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**BCH  
ELECTRIC  
LIMITED**

# **LOW VOLTAGE SWITCHGEAR PRODUCTS**

Price List effective 17th April 2026

[www.bchindia.com](http://www.bchindia.com)

## Modern facilities at Faridabad & Rudrapur



### 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.

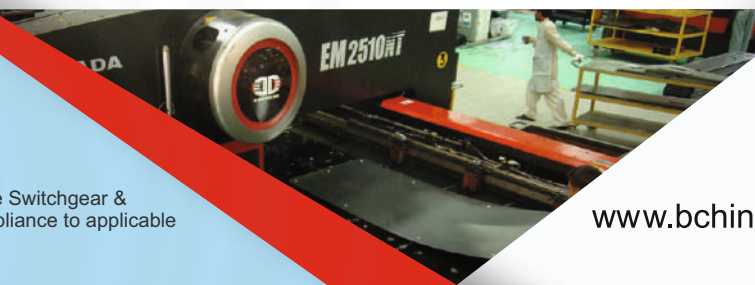
### Environmental Policy

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](http://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



BCH  
ELECTRIC  
LIMITED

# Power Distribution

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



# 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,  $I_{cu} = I_{cs} = I_{cw}$  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:

$I_{cu} = I_{cs} = I_{cw}$

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	

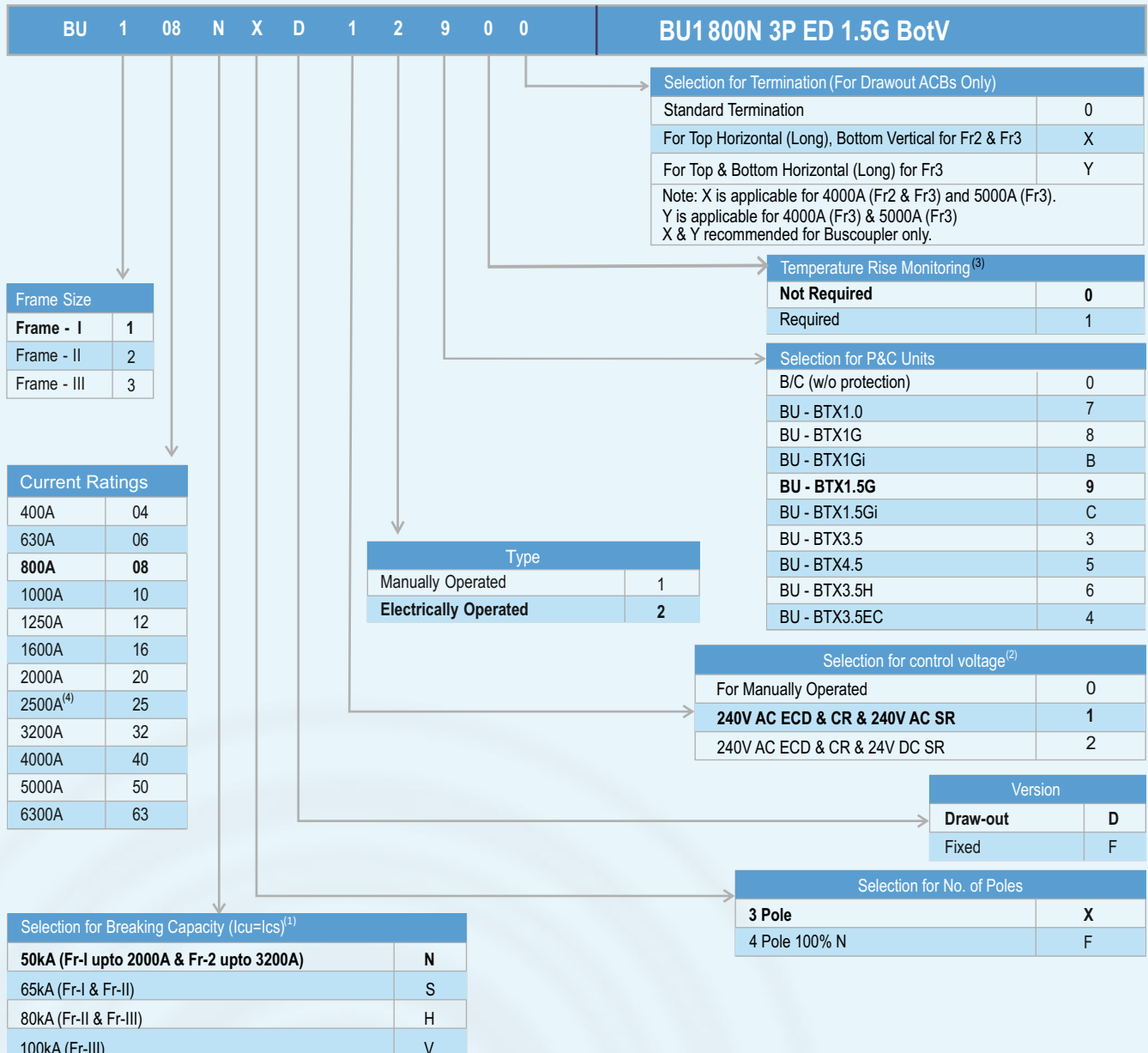


# Air Circuit Breakers



## ACB ordering information:

Air Circuit Breakers



**Please Note :** (1) For low 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



## POWER ACBs are offered with following standard features:

<b>Draw-out Version:</b>	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.
<b>Fixed Version:</b>	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).

# 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



# Air Circuit Breakers



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

Air Circuit Breakers



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						
4000A		-		-	BU232HFD01800					*
5000A		-		-	BU240HFD01800					
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)	BLCA609630000	*
Frame-2 400-3200A N/S/H (Vertical / Horizontal)	BLCA609640000	



Operation Counter



Door Interlock

HSN Code : 8538

Description	Cat. No.	M.R.P. [₹]
Other Accessories		
Operation Counter	BLOC909830000	*
Door Interlock	BLDI909780000	
Electrical Position Indication (EPI)	BLEPI958260000	
Microswitches for Indication		
Microswitch for Common Fault Indication (CFI)	BLCM909490000	*
Microswitch for Ready To Close Indication (RTC)	BLRCM909530000	
Microswitch for Shunt Release	BLSM909510000	
Microswitch for Undervoltage Release	BLUM909470000	
Microswitch for Spring Charging Indication	BLMSC426720000	

\* Available on request

# Air Circuit Breakers



## Accessories of Air Circuit Breakers



R-Lock



C-Lock



Closing Release



Shunt Release



UV Release

HSN Code : 8538

HSN Code : 8538

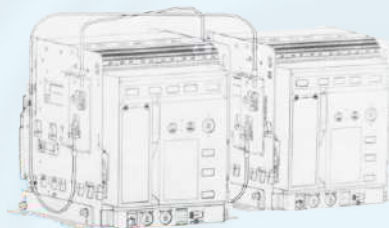
Description	Cat. No.	M.R.P. [₹]
<b>Mechanical Interlock using Key &amp; Lock</b>		
R - Lock Type - 1	BLRL1006590000	*
R - Lock Type - 2	BLRL2006600000	
R - Lock Type - 3	BLRL3006610000	
R - Lock Type - 12	BLRL12006620000	
R - Lock Type - 23	BLRL23006630000	
Locking arrangement for OFF button with R - Lock (on breaker)	BLRL908150000	
Locking arrangement for ISO position with R - Lock (on Cradle)	BLCLR908650000	
Locking arrangement for ANY position with R - Lock (on Cradle)	BLCLR909270000	
C - Lock Type - S	BLCLS006640000	
C - Lock Type - T	BLCLT006650000	
C - Lock Type - ST	BLCLST006660000	
C - Lock Type - SS	BLCLSS006670000	
C - Lock Type - TT	BLCLTT006680000	
Locking arrangement for OFF button with C - Lock (on breaker)	BLCL908140000	
Locking arrangement for ISO position for C - Lock (on Cradle)	BLCLC909820000	
Locking arrangement for ANY position with C - Lock (on Cradle)	BLCLC909810000	

Description	Cat. No.	M.R.P. [₹]	
<b>Electrical Charging Device (ECD)</b>			
240V AC / 250V DC	BLECD903590000	*	
415V AC / 400V DC	BLECD903610000		
<b>Closing Release (CR)</b>			
220 - 240V AC / 220 - 250V DC	BLCR90817B000		
415V AC	BLCR90817D000		
<b>Shunt Release (SR)</b>			
24-30V DC	BLSH908160400		
220 - 240V AC / 220 - 250V DC	BLSH908160B00		
415V AC	BLSH908160D00		
<b>Under Voltage Release (UVR) with time delay (0-1-3-5 sec)</b>			
240V AC / 220V DC	BLUV90818B000		
415V AC	BLUV90818D000		

HSN Code : 8538

Description	Cat. No.	M.R.P. [₹]
<b>External Neutral CT for BU-BTX Releases</b>		
Frame-1, 800A	BLEN007170000	*
Frame-1, 1000-1600A	BLEN007180000	
Frame-1 2000A	BLEN007190000	
Frame-2 & 3 2500-4000A	BLNCT007200000	

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



Mechanical Interlock using Bowden Cable

HSN Code : 8538

Description	Cat. No.	M.R.P. [₹]
<b>Mechanical Interlock using Bowden Cable (3 meters length)</b>		
Between 2 Incomers	BLBC906590000	*
Between 2 Incomers & 1 Buscoupler	BLBC906620000	

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



BU-BTX1.5G



BU-BTX3.5

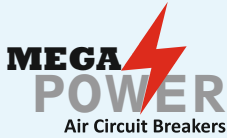
HSN Code : 8538

Description	Cat. No.	M.R.P. [₹]
<b>BTX Releases</b>		
BU-BTX1G	BLBTX919710000	*
BU-BTX1Gi	BLBTX905620000	
BU-BTX1.5G	BLBTX919650000	
BU-BTX1.5Gi	BLBTX905520000	
BU-BTX3.5	BLBTX901130000	
BU-BTX3.5EC	BLBTX906440000	
BU-BTX3.5H	BLBTX919750000	
Simulation Kit	BLSK907240000	

\* Available on request



# 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	BM960420000	*	BM960620000	*
800A	50kA	EDO	BM960520000		BM960720000	
1000A	50kA	MDO	BM960430000		BM960630000	
1000A	50kA	EDO	BM960530000		BM960730000	
1250A	50kA	MDO	BM960440000		BM960640000	
1250A	50kA	EDO	BM960540000		BM960740000	
1600A	50kA	MDO	BM960450000		BM960650000	
1600A	50kA	EDO	BM960550000		BM960750000	
2000A	50kA	MDO	BM960460000		BM960660000	
2000A	50kA	EDO	BM960560000		BM960760000	
2500A	60kA	MDO	BM960470000		BM960670000	
2500A	60kA	EDO	BM960570000		BM960770000	

## 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	BM955610000	*	BM955810000	*
630A	50kA	EF	BM955710000		BM955910000	
800A	50kA	MF	BM955620000		BM955820000	
800A	50kA	EF	BM955720000		BM955920000	
1000A	50kA	MF	BM955630000		BM955830000	
1000A	50kA	EF	BM955730000		BM955930000	
1250A	50kA	MF	BM955640000		BM955840000	
1250A	50kA	EF	BM955740000		BM955940000	
1600A	50kA	MF	BM955650000		BM955850000	
1600A	50kA	EF	BM955750000		BM955950000	

# Air Circuit Breakers



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

Air Circuit Breakers



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	BM948220000	*	BM948260000	*
3200A	75kA	EDO	H2	BM948240000		BM948280000	
4000A	75kA	MDO	H2	BM948230000		BM948270000	
4000A	75kA	EDO	H2	BM948250000		BM948290000	
5000A	95kA	MDO/EDO	C	On request		On request	
6300A	95kA	MDO/EDO	C	On request		On request	

M.R.P. changes for		M.R.P. [₹]
product customization w.r.t. BR18G 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



UVR Release

HSN Code : 8538

HSN Code : 8538

Description	Cat. No.	M.R.P. [₹]
<b>Lockable Trip Push Button (LTPB)</b>		
Type AA	BMLP93148000A	*
Type BB	BMLP93148000B	
Type CC	BMLP93148000C	
Type DD	BMLP93148000D	
<b>Locking of ACB in Any position (LAP)</b>		
Type A	BMLP93147000A	*
Type B	BMLP93147000B	
Type C	BMLP93147000C	
Type D	BMLP93147000D	
<b>Racking Interlock</b>		
Type AA	BMRI93149000A	*
Type B B	BMRI93149000B	
Type C C	BMRI93149000C	
Type D D	BMRI93149000D	
<b>Other Accessories</b>		
Door Interlock	BMDI931500000	*

Description	Cat. No.	M.R.P. [₹]
<b>Shunt Release (SR)</b>		
Type EA : 24/48V DC	BMSH927180400	*
Type EA1 : 240V AC	BMSH927180B00	
Type EA1 : 415V AC	BMSH927180D00	
<b>Under Voltage Release (UVR)</b>		
Type MV : 240V AC	BMUV92720B000	*
Type MV : 415V AC	BMUV92720D000	
<b>Microswitches for Indication</b>		
Test or Isolated Position Microswitch - Left (2)	BMTL931450000	*

**Note :**

- The Numerical in brackets, against various accessories indicate the SICs required for wiring purpose in Draw-Out breakers
- Shunt release requires one set of auxiliary contacts
- 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. [₹]
<b>Protection Releases</b>		
Microprocessor based type BR18G	BMBR960300000	*



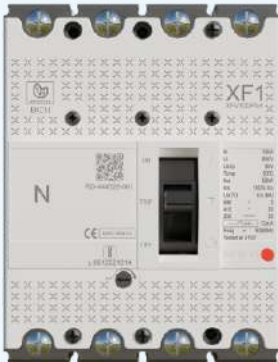
# XF MCCB



## 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	3475	XFE016P4N	5330	1			
	20A		XFE020P		XFE020P4N					
	25A		XFE025P		XFE025P4N					
	32A		XFE032P		XFE032P4N					
	40A		XFE040P		XFE040P4N					
	50A		XFE050P		XFE050P4N					
	63A		XFE063P		XFE063P4N			5175		
	80A		XFE080P-WT		XFE080P4N-WT			5160		
	80A		XFE080P#		XFE080P4N#			6100		
	100A		XFE100P-WT		XFE100P4N-WT			5160		
	100A		XFE100P#		XFE100P4N#			6100		
	125A		XFE125P-WT		XFE125P4N-WT			6940		
	125A		XFE125P#		XFE125P4N#			7925		
	16A		18/18kA		XFR016PV			8095	XFR016PV4N	10400
	20A				XFR020PV				XFR020PV4N	
	25A	XFR025PV		XFR025PV4N						
	32A	XFR032PV		XFR032PV4N						
	40A	XFR040PV		XFR040PV4N						
	50A	XFR050PV		XFR050PV4N						
	63A	XFR063PV		XFR063PV4N						
	80A	XFR080PV-WT		XFR080PV4N-WT	8250					
	100A	XFR100PV-WT		XFR100PV4N-WT						
	125A	XFR125PV-WT		XFR125PV4N-WT	13050					
	16A	25/25kA	XFS016PV	10710	XFS016PV4N	14810				
	20A		XFS020PV		XFS020PV4N					
25A	XFS025PV		XFS025PV4N							
32A	XFS032PV		XFS032PV4N							
40A	XFS040PV		XFS040PV4N							
50A	XFS050PV		XFS050PV4N							
63A	XFS063PV		XFS063PV4N							
80A	XFS080PV-WT		XFS080PV4N-WT		10355					
100A	XFS100PV-WT		XFS100PV4N-WT							
125A	XFS125PV-WT		XFS125PV4N-WT		19005					
16A	36/36kA	XFL016PV	14225	XFL016PV4N	17675					
20A		XFL020PV		XFL020PV4N						
25A		XFL025PV		XFL025PV4N						
32A		XFL032PV		XFL032PV4N						
40A		XFL040PV		XFL040PV4N						
50A		XFL050PV		XFL050PV4N						
63A		XFL063PV		XFL063PV4N						
80A		XFL080PV-WT		XFL080PV4N-WT		15455				
100A		XFL100PV-WT		XFL100PV4N-WT						
125A		XFL125PV-WT		XFL125PV4N-WT		19935				
16A	50/50kA	XFV016PV	19410	XFV016PV4N	22850					
20A		XFV020PV		XFV020PV4N						
25A		XFV025PV		XFV025PV4N						
32A		XFV032PV		XFV032PV4N						
40A		XFV040PV		XFV040PV4N						
50A		XFV050PV		XFV050PV4N						
63A		XFV063PV		XFV063PV4N						
80A		XFV080PV-WT		XFV080PV4N-WT		18000				
100A		XFV100PV-WT		XFV100PV4N-WT		19255				

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.14 on Table1 & 2

# XF MCCB



## 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			

HSN Code : 8536

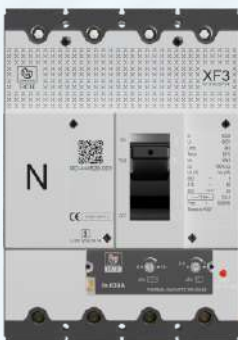
### XF Frame 2



- 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

Type	Release Range (A)	Breaking Capacity Icu/lcs at 415V AC	3 Pole		4 Pole		Std. Pkg.
			Cat. No.	MRP [₹]	Cat. No.	MRP [₹]	
XF Frame 2	160A	25/25kA	XF2E160PV-WT	20695	XF2E160PV4N-WT	24835	1
	200A		XF2E200PV-WT	24640	XF2E200PV4N-WT	30695	1
	250A		XF2E250PV-WT	28330	XF2E250PV4N-WT	34965	1
	125A	36/36kA	XF2N125PV-WT	22620	XF2N125PV4N-WT	28500	1
	160A		XF2N160PV-WT	29610	XF2N160PV4N-WT	37310	1
	200A		XF2N200PV-WT	31310	XF2N200PV4N-WT	39690	1
	250A		XF2N250PV-WT	34770	XF2N250PV4N-WT	40225	1
	125A	50/50kA	XF2H125PV-WT	30470	XF2H125PV4N-WT	36565	1
	160A		XF2H160PV-WT	35185	XF2H160PV4N-WT	42220	1
	200A		XF2H200PV-WT	35115	XF2H200PV4N-WT	43965	1
	250A		XF2H250PV-WT	36685	XF2H250PV4N-WT	45480	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

Type	Release Range (A)	Breaking Capacity Icu/lcs at 415V AC	3 Pole		4 Pole		Std. Pkg.
			Cat. No.	MRP [₹]	Cat. No.	MRP [₹]	
XF3 range	320	36/36kA	XF3N320PV-WT	40120	XF3N320PV4N-WT	52070	1
	400		XF3N400PV-WT	40120	XF3N400PV4N-WT	52070	
	500		XF3N500PV-WT	53100	XF3N500PV4N-WT	69310	
	630		XF3N630PV-WT	53100	XF3N630PV4N-WT	69310	
	320	50/50kA	XF3H320PV-WT	44460	XF3H320PV4N-WT	59490	
	400		XF3H400PV-WT	44460	XF3H400PV4N-WT	59490	
	500		XF3H500PV-WT	58500	XF3H500PV4N-WT	78205	
	630		XF3H630PV-WT	58500	XF3H630PV4N-WT	78205	



HSN Code : 8536

Note: Phase barriers are supplied along with all MCCBs.  
 Spreader terminals are available as accessories.  
 For accessories please refer page No.14 on Table 1 & 2

## YG1/XB Range With Thermal - Magnetic Release:

RATING (A) Icu=Ics (kA)	20	25	32	40	63	100	125	160	200	250	320	400	630
18	XA1 - 4 Pole												
25	XB0 - 4 Pole												
25								XB1 - 4 Pole					
36						YG1 - 4 Pole			XB2 - 4 Pole		XB3S - 4 Pole		
36											XB3 - 4 Pole		XB3 - 4 Pole
50						YG1 - 4 Pole			XB2 - 4 Pole		XB3 - 4 Pole		

### 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<sub>cu</sub>/I<sub>cs</sub> = 18/18 kA

### YG1 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

YG1 Frame :  
I<sub>cu</sub>/I<sub>cs</sub> = 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<sub>cu</sub>/I<sub>cs</sub> = 25/25, 36/18, 36/36, 50/50 kA

### XA1/YG1/XB Range With Thermal - Magnetic Release - 4 Pole

HSN Code : 8536

Type	Release	Breaking	4 Pole		Std. Pkg.
	Range (A)	Capacity Icu/Ics	Cat. No.	MRP [₹]	
XA1	32	18/18kA	XA1R032PV4	11300	1
	40		XA1R040PV4	11300	
	63		XA1R063PV4	10975	
	100 (w/o spreader)		XA1R100PV4	10975	
	125		XA1R125PV4	13920	
XB0	20	25/25kA	XB0S020PV4	16240	
	25		XB0S025PV4	16240	
	32		XB0S032PV4	16240	
	40		XB0S040PV4	16240	
	63		XB0S063PV4	15915	
	100		XB0S100PV4	15915	
XB1	125	36/36kA	XB1E125PV4	20275	
	160		XB1E160PV4	26025	
	200		XB1E200PV4	32745	
	250		XB1E250PV4	37300	
YG1	100	50/50kA	YG1N100PV4	18945	
	125		YG1N125PV4	21110	
	160		YG1N160PV4	27400	
XB2	200	50/50kA	XB2N200PV4	40150	
	250		XB2N250PV4	42525	
XB3S	320	50/50kA	XB3SN320PV4	53750	
	400		XB3SN400PV4	53750	
XB3	320	50/50kA	XB3N320PV4	68560	
	630		XB3N630PV4	74350	
YG1	100	50/50kA	YG1H100PV4	24145	
	125		YG1H125PV4	30260	
	160		YG1H160PV4	35625	
XB2	200	50/50kA	XB2H200PV4	48125	
	250		XB2H250PV4	49785	
XB3	320	50/50kA	XB3H320PV4	63615	
	400		XB3H400PV4	63615	
	630		XB3H630PV4	83890	

#### 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.

@ 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.15 on Table3, 4 & 5

#### 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

## XG1/XB Range With Microprocessor Release:

RATING (A) I <sub>cu</sub> =I <sub>cs</sub> (kA)	40	63	100	160	250	320	400	500	630	800	1000	1250	
36/36	XG1-LSI/LSIG (3 & 4 Pole)												
	XF2 RANGE-LSIG (3 Pole)												
			XB2-LSI/LSIG (3 & 4 Pole)						XF3 RANGE-LSIG (3 Pole)				
					XB3-LSI/LSIG (3 & 4 Pole)								
							XB3-LSI/LSIG (3 & 4 Pole)						
50/50	XG1-LSI/LSIG (3 & 4 Pole)												
	XF2 RANGE-LSIG (3 Pole)												
			XB2-LSI/LSIG (3 & 4 Pole)						XF3 RANGE-LSIG (3 Pole)				
					XB3-LSI/LSIG (3 & 4 Pole)								
							XB3-LSI/LSIG (3 & 4 Pole)						
										XB4-LSI/LSIG (4 Pole)			

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



XB Frame - BMR :  
I<sub>cu</sub>/I<sub>cs</sub> = 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 I<sub>n</sub>
- I<sub>cs</sub>=100% I<sub>cu</sub>
- Adjustable short-circuit setting from 1.5 to 8 x I<sub>r</sub>
- 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<sub>cu</sub>/I<sub>cs</sub> = 36/36, 50/50 kA

### XG1-GMR (LSI)

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

HSN Code : 8536

Type	Release Range (A)	Breaking Capacity I <sub>cu</sub> /I <sub>cs</sub>	3 Pole		4 Pole		Std. Pkg.
			Cat. No.	MRP [₹]	Cat. No.	MRP [₹]	
XG1	10-40	36/36kA	XG1L040PE3-LSI	27250	XG1L040PE4-LSI	33535	1
	16-63		XG1L063PE3-LSI	27425	XG1L063PE4-LSI	33535	
	25-100		XG1L100PE3-LSI	27425	XG1L100PE4-LSI	33535	
	40-160		XG1N160PE3-LSI	32365	XG1N160PE4-LSI	44980	
XB2	100-250		XB2N250PE3-LSI	50250	XB2N250PE4-LSI	69940	
	XB3		160-400	XB3N400PE3-LSI	61755	XB3N400PE4-LSI	
250-630			XB3N630PE3-LSI	68300	XB3N630PE4-LSI	91000	
XG1	10-40		50/50kA	XG1V040PE3-LSI	31835	XG1V040PE4-LSI	
	16-63	XG1V063PE3-LSI		31835	XG1V063PE4-LSI	43970	
	25-100	XG1V100PE3-LSI		31835	XG1V100PE4-LSI	43970	
	40-160	XG1H160PE3-LSI		39860	XG1H160PE4-LSI	52575	
XB2	100-250	XB2H250PE3-LSI		59980	XB2H250PE4-LSI	74840	
	XB3	160-400		XB3H400PE3-LSI	67575	XB3H400PE4-LSI	88700
250-630		XB3H630PE3-LSI		74245	XB3H630PE4-LSI	96805	
XB4	320-800	XB4H800PE3-LSI		98220	XB4H800PE4-LSI	124795	
	400-1000	XB4H1000PE3-LSI		146095	XB4H1000PE4-LSI	204335	
	500-1250	XB4H1250PE3-LSI		182395	XB4H1250PE4-LSI	246730	

@ Motorized version available for XB2 and XB3 Frames (please refer page no.15)

For accessories please refer page No.15 on Table3, 4 & 5

### 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.

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

HSN Code : 8536



XF2 & XF3 Frame - LSIG :  
I<sub>cu</sub>/I<sub>cs</sub> 36/36, 50/50 kA

### • Electronic Trip Unit (ETU)-LSIG

- 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



XB Frame - BMR :  
I<sub>cu</sub>/I<sub>cs</sub> 36/36, 50/50 kA

Type	Release Range (A)	Breaking Capacity I <sub>cu</sub> /I <sub>cs</sub> at 415V AC	3 Pole		Std. Pkg.
			Cat. No.	MRP [₹]	
XF2 range	16 - 40	36/36kA	XF2N040PE-LSIG	43615	1
	25 - 63		XF2N063PE-LSIG	43615	
	40 - 100		XF2N100PE-LSIG-WT	43615	
	63 - 160		XF2N160PE-LSIG-WT	45650	
	100 - 250		XF2N250PE-LSIG-WT	53290	
XF3 range	160 - 400	XF3N400PE-LSIG-WT	66890		
	250 - 630	XF3N630PE-LSIG-WT	71000		
XF2 range	16 - 40	50/50kA	XF2H040PE-LSIG	47425	
	25 - 63		XF2H063PE-LSIG	47425	
	40 - 100		XF2H100PE-LSIG-WT	45625	
	63 - 160		XF2H160PE-LSIG-WT	55190	
	100 - 250		XF2H250PE-LSIG-WT	59565	
XF3 range	160 - 400	XF3H400PE-LSIG-WT	71760		
	250 - 630	XF3H630PE-LSIG-WT	76755		

Note: Phase barriers are supplied along with all MCCBs.  
Spreader terminals are available as accessories.  
For accessories please refer page No.14 on Table1 & 2

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

HSN Code : 8536

### XB-BMR (LSIG)

- Conforms to IS/IEC 60947-2
- 40A to 1250A, 3P & 4P
- 36kA, 50kA breaking capacities
- I<sub>cs</sub>=100% I<sub>cu</sub>
- 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<sub>cu</sub>/I<sub>cs</sub> 36/36, 50/50 kA

### XG1-GMR (LSIG)

- Conforms to IS/IEC 60947-2
- 16A to 160A, 3P & 4P
- 36kA & 50kA breaking capacities
- I<sub>cs</sub>=100% I<sub>cu</sub>
- 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

