | 2795 |
| Single unit driver with mounting plate (150-600A) | 9C9P116 | 2100 |
| Double unit driver with mounting plate (150-600A) | 9C9P117 | 3065 |
| Hold out coil for 934, 935 & 936 | 9C9P113-# | 37820 |
| Condenser 50 + 50uF for 934, 935 & 936 | 9C9P114 | 2100 |
| Mechanical interlock for 150/300/600A | AC10M4/M8/M12 | 13565 |
| Rectifier 110/240 V | SP30R | 7160 |

# Suffix hold out coil code from table

## Hold Out Coil Suffix table - 934/935/936

| Hold out coil type | Voltage | Suffix code |
|---|---|---|
| 494-2 | 100/125 | 2 |
| 494-7 | 400/450 | 7 |
| 492-12 | 100/125 | 12 |
| 494-43 | 200/250 & 400/550 | 43 |



- Magnetic Operated Overload relay for heavy duty applications
- From 1.5A to 600A
- Instantaneous and Time delay tripping
- Manual and automatic resetting
- 1NO + 1NC Contacts

## DC Magnetic Overload Relays *

**HSN Code : 8536**

| Cat. No. | Coil No. | Continuous Rating | Range Amps | MRP [₹] |
|---|---|---|---|---|
| B3A23 | 159-10 | 2.8 | 1.5 to 3.5 | 33055 |
| B3B23 | 159-5 | 3.9 | 3 to 7 | |
| B3C23 | 159-4 | 5.4 | 5 to 13 | |
| B3E23 | 159-3 | 10.9 | 8 to 24 | |
| B3F23 | 159-2 | 16.9 | 10 to 30 | |
| B3G23 | 159-1 | 21.9 | 20 to 40 | |
| B3H23 | 159-8 | 34.9 | 25 to 65 | |
| B3J23 | 159-6 | 50.0 | 35 to 75 | |
| B3K23 | 179-39 | 69.0 | 40 to 120 | 38730 |
| B3L23 | 179-38 | 109.0 | 70 to 190 | |
| B3M23 | 179-37 | 179.0 | 100 to 300 | |
| B3N23 | 179-36 | 299.0 | 200 to 600 | 42230 |
| B3Y23 | 179-36.2 | 199.0 | 200 to 600 | |
| B3P23 | | 549.0 | 300 to 900 | 51360 |
| B3R23 | | 500.0 | 500 to 1500 | |

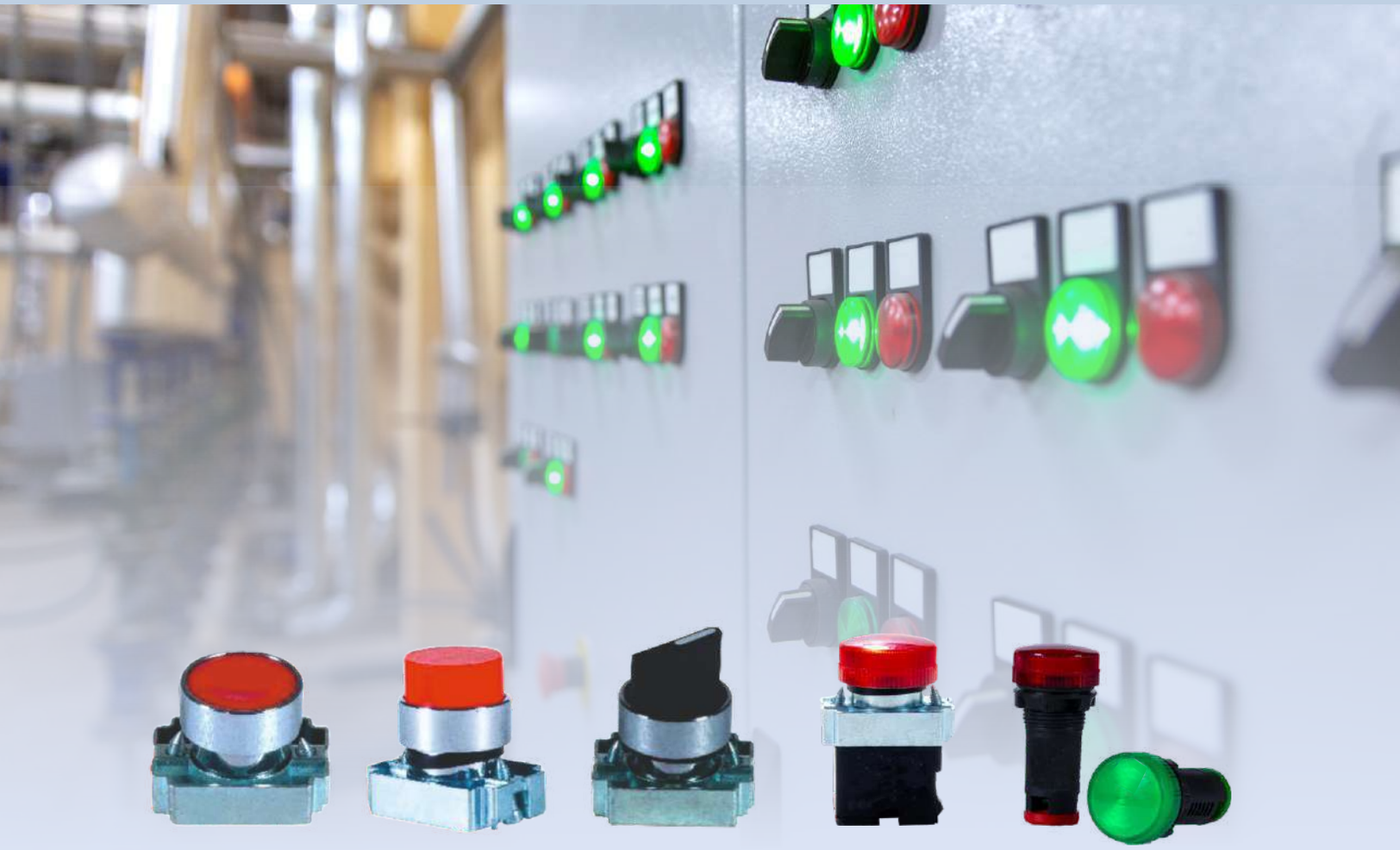
* With 1NO + 1NC Contacts

## Coil Voltage table - DC Mill Duty Contactor

| | | 24V | 48V | 55V | 110V | | 220V | 240V | 250V |
|---|---|---|---|---|---|---|---|---|---|
| DC CONTACTOR | PRODUCT | DC | DC | DC | AC | DC | DC | AC | F1 |
| | 912X | U1 | - | Q1 | A1R | A1 | B1 | K1R | F1 |
| | 914;934X | U1 | W1 | Q1 | A1R | A1 | B1 | K1R | F1 |
| | 935X;924;915 | U1 | W1 | Q1 | A1R | A1 | B1 | K1R | F1 |
| | 925 | - | - | - | - | A1 | B1 | K1R | F1 |
| | 916&936 | U1 | W1 | Q1 | A1R | A1 | B1 | K1R | F1 |
| | D912-D916 | - | W1 | - | A1R | A1 | B1 | K1R | F1 |

1. For other coil voltages, please contact nearest sales office
2. AC control is not available for 934, 935, 936 versions.
3. For ordering spare coils for D912, D914, D915 and D916 Contactors, please order coils with 50% voltage rating as that of control voltage. Example to order coils for D914 X 22B1 (which is a 220V DC DP Contactor), please order spare coils with 110V DC rating.

# Control & Signaling Devices - 22.5 mm



Metal Series Actuators & LED Indicating Lights

- Flush Head, Projected Head, Twin Head,
- Mushroom Head type- 40 & 60 mm,
- Selector Head : 2 Position, 3 Position, Key Actuator
- Illuminated type - Actuator, Selector Head, Twin Head
- Barrel LED Indicating Light (Standard & Multi Voltage)
- Pilot LED Indicating Light
- Wide colour options available

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LIMITED

## Control & Signalling Devices 22.5 mm - BML Metal Series ( Non - illuminated)

HSN Code : 8536

| Product | Description | Colour | Cat. No. | Unit MRP[₹] | Lot Size |
|---|---|---|---|---|---|
| | Flush Actuator | Red | BML22FA - R | 185 | 30 |
| | | Green | BML22FA - G | 185 | |
| | | Yellow | BML22FA - Y | 185 | |
| | | Blue | BML22FA - BL | 185 | |
| | | Black | BML22FA - BK | 185 | |
| | | White | BML22FA - W | 185 | |
| | Projecting Actuator | Red | BML22PA - R | 200 | 15 |
| | | Green | BML22PA - G | 200 | |
| | | Yellow | BML22PA - Y | 200 | |
| | | Blue | BML22PA - B | 200 | |
| | | Black | BML22PA - BL | 200 | |
| | | White | BML22PA - W | 200 | |
| | Mushroom Actuator (Momentary) Head – Φ 40mm | Red | BML22MM4 - R | 265 | 20 |
| | | Green | BML22MM4 - G | 265 | |
| | | Yellow | BML22MM4 - Y | 265 | |
| | | Blue | BML22MM4 - BL | 265 | |
| | | Black | BML22MM4 - BK | 265 | |
| | | White | BML22MM4 - W | 265 | |
| | Mushroom Actuator (Twist to Release) Head – Φ 40mm | Red | BML22MT4 - R | 365 | 20 |
| | | Black | BML22MT4 - BK | 365 | |
| | Mushroom Actuator (Key to Release) Head – Φ 40mm | Red | BML22MK4 - R | 815 | 20 |
| | Mushroom Actuator (Momentary) Head – Φ 60mm | Red | BML22MM6 - R | 435 | 6 |
| | | Green | BML22MM6 - G | 435 | |
| | | Yellow | BML22MM6 - Y | 435 | |
| | | Blue | BML22MM6 - BL | 435 | |
| | | Black | BML22MM6 - BK | 435 | |
| | | White | BML22MM6 - W | 435 | |
| | Mushroom Actuator (Twist to Release) Head – Φ 60mm | Red | BML22MT6 - R | 470 | 6 |
| | | Black | BML22MT6 - BK | 470 | |

## Control & Signalling Devices 22.5 mm – BML Metal Series ( Non - illuminated)

HSN Code : 8536

| Product | Description | Colour | | Cat. No. | Unit MRP [₹] | Lot Size |
|---|---|---|---|---|---|---|
| | Selector Knob Actuator | | | | | 15 |
| | 2 Position - Maintained | Black | ● | BML22SM2P - BK | 510 | |
| | 3 Position – Maintained (both side) | Black | ● | BML22SM3P - BK | 510 | |
| | 2 Position Spring Return | Black | ● | BML22SS2P - BK | 560 | |
| | 3 Position Spring Return (Both Side) | Black | ● | BML22SS3P - BK | 575 | |
| | Selector Key Actuator | | | | | 15 |
| | 2 Position - Maintained | Black | ● | BML22SK2P - BK | 710 | |
| | 3 Position - Maintained (both side) | Black | ● | BML22SK3P - BK | 745 | |
| | Twin Actuator (Spring Return with Green Knob "I" marked & Red Knob "O" marked) | Green & Red | ● & ● | BML22TA - RG | 315 | 15 |

## Control & Signalling Devices 22.5 mm - BML Metal Series (illuminated)

| | | | | | | |
|---|---|---|---|---|---|---|
| | LED Luminous Twin Actuator<br>AC/DC : 12V, 24V, 48V, 60V<br>DC :110V, 220V<br>AC : 110V, 240V, 440V | Red & Green Marked ( I/O ) & Amber LED | ● | BML22LTA □-A | 600 | 10 |
| | LED Luminous Actuator<br>AC/DC: 12V, 24V, 48V, 60V<br>DC:110V, 220V<br>AC: 110V, 240V, 440V | Red | ● | BML22LA □-R | 520 | 15 |
| | | Green | ● | BML22LA □-G | 520 | |
| | | Yellow | ● | BML22LA □-Y | 520 | |
| | | Clear | ● | BML22LA□-C | 520 | |
| | | Amber | ● | BML22LA□-A | 520 | |
| | | White | ● | BML22LA□-W | 835 | |
| | | Blue | ● | BML22LA□-BL | 835 | |

□ : Please mention voltage code from Table 2 (page no.71)

## Control & Signalling Devices 22.5 mm – BML Metal Series (illuminated)

HSN Code : 8536

| Product | Description | Colour | Cat. No. | Unit MRP [₹] | Lot Size |
|---|---|---|---|---|---|
| | LED Luminous 2 Position Selector Actuator (Maintained) AC/DC: 12V, 24V, 48V, 60V DC:110V, 220V AC: 110V, 240V, 440V | Red | BML22LSM2 □-R | 795 | 15 |
| | | Green | BML22LSM2 □-G | 795 | |
| | | Yellow | BML22LSM2 □-Y | 795 | |
| | | Clear | BML22LSM2 □-C | 795 | |
| | | Amber | BML22LSM2 □-A | 795 | |
| | | White | BML22LSM2 □-W | 1110 | |
| | | Blue | BML22LSM2 □-BL | 1110 | |
| | LED Luminous 3 Position Selector Actuator (Maintained) AC/DC: 12V, 24V, 48V, 60V DC:110V, 220V AC: 110V, 240V, 440V | Red | BML22LSM3 □-R | 795 | 15 |
| | | Green | BML22LSM3 □-G | 795 | |
| | | Yellow | BML22LSM3 □-Y | 795 | |
| | | Clear | BML22LSM3 □-C | 795 | |
| | | Amber | BML22LSM3 □-A | 795 | |
| | | White | BML22LSM3 □-W | 1110 | |
| | | Blue | BML22LSM3 □-BL | 1110 | |

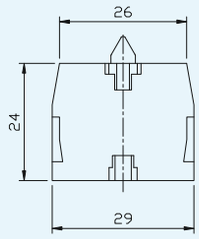
## Control & Signalling Devices 22mm – BIL/BML LED Indicating Light

| | | | | | |
|---|---|---|---|---|---|
| | LED Indicating Light - Standard (Barrel Type) AC/DC : 12V, 24V, 48V, 60V DC :110V, 220V AC : 110V, 240V, 440V | Red | BIL22BRS□-R | 270 | 30 |
| | | Green | BIL22BRS□-G | 270 | |
| | | Yellow | BIL22BRS□-Y | 270 | |
| | | Clear | BIL22BRS□-C | 270 | |
| | | Amber | BIL22BRS□-A | 270 | |
| | | White | BIL22BRS□-W | 480 | |
| | | Blue | BIL22BRS□-BL | 480 | |
| | LED Indicating Light - with LVGP (Barrel Type) AC/DC : 12V, 24V, 48V, 60V DC :110V, 220V AC : 110V, 240V, 440V | Red | BIL22BRP□-R | 325 | 30 |
| | | Green | BIL22BRP□-G | 325 | |
| | | Yellow | BIL22BRP□-Y | 325 | |
| | | Clear | BIL22BRP□-C | 325 | |
| | | Amber | BIL22BRP□-A | 325 | |
| | | White | BIL22BRP□-W | 540 | |
| | | Blue | BIL22BRP□-BL | 540 | |
| | LED Indicating Light - Universal Voltage (Barrel Type) 12-230V AC/DC | Red | BIL22BRUH4-R | 410 | 30 |
| | | Green | BIL22BRUH4-G | 410 | |
| | | Yellow | BIL22BRUH4-Y | 410 | |
| | | Clear | BIL22BRUH4-C | 410 | |
| | | Amber | BIL22BRUH4-A | 410 | |
| | | White | BIL22BRUH4-W | 625 | |
| | | Blue | BIL22BRUH4-BL | 625 | |
| | Pilot LED Indicating Light AC/DC : 12V, 24V, 48V, 60V DC :110V, 220V AC : 110V, 240V, 440V | Red | BML22PL□-R | 470 | 15 |
| | | Green | BML22PL□-G | 470 | |
| | | Yellow | BML22PL□-Y | 470 | |
| | | Clear | BML22PL□-C | 470 | |
| | | Amber | BML22PL□-A | 470 | |
| | | White | BML22PL□-W | 785 | |
| | | Blue | BML22PL□-BL | 785 | |

□ : Please mention voltage code from Table 2

## Control & Signalling Devices 22.5 mm - Accessories for BML Series

HSN Code : 8536

| Product | Description | Type | Cat. No. | Unit MRP [₹] | Lot Size |
|---|---|---|---|---|---|
| | Contact Element   | 1 NO | BML22CB10 | 140 | 50 |
| | | 1 NC | BML22CB01 | 140 | |
| | Legend Plate Metal | Aluminium | BML22LPM-□ | 50 | 30 |
| | Legend Plate Plastic Yellow Colour | Emergency / Stop | BML22LPP - 23 | 50 | 30 |
| | Hole Closer | Plastic | BML22HC | 90 | 50 |
| | Rubber Boot for Flush Actuator | Transparent | BML22RB | 100 | 20 |
| | Rubber boot for Illuminated Push Button | Clear | BML22LRB | 105 | 20 |

□: Please mention legend plate code from Table 1

## Suffix Code Table

**Table 1 ( Legend Plate)**

| Legend Plate | Code | legend Plate | Code |
|---|---|---|---|
| Start | 1 | OFF | 12 |
| Stop | 2 | Right | 13 |
| Forward | 3 | Left | 14 |
| Reverse | 4 | TRIP | 15 |
| UP | 5 | Local | 16 |
| DOWN | 6 | Remote | 17 |
| Open | 7 | Test | 18 |
| Close | 8 | Run | 19 |
| Auto | 9 | R Phase | 20 |
| Reset | 10 | Y Phase | 21 |
| ON | 11 | B Phase | 22 |

**Table 2 ( Voltage Rating )**

| Voltage | Code |
|---|---|
| 12V AC/DC | S4 |
| 24V AC/DC | U4 |
| 48V AC/DC | W4 |
| 60V AC/DC | Y4 |
| 110V DC | E1 |
| 220V DC | H1 |
| 110V AC | E |
| 240V AC | H |
| 415V AC | M |

Note: FLEXI22 Push Button - 22.5mm are also available on request.

## Range

- Non illuminated and illuminated
- Flush
- Extended
- Mushroom head
- Lever and key type selector switch
- Indicators-Direct/Resistor/Transformer type
- Conforms to EN/IEC-60947-5/IS-13947-5

## Features

- Protection degree - IP65
- Rugged construction
- Ideal for motor control centers and control panels
- Proven time tested design

## Oil Tight Push Button & Indicating Lights - 'Type T' E 30.5 mm

**HSN Code : 8536**

| Type | Description | Cat. No. | MRP [₹] | Lot Size |
|---|---|---|---|---|
| Actuator | **Standard flush Button**<br>Red<br>Green<br>Black<br>Yellow<br>Blue<br>Orange<br>White | <br>TSFB-R<br>TSFB-G<br>TSFB-B<br>TSFB-Y<br>TSFB-BL<br>TSFB-O<br>TSFB-W | 455 | 20 |
| | **Long Button**<br>Red<br>Green<br>Black<br>Yellow<br>Blue<br>Orange<br>White | <br>TLB-R<br>TLB-G<br>TLB-B<br>TLB-Y<br>TLB-BL<br>TLB-O<br>TLB-W | 465 | 10 |
| | **Mushroom Head**<br>-Spring return Red<br>-Spring return Green<br>-Turn to release Red<br>-Turn to release Green | <br>TMH-R<br>TMH-G<br>TMHL-R<br>TMHL-G | <br>540<br>540<br>640<br>640 | 10 |
| | Selector Actuator<br>-2 or 3 position | TSSA *▪• | 1070 | 10 |
| | Cylindrical Lock<br>-2 or 3 positions | TCL*▪• | 1540 | 10 |
| Station | Start/Stop Pushbutton | E20EA | 1595 | 1 |
| Contact Block | 1NO +1NC<br>2NO<br>2NC | 050N1<br>050N2<br>050N3 | 700 | 20 |
| Aluminium Diecast Enclosure | One button<br>Two buttons<br>Three buttons | TEN-1<br>TEN-2<br>TEN-3 | 2395<br>2325<br>3145 | 1 |
| | | | **HSN Code : 8538** | |
| Accessories | Wrench for retaining ring<br>Plug for hole<br>Legend plate | TWN<br>TPL<br>050L^ | 535<br>255<br>120 | 1 |

Note: * Position-2 or 3 • Function M-maintained, S-Spring return ▪ Cam code 1/2/3 ^ Suffix Legend Code

## Oil Tight Indicating Light - E 30.5mm

**HSN Code : 8536**

| Description | Application | Cat. No. | List Price [₹] | Lot Size |
|---|---|---|---|---|
| (Without lens) Direct type | AC & DC | TILD•10 | 760 | 1 |
| Transformer type | AC | TILT•10 | 960 | 1 |
| **HSN Code : 8538** | | | | |
| Polycarbonate Lens | - | LENS* | 135 | 10 |
| Spare Bulb | AC & DC | SP61L# | 145 | 1 |

* Lens available in colours given below # Suffix voltage code lamp

## Voltage Code (Direct type lamps)

| Volts | 6 | 12 | 24 | 48 | 110 | 220 | 240 | 415 |
|---|---|---|---|---|---|---|---|---|
| Code | * | * | U | * | A | B | K | M |

## Voltage Code (Transformer type lamps)

| Volts | 110/6 | 110/24 | 220/6 | 240/24 | 415/6 |
|---|---|---|---|---|---|
| Code | A | * | * | K/U | * |

* Available on request

## Accessories for indicating light - E 30.5mm

**HSN Code : 8538**

| Description | Cat. No. | List Price [₹] | Lot Size |
|---|---|---|---|
| Signal lamp transformer | TR ▪ | 560 | 10 |

## Suffix Colour Code - 30.5 mm

| Colour | Suffix | Colour | Suffix |
|---|---|---|---|
| Red | 1P | Yellow | 5P |
| Green | 2P | White | 6P |
| Blue | 3P | Clear | 7P |
| Amber | 4P | | |

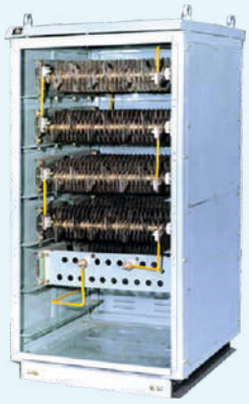
## Legend Plate - Suffix Code for E30 & 22.5

| Inscription | | Start | Stop | Inch | Forward | Reverse | UP | Down | Slow | Fast | Raise | Left | Motor Run | Motor Stop | Overload Tripped | Overload Reset | Power On |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Suffix code | Type T (30.5mm) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 10 | 11 | - | - | - | - | - | - |
| | E22 (22.5mm) | 34 | 35 | 14 | 07 | 41 | 40 | 04 | 33 | 06 | - | 18 | 22 | 23 | 30 | 31 | 32 |

| Inscription | | Stop Reset | Test | Trip | Lower | Off | On | Jog | Emergency Stop | Reset | High | Run | Close | Open | Blank | On-Off |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Suffix code | Type T (30.5mm) | - | - | - | 12 | 13 | 14 | 15 | 16 | 17 | 19 | 20 | 21 | 22 | 23 | 28 |
| | E22 (22.5mm) | 36 | 37 | 38 | - | 24 | 26 | - | 05 | - | 12 | - | 03 | 27 | 01 | - |

# Punched Grid Resistors

BHARTIA BCH



## Applications:

- Speed Control Resistors
- Starting Resistors for AC and DC Motors
- Dynamic Braking Resistors
- Neutral Grounding Resistors (upto 11KV)

## Features

- Special Chromiun Steel Alloy (AISI406) for :

a) Higher resistivity (approx 70% higher than others)
This results in overall light and compact unit

b) Low temperature coefficient (approx 72% lower than others)
This means negligible change in resistance values despite grid temperature variations (very important parameter in applications like crane controls)

c) Unbreakable and corrosion free Grids . Suitable for extreme vibration conditions

d) Drawout type of banks for ease of removal while replacements

e) Three rod construction for higher range resistance grid for improved mechanical strength

f) Individual grids are T.I.G. welded for consistent current path

g) Unique design using staggered grid pattern ensuring maximum air circulation

h) Terminal designed for 2 types of conductors ensuring flexibility

We also manufacture NGRs & DBRs

**GST to be charged extra on PGR Prices**

**PGRs are 10 minutes rated.**
**Temp. rise : 375 deg over ambient**

**Dimensions in mm (WxHxD) : 673x152x250** **HSN Code - 8533**

| Type | Resistance Per Bank | Continuous Rating | LP |
|---|---|---|---|
| | Ohms | Amps | [₹] |
| WL10 | 0.1 | 225 | 32870 |
| WL12 | 0.125 | 200 | 29080 |
| WL16 | 0.16 | 180 | 33600 |
| WL20 | 0.2 | 150 | 34305 |
| WL25 | 0.25 | 134 | 30290 |
| WL32 | 0.32 | 118 | 26820 |
| WL40 | 0.4 | 113 | 31015 |
| WL50 | 0.5 | 100 | 26205 |
| WL62 | 0.62 | 84 | 33810 |
| WL80 | 0.8 | 75 | 30645 |
| WL100 | 1 | 67 | 28485 |
| WL125 | 1.25 | 64 | 31710 |
| WL160 | 1.6 | 57 | 27360 |
| WL200 | 2 | 54 | 30465 |
| WL250 | 2.5 | 48 | 26890 |
| WL320 | 3.2 | 43 | 23560 |
| WL400 | 4 | 40 | 32800 |
| WL500 | 5 | 35 | 23805 |
| WL625 | 6.25 | 33 | 27185 |
| WL800 | 8 | 29 | 25360 |
| WL1200 | 12 | 21 | 27185 |
| WL1600 | 16 | 19 | 26370 |

**Dimensions in mm (WxHxD) : 800x152x250** **HSN Code - 8533**

| Type | Resistance Per Bank | Continuous Rating | LP |
|---|---|---|---|
| | Ohms | Amps | [₹] |
| WLL20(M)-1 | 0.325 | 150 | 53330 |
| WLL25(M)-1 | 0.54 | 134 | 50990 |
| WLL32(M)-1 | 0.68 | 118 | 43245 |
| WLL50(M)-1 | 0.864 | 100 | 36645 |

# Industrial Brakes

- **AC Solenoid & Brakes**
- **DC Brakes**

## AC Solenoid - Pull Type

**GST to be charged extra**
**HSN Code : 8505**

| Type | Suitable for | Stroke Length mm | Max. Pull at rated voltage Kg. | Cat. No. | List Price [₹] |
|---|---|---|---|---|---|
| B | S-42 | 25.0 | 1.25 | SLB▪ | 7540 |
| D | S-51, S-71<br>S-52, S-72 | 31.4 | 6.75 | SLD▪<br>SLD2▪ | 11120 |
| E | S-250 | 40 | 10 | SPSLEM<br>SPSLEB | 24180 |

* The standard coil voltages are 110, 220 & 415 V 50 Hz. AC

## AC Solenoid Brake - Type S

**GST to be charged extra**
**HSN Code : 8505**

| Type of Brake | Wheel dia. | | Max. Torque | | Duty | Brake | | Drum | |
|---|---|---|---|---|---|---|---|---|---|
| | Inch | mm | Lb. ft. | Nm | | Cat No. | List Price [₹] | Cat No. | List Price [₹] |
| S-4 | 4 | 101.6 | 10 | 13.6 | Continuous | S-42▪ | 17290 | AC50D4 | 2895 |
| S-5 | 5.5 | 139.7 | 25<br>35 | 34.0<br>48.0 | Continuous<br>Intermittent | S-51▪<br>S-52▪ | 24730 | AC50D5 | 4165 |
| S-7 | 7 | 177.8 | 50<br>75 | 68.0<br>102.0 | Continuous<br>Intermittent | S-71▪<br>S-72▪ | 28275 | AC50D7 | 5055 |
| S-250 | 9.84 | 250 | 109 | 147.0 | Continuous | S-2501M | 60825 | AC50D25 | 9775 |

- The standard coils are 110, 220 & 415 V 50 Hz. AC
▪ To complete Cat. No. suffix voltage code given below
- Brake drums are of standard specification

### Range

- Solenoids:
  - Type : SLB - 25 mm stroke length
  - Type : SLD - 31.4 mm stroke length
- AC Brakes
  - 4" Dia
  - 5.5" Dia
  - 7" Dia
- Drums

### Features

- Class F insulation of the coil
- Continuous & Intermittent duty
- Long life & ease of maintenance
- Ideally suited for applications such as :
  - Cranes
  - Hoists
  - Machines
  - Valves
  - Conveyers

## AC Solenoid Brakes - Voltage Codes

| Coil Voltage | 110 | 220 | 415 |
|---|---|---|---|
| AC | A | B | M |

## Spares For AC Solenoid Brake

**GST to be charged extra**
**HSN Code : 8505**

| Description | Brake Size : 4" | | Brake Size : 5.5" | | Brake Size : 7.0" | | Brake Size : 250mm | |
|---|---|---|---|---|---|---|---|---|
| | Cat. No. | List Price [₹] | Cat. No. | List Price [₹] | Cat. No. | List Price [₹] | Cat. No. | List Price [₹] |
| Brake lining | SP50L1 | 2125 | SP50L2 | 3150 | SP50L3 | 4210 | SP50L4 | 8230 |
| Brake shoe Assembly* | SP50SA1 | 6160 | SP50SA2 | 7950 | SP50SA3 | 13095 | SP50SA4 | 26365 |
| Brake Coil<br>-Continuous<br>-Intermittent | SP50MC01▪ | 3965 | SP50MC21▪<br>SP50MC22▪ | 7855 | SP50MC21▪<br>SP50MC22▪ | 7855 | SP50MC31▪ | 20745 |

* Brake shoe assembly is with lining.
▪ To Complete Cat. No. suffix voltage code is given in table, above.

***GST to be charged extra on all AC Brakes & Brake Spares**

- Shunt and Series type versions in sizes :
  8 Inch to 30 Inch
  160 mm to 800 mm
- Conforms to NEMA and AISE Standards
- Fail safe operation
- Unique design for maximum torque and minimum shoe wear
  Brakes equivalent to Russian 'TKπ' design also available
- **Resistance & rectifier Panel available with option of 'Fuse' or 'MCB' protection**

Proven and time tested

### Optional Features

- Limit Switch Attachment
- Manual Release
- Residual magnetism adjustment

Heavy duty encapsulated coil with class 'F' insulation

**GST to be charged extra**

**HSN Code : 8505**

## DC Electromagnetic Brakes

| Shunt Type Torque | | | | Resistance & Rectifier Panel (with fuse protection)+ | | | |
|---|---|---|---|---|---|---|---|
| | | | | Single Brake | | 2 Brakes Simult. Operation | |
| Drum Size | Cat No. | Torque KG-M | List Price [₹] | Cat No. | List Price [₹] | Cat No. | List Price [₹] |
| 150mm<br>160mm | SMH150<br>SMH160 | 8 | 87640 | CACS1*MAE | 91740 | CACS2*MAE | 127425 |
| 8"/200mm | SMH8 | 13.8 | 103165 | CACA1*MAE | 102270 | CACJ2*MAE | 132515 |
| | SMH200 | 13.8 | | | | | |
| 10"/250mm | SMH10 | 27.7 | 126640 | CACB1*MAE | 108510 | CACK2*MAE | 149160 |
| | SMH250 | 27.7 | | | | | |
| 13"/300mm | SMH13 | 76.0 | 207315 | CACC1*MAE | 117000 | CACL2*MAE | 173700 |
| | SMH300 | 76.0 | | | | | |
| 16"/400mm | SMH16 | 138.8 | 333695 | CACD1*MAE | 134725 | CACM2*MAE | 188755 |
| | SMH400 | 138.8 | | | | | |
| 19"/500mm | SMH19 | 277.0 | 537950 | CACE1*MAE | 162895 | CACN2*MAE | 238475 |
| | SMH500 | 277.0 | | | | | |
| 23"/600mm | SMH23 | 555.0 | 851380 | CACF1*MAE | 210030 | CACP2*MAE | 301700 |
| | SMH600 | 555.0 | | | | | |
| 30"/700mm | SMH30 | 1242.0 | 1895910 | CACG1*MAE | 829105 | - | - |
| | SMH700 | 1242.0 | | | | | |
| 800mm | SMH800 | 1242.0 | 2054120 | CACG1*MAE | 829105 | - | - |

* For control supply i.e. A=110 V, B=220 V, K =240V and M=415 V AC

1. DC Electromagnetic Brakes are suitable to operate on:
   For AC Power - Resistance & Rectifier Panel
   For DC Power - Series Resistance Box

\+ **For Panel with MCB protection use the suffix '- MCB'**
**eg. For 200mm single operation brake panel with MCB protection, Cat code will be CACA1*MAE-MCB**

- All Brakes are Supplied for Continuous Duty
- Resistance & Rectifier Panel is supplied without transformer.
- Control Transformer (Optional) can be supplied at extra cost.
  Please add Rs. 9730/- per unit with the LP of Resistance & Rectifier Panel. Please add 'TR' with respective panel cat. ref. to obtain final cat. Code of such panel with control transformer.

***GST to be charged extra on all DC Brakes, Brake Spares, Resistance & Rectifier Panel & Resistance Boxes**

# DC Brake Panel - Silicon Rectifier

- Time tested and proven BCH citation contactors.
- Canopy design as standard for effective cooling and ensuring enhanced performance.
- Heavy duty enclosures with advanced multi-stage surface pre-treatment & painting system.

**HSN Code: 8505**

| Cat No. | Silicon Resistance & Rectifier Panel with fuse protection as default | | | |
|---|---|---|---|---|
| | Single Brake | | 2 Brake wih Simult. Operation | |
| | Cat No. | List Price [₹] | Cat No. | List Price [₹] |
| SMH8<br>SMH200 | CACA1*MAE- SFD | 130750 | CACJ2*MAE- SFD | 157340 |
| SMH10<br>SMH250 | CACB1*MAE- SFD | 130720 | CACK2*MAE- SFD | 166910 |
| SMH13<br>SMH300 | CACC1*MAE- SFD | 164050 | CACL2*MAE- SFD | 175640 |
| SMH16<br>SMH400 | CACD1*MAE- SFD | 160240 | CACM2*MAE- SFD | 195230 |
| SMH19<br>SMH500 | CACE1*MAE- SFD | 214190 | CACN2*MAE- SFD | 249200 |
| SMH23<br>SMH600 | CACF1*MAE- SFD | 248810 | CACP2*MAE- SFD | 305440 |

## Options On Request

*For control supply i.e A=110V, B=220V, K=240V and M=415V AC

- For Panel with optional MCB protection use suffix - SMD

Eg . For 200mm single operation brake panel with MCB protection, cat code will be CACA1*MAE - SMD

- For spare parts requirement please check with nearest BCH branch office.
- GST to be charged extra on all DC Brake panel

## Resistance Boxes for DC Electromagnetic Brakes

**GST to be charged extra**

**HSN Code : 8505**

| Suitable for Shunt Type | | Permanent Series Resistance Box for 230 V DC Supply For Single Brake | | Permanent Series Resistance Box for 230 V AC Supply For Single Brake | | Permanent Economy Resistance Box for 415 V AC Supply For Single Brake | | Permanent Economy Resistance Box for 415 V AC Supply For Double Brake | |
|---|---|---|---|---|---|---|---|---|---|
| Cat No. | Torque KGM | Cat No. | List Price [₹] | Cat No. | List Price[₹] | Cat No. | List Price[₹] | Cat No. | List Price[₹] |
| SMH150 / SMH160 | 8 | CDCS101D | 11715 | CARS10KE | 10720 | CARS10ME | 21620 | CARS20ME | On request |
| SMH8 / SMH200 | 13.8 | CDCA101D<br>CDIA101D* | 12170 | CARA10KE | 11080 | CARA10ME | 21620 | CARA20ME | On request |
| SMH10 / SMH250 | 27.7 | CDCB101D<br>CDIB101D* | 14430 | CARB10KE | 12755 | CARB10ME | 21620 | CARB20ME | On request |
| SMH13 / SMH300 | 76.0 | CDCC101D<br>CDIC101D* | 16655 | CARC10KE | 15115 | CARC10ME | 24740 | CARC20ME | 33800 |
| SMH16 / SMH400 | 138.8 | CDCD101D<br>CDID101D* | 17820 | CARD10KE | 16250 | CARD10ME | 28755 | CARD20ME | 35510 |
| SMH19 / SMH500 | 277.0 | CDCE101D<br>CDIE101D* | 19085 | CARE10KE | 17415 | CARE10ME | 31915 | CARE20ME | On request |
| SMH23 / SMH600 | 555.0 | CDCF101D<br>CDIF101D* | 21730 | CARF10KE | 19560 | CARF10ME | 34295 | CARF20ME | On request |
| SMH30 / SMH700 | 1242.0 | CDCG101D<br>CDIG101D* | On request | - | - | CARG10ME | 59170 | - | - |
| SMH800 | 1242.0 | CDIG101D* | On request | - | - | CARG10ME | 59170 | - | - |

1. DC Electromagnetic Brakes are suitable to operate on:
   For AC Power - Resistance & Rectifier Panel
   For DC Power - Series Resistance Box

- All Brakes are Supplied for Continuous Duty
* These cat. references are meant for intermittent duty

***GST to be charged extra on all DC Brakes, Brake Spares, Resistance & Rectifier Panel & Resistance Boxes.**

**GST to be charged extra**

## Series Type - DC Electromagnetic Brakes

**HSN Code : 8505**

| Brake Size | Motor Frame No. (Max.) | Half Hour Rating | | | One Hour Rating | | | List Price [₹] |
|---|---|---|---|---|---|---|---|---|
| | | Torque KGM | Max. FLC (A) | Cat. No. | Torque KGM | Max. FLC (A) | Cat. No. | |
| 8”/200mm | 402,802A | 13.8 | 29 | SME8H1 SME200H1 | 8.97 | 21 | SME801 SME20001 | 212525 |
| | 403, 602, 802B | | 44 | SME8H2 SME200H2 | | 31 | SME802 SME20002 | On request |
| 10”/250mm | 404,603,802C, | 27.7 | 57 | SME10H1 SME250H1 | 18.0 | 40 | SME1001 SME25001 | 303205 |
| | 406,604,803 | | 77 | SME10H2 SME250H2 | | 57 | SME1002 SME25002 | On request |
| 13”/300mm | 408,606,804 | 76.0 | 126 | SME13H1 SME300H1 | 49.4 | 95 | SME1301 SME30001 | 410780 |
| | 410,608,806 | | 176 | SME13H2 SME300H2 | | 132 | SME1302 SME30002 | On request |
| 16”/400mm | 412,610,808 | 138.8 | 245 | SME16H1 SME400H1 | 90.2 | 185 | SME1601 SME40001 | 642865 |
| 19”/500mm | 414,612,810 | 277.0 | 368 | SME19H1 SME500H1 | 180.0 | 272 | SME1901 SME50001 | 987600 |
| | 416,614,812 | | 500 | SME19H2 SME500H2 | | 360 | SME1902 SME50002 | On request |
| 23”/600mm | 418,616,814 | 555.0 | 740 | SME23H1 SME600H1 | 361.0 | 540 | SME2301 SME60001 | 1597805 |
| | 618,816 | | 960 | SME23H2 SME600H2 | | 730 | SME2302 SME60002 | On request |

- During ordering, besides brake drum dia, please confirm duty rating, current rating & motor frame Nos.
- Above current ratings are for 230 V DC Series Motors.
- To convert KGM to LB.FT. multiply by 7.25

***GST to be charged extra on all DC Brakes, Brake Spares, Resistance & Rectifier Panel & Resistance Boxes.**

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**GST to be charged extra**

## Series & Accessories - DC Eectromagnetic Brakes

**HSN Code : 8505**

| Description | 150/160mm | | 8"/200mm | | 10"/250mm | | 13"/300mm | |
|---|---|---|---|---|---|---|---|---|
| | Cat No. | List Price [₹] | Cat No. | List Price [₹] | Cat No. | List Price [₹] | Cat No. | List Price [₹] |
| Coil Shunt | 9GDS01 | 73545 | 9GDA01 | 87080 | 9GDB01 | 105250 | 9GDC01 | 174040 |
| Coil Series for inch<br>for mm | - | - | 9GDA02/<br>9GDA03 | 177065 | 9GDB02/<br>9GDB03 | 277535 | 9GDC02/<br>9GDC03 | 373865 |
| Torque Adj. Screw Assembly | 9GDS04 | 6405 | 9GDA04 | 6700 | 9GDB04 | 6700 | 9GDC04 | 12125 |
| Torque Spring | 9GDS05 | 17445 | 9GDA05 | 18210 | 9GDB05 | 21510 | 9GDC05 | 34820 |
| Wedge Assembly with Bolt, Spring and Washers for inch/mm | 9GDS20/<br>9GDS22 | 2500 | 9GDA20/<br>9GDA22 | 2860 | 9GDB20/<br>9GDB22 | 3320 | 9GDC20/<br>9GDC22 | 5060 |
| Pin set for Lever & Armature Consisting of<br>a) Pin Lever 2 Nos.<br>b) Pin armature 2 Nos. | 9GDS06 | 8800 | 9GDA06 | 9230 | 9GDB06 | 9230 | 9GDC06<br>9GDC06-2# | 11640 |
| Coller Set of Lever & Armature Consisting of<br>a) Coller Lever 4 Nos.<br>a) Coller Armature 4 Nos. | 9GDS07 | 8800 | 9GDA07 | 9230 | 9GDB07 | 9230 | 9GDC07 | 11070 |
| Bush Set for Lever & Armature Consisting of<br>a) Bush Lever 4 Nos.<br>a) Bush Armature 4 Nos. | 9GDS08 | 17445 | 9GDA08 | 18290 | 9GDB08 | 18290 | 9GDC08 | 19925 |
| Pull Rod Assembly with nuts, spring & washer | 9GDS29 | 7135 | 9GDA29 | 7470 | 9GDB29 | 9230 | 9GDC29 | 14195 |
| Greese Nipple (1 set consist 8 Nos.) | 9GDS09 | 2500 | 9GDA09 | 2650 | 9GDB09 | 2650 | 9GDC09 | 2675 |
| Shoe Assembly with Clamp & Bolts (1 set consist 2 Nos.) for inch/mm | 9GDS10/<br>9GDS11 | 18155 | 9GDA10/<br>9GDA11 | 18085 | 9GDB10/<br>9GDB11 | 22425 | 9GDC10/<br>9GDC11 | 35300 |
| Shoe Lining without Bolts (1 set consist 2 Nos.) for inch<br>for mm | 9GDS12/<br>9GDS13 | 6165 | 9GDA12/<br>9GDA13 | 6405 | 9GDB12/<br>9GDB13 | 8065 | 9GDC12/<br>9GDC13 | 11640 |
| Shoe Lining with Bolts (1 set consist 2 Nos.) for inch<br>for mm | 9GDS23/<br>9GDS26 | 8330 | 9GDA23/<br>9GDA26 | 9230 | 9GDB23/<br>9GDB26 | 11640 | 9GDC23/<br>9GDC26 | 16620 |
| Dust Cover (made of jeans cloth & painted with fire reterdent al. paint). | - | - | 9GDA30 | 10270 | 9GDB30 | 10270 | 9GDC30 | 12220 |
| mm Size Cast Steel Drum without Hard Chrome Plating | 9GDS15/ (150mm)<br>9GDS14 (160mm) | 19840 | 9GDA14 | 21830 | 9GDB14 | 33610 | 9GDC14 | 59320 |
| mm Size Cast Steel Drum with Hard Chrome Plating | 9GDS15P/ (150mm)<br>9GDS14P (160mm) | 26795 | 9GDA14P | 31245 | 9GDB14P | 48785 | 9GDC14P | 82055 |
| Cast Steel Drum without Hard Chrome Plating* for inch | - | - | 9GDA15 | 22640 | 9GDB15 | 34835 | 9GDC15 | 58890 |
| Cast Steel Drum with Hard Chrome Plating* for inch | - | - | 9GDA15P | 32490 | 9GDB15P | 49980 | 9GDC15P | 85395 |

* For brakes manufactured upto September 07. # For brakes manufactured after September 07 (pins are different).

***GST to be charged extra on all DC Brakes, Brake Spares, Resistance & Rectifier Panel & Resistance Boxes.**

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**GST to be charged extra**

## Spares & Accessories - DC Brakes

**HSN Code : 8505**

| Description | 16"/400 mm | | 19"/500 mm | | 23"/600 mm | | 30"/700 mm/800mm | |
|---|---|---|---|---|---|---|---|---|
| | Cat No. | List Price [₹] | Cat No. | List Price [₹] | Cat No. | List Price [₹] | Cat No. | List Price [₹] |
| Coil Shunt | 9GDD01 | 253965 | 9GDE01 | 415995 | 9GDF01 | 560360 | 9GDG01 | 1269530 |
| Coil Series for inch<br>for mm | 9GDD02<br>9GDD03 | 528065 | 9GDE02<br>9GDE03 | 803590 | 9GDF02<br>9GDF03 | 1064745 | - | - |
| Torque Adj. Screw Assembly | 9GDD04 | 17385 | 9GDE04 | 27880 | 9GDF04 | 39610 | 9GDG04 | 82950 |
| Torque Spring | 9GDD05 | 53490 | 9GDE05 | 74005 | 9GDF05 | 122530 | 9GDG05 | 262965 |
| Wedge Assembly with Bolt, Spring and Washers for inch<br>for mm | 9GDD20/<br>9GDD22 | 6700 | 9GDE20/<br>9GDE22 | 10045 | 9GDF20/<br>9GDF22 | 15745 | 9GDG20/<br>9GDG22 | 34855 |
| Pin set for Lever & Armature Consisting of a) Pin Lever 2 Nos. b) Pin Armature 2 Nos. for inch<br>for mm | 9GDD06*<br>9GDD06-2# | 14195 | 9GDE06*<br>9GDE06-2# | 14195 | 9GDF06*<br>9GDF06-2# | 19925 | 9GDG06++ | 60280 |
| Coller Set of Lever & Armature Consisting of a) Coller Lever 4 Nos. b) Coller Armature 4 Nos. | 9GDD07 | 11070 | 9GDE07 | 10855 | 9GDF07 | 13565 | 9GDG07+ | 22255 |
| Bush Set for Lever & Armature Consisting of a) Bush Lever 4 Nos. b) Bush Armature 4 Nos. | 9GDD08 | 20385 | 9GDE08 | 21355 | 9GDF08 | 27330 | 9GDG08++ | 48605 |
| Pull Rod Assembly with nuts, spring & washer | 9GDD29 | 21510 | 9GDE29 | 29750 | 9GDF29 | 39965 | 9GDG29 | 104530 |
| Grease Nipple ( 1 set consist 8 Nos.) | 9GDD09 | 2725 | 9GDE09 | 4680 | 9GDF09 | 4680 | 9GDG09 | 5180 |
| Shoe Assembly with Clamp & Bolts for inch ( 1 set consist 2 Nos.) for mm | 9GDD10/<br>9GDD11 | 53575 | 9GDE10/<br>9GDE11 | 74105 | 9GDF10/<br>9GDF11 | 118470 | 9GDG10/<br>9GDG11<br>9GDG11A+++ | 266605<br>274900 |
| Shoe Lining without Bolts ( 1 set consist 2 Nos.) for inch<br>for mm | 9GDD12/<br>9GDD13 | 18235 | 9GDE12/<br>9GDE13 | 29750 | 9GDF12/<br>9GDF13 | 44005 | 9GDG12/<br>9GDG13<br>9GDG13A+++ | 83130<br>On request |
| Shoe Lining with Bolts ( 1 set consist 2 Nos.) for inch<br>for mm | 9GDD23/<br>9GDD26 | 22425 | 9GDE23/<br>9GDE26 | 37095 | 9GDF23/<br>9GDF26 | 57630 | 9GDG23/<br>9GDG26<br>9GDG26A+++ | 102810<br>111680 |
| Dust Cover (made of jeans cloth & painted with fire reterdent al. paint). | 9GDD30 | 13220 | 9GDE30 | 16340 | 9GDF30 | 17140 | 9GDG30 | 22205 |
| mm Size Cast Steel Drum without Hard Chrome Plating | 9GDD14 | 70800 | 9GDE14 | 115245 | 9GDF14 | 160270 | - | - |
| mm Size Cast Steel Drum with Hard Chrome Plating | 9GDD14P | 105395 | 9GDE14P | 168340 | 9GDF14P | 245165 | - | - |
| Cast Steel Drum without Hard Chrome Plating* for inch | 9GDD15 | 73835 | 9GDE15 | 120640 | 9GDF15 | 164670 | - | - |
| Cast Steel Drum with Hard Chrome Plating* for inch | 9GDD15P | 110155 | 9GDE15P | 176485 | 9GDF15P | 256935 | 9GDG15P | 435310 |

* For brakes manufactured upto September 07. # For brakes manufactured after September 07 (pins are different).
\+ Consist of strap, Brass Shim & spring Plate ++ Only for Armature +++ Suitable for 800mm

***GST to be charged extra on all DC Brakes, Brake Spares, Resistance & Rectifier Panel & Resistance Boxes.**

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## Spare Selenium Type Bridge Rectiers

**GST to be charged extra**

**HSN Code : 8505**

| Rectifier Code / Part No. | Recommended to operate brake at 415V AC | | Qty. per set | List Price [₹] |
|---|---|---|---|---|
| | Individual | Simultaneous | | |
| 9GDX01 | 1x8"/200mm | - | 2 | 20570 |
| 9GDX02 | 1x10"/250mm | 2x8"/200mm | 2 | 30690 |
| 9GDX03 | 1x13"/300mm<br>1x16"/400mm | 2x10"/250mm | 2 | 41565 |
| 9GDX04 | 1x19"/500mm | 2x13"/300mm<br>2x16"/400mm | 2 | 54885 |
| 9GDX05 | 1x23"/600mm | 2x19"/500mm | 2 | 78260 |
| 9GDX06 | - | 2x23"/600mm | 2 | 156590 |
| 9GDX07 | 1x30"/700 & 800mm | - | 2 | 217135 |

## Spare Resistances

**GST to be charged extra**

**HSN Code : 8505**

| Used in resistance and rectifier panels | Cat. No. | Ohms | Watts | List Price [₹] |
|---|---|---|---|---|
| CACA1*, CACB1*, CACC1*, CACD1*, CACJ2* | 9GDX32 | 32 | 200 | 3840 |
| CACA1*, CACB1*, CACC1*, CACF1*, CACG1*, CACL2*, CACP2*, CACJ2* | 9GDX42 | 42 | 200 | |
| CACS2* | 9GDX47 | 47 | 200 | |
| CACB1*, CACE1*, CACF1*, CACG1*, CACJ2*, CACK2*, CACM2*, CACN2* | 9GDX52 | 52 | 200 | |
| CACS1* | 9GDX64 | 64 | 100 | |
| CACA1*, CACB1*, CACD1*, CACE1*, CACF1*, CACG1*, CACJ2*, CACK2*, CACM2*, CACN2*, CACP2* | 9GDX80 | 80 | 200 | |
| CACA1*, CACD1*, CACK2*, CACL2* | 9GDX112 | 112 | 200 | |
| CACS1*, CACS2* | 9GDX112A | 112 | 125 | |

## Optional Features - DC Brakes

**GST to be charged extra**

**HSN Code : 8505**

| Brakes Size | | Manual Release List Price [₹] | Residual Magnetism Adjustment List Price [₹] | Limit Switch Attachment List Price [₹] | |
|---|---|---|---|---|---|
| Inch | mm | | | 1NO+1NC (LSA) | 2NO+2NC (LSA-2) |
| 8 | 150/160/200 | 7595 | 7230 | 14760 | 15555 |
| 10 | 250 | 7595 | 8475 | | |
| 13 | 300 | 10410 | 12590 | | |
| 16 | 400 | 11145 | 18765 | | |
| 19 | 500 | 17315 | 26035 | | |
| 23 | 600 | 24255 | 29400 | | |

Note : Suffix following codes to complete brakes code with optional features.

- MR = For Manual Release
- RM = For Residual Magnetism
- LS = For Limit Switch (1NO+1NC)
- LS-1 = For Limit Switch (2NO+2NC)
- RR = For Manual Release + Residual Magnetism
- RL = Residual Magnetism + Limit Switch
- ML = For Manual Release + Limit Switch
- RS = For Manual Release + Residual Magnetism + Limit Switch

**To order Spare Limit Switch assembly, cat codes are:**

- LSA = Limit Switch with fitting Arrangement (1NO + 1NC)
- LSA -2 = Limit Switch (2NO + 2NC) with fitting Arrangement

***GST to be charged extra on all DC Brakes, Brake Spares, Resistance & Rectifier Panel & Resistance Boxes.**

# Industrial Automation & Safety

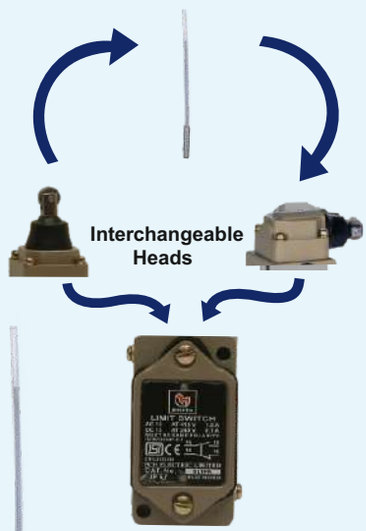
- Limit Switches
- Foot Switches
- Pneumatic Timers
- Electronic Timers
- AC Drives
- Digital DC Drives
- Soft Starters
- e-prox Sensors
- Plug-in Relays

## Heavy Duty Limit Switch - Snap Action Type NL IP 67

**HSN Code : 8536**

| Type | Description | Cat. No. Screw Terminal (1NO+1NC) | MRP [₹] | Cat.No. Precabled (1NO+1NC) | MRP [₹] | Cat. No. Screw Terminal (2NO+2NC) | MRP [₹] | Cat. No. Precabled (2NO+2NC) | MRP [₹] |
|---|---|---|---|---|---|---|---|---|---|
| Roller Lever | Standard-38MM<br>Standard-76.2mm<br>Adjustable | NLL1<br>NLL2<br>NLLA | 3285 | NLL1C<br>NLL2C<br>NLLAC | 3575 | NLL1-22<br>NLL2-22<br>NLLA-22 | 5425 | NLL1-22C<br>NLL2-22C<br>NLLA-22C | 5615 |
| | Maintained Type<br>Maintained Type<br>Maintained Type | NLL1M<br>NLL2M<br>NLLAM | 3680 | NLL1MC<br>NLL2MC<br>NLLAMC | 3865 | NLL1M-22<br>NLL2M-22<br>NLLAM-22 | 5995 | NLL1M-22C<br>NLL2M-22C<br>NLLAM-22C | 6110 |
| Push Roller | Top<br>Side | NLTPR<br>NLSPR | 3285<br>3600 | NLTPRC<br>NLSPRC | 3575<br>3865 | NLTPR-22<br>NLSPR-22 | 5425<br>5850 | NLTPR-22C<br>NLSPR-22C | 5615<br>6110 |
| Push Button | Top Adjustable<br>Side Adjustable | NLTPBA<br>NLSPBA | 3285<br>3600 | NLTPBAC<br>NLSPBAC | 3575<br>3865 | NLTPBA-22<br>NLSPBA-22 | 5275<br>5850 | NLTPBA-22C<br>NLSPBA-22C | 5615<br>6110 |
| Cat Whisker | Nylon Rod<br>Steel Rod | NLCW<br>NLJW | 2885<br>3285 | NLCWC<br>NLJWC | 3100<br>3505 | NLCW-22<br>NLJW-22 | 5155<br>5425 | NLCW-22C<br>NLJW-22C | 5425<br>5615 |

- IP 67 degree of Protection
- Choice of 16 Operating Heads
- Interchangeable heads ensures complete modularity and flexibility
- Zinc Die cast body for Heavy duty applications
- Easily replaceable contact blocks
- Precabled version with 2m cable length



NLL1 NLL2 NLLA NLTPBA NLCW NLTPRC

## Mini Limit Switch

**HSN Code : 8536**

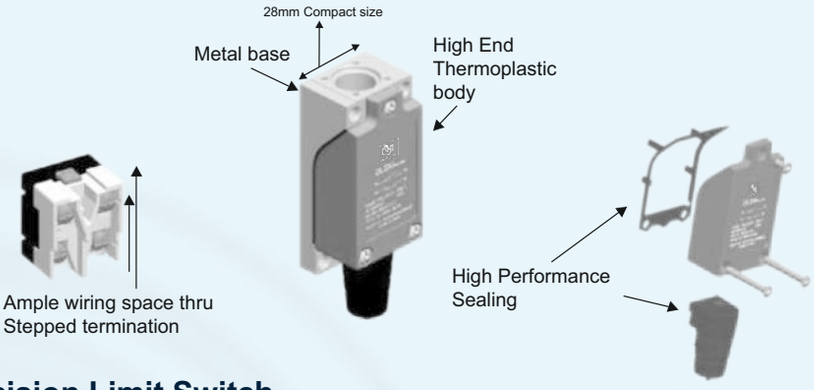
| Type | | Cat. No. | MRP [₹] |
|---|---|---|---|
| General Purpose Type | | DLSMAR | 1985 |
| Top Plunger | Standard | DLSMPP | 1985 |
| Push Roller | Standard | DLSMRP | 1985 |
| Push Roller | Cross | DLSMRPX | 1985 |
| Roller Lever | 30mm | DLSMRL | 1985 |
| Roller Lever | Adjustable | DLSMRLA | 2040 |
| Rod Arm | Adjustable | DLSMJWA | 2040 |
| Cat's Whisker | Steel Spring | DLSMSW | 2165 |
| Flexible Rod | Nylon | DLSMSR | 2165 |

- Conforming to IS/IEC 60947-5-1
- Compact Design requiring less mounting space
- Zinc Die cast base & high end polyamide cover ensuring robustness & excellent aesthetics
- Unique Cross bar contacts for enhanced reliability
- Dust proof, Water proof & Oil resistance construction

### Applications

- Lifts and Escalators
- Machine Tools
- Food and Beverages
- Textile Machines
- Packaging & Printing Machines

**Available Operating Heads**




## Precision Limit Switch

**HSN Code : 8536**

| 1NO+1NC | | | 2NO+2NC | | |
|---|---|---|---|---|---|
| Type of Operator | Cat. No. | MRP [₹] | Cat. No. | MRP [₹] | Lot Size |
| Roller Lever | PSRL-L or R | 1595 | PSRL-L-2 or R-2 | 2205 | 1 |
| Six Inch Lever | PSSIL-L or R | 1595 | PSSIL-L-2 or R-2 | 2205 | |
| Top Push Roller | PSTPR* | 1595 | PSTPR*-2 | 2205 | |
| Top Push Button | PSTPB | 1595 | PSTPB-2 | 2205 | |
| Type | Cat. No | MRP [₹] | Cat. No | MRP [₹] | Lot Size |
| Spare Contact Block | SP20S1 | 1495 | SP20S2 | 2130 | |

- Conforming to IS/IEC 60947-5-1
- Snap action contacts
- Frequency of operation 2500 Operations / hr
- Mechanical life : 20 million operations
- Electrical life : 10 million operations

* A - Top push roller in line with contact block
B - Top push roller perpendicular to contact block

## Limit Switch for 125°C Application*

**HSN Code : 8536**

| Type | Cat. No. | MRP [₹] |
|---|---|---|
| **with 1NO + 1NC**<br>Roller Lever<br>Top Push Roller | LL1-150S-M<br>LTPR-150S-M | 11610 |

*Refer to our nearest sales office for specification & details

## Heavy Duty General Purpose Limit Switch

**HSN Code : 8536**

| | | | |
|---|---|---|---|
| Snap Action<br>Type L | Angular Roller<br>Top Plunger | LLGS<br>LPGS | 2200 |

## Oil Tight Limit Switch - Snap Action Type L IP 65

**HSN Code : 8536**

| Type | Description | Cat. No. | MRP [₹] |
|---|---|---|---|
| Roller Lever | Standard-38MM<br>Standard-76.2mm<br>Adjustable | LL1<br>LL2<br>LLA | 4700 |
| | Maintained Type LL1<br>Maintained Type LL2<br>Maintained Type LLA | LL1M<br>LL2M<br>LLAM | 4910 |
| Push Roller | Top<br>Side | LTPR<br>LSPR | 4595<br>5160 |
| Push Button | Top Adjustable<br>Side Adjustable | LTPBA<br>LSPBA | 4985 |
| Cat Whisker | Nylon Rod<br>Steel Rod | LCW<br>LJW | 3765<br>4675 |