Type	Release Range (A)	Breaking Capacity I <sub>cu</sub> /I <sub>cs</sub>	3 Pole		4 Pole		Std. Pkg.
			Cat. No.	MRP [₹]	Cat. No.	MRP [₹]	
XG1	10-40	36/36kA	XG1L040PE3-LSIG	45965	XG1L040PE4-LSIG	53510	1
	16-63		XG1L063PE3-LSIG	45965	XG1L063PE4-LSIG	53510	1
	25-100		XG1L100PE3-LSIG	45965	XG1L100PE4-LSIG	53510	1
	40-160		XG1N160PE3-LSIG	52760	XG1N160PE4-LSIG	65025	1
XB2	40-100	36/36kA	-	-	XB2V100PE4-LSIG	69270	1
	63-160		-	-	XB2N160PE4-LSIG	77870	1
	100-250		XB2N250PE3-LSIG	71470	XB2N250PE4-LSIG	87925	1
XB3	160-400	36/36kA	XB3N400PE3-LSIG	84930	XB3N400PE4-LSIG	99110	1
	250-630		XB3N630PE3-LSIG	93440	XB3N630PE4-LSIG	113365	1
XG1	10-40	50/50kA	XG1V040PE3-LSIG	50925	XG1V040PE4-LSIG	60825	1
	16-63		XG1V063PE3-LSIG	50925	XG1V063PE4-LSIG	60825	1
	25-100		XG1V100PE3-LSIG	50925	XG1V100PE4-LSIG	60825	1
	40-160		XG1H160PE3-LSIG	60390	XG1H160PE4-LSIG	72305	1
XB2	40-100	50/50kA	-	-	XB2L100PE4-LSIG	78075	1
	63-160		-	-	XB2H160PE4-LSIG	82610	1
	100-250		XB2H250PE3-LSIG	75130	XB2H250PE4-LSIG	90705	1
XB3	160-400	50/50kA	XB3H400PE3-LSIG	89985	XB3H400PE4-LSIG	107070	1
	250-630		XB3H630PE3-LSIG	99295	XB3H630PE4-LSIG	128000	1
XB4	320-800	50/50kA	XB4H800PE3-LSIG	134705	XB4H800PE4-LSIG	160015	1
	400-1000		XB4H1000PE3-LSIG	174450	XB4H1000PE4-LSIG	249120	1
	500-1250		XB4H1250PE3-LSIG	214320	XB4H1250PE4-LSIG	282105	1

@ Motorized version available for XB2 and XB3 Frames

For accessories please refer page No.15 on Table3, 4 & 5

### 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.

# 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 $I_{cu}/I_{cs}$ at 415V AC	3 Pole		Std. Pkg.
			Cat. No.	MRP [₹]	
XF1 range	32	50/50kA	XFV032P-MO	8585	1
	40		XFV040P-MO	8585	1
	50		XFV050P-MO	8585	1
	63		XFV063P-MO	8585	1
	80		XFV080P-MO-WT	8085	1
	100		XFV100P-MO-WT	10435	1
XF2 range	125	50/50kA	XF2H125P-MO-WT	14075	1
	160		XF2H160P-MO-WT	21770	1
	200		XF2H200P-MO-WT	25835	1
	250		XF2H250P-MO-WT	30195	1
XF3 range	320	50/50kA	XF3H320P-MO-WT	37780	1
	400		XF3H400P-MO-WT	37780	1
	500		XF3H500P-MO-WT	43445	1
	630		XF3H630P-MO-WT	46000	1

Note: Phase barriers are supplied along with all MCCBs.  
 Spreader terminals are available as accessories.  
 For accessories please refer page No.14 on Table1 & 2

# MCCB Accessories



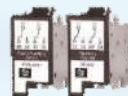
## XF Range MCCBs:



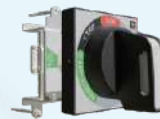
Shunt Release



UV Release



ATAC



Extended Rotary Handle



DIN Rail

Table 1

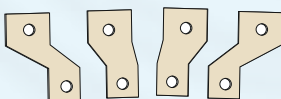
HSN Code : 8538

Description	Internal		
	Cat. No.	MRP [₹]	Std. Pkg.
<b>Auxiliary + Trip Alarm Contact</b>			
1 C/O + 1C/O (F1, F2 & F3)	XFALAX11	2350	1
2 C/O (F1, F2 & F3)	XFAX2	2310	
<b>Shunt Release</b>			
220V - 415V F1	XFSTH220V	2025	1
220V - 415V F2	XF2SHT220V	2065	
220V - 415V F3	XF3SHT220V	3345	
<b>Under Voltage Release</b>			
240V F1	XFUV240VA	2645	1
240V F2	XF2UV240VA	2675	
240V F3	XF3UV240VA	4180	
415V F1	XFUV415VA	3040	
415V F2	XF2UV415VA	3075	
415V F3	XF3UV415VA	4180	

Table 2

HSN Code : 8538

Description	Current (A)	External			
		Cat. No.	MRP [₹]	Std. Pkg.	
Spreader Terminals	50	ACMF1TP050-6T	580	Set of 6 (3P)	
	100	ACMF1TP100-6T	580		
	125	ACMF1TP125-6T	685		
	Spreader Terminals	50	ACMF1FP050-8T	835	Set of 8 (4P)
		100	ACMF1FP100-8T	880	
		125	ACMF1FP125-8T	1090	Set of 6 (3P)
		160	ACMF2TP160-6T	2275	
		250	ACMF2TP250-6T	2275	
		160	ACMF2FP160-8T	2855	
	Spreader Terminals	250	ACMF2FP250-8T	3015	Set of 6 (3P)
		400	ACMF3TP400-6T	4455	
		630	ACMF3TP630-6T	5665	Set of 8 (4P)
400		ACMF3FP400-8T	7150		
630		ACMF3FP630-8T	7700		
Extended Rotary Handle		-	XF1ROHE	2880	
	-	XF2ROHE	3080		
	-	XF2ROHE-LSIG	3080		
	-	XF3ROHE	5940		
Direct Rotary Handle	-	XF1ROHD	1820	1	
	-	XF2ROHD	1890		
Din Rail	-	F1DIN	355	1	
	-	F2EUSP	1535		
MCCB Enclosure	-	F2EU3P	3320	1	
	-	F1EU4P	2000		
	-	F2EU4P	4300		
	-	F1EU3P	1535		



Spreader Terminals

# MCCB Accessories



## Accessories - XB/XG1 Range MCCBs:



Auxiliary Contact



ATAC



Shunt Release



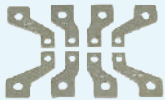
UV Release

**Table 3** HSN Code : 8538

Description	External		
	Cat. No.	MRP [₹]	Std. Pkg.
<b>Rotary Handle</b>			
XA1, XB0 Direct ROM	XB0A1ROHD	1795	1
XA2, XB1 Direct ROM	XB1A2ROHD	1835	1
XG1 Direct ROM	XG1ROHD	1870	1
XB2 Direct ROM	XB2ROHD	1900	1
XA3, XB3S, XB3 Direct ROM	XB3A3ROHD	2835	1
XA1, XB0 Extended ROM	XB0A1ROHE	2320	1
XA2, XB1 Extended ROM	XB1A2ROHE	2370	1
XG1 Extended ROM	XG1ROHE	2530	1
XB2 Extended ROM	XB2ROHE	2855	1
XA3, XB3S, XB3 Extended ROM	XB3A3ROHE	4655	1
XB4 Extended ROM	XB4ROHE	5915	1
<b>Stored Energy Electrical Operating Mechanism</b>			
XB2 - 240V AC*		40860	
XB3 - 240V AC*		51200	

**Table 4** HSN Code : 8538

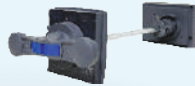
Description	Internal		
	Cat. No.	MRP [₹]	Std. Pkg.
<b>Auxiliary Contact</b>			
XA1, XA2, XB0, XB1 - 1 C/O - Right	XB01A12AUX1	1340	1
XA1, XA2, XB0, XB1 - 2 C/O - Right	XB01A12AUX2	2380	1
XG1 - 1 C/O	XG1AUX1	1340	1
XA3, XB2, XB3S, XB3, XB4 - 1 C/O	XB234A3AUX1	1560	1
XA3, XB2, XB3S, XB3, XB4 - 2 C/O	XB234A3AUX2	3015	1
<b>Trip Alarm Contact</b>			
XA1, XA2, XB0, XB1 - 1 C/O - Right	XB01A12ALR1	1340	1
XG1 - 1 C/O	XG1AUX1	1340	1
XA3, XB2, XB3S, XB3, XB4 - 1 C/O - Right	XB234ALR1	1640	1
<b>Auxiliary 1 C/O + TAC 1 C/O</b>			
XA1, XA2, XB0, XB1 - Right	XB01A12ALAX1	2295	1
XA3, XB2, XB3S, XB3, XB4 - Right	XB234ALAX1	3015	1
<b>Shunt Release</b>			
XA1, XA2, XB0, XB1 - 24V DC - Left	XB01A12SHT24V	2770	1
XA1, XA2, XB0, XB1 - 240/415V AC - Left	XB01A12SHTUNI	2660	1
XG1 - 240V AC	XG1SHT240V	3560	1
XA3, XB2, XB3S, XB3, XB4 - 110/240/415V AC, 110/220V DC	XB234A3SHTUNI	3915	1
<b>Under Voltage Release</b>			
XA1, XA2, XB0, XB1 - 240V AC - Left	XB01A12UV240V	4410	1
XG1 - 240V AC	XG1UV240V	4470	1
XA3, XB2, XB3S, XB3 - 240V AC - Left	XB23UV240V	5440	1
XB4 - 240V AC - Left	XB4UV240V	6205	1



Spreader Terminals



Direct ROM



Extended ROM

**Table 5**

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

HSN Code : 8538

Description	External		
	Cat. No.	MRP [₹]	Std. Pkg.
<b>Spreader Terminals - 3 Pole</b>			
XA1, XB0-100 - 3 Pole	XB0A1100TPST	535	Set of 6
XA1, XB0-125D - 3 Pole	XB0A1125TPST	735	Set of 6
XG1 - 160 - 3 Pole	XG160TPST	2185	Set of 6
XA2, XB1, XB2 - 250 - 3 Pole	XB12A2250TPST	2285	Set of 6
XA3, XB3S/XB3-400 - 3 Pole	XB3400TPST	4485	Set of 6
XB3-630 - 3 Pole	XB3630TPST	5200	Set of 6
XB4-800 - 3 Pole	XB4800TPST	10950	Set of 6
XB4-1000 - 3 Pole	XB41000TPST	21910	Set of 12
XB4-1250 - 3 Pole	XB41250TPST	43260	Set of 6
<b>Spreader Terminals - 4 Pole</b>			
XA1, XB0-100 - 4 Pole	XB0A1100FPST	835	Set of 8
XA1, XB0-125D - 4 Pole	XB0A1125FPST	1050	Set of 8
XG1 - 160 - 4 Pole	XG160FPST	2855	Set of 8
XA2, XB1, XB2 - 250 - 4 Pole	XB12A2250FPST	3015	Set of 8
XA3, XB3S/XB3-400 - 4 Pole	XB3400FPST	6565	Set of 8
XB3-630 - 4 Pole	XB3630FPST	7075	Set of 8
XB4-800 - 4 Pole	XB4800FPST	14000	Set of 8
XB4-1000 - 4 Pole	XB41000FPST	27880	Set of 16
XB4-1250 - 4 Pole	XB41250FPST	55420	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 shaft 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	3455	1	32 TPN / FP	BXL95518	3455	1
	32	HF Size 14x51	2 to 32	32 TPN / FP CE*	BXL95703*	2995	1	32 TPN / FP CE*	BXL95703	2995	1
	63	HF Size 14x51	2 to 63	63 TPN / FP	BXL95421	4545	1	63 TPN / FP	BXL95421	4545	1
	63	HF Size 14x51	2 to 63	63 TPN / FP CE*	BXL95704*	4055	1	63 TPN / FP CE*	BXL95704	4055	1
Frame 2	100	Size 000/00	63 to 100	100 TPN	BXL95568	8455	1	100 FP	BXL90496	9880	1
	125	Size 000/00	63 to 125	125 TPN	BXL95001	10960	1	125 FP	BXL90497	12295	1
	160	Size 000/00	63 to 160	160 TPN	BXL95713	11785	1	160 FP	BXL90498	13780	1
Frame 3	200	Size 0	80 to 200	200 TPN	BXL95418	15910	1	200 FP	BXL90471	19680	1
	250	Size 1	125 to 250	250 TPN	BXL95642	18515	1	250 FP	BXL90472	22300	1
Frame 4	315	Size 1	125 to 315	315 TPN	BXL95461	22175	1	315 FP	BXL90473	27055	1
	400	Size 2	200 to 400	400 TPN	BXL95481	27055	1	400 FP	BXL90480	30680	1
Frame 5	630	Size 3	315 to 630	630 TPN	BXL95521	45255	1	630 FP	BXL90481	51735	1
	800	Size 3	315 to 800	800 TPN	BXL95679	On request	1	800 FP	BXL90482	On request	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*	8115	1
	63	HF Size 14x51	2 to 63	63 TPN / FP CE*	BXLENC90484*	9690	1
Frame 2	100	Size 000/00	63 to 100	100 TPN	BXLENC90485	15615	1
	125	Size 000/00	63 to 125	125 TPN	BXLENC90486	17710	1
	160	Size 000/00	63 to 160	160 TPN	BXLENC90487	18560	1
Frame 3	200	Size 0	80 to 200	200 TPN	BXLENC90488	26810	1
	250	Size 1	125 to 250	250 TPN	BXLENC90489	29535	1
Frame 4	315	Size 1	125 to 315	315 TPN	BXLENC90490	34300	1
	400	Size 2	200 to 400	400 TPN	BXLENC90491	39270	1
Frame 5	630	Size 3	315 to 630	630 TPN	BXLENC90492	60115	1
	800	Size 3	315 to 800	800 TPN	BXLENC90493	On request	1

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

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

# X-Line SDF



- Range 32A to 630A, 415V, AC 23A
- Conforms to IS/IEC 60947-3
- Terminal Shrouds on both sides and Phase Barriers included
- Telescopic shaft 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	2710	1
	63	HF Size 14x51	63 2P	BXL95595	3840	1
Frame 2	100	Size 000/00	100 2P	BXL35086	6750	1
	125	Size 000/00	125 2P	BXL35087	9645	1
Frame 3	160	Size 000/00	160 2P	BXL35088	10045	1
	200	Size 0	200 2P	BXL35089	12710	1
Frame 4	250	Size 1	250 2P	BXL31674	15205	1
	315	Size 1	315 2P	BXL38930	18825	1
Frame 5	400	Size 2	400 2P	BXL31676	21200	1
	630	Size 3	630 2P	BXL35090	35520	1



2 Pole - Din Type Fuse link

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

## 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 shaft 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	3150	1
	63	A1L	63 TPN	BXL95651	4250	1
Frame 2	100	A4	100 TPN	BXL95570	8145	1
	125	A4	125 TPN	BXL95009	10625	1
Frame 3	160	A4	160 TPN	BXL95714	11085	1
	200	B1 / B2	200 TPN	BXL95588	15085	1
Frame 4	250	B2 / B3	250 TPN	BXL95682	18155	1
	315	B3	315 TPN	BXL95590	22160	1
Frame 5	400	B4	400 TPN	BXL95591	26575	1
	630	C2	630 TPN	BXL95592	44800	1



TPN Bolted Type Fuse link

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

## 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	730	1
		100/125/160	BXL91328	880	1
		200/250	BXL91329	1190	1
		315/400/630/800	BXL91330	1260	1
	2nd Aux. Contact (1NO + 1NC)	32/63	BXL90670	800	1
		100 to 1000	BXL90696	925	1
	Earthing Link	32 to 1000@	BXL90396	715	1
	Terminal Shroud Kit	32/63	BXL91190	255	1
		100/125/160	BXL91137	315	1
		200/250	BXL91335	895	1
		315/400	BXL91346	915	1
		630/800	BXL91347	970	1
	Handle Assembly - A	32/63	BXL91257	705	1
		100 to 250	BXL91258	1495	1
	Handle Assembly - B	315/400/630/800	BXL91259	1640	1
		32/63	BXL91277	705	1
		100 to 250	BXL91278	1495	1
Handle Assembly - CE	315/400/630/800	BXL91279	1640	1	
	32/63	BXL91337	420	1	
	Interphase Barrier Kit	200	BXL91343	640	1
		315/400	BXL91344	660	1
		630/800	BXL91345	680	1
	A	100/125/160/200/250	BXL00333	3480	1
			BXL00334	3480	1
			BXL00335	3480	1
			BXL00336	3480	1
	B	315/400/630/800	BXL00345	3480	1
			BXL00346	3480	1
			BXL00347	3480	1
			BXL00348	3480	1
	Switched Neutral Kit	100/125/160	BXL95233	6605	1
		200/250	BXL95516	7045	1
		315/400	BXL95517	7610	1
		630/800	BXL95546	10685	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 Disconnecter Fuse Units**

Suitable for DIN / BOLTED fuses in open execution

Rating (A) AC-23A	Cat No.	Fuse Type	Type	MRP [₹]
32A	PSFS323ND00	DIN	TPN	3245
32A	PSFS323ND000	DIN	TPN	3245
32A	PSFS323NB	Bolted	TPN	3245
32A	PSFS323B	Bolted	TP	3375
63A	PSFS633ND00	DIN	TPN	4615
63A	PSFS633ND000	DIN	TPN	4615
63A	PSFS633NB	Bolted	TPN	4490
63A	PSFS633B	Bolted	TP	4615
100	PSFS1003*	DIN/Bolted	TP	10235
100	PSFS1003N*	DIN/Bolted	TPN	10235
125	PSFS1253*	DIN/Bolted	TP	13835
125	PSFS1253N*	DIN/Bolted	TPN	13835
160	PSFS1603*	DIN/Bolted	TP	14185
160	PSFS1603N*	DIN/Bolted	TPN	15400
200	PSFS2003B	Bolted	TP	15990
200	PSFS2003NB	Bolted	TPN	16500

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

**Switch Disconnecter**

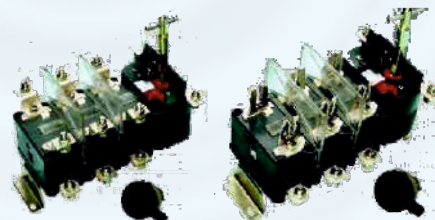
HSN Code : 8536

Rating (A) AC-23A	Cat No.	Fuse Type	Type	MRP [₹]
32A	PSSD323N	-	TPN	3045
63A	PSSD633N	-	TPN	4170
100A	PSSD1003N	-	TPN	9495
125A	PSSD1253N	-	TPN	11790
160A	PSSD1603N	-	TPN	13290
200A	PSSD2003N	-	TPN	13900

**Fuse Switch Units Type FS**

HSN Code : 8538

Rating (A) AC-23A	Cat No.	Fuse Type	Type	MRP [₹]
32A	FS0N	BOLTED	TP	4265
63A	FS1N	BOLTED	TP	5725
Shroud	AC21TS			320
1NO+1NC	AC21EB11		for FS0 / FS1N	1045
Neutral	AC21L		for FS0 / FS1N-	450
Handle assembly-32A	SP21FS0H		for FS0	625
Handle assembly-63A	SP21FS1H		for FS1	625



**Switch Disconnecter Fuse**

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



# Polycarbonate Plug & Socket BPX Series



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

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

HSN Code : 8536

HSN Code : 8536

Panel Mounted Straight Socket - IP44						
Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit	
16	3	BPX1PSS341		10	870	
	4		BPX1PSS442	10	1395	
	5		BPX1PSS542	10	1410	
32	3	BPX2PSS341		10	1500	
	4		BPX2PSS442	10	1710	
	5		BPX2PSS542	10	1730	
63	3	BPX3PSS341		5	5955	
	4		BPX3PSS442	5	6085	
	5		BPX3PSS542	5	6130	



Panel Mounted Straight Socket - IP67						
Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit	
16	3	BPX1PSS371		10	1810	
	4		BPX1PSS472	10	1965	
	5		BPX1PSS572	10	1975	
32	3	BPX2PSS371		10	2260	
	4		BPX2PSS472	10	2575	
	5		BPX2PSS572	10	2600	
63	3	BPX3PSS371		5	6670	
	4		BPX3PSS472	5	6690	
	5		BPX3PSS572	5	6720	
125	3	BPX4PSS371		2	22730	
	4		BPX4PSS472	2	22840	
	5		BPX4PSS572	2	22970	



Panel Mounted Angled Socket - IP44						
Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit	
16	3	BPX1PAS341		10	870	
	4		BPX1PAS442	10	1405	
	5		BPX1PAS542	10	1425	
32	3	BPX2PAS341		10	1500	
	4		BPX2PAS442	10	1735	
	5		BPX2PAS542	10	1755	
63	3	BPX3PAS341		5	5955	
	4		BPX3PAS442	5	6130	
	5		BPX3PAS542	5	6160	



Panel Mounted Angled Socket - IP67						
Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit	
16	3	BPX1PAS371		10	1810	
	4		BPX1PAS472	10	1965	
	5		BPX1PAS572	10	1980	
32	3	BPX2PAS371		10	2260	
	4		BPX2PAS472	10	2575	
	5		BPX2PAS572	10	2595	
63	3	BPX3PAS371		5	6670	
	4		BPX3PAS472	5	6690	
	5		BPX3PAS572	5	6720	
125	3	BPX4PAS371		2	22730	
	4		BPX4PAS472	2	22840	
	5		BPX4PAS572	2	22970	



Surface Mounted Socket - IP44						
Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit	
16	3	BPX1WS341		10	1395	
	4		BPX1WS442	10	1540	
	5		BPX1WS542	10	1555	
32	3	BPX2WS341		10	1735	
	4		BPX2WS442	10	1890	
	5		BPX2WS542	10	1915	
63	3	BPX3WS341		3	6810	
	4		BPX3WS442	3	6825	
	5		BPX3WS542	3	6855	



Surface Mounted Socket - IP67						
Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit	
16	3	BPX1WS371		10	2355	
	4		BPX1WS472	10	2980	
	5		BPX1WS572	10	3000	
32	3	BPX2WS371		10	2920	
	4		BPX2WS472	10	3595	
	5		BPX2WS572	10	3625	
63	3	BPX3WS371		3	8560	
	4		BPX3WS472	3	8595	
	5		BPX3WS572	3	8655	
125	3	BPX4WS371		1	27945	
	4		BPX4WS472	1	30655	
	5		BPX4WS572	1	30790	



Standard Connector - IP44						
Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit	
16	3	BPX1SC341		10	1080	
	4		BPX1SC442	10	1275	
	5		BPX1SC542	10	1285	
32	3	BPX2SC341		10	1395	
	4		BPX2SC442	10	1750	
	5		BPX2SC542	10	1760	
63	3	BPX3SC341		5	7305	
	4		BPX3SC442	5	7320	
	5		BPX3SC542	5	7350	



Standard Connector - IP67						
Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit	
16	3	BPX1SC371		10	2275	
	4		BPX1SC472	10	2710	
	5		BPX1SC572	10	2730	
32	3	BPX2SC371		10	3140	
	4		BPX2SC472	10	3525	
	5		BPX2SC572	10	3540	
63	3	BPX3SC371		5	7430	
	4		BPX3SC472	5	7455	
	5		BPX3SC572	5	7485	
125	3	BPX4SC371		1	23840	
	4		BPX4SC472	1	24370	
	5		BPX4SC572	1	24440	



# Polycarbonate Plug & Socket BPX Series





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


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


HSN Code : 8536


HSN Code : 8536


Standard Plug - IP44						
	Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit
	16	3		BPX1SP341		10
4				BPX1SP442	10	1000
5				BPX1SP542	10	1010
32	3		BPX2SP341		10	1210
	4			BPX2SP442	10	1465
	5			BPX2SP542	10	1480
63	3		BPX3SP341		5	5680
	4			BPX3SP442	5	5715
	5			BPX3SP542	5	5750


Standard Plug - IP67						
	Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit
	16	3		BPX1SP371		10
4				BPX1SP472	10	2130
5				BPX1SP572	10	2150
32	3		BPX2SP371		10	2425
	4			BPX2SP472	10	2575
	5			BPX2SP572	10	2610
63	3		BPX3SP371		5	6525
	4			BPX3SP472	5	6560
	5			BPX3SP572	5	6590
125A	3		BPX4SP371		1	20505
	4			BPX4SP472	1	20545
	5			BPX4SP572	1	20680


Phase Inverter Plug - IP44					
	Amp	Poles	415V~ 50-60Hz	Lot size	MRP (₹) / Unit
	16	5		BPX1PIP542	10
32		5	BPX2PIP542	10	2360

Phase Inverter Plug - IP67					
	Amp	Poles	415V~ 50-60Hz	Lot size	MRP (₹) / Unit
	16	5		BPX1PIP572	10
32		5	BPX2PIP572	10	3945

Panel Mounted Plug - IP44						
	Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit
	16	3		BPX1PP341		10
4				BPX1PP442	10	1545
5				BPX1PP542	10	1585
32	3		BPX2PP341		10	1635
	4			BPX2PP442	10	1910
	5			BPX2PP542	10	1950
63	3		BPX3PP341		5	5940
	4			BPX3PP442	5	5990
	5			BPX3PP542	5	6080

Panel Mounted Plug - IP67						
	Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit
	16	3		BPX1PP371		10
4				BPX1PP472	10	3170
5				BPX1PP572	10	3225
32	3		BPX2PP371		10	3085
	4			BPX2PP472	10	3315
	5			BPX2PP572	10	3375
63	3		BPX3PP371		5	6600
	4			BPX3PP472	5	6645
	5			BPX3PP572	5	6670
125A	3		BPX4PP371		2	22190
	4			BPX4PP472	2	23690
	5			BPX4PP572	2	24025

Surface Mounted Plug - IP44						
	Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit
	16	3		BPX1WP341		10
4				BPX1WP442	8	2810
5				BPX1WP542	10	2845
32	3		BPX2WP341		10	3465
	4			BPX2WP442	10	4020
	5			BPX2WP542	10	4095
63	3		BPX3WP341		2	7970
	4			BPX3WP442	2	8030
	5			BPX3WP542	2	8150

Surface Mounted Plug - IP67						
	Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit
	16	3		BPX1WP371		10
4				BPX1WP472	8	3800
5				BPX1WP572	10	3860
32	3		BPX2WP371		10	6610
	4			BPX2WP472	10	6790
	5			BPX2WP572	10	6895
63	3		BPX3WP371		2	8950
	4			BPX3WP472	2	8990
	5			BPX3WP572	2	9120






# Polycarbonate Plug & Socket BPX Series






## 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	10020
		4			BPX1MIH442	4	14100
		5			BPX1MIH542	4	14170
Horizontal Type - IP67							
	Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit	
	16	3		BPX1MIH371		4	10195
		4			BPX1MIH472	4	14360
		5			BPX1MIH572	4	14410
Vertical Type - IP44							
	Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit	
	16	3		BPX1MIV341		1	12285
		4			BPX1MIV442	1	17200
		5			BPX1MIV542	1	17260
	32	3		BPX2MIV341		1	16040
		4			BPX2MIV442	1	19515
		5			BPX2MIV542	1	19580
	63	3		BPX3MIV341		1	34940
		4			BPX3MIV442	1	36540
		5			BPX3MIV542	1	36600
	Vertical Type - IP67						
	 16A - 63A   125A	Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit
16		3		BPX1MIV371		1	12285
		4			BPX1MIV472	1	17455
		5			BPX1MIV572	1	17520
32		3		BPX2MIV371		1	16305
		4			BPX2MIV472	1	19770
		5			BPX2MIV572	1	19840
63		3		BPX3MIV371		1	35265
		4			BPX3MIV472	1	36860
		5			BPX3MIV572	1	36930
125		3		BPX4MIV371		1	116340
		4			BPX4MIV472	1	126800
		5			BPX4MIV572	1	126865

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	13420
		4			BPX1MID442	1	19845
		5			BPX1MID542	1	20505
	32	3		BPX2MID341		1	15885
		4			BPX2MID442	1	22830
		5			BPX2MID542	1	22845
	63	3		BPX3MID341		1	32355
		4			BPX3MID442	1	35360
		5			BPX3MID542	1	37500
Vertical Type - IP67							
 16A - 63A   125A	Amp	Poles	230V~ 50-60Hz	415V~ 50-60Hz	Lot size	MRP (₹) / Unit	
	16	3		BPX1MID371		1	13690
		4			BPX1MID472	1	20235
		5			BPX1MID572	1	20895
	32	3		BPX2MID371		1	16165
		4			BPX2MID472	1	23110
		5			BPX2MID572	1	23175
	63	3		BPX3MID371		1	32695
		4			BPX3MID472	1	35750
		5			BPX3MID572	1	37840
	125	3		BPX4MID371		1	120595
		4			BPX4MID472	1	130130
		5			BPX4MID572	1	130185

# Plugs & Sockets



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

HSN Code : 8536

Rating	Pins	Type	Cat No.	MRP [₹]
20A, 250V	2P + E	Plug	MP20	370
		Socket	MS20	415
30A, 440V	3P + E	Plug	MP30	850
		Socket	MS30	895



## Plastic Plugs & Socket Type 'PS'

HSN Code : 8536

Rating	Pins	Type	Cat No.	MRP [₹]
20A, 250V	3	Plug	PS16AA7	430
		Flush Mounting Socket	PS16BA7	595
		Socket with Wall Mounting Box	PS16DA7	740
20A, 415V	4	Plug	PS16AA1	520
		Flush Mounting Socket	PS16BA1	780
		Socket with Wall Mounting Box	PS16DA1	910
32A, 415V	3	Plug	PS32AA7	970
		Socket	PS32BA7	970
	4	Plug	PS32AA1	1015
		Socket	PS32BA1	1015
	5	Plug	PS32AA5	1085
		Socket	PS32BA5	1085

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

## Heavy duty Metal-Control 'SS'



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

HSN Code : 8536

Rating	Pins	Type	Cat No.	MRP [₹]
12A, 415V (Control)	12	Panel Mounting Socket	2499/12	3685
		Plug with inclined Handle	299/12B	2660

## 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	2415B	1360
		Plug with inclined Handle	215B	1340
30A, 415V	4	Panel Mounting Socket	2413B	1425
		Plug with inclined Handle	213B	1395
30A, 415V	5	Panel Mounting Socket	2417B	1490
		Plug with inclined Handle	217B	1450

Note : \*Loose Conduit Box Straight (Cat. No. 9J101) MRP - Rs. 510/- each  
 \*Spare Handle Inclined (Cat. No. 9J108) MRP -Rs. 245/- each.

HSN Code : 8538

# Plugs & Sockets



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

HSN Code : 8536

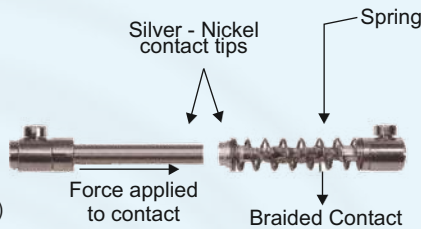
Rating	Pins	Type	Cat No.	MRP[₹]
16A, 415V	5	Plug	DS1A7A1	2025
		Socket	DS1B7A1	2510
		Handle Assembly	SP91PH	395
32A, 415V	5	Plug	DS3A7A1	3310
		Socket	DS3B7A1	4020
		Handle Assembly	SP93PH	410
63A, 415V	5	Plug	DS6A7A1	5265
		Socket	DS6B7A1	7260
		Handle Assembly	SP96PH	565
125A, 415V	5	Plug	DS9A7A1	15160
		Socket	DS9B7A1	21670
		Handle Assembly	SP99PH	1385

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

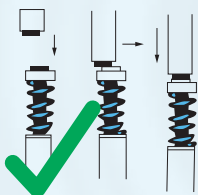
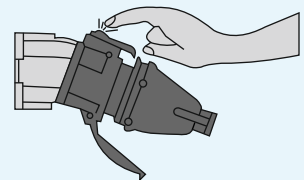


- Range from 16A to 125 A
- 5 Pin configuration ( 3P+N+E)
- Plug cannot come out in ON condition ( Integral Interlocking)

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



Quick Disconnect

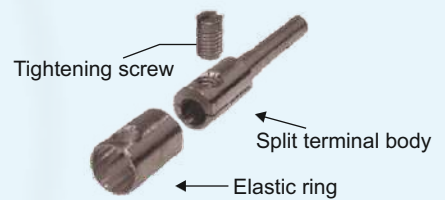


- Self aligning self wiping
- Spring loaded for consistent pressure
- Silver nickle material for extremely low temperature rise

Safety Disk



Vibration proof termination



# Plugs & Socket Box



## 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	1630
20A, 250V	2P + E	Universal	Plug & Socket Box - DP-MCB Cutout	MPSEU202	1630
30A, 415V	3P + E	Universal	Plug & Socket Box - TPN-MCB Cutout	MPSEU301	4085



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	PSEU201	1960
			Plug & Socket Box with DP-MCB Cutout	PSEU202	2010
		Flush	Plug & Socket Box with SP MCB Cutout	PSEF201	1960
			Plug & Socket Box with DP-MCB Cutout	PSEF202	2010
32A, 415V	4	Universal	Plug & Socket Box with 4P MCB Cutout	PSEU324	4335
			5	PSEU325	4420
	4	Flush	Plug & Socket Box with 4P MCB Cutout	PSEF324	4335
			5	PSEF325	4420

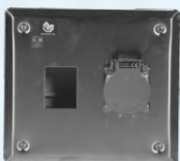
## Heavy Duty Metal - Plug & Socket Box Type 'SSEU'

HSN Code : 8536

Rating	Pins	Mounting	Type	Cat No.	MRP [₹]
30A, 415V	3	Universal	Plug & Socket Box with SP MCB Cutout	SSEU303-MCB1P	4895
	3	Universal	Plug & Socket Box with DP MCB Cutout	SSEU303	4895
	4	Universal	Plug & Socket Box with 4P MCB Cutout	SSEU304	5020
				SSEU305	5130

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

HSN Code : 8536



Rating	Pins	Mounting	Type	Cat No.	MRP [₹]
20A, 250V 32A, 415V	3	Universal	P&S Box with 'PS' P&S and SP MCB Cutout	PSEU201-SSC	2450
	5		P&S Box with 'PS' P&S and 4P MCB Cutout	PSEU325-SSC	5060
30A, 415V	3	Universal	Plug & Socket Box with SP MCB Cutout	SSEU303-SSC-MCB1P	5620
			Plug & Socket Box with DP MCB Cutout	SSEU303-SSC	5620
	4	Universal	Plug & Socket Box with 4P MCB Cutout	SSEU304-SSC	5750
	5	Universal	Plug & Socket Box with 3P MCB Cutout	SSEU305-SSC-MCB3P	5865
			Plug & Socket Box with 4P MCB Cutout	SSEU305-SSC	5865

# Final Distribution Products

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



# MCB



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	320	BCHX10SPC06	320	0.5A 1A 2A 3A 4A 5A	BCHX10SPCL5	545
		10A	BCHX10SPB10	320	BCHX10SPC10	320		BCHX10SPC01	545
		16A	BCHX10SPB16	320	BCHX10SPC16	320		BCHX10SPC02	545
		20A	BCHX10SPB20	320	BCHX10SPC20	320		BCHX10SPC03	545
		25A	BCHX10SPB25	320	BCHX10SPC25	320		BCHX10SPC04	545
		32A	BCHX10SPB32	320	BCHX10SPC32	320		BCHX10SPC05	545
		40A	BCHX10SPB40	785	BCHX10SPC40	785			
		50A	BCHX10SPB50	835	BCHX10SPC50	835			
1P+N	6 units	6A			BCHX10SNC06	1105			
		10A			BCHX10SNC10	1105			
		16A			BCHX10SNC16	1105			
		20A			BCHX10SNC20	1105			
		25A			BCHX10SNC25	1105			
		32A			BCHX10SNC32	1105			
		40A			BCHX10SNC40	1605			
		50A			BCHX10SNC50	1815			
2P	6 units	6A	BCHX10DPB06	1155	BCHX10DPC06	1155	0.5A 1A 2A 3A 4A 5A	BCHX10DPCL5	1615
		10A	BCHX10DPB10	1155	BCHX10DPC10	1155		BCHX10DPC01	1615
		16A	BCHX10DPB16	1155	BCHX10DPC16	1155		BCHX10DPC02	1615
		20A	BCHX10DPB20	1155	BCHX10DPC20	1155		BCHX10DPC03	1615
		25A	BCHX10DPB25	1155	BCHX10DPC25	1155		BCHX10DPC04	1615
		32A	BCHX10DPB32	1155	BCHX10DPC32	1155		BCHX10DPC05	1615
		40A	BCHX10DPB40	1715	BCHX10DPC40	1715			
		50A	BCHX10DPB50	1935	BCHX10DPC50	1935			
3P	4 units	6A	BCHX10TPB06	1825	BCHX10TPC06	1825	0.5A 1A 2A 3A 4A 5A	BCHX10TPCL5	2285
		10A	BCHX10TPB10	1825	BCHX10TPC10	1825		BCHX10TPC01	2285
		16A	BCHX10TPB16	1825	BCHX10TPC16	1825		BCHX10TPC02	2285
		20A	BCHX10TPB20	1825	BCHX10TPC20	1825		BCHX10TPC03	2285
		25A	BCHX10TPB25	1825	BCHX10TPC25	1825		BCHX10TPC04	2285
		32A	BCHX10TPB32	1825	BCHX10TPC32	1825		BCHX10TPC05	2285
		40A	BCHX10TPB40	2715	BCHX10TPC40	2715			
		50A	BCHX10TPB50	2835	BCHX10TPC50	2835			
3P+N	3 units	6A			BCHX10TNC06	2335			
		10A			BCHX10TNC10	2335			
		16A			BCHX10TNC16	2335			
		20A			BCHX10TNC20	2335			
		25A			BCHX10TNC25	2335			
		32A			BCHX10TNC32	2335			
		40A			BCHX10TNC40	3175			
		50A			BCHX10TNC50	3375			
4P	3 units	6A	BCHX10FPB06	2585	BCHX10FPC06	2585	0.5A 1A 2A 3A 4A 5A	BCHX10FPCL5	3165
		10A	BCHX10FPB10	2585	BCHX10FPC10	2585		BCHX10FPC01	3165
		16A	BCHX10FPB16	2585	BCHX10FPC16	2585		BCHX10FPC02	3165
		20A	BCHX10FPB20	2585	BCHX10FPC20	2585		BCHX10FPC03	3165
		25A	BCHX10FPB25	2585	BCHX10FPC25	2585		BCHX10FPC04	3165
		32A	BCHX10FPB32	2585	BCHX10FPC32	2585		BCHX10FPC05	3165
		40A	BCHX10FPB40	3545	BCHX10FPC40	3545			
		50A	BCHX10FPB50	3675	BCHX10FPC50	3675			
		63A	BCHX10FPB63	3675	BCHX10FPC63	3675			



New

# R10 DC MCB



- Range : 6A to 63A
- Pole : 1P, 2P, 3P & 4P
- Breaking Capacity : 10 kA
- Energy Limiting Class : 3
- Voltage : upto 1000V DC
- Ergonomic Lever
- Bi Connecting Terminals
- ON/OFF Contact Position Indicator
- Standard Conformity IS/IEC 60947-2



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# R10 DC MCB

New



Pole	Rating	Cat No.	MRP [₹]	Standard Packing
1	6A	BCHR10DCSP06-250	725	12 Units
	10A	BCHR10DCSP10-250	725	
	16A	BCHR10DCSP16-250	725	
	20A	BCHR10DCSP20-250	725	
	25A	BCHR10DCSP25-250	725	
	32A	BCHR10DCSP32-250	725	
	40A	BCHR10DCSP40-250	On request	
	50A	BCHR10DCSP50-250	On request	
	63A	BCHR10DCSP63-250	On request	
2	6A	BCHR10DCDP06-500	1570	6 Units
	10A	BCHR10DCDP10-500	1570	
	16A	BCHR10DCDP16-500	1570	
	20A	BCHR10DCDP20-500	1570	
	25A	BCHR10DCDP25-500	1570	
	32A	BCHR10DCDP32-500	1570	
	40A	BCHR10DCDP40-500	On request	
	50A	BCHR10DCDP50-500	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	
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		



# ISOLATOR



HSN Code : 8536

Poles	Standard Pack of	Rating	Cat. No.	MRP [₹]
2P	6 units	40A	BCHISODP40	805
	6 units	63A	BCHISODP63	1005
3P	4 units	40A	BCHISOTP40	1555
	4 units	63A	BCHISOTP63	1745
4P	3 units	40A	BCHISOFP40	1775
	3 units	63A	BCHISOFP63	1955

## RCCB



### RCCB, Double Pole

HSN Code : 8536

Description	Cat. No.	MRP [₹]
25A - 30mA	BCHRCBR030DPC25	4425
40A - 30mA	BCHRCBR030DPC40	4525
63A - 30mA	BCHRCBR030DPC63	6075
25A - 100mA	BCHRCBR100DPC25	4475
40A - 100mA	BCHRCBR100DPC40	4640
63A - 100mA	BCHRCBR100DPC63	6205
25A - 300mA	BCHRCBR300DPC25	4475
40A - 300mA	BCHRCBR300DPC40	4965
63A - 300mA	BCHRCBR300DPC63	6205

All above RCCB's are 'AC' type



### RCCB, Four Pole

HSN Code : 8536

Description	Cat. No.	MRP [₹]
25A - 30mA	BCHRCBR030FPC25	5700
40A - 30mA	BCHRCBR030FPC40	5865
63A - 30mA	BCHRCBR030FPC63	6600
25A - 100mA	BCHRCBR100FPC25	5865
40A - 100mA	BCHRCBR100FPC40	6120
63A - 100mA	BCHRCBR100FPC63	6600
25A - 300mA	BCHRCBR300FPC25	5865
40A - 300mA	BCHRCBR300FPC40	6150
63A - 300mA	BCHRCBR300FPC63	6600

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

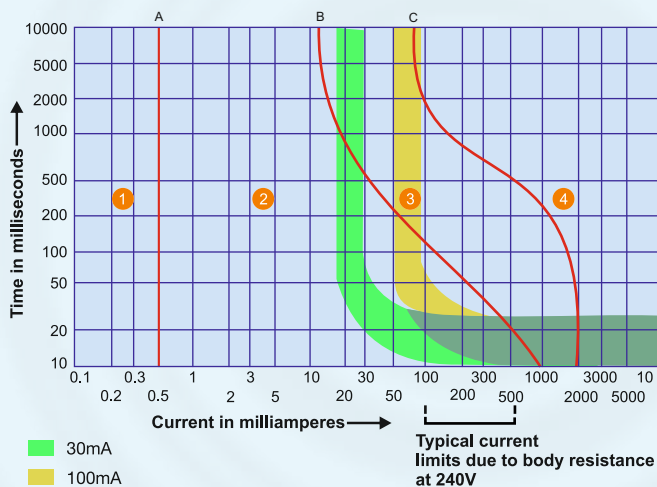


**RCCB, Four Pole**

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.

# MCB DISTRIBUTION BOXES



HSN Code : 8537



No. Of Way	No. of Modules (Incoming + Outgoing)	Cat. No. (Single Door)	MRP [₹]
4 WAY	4	BCHPSPNSD04W	1580
6 WAY	6	BCHPSPNSD06W	1690
8 WAY	8	BCHPSPNSD08W	1980
12 WAY	12	BCHPSPNSD12W	2595
16 WAY	16	BCHPSPNSD16W	3320

No. Of Way	Cat. No. (Double Door)	MRP [₹]
4 WAY	BCHPSPNDD04W	2545
6 WAY	BCHPSPNDD06W	2600
8 WAY	BCHPSPNDD08W	2985
12 WAY	BCHPSPNDD12W	3995
16 WAY	BCHPSPNDD16W	5100



No. Of Way	No. of Modules (Incoming + Outgoing)	Cat. No. (Single Door)	MRP [₹]
4 WAY	4	BCHPHTPNSD04W	5125
6 WAY	6	BCHPHTPNSD06W	6145
8 WAY	8	BCHPHTPNSD08W	6760

No. Of Way	Cat. No. (Double Door)	MRP [₹]
4 WAY	BCHPHTPNDD04W	6420
6 WAY	BCHPHTPNDD06W	7985
8 WAY	BCHPHTPNDD08W	9915

HSN Code : 8537



Description	No. of Modules (Incoming + Outgoing)	Cat. No. (Single Door)	MRP [₹]	Cat. No. (Double Door)	MRP [₹]
4 WAY, SPN DB	4	BCHSPNSD04W	1610	BCHSPNDD04W	2615
6 WAY, SPN DB	6	BCHSPNSD06W	1715	BCHSPNDD06W	2675
8 WAY, SPN DB	8	BCHSPNSD08W	2010	BCHSPNDD08W	3065
12 WAY, SPN DB	12	BCHSPNSD12W	2635	BCHSPNDD12W	4100
16 WAY, SPN DB	16	BCHSPNSD16W	3365	BCHSPNDD16W	5240

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	5265	BCHHTPNDD04W	6595
6 WAY, HTPN DB	8+18	BCHHTPNSD06W	6315	BCHHTPNDD06W	8205
8 WAY, HTPN DB	8+24	BCHHTPNSD08W	6950	BCHHTPNDD08W	10190
12 WAY, HTPN DB	8+36	BCHHTPNSD12W	9215	BCHHTPNDD12W	14570

# MCB DISTRIBUTION BOXES



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	14940
6 WAY, DD, MCB I/C, VERTICAL TPN DB	BCHVTPNDD06W-A	8+18	18700
8 WAY, DD, MCB I/C, VERTICAL TPN DB	BCHVTPNDD08W-A	8+24	21065
12 WAY, DD, MCB I/C, VERTICAL TPN DB	BCHVTPNDD12W-A	8+36	26910

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	20355
8 WAY, DD, 125A, 3P MCCB I/C VERTICAL TPN DB	BCHVTPNDD08W-B	FRAME 1	23330
12 WAY, DD, 125A, 3P MCCB I/C VERTICAL TPN DB	BCHVTPNDD12W-B	FRAME 1	31600
4 WAY, DD, 250A, 3P MCCB I/C VERTICAL TPN DB	BCHVTPNDD04W-C	FRAME 2	24800
8 WAY, DD, 250A, 3P MCCB I/C VERTICAL TPN DB	BCHVTPNDD08W-C	FRAME 2	30305
12 WAY, DD, 250A, 3P MCCB I/C VERTICAL TPN DB	BCHVTPNDD12W-C	FRAME 2	35380

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	21405
6 WAY, DD, 7 SEGMENT PHASE SEGREGATED DB	BCHPHSGDD06W	8+12+18	24110
8 WAY, DD, 7 SEGMENT PHASE SEGREGATED DB	BCHPHSGDD08W	8+12+24	26925
12 WAY, DD, 7 SEGMENT PHASE SEGREGATED DB	BCHPHSGDD12W	8+12+36	34205

All above DB's are double door

★ All above DB's are Non Stockable

# MCB DISTRIBUTION BOXES



HSN Code : 8537



Description	Cat. No.	MRP [₹]
4 WAY, 40A, DD, PHASE SELECTOR DB	BCHPHSLDD04W-40	22015
6 WAY, 40A, DD, PHASE SELECTOR DB	BCHPHSLDD06W-40	22600
8 WAY, 40A, DD, PHASE SELECTOR DB	BCHPHSLDD08W-40	25310
12 WAY, 40A, DD, PHASE SELECTOR DB	BCHPHSLDD12W-40	28840
4 WAY, 63A, DD, PHASE SELECTOR DB	BCHPHSLDD04W-63	22190
6 WAY, 63A, DD, PHASE SELECTOR DB	BCHPHSLDD06W-63	22955
8 WAY, 63A, DD, PHASE SELECTOR DB	BCHPHSLDD08W-63	26370
12 WAY, 63A, DD, PHASE SELECTOR DB	BCHPHSLDD12W-63	29310

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	9785
3 ROW, 13 MODULE, DD, ROW DB	BCHROWDB3R13	13	11530
4 ROW, 13 MODULE, DD, ROW DB	BCHROWDB4R13	13	12775

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		1980
SPN-20A, P&S DB	BCHPSDBSPN20		1980
TPN-20A, P&S DB	BCHPSDBTPN20		5665
TPN-30A, P&S DB	BCHPSDBTPN30		5665



HSN Code : 8537

Description	Cat. No.	No. of Modules (Incoming + Outgoing)	MRP [₹]
SP, ONE WAY MCB DB	BCHOWMCBDBSP		820
DP, ONE WAY MCB DB	BCHOWMCBDBDP		820
TP, ONE WAY MCB DB	BCHOWMCBDBTP		890
FP, ONE WAY MCB DB	BCHOWMCBDBFP		890

★ All above DB's are Non Stockable

# Industrial Control & Protection

- AC Contactors, Accessories & Spares
  - BRAVO Contactor & OLR
  - Freedom Contactor
  - FS1 Contactor
  - Freedom Capacitor Duty Contactor
  - Freedom Overload Relays
  - Special Purpose Contactors:
    - NHD Contactor, Definite Purpose Contactor
  - Citation Contactor
  - Citation Overload Relays
  - Mini Contactor & OLR
- Bhartia Overcurrent Relays (BOCR)
- 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



# Contactors



## 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

## **BRAV** Series CONTACTOR



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

# **BRAV** Series

---

## CONTACTOR

**New**



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



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**3 Pole Contactor**

HSN Code : 8536



**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° C to +55 C
- Wide Band Coil -30% to +20%

Size	AC1 Rating	AC3 Rating 415V AC			AC Coil			DC Coil (dual coil design) <b>New</b>	
		Amp	HP	KW	Aux Contact	Cat Code	MRP [₹]	Cat Code	MRP [₹]
Frame 1	20	6	3	2.2	1NO	BR30610*	1680	-	-
					1NC	BR30601*			
	25	9	5.5	4	1NO	BR30910*	1920	BR3009DDC*	2785
					1NC	BR30901*			
	25	12	7.5	5.5	1NO	BR31210*	2080	BR3012DDC*	3025
					1NC	BR31201*			
32	18	12	9	1NO	BR31810*	2430	BR3018DDC*	3480	
				1NC	BR31801*				
40	25	15	11	1NO	BR32510*	3330	BR3025DDC*	4660	
				1NC	BR32501*				
Frame 2	50	32	20	15	1NO	BR33210*	7075	-	-
					1NC	BR33201*			
	50	38	25	18.5	1NO	BR33810*	7790	-	-
					1NC	BR33801*			
50	40	30	22	1NO	BR34010*	9785	-	-	
				1NC	BR34001*				
Frame 3	60	40	30	22	1NO+1NC	BR34011*	11500	-	-
	70	50	34	25	1NO+1NC	BR35011*	12475		
	80	65	50	37	1NO+1NC	BR36511*	17810		
Frame 4	110	80	60	45	1NO+1NC	BR38011*	22650	-	-
	120	95	60	45	1NO+1NC	BR39511*	27000		

\* Refer Coil Voltage Table below

**4 Pole Contactor (AC Control)**

HSN Code : 8536



**BR4250**



**BR46500**

Size	AC1 Rating	Main Pole Configuration	Cat Code	MRP [₹]
Frame 1	20	4NO	BR4060*	2210
	25	4NO	BR4090*	2405
	32	4NO	BR4120*	2610
	40	4NO	BR4180*	3320
	50	4NO	BR4250*	4650
Frame 2	55	4NO	BR4320*	9360
	60	4NO	BR4380*	10160
Frame 3	60	4NO	BR44000*	12885
	80	4NO	BR46500*	17430
Frame 4	100	4NO	BR48000*	22085
	125	4NO	BR49500*	24895

\* Refer Coil Voltage Table below

**Control Relay (AC Control)**



Aux Contact Combination	Cat Code	MRP [₹]
2NO+2NC	BRCR22*	1945
3NO+1NC	BRCR31*	1945
4NO	BRCR40*	1945

\* 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	-	-

New

**BRAV** Series

**Thermal Overload Relays**

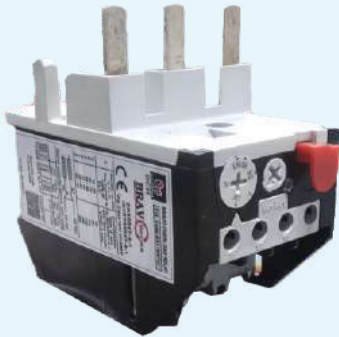


HSN Code : 8536



Frame 1

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



Frame 2

**Thermal Overload Relays**

	Protection Adjustment Range	For Use With Contactor	Cat Code	MRP [₹]	Accessories
Frame 1	0.25-0.40A	BR306..40	BR318F13C	2700	-
	0.63-1.00A	BR306..40	BR318F13E		
	1.0-1.40A	BR306..40	BR318F13F		
	1.30-1.80A	BR306..40	BR318F13G		
	1.7-2.4A	BR306..40	BR318F13H		
	2.2-3.1A	BR306..40	BR318F13J		
	2.8-4.0A	BR306..40	BR318F13K		
	3.5-5.0A	BR306..40	BR318F13L		
	4.5-6.5A	BR306..40	BR318F13M		
	6.0-8.5A	BR306..40	BR318F13N		
	7.5-11A	BR306..40	BR318F13P		
	10.0-14.0A	BR306..40	BR318F13Q	2975	
	13.0-19.0A	BR306..40	BR318F13R		
	18.0-25.0A	BR306..40	BR318F13S	4045	
24.0-32.0A	BR306..40	BR318F13T			
Frame 2	22.0-32.0A	BR34011..9511	BR318GF23B	4395	Adaptor for individual mounting Cat No.BRADP318GF2  MRP ₹ 850/-
	29.0-42.0A	BR34011..9511	BR318GF23C	4405	
	36.0-52.0A	BR34011..9511	BR318GF23D	5955	
	45.0-63.0A	BR34011..9511	BR318GF23E	6635	
	60.0-80.0A	BR34011..9511	BR318GF23F	8160	



BRTAC11



BRTAC22



BRMIH640



BRSRG48V

**Accessories for Contactors**

Description	For Use With	Mounting	Contacts	Cat Code	MRP [₹]		
Auxiliary Contact Block	BR306..95 & BR4060..49500	Top	1NO	BRTAC10	450		
		Top	1NC	BRTAC01			
		Top	1NO+1NC	BRTAC11			
				Top	2NO	BRTAC20	675
				Top	2NC	BRTAC02	
				Top	2NO+2NC	BRTAC22	1075
				Top	3NO+1NC	BRTAC31	
				Top	1NO+3NC	BRTAC13	
				Top	4NO	BRTAC40	
Top	4NC			BRTAC04			
Mechanical Interlock	BR306..365 & BR4060..4380	Side	-	BRMIH640	675		
	BR38011..39511 & BR44000..49500	Side	-	BRMIH4095	1200		
Surge Suppressor RC type	BR306....BR395 BR4060....BR49500	24-48V AC		BRSRG48V	950		
		110-240V AC		BRSRG240V			
		380-415V AC		BRSRG415V			

**Spare Coil AC**



AC Coil For Contactor	Cat Code	MRP [₹]
BR06F1 - 25F1 3P&4P	MCBRF134P*	535
BR32F2 TO 40F2 3P	MCBRF2A3P*	670
BR25F2 TO 38F2 4P	MCBRF2B4P*	670
BR34011 - 36511 3P	MCBRF33P*	750
BR38011 - 39511 3P	MCBRF43P*	900
BR44000 - 46500 4P	MCBRF34P*	
BR48000 - 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



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# Freedom Contactors



## 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	2140
					1NC	CE15ANC3 ■ B-N	
B	20	9	5.5	4	1NO	CE15BNS3 ■ B-N	2210
					1NC	CE15BNC3 ■ B-N	
C	20	12	7.5	5.5	1NO	CE15CNS3 ■ B-N	2545
					1NC	CE15CNC3 ■ B-N	
D	32	16	10	7.5	1NO	CE15DN3 ■ B10-N	2850
					1NC	CE15DN3 ■ B01-N	
	32	18	10	7.5	1NO	CE15D1N3 ■ B10-N	2860
					1NC	CE15D1N3 ■ B01-N	
E	40	25	15	11	1NO	CE15EN3 ■ B10-N	3995
					1NC	CE15EN3 ■ B01-N	
F	40	32	20	15	1NO	CE15FN3 ■ B10-N	7915
					1NC	CE15FN3 ■ B01-N	
G	60	40	30	22	1NO+1NC	CE15GN3 ■	11730
					-	CE15GN3 ■ NB	11110
H	75	50	33.5	25	1NO+1NC	CE15HN3 ■	14745
					-	CE15HN3 ■ NB	14185
J	80	65	50	37	1NO+1NC	CE15JN3 ■	20040
					-	CE15JN3 ■ NB	19475
K	80	73	50	37	1NO+1NC	CE15KN3 ■	20590
					-	CE15KN3 ■ NB	19940
	80	75	50	37	1NO+1NC	CE15K1N3 ■	20770
					-	CE15K1N3 ■ NB	20040
L	115	80	53	40	1NO+1NC	BCH15KT.3.11. ■	22965
# M	125	95	62	47	1NO+1NC	BCH15LT.3.11. ■	27745
# N	135	110	80	60	1NO+1NC	BCH15MT.3.11. ■	34070
# P	230	150	100	75	1NO+1NC	BCH15NT.3.11. ■	45320
# P	250	175	125	95	1NO+1NC	BCH15PT.3.11. ■	56475
# P1	250	185	125	95	1NO+1NC	BCH15P1T.3.11. ■	59900
R	300	200	150	100	1NO+1NC	MCE15RN3 ■ 7	77470
S0	315	265	186	140	1NO+1NC	MCE15S0N3 ■ 7	81105
@ S	315	300	220	160	1NO+1NC	MCE15SN3 ■ 7	89560

# 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. ■	114890
BCH55	600	450	320	240	2NO+2NC	BCH55.3.22. ■	147715
BCH57	760	550	420	315	2NO+2NC	BCH57.3.22. ■	166500
BCH62	1000	700	533	400	2NO+2NC	BCH62.3.22. ■	On request
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 55

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

### 3 Pole Contactor (DC Control)

HSN Code : 8536



Dual DC



Pure DC

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	3040	-	-	-
		1NO	CE15ANS3 ■-N				
9	4.4	1NC	CE15BNC3 ■-N	3220	1NC	CE16BNC3*B	3375
		1NO	CE15BNS3 ■-N		1NO	CE16BNS3*B	
12	5.5	1NC	CE15CNC3 ■-N	3395	1NC	CE16CNC3*B	3560
		1NO	CE15CNS3 ■-N		1NO	CE16CNS3*B	
16	7.5	-	CE15DN3 ■-N	4105	1NO+1NC	CE16DN3*B	4330
25	11	-	CE15EN3 ■-N	5565	1NO+1NC	CE16EN3*B	5955
32	15	-	CE15FN3 ■-N	11750	1NO+1NC	CE16FN3*B	12385
40	22	-	CE15GN3 ■	13910	-	-	-
50	25	-	CE15HN3 ■	17740	-	-	-
65	37	-	CE15JN3 ■	21090	-	-	-
73	37	-	CE15KN3 ■	24825	-	-	-
75	37	-	CE15K1N3 ■	24825	-	-	-

■ For Coil Voltage Codes refer Table on page 55

### Control Relays

HSN Code : 8536

Size	Contact Configuration	Cat No.	AC Coil	Dual Coil DC	Pure DC Coil	
			MRP [₹]	MRP [₹]	Cat No.	MRP [₹]
CR	2NO+2NC	D15CR22 ■-N	2415	3700	D16CR22*	3870
	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	3220
					-	CE15DN3 ■-N	2665
E	40	25	15	11	1NO+1NC	CE15EN3 ■ B-N	4365
					-	CE15EN3 ■-N	3715
F	40	32	20	15	1NO+1NC	CE15FN3 ■ B-N	8285
					-	CE15FN3 ■-N	7510

■ For Standard Coil Voltage Codes refer page 55

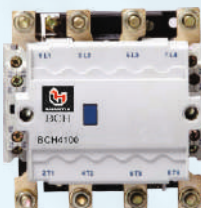
\*Coil Codes : Pure DC

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



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

AC1 rating (A)	Cat No.	Aux Contact	MRP [₹]
20	CE15CN4 ■B-N	#	On request
40	BCH4040 ■	#	
63	BCH4063 ■	#	
80	BCH4080 ■	#	
100	BCH4100 ■	#	
130	BCH4130 ■	#	25650
160	BCH15MN0.4.11.■	1NO+1NC	36260
200	BCH15MN.4.11.■	1NO+1NC	42935
250	BCH15NN.4.11.■	1NO+1NC	48315
300	BCH15PN.4.11.■	1NO+1NC	83675
400	BCH4400 ■	2NO+2NC	141275
500	BCH4500 ■	2NO+2NC	178910

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

# FS1 Contactor



## 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=

- 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<sup>0</sup> C to +60<sup>0</sup> C

For Standard Coil Voltage Codes refer page 55  
 Note: For prices, please contact nearest sales office.