## Oil Tight Limit Switch - Spares

**HSN Code : 8538**

| Description | Suitable for | Cat. No. | MRP [₹] |
|---|---|---|---|
| 38 mm lever | NLL1, LL1 | SP40L1 | 745 |
| 76.2 mm lever | NLL2, LL2 | SP40L2 | 935 |
| Adjustable lever | NLLA, LLA | SP40LA | 935 |
| Operating Head | LLGS, LPGS | SP40HLG | 1340 |
| Operating Head | Roller Lever Type | SP40HL | 1450 |
| Operating Head Maintained | Roller Lever Maintained Type | SP40HLM | 1670 |
| Operating Head | Top Push<br>Side Push | SP 40HTP*<br>SP 40HSP* | 1450<br>1605 |
| Operating Head | Cat Whisker Nylon Rod<br>Cat Whisker Steel Rod | SP40CW<br>SP40JW | 1000<br>1340 |
| Limit Switch Unit Assembly 1NO+1NC | Type 'L' & 'NL' (Except LLGS / LPGS) | SP40S1 | 1975 |
| Limit Switch Unit Assembly 2NO+2NC | Type 'L' & 'NL' (Except LLGS / LPGS) | SP40S2 | 4200 |
| Limit Switch Unit Assembly 1NO+1NC | LLGS / LPGS | SP40S1WOM | 1605 |
| Oil tight Conduit | Type 'NL' | SP40CE | 795 |

* B = Button R = Roller

## Bravo Series - Heavy Duty Limit Switch

**HSN Code : 8536**

| Type | Description | Cat. No. | MRP [₹] |
|---|---|---|---|
| Roller Lever | Standard-38MM | BALRL38 | 1980 |
| | Standard-76.2mm | BALRL76 | |
| | Adjustable | BALRLA | |
| Push Roller | Top | BALPRT | 1980 |
| | Side | BALPRS | 2175 |
| Push Button | Top Adjustable | BALPBT | 1980 |
| | Side Adjustable | BALPBS | 2175 |
| Cat Whisker | Nylon Rod | BALCWN | 1980 |
| | Steel Rod | BALCWS | 2015 |

**Salient Features:**

- IP 67 degree of Protection
- 1NO+1NC Contact Block
- Choice of 9 Operating Heads
- Aluminium Die-cast body

New
BRAVO Series
LIMIT SWITCH

BALRL38

BALRL76

BALRLA

BALPRT

BALPBT

BALPRS

BALPBS

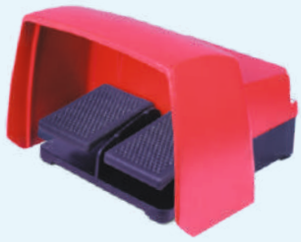
BALCWN

BALCWS

# BSG Foot Switch

**BSG2M**

- Full Metal Body with Shielded Guard for Pedal
- 2 Positions
- Yellow Colour Shielded Guard for better visibility



**BSG2C**

- Full Metal Body with Shielded Guard for Pedal
- Glass Filled Nylon Pedal
- 2 Positions
- Red Colour Shielded Guard for better visibility

**BSG2P**

- Full Plastic Body with Shielded Guard for Pedal
- 2 Positions
- Yellow Colour Shielded Guard for better visibility

**HSN Code : 8538**

| | BSG Range of Foot switches | |
|---|---|---|
| **Cat code** | **Description** | MRP [₹] |
| BSG2MX1 | FOOT SWITCH METAL GUARD & SHIELD 1NO+1NC | 6890 |
| BSG2MX2 | FOOT SWITCH METAL GUARD & SHIELD 2NO+2NC | 8265 |
| BSG2CY1 | FOOT SWITCH DOUBLE PEDAL 2 X 1NO+1NC | 10600 |
| BSG2PX1 | FOOT SWITCH PLASTIC GUARD&SHIELD 1NO+1NC | 3320 |
| BSG2PX2 | FOOT SWITCH PLASTIC GUARD&SHIELD 2NO+2NC | 4065 |

# FSG Foot Switch

**HSN Code : 8536**

| Number of Contact Blocks | Total contacts available | No.of position | Description | Cat. No. | MRP [₹] | Lot Size |
|---|---|---|---|---|---|---|
| One | 1NO+1NC | 2 | With Guard | FSGX1 | 7355 | 1 |
| One | 1NO+1NC | 2 | With Latch | FSGX1L | 7745 | |
| One | 2NO+2NC | 2 | With Guard | FSGX2 | 8510 | |
| One | 2NO+2NC | 2 | With Latch | FSGX2L | 8880 | |
| Two | 2NO+2NC | 2 | With Guard | FSGY1 | 9015 | |
| Two | 2NO+2NC | 2 | With Latch | FSGY1L | 9585 | |
| Two | 4NO+4NC | 2 | With Guard | FSGY2 | 11220 | |
| Two | 4NO+4NC | 2 | With Latch | FSGY2L | 11425 | |
| Two | 2NO+2NC | 3 | With Guard | FSGZ1M | 9760 | |
| Two | 4NO+4NC | 3 | With Guard | FSGZ2M | 11185 | |

Note : Latching unit (with suffix L) is provided with X & Y versions only.

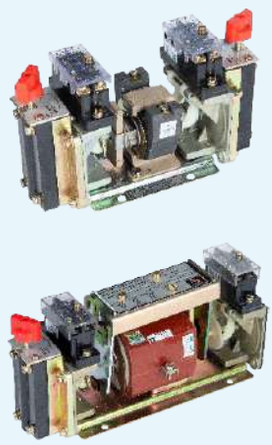
**Spares for Foot Switch**

**HSN Code : 8538**

| Description | Suitable For | Cat No. | MRP [₹] |
|---|---|---|---|
| Spare Contact Block 1NO+1NC | FSG & BSG | SP20S1 | 1495 |
| Spare Contact Block 2NO+2NC | FSG & BSG | SP20S2 | 2130 |
| Spare Cover with Guard | FSG | SP20CG | 2960 |

- 2 Position and 3 Position
- 1NO+1NC/2NO+2NC/4NO+4NC contact blocks
- With Guard
- Oil tight and water tight enclosure for contact block
- Mechanical and electrical life : 10 million operation
- Suited for heavy duty applications such as :
  Machine Tools
  Rubber and Tyre making machines
  SPMs
  Welding Machines
- Suffix X1 = One Block of 1NO+1NC
  X2 = One Block of 2NO+2NC
  Y1 = Two Blocks of 1NO+1NC
  Y2 = Two Blocks of 2NO+2NC

Pneumatic Timer



- 30 sec / 60 sec/180 sec
- AC and DC Supply
- 1 NO+1NC / 2 NO+2NC Contact Blocks
- Completely enclosed timing head ensures excellent timings in adverse environmental conditions
- Encapsulated coil for better resistance against moisture and corrosion
- Completely maintainable I.e Coil , Contact blocks and Timing head can be replaced
- Special timer for Railway application

Site convertible On/Off delay

## Pneumatic Timers
## Time Delay Relay-Electro Pneumatic

**HSN Code : 9107**

| Type | Time Range (Secs.) | Contact Configuration | | Cat No. | MRP [₹] | |
|---|---|---|---|---|---|---|
| | | Time Block | Instantaneous Block | | AC | DC |
| PN | 0.05 - 30 Sec | 1NO + 1NC | - | KRTPN10▪-0 | 7545 | 11305 |
| | 0.05 - 60 Sec | 1NO + 1NC | - | KRTPN10▪-1 | 7800 | 11930 |
| | 0.05 - 180 Sec | 1NO + 1NC | - | KRTPN10▪-3 | 8815 | 13010 |
| | 0.05 - 30 Sec | 2NO + 2NC | - | KRTPN20▪-0 | 8480 | 12095 |
| | 0.05 - 60 Sec | 2NO + 2NC | - | KRTPN20▪-1 | 8660 | 12240 |
| | 0.05 - 180 Sec | 2NO + 2NC | - | KRTPN20▪-3 | 9305 | 13150 |
| PNI | 0.05 - 30 Sec | 1NO + 1NC | 1NO + 1NC | KRTPN11▪-0 | 9195 | 14360 |
| | 0.05 - 60 Sec | 1NO + 1NC | 1NO + 1NC | KRTPN11▪-1 | 10430 | 14360 |
| | 0.05 - 180 Sec | 1NO + 1NC | 1NO + 1NC | KRTPN11▪-3 | 11415 | 14535 |
| | 0.05 - 30 Sec | 2NO + 2NC | 2NO + 2NC | KRTPN22▪-0 | 11520 | 15005 |
| | 0.05 - 60 Sec | 2NO + 2NC | 2NO + 2NC | KRTPN22▪-1 | 11645 | 15785 |
| | 0.05 - 180 Sec | 2NO + 2NC | 2NO + 2NC | KRTPN22▪-3 | 12485 | 16695 |
| **Type** | **Time Range (Secs.)** | **On-Delay Block** | **Off-Delay Block** | **Cat No.** | **AC** | **DC** |
| PCN | 0.05 - 30 Sec | 1NO + 1NC | 1NO + 1NC | KRTPCN11▪-0 | 12720 | 16665 |
| | 0.05 - 60 Sec | 1NO + 1NC | 1NO + 1NC | KRTPCN11▪-1 | 13075 | 16800 |
| | 0.05 - 180 Sec | 1NO + 1NC | 1NO + 1NC | KRTPCN11▪-3 | 14850 | 18560 |
| | 0.05 - 30 Sec | 2NO + 2NC | 2NO + 2NC | KRTPCN22▪-0 | 13990 | 18290 |
| | 0.05 - 60 Sec | 2NO + 2NC | 2NO + 2NC | KRTPCN22▪-1 | 14660 | 18505 |
| | 0.05 - 180 Sec | 2NO + 2NC | 2NO + 2NC | KRTPCN22▪-3 | 16530 | 20175 |

PN, PNI Time Delay Relay will be supplied only as on-delay

▪ To complete Cat. No. Suffix Voltage code from Table

## Timer for Railway Application

**HSN Code : 9107**

| Type | Time (Secs.) | Contact Configuration | | Cat No. | MRP [₹] | |
|---|---|---|---|---|---|---|
| | | Time Block | Instantaneous Block | | AC | DC |
| PN | 120 | 2NO + 2NC | - | KRTPN20A-2R | 9065 | - |
| | 150 | 2NO + 2NC | - | KRTPN20A-3R | 9065 | - |

## Accessories for Time Delay Relay

**HSN Code : 9107**

| Description | Cat. No. | MRP [₹] | Lot Size |
|---|---|---|---|
| Contact Block<br>1NO+1NC Timed<br>2NO+2NC Timed<br>1NO+1NC Inst.<br>2NO+2NC Inst. | <br>SP20S3+<br>SP20S4+<br>SP20S5+<br>SP20S6+ | <br>1725<br>2250<br>1725<br>2250 | 1 |
| Magnet Coil<br>AC-PN Relays<br>AC-PNI & PCN Relays<br>DC Relays | <br>SP20MC ▪<br>SP20MC1▪<br>SP20MC2▪ | <br>2345<br>2345<br>7550 | 1 |
| Return Spring*<br>(PNI & PCN)<br>Coil Clip* | SP20RS<br>SP20CC | 405<br>645 | 1 |
| Magnet frame assembly without coil | SP20 MA\MA1 | 3405 | 1 |
| Knob assembly | SP20KA | 130 | 10 |

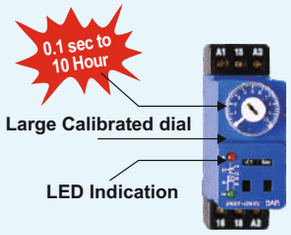
+ These are supplied with plastic cover
* For DC Timers only
▪ To complete suffix voltage code refer to the table

- High Repeat Accuracy
- Operating Temperature - $40^0$ to $+65^0$
- Mechanical and Electrical Life - 10 million operations

### Voltage Suffix Code

| Coil Voltage | 24 | 110 | 220 | 240 | 415 |
|---|---|---|---|---|---|
| AC Suffix M Code* | U | A | B | K | M |
| DC Suffix - Code | U1 | A1 | B1 | K1 | - |

* KRTPN timers with 550V AC coil voltage, Prices available on request




- On Delay
- Off Delay
- Cyclic
- Multifunction
- Widest timing range from 0.1 sec to 10 Hours in Single Unit
- Calibrated time scale for easy time setting
- DIN rail mounting
- Excellent repeat accuracy

## Electronic Timers

**HSN Code - 9107**

| | | |
|---|---|---|
| Chronos<br>Delay on make type BAR 0.1 Sec. - 10 Hrs.<br>240V AC; 24V AC/DC or 110V AC; 24V AC/DC or 12V DC | SBT00▪ 00N | 2535 |
| Delay on break type BCR 0.1 Sec. - 10 Hrs.<br>240V AC; 24V AC/DC or 110V AC; 24V AC/DC or 12V DC | SBT01▪ 00N | 2760 |
| Recycling type BDR 0.1 Sec. - 10 Hrs.<br>240V AC; 24V AC/DC or 110V AC; 24V AC/DC | SBT02▪ 00N | 3625 |
| Multifunction type BLR 0.1 Sec. - 10 Hrs.<br>240V AC; 24V AC/DC or 110V AC; 24V AC/DC | SBT03▪ 00N | 2760 |

### Voltage Codes

| Type | Voltage | Voltage Code |
|---|---|---|
| B | 240V AC; 24 V AC/DC<br>110 V AC; 24 V AC/DC<br>12 V DC | 1<br>2<br>5 |

### Multi Function

- 4 Functions - On delay, Interval , Off delay, Single Shot
- Multi Time Range - Sec / Min / Hr
- Universal Voltage - 24 V- 230V AC/DC
- Large calibrated dial for easy and accurate time setting
- Compact Design
- LED indications for Input supply and Output status
- Surface mounting & DIN rail mounting
- 1 changeover relay output (SPDT)
- All Purpose Timer

## Universal Voltage, Multi Time, Multi Function - IBTMU

**HSN Code - 9107**

| Product | Cat No. | Time Range | Function | Voltage | MRP [₹] |
|---|---|---|---|---|---|
| | IBT04500 | 0.1S - 10 Hr. | On Delay, Off Delay, Interval, Single Shot | 24-240V AC/DC | 2610 |

New

## BTR17 - Star Delta Timer 17.5mm Width

**HSN Code - 9107**

| Product | Description | Cat No. | MRP [₹] |
|---|---|---|---|
| | Star-Delta Timer 0-60 Sec<br>240-415V AC | BTR174622 | 1090 |

- Wide Time ranges
- Two Transition times - 50ms/100ms
- Wide Voltage Supply - 240 - 415V AC
- Two C/O Contacts
- Width 17.5 mm
- Flame Retardant UL94 -V0 enclosure
- CE approved & RoHS Compliance

New

## Electronic Timer-BTR17 Series - 17.5mm width

**HSN Code - 9107**

- On Delay
- Off Delay
- Cyclic
- Multifunction - 12 functions
- LED Indications for Power and Relay status
- 1C/O Contacts
- Microcontroller based timer
- Compact size 17.5mm Wide
- CE marked & RoHS compliant
- EMC/EMI Compatible
- Flame Retardant UL94-V0 Enclosure

| Product | Cat No. | Description | Time Range | MRP [₹] |
|---|---|---|---|---|
| | BTR170101 | ON delay Timer 240V AC/24V AC/DC | 0.3 sec to 30Hr | 870 |
| | BTR170201 | ON delay Timer 110V AC/24V AC/DC | 0.3 sec to 30Hr | 1280 |
| | BTR170501 | ON delay Timer 12V DC | 0.3 sec to 30Hr | 1050 |
| | BTR171101 | OFF delay Timer 240V AC/24V AC/DC | 0.3 sec to 30Hr | 1040 |
| | BTR171201 | OFF delay Timer 110V AC/24V AC/DC | 0.3 sec to 30Hr | 1040 |
| | BTR171501 | OFF delay Timer 12V DC | 0.3 sec to 30Hr | 1050 |
| | BTR172011 | Cyclic timer 12-240V AC/DC | 0.1 sec to 100Hr | 1775 |
| | BTR173011 | Multi-function timer 12-240V AC/DC, 12 Function | 0.1 sec to 100Hr | 1775 |

New

## Electronic Timer-BTR22 Series - 22.5mm width

**HSN Code - 9107**

- On Delay
- Off Delay
- Cyclic
- Multifunction - 13 functions
- Wide time range & voltage
- High accuracy
- 2C/O Contacts
- LED Indications or Power and Relay status
- Micro controller based timer
- Compact size 22.5mm Wide
- Low Power Consumption
- 35mm DIN Rail mounting
- EMC/EMI Compatible
- CE marked & RoHS Compliant
- Flame Retardant UL94-V0 Enclosure

| Product | Cat No. | Description | Time Range | MRP [₹] |
|---|---|---|---|---|
| | BTR220012 | ON delay Timer 24 - 240V AC/DC<br>2 C/O Contact | 0.1 sec to 100Hr | 1500 |
| | BTR221012 | OFF delay Timer 24 - 240V AC/DC<br>2 C/O Contact | 0.1 sec to 100Hr | 1365 |
| | BTR222012 | Cyclic Timer 24 - 240V AC/DC<br>2 C/O Contact | 0.1 sec to 100Hr | 1860 |
| | BTR223012 | Multifunction Timer 24 - 240V AC/DC<br>2 C/O Contact | 0.1 sec to 100Hr | 1800 |

## SINUS B AC Drive

- 0.37~2.2Kw, Input-1Phase 200-230V AC
- Output - 3 Phase 200-230V AC
- Sensorless vector and V/F control
- Build in PID function

# AC Drive

## Sinus Penta AC Drive

- 4.5 - 3000 KW, 3 Phase 380 - 415 VAC
- One Drive - Five functions
  - Vector modulation IFD functionality for general-purpose applications
  - Sensorless vector VTC functionality for high torque-demanding applications
  - Vector FOC functionality with an encoder for accurate torque requirements and a wide speed range
  - Vector SYN functionality for applications with brushless, synchronous motors
  - RGN functionality for the inverter application as an AC/DC converter for the DC supply of multiple drives
- In built Braking chopper upto 132KW rating (S30)
- Serial communication port RS485 – MODBUS RTU Protocol
- Starting Torque upto 240% max
- PID function / second PID function
- Control keypad panel with 12 keys and large back-lit LCD
- Intelligent cooling system
- Encoder feedback
- Full compatibility with teleservice software, "REMOTE DRIVE" on internet
- Compatible with Easy Harmonics, tool for the calculation of Harmonic currents

*** For the prices of above mentioned products please contact our nearest sales office.**

# Digital DC Drives

- From 10A to 4500A ( 2.4 KW to 2205 KW ) 3 Phase 220-690VAC
- 2 & 4 Quadrant digital drive
- Local control from keypad
- 12/7 programmable I/Os
- Predictive control and field boost
- Feedback from dynamo/encoder/armature
- Auto switching in armature F/B against encoder/tacho feed back failure

## Digital DC Drives

**HSN Code - 8504**

| Cat. No. | Armature Current (A) | Field Current (A) |
|---|---|---|
| DCREG*.10 POT440V | 10 | 5 |
| DCREG*.20 POT440V | 20 | 5 |
| DCREG*.40 POT440V | 40 | 5 |
| DCREG*.70 POT440V | 70 | 5 |
| DCREG*.100 POT440V | 100 | 5 |
| DCREG*.150 POT440V | 150 | 15 |
| DCREG*.180 POT440V | 180 | 15 |
| DCREG*.250 POT440V | 250 | 15 |
| DCREG*.350 POT440V | 350 | 15 |
| DCREG*.410 POT440V | 410 | 35 |
| DCREG*.500 POT440V | 500 | 35 |
| DCREG*.600 POT440V | 600 | 35 |
| DCREG*.900 POT440V | 900 | 35 |
| DCREG*.1200 POT440V | 1200 | 35 |

* to complete cat code suffix : 2- for II Quadrant drive 4 - for IV Quadrant drive

## ASA4.0 Series Soft-Starter

24A to 580A, 3 Phase 200V to 525V AC or 380-690V AC
overload upto 600% of the rated current

## Protection:

- over / under current
- current imbalance
- Motor Thermistor
- Phase Sequence
- Phase Loss
- Power Loss

*** For the prices of above mentioned products please contact our nearest sales office.**

BHARTIA BCH

# ePROX Range

- Sizes from 8mm to 30mm Dia
- Switching Distance from 1.5mm to 15mm
- IP 67, CE Marked
- Sensors with Linear output (4 - 20 mA /0-10VDC )

### General Specications

- High switching capacity
- 200mA upto 12mm Dia
- 400mA for 18mm and 30mm Dia
- Wide range of outputs
- Voltages AC/DC
- Status LED Indication
- Built in Short circuit protection

### Special Versions

- Non Standard sizes from 4mm to 80mm dia
- High temperature sensors upto 125 Deg C
- Square / Slot / Rectangular sensors
- Sensor with shielded cable

## Standard Version of Inductive Proximity Switches

**HSN Code - 8536**

| Cat. No. | Dia (mm) | Nominal Sn Distance (mm) | Output | Max. Load (mA) | MRP [₹] | Lot Size |
|---|---|---|---|---|---|---|
| Flush Version Nominal Voltage 12-30V DC 3 Wire Output LED Indication Integrated cable 3C/2M | | | | | | |
| DINE8SP10 | 8 | 1.5 | PNP-NO | 100 | 1580 | 10 |
| DINE8SN10 | 8 | 1.5 | NPN-NO | 100 | 1580 | |
| DINE12SP10 | 12 | 2 | PNP-NO | 200 | 1310 | |
| DINE12SN10 | 12 | 2 | NPN-NO | 200 | 1310 | |
| DINE18SP10 | 18 | 5 | PNP-NO | 200 | 1370 | |
| DINE18SN10 | 18 | 5 | NPN-NO | 200 | 1370 | |
| DINE30SP10 | 30 | 10 | PNP-NO | 400 | 2090 | |
| DINE30SN10 | 30 | 10 | NPN-NO | 400 | 2090 | |
| Non Flush Version Nominal Voltage 12-30V DC 3 Wire Output LED Indication Integrated cable 3C/2M | | | | | | |
| DINE8NP10 | 8 | 2 | PNP-NO | 100 | 1580 | 10 |
| DINE8NN10 | 8 | 2 | NPN-NO | 100 | 1580 | |
| DINE12NP10 | 12 | 4 | PNP-NO | 200 | 1310 | |
| DINE12NN10 | 12 | 4 | NPN-NO | 200 | 1310 | |
| DINE18NP10 | 18 | 8 | PNP-NO | 200 | 1370 | |
| DINE18NN10 | 18 | 8 | NPN-NO | 200 | 1370 | |
| DINE30NP10 | 30 | 15 | PNP-NO | 400 | 2090 | |
| DINE30NN10 | 30 | 15 | NPN-NO | 400 | 2090 | |
| Flush Version Nominal Voltage 240V AC* 2 Wire Output LED Indication Integrated cable 3C/2M | | | | | | |
| DINE12SA10 | 12 | 2 | NO | 200 | 1690 | 10 |
| DINE12SA01 | 12 | 2 | NC | 200 | 1690 | |
| DINE18SA10 | 18 | 5 | NO | 400 | 1785 | |
| DINE18SA01 | 18 | 5 | NC | 400 | 1785 | |
| DINE30SA10 | 30 | 10 | NO | 400 | 2345 | |
| DINE30SA01 | 30 | 10 | NC | 400 | 2345 | |
| Non Flush Version Nominal Voltage 240V AC* 2 Wire Output LED Indication Integrated cable 3C/2M | | | | | | |
| DINE12NA10 | 12 | 4 | NO | 200 | 1690 | 10 |
| DINE12NA01 | 12 | 4 | NC | 200 | 1690 | |
| DINE18NA10 | 18 | 8 | NO | 400 | 1785 | |
| DINE18NA01 | 18 | 8 | NC | 400 | 1785 | |
| DINE30NA10 | 30 | 15 | NO | 400 | 2345 | |
| DINE30NA01 | 30 | 15 | NC | 400 | 2345 | |

*110V AC input voltage is also available, For 110V AC replace A by 2A

# ePROX Range

## Capacitive Proximity Switches

**HSN Code - 8536**

- Sizes: 18mm and 30mm dia
- Switching Distance: upto 15mm
- IP 67, CE Compliance

### General Specications

- Max. load current : 400mA
- Wide range of outputs
- Built in Short circuit & polarity reversal protection
- Sensitivity adjustment thru trimmer

| Cat. No. | Dia (mm) | Nominal Sn Distance (mm) | Output | Max. Load (mA) | MRP [₹] | Lot Size |
|---|---|---|---|---|---|---|
| Flush Version 12-30V DC 3 Wire Output LED Indication Integrated 3C/2M | | | | | | |
| DCAE18SN10 | 18 | 1 to 5 | NPN-NO | 400 | 3230 | 10 |
| DCAE18SP10 | 18 | 1 to 5 | PNP-NO | 400 | 3230 | |
| DCAE30SN10 | 30 | 1 to 10 | NPN-NO | 400 | 4190 | |
| DCAE30SP10 | 30 | 1 to 10 | PNP-NO | 400 | 4190 | |
| Non Flush Version 12-30V DC 3 Wire Output LED Indication Integrated 3C/2M | | | | | | |
| DCAE18NN10 | 18 | 2 to 10 | NPN-NO | 400 | 3230 | 10 |
| DCAE18NP10 | 18 | 2 to 10 | PNP-NO | 400 | 3230 | |
| DCAE30NN10 | 30 | 3 to 15 | NPN-NO | 400 | 4190 | |
| DCAE30NP10 | 30 | 3 to 15 | PNP-NO | 400 | 4190 | |

## Photoelectric Sensors

**HSN Code - 8536**

- Size : M18 cylindrical
- Mode : diffuse, retro and thru beam
- LED indication
- Sensing distance 20cm to 5mtr.

### Special Versions

- Sensors in Rectangular housing

| Cat. No. | Dia (mm) | Nominal Sn Distance (mm) | Output | Max. Load (mA) | MRP [₹] | Lot Size |
|---|---|---|---|---|---|---|
| Nominal Voltage : 12-30V DC Diffuse Scan DC 4-W Output LED Indication Prewired with 2 m Cable | | | | | | |
| DPHE18D2N11 | 18 | 200 | NPN-NO+NC | 200 | 4890 | 10 |
| DPHE18D2P11 | 18 | 200 | PNP-NO+NC | 200 | 4890 | |
| Nominal Voltage : 12-30V DC Retro Reflective DC 4-W Output LED Indication Prewired with 2 m Cable | | | | | | |
| DPHE18RRN11 | 18 | 1000 | NPN-NO+NC | 200 | 4905 | 10 |
| DPHE18RRP11 | 18 | 1000 | PNP-NO+NC | 200 | 4905 | |
| Nominal Voltage : 12-30V DC Through Beam DC 4-W Output LED Indication Prewired with 2 m Cable | | | | | | |
| DPHE18TBRP11 | 18 | 5000 | PNP-NO+NC | 200 | 5865 | 10 |
| DPHE18TBRN11 | 18 | 5000 | NPN-NO+NC | 200 | 5865 | |

Note :

- Prices for Thru Beam, Photo Sensors are inclusive of emitters & receivers.
- Prices for Retro Reflective Sensors are inclusive of reflectors.