# Freedom Capacitor duty contactor



## 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	4255
10	C	CCD.10.11.=	1NO+1NC	4615
15	E	CCD.15.11.=	1NO+1NC	6745
20	F	CCD.20.11.=	1NO+1NC	7915
26	G	CCD.26.11.=	1NO+1NC	9700
30	H	CCD.30.11.=	1NO+1NC	15400
40	K	CCD.40.11.=	1NO+1NC	23455
50	KT	CCD.50.21.=	2NO+1NC	24645
60	LT	CCD.60.21.=	2NO+1NC	27665

For Standard Coil Voltage Codes refer page 55  
 Note: For Non Standard Coil Voltages, please contact nearest sales office.

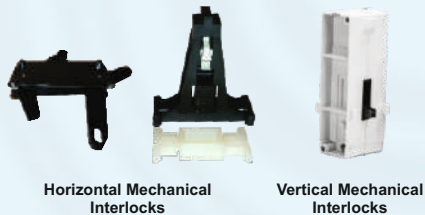
# Freedom Contactor Accessories



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

HSN Code : 8538

Accessories	Configuration	Cat No.	Contacteur Type	MRP [₹]
Aux. Contact Block (side Mounting)	1NO	C320KGSR10	CE15 & CR	420
	1NO+1NC	C320KGSR11		985
	1NC	C320KGSR01		420
	2NO	C320KGSR20		985
	1NO+1NC	BCH15S11	BCH15	1185
	1NO+1NC	MC320KB11	MCE15R	1555
	1NO+1NC (Late break type)	MC320KAS11	MCE15S0 & MCE15S	1505
	2NO+2NC	EF22	BCH54 to BCH64	11975
	1NO+1NC	EB11	BCH76 to BCH78	18605
	1NO+1NC (1st left)^	BCH4A04041SL11	BCH4040	1415
	1NO+1NC (1st right)^	BCH4A04041SR11	BCH4040	1415
	4th Neutral Switching Pole	800A	NP800/5	BCH54 to 57
1000A		NP1000/6	BCH62 to 64	73705
1000A		NP1000/7	BCH76 to 78	83905
Aux. Contact Block (Front Mounting)	1NO	C320KGTC10	CE15, CR	420
	1NC	C320KGTC01		595
	2NO	C320KGT*20		
	2NC	C320KGT*02		
	1NO+1NC	C320KGT*11		
	2NO+2NC	C320KGT*22		
	3NO+1NC	C320KGT*31		
	4NO	C320KGT*40	1025	
	1NO+3NC	C320KGT*13		
	4NC	C320KGT*04		
	4NO	BCH15T40		BCH15
	3NO+1NC	BCH15T31		
	2NO+2NC	BCH15T22		
	1NO+1NC	BCH15T11		
1NO	BCH15T10			
1NC	BCH15T01			
1NO+1NC^	BCH4A0413T11	BCH4040-063	925	
Pneumatic Timer Block "ON/OFF" Delay site selectable	1NO+1NC (0.1 to 30 sec)	C320TP1	CE15 & CR	2765
	1NO+1NC (10 to 180 sec)	C320TP2		
Mechanical Interlocks	-	C321KM60	CE15 & CR	910
	-	MC321KM3	MCE15R to MCE15S	2640
	Horizontal	BM5H	BCH54 to 57	15975
		BM6H	BCH62 to 64	27615
		BM7H	BCH76 to 78	73100
	Vertical	BM5V	BCH54 to 57	15975
		BM6V	BCH62 to 64	27615
		BM7V	BCH76 to 78	64885
	Horizontal	BM0H	BCH15KT/LT/MT	900
		BM3H	BCH15NT/PT/MN/NN/PN	970
		BCH4M0404	BCH4040	945
		BCH4M0608	BCH4063-080	1900
		BCH4M1013	BCH4100-130	8790
		BCH4M4040	BCH4400	14950



^ 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

# Freedom Contactor Accessories



## 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	880
	110-240V (50/60Hz)	MC320LR12		
Mechanical latch #	to complete the cat no. suffix code given	AM5- \$	BCH54 to BCH57	43800
		AM6 \$	BCH62 to BCH64	61945

# 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

# Freedom Contactor Spares



## 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	1880	BCH15PT	Complete set of 6 fixed & 3 moving contacts with hardware, contact springs, spring retainers and arc runners	CP-BCH15PT-3	18750	
		SBANC3		-		CP-BCH15P1T-3	19305	
		SBAN4		BCH15MN0		CP-BCH15MN0-4	22570	
B		SBBNS3	1990	BCH15MN		CP-BCH15MN-4	24165	
		SBBNC3		BCH15NN		CP-BCH15NN-4	26495	
		SBBN4		BCH15PN		CP-BCH15PN-4	27685	
C		SBCNS3	2165	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	36795
		SBCNC3		S0			6-286-S0	46160
		SBCN4					S	6-286
D		SBDN3	2590					
E	SBEN3	3040						
F	SBFN3	5935						
G	6 Fixed contacts 3 Moving Contacts 3 springs 6 Arc Bonnets 3 Spring Retainer	6-65-4	5210	BCH54	Complete set of 6 fixed & 3 moving contacts with hardware, contact springs, spring retainers and arc runners		CP-BCH54-3	53970
H		6-65-6	6430	BCH55			CP-BCH55-3	62220
J		6-65-15	8750	BCH57			CP-BCH57-3	87650
K		6-65-17	9045	BCH62			CP-BCH62-3	160160
BCH15KT	Complete set of 6 fixed & 3 moving contacts with hardware, contact springs, spring retainers and arc runners	CP-BCH15KT-3	9200	BCH64		CP-BCH64-3	214770	
BCH15LT		CP-BCH15LT-3	10560	BCH76		CP-BCH76-3	468345	
BCH15MT		CP-BCH15MT-3	11360	BCH78		CP-BCH78-3	526280	
BCH15NT		CP-BCH15NT-3	18750	BCH4		Contact kit BCH4040	-	-
						Contact kit BCH4063	BCH4K06	5435
						Contact kit BCH4080	BCH4K08	7575
					Contact kit BCH4100	BCH4K10	9410	
					Contact kit BCH4130	BCH4K13	11500	
					Contact kit BCH4400	BCH4K40	58925	

## 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 ■	990	
	CE16, D16 (Pure DC)	MC16FW ■	1575	
	D, E, F	MC15FW ■	1100	
	G, H, J, K	MC15KW ■	2835	
	BCH15KT/LT	B02. ■	2650	
	BCH15MT	B022. ■	4520	
	BCH15NT / PT / MN / NN / PN	B031. ■	9000	
	R, S0, S	9-2412- ■	8170	
	BCH4040	BCH4C0404 ■	885	
	BCH4063-080	BCH4C0608 ■	970	
	BCH4100-130	BCH4C1013 ■	2715	
	BCH4400	BCH4C4040 ■	16675	
	Magnetic coil (set of two)	BCH54/ BCH55/ BCH57	B51. ■	18335
	Feeder group		FG51. ■	18665
Magnetic coil (set of two)	BCH62/ BCH64	B61. ■	54195	
Feeder group		FG61. ■	62740	
Magnetic coil (set of two)	BCH76/ BCH78	B8- ■	143565	
Feeder group		FG78- ■	144135	

■ For Standard Coil Voltage Codes refer page 55, 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

# Freedom Overload Relay



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	2640	Adaptor for Individual mounting Cat. No. <b>C318F1</b> MRP Rs. 755
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		CE15G to CE15K1		
18.0-25.0	MC318ANA3S			
24.0-32.0	MC318ANA3T		4145	
22.0-32.0	MC318GNA3B		4495	
29.0-42.0	MC318GNA3C		4505	
36.0-52.0	MC318GNA3D	6095		
45.0-63.0	MC318GNA3E	6780		
60.0-80.0	MC318GNA3F	8340		

# Special Purpose Contactors



## 2 Pole Contactors



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



## 'NHD' Series 2 Pole Contactor

HSN Code : 8536

Ith (A)	AC3 (A) 240V AC	Cat. No.	MRP [₹]
20	12	CPG 212 ■	2150
25	16	CPG 216 ■	2550
35	20	CPG 220 ■	3465
40	25	CPG 225 ■	3965
40	32	CPG 232 ■	4850
50	40	CPG 240 ■	5770

■ For Coil Voltage Codes refer Table on page 55

## 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 ■	4480
00	20	16	10	7.5	C00N ■	4990
CP20	30	20	12.5	9.3	CP20N ■	6155
CP22	30	22	12.5	9.3	CP22N ■	On request
0	32	25	15	11	N0N ■	9190
01	40	32	20	15	N01N ■	12820
1	50	40	25	18.5	N1N ■	16290

HSN Code : 8538

Description	Orientation	Cat. No.	MRP [₹]
Auxiliary Contact Blocks - NHD	1NO	001CB10	545
	1NO+1NC	001CB11	650
	2NO	001CB20	
	2NC	001CB02	

■ Standard coil voltages are 24, 110, 220/240 & 380/415 VAC, 50 Hz. For voltage codes refer Table on page 55

## '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	3860
CA16	20	16	10	7.5	CA16N	4390
CA20	30	20	12.5	9.3	CA20N	5400
CA22	30	22	12.5	9.3	CA22N	On request
NA25	32	25	15	11	NA25N	7895
NA32	40	32	20	15	NA32N	11170
NA40	50	40	25	18.5	NA40N	14305

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

## Definite Purpose Contactors

HSN Code : 8536



- Quick connect plugin terminals
- Specially designed low VA coil



1 Pole				2 Pole			
AC3 (A)	Type	Cat. No.	MRP [₹]	AC3 (A)	Type	Cat. No.	MRP [₹]
25	1 Pole	CPD251CK	1060	20	2P, 140-200VAC	CPDN202BL	1165
25	1 Pole with Neutral	CPD251NCK	1080	25	2P, 220-240VAC	CPD252H	1220
40	1 Pole	CPD401CK	1140	25	2P, 415VAC	CPD252M	1285
40	1 Pole with Neutral	CPD401NCK	1230	40	2P, 220-240VAC	CPD402H	
-	-	-	-	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*			

## Spares for NHD Contactors



## KIT for NHD

HSN CODE : 8538

Contactor Rating (AC-3)	4P KIT	MRP [₹]	1 Aux + 3P KIT	MRP [₹]	1P KIT	MRP [₹]
	Cat Code		Cat. No.		Cat. No.	
12A	SP90E1	1720	SP90E2	Refer latest Motor Starters pricelist	SP90E01	Refer latest Motor Starters pricelist
16A	SP90A1	2170	SP90A2		SP90A01	
20A	SP90F1	2865	SP90F2		SP90F01	
25A	SP90B1	4825	SP90B2		SP90B01	
32A	SP90D1	5710	SP90D2		SP90D01	
40A	SP90C1	7005	SP90C2		SP90C01	

\* 4P Kit consist of - 8 Fixed main contacts, 4 moving main contacts, 4 springs &amp; 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 &amp; 4 retainers

## KIT for CPG

HSN CODE : 8538

Contactor Rating	Cat. No.	MRP [₹]
12A	CPG122PSP	960
16A	CPG162PSP	1110
20A	CPG202PSP	1730
25A	CPG252PSP	2585
32A	CPG322PSP	2690
40A	CPG402PSP	4040

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

## 2P Contactor

HSN CODE : 8536

Rating	Cat. No.	MRP [₹]
16A	CPGN216*	1985
20A	CPGN220*	2235
25A	CPGN225*	2640

## 2P Contactor Kit

HSN CODE : 8538

Rating	Cat. No.	MRP [₹]
16A	CPGN162PSP	480
20A	CPGN202PSP	520
25A	CPGN252PSP	590

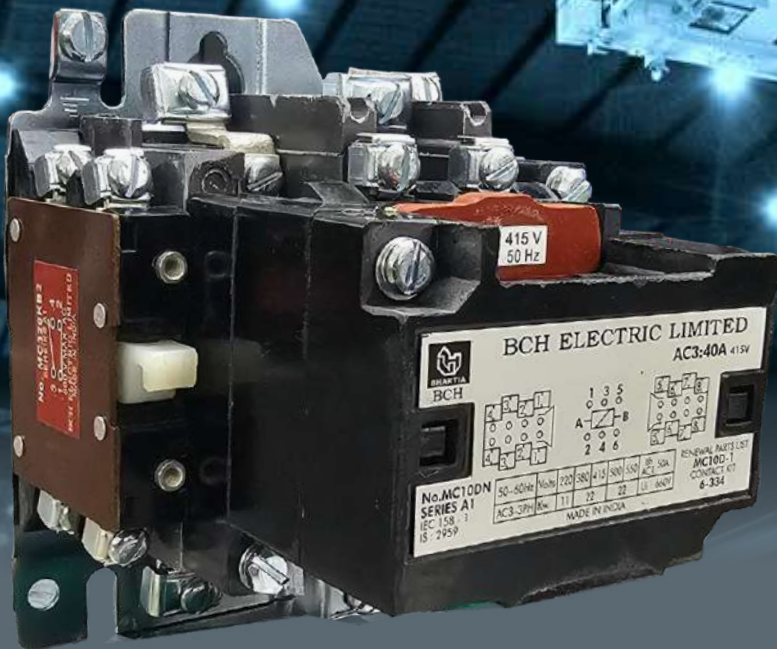
\* 2P Kit consist of - 4 Fixed contacts, 2 moving contacts, 2 springs &amp; 2 retainers

## Spare Coil &amp; Carrier

HSN CODE : 8538

Product	Cat. No.	MRP [₹]
Coil for NHD / CPG	SP90MC*	630
Carrier for NHD	SP90CC	145
Carrier for CPG	CPG2PCC	95

# CITATION CONTACTOR



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

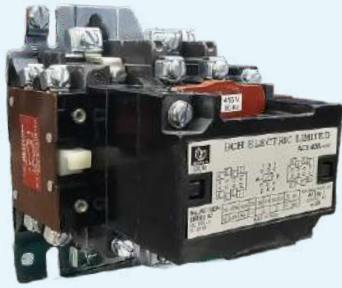


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## 3 Pole AC Control

HSN Code : 8536



MC10DN11



MCE15MN

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 ■	11185	C4NE11 ■	10460	C4NE00 ■	9275
D	40	30	22	MC10DN22 ■	17700	MC10DN11 ■	15575	MC10DN00 ■	15465
D1	50	33.5	25	MC10D1N22 ■	20820	MC10D1N11 ■	19590	MC10D1N00 ■	18360
D2	55	33.5	25	MC10D2N22 ■	21870	MC10D2N11 ■	20655	MC10D2N00 ■	19845
E	70	50	37	MC10EN22 ■	31680	MC10EN11 ■	31030	MC10EN00 ■	30430
E1	75	50	37	MC10E1N22 ■	33075	MC10E1N11 ■	32370	MC10E1N00 ■	31695

Size	AC1 Rating	AC3 Rating 415 V			Aux. Contact	Cat. No.	MRP [₹]
		A	HP	KW			
L	140	80	53	40	1NO+1NC	MCE15LN3 ■ 5	31585
M	150	95	62	47	1NO+1NC	MCE15M0N3 ■ 5	36575
M-5	150	110	80	60	1NO+1NC	MCE15MN3 ■ 5	44755
N	300	140	100	75	1NO+1NC	MCE15NN3 ■ 7	66735
Q	300	185	120	90	1NO+1NC	MCE15QN3 ■ 7	75555

■ For coil voltage codes refer Table on page 55

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

HSN Code : 8538

Accessories	Configuration	Cat No.	Contactors Type	MRP [₹]
Aux. block side mounting	1NO+1NC	C320KGM11	L, M & M-5	1340
	1NO+1NC	MC320KB11	N, Q, R & S	1555
Aux. block add-on (Late break type)	1NO+1NC	MC320KAS11	L, M, M-5, N & Q	1505
	1NO+1NC	AC34EA11	C4, D & E	1095
Mechanical Interlock		MC321KM1	C4 & D	1115
		MC321KM2	L, M, M-5 & E	1200
		MC321KM3	N & Q	2640
Base block	1NO+1NC	MC320KB2	C4 & D	1220
	1NO+1NC	AC35EB11	E	1185

## Spare Coil Citation Contactors

Description	Cat. No.	MRP [₹]
Magnetic coil for MCE15L, MCE15M0, MCE15M	9-2268- ■	3715
Magnetic coil for MCE15N & MCE15Q	9-2412- ■	8170
Magnetic coil for C4 & MC10D	9-2267- ■	2320
Magnetic coil for MC10E type	9-2268- ■	3715

■ For coil voltage codes refer Table on page 55

## 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	4995
MC10D	6 Fixed Main Contacts, 3 Compression springs, 3 Retainers	6-334	7150
MC10E	Same as above plus 6, Blow outs 6 M5/M4 self tapping screws	6-335	13470
L	6 Fixed Contacts, 6 Pan Head Screws	6-385-L0	10740
M	6 Helical Lock Washers, 3 Moving contacts 3 Springs, 3 Retainers	6-385-M	12085
M-5	6 Blowouts, 6 self tapping screws	6-385	12215
N	6 Fixed contacts, 12 CSK screws & washers 3 Moving contacts	6-293	32400
Q	3 Springs, Spring Retainers, Self tapping screws & Washers	6-288-Q	35535

# Citation Thermal Overload Relay



## 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	2805	(Incoming) MC305TB1 (Outgoing) MC305TB3	400
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	3100	(Incoming) MC305TB2 (Outgoing) MC305TB3	
17.40 - 24.00	MC305ANA3M	3425		
22.00 - 30.00	MC305ANA3N*	4415	(Incoming) MC305TB2 (Outgoing) MC305TB3	
23.00 - 32.00	MC305ANA3P*	4455		
26.00 - 40.00	MC305ANA3Q*	4835		

\* 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	475
L to N	MC305DM2	490

## CT Operated Overload Relays-Individual Mounting

HSN Code : 8536

Relay Range (A)	Cat. No.	MRP [₹]
24.4-39.0	CT1MC305ANA3C	8185
37.6-60.0	CT2MC305ANA3C	10565
56.4-90.0	CT3MC305ANA3C	11860
84.6-135.0	CT4MC305ANA3C	12040
112.8-180.0	CT5L1MC305ANA3C	18460
131.6-210.0	CT5MC305ANA3C	19065
188.0-300.0	CT6MC305ANA3C	21850
263.2-420.0	CT7MC305ANA3C	22585
376.0-600.0	CT8MC305ANA3C	26215

## CT Operated Overload Relay



## WP 2 Pole Overload Relay



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

## WP Overload Relay



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

## 2 Pole Overload Relays (Direct Mounting)

HSN Code : 8536

Relay Range (A)	Cat. No.	MRP [₹]
1.58-2.50	MC307ANA2F	1280
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	1480
17.40-24.00	MC307ANA2M	1580
22.00-30.00	MC307ANA2N	1840
23.00-32.00	MC307ANA2P	1875
28.00-40.00	MC307ANA2Q	2080

## 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	2235
8.90 - 13.50	MC307ANA3K / MC307ANA3K-OS	
13.20 - 20.00	MC307ANA3L / MC307ANA3L-OS	2475
17.40 - 24.00	MC307ANA3M / MC307ANA3M-OS	2740
22.00 - 30.00	MC307ANA3N	3290
23.00 - 32.00	MC307ANA3P (Spare for Oil Starter)	3385

# Mini Contactors & Mini OLR



## 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	2020	CA1507P3001D***	2945
07	1NO	CA1507P3010A***F		CA1507P3010D***	
09	1NC	CA1509P3001A***F	2185	CA1509P3001D***	3060
09	1NO	CA1509P3010A***F		CA1509P3010D***	
12	1NC	CA1512P3001A***F	2320	CA1512P3001D***	3360
12	1NO	CA1512P3010A***F		CA1512P3010D***	
16	1NC	CA1516P3001A***F	2745	CA1516P3001D***	3700
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	2345	CR1516P0022D***	3110
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	2870
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	2900
2.8 - 4A	MC15BRM40	
4 - 06.3A	MC15BRM63	
5.6 - 8A	MC15BRM80	
7 - 10A	MC15BRH10	
8 - 12.5A	MC15BRH12	2960
10 - 15A	MC15BRH15	
11 - 17A	MC15BRH17	

# Mini Contactor Accessories



HSN Code : 8538

## Accessories



MA15AF22

### Auxiliary Contacts Front Mounted for Mini Contactor

Description	Cat no.	MRP [₹]
2 NO	MA15AF20	640
1 NO + 1 NC	MA15AF11	
2 NC	MA15AF02	1000
4 NO	MA15AF40	
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	640
1 NO + 1 NC	MR15AF11	
2 NC	MR15AF02	1000
4 NO	MR15AF40	
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	575



M15A16LDRW

### Reversing Wiring Module

Description	Cat no.	MRP [₹]
Reversing Power Wiring Module	M15A16LDRW	525
	M15A16LNRW	

### Surge Suppressor RC Type

Description	Cat no.	MRP [₹]
12-24V AC 50/60Hz	M15ASSR024	960
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 Suppressor Varistor Type

Description	Cat no.	MRP [₹]
12-48V AC/12-60V DC	M15ASSV048	945
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	300



M15ASSR024

### Spare coil

Cat No.	Description	MRP [₹]
M15CA***	Spare coil AC	725
M15CD***	Spare coil DC	1195

\*\*\* 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 Table



## COIL VOLTAGE: MASTER TABLE

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

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



- ◆ 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
- ◆ Password Protection
- ◆ 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



HSN Code : 8536

## 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

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	17000
		BOCR2.0-05Z35*	EOCR 2.0 , 0.25-5.0A with Inbuilt Display+Ground Fault+ZCT35mmID	22000
		BOCR2.0-05Z50*	EOCR 2.0 , 0.25-5.0A with Inbuilt Display+Ground Fault+ZCT50mmID	22000
		BOCR2.0-05Z90*	EOCR 2.0 , 0.25-5.0A with Inbuilt Display+Ground Fault+ZCT90mmID	23000
		BOCR2.0-05Z150*	EOCR 2.0 , 0.25-5.0A with Inbuilt Display+Ground Fault+ZCT150mmID	23000
	2.5 - 60	BOCR2.0-60N*	EOCR2.0, 2.5-60A with Inbuilt Display	17000
		BOCR2.0-60Z35*	EOCR 2.0, 2.5 -60A with Inbuilt Display+Ground Fault+ZCT35mmID	22000
		BOCR2.0-60Z50*	EOCR 2.0, 2.5 -60A with Inbuilt Display+Ground Fault+ZCT50mmID	22000
		BOCR2.0-60Z90*	EOCR 2.0, 2.5 -60A with Inbuilt Display+Ground Fault+ZCT90mmID	23000
		BOCR2.0-60Z150*	EOCR 2.0, 2.5 -60A with Inbuilt Display+Ground Fault+ZCT150mmID	23000
BOCR 4.0	0.25 - 5.0	BOCR4.0-05NN*	EOCR4.0.0, 0.25-5.0A with Ext. Display+ Cable	22000
		BOCR4.0-05NM*	EOCR4.0.0, 0.25-5.0Amp with Ext. Display+ Cable+Comm	26000
		BOCR4.0-05Z35N*	EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT35mmID	28000
		BOCR4.0-05Z50N*	EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT50mmID	28500
		BOCR4.0-05Z90N*	EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT90mmID	29000
		BOCR4.0-05Z150N*	EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT150mmID	29500
		BOCR4.0-05Z35M*	EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT35mmID+Comm	32000
		BOCR4.0-05Z50M*	EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT50mmID+Comm	32500
		BOCR4.0-05Z90M*	EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT90mmID+Comm	33000
	2.5 - 60	BOCR4.0-05Z150M*	EOCR4.0, 0.25-5A with Ext. Display+Ground Fault+ZCT150mmID+Comm	33500
		BOCR4.0-60NN*	EOCR4.0.0, 2.5A-60A with Ext. Display+ Cable	22000
		BOCR4.0-60NM*	EOCR4.0.0, 2.5A-60 with Ext. Display+ Cable+Comm	26000
		BOCR4.0-60Z35N*	EOCR4.0, 2.5A-60A with Ext. Display+Ground Fault+ZCT35mmID	28000
		BOCR4.0-60Z50N*	EOCR4.0, 2.5A-60A with Ext. Display+Ground Fault+ZCT50mmID	28500
		BOCR4.0-60Z90N*	EOCR4.0, 2.5A-60A with Ext. Display+Ground Fault+ZCT90mmID	29000
		BOCR4.0-60Z150N*	EOCR4.0,2.5A-60A with Ext. Display+Ground Fault+ZCT150mmID	29500
		BOCR4.0-60Z35M*	EOCR4.0, 2.5A-60A with Ext. Display+Ground Fault+ZCT35mmID+Comm	32000
		BOCR4.0-60Z50M*	EOCR4.0,2.5A-60A with Ext. Display+Ground Fault+ZCT50mmID+Comm	32500
BOCR4.0-60Z90M*	EOCR4.0, 2.5A-60A with Ext. Display+Ground Fault+ZCT90mmID+Comm	33000		
BOCR4.0-60Z150M*	EOCR4.0, 2.5A-60A with Ext. Display+Ground Fault+ZCT150mmID+Comm	33500		

- \* 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	5000
3CTB-150-5	BCH EOCR CT 150/5	5000
3CTB-200-5	BCH EOCR CT 200/5	6000
3CTB-300-5	BCH EOCR CT 300/5	6500
3CTB-400-5	BCH EOCR CT 400/5	7000

# Electronic Overcurrent Relay



- 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 output
- 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	7010
SS 30	3.0 -30A	MP21SS030 ■		
SS 60	5.0-60A	MP21SS060 ■		
SSD 05	0.5-6A	MP22SSD005 ■	Digital model/ Inbuilt display	12685
SSD 30	3.0 -30A	MP22SSD030 ■		
SSD 60	10-60A	MP22SSD060 ■		
3DE 05	0.5-7.0A	MP353DE05D ■H	built-in display, bottom hole	35335
3DE 80	5.0-80A	MP353DE80D ■H		
FDE 05	0.5-7.0A	MP35FDE05D ■H	Flush mounted display #, bottom hole	40000
FDE 80	5.0-80A	MP35FDE80D ■H		
3EZ 05	0.5-7.0A	MP363EZ05A ■H	built-in display, bottom hole, G/F protection	38460
3EZ 80	5.0-80A	MP363EZ80A ■H		
FEZ 05	0.5-7.0A	MP36FEZ05A ■H	Flush mounted display #, bottom hole, G/F protection	43550
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	4860
2CT-DH-150-C	2CT EP 150/5	
2CT-D2-200-C	2CT EP 200/5	
2CT-D3-300-C	2CT EP 300/5	5250
2CT-D4-400-C	2CT EP 400/5	7390
3CT-H1-100-C	3CT version 100/5	7470
3CT-HH-150-C	3CT version 150/5	7765
3CT-H2-200-C	3CT version 200/5	8185
3CT-H3-300-C	3CT version 300/5	8690
3CT-H4-400-C	3CT version 400/5	9210
ZCT-035	ZCT version 35mm hole	8860
ZCT-080	ZCT version 80mm hole	11540
ZCT-120	ZCT version 120mm hole	20435

ZCT must be used for ground Fault protection alongwith EOGR

### # Cable for separate display Models

HSN Code : 8536

Cat No.	For model	Range	MRP [₹]
CABLE-RJ45-003	FDEFEZ/PFZ IFDM/IFDZ	CABLE-RJ45 3m EOGR-IFD model	2650

Note : Cable must be ordered separately along with the EOGR

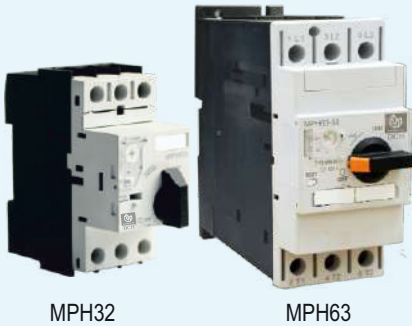
# MPCB



HSN Code : 8536

## MPH range (0.1 to 63A)

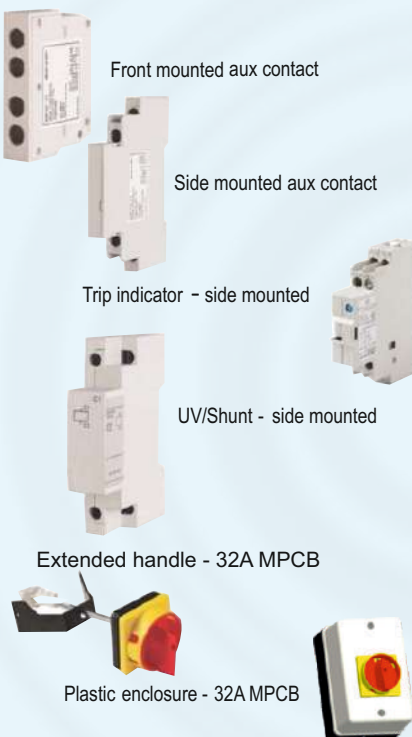
- ON/OFF Rotary knob with manual operation
- Clear trip indication with rotary knob
- 1 NO + 1 NC - Front & side mounted Aux. Contact
- Trip indicator for visual discrimination between short circuit & over load tripping
- Undervoltage / Shunt Release
- PAD Lock facility
- Extended Handle
- Mag only version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



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	5445	MPH32M-0.16	0.16	100kA	5315
	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	5750	MPH32M-0.63	0.63	100kA	5610
	MPH32-1.0	0.63-1.0	100kA	5970	MPH32M-1.0	1.0	100kA	
	MPH32-1.6	1.0-1.6	100kA	6085	MPH32M-1.6	1.6	100kA	5490
	MPH32-2.5	1.6-2.5	100kA		MPH32M-2.5	2.5	100kA	
	MPH32-4.0	2.5-4.0	100kA	6180	MPH32M-4.0	4.0	100kA	5820
	MPH32-6.3	4.0-6.3	100kA	6355	MPH32M-6.3	6.3	100kA	5970
	MPH32-10	6.3-10	100kA	6430	MPH32M-10	10	100kA	6070
	MPH32-16	10-16	50kA	7455	MPH32M-16	16	50kA	6735
	MPH32-20	16-20	50kA	8500	MPH32M-20	20	50kA	6915
	MPH32-25	20-25	50kA	9105	MPH32M-25	25	50kA	6860
MPH32-32	25-32	50kA	14295	MPH32M-32	32	50kA	11975	
63A	MPH63-16	11-16	50kA	15490	MPH63M-16	16	50kA	14900
	MPH63-20	14-20	50kA		MPH63M-20	20	50kA	
	MPH63-25	18-25	50kA		MPH63M-25	25	50kA	
	MPH63-32	22-32	50kA	26035	MPH63M-32	32	50kA	25730
	MPH63-40	28-40	50kA		MPH63M-40	40	50kA	
	MPH63-45	36-45	50kA	27650	MPH63M-45	45	50kA	27290
	MPH63-50	40-50	50kA		MPH63M-50	50	50kA	
MPH63-63	45-63	50kA		MPH63M-63	63	50kA		

## Accessories for MPH MPCB

HSN Code : 8538



Cat code	Description	MRP [₹]
MPHF11	Front aux contact 1NO+1 NC MPCB	1120
MPHS11	Side aux contact 1NO+1 NC MPCB	1445
MPHT11	MPCB Trip Indicator	1700
MPH024UR	UV Rel. 24V 50HZ MPCB	2760
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	Extd rotary handle for 32A	
B31SMA1	Plastic enclosure for MPH32 MPCB	3020
MPH64	Extd Rotary Handle for MPH 63A MPCB	2225
MPHT11F2	LHS Trip Indicator for 63A F2 MPCB	2980

# Solid State Relay (SSR)



## 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 <sup>2</sup> S)	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SC941110L	5	12A	72	600V AC	12-280V AC	4-30V DC	2995
SC942110L	5	25A	288	600V AC	12-280V AC	4-30V DC	3500
SC944110L	5	40A	612	600V AC	12-280V AC	4-30V DC	5160

MOQ - Minimum Order Qty.

- 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

#### SC9 Series 1-Phase ZERO CROSS With LED HSN Code : 8536

Cat. No.	MOQ	AC51 Rating	$I^2t$ (A <sup>2</sup> S)	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SC941160L	5	12A	72	600V AC	12-280V AC	4-30V DC	3015
SC942160L	5	25A	288	600V AC	12-280V AC	4-30V DC	3540
SC944160L	5	40A	612	600V AC	12-280V AC	4-30V DC	5240
SC945160L	5	50A	1500	600V AC	12-280V AC	4-30V DC	9335
SC947160L	5	75A	5000	600V AC	12-280V AC	4-30V DC	10365

MOQ - Minimum Order Qty.



#### SO9 Series 1-Phase ZERO CROSS With LED in okpac® Housing IP20 Protection HSN Code : 8536

Cat. No.	MOQ	AC51 Rating	$I^2t$ (A <sup>2</sup> S)	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SO942560*	19	25A	600	600V AC	12-280V AC	7-30V DC	7960
SO963460*	19	35A	1250	1200V AC	24-600V AC	3.5-32V DC	10305
SO945460*	19	50A	2500	600V AC	12-280V AC	3-32V DC	10955
SO965460*	19	50A	2800	1200V AC	24-600V AC	3.5-32V DC	11480
SO967460*	19	90A	7200	1200V AC	24-600V AC	3.5-32V DC	13240

MOQ - Minimum Order Qty.

#### Innovation - Performance-Design

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

# Solid State Relay (SSR)



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

HSN Code : 8536

### 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

Cat. No.	MOQ	AC51 Rating	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SU942460*	36	25A	600V AC	12-280V AC	3-32V DC	7480
SU963460*	36	35A	1200V AC	24-600V AC	3.5-32V DC	9275
SU965460*	36	50A	1200V AC	24-600V AC	3.5-32V DC	9910
SU967460*	36	75A	1200V AC	24-600V AC	3.5-32V DC	12320



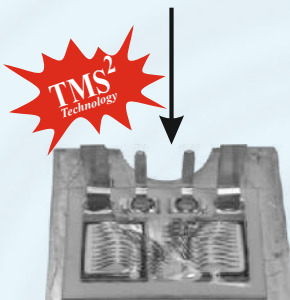
## Single Phase SSR's for Capacitor Control Applications SO8 Series 1-Phase With LED in okpac® Housing IP20 Protection

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	9685
SO863070*	19	35A	1250	1200V AC	24-510V AC	3.5-32V DC	10675
SO845070*	19	50A	2500	600V AC	12-275V AC	3-32V DC	11450
SO848070*	19	95A	14400	600V AC	12-275V AC	3-32V DC	17225
SO889060*	19	125A	24000	1600V AC	24-600V AC	3.5-32V DC	45705

MOQ - Minimum Order Qty.

### Direct Copper Bonding Technology



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

# Solid State Relay (SSR)



## Three Phase SSR's

### SGT Series 3-Phase With LED (ZERO CROSS) IP20 Protection

HSN Code : 8536



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

Cat. No.	MOQ	AC51 Rating	AC53 Rating	I <sup>2</sup> t(A <sup>2</sup> S)	Peak Voltage	Operating	Control Voltage	MRP [₹]
<b>DC CONTROL</b>								
SGT8850200	16	50A	12A	2800	1600VAC	24-640VAC	4-30VDC	47310
SGT8670500	16	75A	16A	7200	1600VAC	24-520VAC	4-30VDC	52035
SGT8690500	16	125A	32A	22000	1600VAC	24-520VAC	4-30VDC	63850
<b>AC/DC CONTROL</b>								
SGT8658500	16	50A	12A	2800	1600VAC	24-520VAC	24-255VAC/DC	49625
SGT8678500	16	75A	16A	7600	1600VAC	24-520VAC	24-255VAC/DC	54520
SGT8698500	16	125A	32A	22000	1600VAC	24-520VAC	24-255VAC/DC	66315

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*	145
SCHS6 DIN	20	Din Clip	360
SCHS2200	5	Heat Sink 2.2K/W	1870
SCHS1100	5	Heat Sink 1.1 K/W	6030
SCHS0900	5	Heat Sink 0.9 K/W	7095
SCHS0300	5	Heat Sink 0.3K/W	11580

\*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 S07 / S08 / S09 / 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<sup>2</sup>t rating lower than that of SSR I<sup>2</sup>t) must be used.

# DC Contactors



## DC Mill Duty Contactor

HSN Code : 8536

No. of poles	(A)	Auxilliary Contacts	Cat. No.	MRP [₹]
<b>50 Amperes</b>				
Single pole Normally Open	15A	2NO+2NC	912x1522	On request
	25A	2NO+2NC	912x2522	On request
	50A	2NO+2NC	912x5022	53705
Double pole Normally Open	15A	2NO+2NC	D912x1522	On request
	25A	2NO+2NC	D912x2522	On request
	50A	2NO+2NC	D912x5022	115410
Mechanically Interlocked 2 Nos. SP NO	15A	2NO+2NC	M912x1522	On request
	25A	2NO+2NC	M912x2522	On request
	50A	2NO+2NC	M912x5022	127995
<b>150 Amperes</b>				
Single pole Normally Open	150A	2NO+2NC	914x22	91675
Double pole Normally Open	150A	2NO+2NC	D914x22	196535
Mechanically Interlocked 2 Nos. SP NO	150A	2NO+2NC	M914x22	207400
Single pole Normally Closed	150A	1NO+1NC	924x11	94435
Double Pole Normally Closed	150A	2NO+2NC	D924x22	200325
Single pole Normally Open with Holdout Coil #	150A	1NO+1NC	934x11 /#	99385
Single pole Normally Open with AC Blow out Coil	150A	2NO+2NC	974x22	116220
<b>300 Amperes</b>				
Single pole Normally Open	300A	2NO+2NC	915x22	133125
Double pole Normally Open	300A	2NO+2NC	D915x22	283475
Mechanically Interlocked 2 Nos. SP NO	300A	2NO+2NC	M915x22	294720
Single pole Normally Closed	300A	1NO+1NC	925x11	133785
Double Pole Normally Closed	300A	2NO+2NC	D925x22	288975
Single pole Normally Open with Holdout Coil #	300A	1NO+1NC	935x11 /#	144445
Single pole Normally Open with AC Blow out Coil	300A	2NO+2NC	975x22	168315



- 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 [₹]
<b>600 Amperes</b>				
Single pole Normally Open	600A	2NO+2NC	916x22	296640
Double pole Normally Open	600A	2NO+2NC	D916x22	615935
Mechanically Interlocked 2 Nos. SP NO	600A	2NO+2NC	M916x22	625915
Single pole Normally Closed	600A	1NO+1NC	926x11	304915
Single pole Normally Open with Holdout Coil#	600A	1NO+1NC	936x11 /#	376865
Single pole Normally Open with AC Blow out Coil	600A	2NO+2NC	976x22	387880

# 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	280520
300A	2NO+2NC	955x22	327300

# DC Contactors



## 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 a. LH Arc Shield b. RH Arc Shield c. DC Blow Out Arc Horn d. DC Blow Out Arc Piece e. DC Blow Out Spacer Assy. f. Polarity Wire g. Latch Strips (Top & Bottom) h. Hardware for Polarity Wire & Latch	1 Set	9C9J101*	28400	9C9P101	48630	9C9T101	70490	9C9V101	153405
AC Arc Chute Assy. Consisting of a. LH Arc Shield b. RH Arc Shield c. AC Blow Out Pole Piece d. AC Blow Out Spacer Assy. e. Polarity Wire f. Latch Strips (Top & Bottom) g. Hardware for Polarity Wire & Latch	1Set	-	-	9C9P102	On request	9C9T102	On request	9C9V102	On request
Fixed & Moving Contacts	1 Set	9C9J105	6460	9C9P105	8890	9C9T105	14400	9C9V105	39140
Contact Lever with Braid (for Single Pole)	1 No.	9C9J106	7855	9C9P106	12800	9C9T106	16935	9C9V106	29360
Contact Lever with Braid (for Double Pole) <sup>†</sup>	1 No.	9C9J106	7855	9C9P106	12800	9C9T106	16935	9C9V103	29360
Set of Armature Spares Consisting of a. Adjusting Pin b. Contact lever spring c. Contact lever spring pin with circlip d. Armature hinge pin e. Armature Securing pin	1 Set	9C9J107	2690	9C9P107	3720	9C9T107	5355	9C9V107	7770
Set of Armature Spares for 924, 925, 926 Consisting of a. Adjusting Pin b. Contact lever spring c. Contact lever spring pin with circlip d. Armature hinge pin e. Armature Securing pin f. Armature spring g. Spring retaining washer	1 Set	-	-	9C9P108	4530	9C9T108	7980	9C9V108	9625
Set of Armature Spares for 934/935/936 Consisting of a. Adjusting pin b. Contact lever spring c. Contact lever hinge pin d. Armature hinge pin e. Armature securing pin f. Armature spring g. Spring retaining washer h. Adjusting screw	1 Set	-	-	9C9P109	5415	9C9T109	7980	9C9V109	10220
Terminal Block	1	9C9J110	3625	9C9P110	4735	9C9T110	6625	9C9V110	8270
No Volt Coil for 912, 914, 915, 916, 934, 935 & 936 **Suffix voltage code	1	9C9J111■	14500	9C9P111■	22160	9C9T111 ■	29155	9C9V111 ■	50215
No Volt Coil for 924, 925, 926 **Suffix voltage code	1	-	-	9C9P112■	29155	9C9T112 ■	45270	9C9V112 ■	73125
Coil clamp for 914 & 934	1	-	-	9C9P118	520	-	-	-	-
Coil clamp for 924, 915, 935, 916 & 936	1	-	-	9C9P118	520	9C9T118	520	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 Contactors



## DC Mill Duty Contactors - Spares & Accessories HSN Code : 8538

Description	Cat. No.	MRP [₹]
1NO+1NC Auxilliary Contact Block	AC10E11	11320
2NO Auxilliary Contact Block	AC10E20	11320
2NC Auxilliary Contact Block	AC10E02	11320
Single unit driver with mounting plate (50A)	9C9J115	1800
Double unit driver with mounting plate (50A)	9C9J116	2600
Single unit driver with mounting plate (150-600A)	9C9P116	1950
Double unit driver with mounting plate (150-600A)	9C9P117	2850
Hold out coil for 934, 935 & 936	9C9P113-#	35180
Condenser 50 + 50uF for 934, 935 & 936	9C9P114	1950
Mechanical interlock for 150/300/600A	AC10M4/M8/M12	12615
Rectifier 110/240 V	SP30R	6660

# 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	30745
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	36025
B3L23	179-38	109.0	70 to 190	
B3M23	179-37	179.0	100 to 300	
B3N23	179-36	299.0	200 to 600	39280
B3Y23	179-36.2	199.0	200 to 600	
B3P23		549.0	300 to 900	47775
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.

# Push Button 30.5mm



### 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	<b>Standard flush Button</b>			
	Red	TSFB-R	410	20
	Green	TSFB-G		
	Black	TSFB-B		
	Yellow	TSFB-Y		
	Blue	TSFB-BL		
	Orange	TSFB-O		
	White	TSFB-W		
	<b>Long Button</b>			
	Red	TLB-R	420	10
Green	TLB-G			
Black	TLB-B			
Yellow	TLB-Y			
Blue	TLB-BL			
Orange	TLB-O			
White	TLB-W			
<b>Mushroom Head</b>				
-Spring return Red	TMH-R	490	10	
-Spring return Green	TMH-G	490		
-Turn to release Red	TMHL-R	580		
-Turn to release Green	TMHL-G	580		
<b>Selector Actuator</b>				
-2 or 3 position	TSSA ***	970	10	
<b>Cylindrical Lock</b>				
-2 or 3 positions	TCL ***	1400	10	
Station	Start/Stop Pushbutton	E20EA	1450	1
Contact Block	1NO +1NC	050N1	635	20
	2NO	050N2		
	2NC	050N3		
Aluminium Diecast Enclosure	One button	TEN-1	2175	1
	Two buttons	TEN-2	2110	
	Three buttons	TEN-3	2855	
<b>HSN Code : 8538</b>				
Accessories	Wrench for retaining ring	TWN	485	1
	Plug for hole	TPL	230	
	Legend plate	050L^	105	

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

# Push Button 30.5mm



## 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	690	1
Transformer type	AC	TILT*10	870	1
<b>HSN Code : 8538</b>				
Polycarbonate Lens	-	LENS*	120	10
Spare Bulb	AC & DC	SP61L#	130	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

### Suffix Colour Code - 30.5 mm

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

## Accessories for indicating light - E 30.5mm HSN Code : 8538

Description	Cat. No.	List Price [₹]	Lot Size
Signal lamp transformer	TR ■	505	10



### 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	-

# Control & Signalling Devices 22.5mm



## 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	175	30
		Green	 BML22FA - G	175	
		Yellow	 BML22FA - Y	175	
		Blue	 BML22FA - BL	175	
		Black	 BML22FA - BK	175	
		White	 BML22FA - W	175	
	Projecting Actuator	Red	 BML22PA - R	190	15
		Green	 BML22PA - G	190	
		Yellow	 BML22PA - Y	190	
		Blue	 BML22PA - B	190	
		Black	 BML22PA - BL	190	
		White	 BML22PA - W	190	
	Mushroom Actuator (Momentary) Head - $\phi$ 40mm	Red	 BML22MM4 - R	250	20
		Green	 BML22MM4 - G	250	
		Yellow	 BML22MM4 - Y	250	
		Blue	 BML22MM4 - BL	250	
		Black	 BML22MM4 - BK	250	
		White	 BML22MM4 - W	250	
	Mushroom Actuator (Twist to Release) Head - $\phi$ 40mm	Red	 BML22MT4 - R	345	20
		Black	 BML22MT4 - BK	345	
	Mushroom Actuator (Key to Release) Head - $\phi$ 40mm	Red	 BML22MK4 - R	775	20
	Mushroom Actuator (Momentary) Head - $\phi$ 60mm	Red	 BML22MM6 - R	410	6
		Green	 BML22MM6 - G	410	
		Yellow	 BML22MM6 - Y	410	
		Blue	 BML22MM6 - BL	410	
		Black	 BML22MM6 - BK	410	
		White	 BML22MM6 - W	410	
	Mushroom Actuator (Twist to Release) Head - $\phi$ 60mm	Red	 BML22MT6 - R	445	6
		Black	 BML22MT6 - BK	445	

# Control & Signalling Devices 22.5mm





## 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					
	2 Position - Maintained	Black	●	BML22SM2P -BK	485	15
	3 Position – Maintained (both side)	Black	●	BML22SM3P -BK	485	
	2 Position Spring Return	Black	●	BML22SS2P -BK	530	
	3 Position Spring Return (Both Side)	Black	●	BML22SS3P -BK	545	
Selector Key Actuator						
	2 Position - Maintained	Black	●	BML22SK2P -BK	675	15
	3 Position - Maintained (both side)	Black	●	BML22SK3P -BK	705	
	Twin Actuator (Spring Return with Green Knob "I" marked & Red Knob "O" marked)	Green & Red	● & ●	BML22TA -RG	300	15

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

	LED Luminous Twin Actuator AC/DC : 12V, 24V, 48V, 60V DC :110V, 220V AC : 110V, 240V, 440V	Red & Green Marked ( I/O ) & Amber LED	●	BML22LTA □-A	570	10
	LED Luminous Actuator AC/DC: 12V, 24V, 48V, 60V DC:110V, 220V AC: 110V, 240V, 440V	Red	●	BML22LA □-R	495	15
		Green	●	BML22LA □-G	495	
		Yellow	●	BML22LA □-Y	495	
		Clear	●	BML22LA □-C	495	
		Amber	●	BML22LA □-A	495	
		White	●	BML22LA □-W	795	
		Blue	●	BML22LA □-BL	795	

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

# Control & Signalling Devices 22.5mm



## 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	755	15
		Green	BML22LSM2 □-G	755	
		Yellow	BML22LSM2 □-Y	755	
		Clear	BML22LSM2 □-C	755	
		Amber	BML22LSM2 □-A	755	
		White	BML22LSM2 □-W	1055	
		Blue	BML22LSM2 □-BL	1055	
	LED Luminous 3 Position Selector Actuator (Maintained) AC/DC: 12V, 24V, 48V, 60V DC:110V, 220V AC: 110V, 240V, 440V	Red	BML22LSM3 □-R	755	15
		Green	BML22LSM3 □-G	755	
		Yellow	BML22LSM3 □-Y	755	
		Clear	BML22LSM3 □-C	755	
		Amber	BML22LSM3 □-A	755	
		White	BML22LSM3 □-W	1055	
		Blue	BML22LSM3 □-BL	1055	

## 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	255	30
		Green	BIL22BRS□-G	255	
		Yellow	BIL22BRS□-Y	255	
		Clear	BIL22BRS□-C	255	
		Amber	BIL22BRS□-A	255	
		White	BIL22BRS□-W	455	
		Blue	BIL22BRS□-BL	455	
	LED Indicating Light - with LVGP (Barrel Type) AC/DC : 12V, 24V, 48V, 60V DC :110V, 220V AC : 110V, 240V, 440V	Red	BIL22BRP□-R	305	30
		Green	BIL22BRP□-G	305	
		Yellow	BIL22BRP□-Y	305	
		Clear	BIL22BRP□-C	305	
		Amber	BIL22BRP□-A	305	
		White	BIL22BRP□-W	510	
		Blue	BIL22BRP□-BL	510	
	LED Indicating Light - Universal Voltage (Barrel Type) 12-230V AC/DC	Red	BIL22BRUH4-R	390	30
		Green	BIL22BRUH4-G	390	
		Yellow	BIL22BRUH4-Y	390	
		Clear	BIL22BRUH4-C	390	
		Amber	BIL22BRUH4-A	390	
		White	BIL22BRUH4-W	595	
		Blue	BIL22BRUH4-BL	595	
	Pilot LED Indicating Light AC/DC : 12V, 24V, 48V, 60V DC :110V, 220V AC : 110V, 240V, 440V	Red	BML22PL□-R	445	15
		Green	BML22PL□-G	445	
		Yellow	BML22PL□-Y	445	
		Clear	BML22PL□-C	445	
		Amber	BML22PL□-A	445	
		White	BML22PL□-W	745	
		Blue	BML22PL□-BL	745	

□ : Please mention voltage code from Table 2

# Control & Signalling Devices 22.5mm



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

HSN Code : 8536

Product	Description	Type	Cat. No.	Unit MRP [₹]	Lot Size
	<p>Contact Element</p>	1 NO	BML22CB10	130	50
		1 NC	BML22CB01	130	
	Legend Plate Metal	Aluminium	BML22LPM-□	45	30
	Legend Plate Plastic Yellow Colour	Emergency / Stop	BML22LPP - 23	45	30
	Hole Closer	Plastic	BML22HC	85	50
	Rubber Boot for Flush Actuator	Transparent	BML22RB	95	20
	Rubber boot for Illuminated Push Button	Clear	BML22LRB	100	20

□: Please mention legend plate code from Table 1

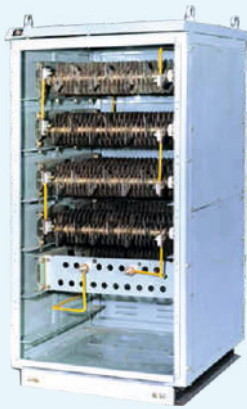
### Suffix Code Table

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

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.