## ePROX Range

### Standard Version of Inductive Proximity Switches

**HSN Code - 8536**

| Cat. No. | Dia (mm) | Nominal Sn Distance (mm) | Output | Connector Size | MRP [₹] | Lot Size |
|---|---|---|---|---|---|---|
| Flush Version Nominal Voltage 12-30V DC 3 Wire Output LED Indication, 200 mA Load upto 18mm & 400 mA for 30 mm | | | | | | |
| DINE8SP10K | 8 | 1.5 | PNP-NO | M8 Connector | 1480 | 10 |
| DINE8SN10K | 8 | 1.5 | NPN-NO | M8 Connector | 1480 | |
| DINE12SP10K | 12 | 2 | PNP-NO | M12 Connector | 1480 | |
| DINE12SN10K | 12 | 2 | NPN-NO | M12 Connector | 1480 | |
| DINE18SP10K | 18 | 5 | PNP-NO | M12 Connector | 1490 | |
| DINE18SN10K | 18 | 5 | NPN-NO | M12 Connector | 1490 | |
| DINE30SP10K | 30 | 10 | PNP-NO | M12 Connector | 1855 | |
| DINE30SN10K | 30 | 10 | NPN-NO | M12 Connector | 1855 | |
| Non Flush Version Nominal Voltage 12-30V DC 3 Wire Output LED Indication | | | | | | |
| DINE8NP10K | 8 | 2 | PNP-NO | M8 Connector | 1480 | 10 |
| DINE8NN10K | 8 | 2 | NPN-NO | M8 Connector | 1480 | |
| DINE12NP10K | 12 | 4 | PNP-NO | M12 Connector | 1480 | |
| DINE12NN10K | 12 | 4 | NPN-NO | M12 Connector | 1480 | |
| DINE18NP10K | 18 | 8 | PNP-NO | M12 Connector | 1490 | |
| DINE18NN10K | 18 | 8 | NPN-NO | M12 Connector | 1490 | |
| DINE30NP10K | 30 | 15 | PNP-NO | M12 Connector | 1855 | |
| DINE30NN10K | 30 | 15 | NPN-NO | M12 Connector | 1855 | |

| Cat. No. | Description Female Connectors | MRP [₹] | |
|---|---|---|---|
| DM8K3 | M8 3-Wire straight connector w/o LED & 2 m cable | 1160 | 10 |
| DM8K390LE | M8 3-Wire "L" type connector with LED & 2 m cable | 1160 | |
| DM12K4 | M12 4-Wire straight connector w/o LED & 2 m cable | 785 | |
| DM12K490 | M12 4-Wire "L" type connector w/o LED & 2 m cable | 1125 | |
| DM12K490LE | M12 4-Wire "L" type connector with LED & 2 m cable | 1220 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Linear Output Inductive Proximity Sensor - Nominal Voltage 24V DC, 2m Integrated Cable | | | | | | |
| DINE18LIN | 18 | 5 | 0 - 10V | 2 m long PVC Cable | 2515 | 10 |
| DINE18LINMA | 18 | 5 | 4 - 20 mA | | 2515 | |

### Standard Version DC 2 Wire Proximity Switches

**HSN Code - 8536**

| Cat. No. | Dia (mm) | Nominal Sensing Distance (mm) | Output | Max. Load (mA) | MRP [₹] | Lot Size |
|---|---|---|---|---|---|---|
| Flush Version Nominal Voltage 24V DC 2 Wire Output LED Indication, Integrated 3C/2m long PVC Cable 65mm long tubular Metallic Housing | | | | | | |
| DINE8SD10 | 8 | 1.5 | NO | 200 | 1755 | 10 |
| DINE12SD10 | 12 | 2 | NO | 200 | 1235 | |
| DINE18SD10 | 18 | 5 | NO | 200 | 1265 | |
| DINE30SD10 | 30 | 10 | NO | 400 | 1630 | |
| Non Flush Version, Nominal Voltage 12-30V DC 2 Wire Output LED Indication, Integrated 3C/2m long PVC Cable 65mm long tubular Metallic Housing | | | | | | |
| DINE8ND10 | 8 | 2 | NO | 200 | 1755 | 10 |
| DINE12ND10 | 12 | 4 | NO | 200 | 1235 | |
| DINE18ND10 | 18 | 8 | NO | 200 | 1265 | |
| DINE30ND10 | 30 | 15 | NO | 400 | 1630 | |

Note : for NC output, replace suffix 10 by 01

## ePROX Range

### Short Housing Inductive Proximity Switch-45mm length

**HSN Code - 8536**

| Cat. No. | Dia (mm) | Nominal Sensing Distance (mm) | Output | Max. Load (mA) | MRP [₹] | Lot Size |
|---|---|---|---|---|---|---|
| Flush Version Nominal Voltage 12-30V DC, 3 Wire Output, LED Indication, Integrated 3C/2m long PVC Cable | | | | | | |
| 45mm long tubular Metallic Housing | | | | | | |
| DINE8SP10S | 8 | 1.5 | PNP-NO | 200 | 2005 | 10 |
| DINE8SN10S | 8 | 1.5 | NPN-NO | 200 | 2005 | |
| DINE12SP10S | 12 | 2 | PNP-NO | 200 | 1405 | |
| DINE12SN10S | 12 | 2 | NPN-NO | 200 | 1405 | |
| DINE18SP10S | 18 | 5 | PNP-NO | 200 | 1415 | |
| DINE18SN10S | 18 | 5 | NPN-NO | 200 | 1415 | |
| Non Flush Version, Nominal Voltage 12-30V DC, 3 Wire Output, LED Indication, Integrated 3C/2m long PVC Cable 45mm long tubular Metallic Housing | | | | | | |
| DINE8NP10S | 8 | 2 | PNP-NO | 200 | 2005 | 10 |
| DINE8NN10S | 8 | 2 | NPN-NO | 200 | 2005 | |
| DINE12NP10S | 12 | 4 | PNP-NO | 200 | 1405 | |
| DINE12NN10S | 12 | 4 | NPN-NO | 200 | 1405 | |
| DINE18NP10S | 18 | 8 | PNP-NO | 200 | 1415 | |
| DINE18NN10S | 18 | 8 | NPN-NO | 200 | 1415 | |

### Square / Rectangular Proximity Switch

**HSN Code - 8536**

| Cat. No.* | Size (mm) | Nominal Sensing Distance (mm) | Output | Max. Load (mA) | MRP [₹] | Lot Size |
|---|---|---|---|---|---|---|
| Flush Version, Nominal Voltage 12-30V DC, 3 Wire Output, LED Indication, Integrated 3C/2m long PVC Cable, Plastic Housing | | | | | | |
| DINE1717SP10P | 17x17x30 | 5 | PNP-NO | 200 | 1405 | 10 |
| DINE5025SP10P | 50x25x10 | 5 | PNP-NO | 200 | 1465 | |
| DINE1717SN10P | 17x17x30 | 5 | NPN-NO | 200 | 1405 | |
| DINE5025SN10P | 50x25x10 | 5 | NPN-NO | 200 | 1465 | |

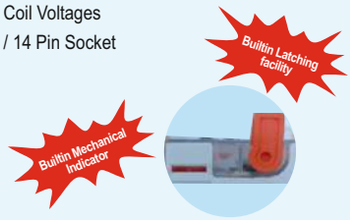
* For NC Output, Replace Suffix 10 by 01

** For 110V AC input, Replace A by 2A

*** High Ambient Temp upto 125°C Proximity switch are available on request

## Miniature Plug in Relays

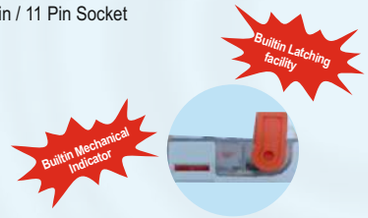
- Type APAM (Miniature)
- 12/6 Amp. (Res.) Contact rating
- 2 Change over / 4Change over
- Silver Nickle Contacts
- Built in Mechanical Indicator/Latching facility
- Wide Coil Voltages
- 8 Pin / 14 Pin Socket




**Socket & Clamp (APSM)**
35 mm DIN rail mounting
Rating : 6A, 12A, 300V

## Universal Relays

- Type APAU
- 10 Amp (Res) Contact rating
- 2 Change over / 3 Change over
- Silver Nickle Contacts
- Built in Mechanical Indicator/ Latching facility
- Wide Coil Voltages
- 8 Pin / 11 Pin Socket




**Socket & Clamp (APAU)**
35 mm DIN rail mounting Rating : 10 A, 250V

## Plug in Relays - Miniature (APAM)

**HSN Code - 8536**

| Coil Voltage | With LED Indication Cat. No. | MRP [₹] | Contacts | Lot Size |
|---|---|---|---|---|
| 14 Pin, Contact rating - 6A (Res.) at 30V DC/250V AC; Mechanical indicator with manual testing/latching lever | | | | |
| 12V DC | APAM412DLE | 730 | 4 C/O | 10 |
| 24V DC | APAM424DLE | 680 | | |
| 110V DC | APAM4110DLE | 835 | | |
| 24V AC | APAM424ALE | 800 | | |
| 110V AC | APAM4110ALE | 800 | | |
| 230V AC | APAM4230ALE | 785 | | |
| 8 Pin, Contact rating - 6A (Res.) at 30V DC/250V AC; Mechanical indicator with manual testing/latching lever | | | | |
| 12V DC | APAM212DLE | 670 | 2 C/O | 10 |
| 24V DC | APAM224DLE | 645 | | |
| 110V DC | APAM2110DLE | 760 | | |
| 24V AC | APAM224ALE | 750 | | |
| 110V AC | APAM2110ALE | 775 | | |
| 230V AC | APAM2230ALE | 785 | | |
| 8 Pin, Contact rating - 12A (Res.) at 30V DC/250V AC; Mechanical indicator with manual testing/latching lever | | | | |
| 12V DC | APAN212DLE | 705 | 2 C/O | 10 |
| 24V DC | APAN224DLE | 695 | | |
| 110V DC | APAN2110DLE | 785 | | |
| 24V AC | APAN224ALE | 775 | | |
| 110V AC | APAN2110ALE | 800 | | |
| 230V AC | APAN2230ALE | 825 | | |

## Sockets for APAM / APAN / ASPM Plug in Relay

**HSN Code - 8538**

| Cat. No. | Type | MRP [₹] | Lot Size |
|---|---|---|---|
| Screw Terminals, 35mm DIN Rail Mounting | | | |
| APSM14 | 14 pin socket suitable for APAM / ASPM plug in relay, 6A | 370 | 10 |
| APSM8 | 8 pin socket suitable for APAM / APAN / ASPM plug in relay 12A | 295 | |
| APAMCL | Holding clamp for APAM / APAN plug in relay | 80 | |

## Plug In Relays - Universal (APAU)

**HSN Code - 8536**

| Coil Voltage | With LED Indication Cat. No. | MRP [₹] | Contacts | Lot Size |
|---|---|---|---|---|
| 8 Pin, Contact rating - 10A (Res.) at 30V DC/250V AC; Mechanical indicator with manual testing/latching lever | | | | |
| 12V DC | APAU212DLE | 1655 | 2 C/O | 10 |
| 24V DC | APAU224DLE | 1595 | | |
| 110V DC | APAU2110DLE | 1315 | | |
| 24V AC | APAU224ALE | 1235 | | |
| 110V AC | APAU2110ALE | 1315 | | |
| 230V AC | APAU2230ALE | 1315 | | |
| 11 Pin, Contact rating - 10A (Res.) at 30V DC/250V AC; Mechanical indicator with manual testing/latching lever | | | | |
| 12V DC | APAU312DLE | 1670 | 3 C/O | 10 |
| 24V DC | APAU324DLE | 1605 | | |
| 110V DC | APAU3110DLE | 1410 | | |
| 24V AC | APAU324ALE | 1385 | | |
| 110V AC | APAU3110ALE | 1760 | | |
| 230V AC | APAU3230ALE | 1815 | | |

## Sockets for APAU / ASPU / ASPS Plug in Relay

**HSN Code - 8538**

| Cat. No. | Type | MRP [₹] | Lot Size |
|---|---|---|---|
| 10A, 250V AC, Screw Terminals, 35mm DIN Rail Mounting | | | |
| APSU11 | 11 pin socket for APAU / ASPU / ASPS plug in relay | 435 | 10 |
| APSU8 | 8 pin socket for APAU / ASPU / ASPS plug in relay | 410 | |
| APAUCL | Holding Clamp for APAU Plug in relay | 80 | |

- Type ASPU
- 10 Amp (Res) Contact rating
- 2 Change over / 3 Change over

## Plug In Relays - Universal (ASPU)

**HSN Code - 8536**

| Coil Voltage | Cat. No. | Contacts | MRP [₹] | Lot Size |
|---|---|---|---|---|
| 8 Pin - contact rating 10A (Res.) at 24V DC/240V AC, LED Indication | | | | |
| 12V DC | ASPU212DLE | 2 C/O | 595 | 10 |
| 24V DC | ASPU224DLE | | 595 | |
| 110V DC | ASPU2110DLE | | 685 | |
| 12V AC | ASPU212ALE | | 685 | |
| 24V AC | ASPU224ALE | | 730 | |
| 110V AC | ASPU2110ALE | | 720 | |
| 240V AC | ASPU2240ALE | | 795 | |
| 11 Pin - contact rating 10A (Res.) at 24V DC/240V AC, LED Indication | | | | |
| 12V DC | ASPU312DLE | 3 C/O | 720 | 10 |
| 24V DC | ASPU324DLE | | 730 | |
| 110V DC | ASPU3110DLE | | 795 | |
| 24V AC | ASPU324ALE | | 830 | |
| 110V AC | ASPU3110ALE | | 805 | |
| 240V AC | ASPU3240ALE | | 885 | |

- Type ASPS
- 5 Amp (Res) Contact rating
- 2 Change over / 3 Change over

## Plug In Relays - Universal (ASPS)

**HSN Code - 8536**

| Coil Voltage | Cat. No. | Contacts | MRP [₹] | Lot Size |
|---|---|---|---|---|
| 8 Pin - contact rating 5A (Res.) at 24V DC/240V AC, LED Indication | | | | |
| 12V DC | ASPS212DLE | 2 C/O | 535 | 10 |
| 24V DC | ASPS224DLE | | 535 | |
| 48V DC | ASPS248DLE | | 685 | |
| 110V DC | ASPS2110DLE | | 605 | |
| 12V AC | ASPS212ALE | | 545 | |
| 24V AC | ASPS224ALE | | 595 | |
| 110V AC | ASPS2110ALE | | 580 | |
| 240V AC | ASPS2240ALE | | 645 | |
| 11 Pin - contact rating 5A (Res.) at 24V DC/240V AC, LED Indication | | | | |
| 12V DC | ASPS312DLE | 3 C/O | 645 | 10 |
| 24V DC | ASPS324DLE | | 655 | |
| 48V DC | ASPS348DLE | | 760 | |
| 110V DC | ASPS3110DLE | | 710 | |
| 24V AC | ASPS324ALE | | 625 | |
| 110V AC | ASPS3110ALE | | 685 | |
| 240V AC | ASPS3240ALE | | 770 | |

## Sockets for ASPU / ASPS Plug in Relay

**HSN Code - 8538**

| Cat. No. | Type | MRP [₹] | Lot Size |
|---|---|---|---|
| 10A, 240V AC, Screw Terminals, 35mm DIN Rail Mounting | | | |
| ASSU11 | SOCKET 11 PIN FOR ASPS/ASPU Relay | 295 | 10 |
| ASSU8 | SOCKET 8 PIN FOR ASPS/ASPU Relay | 230 | |

* For price of other coil voltage, please contact our nearest sales office.

- Type ASPM
- 5 Amp (Res) Contact rating
- 2 Change over / 4 Change over

## Plug In Relays - Miniature (ASPM)

**HSN Code - 8536**

| Coil Voltage | Cat. No. | Contacts | MRP [₹] | Lot Size |
|---|---|---|---|---|
| 14 Pin - contact rating 5A (Res.) at 24V DC/240V AC, LED Indication | | | | |
| 12V DC | ASPM412DLE | 4 C/O | 490 | 20 |
| 24V DC | ASPM424DLE | | 480 | |
| 48V DC | ASPM448DLE | | 505 | |
| 110V DC | ASPM4110DLE | | 490 | |
| 24V AC | ASPM424ALE | | 595 | |
| 110V AC | ASPM4110ALE | | 540 | |
| 240V AC | ASPM4240ALE | | 560 | |
| 8 Pin - contact rating 5A (Res.) at 24V DC/240V AC, LED Indication | | | | |
| 12V DC | ASPM212DLE | 2 C/O | 405 | 20 |
| 24V DC | ASPM224DLE | | 405 | |
| 48V DC | ASPM248DLE | | 600 | |
| 110V DC | ASPM2110DLE | | 485 | |
| 24V AC | ASPM224ALE | | 480 | |
| 110V AC | ASPM2110ALE | | 490 | |
| 240V AC | ASPM2240ALE | | 490 | |

## Sockets - for ASPM Plug in Relay

**HSN Code - 8538**

| Cat. No. | Type | MRP [₹] | Lot Size |
|---|---|---|---|
| 5A, 240V AC, Screw Terminals, 35mm DIN Rail Mounting | | | |
| ASSM14 | SOCKET 14 PIN FOR ASPM Relay | 380 | 20 |
| ASSM8 | SOCKET 8 PIN FOR ASPM Relay | 305 | |

* For price of other coil voltage, please contact our nearest sales office.

# Enclosures

- Bhartia Enclosure 2.0
- Terminal Box 2.0
- 'BCH-SS' (Stainless Steel) Boxes
- Terminal Boxes
- Bhartia Boxes
- TCE Series Enclosure
- Techno - Modular Enclosures
- Compartmentalized Enclosure (Fixed & Draw-out)
- Control Desk
- IT Racks - 19" and ETSI Racks
- Non Metallic Enclosure
- Enclosure Cooling System New

# ENCLOSURE COOLING SYSTEM

**Protects Panels**

Prevents Overheating

**Reliable Operation**

Reduces Downtime

**Energy Efficient**

Lower Power Consumption

**Boosts Productivity**

Keeps Operations Running

## KEY FEATURES

- 500W–2000W Cooling Capacity
- IP54 Internal Protection
- R134a Refrigerant

**Reliable Cooling For Electrical Enclosures In Demanding Industrial Environments**

BHARTIA BCH

BCH ELECTRIC LIMITED

# Bhartia Enclosure 2.O

- Available in 45 different variants
- Single/Double door version
- Min. Size : 200Wx300Hx120D mm
- Max. Size : 1200Wx1400Hx400D mm
- **Protection Ratings:**

  **Single door - UL/cUL Type 1,4#**
  **- IP66**
  **- IK10**
  **Double door - UL/cUL Type 1,12#**
  **- IP55**
  **- IK10**

- CE Certified

# For UL Listed products, please contact the nearest BCH branch office.

## Bhartia Enclosure 2.O

**HSN CODE: 8538**

| Type | SIZE ( WxHxD) mm | MOQ Nos. | Cat No. | List Price [₹] |
|---|---|---|---|---|
| SINGLE DOOR ENCLOSURE | 200X300X120 | 1 | BIL-40000 | 4155 |
| SINGLE DOOR ENCLOSURE | 200X300X150 | 1 | BIL-40010 | 4530 |
| SINGLE DOOR ENCLOSURE | 250X300X150 | 1 | BIL-40020 | 4700 |
| SINGLE DOOR ENCLOSURE | 300X300X150 | 1 | BIL-40030 | 5065 |
| SINGLE DOOR ENCLOSURE | 300X300X210 | 1 | BIL-40040 | 5400 |
| SINGLE DOOR ENCLOSURE | 300X400X150 | 1 | BIL-40050 | 5630 |
| SINGLE DOOR ENCLOSURE | 300X400X210 | 1 | BIL-40060 | 6310 |
| SINGLE DOOR ENCLOSURE | 400X300X150 | 1 | BIL-40070 | 5515 |
| SINGLE DOOR ENCLOSURE | 400X300X210 | 1 | BIL-40080 | 6185 |
| SINGLE DOOR ENCLOSURE | 400X400X150 | 1 | BIL-40090 | 6310 |
| SINGLE DOOR ENCLOSURE | 400X400X210 | 1 | BIL-40100 | 6690 |
| SINGLE DOOR ENCLOSURE | 400X500X150 | 1 | BIL-40110 | 7125 |
| SINGLE DOOR ENCLOSURE | 400X500X210 | 1 | BIL-40120 | 7550 |
| SINGLE DOOR ENCLOSURE | 400X600X210 | 1 | BIL-40140 | 8900 |
| SINGLE DOOR ENCLOSURE | 400X600X350 | 1 | BIL-40150 | 11040 |
| SINGLE DOOR ENCLOSURE | 500X500X210 | 1 | BIL-40160 | 8900 |
| SINGLE DOOR ENCLOSURE | 500X500X300 | 1 | BIL-40170 | 10675 |
| SINGLE DOOR ENCLOSURE | 500X600X210 | 1 | BIL-40180 | 10210 |
| SINGLE DOOR ENCLOSURE | 500X700X210 | 1 | BIL-40190 | 11605 |
| SINGLE DOOR ENCLOSURE | 500X700X300 | 1 | BIL-40200 | 13355 |
| SINGLE DOOR ENCLOSURE | 600X400X210 | 1 | BIL-40210 | 9070 |
| SINGLE DOOR ENCLOSURE | 600X400X300 | 1 | BIL-40220 | 11655 |
| SINGLE DOOR ENCLOSURE | 600X600X210 | 1 | BIL-40230 | 10950 |
| SINGLE DOOR ENCLOSURE | 600X600X300 | 1 | BIL-40240 | 13150 |
| SINGLE DOOR ENCLOSURE | 600X600X350 | 1 | BIL-40250 | 13945 |
| SINGLE DOOR ENCLOSURE | 600X800X210 | 1 | BIL-40260 | 13215 |
| SINGLE DOOR ENCLOSURE | 600X800X250 | 1 | BIL-40270 | 15160 |
| SINGLE DOOR ENCLOSURE | 600X800X300 | 1 | BIL-40280 | 15130 |
| SINGLE DOOR ENCLOSURE | 600X1000X210 | 1 | BIL-40290 | 16665 |
| SINGLE DOOR ENCLOSURE | 600X1000X300 | 1 | BIL-40300 | 18900 |
| SINGLE DOOR ENCLOSURE | 600X1200X300 | 1 | BIL-40310 | 21705 |
| SINGLE DOOR ENCLOSURE | 800X600X300 | 1 | BIL-40320 | 15040 |
| SINGLE DOOR ENCLOSURE | 800X800X210 | 1 | BIL-40330 | 16615 |
| SINGLE DOOR ENCLOSURE | 800X800X300 | 1 | BIL-40340 | 17635 |
| SINGLE DOOR ENCLOSURE | 800X1000X250 | 1 | BIL-40350 | 20045 |
| SINGLE DOOR ENCLOSURE | 800X1000X300 | 1 | BIL-40360 | 20290 |
| SINGLE DOOR ENCLOSURE | 800X1200X300 | 1 | BIL-40370 | 25270 |
| DOUBLE DOOR ENCLOSURE | 1000X800X210 | 1 | BIL-40380 | 21200 |
| DOUBLE DOOR ENCLOSURE | 1000X800X300 | 1 | BIL-40390 | 24305 |
| DOUBLE DOOR ENCLOSURE | 1000X1000X300 | 1 | BIL-40400 | 28270 |
| DOUBLE DOOR ENCLOSURE | 1000X1200X300 | 1 | BIL-40410 | 32490 |
| DOUBLE DOOR ENCLOSURE | 1000X1400X300 | 1 | BIL-40420 | 38865 |
| DOUBLE DOOR ENCLOSURE | 1000X1400X400 | 1 | BIL-40430 | 42000 |
| DOUBLE DOOR ENCLOSURE | 1200X1400X300 | 1 | BIL-40440 | 40970 |
| DOUBLE DOOR ENCLOSURE | 1200X1400X400 | 1 | BIL-40450 | 45095 |

**MOQ : Minimum order quantity in nos.**

## Technical Particulars (Bhartia Enclosure 2.O)

- Enclosure body fabricated from 1.2mm/1.6mm
- Enclosure door fabricated from 1.2mm/1.6mm/2.0mm
- Cable entry plate 1.6mm provided at bottom
- Mounting plate made 2.0/2.5mm Galvanised steel
- Foamed in PU Gasket
- Hinged door interchangeable LHS/RHS
- Door opening angle 120°
- Die casted Cam lock provided up to 1000mm height
- 3 - point lock provide for 1200mm and above height
- Powder coated to RAL - 7035 structure finish

**HSN CODE: 8538**

| Type | Cat No. | MOQ Nos. | List Price [₹] |
|---|---|---|---|
| Wall Mounting Bracket Kit 20mm | BIL-WM-H20 | 1 | 420 |

Note: Cutout charges will be extra
: Wall mounting bracket set is an additional accessory
(For Bhartia enclosure 2.O, it is not a part of standard packing)

***List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.**

***GST to be charged extra**

# Terminal Box 2.O

- Available in 22 different variants
- Min. Size : 150Wx150Hx80D mm
- Max. Size : 600Wx400Hx120D mm
- Degree of protection: IP66 - IK10
- CE Certified

## Terminal Box 2.O

**HSN CODE: 8538**

| SIZE ( W x H x D) mm | MOQ | Cat No. | List Price [₹] |
|---|---|---|---|
| 150X150X80 | 1 | BIL-30000 | 2030 |
| 200X150X80 | 1 | BIL-30010 | 2240 |
| 300X150X80 | 1 | BIL-30020 | 2585 |
| 200X200X80 | 1 | BIL-30030 | 2355 |
| 300X200X80 | 1 | BIL-30040 | 2510 |
| 400X200X80 | 1 | BIL-30050 | 2685 |
| 600X200X80 | 1 | BIL-30060 | 3645 |
| 150X150X120 | 1 | BIL-30070 | 2310 |
| 200X150X120 | 1 | BIL-30080 | 2390 |
| 300X150X120 | 1 | BIL-30090 | 2640 |
| 400X150X120 | 1 | BIL-30100 | 3100 |
| 200X200X120 | 1 | BIL-30110 | 2585 |
| 300X200X120 | 1 | BIL-30120 | 2865 |
| 400X200X120 | 1 | BIL-30130 | 3250 |
| 500X200X120 | 1 | BIL-30140 | 4075 |
| 600X200X120 | 1 | BIL-30150 | 4505 |
| 300X300X120 | 1 | BIL-30160 | 3465 |
| 400X300X120 | 1 | BIL-30170 | 4155 |
| 500X300X120 | 1 | BIL-30180 | 4485 |
| 600X300X120 | 1 | BIL-30190 | 5420 |
| 400X400X120 | 1 | BIL-30200 | 4700 |
| 600X400X120 | 1 | BIL-30210 | 5905 |

**MOQ : Minimum order quantity in nos.**

## Technical Particulars (Terminal Box 2.O)

- Enclosure body fabricated from 1.2mm
- Enclosure door fabricated from 1.2mm
- Holes with rubber grommet at top and bottom of enclosure body provided to facilitate cable entry
- Provision of din rail fixing in horizontal position on predrilled bracket
- Door removable type with quick release fastners
- Foamed in PU Gasket
- Powder coated to RAL - 7035 structure finish

**HSN Code : 8538**

| Type | Cat. No. | MOQ | List Price [₹] |
|---|---|---|---|
| Set of Wall Mounting bracket (small) | BIL-WM-S | 1 | 250 |
| Set of Wall Mounting bracket (big) | BIL-WM-B | 1 | 285 |
| Set of Wall Mounting bracket Kit 20mm | BIL-WM-H20 | 1 | 420 |

Note : Cutout charges will be extra
: Wall mounting bracket set is an additional accessory
(For Terminal box 2.O, it is not a part of standard packing)

***List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.**

***GST to be charged extra**

- 10 Different Versions
- Fabricated from 1.2/1.5 mm stainless steel sheet
- Mounting Plate made up of 2.0mm Galvanised steel
- Cable entry plate 2.0mm SS 304 provided at bottom
- SS grade 304
- Foamed in PU gasket
- Box upto BIL - 90405020 is made up of 1.2 mm SS & above of 1.5 MM SS.
- Degree of protection IP66
- 120 deg door open-able concealed hinge door with cam locking arrangement.

## 'BCH - SS' (Stainless Steel)

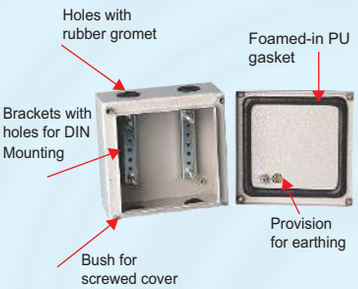
**HSN Code : 8538**

| Type | Size (WxHxD) mm | MOQ Nos. | Cat No. | List Price [₹] |
|---|---|---|---|---|
| SINGLE DOOR BOX | 200X300X150 | 1 | BIL-90203015 | 8810 |
| SINGLE DOOR BOX | 300X300X200 | 1 | BIL-90303020 | 12205 |
| SINGLE DOOR BOX | 400X400X200 | 1 | BIL-90404020 | 16140 |
| SINGLE DOOR BOX | 400X500X200 | 1 | BIL-90405020 | 17980 |
| SINGLE DOOR BOX | 400X600X200 | 1 | BIL-90406020 | 20605 |
| SINGLE DOOR BOX | 500X600X200 | 1 | BIL-90506020 | 26390 |
| SINGLE DOOR BOX | 600X600X200 | 1 | BIL-90606020 | 28220 |
| SINGLE DOOR BOX | 600X800X200 | 1 | BIL-90608020 | 33545 |
| SINGLE DOOR BOX | 500X700X300 | 1 | BIL-90507030 | 34070 |
| SINGLE DOOR BOX | 800X800X300 | 1 | BIL-90808030 | 46905 |

**MOQ - Minimum order quantity in nos.**

| Type | Cat No. | MOQ Nos. | List Price [₹] |
|---|---|---|---|
| SET OF SS WALL MOUNTING BRACKET (SMALL) | BIL-WM-S-SS | 1 | 685 |
| SET OF SS WALL MOUNTING BRACKET (BIG) | BIL-WM-B-SS | 1 | 910 |

- 43 Different Versions
- Min. Size : 150 X 150 X 80
- Max Size : 800 X 400 X 120
- Degree of protection IP55/IP66/IK10
- CE Certified




**Technical Particulars (TERMINAL BOXES)**

- Fabricated from 1.2mm CRCA sheet steel
- Powder coated to shade RAL 7035 Structure finish
- Foamed in PU gasket
- Provided with screwed cover on top
- Degree of protection IP55/IP66/IK10
- CE Certified
- Brackets provided inside to facilitate DIN rail mounting
- Holes with Gromet provided to facilitate cable entry in IP 55 terminal boxes

Note: Cutout charges will be extra

## Terminal Boxes

**HSN Code : 8538**

| Box Size (W x H x D) | IP-55 Range | | | IP-66 Range | |
|---|---|---|---|---|---|
| | MOQ | Cat. No. | List Price [₹] | Cat. No. | List Price [₹] |
| 150x150x80 | 1 | BIL-70000 | 2000 | BIL-80000 | 2295 |
| 200x150x80 | - | | | BIL-80100 | 2525 |
| 300x150x80 | 1 | BIL-70010 | 2350 | BIL-80010 | 2915 |
| 200x200x80 | 1 | BIL-70020 | 2250 | BIL-80020 | 2660 |
| 300x200x80 | 1 | BIL-70030 | 2465 | BIL-80030 | 2840 |
| 400x200x80 | - | | | BIL-80110 | 3035 |
| 600x200x80 | - | | | BIL-80130 | 4125 |
| 150x150x120 | 1 | BIL-70040 | 2215 | BIL-80040 | 2610 |
| 200x150x120 | - | | | BIL-80150 | 2710 |
| 300x150x120 | 1 | BIL-70050 | 2625 | BIL-80050 | 2965 |
| 200x200x120 | 1 | BIL-70060 | 2560 | BIL-80060 | 2915 |
| 300x200x120 | 1 | BIL-70070 | 2850 | BIL-80070 | 3230 |
| 400x200x120 | 1 | BIL-70080 | 3190 | BIL-80080 | 3665 |
| 300x300x120 | 1 | BIL-70090 | 3400 | BIL-80090 | 3920 |
| 400x150x120 | - | | | BIL-80170 | 3500 |
| 400x300x120 | 1 | BIL-70180 | 3765 | BIL-80180 | 4700 |
| 400x400x120 | 1 | BIL-70190 | 4425 | BIL-80190 | 5310 |
| 500x200x120 | 1 | BIL-70200 | 3880 | BIL-80200 | 4605 |
| 500x300x120 | 1 | BIL-70210 | 4305 | BIL-80210 | 5070 |
| 600x200x120 | 1 | BIL-70220 | 4335 | BIL-80220 | 5080 |
| 600x300x120 | 1 | BIL-70230 | 5300 | BIL-80230 | 6130 |
| 600x400x120 | 1 | BIL-70240 | 5815 | BIL-80240 | 6670 |
| 800x200x120 | 1 | BIL-70250 | 6130 | BIL-80250 | 7025 |
| 800x400x120 | 1 | BIL-70260 | 7455 | BIL-80260 | 8440 |

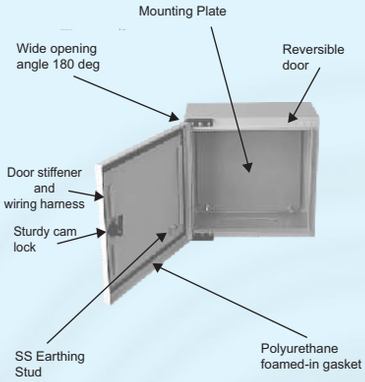
MOQ-Minimum order quantity in nos.

***List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.**

***GST to be charged extra**

- 51 Different Versions
- Single/Double door versions
- Min. Size : 200 X 200 X 150
- Max Size : 1200 X 1400 X 400
- Degree of protection IP55/IP66/IK10
- CE Certified

## Double door version




### Technical Particulars (BHARTIA BOXES)

- Fabricated from 1.2mm / 1.6mm CRCA sheet steel ( Sizes upto BIL-50180 made from 1.2mm CRCA, beyond this using 1.6mm CRCA )
- Foamed in PU gasket
- Hinged door, interchangeable LHS / RHS, opening angle 180 deg for standard hinge & 120 deg for concealed hinge in bigger sizes.
- Degree of protection IP55/IP66/IK10
- CE Certified
- Cable gland plate 2mm thick provided at bottom
- Cam locking arrangement
- Powder coated to RAL : 7035 structure finish
- Mounting Plate made up of 2.0mm Galvanised steel

Note : Cutout charges will be extra
: Wall mounting bracket set is an additional accessory
(for Bhartia Box & Terminal box it is not a part of standard packing)

**HSN Code : 8538**

| Type | Cat. No. | MOQ | List Price [₹] |
|---|---|---|---|
| Set of Wall Mounting bracket (small) | BIL-WM-S | 1 | 250 |
| Set of Wall Mounting bracket (big) | BIL-WM-B | 1 | 285 |
| Set of Wall Mounting bracket Kit 20mm | BIL-WM-H20 | 1 | 420 |

Note :
* Set of wall mounting bracket (small) is suitable for all range of terminal boxes and Bhartia boxes upto size : 400x500x200mm.
* Set of wall mounting bracket (big) is suitable for Bhartia boxes beyond size : 400x500x200mm.

## Bhartia Boxes

**HSN Code : 8538**

| Type | Size (WxHxD) mm | IP-55 Range | | | IP-66 Range | |
|---|---|---|---|---|---|---|
| | | MOQ Nos. | Cat. No. | List Price [₹] | Cat. No. | List Price [₹] |
| SINGLE DOOR BOX | 200x200x150 | 1 | BIL-50000 | 4025 | BIL-60000 | 4225 |
| SINGLE DOOR BOX | 200x300x150 | 1 | BIL-50010 | 5110 | BIL-60010 | 5210 |
| SINGLE DOOR BOX | 250x300x150 | 1 | BIL-50020 | 5310 | BIL-60020 | 5475 |
| SINGLE DOOR BOX | 300x300x150 | 1 | BIL-50030 | 5730 | BIL-60030 | 5955 |
| SINGLE DOOR BOX | 300x300x200 | 1 | BIL-50050 | 6100 | BIL-60050 | 6460 |
| SINGLE DOOR BOX | 300x400x150 | 1 | BIL-50060 | 6360 | BIL-60060 | 6695 |
| SINGLE DOOR BOX | 300x400x200 | 1 | BIL-50080 | 7140 | BIL-60080 | 7180 |
| SINGLE DOOR BOX | 400x300x150 | 1 | BIL-50090 | 6235 | BIL-60090 | 6600 |
| SINGLE DOOR BOX | 400x300x200 | 1 | BIL-50110 | 6985 | BIL-60110 | 7090 |
| SINGLE DOOR BOX | 400x400x150 | 1 | BIL-50120 | 7140 | BIL-60120 | 7275 |
| SINGLE DOOR BOX | 400x400x200 | 1 | BIL-50140 | 7560 | BIL-60140 | 7790 |
| SINGLE DOOR BOX | 400x500x150 | 1 | BIL-50150 | 8050 | BIL-60150 | 8470 |
| SINGLE DOOR BOX | 400x500x200 | 1 | BIL-50170 | 8535 | BIL-60170 | 8775 |
| SINGLE DOOR BOX | 500x500x200 | 1 | BIL-50180 | 10055 | | |
| SINGLE DOOR BOX | 400x600x200 | 1 | BIL-50190 | 10055 | BIL-60190 | 10200 |
| SINGLE DOOR BOX | 500x600x200 | 1 | BIL-50210 | 11535 | BIL-60210 | 11880 |
| SINGLE DOOR BOX | 500x700x200 | 1 | BIL-50220 | 13115 | | |
| SINGLE DOOR BOX | 500x700x300 | 1 | BIL-50230 | 15085 | | |
| SINGLE DOOR BOX | 600x400x200 | 1 | BIL-50240 | 10250 | BIL-60240 | 10630 |
| SINGLE DOOR BOX | 600x400x300 | 1 | BIL-50250 | 13170 | | |
| SINGLE DOOR BOX | 600x500x200 | 1 | BIL-50260 | 11880 | BIL-60260 | 12840 |
| SINGLE DOOR BOX | 600x600x200 | 1 | BIL-50270 | 12365 | | |
| SINGLE DOOR BOX | 600x600x300 | 1 | BIL-50280 | 14865 | | |
| SINGLE DOOR BOX | 600x700x200 | 1 | BIL-50290 | 14895 | | |
| SINGLE DOOR BOX | 600x800x200 | 1 | BIL-50300 | 14935 | | |
| SINGLE DOOR BOX | 600x800x300 | 1 | BIL-50320 | 17090 | | |
| SINGLE DOOR BOX | 600x1000x200 | 1 | BIL-50330 | 18835 | | |
| SINGLE DOOR BOX | 600x1000x300 | 1 | BIL-50340 | 21370 | | |
| SINGLE DOOR BOX | 800x800x300 | 1 | BIL-50310 | 19935 | | |
| SINGLE DOOR BOX | 800x1000x200 | 1 | BIL-50350 | 22195 | | |
| SINGLE DOOR BOX | 800x1000x250 | 1 | BIL-50360 | 22655 | | |
| SINGLE DOOR BOX | 800x1000x300 | 1 | BIL-50390 | 22925 | | |
| SINGLE DOOR BOX | 800x1200x300 | 1 | BIL-50395 | 28565 | | |
| DOUBLE DOOR BOX | 1000x800x200 | 1 | BIL-50500 | 23955 | | |
| DOUBLE DOOR BOX | 1000x800x300 | 1 | BIL-50520 | 27470 | | |
| DOUBLE DOOR BOX | 1000x1000x300 | 1 | BIL-50540 | 31940 | | |
| DOUBLE DOOR BOX | 1000x1200x300 | 1 | BIL-50550 | 36720 | | |
| DOUBLE DOOR BOX | 1000x1400x300 | 1 | BIL-50560 | 43915 | | |
| DOUBLE DOOR BOX | 1200x1400x300 | 1 | BIL-50570 | 48820 | | |
| DOUBLE DOOR BOX | 1000x1400x400 | 1 | BIL-50580 | 46310 | | |
| DOUBLE DOOR BOX | 1200x1400x400 | 1 | BIL-50590 | 50965 | | |

MOQ. Minimum order quantity in nos.

## Canopy for Bhartia Boxes

**HSN Code : 8538**

| Size (WxHxD) mm | Cat. No. | MOQ Nos. | List Price [₹] | Size (WxHxD) mm | Cat. No. | MOQ Nos. | List Price [₹] |
|---|---|---|---|---|---|---|---|
| 200WX150D | BIL-12-CAN-2015 | 1 | 1180 | 600WX200D | BIL-16-CAN-6020 | 1 | 2255 |
| 250WX150D | BIL-12-CAN-2515 | 1 | 1340 | 600WX300D | BIL-16-CAN-6030 | 1 | 2765 |
| 300WX150D | BIL-12-CAN-3015 | 1 | 1430 | 800WX300D | BIL-16-CAN-8030 | 1 | 3365 |
| 300WX200D | BIL-12-CAN-3020 | 1 | 1555 | 800WX200D | BIL-16-CAN-8020 | 1 | 2735 |
| 400WX150D | BIL-12-CAN-4015 | 1 | 1620 | 800WX250D | BIL-16-CAN-8025 | 1 | 2950 |
| 400WX200D | BIL-12-CAN-4020 | 1 | 1785 | 1000WX200D | BIL-16-CAN-1020 | 1 | 3205 |
| 500WX200D | BIL-12-CAN-5020 | 1 | 2025 | 1000WX300D | BIL-16-CAN-1030 | 1 | 3945 |
| 500WX300D | BIL-12-CAN-5030 | 1 | 2475 | | | | |

***List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.**

***GST to be charged extra**

Effective from 19.08.2026

## TCE Series Enclosure Code Selection I

**Example:-**

| TCE | 06 | 18 | 05 | - | 001 |
|---|---|---|---|---|---|
| TCE Series of Enclosure | Width | Height | Depth | | Version |

## Sizes Available |

| Width | Height | Depth |
|---|---|---|
| 06-600 W | 18-1800 H | 04-400 D |
| 08-800 W | 20-2000 H | 05-500 D |
| 10-1000 W | 22-2200 H | 06-600 D |
| 12-1200 W | | 08-800 D |

## Version Details |

| 001 | 002 | 003 | 004 | 005 |
|---|---|---|---|---|
| Structure: | Structure: | Structure: | Structure: | Structure: |
| Front Door with Hinge | Front Door with Hinge | Front Door with Hinge | Front Door with Hinge | Front Door with Hinge |
| Rear Bolted Cover | Rear Door with Hinge | Rear Bolted Cover | Rear Door with Hinge | Rear Door with Hinge |
| STD Gland Plate | STD Gland Plate | STD Gland Plate | STD Gland Plate | STD Gland Plate |
| Top Cover | Top Cover | Top Cover | Top Cover | Top Cover |
| Eye Bolt | Eye Bolt | Eye Bolt | Eye Bolt | Eye Bolt |
| 01 Mounting Plate | 01 Mounting Plate | No Mounting Plate | No Mounting Plate | 2 Mounting Plate |

***List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.**

***GST to be charged extra**

### Technical Particulars for TCE Series

- IP66-IK10 for single door enclosure
- IP65-IK10 for double door enclosure
- Structure made up with 2.0mm CRCA
- Door made up with 2.0mm CRCA and covers made up with 1.6mm CRCA
- Bottom 3-part cable entry provision as standard and made up with 2.0mm GPSP
- Mounting plate with sliding arrangement and made up with 3.0mm GPSP
- Push fit Die casted hinge provided at doors.
- Door with Interchangeability features (LHS/RHS)
- 4-point locking provides as standards
- Separate locking at LHS door with swing handle
- Door stiffener with provision of drilling holes for wiring harness.
- Eye bolt as standard for lifting
- Modular Plinth (optional) 100mm Height with Black finish
- Side Covers – Pair consisting of 1no. LHS and 1no. RHS cover
- Surface finish of enclosure RAL - 7035
- Surface finish of Mounting plate - Zn Galvanized

**Note:** up to 800 mm width single door
1000 mm & 1200 mm width double door

**IK10** **IP66 | IP65** CE

*List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.

***GST to be charged extra**

HSN Code: 8538

| Size of Enclosure in mm | | | Cat No. | Enclosure Version* | | | | |
|---|---|---|---|---|---|---|---|---|
| Width (W) | Height (H) | Depth (D) | | VER-001 LP [₹] | VER-002 LP [₹] | VER-003 LP [₹] | VER-004 LP [₹] | VER-005 LP [₹] |
| 600 | 1800 | 400 | TCE061804 | 39780 | 44310 | 31590 | 36480 | |
| 800 | 1800 | 400 | TCE081804 | 47515 | 52140 | 36120 | 41765 | |
| 1000 | 1800 | 400 | TCE101804 | 65395 | 70480 | 50725 | 55470 | |
| 1200 | 1800 | 400 | TCE121804 | 73490 | 82085 | 57010 | 63195 | |
| 600 | 1800 | 500 | TCE061805 | 41560 | 45745 | 33720 | 37890 | |
| 800 | 1800 | 500 | TCE081805 | 48385 | 54475 | 38675 | 43315 | |
| 1000 | 1800 | 500 | TCE101805 | 67160 | 72275 | 52910 | 58340 | |
| 1200 | 1800 | 500 | TCE121805 | 74890 | 85085 | 59990 | 67395 | |
| 800 | 1800 | 600 | TCE081806 | 51590 | 54130 | 41985 | 45965 | 62895 |
| 800 | 1800 | 800 | TCE081808 | 53835 | 59230 | 44780 | 50155 | 71850 |
| 600 | 2000 | 400 | TCE062004 | 42870 | 48195 | 32925 | 39110 | |
| 800 | 2000 | 400 | TCE082004 | 49910 | 54795 | 38130 | 43290 | |
| 1000 | 2000 | 400 | TCE102004 | 71460 | 75460 | 55570 | 59430 | |
| 1200 | 2000 | 400 | TCE122004 | 76770 | 84850 | 61425 | 69630 | |
| 600 | 2000 | 500 | TCE062005 | 45500 | 49280 | 37350 | 42210 | |
| 800 | 2000 | 500 | TCE082005 | 51055 | 56345 | 39335 | 44850 | |
| 1000 | 2000 | 500 | TCE102005 | 70705 | 79115 | 56345 | 62525 | |
| 1200 | 2000 | 500 | TCE122005 | 77310 | 85085 | 60775 | 67395 | |
| 600 | 2000 | 600 | TCE062006 | 46175 | 50725 | 39550 | 44095 | 61035 |
| 800 | 2000 | 600 | TCE082006 | 52815 | 57550 | 42410 | 47165 | 68305 |
| 1000 | 2000 | 600 | TCE102006 | 71830 | 82405 | 57210 | 66705 | 99920 |
| 1200 | 2000 | 600 | TCE122006 | 78835 | 87405 | 63850 | 72030 | 106115 |
| 600 | 2000 | 800 | TCE062008 | 47515 | 51055 | 39680 | 44640 | 66495 |
| 800 | 2000 | 800 | TCE082008 | 55015 | 59090 | 44965 | 49235 | 71960 |
| 1000 | 2000 | 800 | TCE102008 | 78835 | 84060 | 60775 | 67395 | 98185 |
| 1200 | 2000 | 800 | TCE122008 | 82875 | 91920 | 68080 | 74890 | 109665 |
| 600 | 2200 | 600 | TCE062206 | 52045 | 57010 | 41315 | 49045 | 68305 |
| 800 | 2200 | 600 | TCE082206 | 58890 | 62755 | 47410 | 52265 | 73240 |
| 1000 | 2200 | 600 | TCE102206 | 81540 | 87825 | 67005 | 73280 | 102645 |
| 1200 | 2200 | 600 | TCE122206 | 84725 | 94580 | 65855 | 73570 | 117635 |
| 600 | 2200 | 800 | TCE062208 | 56745 | 61555 | 43540 | 50265 | 65505 |
| 800 | 2200 | 800 | TCE082208 | 68495 | 72485 | 52585 | 57210 | 79240 |
| 1000 | 2200 | 800 | TCE102208 | 86835 | 93555 | 70480 | 75800 | 109030 |
| 1200 | 2200 | 800 | TCE122208 | 93920 | 99210 | 76910 | 82085 | 122955 |

*List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.

***GST to be charged extra**

## TCE Bottom Plinth 100mm Height

**HSN Code: 8538**

| Size in MM | | Cat No | LP [₹] |
|---|---|---|---|
| Width (W) | Depth (D) | | |
| 600 | 400 | TCEPL0604 | 3590 |
| 800 | 400 | TCEPL0804 | 4090 |
| 1000 | 400 | TCEPL1004 | 4580 |
| 1200 | 400 | TCEPL1204 | 5015 |
| 600 | 500 | TCEPL0605 | 3840 |
| 800 | 500 | TCEPL0805 | 4305 |
| 1000 | 500 | TCEPL1005 | 4805 |
| 1200 | 500 | TCEPL1205 | 5235 |
| 600 | 600 | TCEPL0606 | 4060 |
| 800 | 600 | TCEPL0806 | 4510 |
| 1000 | 600 | TCEPL1006 | 4980 |
| 1200 | 600 | TCEPL1206 | 5430 |
| 600 | 800 | TCEPL0608 | 4510 |
| 800 | 800 | TCEPL0808 | 4980 |
| 1000 | 800 | TCEPL1008 | 5385 |
| 1200 | 800 | TCEPL1208 | 5915 |

## TCE Side Panel

**HSN Code: 8538**

| Size in MM | | Cat No | LP [₹] |
|---|---|---|---|
| Height (H) | Depth (D) | | |
| 1800 | 400 | TCESP0418 | 7150 |
| 1800 | 500 | TCESP0518 | 8305 |
| 1800 | 600 | TCESP0618 | 9235 |
| 1800 | 800 | TCESP0818 | 12310 |
| 2000 | 400 | TCESP0420 | 7680 |
| 2000 | 500 | TCESP0520 | 9030 |
| 2000 | 600 | TCESP0620 | 10030 |
| 2000 | 800 | TCESP0820 | 12910 |
| 2200 | 600 | TCESP0622 | 11615 |
| 2200 | 800 | TCESP0822 | 15095 |

Note: Cutout charges will be extra

Freight charges will be extra at actuals

*List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.

***GST to be charged extra**

## TCE Series Enclosure Accessories

### Baying system

HSN Code: 8538

| Sl. No | Description | Cat No | LP [₹] |
|---|---|---|---|
| 1 | Baying Kit | TCE-14280 | 2660 |
| 2 | Combination Angle (Pack of 2) | TCE-14281 | 1400 |

### Mounting plate filler profile

HSN Code: 8538

| Sl. No | Description | Cat No | LP [₹] |
|---|---|---|---|
| 1 | Filler plate for 1800mm Height | TCE-FP-1800 | 2025 |
| 2 | Filler plate for 2000mm Height | TCE-FP-2000 | 2230 |
| 3 | Filler plate for 2200mm Height | TCE-FP-2200 | 2445 |

### Wiring plan pocket

HSN Code: 8538

| Sl. No | Description | Cat No | LP [₹] |
|---|---|---|---|
| 1 | File pocket 500mm Width | TCE-TPKT-500 | 990 |
| 2 | File pocket 600mm Width | TCE-TPKT-600 | 1185 |
| 3 | File pocket 800mm Width | TCE-TPKT-800 | 1535 |

### Lamp rail

HSN Code: 8538

| Sl. No | Description | Cat No | LP [₹] |
|---|---|---|---|
| 1 | Lamp rail 600mm Width | TCE-LAMP-RAIL-600 | 285 |
| 2 | Lamp rail 800mm Width | TCE-LAMP-RAIL-800 | 390 |
| 3 | Lamp rail 1000mm Width | TCE-LAMP-RAIL-1000 | 480 |
| 4 | Lamp rail 1200mm Width | TCE-LAMP-RAIL-1200 | 585 |

### Limit switch with fixing arrangement

HSN Code: 8538

| Sl. No | Description | Cat No | LP [₹] |
|---|---|---|---|
| 1 | BCH Limit switch | TCE-LC | 1185 |

### Punched section for depth

HSN Code: 8538

| Sl. No | Description | Cat No | LP [₹] |
|---|---|---|---|
| 1 | Punched section 400mm depth | TCE-PSD-400 | 700 |
| 2 | Punched section 500mm depth | TCE-PSD-500 | 990 |
| 3 | Punched section 600mm depth | TCE-PSD-600 | 1260 |
| 4 | Punched section 800mm depth | TCE-PSD-800 | 1680 |

### Punched section for width

HSN Code: 8538

| Sl. No | Description | Cat No | LP [₹] |
|---|---|---|---|
| 1 | Punched section 600mm width | TCE-PSW-600 | 1400 |
| 2 | Punched section 800mm width | TCE-PSW-800 | 1680 |
| 3 | Punched section 1000mm width | TCE-PSW-1000 | 1960 |
| 4 | Punched section 1200mm width | TCE-PSW-1200 | 2230 |

### Air Filter Unit

HSN Code: 8538

| Sl. No | Description | Cat No | LP [₹] |
|---|---|---|---|
| 1 | Snap fit air filter 148x148 | BIL-SF-1414 | 1100 |
| 2 | Snap fit air filter 204x204 | BIL-SF-2020 | 1650 |
| 3 | Snap fit air filter 255x255 | BIL-SF-2525 | 1825 |
| 4 | Snap fit air filter 204x204 with mounting adaptor | BIL-SFMA-2020 | 1925 |
| 5 | Snap fit air filter 255x255 with mounting adaptor | BIL-SFMA-2525 | 2405 |

### Door Stay

HSN Code: 8538

| Sl. No | Description | Cat No | LP [₹] |
|---|---|---|---|
| 1 | Door Stay for TCE Series | TCE-DS | 1525 |

*GST to be charged extra

*List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.

## Modular Enclosures

- Enclosures
- Minimum size in mm :
  600 x 1800 x 400 (W x H x D)
- Maximum size in mm :
  1200 x 2200 x 800 (W x H x D)
- Degree of protection IP55/IK10
- CE Certified
- Wide range of accessories

## Features

- Completely modular in all the three axes
- Powder coated surface (RAL 7035) for excellent finish and durability
- PU Gasket ensuring higher degree of ingress protection
- 3mm CRCA mounting plate as a standard
- Manufactured on CNC Turret punch press for higher precision, finish and repeated accuracy
- Ideal for :
- Special purpose machines
- Control panels
- PLC panels
- Starter enclosures
- Accessories for mounting 19" equipment

**Enclosure Versions**

001 - with mounting plate and rear cover
002 - with mounting plate and rear door
003 - without mounting plate and with rear cover
004 - without mounting plate and with rear door

To Order And Calculate List Price
(a) Choose Cat. No. and LP of Enclosure version from 001, 002, 003 or 004
(b) Add Cat. No. and LP of Plinth
(c) Add Cat. No. and LP of Side Covers pair

**General Technical Particulars**

- Degree of protection IP55/IK10
- CE Certified
- Fabricated from 2/1.6 mm CRCA/GPSP (frame made up of 2.0mm GPSP, doors & covers made up of 1.6 mm CRCA).
- Fully bolted construction
- Mounting Plate with sliding arrangement - standard & Powder coated to RAL-2000
- Modular Plinth (optional) 100mm high fabricated from CRCA
- Cable entry provision is given from Bottom & made in 3-part construction with Galvanized steel [Unpainted]
- Foamed-in PU gasket
- Powder coated to RAL : 7035 structure finish
- Hinge design allows 120 deg. Door opening
- 3 point lock provided as standard
- Door stiffener with provision of drilling holes for wiring harness.
- Side Covers - Pair : consisting of 1no. LHS and 1no. RHS cover
- To calculate limiting dimension of the enclosure, add 44mm to the width to account for Side Covers,
- 22mm to the height for Top Cover & 44mm to the depth on account of Front and Rear door / cover.

Note : upto 800 mm width single door
1000 mm & 1200 mm width double leaf door

***List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.**

***GST to be charged extra**

**www.bchindia.com**

## Techno Modular Enclosures

**HSN Code : 8538**

| Size of Enclosure (W x H x D in mm) | Cat. No. | Enclosure Version* | | | | Plinth | | Side Covers (Pair) | |
|---|---|---|---|---|---|---|---|---|---|
| | | Ver 001 LP [₹] | Ver 002 LP [₹] | Ver 003 LP [₹] | Ver 004 LP [₹] | Cat. No. | List Price [₹] | Cat. No. | List Price [₹] |
| 600 x 1800 x 400 | TME 061804 | 37130 | 41355 | 29485 | 34045 | TPL 061804 | 3610 | TSC 061804 | 7200 |
| 800 x 1800 x 400 | TME 081804 | 44355 | 48670 | 33725 | 38980 | TPL 081804 | 4110 | TSC 081804 | 7200 |
| 1000 x 1800 x 400 | TME 101804 | 61045 | 65790 | 47335 | 51785 | TPL 101804 | 4605 | TSC 101804 | 7200 |
| 1200 x 1800 x 400 | TME 121804 | 68580 | 76610 | 53215 | 58985 | TPL 121804 | 5060 | TSC 121804 | 7200 |
| 600 x 1800 x 500 | TME 061805 | 38785 | 42700 | 31465 | 35365 | TPL 061805 | 3865 | TSC 061805 | 8360 |
| 800 x 1800 x 500 | TME 081805 | 45165 | 50850 | 36105 | 40425 | TPL 081805 | 4355 | TSC 081805 | 8360 |
| 1000 x 1800 x 500 | TME 101805 | 62705 | 67445 | 49400 | 54465 | TPL 101805 | 4850 | TSC 101805 | 8360 |
| 1200 x 1800 x 500 | TME 121805 | 69905 | 79420 | 55990 | 62915 | TPL 121805 | 5275 | TSC 121805 | 8360 |
| 800 x 1800 x 600 | TME 081806 | 48150 | 50550 | 39205 | 42900 | TPL 081806 | 4550 | TSC 081806 | 9300 |
| 600 x 2000 x 400 | TME 062004 | 40025 | 44970 | 30735 | 36525 | TPL 062004 | 3610 | TSC 062004 | 7745 |
| 800 x 2000 x 400 | TME 082004 | 46575 | 51155 | 35590 | 40400 | TPL 082004 | 4110 | TSC 082004 | 7745 |
| 1000 x 2000 x 400 | TME 102004 | 66715 | 70425 | 51870 | 55470 | TPL 102004 | 4605 | TSC 102004 | 7745 |
| 1200 x 2000 x 400 | TME 122004 | 71670 | 79205 | 57340 | 64975 | TPL 122004 | 5060 | TSC 122004 | 7745 |
| 600 x 2000 x 500 | TME 062005 | 42485 | 45990 | 34855 | 39400 | TPL 062005 | 3865 | TSC 062005 | 9090 |
| 800 x 2000 x 500 | TME 082005 | 47655 | 52605 | 36725 | 41875 | TPL 082005 | 4355 | TSC 082005 | 9090 |
| 1000 x 2000 x 500 | TME 102005 | 66000 | 73845 | 52605 | 58365 | TPL 102005 | 4850 | TSC 102005 | 9090 |
| 1200 x 2000 x 500 | TME 122005 | 72170 | 79420 | 56720 | 62915 | TPL 122005 | 5275 | TSC 122005 | 9090 |
| 600 x 2000 x 600 | TME 062006 | 43095 | 47335 | 36920 | 41160 | TPL 062006 | 4075 | TSC 062006 | 10115 |
| 800 x 2000 x 600 | TME 082006 | 49300 | 53725 | 39595 | 44035 | TPL 082006 | 4550 | TSC 082006 | 10115 |
| 1000 x 2000 x 600 | TME 102006 | 67035 | 76920 | 53415 | 62275 | TPL 102006 | 5025 | TSC 102006 | 10115 |
| 1200 x 2000 x 600 | TME 122006 | 73585 | 81570 | 59585 | 67235 | TPL 122006 | 5495 | TSC 122006 | 10115 |
| 600 x 2000 x 800 | TME 062008 | 44355 | 47655 | 37030 | 41650 | TPL 062008 | 4550 | TSC 062008 | 13000 |
| 800 x 2000 x 800 | TME 082008 | 51355 | 55175 | 41970 | 45960 | TPL 082008 | 5025 | TSC 082008 | 13000 |
| 1000 x 2000 x 800 | TME 102008 | 73585 | 78480 | 56720 | 62915 | TPL 102008 | 5420 | TSC 102008 | 13000 |
| 1200 x 2000 x 800 | TME 122008 | 77355 | 85780 | 63545 | 69905 | TPL 122008 | 5975 | TSC 122008 | 13000 |
| 600 x 2200 x 600 | TME 062206 | 48575 | 53215 | 38585 | 45775 | TPL 062206 | 4075 | TSC 062206 | 11715 |
| 800 x 2200 x 600 | TME 082206 | 54975 | 58580 | 44240 | 48780 | TPL 082206 | 4550 | TSC 082206 | 11715 |
| 1000 x 2200 x 600 | TME 102206 | 76105 | 81970 | 62535 | 68410 | TPL 102206 | 5025 | TSC 102206 | 11715 |
| 1200 x 2200 x 600 | TME 122206 | 79085 | 88275 | 61475 | 68680 | TPL 122206 | 5495 | TSC 122206 | 11715 |
| 600 x 2200 x 800 | TME 062208 | 52975 | 57460 | 40645 | 46930 | TPL 062208 | 4550 | TSC 062208 | 15210 |
| 800 x 2200 x 800 | TME 082208 | 63930 | 67660 | 49110 | 53415 | TPL 082208 | 5025 | TSC 082208 | 15210 |
| 1000 x 2200 x 800 | TME 102208 | 81040 | 87320 | 65790 | 70750 | TPL 102208 | 5420 | TSC 102208 | 15210 |
| 1200 x 2200 x 800 | TME 122208 | 87655 | 92590 | 71775 | 76610 | TPL 122208 | 5975 | TSC 122208 | 15210 |

*Baying kit (BIL-14280) Rs. 2445/- is also available for Enclosure Version. For extra accessories, please contact nearest branch office.

Note : Cutout charges will be extra
Freight charges will be extra at actuals

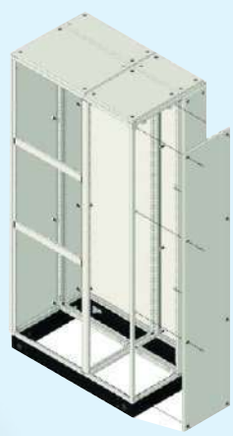
***List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.**

***GST to be charged extra**

# Highlights of **BCH Compartmentalized**

# MCC / PCC / PMCC Solution (Fixed & Drawed Type)

- 100% Modular Structure; can be dispatched in flat pack.
- Flexible compartmentalized -up to Form 4b.
- IP 54 degree of protection with polyurethane foam gasket.
- Compartment size available from 200mm height & multiplies of 100mm.
- Additional accessories like Cable support, Busbar support, Limit Switch and Lamp brackets are available.
- Adjustable mounting plates (Depth wise at the pitch of 25mm).
- Panel can be expended in all 3 dimensions and bayed together by using Baying Kit.
- All Structure members (Corner & Cross bar) having M6 extrude hole at 25mm intervals, No need of any Captive hardware.
- Standard Module dimension for Drawout Enclosures.
  - ▷ Single Front :- 900(W) x 2400(H) x 600(D)
  - ▷ Double Front :- 900(W) x 2400(H) x 1200(D)
- Draw-out feeder available from 200mm height (2SU) to 800mm height (8SU).
- Colour :- RAL-7035 (Structure finish) for structure, doors, covers & internal parts - RAL-2000 (smooth finish) for Mounting plates & Black (Smooth Finish) for Plinth .
- Sheet thickness 2.0mm GPSP for structure, 2.0mm CRCA for Mounting Plate & Mounting rail, 1.6mm CRCA for Doors & Covers, 1.2mm CRCA for Separation plates.