# Punched Grid Resistors



## 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**

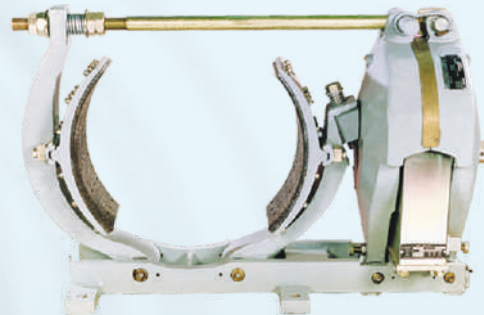
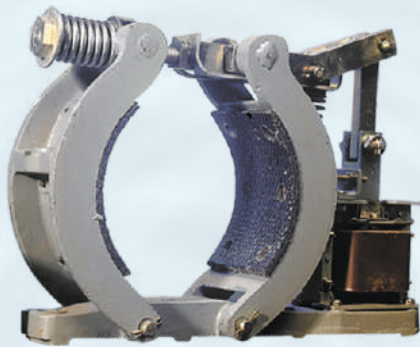
Type	Resistance Per Bank	Continuous Rating	LP
	Ohms	Amps	[₹]
WL10	0.1	225	30575
WL12	0.125	200	27050
WL16	0.16	180	31255
WL20	0.2	150	31910
WL25	0.25	134	28175
WL32	0.32	118	24945
WL40	0.4	113	28850
WL50	0.5	100	24375
WL62	0.62	84	31450
WL80	0.8	75	28505
WL100	1	67	26495
WL125	1.25	64	29495
WL160	1.6	57	25450
WL200	2	54	28335
WL250	2.5	48	25010
WL320	3.2	43	21915
WL400	4	40	30510
WL500	5	35	22140
WL625	6.25	33	25285
WL800	8	29	23590
WL1200	12	21	25285
WL1600	16	19	24530

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

Type	Resistance Per Bank	Continuous Rating	LP
	Ohms	Amps	[₹]
WLL20(M)-1	0.325	150	49605
WLL25(M)-1	0.54	134	47430
WLL32(M)-1	0.68	118	40225
WLL50(M)-1	0.864	100	34085

# Industrial Brakes

- AC Solenoid & Brakes
- DC Brakes



# AC Solenoids & Brakes



**GST to be charged extra**

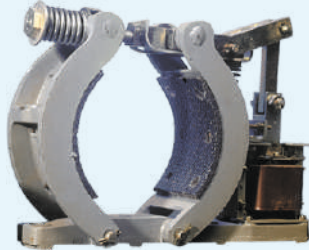
## AC Solenoid - Pull Type

**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■	7320
D	S-51, S-71 S-52, S-72	31.4	6.75	SLD■ SLD2■	10795
E	S-250	40	10	SPSLEM SPSLEB	23475

\* 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■	16785	AC50D4	2810
S-5	5.5	139.7	25 35	34.0 48.0	Continuous Intermittent	S-51■ S-52■	24005	AC50D5	4040
S-7	7	177.8	50 75	68.0 102.0	Continuous Intermittent	S-71■ S-72■	27450	AC50D7	4905
S-250	9.84	250	109	147.0	Continuous	S-2501M	59050	AC50D25	9490

- 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

**GST to be charged extra**

## Spares For AC Solenoid Brake

**HSN Code : 8505**

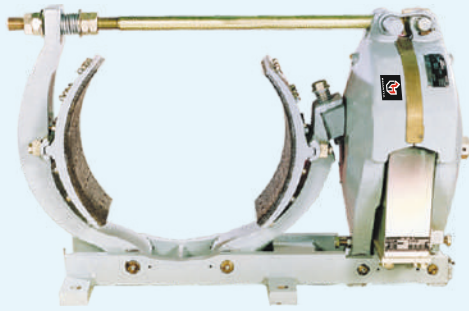
Description	Brake Size : 4"		Brake Size : 5.5"		Brake Size : 7.0"		Brake Size : 250mm	
	Cat. No.	List Price [₹]	Cat. No.	List Price [₹]	Cat. No.	List Price [₹]	Cat. No.	List Price [₹]
Brake lining	SP50L1	2060	SP50L2	3055	SP50L3	4085	SP50L4	7990
Brake shoe Assembly*	SP50SA1	5980	SP50SA2	7715	SP50SA3	12710	SP50SA4	25595
Brake Coil -Continuous -Intermittent	SP50MC01■	3845	SP50MC21■ SP50MC22■	7625	SP50MC21■ SP50MC22■	7625	SP50MC31■	20140

\* 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**

# DC Brakes



- 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 'TKT' design also available
- Resistance & rectifier Panel available with option of 'Fuse' or 'MCB' protection



### Optional Features

- Limit Switch Attachment
- Manual Release
- Residual magnetism adjustment



**GST to be charged extra**

**HSN Code : 8505**

### DC Electromagnetic Brakes

Shunt Type Torque				Resistance & Rectifier Panel (with fuse protection) <sup>+</sup>			
Drum Size	Cat No.	Torque	List Price [₹]	Single Brake		2 Brakes Simult. Operation	
		KG-M		Cat No.	List Price [₹]	Cat No.	List Price [₹]
150mm	SMH150	8	85920	CACS1*MAE	89940	CACS2*MAE	124925
160mm	SMH160						
8"/200mm	SMH8	13.8	101140	CACA1*MAE	100260	CACJ2*MAE	129915
	SMH200	13.8					
10"/250mm	SMH10	27.7	124155	CACB1*MAE	106380	CACK2*MAE	146235
	SMH250	27.7					
13"/300mm	SMH13	76.0	203250	CACC1*MAE	114705	CACL2*MAE	170290
	SMH300	76.0					
16"/400mm	SMH16	138.8	327150	CACD1*MAE	132080	CACM2*MAE	185050
	SMH400	138.8					
19"/500mm	SMH19	277.0	527400	CACE1*MAE	159700	CACN2*MAE	233795
	SMH500	277.0					
23"/600mm	SMH23	555.0	834685	CACF1*MAE	205910	CACP2*MAE	295780
	SMH600	555.0					
30"/700mm	SMH30	1242.0	1858735	CACG1*MAE	812845	-	-
	SMH700	1242.0					
800mm	SMH800	1242.0	2013840	CACG1*MAE	812845	-	-

\* 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 Brakes



**GST to be charged extra**

**HSN Code : 8505**

## Resistance Boxes for DC Electromagnetic Brakes

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	11155	CARS10KE	10205	CARS10ME	20590	CARS20ME	On request
SMH8 / SMH200	13.8	CDCA101D CDIA101D*	11590	CARA10KE	10550	CARA10ME	20590	CARA20ME	On request
SMH10 / SMH250	27.7	CDCB101D CDIB101D*	13740	CARB10KE	12145	CARB10ME	20590	CARB20ME	On request
SMH13 / SMH300	76.0	CDCC101D CDIC101D*	15860	CARC10KE	14395	CARC10ME	23560	CARC20ME	32190
SMH16 / SMH400	138.8	CDCD101D CDID101D*	16970	CARD10KE	15475	CARD10ME	27385	CARD20ME	33815
SMH19 / SMH500	277.0	CDCE101D CDIE101D*	18175	CARE10KE	16585	CARE10ME	30395	CARE20ME	On request
SMH23 / SMH600	555.0	CDCF101D CDIF101D*	20695	CARF10KE	18625	CARF10ME	32660	CARF20ME	On request
SMH30 / SMH700	1242.0	CDCG101D CDIG101D*	On request	-	-	CARG10ME	56350	-	-
SMH800	1242.0	CDIG101D*	On request	-	-	CARG10ME	56350	-	-

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.**

## DC Brakes



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	208355
	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	297255
	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	402725
	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	630255
19"/500mm	414,612,810	277.0	368	SME19H1 SME500H1	180.0	272	SME1901 SME50001	968235
	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	1566475
	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.**











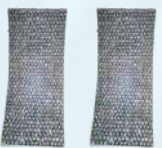



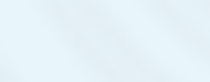
# DC Brakes



**GST to be charged extra**

## Series & Accessories - DC Electromagnetic 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	66855	9GDA01	79160	9GDB01	95680	9GDC01	158215
 Coil Series for inch for mm	-	-	9GDA02/ 9GDA03	168630	9GDB02/ 9GDB03	264315	9GDC02/ 9GDC03	356060
 Torque Adj. Screw Assembly	9GDS04	6100	9GDA04	6380	9GDB04	6380	9GDC04	11545
 Torque Spring	9GDS05	16610	9GDA05	17340	9GDB05	20485	9GDC05	33160
 Wedge Assembly with Bolt, Spring and Washers for inch/mm	9GDS20/ 9GDS22	2380	9GDA20/ 9GDA22	2720	9GDB20/ 9GDB22	3160	9GDC20/ 9GDC22	4815
 Pin set for Lever & Armature Consisting of a) Pin Lever 2 Nos. b) Pin armature 2 Nos.	9GDS06	8380	9GDA06	8790	9GDB06	8790	9GDC06 9GDC06-2#	11085
 Coller Set of Lever & Armature Consisting of a) Coller Lever 4 Nos. a) Coller Armature 4 Nos.	9GDS07	8380	9GDA07	8790	9GDB07	8790	9GDC07	10540
 Bush Set for Lever & Armature Consisting of a) Bush Lever 4 Nos. a) Bush Armature 4 Nos.	9GDS08	16610	9GDA08	17415	9GDB08	17415	9GDC08	18975
 Pull Rod Assembly with nuts, spring & washer	9GDS29	6795	9GDA29	7110	9GDB29	8790	9GDC29	13515
Greese Nipple (1 set consist 8 Nos.)	9GDS09	2380	9GDA09	2520	9GDB09	2520	9GDC09	2545
 Shoe Assembly with Clamp & Bolts (1 set consist 2 Nos.) for inch/mm	9GDS10/ 9GDS11	17290	9GDA10/ 9GDA11	17220	9GDB10/ 9GDB11	21355	9GDC10/ 9GDC11	33615
 Shoe Lining without Bolts (1 set consist 2 Nos.) for inch for mm	9GDS12/ 9GDS13	5870	9GDA12/ 9GDA13	6100	9GDB12/ 9GDB13	7680	9GDC12/ 9GDC13	11085
 Shoe Lining with Bolts (1 set consist 2 Nos.) for inch for mm	9GDS23/ 9GDS26	7930	9GDA23/ 9GDA26	8790	9GDB23/ 9GDB26	11085	9GDC23/ 9GDC26	15825
 Dust Cover (made of jeans cloth & painted with fire reterdent al. paint).	-	-	9GDA30	9780	9GDB30	9780	9GDC30	11635
 mm Size Cast Steel Drum without Hard Chrome Plating	9GDS15/ (150mm) 9GDS14 (160mm)	18895	9GDA14	20790	9GDB14	32005	9GDC14	53925
mm Size Cast Steel Drum with Hard Chrome Plating	9GDS15P/ (150mm) 9GDS14P (160mm)	25515	9GDA14P	29755	9GDB14P	46460	9GDC14P	78145
 Cast Steel Drum without Hard Chrome Plating* for inch	-	-	9GDA15	21560	9GDB15	33175	9GDC15	56085
Cast Steel Drum with Hard Chrome Plating* for inch	-	-	9GDA15P	30940	9GDB15P	47600	9GDC15P	81325

\* 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.**



















# DC Brakes



**GST to be charged extra**

## Spares & Accessories - DC Brakes

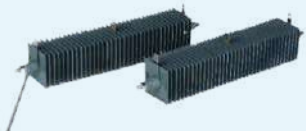
**HSN Code : 8505**

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	230875	9GDE01	378175	9GDF01	509415	9GDG01	1154115
 Coil Series for inch for mm	9GDD02 9GDD03	502915	9GDE02 9GDE03	765320	9GDF02 9GDF03	1014040	-	-
 Torque Adj. Screw Assembly	9GDD04	16555	9GDE04	26550	9GDF04	37720	9GDG04	79000
 Torque Spring	9GDD05	50940	9GDE05	70480	9GDF05	116695	9GDG05	250440
 Wedge Assembly with Bolt, for inch Spring and Washers for mm	9GDD20/ 9GDD22	6380	9GDE20/ 9GDE22	9565	9GDF20/ 9GDF22	14995	9GDG20/ 9GDG22	33195
 Pin set for Lever & Armature Consisting of a) Pin Lever 2 Nos. b) Pin Armature 2 Nos.	9GDD06* 9GDD06-2#	13515	9GDE06* 9GDE06-2#	13515	9GDF06* 9GDF06-2#	18975	9GDG06 <sup>++</sup>	57405
 Coller Set of Lever & Armature Consisting of a) Coller Lever 4 Nos. b) Coller Armature 4 Nos.	9GDD07	10540	9GDE07	10335	9GDF07	12915	9GDG07 <sup>+</sup>	21195
 Bush Set for Lever & Armature Consisting of a) Bush Lever 4 Nos. b) Bush Armature 4 Nos.	9GDD08	19410	9GDE08	20335	9GDF08	26025	9GDG08 <sup>++</sup>	46290
 Pull Rod Assembly with nuts, spring & washer	9GDD29	20485	9GDE29	28330	9GDF29	38060	9GDG29	99550
 Grease Nipple ( 1 set consist 8 Nos.)	9GDD09	2595	9GDE09	4455	9GDF09	4455	9GDG09	4930
 Shoe Assembly with Clamp & Bolts for inch ( 1 set consist 2 Nos.) for mm	9GDD10/ 9GDD11	51020	9GDE10/ 9GDE11	70575	9GDF10/ 9GDF11	112825	9GDG10/ 9GDG11 9GDG11A <sup>+++</sup>	253905 261805
 Shoe Lining without Bolts for inch ( 1 set consist 2 Nos.) for mm	9GDD12/ 9GDD13	17365	9GDE12/ 9GDE13	28330	9GDF12/ 9GDF13	41905	9GDG12/ 9GDG13 9GDG13A <sup>+++</sup>	79170 On request
 Shoe Lining with Bolts for inch ( 1 set consist 2 Nos.) for mm	9GDD23/ 9GDD26	21355	9GDE23/ 9GDE26	35325	9GDF23/ 9GDF26	54885	9GDG23/ 9GDG26 9GDG26A <sup>+++</sup>	97910 106360
 Dust Cover (made of jeans cloth & painted with fire reterdent al. paint).	9GDD30	12590	9GDE30	15560	9GDF30	16320	9GDG30	21145
 mm Size Cast Steel Drum without Hard Chrome Plating	9GDD14	67425	9GDE14	109755	9GDF14	152635	-	-
 mm Size Cast Steel Drum with Hard Chrome Plating	9GDD14P	100375	9GDE14P	160320	9GDF14P	233490	-	-
 Cast Steel Drum without Hard Chrome Plating* for inch	9GDD15	70315	9GDE15	114895	9GDF15	156825	-	-
 Cast Steel Drum with Hard Chrome Plating* for inch	9GDD15P	104905	9GDE15P	168080	9GDF15P	244700	9GDG15P	414580

\* 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.**

# Spares - DC Brakes



**GST to be charged extra**

## Spare Selenium Type Bridge Rectifiers

**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 1x16"/400mm	2x10"/250mm	2	41565
9GDX04	1x19"/500mm	2x13"/300mm 2x16"/400mm	2	54885
9GDX05	1x23"/600mm	2x19"/500mm	2	78260
9GDX06	-	2x23"/600mm	2	156590
9GDX07	1x30"/700 & 800mm	-	2	217135



**GST to be charged extra**

## Spare Resistances

**HSN Code : 8505**

Used in resistance and rectifier panels	Cat. No.	Ohms	Watts	List Price [₹]
CACA1*, CACB1*, CACC1*, CACD1*, CACJ2*	9GDX32	32	200	3655
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	

**GST to be charged extra**

## Optional Features - DC Brakes

**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	7445	14470	15250	
10	250	7445			
13	300	10205			
16	400	10925			
19	500	16975			
23	600	23775			

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

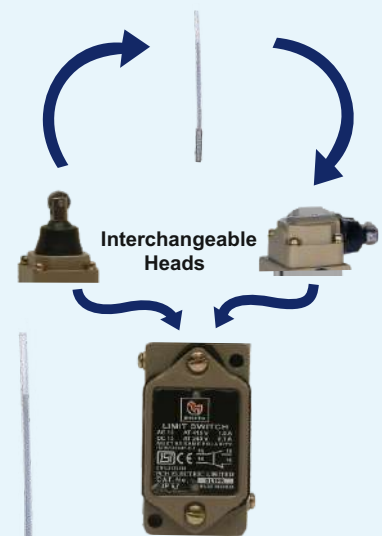


## Heavy Duty Limit Switch - Snap Action Type NL IP 67

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 Standard-76.2mm Adjustable	NLL1 NLL2 NLLA	3080	NLL1C NLL2C NLLAC	3355	NLL1-22 NLL2-22 NLLA-22	5090	NLL1-22C NLL2-22C NLLA-22C	5270
	Maintained Type Maintained Type Maintained Type	NLL1M NLL2M NLLAM	3455	NLL1MC NLL2MC NLLAMC	3625	NLL1M-22 NLL2M-22 NLLAM-22	5625	NLL1M-22C NLL2M-22C NLLAM-22C	5735
Push Roller	Top Side	NLTPR	3080	NLTPRC	3355	NLTPR-22	5090	NLTPR-22C	5270
		NLSPR	3380	NLSPRC	3625	NLSPR-22	5490	NLSPR-22C	5735
Push Button	Top Adjustable Side Adjustable	NLTPBA	3080	NLTPBAC	3355	NLTPBA-22	4950	NLTPBA-22C	5270
		NLSPBA	3380	NLSPBAC	3625	NLSPBA-22	5490	NLSPBA-22C	5735
Cat Whisker	Nylon Rod Steel Rod	NLCW	2705	NLCWC	2910	NLCW-22	4840	NLCW-22C	5090
		NLJW	3080	NLJWC	3290	NLJW-22	5090	NLJW-22C	5270

- 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



# Limit Switches



## Mini Limit Switch

HSN Code : 8536



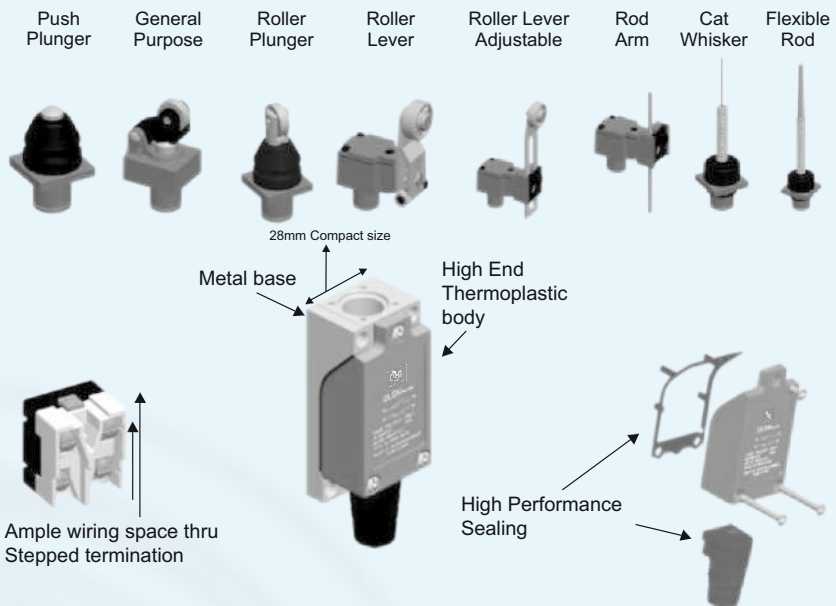
Type		Cat. No.	MRP [₹]
General Purpose Type		DLSMAR	1860
Top Plunger	Standard	DLSMPP	1860
Push Roller	Standard	DLSMRP	1860
Push Roller	Cross	DLSMRPX	1860
Roller Lever	30mm	DLSMRL	1860
Roller Lever	Adjustable	DLSMRLA	1915
Rod Arm	Adjustable	DLSMJWA	1915
Cat's Whisker	Steel Spring	DLSMSW	2030
Flexible Rod	Nylon	DLSMSR	2030

- 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



- 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

1NO+1NC			2NO+2NC		Lot Size
Type of Operator	Cat. No.	MRP [₹]	Cat. No.	MRP [₹]	
Roller Lever	PSRL-L or R	1495	PSRL-L-2 or R-2	2070	1
Six Inch Lever	PSSIL-L or R	1495	PSSIL-L-2 or R-2	2070	
Top Push Roller	PSTPR*	1495	PSTPR*-2	2070	
Top Push Button	PSTPB	1495	PSTPB-2	2070	
Type	Cat. No	MRP [₹]	Cat. No	MRP [₹]	Lot Size
Spare Contact Block	SP20S1	1400	SP20S2	1935	

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

# Limit Switches



## Limit Switch for 125°C Application\*

HSN Code : 8536

Type	Cat. No.	MRP [₹]
with 1NO + 1NC Roller Lever Top Push Roller	LL1-150S-M LTPR-150S-M	10900

\*Refer to our nearest sales office for specification &amp; details

## Heavy Duty General Purpose Limit Switch

HSN Code : 8536

Snap Action Type L	Angular Roller Top Plunger	LLGS LPGS	2065
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## Oil Tight Limit Switch - Snap Action Type L IP 65

HSN Code : 8536

Type	Description	Cat. No.	MRP [₹]
Roller Lever	Standard-38MM	LL1	4410
	Standard-76.2mm	LL2	
	Adjustable	LLA	
Push Roller	Maintained Type LL1	LL1M	4610
	Maintained Type LL2	LL2M	
	Maintained Type LLA	LLAM	
Push Button	Top	LTPR	4310
	Side	LSPR	4845
Push Button	Top Adjustable	LTPBA	4680
	Side Adjustable	LSPBA	
Cat Whisker	Nylon Rod	LCW	3535
	Steel Rod	LJW	4385

## Oil Tight Limit Switch - Spares

HSN Code : 8538

Description	Suitable for	Cat. No.	MRP [₹]
38 mm lever	NLL1, LL1	SP40L1	695
76.2 mm lever	NLL2, LL2	SP40L2	875
Adjustable lever	NLLA, LLA	SP40LA	875
Operating Head	LLGS, LPGS	SP40HLG	1255
Operating Head	Roller Lever Type	SP40HL	1360
Operating Head Maintained	Roller Lever Maintained Type	SP40HLM	1565
Operating Head	Top Push	SP 40HTP*	1360
	Side Push	SP 40HSP*	1505
Operating Head	Cat Whisker Nylon Rod	SP40CW	935
	Cat Whisker Steel Rod	SP40JW	1255
Limit Switch Unit Assembly 1NO+1NC	Type 'L' & 'NL' (Except LLGS / LPGS)	SP40S1	1850
Limit Switch Unit Assembly 2NO+2NC	Type 'L' & 'NL' (Except LLGS / LPGS)	SP40S2	3940
Limit Switch Unit Assembly 1NO+1NC	LLGS / LPGS	SP40S1WOM	1505
Oil tight Conduit	Type 'NL'	SP40CE	745

\* B = Button    R = Roller

## Bravo Series - Heavy Duty Limit Switch

HSN Code : 8536

Type	Description	Cat. No.	MRP [₹]
Roller Lever	Standard-38MM	BALRL38	1855
	Standard-76.2mm	BALRL76	
	Adjustable	BALRLA	
Push Roller	Top	BALPRT	1855
	Side	BALPRS	2040
Push Button	Top Adjustable	BALPBT	1855
	Side Adjustable	BALPBS	2040
Cat Whisker	Nylon Rod	BALCWN	1855
	Steel Rod	BALCWS	1890

### Salient Features:

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

**New**  
**BRAV Series**  
**LIMIT SWITCH**



**BALRL38**



**BALRL76**



**BALRLA**



**BALPRT**



**BALPBT**



**BALPRS**



**BALPBS**



**BALCWN**



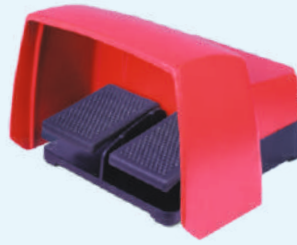
**BALCWS**

# 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	6560
BSG2MX2	FOOT SWITCH METAL GUARD & SHIELD 2NO+2NC	7510
BSG2CY1	FOOT SWITCH DOUBLE PEDAL 2 X 1NO+1NC	10095
BSG2PX1	FOOT SWITCH PLASTIC GUARD&SHIELD 1NO+1NC	3160
BSG2PX2	FOOT SWITCH PLASTIC GUARD&SHIELD 2NO+2NC	3870

# 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	6655	1
One	1NO+1NC	2	With Latch	FSGX1L	7005	
One	2NO+2NC	2	With Guard	FSGX2	7700	
One	2NO+2NC	2	With Latch	FSGX2L	8035	
Two	2NO+2NC	2	With Guard	FSGY1	8155	
Two	2NO+2NC	2	With Latch	FSGY1L	8670	
Two	4NO+4NC	2	With Guard	FSGY2	10150	
Two	4NO+4NC	2	With Latch	FSGY2L	10335	
Two	2NO+2NC	3	With Guard	FSGZ1M	8830	
Two	4NO+4NC	3	With Guard	FSGZ2M	10120	

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

### Spares for Foot Switch

**HSN Code : 8538**



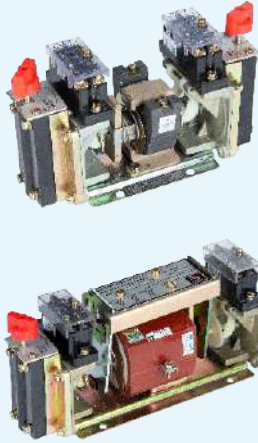
Description	Suitable For	Cat No.	MRP [₹]
Spare Contact Block 1NO+1NC	FSG & BSG	SP20S1	1400
Spare Contact Block 2NO+2NC	FSG & BSG	SP20S2	1935
Spare Cover with Guard	FSG	SP20CG	2675

- 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 Timers



## 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



## 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 <sup>■</sup> -0	7185	10765
	0.05 - 60 Sec	1NO + 1NC	-	KRTPN10 <sup>■</sup> -1	7425	11360
	0.05 - 180 Sec	1NO + 1NC	-	KRTPN10 <sup>■</sup> -3	8395	12390
	0.05 - 30 Sec	2NO + 2NC	-	KRTPN20 <sup>■</sup> -0	8075	11515
	0.05 - 60 Sec	2NO + 2NC	-	KRTPN20 <sup>■</sup> -1	8245	11655
	0.05 - 180 Sec	2NO + 2NC	-	KRTPN20 <sup>■</sup> -3	8860	12520
PNI	0.05 - 30 Sec	1NO + 1NC	1NO + 1NC	KRTPN11 <sup>■</sup> -0	8755	13675
	0.05 - 60 Sec	1NO + 1NC	1NO + 1NC	KRTPN11 <sup>■</sup> -1	9930	13675
	0.05 - 180 Sec	1NO + 1NC	1NO + 1NC	KRTPN11 <sup>■</sup> -3	10870	13840
	0.05 - 30 Sec	2NO + 2NC	2NO + 2NC	KRTPN22 <sup>■</sup> -0	10970	14290
	0.05 - 60 Sec	2NO + 2NC	2NO + 2NC	KRTPN22 <sup>■</sup> -1	11090	15030
	0.05 - 180 Sec	2NO + 2NC	2NO + 2NC	KRTPN22 <sup>■</sup> -3	11890	15900
PCN	0.05 - 30 Sec	1NO + 1NC	1NO + 1NC	KRTPCN11 <sup>■</sup> -0	12110	15870
	0.05 - 60 Sec	1NO + 1NC	1NO + 1NC	KRTPCN11 <sup>■</sup> -1	12450	16000
	0.05 - 180 Sec	1NO + 1NC	1NO + 1NC	KRTPCN11 <sup>■</sup> -3	14140	17675
	0.05 - 30 Sec	2NO + 2NC	2NO + 2NC	KRTPCN22 <sup>■</sup> -0	13320	17415
	0.05 - 60 Sec	2NO + 2NC	2NO + 2NC	KRTPCN22 <sup>■</sup> -1	13960	17620
	0.05 - 180 Sec	2NO + 2NC	2NO + 2NC	KRTPCN22 <sup>■</sup> -3	15740	19210

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	8630	-
	150	2NO + 2NC	-	KRTPN20A-3R	8630	-

## Accessories for Time Delay Relay HSN Code : 9107

Description	Cat. No.	MRP [₹]	Lot Size
Contact Block			
1NO+1NC Timed	SP20S3+	1640	1
2NO+2NC Timed	SP20S4+	2140	
1NO+1NC Inst.	SP20S5+	1640	
2NO+2NC Inst.	SP20S6+	2140	
Magnet Coil			
AC-PN Relays	SP20MC <sup>■</sup>	2230	1
AC-PNI & PCN Relays	SP20MC1 <sup>■</sup>	2230	
DC Relays	SP20MC2 <sup>■</sup>	7190	
Return Spring*	SP20RS	385	1
(PNI & PCN) Coil Clip*	SP20CC	610	
Magnet frame assembly without coil	SP20 MA/MA1	3240	1
Knob assembly	SP20KA	120	10

- High Repeat Accuracy
- Operating Temperature - 40<sup>0</sup> to +65<sup>0</sup>
- Mechanical and Electrical Life - 10 million operations