**Technical Particulars (CONTROL DESK):**

- Desk body: 1.6mm CRCA sheet
- Hinged door: 1.6mm CRCA sheet
- Bottom Gland plate: 2.0mm CRCA sheet
- Mounting plate: 2.0mm GPSP sheet
- Plinth corner: 2.0mm CRCA sheet
- Plinth Trim Plates: 1.6mm CRCA sheet
- Foamed-in PU gasket at front door
- Powder coated to RAL: 7035 structure finish
- Bottom plinth painted with smooth black color
- Mounting plate Zn galvanized

## Control Desk

**HSN Code : 8538**

| Type | SIZE ( WxHxD) mm | Control DESK | | |
|---|---|---|---|---|
| | | MOQ Nos. | Cat No. | List Price [₹] |
| SINGLE DOOR CONTROL DESK | 600X1000X400 | 1 | BIL-CD-061004 | 22400 |
| SINGLE DOOR CONTROL DESK | 800X1000X400 | 1 | BIL-CD-081004 | 26650 |
| SINGLE DOOR CONTROL DESK | 600X1000X500 | 1 | BIL-CD-061005 | 24385 |
| SINGLE DOOR CONTROL DESK | 800X1000X500 | 1 | BIL-CD-081005 | 29485 |
| DOUBLE DOOR CONTROL DESK | 1000X1000X400 | 1 | BIL-CD-101004 | 31185 |
| DOUBLE DOOR CONTROL DESK | 1200X1000X400 | 1 | BIL-CD-121004 | 36290 |
| DOUBLE DOOR CONTROL DESK | 1000X1000X500 | 1 | BIL-CD-101005 | 35615 |
| DOUBLE DOOR CONTROL DESK | 1200X1000X500 | 1 | BIL-CD-121005 | 40260 |

## Bottom Plinth for Control Desk

**HSN Code : 8538**

| Size in MM | | MOQ Nos. | Cat No | List Price [₹] |
|---|---|---|---|---|
| Width (W) | Depth (D) | | | |
| 600 | 400 | 1 | BIL-CDPL-0604 | 3690 |
| 800 | 400 | 1 | BIL-CDPL-0804 | 4200 |
| 1000 | 400 | 1 | BIL-CDPL-1004 | 4710 |
| 1200 | 400 | 1 | BIL-CDPL-1204 | 5165 |
| 600 | 500 | 1 | BIL-CDPL-0605 | 3970 |
| 800 | 500 | 1 | BIL-CDPL-0805 | 4485 |
| 1000 | 500 | 1 | BIL-CDPL-1005 | 4995 |
| 1200 | 500 | 1 | BIL-CDPL-1205 | 5445 |

**Key Attributes:**

- Aesthetic & robust construction
- Mounting Fan in top doesn't take usable "U" space.
- Special type of Wall mounting hardware.
- Provision for earthing available in the cabinets.
- Highly corrosion resistant in nature.
- Power coated to shade RAL : 7035 structure finish.

## 19" Wall Mount Racks

**HSN Code : 8538**

| Dimensions (H x W x D) mm | MOQ Nos. | Cat. No. | List Price [₹] |
|---|---|---|---|
| 6UX550X400 | 1 | BIL-W-6-5504 | 6885 |
| 9UX550X400 | 1 | BIL-W-9-5504 | 8305 |
| 6UX550X500 | 1 | BIL-W-6-5505 | 7600 |
| 9UX550X500 | 1 | BIL-W-9-5505 | 8855 |
| 12UX550X500 | 1 | BIL-W-12-5505 | 9835 |
| 15UX550X500 | 1 | BIL-W-15-5505 | 11580 |

MOQ-Minimum order quantity in nos.
Standard Configuration: Wallmount cabinet, 2-Pairs of 19" rail.
Notes : Accessories viz. Shelves, Fans, power strips, cable managers captive H/W & wall mounting hardware etc. will be extra as per the accessories list furnished in the price list.
Wall mount racks price do not include freight & will be extra at actuals

**Key Attributes:**

- Floor mounting robust design.
- Lockable & removable side panels.
- 2-pairs of adjustable 19" rails.
- Front door with toughened glass & perforation.
- High load bearing capacity.
- Rear vented door.
- Provision for fan mounting in top which doesn't take usable "U" Space.
- Superior cable management facility in extra wide racks.
- 4-integrated vertical cable managers are default design of 800mm wide racks.
- Rear space saving split door with 3-point secure locking in extra wide (800mm) racks.
- Power coated to shade RAL : 7035 structure finish.

## 19" Networking Racks

**HSN Code : 8538**

| Dimensions (H x W x D) mm | MOQ Nos. | Cat. No. | List Price [₹] |
|---|---|---|---|
| 24U X 600 X 600 | 1 | BIL-N-062406 | 38465 |
| 24U X 600 X 800 | 1 | BIL-N-062408 | 42520 |
| 24U X 800 X 600 | 1 | BIL-N-082406 | 48195 |
| 24U X 800 X 800 | 1 | BIL-N-082408 | 52675 |
| 30U X 600 X 600 | 1 | BIL-N-063006 | 42520 |
| 30U X 600 X 800 | 1 | BIL-N-063008 | 46595 |
| 30U X 800 X 600 | 1 | BIL-N-083006 | 52675 |
| 30U X 800 X 800 | 1 | BIL-N-083008 | 57735 |
| 36U X 600 X 600 | 1 | BIL-N-063606 | 46595 |
| 36U X 600 X 800 | 1 | BIL-N-063608 | 51645 |
| 36U X 800 X 600 | 1 | BIL-N-083606 | 57760 |
| 36U X 800 X 800 | 1 | BIL-N-083608 | 62710 |
| 42U X 600 X 600 | 1 | BIL-N-064206 | 53695 |
| 42U X 600 X 800 | 1 | BIL-N-064208 | 57530 |
| 42U X 800 X 600 | 1 | BIL-N-084206 | 63195 |
| 42U X 800 X 800 | 1 | BIL-N-084208 | 69865 |
| 45U X 600 X 600 | 1 | BIL-N-064506 | 61780 |
| 45U X 600 X 800 | 1 | BIL-N-064508 | 64840 |
| 45U X 800 X 600 | 1 | BIL-N-084506 | 67850 |
| 45U X 800 X 800 | 1 | BIL-N-084508 | 73920 |

MOQ-Minimum order quantity in nos.
Notes : 1) Networking racks price do not include freight & this will be extra at actuals.
For more details visit : www.bchindia.com/technorack

***List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.**

***GST to be charged extra**

## 19" Server Racks

**HSN Code : 8538**

**Key Attributes:**

- Floor mounting robust design.
- Lockable & removable side panels.
- 2-pairs of adjustable 19" rails.
- Front door with toughened glass & perforation.
- High load bearing capacity.
- Rear vented door.
- Provision for fan mounting in top which doesn't take usable "U" Space.
- Superior cable management facility in extra wide racks.
- 4-integrated vertical cable managers are default design of 800mm wide racks.
- Rear space saving split door with 3-point secure locking
- locking in extra wide (800mm) racks.
- Power coated to shade RAL : 7035 structure finish.

| Dimensions (H x W x D) mm | MOQ Nos. | Cat. No. | List Price [₹] |
|---|---|---|---|
| 24U X 600 X 900 | 1 | BIL-S-062409 | 43455 |
| 24U X 600 X 1000 | 1 | BIL-S-062410 | 46175 |
| 30U X 600 X 900 | 1 | BIL-S-063009 | 49135 |
| 30U X 600 X 1000 | 1 | BIL-S-063010 | 51055 |
| 36U X 600 X 900 | 1 | BIL-S-063609 | 53865 |
| 36U X 600 X 1000 | 1 | BIL-S-063610 | 56745 |
| 42U X 600 X 900 | 1 | BIL-S-064209 | 60570 |
| 42U X 600 X 1000 | 1 | BIL-S-064210 | 64415 |
| 42U X 800 X 1000 | 1 | BIL-S-084210 | 74125 |
| 45U X 600 X 900 | 1 | BIL-S-064509 | 69995 |
| 45U X 600 X 1000 | 1 | BIL-S-064510 | 74055 |

MOQ - Minimum order quantity in nos.

**Notes :** Server racks price do not include freight & this will be extra at actuals.

**STANDARD CONFIGURATION:** Basic frame, Top & bottom, Front Glass door with perforation, Rear vented door, Lockable & detachable side panels, 2-Pairs of 19" rails with depth members.

## ETSI Racks

**HSN Code : 8538**

**Key Attributes:**

- Includes 1-Pair of 21" rails.
- Integrated side panels.
- Grouting arrangements along with grouting bolts as std. BOM
- Provision for power & detachable Cable entry/exit in top & bottom.
- Power coated to shade RAL : 7035 structure finish.

| Dimensions (H x W x D) mm | MOQ Nos. | Cat. No. | List Price [₹] |
|---|---|---|---|
| 2200 X 600 x 300 | 1 | ITE-062203 | On request |
| 2200 X 600 x 600 | 1 | ITE-062206 | On request |

MOQ - Minimum order quantity in nos.

**Notes :** Above ETSI configuration do not include front & rear door and covers.
All other accessories will be extra & will be furnished on request.
The prices mentioned above do not include freight.

## 19" Open Racks

**HSN Code : 8538**

**Key Attributes:**

- 1-Pair of vertical cable manager is default design.
- Surface pretreated and advance powder coated
- Goruting bolts as std. BOM.
- Power coated to shade RAL : 7035 structure finish.

| Dimensions (H x W ) mm | MOQ Nos. | Cat. No. | List Price [₹] |
|---|---|---|---|
| 36U X 600 | 1 | ITE-OF-0636 | On request |
| 45U X 600 | 1 | ITE-OF-0645 | On request |

MOQ - Minimum order quantity in nos.

**Notes :** 1) Above Open Rack configuration does not include Shelves, Doors and Covers. All other accessories prices will be extra and will be furnished on request.

2) The Prices above do not include Freight and this will be extra at actuals.

For more details, visit : www.bchindia.com/technorack

***List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.**

***GST to be charged extra**

# Accessories for 19" Racks

**Fixed Shelf/Stationary Shelf**
- Compatible to keep monitor, servers, non 19" Networking & allied equipments.

**Key-Board Tray**
- Sliding & rotatory type.

**Canteliver Shelf**
- It can accomodate light weighted networking & allied equipments like modem, routers etc.

**Equipment Support Angle**
- "L" type angles. Useful to keep non 19" heavy duty equipment in rack mounting position.

**Sliding Shelf**
- Useful to keep servers, networking & allied equipment which are required to slide out for operational & other purpose.

**Fans/Fan Tray**
- 220V 90 CFM Capacity. Can be mounted at the top either directly or through Fan housing unit (Fan Tray)

## Shelves

**HSN Code : 8538**

| Description | Cat No. | List Price [₹] |
|---|---|---|
| Fixed Shelf (600mmD) | BIL-A-FS-L-06 | 1755 |
| Fixed Shelf (800mmD) | BIL-A-FS-L-08 | 2715 |
| Fixed Shelf (900mmD) | BIL-A-FS-L-09 | 3015 |
| Fixed Shelf (1000mmD) | BIL-A-FS-L-10 | 3245 |
| Key board tray (Sliding & Rotatory) | BIL-A-KB-06 | 5185 |
| Canteliver Shelf (1U) | BIL-A-CS-1 | 1050 |
| Canteliver Shelf (2U) | BIL-A-CS-2 | 1555 |
| Equipment Support Angle (600mmD) | BIL-A-ESA-06 | 665 |
| Equipment Support Angle (800mmD) | BIL-A-ESA-08 | 750 |
| Equipment Support Angle (900mmD) | BIL-A-ESA-09 | 920 |
| Equipment Support Angle (1000mmD) | BIL-A-ESA-10 | 1075 |
| Sliding Shelf (900mmD) | BIL-A-SS-09 | 5185 |
| Sliding Shelf (1000mmD) | BIL-A-SS-10 | 5380 |

## Thermal Management

**HSN Code : 8538**

| Description | Cat No. | List Price [₹] |
|---|---|---|
| 1-Fan (Direct mounted) | BIL-A-SF | 1755 |
| Fan-tray with 2-Fans (FHU) | BIL-A-FHU-2FANS | 3745 |
| Fan-tray with 4-Fans (FHU) | BIL-A-FHU-4FANS | 6520 |

## Cable Management

**HSN Code : 8538**

| Description | Cat No. | List Price [₹] |
|---|---|---|
| Horizontal Cable Manager (1U) | BIL-A-HCM-1U | 420 |
| Horizontal Cable Manager (2U) | BIL-A-HCM-2U | 520 |
| Vertical Cable Manager (24U) | BIL-A-VCM-24U | 665 |
| Vertical Cable Manager (30U) | BIL-A-VCM-30U | 835 |
| Vertical Cable Manager (36U) | BIL-A-VCM-36U | 955 |
| Vertical Cable Manager (42U) | BIL-A-VCM-42U | 1050 |
| Vertical Cable Manager (45U) | BIL-A-VCM-45U | 1150 |

## Power Management

**HSN Code : 8538**

| Description | Cat No. | List Price [₹] |
|---|---|---|
| 6-Point 5Amp Horizontal Power Strip (19") | BIL-A-HPS-5AMP | 1720 |
| 5-Point 5/15Amp Horizontal Power Strip (19") | BIL-A-HPS-15AMP | 2285 |
| 12-Point 5Amp Vertical Power Strip | BIL-A-12VPS-5AMP | 3340 |
| 10-Point 5/15Amp Vertical Power Strip | BIL-A-10VPS-15AMP | 3830 |
| Earth continuity Kit (Earthing Kit) | BIL-A-ECT | 1305 |

**6-Point 5A Hor. Power Strip**
- All universal type socket along with on/off switch with fuse & indicator. Internal strips are made up of Berellium copper that has high rate of heat & mechanical tolerance.
- Other 5A or 5/15A Power strips have Indian style (Anchor) Sockets with on/off switch/MCB.

**Castors**
- 1-Set includes 4Nos. of castors, 2Nos. with foot operated brake & remaining 2 are free.

**Levelling Feet**
- 1-Set includes 4Nos. of Levelling Feet.

**Stability Plate**
- It Prevents the racks from toppling while taking out heavy duty servers.

## Stability Management

**HSN Code : 8538**

| Description | Cat No. | List Price [₹] |
|---|---|---|
| Castors (1-Set) Heavy Duty | BIL-A-CAS-HD | 6255 |
| Castors (1-Set) Light Duty | BIL-A-CAS | 4980 |
| Levelling Feet (1-Set) | BIL-A-LF | 855 |

## Miscellaneous

**HSN Code : 8538**

| Description | Cat No. | List Price [₹] |
|---|---|---|
| BAYING KIT | BIL-A-BK | 620 |
| BLANKING PANEL (1U) | BIL-A-BP-1U | 295 |
| BLANKING PANEL (2U) | BIL-A-BP-2U | 390 |
| BLANKING PANEL (3U) | BIL-A-BP-3U | 485 |
| BLANKING PANEL (4U) | BIL-A-BP-4U | 600 |
| BLANKING PANEL (5U) | BIL-A-BP-5U | 675 |
| Captive H/w (set of 10) | BIL-A-Captive-M6 | 295 |
| Wallmounting H/w (set of 4) | BIL-A-WALLMOUNTHW | 305 |

**Notes :** Packing & forwarding will be extra if accessrories are ordered seprately.

***List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.**

***GST to be charged extra**

## Type-1 (Inbulit Hinged Door Enclosure)

Technical Particulars :

- Enclosure with In built hinges for front door
- Pad locking provision for front door
- Suitable for wall & pole mounting
- Front door locked with rust proof hardware
- Silicon Gasket between enclosure and front door for sealing
- Protection Category IP-67

| Size (WxHxD) mm | MOQ | Box & Cover both in ABS | | Box in ABS & Cover in PC(TR) | | Box & Cover both in PC | |
|---|---|---|---|---|---|---|---|
| | | Cat No. | List Price[₹] | Cat No. | List Price [₹] | Cat No. | List Price[₹] |
| 210X257X90 | 17 | BIL-AB-1.01 | 1445 | BIL-AP-1.01 | 1600 | BIL-PC-1.01 | 1760 |
| 225X275X105 | 17 | BIL-AB-1.02 | 1490 | BIL-AP-1.02 | 1655 | BIL-PC-1.02 | 1810 |
| 200X280X140 | 12 | BIL-AB-1.03 | 1745 | BIL-AP-1.03 | 1930 | BIL-PC-1.03 | 2115 |
| 280X280X130 | 8 | BIL-AB-1.04 | 2065 | BIL-AP-1.04 | 2285 | BIL-PC-1.04 | 2495 |
| 300X350X146 | 6 | BIL-AB-1.05A | 2920 | BIL-AP-1.05A | 3245 | BIL-PC-1.05A | 3580 |
| 300X350X205 | 4 | BIL-AB-1.05B | 3160 | BIL-AP-1.05B | 3505 | BIL-PC-1.05B | 3860 |
| 644X674X277 | 1 | NA | - | NA | - | BIL-PC-1.06 | 21010 |

## Type-2 (Plain Walled Industrial Enclosure)

Technical Particulars :

- Plain walled enclosures came along with front removable Cover
- Rust proof polyamide screw for front cover
- Equipped with parallel inner bush ribs for din channels Self-tapping screws
- Silicon Gasket between enclosure and front cover for sealing
- Protection Category IP-67

| Size (WxHxD) mm | MOQ | Box & Cover both in ABS | | Box in ABS & Cover in PC(TR) | | Box & Cover both in PC | |
|---|---|---|---|---|---|---|---|
| | | Cat No. | List Price[₹] | Cat No. | List Price[₹] | Cat No. | List Price[₹] |
| 130X180X100 | 40 | BIL-AB-2.00A | 885 | BIL-AP-2.00A | 965 | BIL-PC-2.00A | 1045 |
| 180X180X100 | 26 | BIL-AB-2.01A | 1035 | BIL-AP-2.01A | 1135 | BIL-PC-2.01A | 1235 |
| 180X180X138 | 16 | BIL-AB-2.01 | 1175 | BIL-AP-2.01 | 1280 | BIL-PC-2.01 | 1395 |
| 180X240X138 | 16 | BIL-AB-2.02 | 1455 | BIL-AP-2.02 | 1600 | BIL-PC-2.02 | 1745 |
| 240X320X138 | 10 | BIL-AB-2.03 | 2155 | BIL-AP-2.03 | 2380 | BIL-PC-2.03 | 2610 |
| 320X420X138 | 6 | BIL-AB-2.04 | 3320 | BIL-AP-2.04 | 3675 | BIL-PC-2.04 | 4030 |
| 320X420X210 | 4 | BIL-AB-2.04B | 4240 | BIL-AP-2.04B | 4640 | BIL-PC-2.04B | 5030 |
| 420X640X160 | 3 | BIL-AB-2.05A | 6110 | BIL-AP-2.05A | 6855 | BIL-PC-2.05A | 7605 |
| 420X640X210 | 2 | NA | - | NA | - | BIL-PC-2.05B | 9275 |
| 380X640X230 | 2 | NA | - | NA | - | BIL-PC-2.06 | 7540 |

## Type-3 (Modular Panel Enclosure)

Technical Particulars :

- Modular in nature and ideal for LV compartmentalized Panel
- Knock outs on box walls for bus bar and cables routing
- Molded silicon push lock jointing kits to maintain IP rating of enclosure After joining each other
- Silicon Gasket between enclosure and front cover for sealing
- Can be joined in modules to make any size of electrical LV panel
- Protection Category IP-67

| Size (WxHxD) mm | MOQ | Box & Cover both in ABS | | Box in ABS & Cover in PC(TR) | | Box & Cover both in PC | |
|---|---|---|---|---|---|---|---|
| | | Cat No. | List Price[₹] | Cat No. | List Price[₹] | Cat No. | List Price[₹] |
| 150X300X135 | 13 | BIL-AB-3.01A | 2305 | BIL-AP-3.01A | 2515 | BIL-PC-3.01A | 2725 |
| 150X300X210 | 12 | BIL-AB-3.01B | 2715 | BIL-AP-3.01B | 2965 | BIL-PC-3.01B | 3205 |
| 300X300X210 | 4 | BIL-AB-3.02 | 3750 | BIL-AP-3.02 | 4125 | BIL-PC-3.02 | 4490 |
| 300X450X210 | 4 | BIL-AB-3.03 | 4580 | BIL-AP-3.03 | 5030 | BIL-PC-3.03 | 5495 |
| 300X600X210 | 6 | BIL-AB-3.04 | 5665 | BIL-AP-3.04 | 6265 | BIL-PC-3.04 | 6855 |

***List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.**

***GST to be charged extra**

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## Type-4 (Junction Boxes)

Technical Particulars :

- Equipped with multiple knockouts to accommodate different size of cables
- Front cover fixes with SS304 screws
- No of inner bush for din rail fixing
- Silicon Gasket between enclosure and front cover for sealing
- Outside bushes provided to mount box without tampering enclosures to maintain IP rating
- Protection Category IP-67

| Size (WxHxD) mm | MOQ | Box & Cover both in ABS | | Box in ABS & Cover in PC(TR) | | Box & Cover both in PC | |
|---|---|---|---|---|---|---|---|
| | | Cat No. | List Price[₹] | Cat No. | List Price[₹] | Cat No. | List Price[₹] |
| 100X100X60 | 160 | BIL-AB-4.01B | 400 | BIL-AP-4.01B | 430 | BIL-PC-4.01B | 455 |
| 120X120X70 | 120 | BIL-AB-4.02B | 515 | BIL-AP-4.02B | 560 | BIL-PC-4.02B | 600 |
| 120X150X80 | 80 | BIL-AB-4.03B | 640 | BIL-AP-4.03B | 695 | BIL-PC-4.03B | 750 |
| 140X140X100 | 50 | BIL-AB-4.04B | 750 | BIL-AP-4.04B | 810 | BIL-PC-4.04B | 875 |
| 140X180X100 | 38 | BIL-AB-4.05B | 820 | BIL-AP-4.05B | 895 | BIL-PC-4.05B | 975 |
| 160X210X100 | 32 | BIL-AB-4.06 | 1005 | BIL-AP-4.06 | 1090 | BIL-PC-4.06 | 1175 |
| 210X260X120 | 17 | BIL-AB-4.07 | 1660 | BIL-AP-4.07 | 1960 | BIL-PC-4.07 | 2255 |

## Type-5 (Power Distribution Boxes With Poly Carbonate Window)

Technical Particulars :

- Suitable for wall or Pole mounting
- Polycarbonate hinged window for easy operation of MCB
- Number of horizontal inner bush for din rail fixing
- Rust proof SS304 screw for front cover fixing
- Silicon Gasket between enclosure and front cover for sealing
- Front cover fixed with rust proof SS304 screws
- Protection Category IP-65

| Size (WxHxD) mm | MOQ | Box & Cover both in ABS | | Box in ABS & Cover in PC(TR) | | Box & Cover both in PC | |
|---|---|---|---|---|---|---|---|
| | | Cat No. | List Price[₹] | Cat No. | List Price [₹] | Cat No. | List Price[₹] |
| 98X138X75 | 80 | NA | - | BIL-AP-5.01 Eco | 1015 | NA | - |
| 76X170X95 | 60 | NA | - | BIL-AP-5.01B Eco | 915 | NA | - |
| 100X225X100 | 40 | NA | - | BIL-AP-5.01 | 1430 | NA | - |
| 115X160X75 | 50 | NA | - | BIL-AP-5.02 Eco | 1305 | NA | - |
| 118X170X95 | 50 | NA | - | BIL-AP-5.02B Eco | 1150 | NA | - |
| 150X225X100 | 25 | NA | - | BIL-AP-5.02 | 1845 | NA | - |
| 225X225X100 | 20 | NA | - | BIL-AP-5.03 | 2360 | NA | - |
| 225X300X100 | 17 | NA | - | BIL-AP-5.04 | 2875 | NA | - |
| 300X400X100 | 8 | NA | - | BIL-AP-5.05 A | 4250 | NA | - |
| 300X400X100 | 8 | NA | - | BIL-AP-5.05 | 5260 | NA | - |
| 300X600X100 | 5 | NA | - | BIL-AP-5.06 | 7510 | NA | - |

## Type-6 (Enclosure With External Mounting)

Technical Particulars :

- Provision of outside mounting on enclosure
- Suitable for heavy duty application like Bus bars, industrial plugs sockets & Solar application
- Number of horizontal inner bush for din rail fixing
- Rust proof SS304 screw for front cover fixing
- Silicon Gasket between enclosure and front cover for sealing
- Protection Category IP-67

| Size (WxHxD) mm | MOQ | Box & Cover both in ABS | | Box in ABS & Cover in PC(TR) | | Box & Cover both in PC | |
|---|---|---|---|---|---|---|---|
| | | Cat No. | List Price[₹] | Cat No. | List Price[₹] | Cat No. | List Price[₹] |
| 98X138X68 | 80 | BIL-AB-6.01 | 490 | NA | - | NA | - |
| 98X200X60 | 60 | BIL-AB-6.02A | 640 | BIL-AP-6.02A | 690 | NA | - |
| 98X200X82 | 50 | BIL-AB-6.02B | 760 | BIL-AP-6.02B | 820 | NA | - |
| 138X138X82 | 50 | BIL-AB-6.03 | 660 | BIL-AP-6.03 | 705 | NA | - |
| 138X225X68 | 40 | BIL-AB-6.04 | 905 | NA | - | NA | - |
| 160X225X100 | 35 | BIL-AB-6.05 | 1235 | NA | - | NA | - |
| 225X225X115 | 20 | BIL-AB-6.06A | 1100 | BIL-AP-6.06A | 1185 | NA | - |
| 225X225X180 | 12 | BIL-AB-6.06B | 1365 | BIL-AP-6.06B | 1480 | NA | - |
| 225X300X115 | 17 | BIL-AB-6.07 | 1925 | BIL-AP-6.07 | 2125 | NA | - |
| 300X400X100 | 8 | BIL-AB-6.08 | 3095 | NA | - | NA | - |
| 300X600X100 | 5 | BIL-AB-6.09 | 4385 | NA | - | NA | - |

***List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.**

***GST to be charged extra**

Technical Particulars :

- Specially designed for IT, electronics and automation industrial solutions
- Available in 31 different sizes
- Provision of PCB & Electronics component mounting
- Rust proof SS304 screw for front cover fixing
- Silicon Gasket between enclosure and front door for sealing
- Suitable for wall & pole mounting
- Protection Category IP-67

## Type-7 (Enclosure With External Mounting)

| Size (WxHxD) mm | MOQ | Box & Cover both in ABS | | Box in ABS & Cover in PC(TR) | | Box & Cover both in PC | |
|---|---|---|---|---|---|---|---|
| | | Cat No. | List Price[₹] | Cat No. | List Price[₹] | Cat No. | List Price[₹] |
| 56X80X40 | 100 | BIL-AB-7.01 | 350 | NA | - | BIL-PC-7.01 | 390 |
| 100X100X62 | 80 | BIL-AB-7.02 | 525 | BIL-AP-7.02 | 570 | NA | - |
| 65X115X40 | 100 | BIL-AB-7.03 | 400 | NA | - | NA | - |
| 80X125X56 | 100 | BIL-AB-7.04 | 515 | NA | - | NA | - |
| 125X125X62 | 60 | BIL-AB-7.05 | 640 | BIL-AP-7.05 | 700 | NA | - |
| 90X134X36 | 100 | BIL-AB-7.06A | 455 | NA | - | NA | - |
| 90X134X56 | 100 | BIL-AB-7.06B | 590 | NA | - | NA | - |
| 120X140X76 | 80 | BIL-AB-7.07 | 820 | BIL-AP-7.07 | 895 | NA | - |
| 120X140X100 | 60 | BIL-AB-7.07B | 855 | BIL-AP-7.07B | 935 | NA | - |
| 150X150X75 | 50 | BIL-AB-7.08 | 685 | NA | - | NA | - |
| 132X150X40 | 50 | BIL-AB-7.08A | 935 | BIL-AP-7.08A | 1025 | BIL-PC-7.08A | 1110 |
| 150X150X100 | 50 | BIL-AB-7.08C | 1035 | BIL-AP-7.08C | 1130 | BIL-PC-7.08C | 1225 |
| 115X160X55 | 60 | BIL-AB-7.09A | 810 | NA | - | NA | - |
| 115X160X75 | 60 | BIL-AB-7.09B | 885 | NA | - | NA | - |
| 125X170X66 | 60 | BIL-AB-7.10A | 960 | BIL-AP-7.10A | On Request | BIL-PC-7.10A | 1065 |
| 125X170X115 | 36 | BIL-AB-7.10B | 1050 | NA | - | BIL-PC-7.10B | 1175 |
| 124X175X36 | 60 | BIL-AB-7.11 | 525 | NA | - | NA | - |
| 160X180X75 | 45 | BIL-AB-7.12 | 1005 | NA | - | NA | - |
| 125X205X75 | 18 | BIL-AB-7.13 | 985 | NA | - | NA | - |
| 80X210X55 | 60 | BIL-AB-7.13A | 885 | NA | - | NA | - |
| 125X230X90 | 20 | BIL-AB-7.14 | 1025 | NA | - | NA | - |
| 70X240X92 | 56 | BIL-AB-7.15 | 1015 | NA | - | NA | - |
| 200X250X90 | 16 | BIL-AB-7.16 | 2090 | NA | - | NA | - |
| 176X260X92 | 16 | BIL-AB-7.18 | 1725 | BIL-AP-7.18 | 1885 | BIL-PC-7.18 | 2050 |
| 225X315X90 | 16 | BIL-AB-7.19 | 1215 | NA | - | NA | - |
| 260X350X90 | 10 | BIL-AB-7.20 | 2665 | NA | - | NA | - |
| 58X84X33 | 100 | BIL-AB-7.01L | 325 | BIL-AP-7.01L | 345 | NA | - |
| 70X100X50 | 100 | BIL-AB-7.02L | 465 | BIL-AP-7.02L | 495 | BIL-PC-7.02L | 525 |
| 80X160X55 | 84 | BIL-AB-7.03L | 770 | BIL-AP-7.03L | 820 | NA | - |

***List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.**

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# Enclosure Cooling System

New

BHARTIA BCH

**Technical Particulars**

- Cooling Capacity: 500-2000 Watt
- Ingress Protection: Internal IP 54 protection
- Temperature Control: Digital controller with display
- Twin Air Flow: Efficient internal cooling & external heat dissipation
- Compressor: Hermitically Sealed with Reciprocatory /Rotary technology
- Drain Pipe: Remove moisture / condensate in the panel
- Fans: High-reliability backward curve fans

**Options On Request**

- Potential free alarm for high and low temperature
- Door limit switch interference
- Aluminum/Galvanized / Stainless steel body
- Custom built sizes
- IP55 Certified BCH Panel Air conditioners
- For outdoor panel air conditioner applications, please contact your nearest BCH Branch.
- For cooling capacities below 500 W or above 2000 W, please contact your nearest BCH Branch for customized solutions.

**HSN Code: 84158290**

| Cooling Capacity (Watt) | Rated Current (Amp) | Width (mm) | Height (mm) | Depth (mm) | Cat No | Standard Packing | List Price [₹] |
|---|---|---|---|---|---|---|---|
| 500 | 2.5 | 280 | 600 | 230 | BIL-PAC500 | 1 Nos | On Request |
| 1000 | 3.5 | 300 | 780 | 250 | BIL-PAC1000 | 1 Nos | On Request |
| 1500 | 5.5 | 390 | 950 | 260 | BIL-PAC1500 | 1 Nos | On Request |
| 2000 | 8 | 400 | 950 | 300 | BIL-PAC2000 | 1 Nos | On Request |

***List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.**

***GST to be charged extra**

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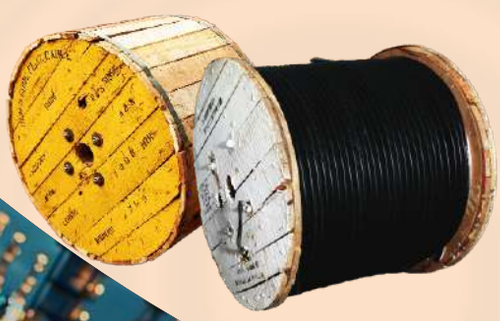
# Wires & Cables

- 3-Core Flat Cables for Submersible Pump Applications
- FR & FRLS Single Core Flexible Cables
- Multi Core PVC Flexible Cables
- Shielded Cables
- Steel Braided Cable



**BCH Three Core Flat Cables with annealed bare & bunched copper conductor insulated & sheathed with PVC for submersible pump motors for voltage grade 1100 V as per I.S. 694 / 2010, conforming & marked with I.S. 694 / 2010 upto 95 sqmm. 3 Core Flat Cable PVC Insulated Type CS**

**HSN Code : 8544**

| BCH Code | Flat Cable | LP Per 500 Mtrs in [₹] | Remark |
|---|---|---|---|
| CS0010BM | 1.0 Sqmm x 3 core Flat cable | On request | Also Available in 100 mtrs,500 mtrs 1000 mtrs in drum as well as in wrap packing |
| CS0015BM | 1.5 Sqmm x 3 core Flat cable | On request | |
| CS0025BM | 2.5 Sqmm x 3 core Flat cable | On request | |
| CS0040BM | 4.0 Sqmm x 3 core Flat cable | On request | |
| CS0060BM | 6.0 Sqmm x 3 core Flat cable | On request | |
| CS0080BM | 8.0 Sqmm x 3 core Flat cable | On request | |
| CS0100BM | 10 Sqmm x 3 core Flat cable | On request | |
| CS0160BM | 16 Sqmm x 3 core Flat cable | On request | |
| CS0250BM | 25 Sqmm x 3 core Flat cable | On request | |
| CS0350BM | 35 Sqmm x 3 core Flat cable | On request | |
| CS0500BM | 50 Sqmm x 3 core Flat cable | On request | |
| CS0700BM | 70 Sqmm x 3 core Flat cable | On request | |
| CS0950BM | 95 Sqmm x 3 core Flat cable | On request | |
| CS1200BM | 120 Sqmm x 3 core Flat cable | On request | |

**BCH Three Core Flat Cables with XLPE insulation & ROHS PVC sheath for withstanding temperature upto 90 deg.C.**

**HSN Code : 8544**

| BCH Code | FLAT CS XLPE CABLE | LP Per 500 Mtrs in | Remark |
|---|---|---|---|
| CFTEX-03-0015BM | 1.5 Sq. mm x 3 core Flat CS XLPE CABLE | On request | Also Available in 100 mtrs,500 mtrs 1000 mtrs in drum as well as in wrap packing |
| CFTEX-03-0025BM | 2.5 Sq. mm x 3 core Flat CS XLPE CABLE | On request | |
| CFTEX-03-0040BM | 4.0 Sq. mm x 3 core Flat CS XLPE CABLE | On request | |
| CFTEX-03-0060BM | 6.0 Sq. mm x 3 core Flat CS XLPE CABLE | On request | |
| CFTEX-03-0080BM | 8.0 Sq. mm x 3 core Flat CS XLPE CABLE | On request | |
| CFTEX-03-0100BM | 10 Sq. mm x 3 core Flat CS XLPE CABLE | On request | |
| CFTEX-03-0160BM | 16 Sq. mm x 3 core Flat CS XLPE CABLE | On request | |
| CFTEX-03-0250BM | 25 Sq. mm x 3 core Flat CS XLPE CABLE | On request | |
| CFTEX-03-0350BM | 35 Sq. mm x 3 core Flat CS XLPE CABLE | On request | |
| CFTEX-03-0500BM | 50 Sq. mm x 3 core Flat CS XLPE CABLE | On request | |

**BCH Three Core Flat Cables with XLPE insulation & ROHS PVC sheath for withstanding temperature upto 90 deg.C.**

**HSN Code : 8544**

| BCH Code | Flat Cable | LP Per 500 Mtrs in [₹] | Remark |
|---|---|---|---|
| CFTX-03-0015BM | 1.5 Sqmm x 3 core Flat cable XLPE insulated Thick | On request | Also Available in 100 mtrs,500 mtrs 1000 mtrs in drum as well as in wrap packing |
| CFTX-03-0025BM | 2.5 Sqmm x 3 core Flat cable XLPE insulated Thick | On request | |
| CFTX-03-0040BM | 4.0 Sqmm x 3 core Flat cable XLPE insulated Thick | On request | |
| CFTX-03-0060BM | 6.0 Sqmm x 3 core Flat cable XLPE insulated Thick | On request | |
| CFTX-03-0080BM | 8.0 Sqmm x 3 core Flat cable XLPE insulated Thick | On request | |
| CFTX-03-0100BM | 10 Sqmm x 3 core Flat cable XLPE insulated Thick | On request | |
| CFTX-03-0160BM | 16 Sqmm x 3 core Flat cable XLPE insulated Thick | On request | |

**Note:**

**At the end of every code "A" stand for 100 mtrs. , "BM" stand for 500 mtrs. , "CM" stand for 1000 mtrs.**

**For price, please contact our nearest sales office.**

## Single Core FR PVC Flexible Cables As Per IS 694: 2010 - With ISI Marking

**HSN Code : 8544**

- Individual conductors drawn from 99.98% bright electrolytic grade copper with more than 100% conductivity
- Special formulation of PVC compounds as per IS 5831:2013 ensures longer and trouble free service life.
- Use only RoHS insulation and sheathing compounds. Ensures cleaner enviornment and better health.
- Online measurement and monitoring of O.D., core dia and dielectric strength.
- Suitable for -15 to +70°C.
- Flame Retardent

| Cat. No. | Conductor Area (nominal) | Safe Current Carrying Capacity 2 wires, Single Phase | | LP Per 100 mtrs |
|---|---|---|---|---|
| | | In conduit / Trunking | Unenclosed clipped directly to a surface or on cable tray | |
| Single Core | (Sq. mm) | (Amp.) | (Amp.) | in [₹] |
| CRFR01-0005A-AAA | 0.5 | 4 | 4.5 | On request |
| CRFR01-0008A-AAA | 0.75 | 7 | 8 | On request |
| CRFR01-0010A-AAA | 1 | 11 | 12 | On request |
| CRFR01-0015A-AAA | 1.5 | 13 | 16 | On request |
| CRFR01-0025A-AAA | 2.5 | 18 | 22 | On request |
| CRFR01-0040A-AAA | 4 | 24 | 29 | On request |
| CRFR01-0060A-AAA | 6 | 31 | 37 | On request |
| CRFR01-0100A-AAA | 10 | 42 | 51 | On request |
| CRFR01-0160A-AAA | 16 | 57 | 68 | On request |
| CRFR01-0250A-AAA | 25 | 71 | 86 | On request |
| CRFR01-0350A-AAA | 35 | 91 | 100 | On request |
| CRFR01-0500A-AAA | 50 | 120 | 145 | On request |
| CRFR01-0700A -AAA | 70 | - | 214 | On request |
| CRFR01-0950A -AAA | 95 | - | 260 | On request |
| CRFR01-1200A-AAA | 120 | - | 305 | On request |
| CRFR01-1500A-AAA | 150 | - | 355 | On request |
| CRFR01-1850A -AAA | 185 | - | 415 | On request |
| CRFR01-2400A-AAA | 240 | - | 500 | On request |
| CRFR01-3000A-AAA | 300 | - | 560 | On request |

Individual conductors drawn from 99.98% bright electrolytic grade copper with more than 100% conductivity
**Note :** Standard packing of 100m, 500m & 1000m available. For price of 500m & 1000m , please contact nearest sales office.

## Single Core Double Insulation FR PVC Flexible Cables As Per IS 694: 2010 - With ISI Marking

**HSN Code : 8544**

- Glossy & smooth surface finish
- Anti Rodent properties
- Lead free
- Energy saving

| Cat. No. | Conductor Area (nominal) | Safe Current Carrying Capacity 2 wires, Single Phase | | LP Per 90 / 100 mtrs |
|---|---|---|---|---|
| | | In conduit / Trunking | Unenclosed clipped directly to a surface or on cable tray | |
| **Single Core** | (Sq. mm) | (Amp.) | (Amp.) | in [₹] |
| CRDFR01-0005D-AAA | 0.5 | 4 | 4.5 | On request |
| CRDFR01-0008D-AAA | 0.75 | 7 | 8 | On request |
| CRDFR01-0010D-AAA | 1 | 11 | 12 | On request |
| CRDFR01-0015D-AAA | 1.5 | 13 | 16 | On request |
| CRDFR01-0025D-AAA | 2.5 | 18 | 22 | On request |
| CRDFR01-0040D-AAA | 4 | 24 | 29 | On request |
| CRDFR01-0060D-AAA | 6 | 31 | 37 | On request |

**Note:** Standard packing of 90m, 180m & 270m available. For prices of 90m, 180m & 270m, please contact nearest sales office.

## Single Core FRLS Flexible Cables As Per IS 694: 2010-With ISI Marking

**HSN Code : 8544**

| Cat. No. | Conductor Area (nominal) | Safe Current Carrying Capacity 2 wires | | LP Per 90 mtrs |
|---|---|---|---|---|
| | | In conduit / Trunking | Unenclosed clipped directly to asurface or on cable tray | |
| **Single Core** | (Sq. mm) | (Amp.) | (Amp.) | in [₹] |
| CRLS01-0005A-AAA | 0.5 | 4 | 4.5 | On request |
| CRLS01-0008A-AAA | 0.75 | 7 | 8 | On request |
| CRLS01-0010A-AAA | 1 | 11 | 12 | On request |
| CRLS01-0015A-AAA | 1.5 | 13 | 16 | On request |
| CRLS01-0025A-AAA | 2.5 | 18 | 22 | On request |
| CRLS01-0040A-AAA | 4 | 24 | 29 | On request |
| CRLS01-0060A-AAA | 6 | 31 | 37 | On request |
| CRLS01-0100A-AAA | 10 | 42 | 51 | On request |
| CRLS01-0160A-AAA | 16 | 57 | 68 | On request |
| CRLS01-0250A-AAA | 25 | 71 | 86 | On request |
| CRLS01-0350A-AAA | 35 | 91 | 100 | On request |
| CRLS01-0500A-AAA | 50 | 120 | 145 | On request |

**Note:** Standard packing of 100m, 180m & 270m available. For prices of 100m, 180m & 270m, please contact nearest sales office.
All sizes will be in 100 mtrs packing

## Multi Core PVC Flexible Cables

**HSN Code : 8544**

| Conductor area (Normal) | Cat. No. 2 Core | LP per 100 Mtrs | Cat. No. 3 Core | LP per 100 Mtrs | Cat. No. 4 Core | LP per 100 Mtrs | Current Rating (Amps) |
|---|---|---|---|---|---|---|---|
| 0.5 sqmm | CR02-0005A-AAA-M | On request | CR03-0005A-AAA-M | On request | CR04-0005A-AAA-M | On request | 4 |
| 0.75 sqmm | CR02-0008A-AAA-M | On request | CR03-0008A-AAA-M | On request | CR04-0008A-AAA-M | On request | 7 |
| 1.0 sqmm | CR02-0010A-AAA-M | On request | CR03-0010A-AAA-M | On request | CR04-0010A-AAA-M | On request | 12 |
| 1.5 sqmm | CR02-0015A-AAA-M | On request | CR03-0015A-AAA-M | On request | CR04-0015A-AAA-M | On request | 15 |
| 2.5 sqmm | CR02-0025A-AAA-M | On request | CR03-0025A-AAA-M | On request | CR04-0025A-AAA-M | On request | 20 |
| 4.0 sqmm | CR02-0040A-AAA-M | On request | CR03-0040A-AAA-M | On request | CR04-0040A-AAA-M | On request | 27 |
| 6.0 sqmm | CR02-0060A-AAA-M | On request | CR03-0060A-AAA-M | On request | CR04-0060A-AAA-M | On request | 35 |
| 10 sqmm | CR02-0100A-AAA-M | On request | CR03-0100A-AAA-M | On request | CR04-0100A-AAA-M | On request | 46 |
| 16 sqmm | CR02-0160A-AAA-M | On request | CR03-0160A-AAA-M | On request | CR04-0160A-AAA-M | On request | 62 |
| 25 sqmm | CR02-0250A-AAA-M | On request | CR03-0250A-AAA-M | On request | CR04-0250A-AAA-M | On request | 80 |
| 35 sqmm | CR02-0350A-AAA-M | On request | CR03-0350A-AAA-M | On request | CR04-0350A-AAA-M | On request | 102 |
| 50 sqmm | CR02-0500A-AAA-M | On request | CR03-0500A-AAA-M | On request | CR04-0500A-AAA-M | On request | 138 |

| Conductor area (Normal) | Cat. No. 5 Core | LP per 100 Mtrs | Cat. No. 6 Core | LP per 100 Mtrs | Cat. No. 7 Core | LP per 100 Mtrs | Current Rating (Amps) |
|---|---|---|---|---|---|---|---|
| 0.5 sqmm | CR05-0005A-AAA-M | On request | CR06-0005A-AAA-M | On request | CR07-0005A-NAA-M | On request | 4 |
| 0.75 sqmm | CR05-0008A-AAA-M | On request | CR06-0008A-AAA-M | On request | CR07-0008A-NAA-M | On request | 7 |
| 1.0 sqmm | CR05-0010A-AAA-M | On request | CR06-0010A-AAA-M | On request | CR07-0010A-NAA-M | On request | 12 |
| 1.5 sqmm | CR05-0015A-AAA-M | On request | CR06-0015A-AAA-M | On request | CR07-0015A-NAA-M | On request | 15 |
| 2.5 sqmm | CR05-0025A-AAA-M | On request | CR06-0025A-AAA-M | On request | CR07-0025A-NAA-M | On request | 20 |
| 4.0 sqmm | CR05-0040A-AAA-M | On request | CR06-0040A-AAA-M | On request | CR07-0040A-NAA-M | On request | 27 |
| 6.0 sqmm | CR05-0060A-AAA-M | On request | | | | | 35 |

| Conductor area (Normal) | Cat. No. 8 Core | LP per 100 Mtrs | Cat. No. 10 Core | LP per 100 Mtrs | Cat. No. 12 Core | LP per 100 Mtrs | Current Rating (Amps) |
|---|---|---|---|---|---|---|---|
| 0.5 sqmm | CR08-0005A-NAA-M | On request | CR10-0005A-NAA-M | On request | CR12-0005A-NAA-M | On request | 4 |
| 0.75 sqmm | CR08-0008A-NAA-M | On request | CR10-0008A-NAA-M | On request | CR12-0008A-NAA-M | On request | 7 |
| 1.0 sqmm | CR08-0010A-NAA-M | On request | CR10-0010A-NAA-M | On request | CR12-0010A-NAA-M | On request | 12 |
| 1.5 sqmm | CR08-0015A-NAA-M | On request | CR10-0015A-NAA-M | On request | CR12-0015A-NAA-M | On request | 15 |
| 2.5 sqmm | CR08-0025A-NAA-M | On request | CR10-0025A-NAA-M | On request | CR12-0025A-NAA-M | On request | 20 |
| 4.0 sqmm | CR08-0040A-NAA-M | On request | CR10-0040A-NAA-M | On request | CR12-0040A-NAA-M | On request | 27 |

| Conductor area (Normal) | Cat. No. 14 Core | LP per 100 Mtrs | Cat. No. 16 Core | LP per 100 Mtrs | Cat. No. 19 Core | LP per 100 Mtrs | Current Rating (Amps) |
|---|---|---|---|---|---|---|---|
| 0.5 sqmm | CR14-0005A-NAA-M | On request | CR16-0005A-NAA-M | On request | CR19-0005A-NAA-M | On request | 4 |
| 0.75 sqmm | CR14-0008A-NAA-M | On request | CR16-0008A-NAA-M | On request | CR19-0008A-NAA-M | On request | 7 |
| 1.0 sqmm | CR14-0010A-NAA-M | On request | CR16-0010A-NAA-M | On request | CR19-0010A-NAA-M | On request | 12 |
| 1.5 sqmm | CR14-0015A-NAA-M | On request | CR16-0015A-NAA-M | On request | CR19-0015A-NAA-M | On request | 15 |
| 2.5 sqmm | CR14-0025A-NAA-M | On request | CR16-0025A-NAA-M | On request | CR19-0025A-NAA-M | On request | 20 |
| 4.0 sqmm | CR14-0040A-NAA-M | On request | CR16-0040A-NAA-M | On request | CR19-0040A-NAA-M | On request | 27 |

| Conductor area (Normal) | Cat. No. 24 Core | LP per 100 Mtrs | Cat. No. 25 Core | LP per 100 Mtrs | Cat. No. 30 Core | LP per 100 Mtrs | Current Rating (Amps) |
|---|---|---|---|---|---|---|---|
| 0.5 sqmm | CR24-0005A-NAA-M | On request | CR25-0005A-NAA-M | On request | CR30-0005A-NAA-M | On request | 4 |
| 0.75 sqmm | CR24-0008A-NAA-M | On request | CR25-0008A-NAA-M | On request | CR30-0008A-NAA-M | On request | 7 |
| 1.0 sqmm | CR24-0010A-NAA-M | On request | CR25-0010A-NAA-M | On request | CR30-0010A-NAA-M | On request | 12 |
| 1.5 sqmm | CR24-0015A-NAA-M | On request | CR25-0015A-NAA-M | On request | CR30-0015A-NAA-M | On request | 15 |
| 2.5 sqmm | CR24-0025A-NAA-M | On request | CR25-0025A-NAA-M | On request | CR30-0025A-NAA-M | On request | 20 |
| 4.0 sqmm | CR24-0040A-NAA-M | On request | CR25-0040A-NAA-M | On request | CR30-0040A-NAA-M | On request | 27 |

| Conductor area (Normal) | Cat. No. 36 Core | LP per 100 Mtrs | Current Rating (Amps) |
|---|---|---|---|
| 0.5 sqmm | CR36-0005A-NAA-M | On request | 4 |
| 0.75 sqmm | CR36-0008A-NAA-M | On request | 7 |
| 1.0 sqmm | CR36-0010A-NAA-M | On request | 12 |
| 1.5 sqmm | CR36-0015A-NAA-M | On request | 15 |
| 2.5 sqmm | CR36-0025A-NAA-M | On request | 20 |
| 4.0 sqmm | CR36-0040A-NAA-M | On request | 27 |

The conductor construction given above is indicative only and will be such that all requirements of strand diameter and conductor resistance as per IS 694:2010 and IS 8130:2013 are met.

Sizes 0.5 to 50 Sq. mm from 2 to 4 cores & 0.5 to 2.5 Sq. mm upto 24 Core with ISI mark, rest all generally conforming to the IS Standard. packing available in 100 meter coils, longer lengths on drums (500m to 1000m)

## BCH Annealed Bare Cu Flexible Conductor PVC Insulated, TinnedCuBraided(Screened) PVC Sheathed Flexible Unarmoured Cables FOR VOLTAGE

**HSN Code : 8544**

| Conductor area (Normal) | Cat. No. 2 Core | LP per 100 Mtrs | Cat. No. 3 Core | LP per 100 Mtrs | Current Rating (Amps) |
|---|---|---|---|---|---|
| 0.5 sqmm | CRSCY02-0005A-EAA | On request | CRSCY03-0005A-EAA | On request | 4 |
| 0.75 sqmm | CRSCY02-0008A-EAA | On request | CRSCY03-0008A-EAA | On request | 7 |
| 1.0 sqmm | CRSCY02-0010A-EAA | On request | CRSCY03-0010A-EAA | On request | 12 |
| 1.5 sqmm | CRSCY02-0015A-EAA | On request | CRSCY03-0015A-EAA | On request | 15 |
| 2.5 sqmm | CRSCY02-0025A-EAA | On request | CRSCY03-0025A-EAA | On request | 20 |

| Conductor area (Normal) | Cat. No. 4 Core | LP per 100 Mtrs | Cat. No. 5 Core | LP per 100 Mtrs | Current Rating (Amps) |
|---|---|---|---|---|---|
| 0.5 sqmm | CRSCY04-0005A-EAA | On request | CRSCY05-0005A-EAA | On request | 4 |
| 0.75 sqmm | CRSCY04-0008A-EAA | On request | CRSCY05-0008A-EAA | On request | 7 |
| 1.0 sqmm | CRSCY04-0010A-EAA | On request | CRSCY05-0010A-EAA | On request | 12 |
| 1.5 sqmm | CRSCY04-0015A-EAA | On request | CRSCY05-0015A-EAA | On request | 15 |
| 2.5 sqmm | CRSCY04-0025A-EAA | On request | CRSCY05-0025A-EAA | On request | 20 |

| Conductor area (Normal) | Cat. No. 6 Core | LP per 100 Mtrs | Cat. No. 7 Core | LP per 100 Mtrs | Current Rating (Amps) |
|---|---|---|---|---|---|
| 0.5 sqmm | CRSCY06-0005A-EAA | On request | CRSCY07-0005A-EAA | On request | 4 |
| 0.75 sqmm | CRSCY06-0008A-EAA | On request | CRSCY07-0008A-EAA | On request | 7 |
| 1.0 sqmm | CRSCY06-0010A-EAA | On request | CRSCY07-0010A-EAA | On request | 12 |
| 1.5 sqmm | CRSCY06-0015A-EAA | On request | CRSCY07-0015A-EAA | On request | 15 |
| 2.5 sqmm | CRSCY06-0025A-EAA | On request | CRSCY07-0025A-EAA | On request | 20 |

## BCH Flex Bare Copper Condutor, PVC Insulated, Cores Laid Up Together PVC Inner Sheathed, GI Wire Braided (Flexible Armouring), Overall Transparent PVC Sheathed Cable FOR VOLTAGE GRADE UPTO 1100 V CONFORMING TO IS-694:2010.

**HSN Code : 8544**

| Conductor area (Normal) | Cat. No. 2 Core | LP per 100 Mtrs | Cat. No. 3 Core | LP per 100 Mtrs | Current Rating (Amps) |
|---|---|---|---|---|---|
| 0.5 sqmm | CRSY02-0005A-AAA-M | On request | CRSY03-0005A-AAA-M | On request | 4 |
| 0.75 sqmm | CRSY02-0008A-AAA-M | On request | CRSY03-0008A-AAA-M | On request | 7 |
| 1.0 sqmm | CRSY02-0010A-AAA-M | On request | CRSY03-0010A-AAA-M | On request | 12 |
| 1.5 sqmm | CRSY02-0015A-AAA-M | On request | CRSY03-0015A-AAA-M | On request | 15 |
| 2.5 sqmm | CRSY02-0025A-AAA-M | On request | CRSY03-0025A-AAA-M | On request | 20 |

| Conductor area (Normal) | Cat. No. 4 Core | LP per 100 Mtrs | Cat. No. 5 Core | LP per 100 Mtrs | Current Rating (Amps) |
|---|---|---|---|---|---|
| 0.5 sqmm | CRSY04-0005A-AAA-M | On request | CRSY05-0005A-AAA-M | On request | 4 |
| 0.75 sqmm | CRSY04-0008A-AAA-M | On request | CRSY05-0008A-AAA-M | On request | 7 |
| 1.0 sqmm | CRSY04-0010A-AAA-M | On request | CRSY05-0010A-AAA-M | On request | 12 |
| 1.5 sqmm | CRSY04-0015A-AAA-M | On request | CRSY05-0015A-AAA-M | On request | 15 |
| 2.5 sqmm | CRSY04-0025A-AAA-M | On request | CRSY05-0025A-AAA-M | On request | 20 |

| Conductor area (Normal) | Cat. No. 6 Core | LP per 100 Mtrs | Cat. No. 7 Core | LP per 100 Mtrs | Current Rating (Amps) |
|---|---|---|---|---|---|
| 0.5 sqmm | CRSY06-0005A-AAA-M | On request | CRSY07-0005A-AAA-M | On request | 4 |
| 0.75 sqmm | CRSY06-0008A-AAA-M | On request | CRSY07-0008A-AAA-M | On request | 7 |
| 1.0 sqmm | CRSY06-0010A-AAA-M | On request | CRSY07-0010A-AAA-M | On request | 12 |
| 1.5 sqmm | CRSY06-0015A-AAA-M | On request | CRSY07-0015A-AAA-M | On request | 15 |
| 2.5 sqmm | CRSY06-0025A-AAA-M | On request | CRSY07-0025A-AAA-M | On request | 20 |

# Power Quality & Energy Management

- LT Power Capacitors - Cylindrical Type
- LT Power Capacitors - Box Type
- Super Heavy Duty Box Type Capacitor
- Automatic Power Factor Controllers (APFC) & Intelligent Power Factor Controllers (IPFC)
- Detuned Reactors

# MPP Can type capacitors

## MPP Can Type Capacitors(with ISI Mark) (440V)

**HSN Code : 8532**

| | Normal Duty | | Heavy Duty | |
|---|---|---|---|---|
| KVAR | Cat. No. | MRP [₹] | Cat. No. | MRP [₹] |
| 1 | BCHMCN001B | 455 | BCHMCH001B | 660 |
| 2 | BCHMCN002B | 900 | BCHMCH002B | 1295 |
| 3 | BCHMCN003B | 1340 | BCHMCH003B | 1935 |
| 4 | BCHMCN004B | 1805 | BCHMCH004B | 2575 |
| 5 | BCHMCN005B | 2175 | BCHMCH005B | 2920 |
| 7.5 | BCHMCN007B | 3170 | BCHMCH007B | 4270 |
| 10 | BCHMCN010B | 3795 | BCHMCH010B | 5260 |
| 12.5 | BCHMCN012B | 4760 | BCHMCH012B | 6575 |
| 15 | BCHMCN015B | 5690 | BCHMCH015B | 7890 |
| 20 | BCHMCN020B | 7585 | BCHMCH020B | 10525 |
| 25 | BCHMCN025B | 9485 | BCHMCH025B | 13140 |

Price of 480V & 525V Capacitors available on request.

Heavy edge Zn Al Alloy MPP film

.02 - .03 micron metallised layer

### MPP Capacitors (IS13340)

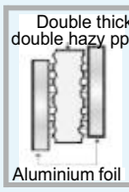
MPP capacitors are manufactured using Zn-Al metallized polypropylene film. These modules are provided with pressure interrupter arrangement for safety against bursting due to internal pressure arised due to prolonged high voltage / current. The modules are assembled in aluminium case or CRCA container

## MPP Box Type Capacitors(with ISI Mark) (440V)

**HSN Code : 8532**

| | Normal Duty | | Heavy Duty | |
|---|---|---|---|---|
| KVAR | Cat. No. | MRP [₹] | Cat. No. | MRP [₹] |
| 1 | BCHMBN001B | 510 | BCHMBH001B | 645 |
| 2 | BCHMBN002B | 990 | BCHMBH002B | 1265 |
| 3 | BCHMBN003B | 1485 | BCHMBH003B | 1890 |
| 4 | BCHMBN004B | 1965 | BCHMBH004B | 2525 |
| 5 | BCHMBN005B | 2310 | BCHMBH005B | 3005 |
| 7.5 | BCHMBN007B | 3470 | BCHMBH007B | 4435 |
| 10 | BCHMBN010B | 4590 | BCHMBH010B | 5900 |
| 12.5 | BCHMBN012B | 5765 | BCHMBH012B | 7380 |
| 15 | BCHMBN015B | 6905 | BCHMBH015B | 8855 |
| 20 | BCHMBN020B | 9190 | BCHMBH020B | 11815 |
| 25 | BCHMBN025B | 11480 | BCHMBH025B | 14775 |

Price of 480V & 525V Capacitors available on request.