## Voltage Suffix Code

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

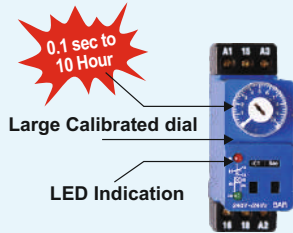
+ These are supplied with plastic cover

\* For DC Timers only

- To complete suffix voltage code refer to the table

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

# Electronic Timers



- 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

## 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

## Electronic Timers

HSN Code - 9107


Chronos Delay on make type BAR 0.1 Sec. - 10 Hrs. 240V AC; 24V AC/DC or 110V AC; 24V AC/DC or 12V DC	SBT00-00N	2435
Delay on break type BCR 0.1 Sec. - 10 Hrs. 240V AC; 24V AC/DC or 110V AC; 24V AC/DC or 12V DC	SBT01-00N	2650
Recycling type BDR 0.1 Sec. - 10 Hrs. 240V AC; 24V AC/DC or 110V AC; 24V AC/DC	SBT02-00N	3485
Multifunction type BLR 0.1 Sec. - 10 Hrs. 240V AC; 24V AC/DC or 110V AC; 24V AC/DC	SBT03-00N	2650

## Voltage Codes

Type	Voltage	Voltage Code
B	240V AC; 24 V AC/DC	1
	110 V AC; 24 V AC/DC	2
	12 V DC	5

## 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	2505

## **New** BTR17 - Star Delta Timer 17.5mm Width

HSN Code - 9107

- 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

Product	Description	Cat No.	MRP [₹]
	Star-Delta Timer 0-60 Sec 240-415V AC	BTR174622	1035

# Electronic Timers



**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	825
	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	990
	BTR171201	OFF delay Timer 110V AC/24V AC/DC	0.3 sec to 30Hr	990
	BTR171501	OFF delay Timer 12V DC	0.3 sec to 30Hr	1050
	BTR172011	Cyclic timer 12-240V AC/DC	0.1 sec to 100Hr	1690
	BTR173011	Multi-function timer 12-240V AC/DC, 12 Function	0.1 sec to 100Hr	1690

**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 2 C/O Contact	0.1 sec to 100Hr	1425
	BTR221012	OFF delay Timer 24 - 240V AC/DC 2 C/O Contact	0.1 sec to 100Hr	1300
	BTR222012	Cyclic Timer 24 - 240V AC/DC 2 C/O Contact	0.1 sec to 100Hr	1770
	BTR223012	Multifunction Timer 24 - 240V AC/DC 2 C/O Contact	0.1 sec to 100Hr	1710

# AC Drives



## 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.

## @PROX Range

### Standard Version of Inductive Proximity Switches

HSN Code - 8536



- 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 Specifications

- 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

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	1435	10
DINE8SN10	8	1.5	NPN-NO	100	1435	
DINE12SP10	12	2	PNP-NO	200	1190	
DINE12SN10	12	2	NPN-NO	200	1190	
DINE18SP10	18	5	PNP-NO	200	1245	
DINE18SN10	18	5	NPN-NO	200	1245	
DINE30SP10	30	10	PNP-NO	400	1670	
DINE30SN10	30	10	NPN-NO	400	1670	
Non Flush Version Nominal Voltage 12-30V DC 3 Wire Output LED Indication Integrated cable 3C/2M						
DINE8NP10	8	2	PNP-NO	100	1435	10
DINE8NN10	8	2	NPN-NO	100	1435	
DINE12NP10	12	4	PNP-NO	200	1190	
DINE12NN10	12	4	NPN-NO	200	1190	
DINE18NP10	18	8	PNP-NO	200	1245	
DINE18NN10	18	8	NPN-NO	200	1245	
DINE30NP10	30	15	PNP-NO	400	1670	
DINE30NN10	30	15	NPN-NO	400	1670	
Flush Version Nominal Voltage 240V AC* 2 Wire Output LED Indication Integrated cable 3C/2M						
DINE12SA10	12	2	NO	200	1535	10
DINE12SA01	12	2	NC	200	1535	
DINE18SA10	18	5	NO	400	1620	
DINE18SA01	18	5	NC	400	1620	
DINE30SA10	30	10	NO	400	1875	
DINE30SA01	30	10	NC	400	1875	
Non Flush Version Nominal Voltage 240V AC* 2 Wire Output LED Indication Integrated cable 3C/2M						
DINE12NA10	12	4	NO	200	1535	10
DINE12NA01	12	4	NC	200	1535	
DINE18NA10	18	8	NO	400	1620	
DINE18NA01	18	8	NC	400	1620	
DINE30NA10	30	15	NO	400	1875	
DINE30NA01	30	15	NC	400	1875	

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

## @PROX Range

### Capacitive Proximity Switches

HSN Code - 8536



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

#### General Specifications

- 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	2935	10
DCAE18SP10	18	1 to 5	PNP-NO	400	2935	
DCAE30SN10	30	1 to 10	NPN-NO	400	3350	
DCAE30SP10	30	1 to 10	PNP-NO	400	3350	
Non Flush Version 12-30V DC 3 Wire Output LED Indication Integrated 3C/2M						
DCAE18NN10	18	2 to 10	NPN-NO	400	2935	10
DCAE18NP10	18	2 to 10	PNP-NO	400	2935	
DCAE30NN10	30	3 to 15	NPN-NO	400	3350	
DCAE30NP10	30	3 to 15	PNP-NO	400	3350	

### 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	4445	10
DPHE18D2P11	18	200	PNP-NO+NC	200	4445	
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	4455	10
DPHE18RRP11	18	1000	PNP-NO+NC	200	4455	
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	5330	10
DPHE18TBRN11	18	5000	NPN-NO+NC	200	5330	

Note :

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

## @PROX 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	
Female Connectors						
Cat. No.	Description				MRP [₹]	10
DM8K3	M8 3-Wire straight connector w/o LED & 2 m cable				1160	
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	2515	10
DINE18LINMA	18	5	4 - 20 mA	PVC Cable	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

## @PROX 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	1820	10
DINE8SN10S	8	1.5	NPN-NO	200	1820	
DINE12SP10S	12	2	PNP-NO	200	1275	
DINE12SN10S	12	2	NPN-NO	200	1275	
DINE18SP10S	18	5	PNP-NO	200	1285	
DINE18SN10S	18	5	NPN-NO	200	1285	
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	1820	10
DINE8NN10S	8	2	NPN-NO	200	1820	
DINE12NP10S	12	4	PNP-NO	200	1275	
DINE12NN10S	12	4	NPN-NO	200	1275	
DINE18NP10S	18	8	PNP-NO	200	1285	
DINE18NN10S	18	8	NPN-NO	200	1285	

### 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	1275	10
DINE5025SP10P	50x25x10	5	PNP-NO	200	1330	
DINE1717SN10P	17x17x30	5	NPN-NO	200	1275	
DINE5025SN10P	50x25x10	5	NPN-NO	200	1330	

\* 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

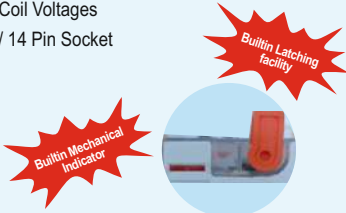
# Plug in Relays - APA Series



## 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)

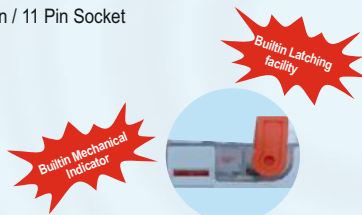
35 mm DIN rail mounting  
Rating : 6A, 12A, 300V



## 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 : 10A, 250V



## Plug in Relays - Miniature (APAM)

HSN Code - 8536

Coil Voltage	With LED Indication		Contacts	Lot Size
	Cat. No.	MRP [₹]		
14 Pin, Contact rating - 6A (Res.) at 30V DC/250V AC; Mechanical indicator with manual testing/latching lever				
12V DC	APAM412DLE	695	4 C/O	10
24V DC	APAM424DLE	645		
110V DC	APAM4110DLE	795		
24V AC	APAM424ALE	760		
110V AC	APAM4110ALE	760		
230V AC	APAM4230ALE	745		
8 Pin, Contact rating - 6A (Res.) at 30V DC/250V AC; Mechanical indicator with manual testing/latching lever				
12V DC	APAM212DLE	635	2 C/O	10
24V DC	APAM224DLE	610		
110V DC	APAM2110DLE	720		
24V AC	APAM224ALE	710		
110V AC	APAM2110ALE	735		
230V AC	APAM2230ALE	745		
8 Pin, Contact rating - 12A (Res.) at 30V DC/250V AC; Mechanical indicator with manual testing/latching lever				
12V DC	APAN212DLE	670	2 C/O	10
24V DC	APAN224DLE	660		
110V DC	APAN2110DLE	745		
24V AC	APAN224ALE	735		
110V AC	APAN2110ALE	760		
230V AC	APAN2230ALE	785		

## 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	350	10
APSM8	8 pin socket suitable for APAM / APAN / ASPM plug in relay 12A	280	
APAMCL	Holding clamp for APAM / APAN plug in relay	75	

## Plug In Relays - Universal (APAU)

HSN Code - 8536

Coil Voltage	With LED Indication		Contacts	Lot Size
	Cat. No.	MRP [₹]		
8 Pin, Contact rating - 10A (Res.) at 30V DC/250V AC; Mechanical indicator with manual testing/latching lever				
12V DC	APAU212DLE	1575	2 C/O	10
24V DC	APAU224DLE	1515		
110V DC	APAU2110DLE	1250		
24V AC	APAU224ALE	1175		
110V AC	APAU2110ALE	1250		
230V AC	APAU2230ALE	1250		
11 Pin, Contact rating - 10A (Res.) at 30V DC/250V AC; Mechanical indicator with manual testing/latching lever				
12V DC	APAU312DLE	1590	3 C/O	10
24V DC	APAU324DLE	1525		
110V DC	APAU3110DLE	1340		
24V AC	APAU324ALE	1315		
110V AC	APAU3110ALE	1675		
230V AC	APAU3230ALE	1725		

## 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	410	10
APSU8	8 pin socket for APAU / ASPU / ASPS plug in relay	390	
APAUCL	Holding Clamp for APAU Plug in relay	75	

# Plug in Relays-ASP Series



## Plug In Relays - Universal (ASPU)

HSN Code - 8536



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

Coil Voltage	Cat. No.	Contacts	MRP [₹]	Lot Size
<b>8 Pin - contact rating 10A (Res.) at 24V DC/240V AC, LED Indication</b>				
12V DC	ASPU212DLE	2 C/O	550	10
24V DC	ASPU224DLE		550	
110V DC	ASPU2110DLE		630	
12V AC	ASPU212ALE		630	
24V AC	ASPU224ALE		675	
110V AC	ASPU2110ALE		665	
240V AC	ASPU2240ALE		735	
<b>11 Pin - contact rating 10A (Res.) at 24V DC/240V AC, LED Indication</b>				
12V DC	ASPU312DLE	3 C/O	665	10
24V DC	ASPU324DLE		675	
110V DC	ASPU3110DLE		735	
24V AC	ASPU324ALE		765	
110V AC	ASPU3110ALE		745	
240V AC	ASPU3240ALE		815	

## Plug In Relays - Universal (ASPS)

HSN Code - 8536



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

Coil Voltage	Cat. No.	Contacts	MRP [₹]	Lot Size
<b>8 Pin - contact rating 5A (Res.) at 24V DC/240V AC, LED Indication</b>				
12V DC	ASPS212DLE	2 C/O	495	10
24V DC	ASPS224DLE		495	
48V DC	ASPS248DLE		630	
110V DC	ASPS2110DLE		560	
12V AC	ASPS212ALE		545	
24V AC	ASPS224ALE		550	
110V AC	ASPS2110ALE		535	
240V AC	ASPS2240ALE		595	
<b>11 Pin - contact rating 5A (Res.) at 24V DC/240V AC, LED Indication</b>				
12V DC	ASPS312DLE	3 C/O	595	10
24V DC	ASPS324DLE		605	
48V DC	ASPS348DLE		760	
110V DC	ASPS3110DLE		710	
24V AC	ASPS324ALE		575	
110V AC	ASPS3110ALE		630	
240V AC	ASPS3240ALE		710	

## Sockets for ASPU / ASPS Plug in Relay

HSN Code - 8538

Cat. No.	Type	MRP [₹]	Lot Size
<b>10A, 240V AC, Screw Terminals, 35mm DIN Rail Mounting</b>			
ASSU11	SOCKET 11 PIN FOR ASPS/ASPU Relay	280	10
ASSU8	SOCKET 8 PIN FOR ASPS/ASPU Relay	215	

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

# Plug in Relays-ASP Series



## Plug In Relays - Miniature (ASPM)

HSN Code - 8536



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

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	465	20
24V DC	ASPM424DLE		455	
48V DC	ASPM448DLE		505	
110V DC	ASPM4110DLE		465	
24V AC	ASPM424ALE		565	
110V AC	ASPM4110ALE		510	
240V AC	ASPM4240ALE		530	
8 Pin - contact rating 5A (Res.) at 24V DC/240V AC, LED Indication				
12V DC	ASPM212DLE	2 C/O	385	20
24V DC	ASPM224DLE		385	
48V DC	ASPM248DLE		600	
110V DC	ASPM2110DLE		460	
24V AC	ASPM224ALE		455	
110V AC	ASPM2110ALE		465	
240V AC	ASPM2240ALE		465	

## 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	360	20
ASSM8	SOCKET 8 PIN FOR ASPM Relay	290	

\* 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



# Bhartia Enclosure 2.0



- Available in 45 different variants
- Single/Double door version
- Min. Size : 200Wx300Hx120D mm
- Max. Size : 1200Wx1400Hx400D mm
- Degree of protection  
IP66 - IK10 for Single door enclosure  
IP55 - IK10 for Double door enclosure
- CE Certified



## Bhartia Enclosure 2.0

HSN CODE: 8538

Type	SIZE ( WxHxD) mm	MOQ Nos.	Cat No.	List Price [₹]
SINGLE DOOR ENCLOSURE	200X300X120	1	BIL-40000	3955
SINGLE DOOR ENCLOSURE	200X300X150	1	BIL-40010	4310
SINGLE DOOR ENCLOSURE	250X300X150	1	BIL-40020	4475
SINGLE DOOR ENCLOSURE	300X300X150	1	BIL-40030	4820
SINGLE DOOR ENCLOSURE	300X300X210	1	BIL-40040	5140
SINGLE DOOR ENCLOSURE	300X400X150	1	BIL-40050	5360
SINGLE DOOR ENCLOSURE	300X400X210	1	BIL-40060	6005
SINGLE DOOR ENCLOSURE	400X300X150	1	BIL-40070	5250
SINGLE DOOR ENCLOSURE	400X300X210	1	BIL-40080	5890
SINGLE DOOR ENCLOSURE	400X400X150	1	BIL-40090	6005
SINGLE DOOR ENCLOSURE	400X400X210	1	BIL-40100	6370
SINGLE DOOR ENCLOSURE	400X500X150	1	BIL-40110	6785
SINGLE DOOR ENCLOSURE	400X500X210	1	BIL-40120	7190
SINGLE DOOR ENCLOSURE	400X600X210	1	BIL-40140	8475
SINGLE DOOR ENCLOSURE	400X600X350	1	BIL-40150	10510
SINGLE DOOR ENCLOSURE	500X500X210	1	BIL-40160	8475
SINGLE DOOR ENCLOSURE	500X500X300	1	BIL-40170	10165
SINGLE DOOR ENCLOSURE	500X600X210	1	BIL-40180	9720
SINGLE DOOR ENCLOSURE	500X700X210	1	BIL-40190	11050
SINGLE DOOR ENCLOSURE	500X700X300	1	BIL-40200	12715
SINGLE DOOR ENCLOSURE	600X400X210	1	BIL-40210	8635
SINGLE DOOR ENCLOSURE	600X400X300	1	BIL-40220	11100
SINGLE DOOR ENCLOSURE	600X600X210	1	BIL-40230	10425
SINGLE DOOR ENCLOSURE	600X600X300	1	BIL-40240	12520
SINGLE DOOR ENCLOSURE	600X600X350	1	BIL-40250	13280
SINGLE DOOR ENCLOSURE	600X800X210	1	BIL-40260	12585
SINGLE DOOR ENCLOSURE	600X800X250	1	BIL-40270	14435
SINGLE DOOR ENCLOSURE	600X800X300	1	BIL-40280	14405
SINGLE DOOR ENCLOSURE	600X1000X210	1	BIL-40290	15870
SINGLE DOOR ENCLOSURE	600X1000X300	1	BIL-40300	18000
SINGLE DOOR ENCLOSURE	600X1200X300	1	BIL-40310	20670
SINGLE DOOR ENCLOSURE	800X600X300	1	BIL-40320	14320
SINGLE DOOR ENCLOSURE	800X800X210	1	BIL-40330	15820
SINGLE DOOR ENCLOSURE	800X800X300	1	BIL-40340	16795
SINGLE DOOR ENCLOSURE	800X1000X250	1	BIL-40350	19090
SINGLE DOOR ENCLOSURE	800X1000X300	1	BIL-40360	19320
SINGLE DOOR ENCLOSURE	800X1200X300	1	BIL-40370	24065
DOUBLE DOOR ENCLOSURE	1000X800X210	1	BIL-40380	20190
DOUBLE DOOR ENCLOSURE	1000X800X300	1	BIL-40390	23145
DOUBLE DOOR ENCLOSURE	1000X1000X300	1	BIL-40400	26920
DOUBLE DOOR ENCLOSURE	1000X1200X300	1	BIL-40410	30940
DOUBLE DOOR ENCLOSURE	1000X1400X300	1	BIL-40420	37010
DOUBLE DOOR ENCLOSURE	1000X1400X400	1	BIL-40430	40000
DOUBLE DOOR ENCLOSURE	1200X1400X300	1	BIL-40440	39015
DOUBLE DOOR ENCLOSURE	1200X1400X400	1	BIL-40450	42945

MOQ : Minimum order quantity in nos.

### Technical Particulars (Bhartia Enclosure 2.0)

- 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

Note: Cutout charges will be extra

: Wall mounting bracket set is an additional accessory  
(For Bhartia enclosure 2.0 and Terminal Box 2.0 it not a part of standard packing)

HSN CODE: 8538

Type	Cat No.	MOQ Nos.	List Price [₹]
Set of Wall Mounting Bracket (small)	BIL-WM-S	10	225
Set of Wall Mounting Bracket (big)	BIL-WM-B	10	255
Wall Mounting Bracket Kit 20mm	BIL-WM-H20	10	380

Note :

- \* Set of wall mounting bracket (small) is suitable for all range of terminal boxes 2.0 and Bhartia Enclosure 2.0 upto size : 400x500x200mm.
- \* Set of wall mounting bracket (big) is suitable for Bhartia Enclosure 2.0 beyond size : 400x500x200mm.

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

**\*GST to be charged extra**

[www.bchindia.com](http://www.bchindia.com)

# Terminal Box 2.0



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



## Terminal Box 2.0

HSN CODE: 8538

SIZE ( W x H x D) mm	MOQ	Cat No.	List Price [₹]
150X150X80	1	BIL-30000	1930
200X150X80	1	BIL-30010	2130
300X150X80	1	BIL-30020	2460
200X200X80	1	BIL-30030	2240
300X200X80	1	BIL-30040	2390
400X200X80	1	BIL-30050	2555
600X200X80	1	BIL-30060	3470
150X150X120	1	BIL-30070	2200
200X150X120	1	BIL-30080	2275
300X150X120	1	BIL-30090	2510
400X150X120	1	BIL-30100	2950
200X200X120	1	BIL-30110	2460
300X200X120	1	BIL-30120	2725
400X200X120	1	BIL-30130	3095
500X200X120	1	BIL-30140	3880
600X200X120	1	BIL-30150	4290
300X300X120	1	BIL-30160	3300
400X300X120	1	BIL-30170	3955
500X300X120	1	BIL-30180	4270
600X300X120	1	BIL-30190	5160
400X400X120	1	BIL-30200	4475
600X400X120	1	BIL-30210	5620

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

## Technical Particulars (Terminal Box 2.0)

- 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

Note: Cutout charges will be extra

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

**\*GST to be charged extra**

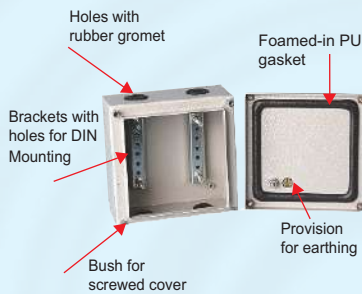
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- Fabricated from 1.2/1.5 mm stainless steel sheet
- Mounting Plate made up of 2.0mm Galvanised steel
- Cable entry plate 2.0mm SS 304 provided at bottom
- SS grade 304
- Foamed - in PU gasket
- Box upto BIL - 90405020 is made up of 1.2 mm SS & above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



- 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

## 'BCH - SS' (Stainless Steel)

HSN Code : 8538

Type	Size (WxHxD) mm	MOQ Nos.	Cat No.	List Price [₹]
SINGLE DOOR BOX	200X300X150	1	BIL-90203015	8390
SINGLE DOOR BOX	300X300X200	1	BIL-90303020	11620
SINGLE DOOR BOX	400X400X200	1	BIL-90404020	15370
SINGLE DOOR BOX	400X500X200	1	BIL-90405020	17120
SINGLE DOOR BOX	400X600X200	1	BIL-90406020	19620
SINGLE DOOR BOX	500X600X200	1	BIL-90506020	25130
SINGLE DOOR BOX	600X600X200	1	BIL-90606020	26875
SINGLE DOOR BOX	600X800X200	1	BIL-90608020	31945
SINGLE DOOR BOX	500X700X300	1	BIL-90507030	32445
SINGLE DOOR BOX	800X800X300	1	BIL-90808030	44670

MOQ - Minimum order quantity in nos.

Type	Cat No.	MOQ Nos.	List Price [₹]
SET OF SS WALL MOUNTING BRACKET (SMALL)	BIL-WM-S-SS	5	650
SET OF SS WALL MOUNTING BRACKET (BIG)	BIL-WM-B-SS	5	865

## 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	1815	BIL-80000	2085
200x150x80	-			BIL-80100	2295
300x150x80	1	BIL-70010	2135	BIL-80010	2650
200x200x80	1	BIL-70020	2045	BIL-80020	2415
300x200x80	1	BIL-70030	2240	BIL-80030	2580
400x200x80	-			BIL-80110	2755
600x200x80	-			BIL-80130	3750
150x150x120	1	BIL-70040	2010	BIL-80040	2370
200x150x120	-			BIL-80150	2460
300x150x120	1	BIL-70050	2385	BIL-80050	2695
200x200x120	1	BIL-70060	2325	BIL-80060	2650
300x200x120	1	BIL-70070	2590	BIL-80070	2935
400x200x120	1	BIL-70080	2900	BIL-80080	3330
300x300x120	1	BIL-70090	3090	BIL-80090	3560
400x150x120	-			BIL-80170	3180
400x300x120	1	BIL-70180	3420	BIL-80180	4270
400x400x120	1	BIL-70190	4020	BIL-80190	4825
500x200x120	1	BIL-70200	3525	BIL-80200	4185
500x300x120	1	BIL-70210	3910	BIL-80210	4605
600x200x120	1	BIL-70220	3940	BIL-80220	4615
600x300x120	1	BIL-70230	4815	BIL-80230	5570
600x400x120	1	BIL-70240	5285	BIL-80240	6060
800x200x120	1	BIL-70250	5570	BIL-80250	6385
800x400x120	1	BIL-70260	6775	BIL-80260	7670

MOQ-Minimum order quantity in nos.

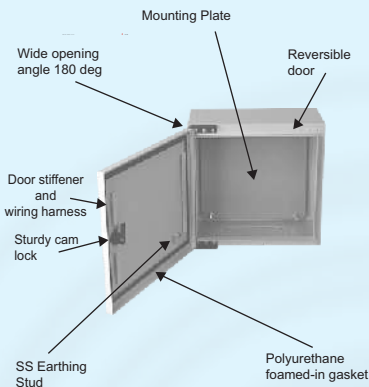
\*List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.