### APP Capacitors

Non self healing APP capacitors manufactured using double hazy and double thick polypropylene films between two electrodes of thick aluminium foil have extended foil construction to ensure low watt losses

## APP Box Type Single Layer Capacitors & Super Heavy Duty Box Type Capacitors (with ISI Mark) (440V)

**HSN Code : 8532**

| | APP Capacitor | | SHD Capacitor | |
|---|---|---|---|---|
| KVAR | Cat. No. | MRP [₹] | Cat. No. | MRP [₹] |
| 1 | BCHAPS001B | 1890 | BCHSHD001B | 2940 |
| 2 | BCHAPS002B | 2940 | BCHSHD002B | 5825 |
| 3 | BCHAPS003B | 4385 | BCHSHD003B | 8720 |
| 4 | BCHAPS004B | 5830 | - | - |
| 5 | BCHAPS005B | 6910 | BCHSHD005B | 12445 |
| 7.5 | BCHAPS007B | 9860 | BCHSHD007B | 18685 |
| 10 | BCHAPS010B | 13155 | BCHSHD010B | 24905 |
| 12.5 | BCHAPS012B | 16455 | BCHSHD012B | 31115 |
| 15 | BCHAPS015B | 19725 | BCHSHD015B | 37345 |
| 20 | BCHAPS020B | 26310 | BCHSHD020B | 49785 |
| 25 | BCHAPS025B | 32900 | BCHSHD025B | 62225 |

Price of 480V & 525V Capacitors available on request.

Price for 14% Aluminum & Copper bound reactor available on request

## 7% Aluminium wound & Copper wound 440V Detuned Reactors

**HSN Code : 8504**

| | Aluminium wound | | Copper wound | |
|---|---|---|---|---|
| KVAR | Cat. No. | MRP [₹] | Cat. No. | MRP [₹] |
| 5 | BCHRAL005B | On request | BCHRCU005B | On request |
| 10 | BCHRAL010B | On request | BCHRCU010B | On request |
| 15 | BCHRAL015B | On request | BCHRCU015B | On request |
| 20 | BCHRAL020B | On request | BCHRCU020B | On request |
| 25 | BCHRAL025B | On request | BCHRCU025B | On request |
| 50 | BCHRAL050B | On request | BCHRCU050B | On request |
| 75 | BCHRAL075B | On request | BCHRCU075B | On request |
| 100 | BCHRAL100B | On request | BCHRCU100B | On request |

# APFC Relay

## Intelligent Power Factor Controllers (IPFC)

| Steps | Cat. No. | Voltage | Brief description | MRP [₹] |
|---|---|---|---|---|
| 12 STEP - 3φ | RG3-12C | 230V | 12 Step intelligent PFC | 48785 |
| 12 STEP - 3φ | RG3-12CS | 230V | 12 Step intelligent PFC with RS 485 communication | 54865 |
| 15 STEP - 3φ | RG3-15C | 230V | 15 Step , Intelligent PFC relay | 51130 |
| 15 STEP - 3φ | RG3-15CL | 230V | 15 Step , Intelligent PFC relay with 3 steps for reactor | On request |
| 15 STEP - 3φ | RG3-15CS | 230V | 15 Step , Intelligent PFC relay with RS485 communication | 61850 |
| 15 STEP - 3φ | RG3-15CLS | 230V | 15 Step , Intelligent PFC relay with 3 steps for reactor and RS485 communication | On request |

Note : **RG3-8/12/15 and RG3-12/15CS available in 230V only

- 3-Phase / 3CTs
- Connecting Single-Phase & 3-Phase Capacitors
- Compensation of Each Phase
- Measures : A,Cos-Ø, Total W, Total VAr, Total VA, Total KWH, Total KVArh
- Harmonic Measurement (up to 19th)
- THD 1% THD V%
- Programmable THD Protection
- Programmable Discharge Time
- Programmable THD Alarm
- Password Protection for setup
- Overheat Protection (Optional)
- RS-485 Communication (Optional)
- RG-15C - Intelligent relay PFC with smart switching with all 15 steps relay connection
- RG-15C - Intelligent relay PFC with smart switching with all 15 steps relay connection with communication

## Automatic Power Factor Controllers (APFC)

| Steps | Cat. No. | Voltage | Brief description | MRP [₹] |
|---|---|---|---|---|
| 6 STEP - 1 φ | RG-6T-230-96 | 230V | PFC (96X96) WITH 6 STEPS , 230 V | 18910 |
| 6 STEP - 1 φ | RG-6T-415-96 | 415V | PFC (96X96) WITH 6 STEPS , 415 V | 18910 |
| 6 STEP - 1 φ | RG-6T-230 | 230V | PFC (144X144) WITH 6 STEPS, 230 V | 19755 |
| 6 STEP - 1 φ | RG-6T-415 | 415V | PFC (144X144) WITH 6 STEPS, 415 V | 19755 |
| 8 STEP - 1 φ | RG-8T-230 | 230V | PFC (144X144) WITH 8 STEPS, 230 V | 22455 |
| 8 STEP - 1 φ | RG-8T-415 | 415V | PFC (144X144) WITH 8 STEPS, 415 V | 22455 |
| 8 STEP - 3 φ | RG3-8T-230 | 230V | PFC 144X144, 8 STEPS,230V UNBALANCE LOAD | 30175 |
| 12 STEP - 1 φ | RG-12T-230 | 230V | PFC (144X144) WITH 12 STEPS, 230 V | 28120 |
| 12 STEP - 1 φ | RG-12T-415 | 415V | PFC (144X144) WITH 12 STEPS, 415 V | 28120 |
| 12 STEP - 3 φ | RG3-12T-230 | 230V | PFC 144X144,12 STEPS,230V UNBALANCE LOAD | 36545 |

Note : **RG3-8/12/15 and RG3-12/15CS available in 230V only

## Thyristor Switched Module with Visual Circuit Indicator

**HSN Code : 8538**

| KVAR | Type | Rated Voltage (V) | Cat. No. | MRP [₹] |
|---|---|---|---|---|
| 5 | TSM | 440 | BCHTSM005 | On request |
| 10 | TSM | 440 | BCHTSM010 | On request |
| 15 | TSM | 440 | BCHTSM015 | On request |
| 20 | TSM | 440 | BCHTSM020 | On request |
| 25 | TSM | 440 | BCHTSM025 | On request |
| 50 | TSM | 440 | BCHTSM050 | On request |
| 75 | TSM | 440 | BCHTSM075 | On request |
| 100 | TSM | 440 | BCHTSM100 | On request |

# Electric Motors

## IE2, IE3 & IE4

50°C
ambient temperature

- Wide Range
- Range: 0.16 HP to 425 HP
- Robust Design - IE2/IE3/IE4 Versions
- Dynamically Balanced Rotors
- Corrosion-Resistant Stator Frames and end-bracket hardware
- High Efficient Stator Laminations with Superior Low Loss CRNGO Steel
- Fully Tropicalised Design for Indian Conditions
- Class F Insulation
- Six Terminal Terminal Box Across the Range
- Various Mounting Possibilities
- Superior Aesthetics - RAL-5014 Paint Shade As Standard
- Customised Motor Design Capability
- Compatible A.C Drive & Soft Starter Range
- Nationwide sales & service network

**Crane Duty Motors**
Power:0.18 to 200.0 kW

**Brake Motors**
Power:0.12 to 55.0 kW

**Multi Speed Motors**
Power:0.12 to 150.0 kW

**Duplex Cooling Motors**
Power:160.0 to 500.0 kW

**Fire Fighting Motors**
Power: 3.7 to 250.0 kW

- Manufacturing in Quality Assurance System Compliant With ISO 9001

# Switchboards & Solutions

- MCC & PCC
- APFC Panels
- Crane Control Panels
- Punch Grid Resistors & Panels, NGR & DBR
- Special Purpose Starters
- Power Receptacles
- Auto Transformer Starters

# Motor Control Centres (MCC) & Power Control Centres (PCC)

## SWITCHBOARD DATA SHEET

BCH Switchboards are manufactured at Faridabad works complying to latest design standard & manufacturing processes, with inhouse powder coating paint shop, gasketting shop, fabrication shop equiped with AMADA punching & bending machines.

Switchboards are modular in design, metal clad, free standing, air insulated, floor mounted & compartmentalized type suitable for most critical and rugged indoor/outdoor application & tough industrial envornment.

### TECHNICAL DATA

Standard & Specification

### Power Switchgear & Controlgear assembly as per IEC 61439 - 1 & 2

- Short circuit Test - Bus-bar system designed for 50 KA rms / 1sec, and peak fault withstanding Strength 105 KA & 65KA rms/1sec & 143KA peak fault withstand as per IS: 8623 and IEC: 61439
- Temperature rise - Panel tested for 800 A to 4000 A from CPRI Bhopal as per IS: 8623 and IEC: 61439
- Impulse withstand test - Rated impulse withstand test for 8Kv from CPRI,Bangalore as per Sub clause 10.9 of IEC 61439-1 & 2
- Seismic Zone & Resonance search test - As per IEE693:2018, PERFORMANCE LEVEL ZPA0.5g

### Product range

- PCC upto 6300A- Single Tire/Two Tire/Three Tire version
- PMCC/IMCC/CMCC- Fixed/drawout version
- Power Distribution Panel / Lighting panel

### Electrical Data

- Rated insulation voltage (Ui) 1000V
- Rated operating voltage (Ue) Upto 690V
- Rated impulse withstand voltage (Uimp) 8KV
- Rated frequency (fn) 50 / 60 Hz

### Main Horizontal Bus Bar -

Aluminum grade E 91E as per IS:5082 & Electrolytic grade Copper Bus-bars

- Rated current ( Ie ) Up to 6300 A
- Rated peak withstand current (Ipk) Up to 220 KA
- Rated short-time withstand current(Icw) Up to 80 KA-1sec

### Vertical Distribution Bus Bar

- Rated current (Ie) up to 2000 A
- Rated peak withstand current (Ipk) up to 220 KA
- Rated short-time withstand current (Icw)up to 80 KA-1sec

### Insulation characterstics

- Clearence >20 mm
- Creepage distance >20 mm
- Pollution degree 3

### Degree of protection

- According to IEC 60529 :
  - IP 54/IP 55 for switchboards & IP-65 for non compartmentalized distribution Boards. CPRI & ERDA TESTED

### Gasketting

- Joint-less, seamless self adhesive,PU foam Gasketing to ensure defined IP.

### Enclosure

- Modular design, uses CR Grade CRCA and Electro galvanized steel for structures are SKIN Pass, Zero spangle with high GSM zinc coating. Ensuring high corrosion resistance against extreme climatic condition after powder coating.

### Mechanical Impact

- According to IEC 62262 : 2002 IK-10 followed by IP 55; ERDA tested

### Forms of seperation

- According to IEC 61439-2 Up to Form 4 Type 6

### Structure components

- Sheet steel of frame & load bearing member 2.0mm/GI
- Door partition & Cover with stiffner Upto 2mm
- Gland plate Upto 3mm
- Base frame channel ISMC 75/100 or 3mm CRCA

### Surface treatment / Painting

- Frame including internal subdivisions & external Standard paint shade - RAL-7035, RAL-7032 and 631 as per IS:5. Ten tank spray type pre-treatment prior to powder coating with fully automated powder coating shop.

### Plastic components

- Flame retardant,halogen free flame retardant, halogen free

### Resistance to corrosion

- Salt spray test - Tri Cataionic Zinc Phosphate based powder coated enclosure can withstand 1000 Hrs in SST as per IS

### Bus bar systems

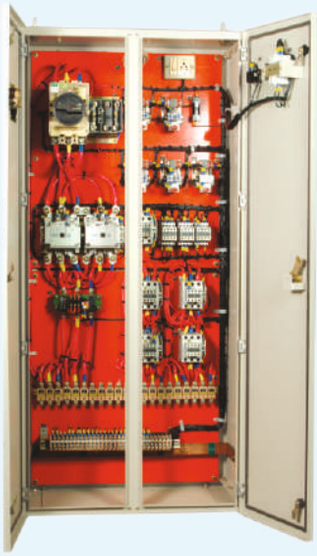
- Bus bar insulation
  - Main Bus bars & vertical bus bars are fully sleeved with insulated heat shrunk PVC Sleeves except at the joints for electrical insulation.
- Bus bar support
  - All bus bars are supported with rigid SMS/DMC supports & are shrouded with FRP from rear side.

## 3Phase Automatic Power Factor Correction (APFC) Panels

### Key Features

- Advanced Micro Controller based Power Factor Controller with Self-diagnostic Sensing and Control of Capacitor Bank Stages.
- High performance 'BCH' Cylindrical & Box type Capacitors.
- Capacitor duty Contactors for reliable & trouble free operation.
- Choice of BCH Make Thyristor switch for capacitor switching & CU/AL wound Detuned reactor as an option.
- Choice of selection of Capacitors as per application & site conditions.
- Thoughtfully designed Panels with provision for louvres & cooling fan for proper ventilation to manage heat load.
- Enclosure with Epoxy based paint shade RAL 7035
- PU Foam Gasketing for sustained Ingress Protection of the Panel.

**Five Standard Versions of APFC Panels are available depending upon Switching Sequence, Mode of Control (Automatic & Manual options) & Type of Capacitors (Cylindrical / Box type) used.**



VERSION 1 - With BCH MPP Heavy Duty Cylindrical Capacitors & **WITHOUT** Manual option.
VERSION 2 - With BCH MPP Heavy Duty Box Capacitors & **WITHOUT** Manual option.
VERSION 3 - With BCH MPP Heavy Duty Cylindrical Capacitors & **WITH** Manual option.
VERSION 4 - With BCH MPP Heavy Duty Box Capacitors & **WITH** Manual option.
VERSION 5 - With BCH APP Box Type Capacitors & **WITH** Manual option.

(Other tailor made versions on request)

## Common Features

CAPACITOR RATING - 40 to 200KVAr in Standard Ratings of 40, 50, 60, 75, 100, 125, 150, 175 & 200 KVAr with suitable banking arrangement.

MOUNTING - Wall Mounting up-to 75KVAr & Floor Mounting above 75 KVAR ratings.

INCOMING - BCH-Resilient 3-P MCCB with Rotary handle.

OUTGOING - TP MCB or HRC fuses with fuse base as standard (BCH-Resilient 3-P MCCB or SDFU and Compartmentalized outgoing feeders can also be provided depending upon size of panel on request).

CONTACTORS - BCH Capacitor Duty Contactors as standard (BCH Thyristor switches on request).

R-Y-B INDICATIONS - RYB for Incomer & ON-OFF for Outgoing

AMMETER/VOLTMERS - Provided for VERSIONS 3, 4 & 5 only.

**For prices contact our nearest sales office.**

## AC Crane Control Bridge and Trolley Motion

This controller provides reversing and plugging operation of slip ring induction motors in heavy duty cranes on Trolley services. Upto 5 motor speeds are achieved in conjuction with a master controller.

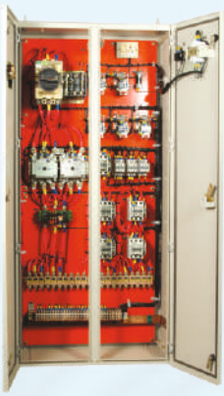
Series resistors provides speed control

### Design Features

- Simplified reliable circuitary
- Inverse Time delay Magnetic Overload protection
- Time Limit acceleration
- Speed Control by series resistors
- No Volt protection
- Special Unique plugging circuit with a voltage relay
- CRCA Sheet steel construction of the panel.
- 7 Tank pretreated panels for extremely long life
- Panels for indoor and outdoor protection

## AC Crane Control Hoisting Motion

- Plain rotor resistance
- AC Single phase dynamic braking
- Counter torque lowering
- Opotor Control
- Creep Speed



## DC Crane Control Hoisting Motion

This control is for use with series wound motors drive for crane hoists and is arranged for reversing and dynamic lowering service. control

### Design Features

- Simplified reliable circuitary
- Inductive time limit acceleration on joisting & lowering
- Better speed control on light or heavy loads when hoisting or lowering
- CRCA Sheet steel construction of the panel.
- 7 Tank pretreated panels for extremely long life

## DC Crane Control
### (Bridge and Trolley motion)

This controller provides reversing and plugging operation of series wound motors in heavy duty cranes on Trolley services. Upto 5 motor speeds are achieved in conjunction with a master controller.

### Design Features

- Simplified, reliable circuitary
- Rectifier controlled plugging
- Instantaneous and Inverse time delay magnetic overload protection
- No volt protection
- Heavy duty DC Contactors equipped with magnetic blowouts
- CRCA Sheet steel construction of the panel.
- 7 Tank pretreated panels for extremely long life

## Power Receptacles

### Range

- Single / Multiple outlet boxes
- 16/32/63/125A rating
- With or without protection
- Option of back up protection with :
  MCBs
  SDFUs
  MCCBs
- Modular and compact construction
- Loop in Loop out facility
- Higher degree of Ingress Protection
- 7 Tank processed powder coated enclosure
- PU Gasketing for excellent sealing against dust and water

## Plugs and Socket outlets with / without protection, mounted in CRCA enclosure of suitable size

| | Incomer ( 1 No.) | | | | |
|---|---|---|---|---|---|
| Single Outlet | Switch Type | MCCB Type | MCB | Standard Version Cat reference | Loop in loop out version Cat reference |
| 1 No DS1A7A1 and 1 No. DS1B7A1 | PSFS323ND000/ PSFS323ND00 | - | - | PR16SDF-1 | PR16SDF-1-LILO |
| 1 No DS1A7A1 and 1 No. DS1B7A1 | - | - | 16A,TPN | PR16MCB-1 | PR16MCB-1-LILO |
| 1 No DS1A7A1 and 1 No. DS1B7A1 | - | - | - | PR16WP-1 | PR16WP-1-LILO |
| 1 No DS3A7A1 and 1 No. DS3B7A1 | PSFS323ND000/ PSFS323ND00 | - | - | PR32SDF-1 | PR32SDF-1-LILO |
| 1 No DS3A7A1 and 1 No. DS3B7A1 | - | - | 32A,TPN | PR32MCB-1 | PR32MCB-1-LILO |
| 1 No DS3A7A1 and 1 No. DS3B7A1 | - | - | - | PR32WP-1 | PR32WP-1-LILO |
| 1 No DS6A7A1 and 1 No. DS6B7A1 | PSFS633ND000/ PSFS633ND00 | | | PR63SDF-1 | PR63SDF-1-LILO |
| 1 No DS6A7A1 and 1 No. DS6B7A1 | - | XFE063N+ separate Neutral Link + Rotary Handle | - | PR63MCCB-1 | PR63MCCB-1-LILO |
| 1 No DS6A7A1 and 1 No. DS6B7A1 | - | - | 63A,TPN | PR63MCB-1 | PR63MCB-1-LILO |
| 1 No DS6A7A1 and 1 No. DS6B7A1 | - | - | - | PR63WP-1 | PR63WP-1-LILO |
| 1 No DS9A7A1 and 1 No. DS9B7A1 | PSFS1253ND | - | - | PR125SDF-1 | PR125SDF-1-LILO |
| 1 No DS9A7A1 and 1 No. DS9B7A1 | - | XF2H125NV+ separate Neutral Link + Rotary Handle | - | PR125MCCB-1 | PR125MCCB-1-LILO |
| 1 No DS9A7A1 and 1 No. DS9B7A1 | - | - | - | PR125WP-1 | PR125WP-1-LILO |

## Double Outlet

| | | | | | |
|---|---|---|---|---|---|
| 2 No DS6A7A1 and 2 No. DS6B7A1 | - | XF2H125NV+ separate Neutral Link + Rotary Handle | - | PR63MCCB-2 | PR63MCCB-2-LILO |
| 2 No DS6A7A1 and 2 No. DS6B7A1 | PSFS1253ND | - | - | PR63SDF-2 | PR63SDF-2-LILO |

* Prices : Available on request

## Auto Transformer Starter Panels upto 800 HP

### Advantages

Good Starting Torque and current performance

Possibility of adjusting starting parameters

No break in supply to the motor during starting

Best suited when maximum reduction of Inrush current is desired or motor requires longer acceleration time with Good starting torque

- Blowers
- Compressors
- Crushers
- Pumps
- Extruders

### Range & Specications

- Available upto 800HP
- Standard Tappings : 50% , 65% and 80%
- Air Cooled design & Oil cooled
- 7 Tank pre treated bolted construction enclosure
- Superior gasket

### Protections

- Short Circuit
- Overload and Single Phasing (Thru Overload relay)
- Under voltage
- Other protections available on request

### Metering and indication

- Voltmeter with selector switch
- Ammeter with selector switch
- R,Y, B phase indication
- Motor ON, OFF and Trip indication

**HSN Code - 8537**

| BIL Auto Transformer Starter - STANDARD RATINGS | MODEL 1 - BASIC ATS : PU door-gasket Enclosure, 3nos. Power Contactor, Citation OLR, Start/Stop PB, Motor ON LED | | MODEL 2 - PREMIUM Version : PU door-gasket Enclosure, MCCB Incomer, 3nos. Power Contactor, Citation OLR, Electronic SPP, Ammeter/voltmeter with selector switches, Start/Stop PB, Phase & Motor ON/Trip LEDs. | |
|---|---|---|---|---|
| HP | Cat. code for Air cooled | Cat. code for Oil cooled | Cat. code for Air cooled | Cat. code for Oil cooled |
| 20 | ATEA20 | ATEO20 | ATPA20 | ATPO20 |
| 25 | ATEA25 | ATEO25 | ATPA25 | ATPO25 |
| 30 | ATEA30 | ATEO30 | ATPA30 | ATPO30 |
| 35 | ATEA40 | ATEO40 | ATPA40 | ATPO40 |
| 40 | ATEA40 | ATEO40 | ATPA40 | ATPO40 |
| 50 | ATEA50 | ATEO50 | ATPA50 | ATPO50 |
| 60 | ATEA60 | ATEO60 | ATPA60 | ATPO60 |
| 75 | ATEA75 | ATEO75 | ATPA75 | ATPO75 |
| 100 | ATEA100 | ATEO100 | ATPA100 | ATPO100 |
| 125 | ATEA125 | ATEO125 | ATPA125 | ATPO125 |
| 150 | ATEA150 | ATEO150 | ATPA150 | ATPO150 |
| 175 | ATEA175 | ATEO175 | ATPA175 | ATPO175 |
| 200 | ATEA200 | ATEO200 | ATPA200 | ATPO200 |
| 225 | ATEA225 | ATEO225 | ATPA225 | ATPO225 |
| 250 | ATEA250 | ATEO250 | ATPA250 | ATPO250 |
| 300 | ATEA300 | ATEO300 | ATPA300 | ATPO300 |
| 350 | ATEA350 | ATEO350 | ATPA350 | ATPO350 |
| 400 | ATEA400 | ATEO400 | ATPA400 | ATPO400 |

* Contact nearest sales office for Prices

# Products available till stock lasts

- **FS1 Contactor**

- Range 9A to 80A, 415V AC3, 3Pole & 2Pole
- Conforms to IS / IEC 60947-4-1
- 3Poles with 1NO/NC Aux Contact as standard
- Rated Operational Voltage 415V
- Rated Insulation Voltage 690V
- Rated Impulse Voltage 6kV
- Ambient Temp - $20^0$C to $+60^0$C

## 3 Pole Contactor (AC Control)

HSN Code : 8536

| Size | AC1 Rating | AC3 Rating 415V AC | | | 3Pole | | 2Pole | |
|---|---|---|---|---|---|---|---|---|
| | | Amp | HP | KW | Aux Contact | Cat Code | Aux Contact | Cat Code |
| B | 20 | 9 | 5.5 | 4 | 1NO | CN14BNS3▪ | 1NO | CN14BNS2▪ |
| | | | | | 1NC | CN14BNC3▪ | 1NC | CN14BNC2▪ |
| C | 20 | 12 | 7.5 | 5.5 | 1NO | CN14CNS3▪ | 1NO | CN14CNS2▪ |
| | | | | | 1NC | CN14CNC3▪ | 1NC | CN14CNC2▪ |
| D | 20 | 16 | 10 | 7.5 | 1NO | CN14DNS3▪ | - | - |
| | | | | | 1NC | CN14DNC3▪ | - | - |
| D | 22 | 18 | 10 | 7.5 | 1NO | CN14D1NS3▪ | 1NO | CN14D1NS2▪ |
| | | | | | 1NC | CN14D1NC3▪ | 1NC | CN14D1NC2▪ |
| E | 40 | 25 | 15 | 11 | 1NO | CN14EN3▪10 | - | CN14EN2▪ |
| | | | | | 1NC | CN14EN3▪01 | - | CN14EN2▪ |
| F | 40 | 32 | 20 | 15 | 1NO | CN14FN3▪10 | - | CN14FN2▪ |
| | | | | | 1NC | CN14FN3▪01 | - | CN14FN2▪ |
| F1 | 40 | 38 | 30 | 22 | 1NO | CN14F1N3▪10 | - | - |
| | | | | | 1NC | CN14F1N3▪01 | - | - |
| G | 60 | 40 | 30 | 22 | 1NO + 1NC | CN14GN3▪11 | - | CN14GN2▪ |
| H | 75 | 50 | 33.5 | 25 | 1NO + 1NC | CN14HN3▪11 | - | CN14HN2▪ |
| J | 80 | 65 | 50 | 37 | 1NO + 1NC | CN14JN3▪11 | - | CN14EN2▪ |
| K2 | 100 | 80 | 53 | 40 | 1NO + 1NC | CN14K2N3▪11 | - | CN14K2N2▪ |

▪ For Standard Coil Voltage Codes refer page 57

**Note: Available till stock lasts, for prices please contact nearest sales office.**

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# Price List

## General Terms & Conditions

Prices are subject to change without any prior notice and will be applicable as prevailing at the time of dispatch.

- The prices are ex-works basis..
- The prices given in this list are effective as on date and are subject to change without notice.
- Maximum Retail Price (MRP) mentioned are inclusive of GST.
- The List Prices (LP) mentioned are exclusive of GST.
- The duties, taxes and other statutory levies are based on rates prevailing at the time of billing. Any subsequent revision of those rates having retrospective effective shall be to customer's account.
- In case where any GST exemption has been claimed, the purchaser is responsible for providing the necessary GST exemption form within the specified period, failing which the purchaser would be liable for the payment of full GST plus applicable interest and penalties
- All Prices are in Indian Rupees (₹).
- Alteration made after receipt of confirmation of order are subject to price & delivery revisions and any other expenses or levies
- The dispute, if any, will be resolved mutually by discussion. However, if no settlement is forthcoming then, the Courts at New Delhi shall only have territorial jurisdiction to hear and decide the dispute.

### Warranty

All products unless specifically mentioned otherwise, shall have warranty against manufacturing defects only for a period of 12* months from the date of invoice or 18 months from the date of manufacturing whichever is later. The Company shall not be liable to give warranty replacement / service for the products damaged due to negligence or wrong application of the product by the customer.

* Proof of purchase to be retained to avail warranty.

Notes

a strong commitment
to serve better
always ...

**Power Distribution | Industrial Control & Protections | Industrial Brakes**
**Industrial Automation & Safety | Starters | Enclosures | Wires & Cables | FDP**
**Power Quality & Energy Management | Electric Motors | Switchboards & Solutions**

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- Wires & Cables
- Power Quality & Energy Management
- Electric Motors
- Switchboards & Solutions
- Power Bus Duct

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# BCH ELECTRIC LIMITED

www.bchindia.com

BCH Customer Care

**1800-103-9262**

**customercare@bchindia.com**

## Visit us at : www.bchindia.com

**Registered & Corporate Office :** 1105, New Delhi House, 27, Barakhamba Road, New Delhi - 110 001 Tel. : 91-11- 43673100
**CIN :** U31103DL1965PLC425953, Customercare No. 1800-103-9262, E-mail : marketing@bchindia.com
**Works 1 :** 20/4, Mathura Road, Faridabad - 121 006 (Haryana) Tel. : 0129-4063000/4293000 Fax : 0129-2304016
**Works 2 :** 64-68, Sector-7, IIE, Pant Nagar, Rudrapur, Udham Singh Nagar - 263 153 (Uttrakhand) Tel. : 05944-250214/16 Fax : 05944-250215

### *Sales Offices :*

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Above Westside,
Shyamal Cross Road,
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***Bangalore***
2nd Floor, 130/5,
K.H. Road (Double road),
Bangalore - 560 027
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E-mail : bangalore@bchindia.com

***Bhubaneswar***
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Complex Plot No.: A/69, unit - 3
Bhubaneswar - 751 001
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E-mail.: bhubaneswar@bchindia.com

***Chandigarh (Panchkula)***
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87, Dr. Nanjappa Road,
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***Delhi 1***
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***Delhi 2***
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E-mail : hyderabad@bchindia.com

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25, Hathroi, Gopalbari,
Jaipur - 302 001
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***Jamshedpur***
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E-mail : lucknow@bchindia.com

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Mumbai - 400 021
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Fax : 022-22822858
E-mail : mumbai@bchindia.com

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Tower, Exhibition Road,
Patna - 800001

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Pune - 411009
E-mail : pune@bchindia.com

***Raipur***
6th Floor, Office No. 607,
Babylon Capital, Near Oswal
Petrol Pump, VIP Chowk,
G.E. Road, Raipur - 492 006
**Tel. : 0771- 4045053**
E-mail : raipur@bchindia.com

***Vadodara***
301, Third Floor, "Florence Classic",
10, Ashapuri Co-Op. Hsg. Soc. Ltd., Opp. VUDA
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**Tel. : 0265-2345068/2345069**
Telefax : 0265-2345068,
E-mail : vadodara@bchindia.com

### *Other Branch Locations*

**Cochin** : cochin@bchindia.com, **Guwahati** : guwahati@bchindia.com, **Vishakapatnam** : vizag@bchindia.com, **Surat** : surat@bchindia.com, **Trichy** : Trichy@bchindia.com

### *Resident Engineer Locations*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Agra | Bhopal | Hospet | Kanpur | Muzaffarnagar | Rajahmundry | Silliguri | Varanasi |
| Ahmednagar | Calicut | Hubli | Karimnagar | Nanded | Ranchi | Solapur | Vijaywada |
| Ambala | Goa | Idukki | Karnal | Nashik | Rourkela | Srinagar | Vishakapatnam |
| Anantapur | Gulbarga | Jabalpur | Kota | Panipat | Rudarpur | Trivendrum | Vellore |
| Ankleshwar | Gurgaon | Jalandhar | Kurnool | Patna | Salem | Tirunelveli | Vilupuram |
| Aurangabad | Haridwar | Jodhpur | Midnapore | Puducherry | Sikar | Udaipur | Warangal |
| Bhiwadi | Hisar | Kashipur | Mahua | Rajkot | Silchar | Vapi | Yamunanagar |

**Since product improvement is a continuous process, the data furnished in this brochure may undergo revision without prior notice.**

BCHPRICELIST/ Low Voltage Switchgear Products /Rev.1.0/August 2026