**\*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	10	225
Set of Wall Mounting bracket (big)	BIL-WM-B	10	255
Set of Wall Mounting bracket Kit 20mm	BIL-WM-H20	10	380

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	3655	BIL-60000	3840
SINGLE DOOR BOX	200x300x150	1	BIL-50010	4645	BIL-60010	4735
SINGLE DOOR BOX	250x300x150	1	BIL-50020	4825	BIL-60020	4975
SINGLE DOOR BOX	300x300x150	1	BIL-50030	5205	BIL-60030	5410
SINGLE DOOR BOX	300x300x200	1	BIL-50050	5545	BIL-60050	5870
SINGLE DOOR BOX	300x400x150	1	BIL-50060	5780	BIL-60060	6085
SINGLE DOOR BOX	300x400x200	1	BIL-50080	6490	BIL-60080	6525
SINGLE DOOR BOX	400x300x150	1	BIL-50090	5665	BIL-60090	6000
SINGLE DOOR BOX	400x300x200	1	BIL-50110	6350	BIL-60110	6445
SINGLE DOOR BOX	400x400x150	1	BIL-50120	6490	BIL-60120	6610
SINGLE DOOR BOX	400x400x200	1	BIL-50140	6870	BIL-60140	7080
SINGLE DOOR BOX	400x500x150	1	BIL-50150	7315	BIL-60150	7700
SINGLE DOOR BOX	400x500x200	1	BIL-50170	7755	BIL-60170	7975
SINGLE DOOR BOX	500x500x200	1	BIL-50180	9140		
SINGLE DOOR BOX	400x600x200	1	BIL-50190	9140	BIL-60190	9270
SINGLE DOOR BOX	500x600x200	1	BIL-50210	10485	BIL-60210	10800
SINGLE DOOR BOX	500x700x200	1	BIL-50220	11920		
SINGLE DOOR BOX	500x700x300	1	BIL-50230	13710		
SINGLE DOOR BOX	600x400x200	1	BIL-50240	9315	BIL-60240	9660
SINGLE DOOR BOX	600x400x300	1	BIL-50250	11970		
SINGLE DOOR BOX	600x500x200	1	BIL-50260	10800	BIL-60260	11670
SINGLE DOOR BOX	600x600x200	1	BIL-50270	11240		
SINGLE DOOR BOX	600x600x300	1	BIL-50280	13510		
SINGLE DOOR BOX	600x700x200	1	BIL-50290	13540		
SINGLE DOOR BOX	600x800x200	1	BIL-50300	13575		
SINGLE DOOR BOX	600x800x300	1	BIL-50320	15535		
SINGLE DOOR BOX	600x1000x200	1	BIL-50330	17120		
SINGLE DOOR BOX	600x1000x300	1	BIL-50340	19425		
SINGLE DOOR BOX	800x800x300	1	BIL-50310	18120		
SINGLE DOOR BOX	800x1000x200	1	BIL-50350	20175		
SINGLE DOOR BOX	800x1000x250	1	BIL-50360	20595		
SINGLE DOOR BOX	800x1000x300	1	BIL-50390	20840		
SINGLE DOOR BOX	800x1200x300	1	BIL-50395	25965		
DOUBLE DOOR BOX	1000x800x200	1	BIL-50500	21775		
DOUBLE DOOR BOX	1000x800x300	1	BIL-50520	24970		
DOUBLE DOOR BOX	1000x1000x300	1	BIL-50540	29035		
DOUBLE DOOR BOX	1000x1200x300	1	BIL-50550	33380		
DOUBLE DOOR BOX	1000x1400x300	1	BIL-50560	39920		
DOUBLE DOOR BOX	1200x1400x300	1	BIL-50570	44380		
DOUBLE DOOR BOX	1000x1400x400	1	BIL-50580	42100		
DOUBLE DOOR BOX	1200x1400x400	1	BIL-50590	46330		

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	1070	600WX200D	BIL-16-CAN-6020	1	2050
250WX150D	BIL-12-CAN-2515	1	1215	600WX300D	BIL-16-CAN-6030	1	2510
300WX150D	BIL-12-CAN-3015	1	1300	800WX300D	BIL-16-CAN-8030	1	3055
300WX200D	BIL-12-CAN-3020	1	1410	800WX200D	BIL-16-CAN-8020	1	2485
400WX150D	BIL-12-CAN-4015	1	1470	800WX250D	BIL-16-CAN-8025	1	2680
400WX200D	BIL-12-CAN-4020	1	1620	1000WX200D	BIL-16-CAN-1020	1	2910
500WX200D	BIL-12-CAN-5020	1	1840	1000WX300D	BIL-16-CAN-1030	1	3585
500WX300D	BIL-12-CAN-5030	1	2250				

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

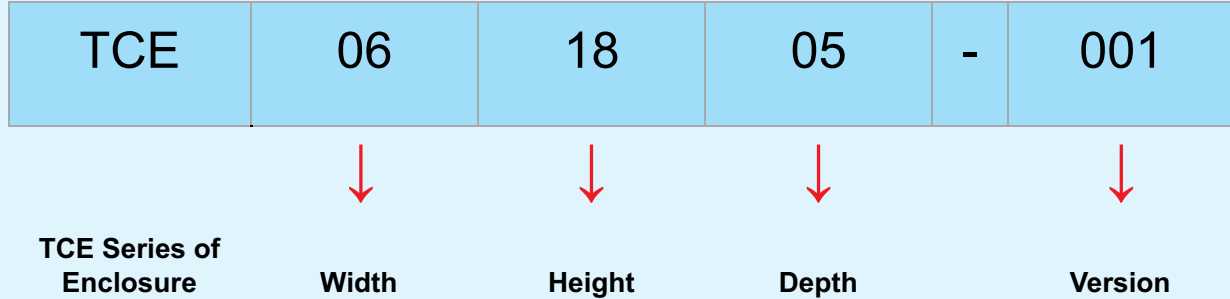
\*GST to be charged extra

# TCE Series Enclosure



## TCE Series Enclosure Code Selection |

Example:-



## 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**

# TCE Series Enclosure



## 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 to enclosure RAL-7035

**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

# TCE Series Enclosure



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	37885	42200	30085	34740	
800	1800	400	TCE081804	45250	49655	34400	39775	
1000	1800	400	TCE101804	62280	67120	48305	52825	
1200	1800	400	TCE121804	69990	78175	54295	60185	
600	1800	500	TCE061805	39580	43565	32110	36085	
800	1800	500	TCE081805	46080	51880	36830	41250	
1000	1800	500	TCE101805	63960	68830	50390	55560	
1200	1800	500	TCE121805	71320	81030	57130	64185	
800	1800	600	TCE081806	49130	51550	39985	43775	59900
800	1800	800	TCE081808	51270	56405	42645	47765	68425
600	2000	400	TCE062004	40825	45900	31355	37245	
800	2000	400	TCE082004	47530	52185	36310	41225	
1000	2000	400	TCE102004	68055	71865	52920	56600	
1200	2000	400	TCE122004	73110	80805	58500	66310	
600	2000	500	TCE062005	43330	46930	35570	40200	
800	2000	500	TCE082005	48620	53660	37460	42710	
1000	2000	500	TCE102005	67335	75345	53660	59545	
1200	2000	500	TCE122005	73625	81030	57880	64185	
600	2000	600	TCE062006	43975	48305	37665	41995	58125
800	2000	600	TCE082006	50300	54805	40390	44915	65050
1000	2000	600	TCE102006	68405	78480	54485	63525	95160
1200	2000	600	TCE122006	75080	83240	60805	68600	101060
600	2000	800	TCE062008	45250	48620	37790	42510	63325
800	2000	800	TCE082008	52395	56275	42820	46890	68530
1000	2000	800	TCE102008	75080	80055	57880	64185	93505
1200	2000	800	TCE122008	78925	87540	64835	71320	104440
600	2200	600	TCE062206	49565	54295	39345	46705	65050
800	2200	600	TCE082206	56085	59765	45150	49775	69750
1000	2200	600	TCE102206	77655	83640	63810	69790	97755
1200	2200	600	TCE122206	80690	90075	62715	70065	112030
600	2200	800	TCE062208	54040	58620	41465	47870	62385
800	2200	800	TCE082208	65230	69030	50080	54485	75465
1000	2200	800	TCE102208	82700	89100	67120	72190	103835
1200	2200	800	TCE122208	89445	94485	73245	78175	117100

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

\*GST to be charged extra

# TCE Series Enclosure



## TCE Bottom Plinth 100mm Height

HSN Code: 8538

Size in MM		Cat No	LP [₹]
Width (W)	Depth (D)		
600	400	TCEPL0604	3415
800	400	TCEPL0804	3895
1000	400	TCEPL1004	4360
1200	400	TCEPL1204	4775
600	500	TCEPL0605	3655
800	500	TCEPL0805	4100
1000	500	TCEPL1005	4575
1200	500	TCEPL1205	4985
600	600	TCEPL0606	3865
800	600	TCEPL0806	4295
1000	600	TCEPL1006	4740
1200	600	TCEPL1206	5170
600	800	TCEPL0608	4295
800	800	TCEPL0808	4740
1000	800	TCEPL1008	5125
1200	800	TCEPL1208	5630



## TCE Side Panel

HSN Code: 8538

Size in MM		Cat No	LP [₹]
Height (H)	Depth (D)		
1800	400	TCESP0418	6805
1800	500	TCESP0518	7905
1800	600	TCESP0618	8795
1800	800	TCESP0818	11720
2000	400	TCESP0420	7310
2000	500	TCESP0520	8600
2000	600	TCESP0620	9550
2000	800	TCESP0820	12295
2200	600	TCESP0622	11060
2200	800	TCESP0822	14375

MOQ-Minimum order quantity in nos.

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**

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# TCE Series Enclosure



## TCE Series Enclosure Accessories

### Baying system

HSN Code: 8538

Sl. No	Description	Cat No	LP [₹]
1	Baying Kit	TCE-14280	2530
2	Combination Angle (Pack of 2)	TCE-14281	1330

### Mounting plate filler profile

HSN Code: 8538

Sl. No	Description	Cat No	LP [₹]
1	Filler plate for 1800mm Height	TCE-FP-1800	1925
2	Filler plate for 2000mm Height	TCE-FP-2000	2120
3	Filler plate for 2200mm Height	TCE-FP-2200	2325

### Wiring plan pocket

HSN Code: 8538

Sl. No	Description	Cat No	LP [₹]
1	File pocket 500mm Width	TCE-TPKT-500	940
2	File pocket 600mm Width	TCE-TPKT-600	1125
3	File pocket 800mm Width	TCE-TPKT-800	1460

### Lamp rail

HSN Code: 8538

Sl. No	Description	Cat No	LP [₹]
1	Lamp rail 600mm Width	TCE-LAMP-RAIL-600	270
2	Lamp rail 800mm Width	TCE-LAMP-RAIL-800	370
3	Lamp rail 1000mm Width	TCE-LAMP-RAIL-1000	455
4	Lamp rail 1200mm Width	TCE-LAMP-RAIL-1200	555

### Limit switch with fixing arrangement

HSN Code: 8538

Sl. No	Description	Cat No	LP [₹]
1	BCH Limit switch	TCE-LC	1125

### Punched section for depth

HSN Code: 8538

Sl. No	Description	Cat No	LP [₹]
1	Punched section 400mm depth	TCE-PSD-400	665
2	Punched section 500mm depth	TCE-PSD-500	940
3	Punched section 600mm depth	TCE-PSD-600	1200
4	Punched section 800mm depth	TCE-PSD-800	1600

### Punched section for width

HSN Code: 8538

Sl. No	Description	Cat No	LP [₹]
1	Punched section 600mm width	TCE-PSW-600	1330
2	Punched section 800mm width	TCE-PSW-800	1600
3	Punched section 1000mm width	TCE-PSW-1000	1865
4	Punched section 1200mm width	TCE-PSW-1200	2120

### Air Filter Unit

HSN Code: 8538

Sl. No	Description	Cat No	LP [₹]
1	Snap fit air filter 148x148	BIL-SF-1414	1045
2	Snap fit air filter 204x204	BIL-SF-2020	1570
3	Snap fit air filter 255x255	BIL-SF-2525	1735
4	Snap fit air filter 204x204 with mounting adaptor	BIL-SFMA-2020	1830
5	Snap fit air filter 255x255 with mounting adaptor	BIL-SFMA-2525	2290

### Door Stay

HSN Code: 8538

Sl. No	Description	Cat No	LP [₹]
1	Door Stay for TCE Series	TCE-DS	1450

\*GST to be charged extra \*List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms &amp; Conditions.

## 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	35360	39385	28080	32420	TPL 061804	3435	TSC 061804	6855
800 x 1800 x 400	TME 081804	42240	46350	32115	37120	TPL 081804	3910	TSC 081804	6855
1000 x 1800 x 400	TME 101804	58135	62655	45080	49315	TPL 101804	4385	TSC 101804	6855
1200 x 1800 x 400	TME 121804	65310	72960	50680	56175	TPL 121804	4815	TSC 121804	6855
600 x 1800 x 500	TME 061805	36935	40665	29965	33680	TPL 061805	3680	TSC 061805	7960
800 x 1800 x 500	TME 081805	43010	48425	34385	38500	TPL 081805	4145	TSC 081805	7960
1000 x 1800 x 500	TME 101805	59715	64230	47045	51870	TPL 101805	4615	TSC 101805	7960
1200 x 1800 x 500	TME 121805	66575	75635	53320	59915	TPL 121805	5020	TSC 121805	7960
800 x 1800 x 600	TME 081806	45855	48140	37335	40855	TPL 081806	4330	TSC 081806	8855
600 x 2000 x 400	TME 062004	38115	42825	29270	34785	TPL 062004	3435	TSC 062004	7375
800 x 2000 x 400	TME 082004	44355	48715	33895	38475	TPL 082004	3910	TSC 082004	7375
1000 x 2000 x 400	TME 102004	63535	67070	49400	52825	TPL 102004	4385	TSC 102004	7375
1200 x 2000 x 400	TME 122004	68255	75430	54605	61880	TPL 122004	4815	TSC 122004	7375
600 x 2000 x 500	TME 062005	40460	43800	33195	37520	TPL 062005	3680	TSC 062005	8655
800 x 2000 x 500	TME 082005	45385	50100	34975	39880	TPL 082005	4145	TSC 082005	8655
1000 x 2000 x 500	TME 102005	62855	70325	50100	55585	TPL 102005	4615	TSC 102005	8655
1200 x 2000 x 500	TME 122005	68730	75635	54015	59915	TPL 122005	5020	TSC 122005	8655
600 x 2000 x 600	TME 062006	41040	45080	35160	39200	TPL 062006	3880	TSC 062006	9630
800 x 2000 x 600	TME 082006	46950	51165	37705	41935	TPL 082006	4330	TSC 082006	9630
1000 x 2000 x 600	TME 102006	63840	73255	50870	59305	TPL 102006	4785	TSC 102006	9630
1200 x 2000 x 600	TME 122006	70080	77685	56745	64030	TPL 122006	5230	TSC 122006	9630
600 x 2000 x 800	TME 062008	42240	45385	35265	39665	TPL 062008	4330	TSC 062008	12380
800 x 2000 x 800	TME 082008	48905	52545	39970	43770	TPL 082008	4785	TSC 082008	12380
1000 x 2000 x 800	TME 102008	70080	74740	54015	59915	TPL 102008	5160	TSC 102008	12380
1200 x 2000 x 800	TME 122008	73670	81695	60515	66575	TPL 122008	5690	TSC 122008	12380
600 x 2200 x 600	TME 062206	46260	50680	36745	43595	TPL 062206	3880	TSC 062206	11155
800 x 2200 x 600	TME 082206	52355	55790	42130	46455	TPL 082206	4330	TSC 082206	11155
1000 x 2200 x 600	TME 102206	72480	78065	59555	65150	TPL 102206	4785	TSC 102206	11155
1200 x 2200 x 600	TME 122206	75315	84070	58545	65405	TPL 122206	5230	TSC 122206	11155
600 x 2200 x 800	TME 062208	50450	54720	38705	44695	TPL 062208	4330	TSC 062208	14485
800 x 2200 x 800	TME 082208	60885	64435	46770	50870	TPL 082208	4785	TSC 082208	14485
1000 x 2200 x 800	TME 102208	77180	83160	62655	67380	TPL 102208	5160	TSC 102208	14485
1200 x 2200 x 800	TME 122208	83480	88180	68355	72960	TPL 122208	5690	TSC 122208	14485

\*Baying kit (BIL-14280) Rs. 2325/- is also available for Enclosure Version. For extra accessories, please contact nearest branch office.

MOQ-Minimum order quantity in nos.

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**



Brackets for  
3 point lock

Robust Mounting  
Plate 3MM Thick,  
RAL 2000

Gland Plate



#### 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
- C € 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

#### 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
- C € Certified
- Wide range of accessories

#### Features

- Completely modular in all the three axis
- Powder coated surface (RAL 7035) for excellent finish and durability
- PU Gasket ensuring higher degree of ingress protection
- 3mm 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

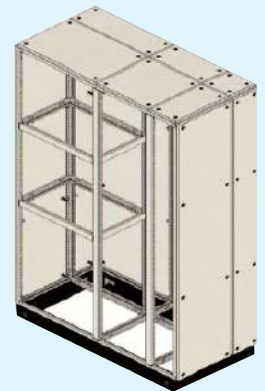
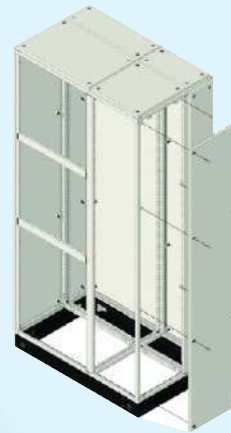
\*List Prices are Ex-works Faridabad. For detail refer Enclosure Selling Terms & Conditions.

**\*GST to be charged extra**  
**www.bchindia.com**

## 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 4.
- 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).
- Colours:- RAL-7035 (Structure finish) for structure, doors, covers & internal parts RAL-2000 (smooth finish) for Mounting plates, Ral-9000 (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.



# Control Desk



## 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	21330
SINGLE DOOR CONTROL DESK	800X1000X400	1	BIL-CD-081004	25380
SINGLE DOOR CONTROL DESK	600X1000X500	1	BIL-CD-061005	23220
SINGLE DOOR CONTROL DESK	800X1000X500	1	BIL-CD-081005	28080
DOUBLE DOOR CONTROL DESK	1000X1000X400	1	BIL-CD-101004	29700
DOUBLE DOOR CONTROL DESK	1200X1000X400	1	BIL-CD-121004	34560
DOUBLE DOOR CONTROL DESK	1000X1000X500	1	BIL-CD-101005	33915
DOUBLE DOOR CONTROL DESK	1200X1000X500	1	BIL-CD-121005	38340

## 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	3510
800	400	1	BIL-CDPL-0804	4000
1000	400	1	BIL-CDPL-1004	4485
1200	400	1	BIL-CDPL-1204	4915
600	500	1	BIL-CDPL-0605	3780
800	500	1	BIL-CDPL-0805	4270
1000	500	1	BIL-CDPL-1005	4755
1200	500	1	BIL-CDPL-1205	5185



**Key Attributes:**

- Aesthetic & robust construction
- Mounting Fan /s in top doesn't take usable "U" space.
- Special type of Wallmounting 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	6555
9UX550X400	1	BIL-W-9-5504	7905
6UX550X500	1	BIL-W-6-5505	7235
9UX550X500	1	BIL-W-9-5505	8430
12UX550X500	1	BIL-W-12-5505	9365
15UX550X500	1	BIL-W-15-5505	11025

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	36630
24U X 600 X 800	1	BIL-N-062408	40495
24U X 800 X 600	1	BIL-N-082406	45900
24U X 800 X 800	1	BIL-N-082408	50165
30U X 600 X 600	1	BIL-N-063006	40495
30U X 600 X 800	1	BIL-N-063008	44375
30U X 800 X 600	1	BIL-N-083006	50165
30U X 800 X 800	1	BIL-N-083008	54985
36U X 600 X 600	1	BIL-N-063606	44375
36U X 600 X 800	1	BIL-N-063608	49185
36U X 800 X 600	1	BIL-N-083606	55005
36U X 800 X 800	1	BIL-N-083608	59720
42U X 600 X 600	1	BIL-N-064206	51135
42U X 600 X 800	1	BIL-N-064208	54790
42U X 800 X 600	1	BIL-N-084206	60185
42U X 800 X 800	1	BIL-N-084208	66535
45U X 600 X 600	1	BIL-N-064506	58835
45U X 600 X 800	1	BIL-N-064508	61750
45U X 800 X 600	1	BIL-N-084506	64615
45U X 800 X 800	1	BIL-N-084508	70400

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](http://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	41385
24U X 600 X 1000	1	BIL-S-062410	43975
30U X 600 X 900	1	BIL-S-063009	46795
30U X 600 X 1000	1	BIL-S-063010	48620
36U X 600 X 900	1	BIL-S-063609	51300
36U X 600 X 1000	1	BIL-S-063610	54040
42U X 600 X 900	1	BIL-S-064209	57685
42U X 600 X 1000	1	BIL-S-064210	61345
42U X 800 X 1000	1	BIL-S-084210	70595
45U X 600 X 900	1	BIL-S-064509	66660
45U X 600 X 1000	1	BIL-S-064510	70525

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.



### 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.

## ETSI Racks

HSN Code : 8538

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.



### Key Attributes:

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

## 19" Open Racks

HSN Code : 8538

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](http://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 accommodate 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)

## 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.

## Shelves

HSN Code : 8538

Description	Cat No.	List Price [₹]
Fixed Shelf (600mmD)	BIL-A-FS-L-06	1670
Fixed Shelf (800mmD)	BIL-A-FS-L-08	2585
Fixed Shelf (900mmD)	BIL-A-FS-L-09	2870
Fixed Shelf (1000mmD)	BIL-A-FS-L-10	3090
Key board tray (Sliding & Rotatory)	BIL-A-KB-06	4935
Canteliver Shelf (1U)	BIL-A-CS-1	1000
Canteliver Shelf (2U)	BIL-A-CS-2	1480
Equipment Support Angle (600mmD)	BIL-A-ESA-06	630
Equipment Support Angle (800mmD)	BIL-A-ESA-08	710
Equipment Support Angle (900mmD)	BIL-A-ESA-09	875
Equipment Support Angle (1000mmD)	BIL-A-ESA-10	1020
Sliding Shelf (900mmD)	BIL-A-SS-09	4935
Sliding Shelf (1000mmD)	BIL-A-SS-10	5120

## Thermal Management

HSN Code : 8538

Description	Cat No.	List Price [₹]
1-Fan (Direct mounted)	BIL-A-SF	1670
Fan-tray with 2-Fans (FHU)	BIL-A-FHU-2FANS	3565
Fan-tray with 4-Fans (FHU)	BIL-A-FHU-4FANS	6205

## Cable Management

HSN Code : 8538

Description	Cat No.	List Price [₹]
Horizontal Cable Manager (1U)	BIL-A-HCM-1U	400
Horizontal Cable Manager (2U)	BIL-A-HCM-2U	495
Vertical Cable Manager (24U)	BIL-A-VCM-24U	630
Vertical Cable Manager (30U)	BIL-A-VCM-30U	795
Vertical Cable Manager (36U)	BIL-A-VCM-36U	905
Vertical Cable Manager (42U)	BIL-A-VCM-42U	1000
Vertical Cable Manager (45U)	BIL-A-VCM-45U	1095

## Power Management

HSN Code : 8538

Description	Cat No.	List Price [₹]
6-Point 5Amp Horizontal Power Strip (19")	BIL-A-HPS-5AMP	1635
5-Point 5/15Amp Horizontal Power Strip (19")	BIL-A-HPS-15AMP	2175
12-Point 5Amp Vertical Power Strip	BIL-A-12VPS-5AMP	3180
10-Point 5/15Amp Vertical Power Strip	BIL-A-10VPS-15AMP	3645
Earth continuity Kit (Earthing Kit)	BIL-A-ECT	1240

## Stability Management

HSN Code : 8538

Description	Cat No.	List Price [₹]
Castors (1-Set) Heavy Duty	BIL-A-CAS-HD	5955
Castors (1-Set) Light Duty	BIL-A-CAS	4740
Levelling Feet (1-Set)	BIL-A-LF	810

## Miscellaneous

HSN Code : 8538

Description	Cat No.	List Price [₹]
BAYING KIT	BIL-A-BK	590
BLANKING PANEL (1U)	BIL-A-BP-1U	280
BLANKING PANEL (2U)	BIL-A-BP-2U	370
BLANKING PANEL (3U)	BIL-A-BP-3U	460
BLANKING PANEL (4U)	BIL-A-BP-4U	570
BLANKING PANEL (5U)	BIL-A-BP-5U	640
Captive H/w (set of 10)	BIL-A-Captive-M6	280
Wallmounting H/w (set of 4)	BIL-A-WALLMOUNTHW	290

Notes : Packing &amp; forwarding will be extra if accessories are ordered separately.

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

\*GST to be charged extra

www.bchindia.com

# Non Metallic 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

## Type-1 (Inbuilt Hinged Door Enclosure)

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	1375	BIL-AP-1.01	1520	BIL-PC-1.01	1675
225X275X105	17	BIL-AB-1.02	1415	BIL-AP-1.02	1575	BIL-PC-1.02	1720
200X280X140	12	BIL-AB-1.03	1660	BIL-AP-1.03	1835	BIL-PC-1.03	2010
280X280X130	8	BIL-AB-1.04	1965	BIL-AP-1.04	2175	BIL-PC-1.04	2375
300X350X146	6	BIL-AB-1.05A	2780	BIL-AP-1.05A	3090	BIL-PC-1.05A	3405
300X350X205	4	BIL-AB-1.05B	3005	BIL-AP-1.05B	3335	BIL-PC-1.05B	3675
644X674X277	1	NA	-	NA	-	BIL-PC-1.06	20005

### 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

## Type-2 (Plain Walled Industrial Enclosure)

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	840	BIL-AP-2.00A	915	BIL-PC-2.00A	995
180X180X100	26	BIL-AB-2.01A	985	BIL-AP-2.01A	1080	BIL-PC-2.01A	1175
180X180X138	16	BIL-AB-2.01	1115	BIL-AP-2.01	1215	BIL-PC-2.01	1325
180X240X138	16	BIL-AB-2.02	1385	BIL-AP-2.02	1520	BIL-PC-2.02	1660
240X320X138	10	BIL-AB-2.03	2050	BIL-AP-2.03	2265	BIL-PC-2.03	2485
320X420X138	6	BIL-AB-2.04	3160	BIL-AP-2.04	3500	BIL-PC-2.04	3835
320X420X210	4	BIL-AB-2.04B	4035	BIL-AP-2.04B	4415	BIL-PC-2.04B	4790
420X640X160	3	BIL-AB-2.05A	5815	BIL-AP-2.05A	6525	BIL-PC-2.05A	7240
420X640X210	2	NA	-	NA	-	BIL-PC-2.05B	8830
380X640X230	2	NA	-	NA	-	BIL-PC-2.06	7180

### 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

## Type-3 (Modular Panel Enclosure)

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	2195	BIL-AP-3.01A	2395	BIL-PC-3.01A	2595
150X300X210	12	BIL-AB-3.01B	2585	BIL-AP-3.01B	2820	BIL-PC-3.01B	3050
300X300X210	4	BIL-AB-3.02	3570	BIL-AP-3.02	3925	BIL-PC-3.02	4275
300X450X210	4	BIL-AB-3.03	4360	BIL-AP-3.03	4790	BIL-PC-3.03	5230
300X600X210	6	BIL-AB-3.04	5395	BIL-AP-3.04	5965	BIL-PC-3.04	6525

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

\*GST to be charged extra

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# Non Metallic Enclosure



## 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	380	BIL-AP-4.01B	405	BIL-PC-4.01B	430
120X120X70	120	BIL-AB-4.02B	490	BIL-AP-4.02B	530	BIL-PC-4.02B	570
120X150X80	80	BIL-AB-4.03B	605	BIL-AP-4.03B	660	BIL-PC-4.03B	710
140X140X100	50	BIL-AB-4.04B	710	BIL-AP-4.04B	770	BIL-PC-4.04B	830
140X180X100	38	BIL-AB-4.05B	780	BIL-AP-4.05B	850	BIL-PC-4.05B	925
160X210X100	32	BIL-AB-4.06	955	BIL-AP-4.06	1035	BIL-PC-4.06	1115
210X260X120	17	BIL-AB-4.07	1580	BIL-AP-4.07	1865	BIL-PC-4.07	2145

**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

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

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	965	NA	-
76X170X95	60	NA	-	BIL-AP-5.01B Eco	870	NA	-
100X225X100	40	NA	-	BIL-AP-5.01	1360	NA	-
115X160X75	50	NA	-	BIL-AP-5.02 Eco	1240	NA	-
118X170X95	50	NA	-	BIL-AP-5.02B Eco	1095	NA	-
150X225X100	25	NA	-	BIL-AP-5.02	1755	NA	-
225X225X100	20	NA	-	BIL-AP-5.03	2245	NA	-
225X300X100	17	NA	-	BIL-AP-5.04	2735	NA	-
300X400X100	8	NA	-	BIL-AP-5.05 A	4045	NA	-
300X400X100	8	NA	-	BIL-AP-5.05	5005	NA	-
300X600X100	5	NA	-	BIL-AP-5.06	7150	NA	-

**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

## Type-6 (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[₹]
98X138X68	80	BIL-AB-6.01	465	NA	-	NA	-
98X200X60	60	BIL-AB-6.02A	605	BIL-AP-6.02A	655	NA	-
98X200X82	50	BIL-AB-6.02B	720	BIL-AP-6.02B	780	NA	-
138X138X82	50	BIL-AB-6.03	625	BIL-AP-6.03	670	NA	-
138X225X68	40	BIL-AB-6.04	860	NA	-	NA	-
160X225X100	35	BIL-AB-6.05	1175	NA	-	NA	-
225X225X115	20	BIL-AB-6.06A	1045	BIL-AP-6.06A	1125	NA	-
225X225X180	12	BIL-AB-6.06B	1300	BIL-AP-6.06B	1405	NA	-
225X300X115	17	BIL-AB-6.07	1830	BIL-AP-6.07	2020	NA	-
300X400X100	8	BIL-AB-6.08	2945	NA	-	NA	-
300X600X100	5	BIL-AB-6.09	4175	NA	-	NA	-

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\*GST to be charged extra

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# Non Metallic Enclosure



## Type-7 (Enclosure With External Mounting)

### 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

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	330	NA	-	BIL-PC-7.01	370
100X100X62	80	BIL-AB-7.02	500	BIL-AP-7.02	540	NA	-
65X115X40	100	BIL-AB-7.03	380	NA	-	NA	-
80X125X56	100	BIL-AB-7.04	490	NA	-	NA	-
125X125X62	60	BIL-AB-7.05	605	BIL-AP-7.05	665	NA	-
90X134X36	100	BIL-AB-7.06A	430	NA	-	NA	-
90X134X56	100	BIL-AB-7.06B	560	NA	-	NA	-
120X140X76	80	BIL-AB-7.07	780	BIL-AP-7.07	850	NA	-
120X140X100	60	BIL-AB-7.07B	810	BIL-AP-7.07B	890	NA	-
150X150X75	50	BIL-AB-7.08	650	NA	-	NA	-
132X150X40	50	BIL-AB-7.08A	890	BIL-AP-7.08A	975	BIL-PC-7.08A	1055
150X150X100	50	BIL-AB-7.08C	985	BIL-AP-7.08C	1075	BIL-PC-7.08C	1165
115X160X55	60	BIL-AB-7.09A	770	NA	-	NA	-
115X160X75	60	BIL-AB-7.09B	840	NA	-	NA	-
125X170X66	60	BIL-AB-7.10A	910	BIL-AP-7.10A	On request	BIL-PC-7.10A	1010
125X170X115	36	BIL-AB-7.10B	1000	NA	-	BIL-PC-7.10B	1115
124X175X36	60	BIL-AB-7.11	500	NA	-	NA	-
160X180X75	45	BIL-AB-7.12	955	NA	-	NA	-
125X205X75	18	BIL-AB-7.13	935	NA	-	NA	-
80X210X55	60	BIL-AB-7.13A	840	NA	-	NA	-
125X230X90	20	BIL-AB-7.14	975	NA	-	NA	-
70X240X92	56	BIL-AB-7.15	965	NA	-	NA	-
200X250X90	16	BIL-AB-7.16	1990	NA	-	NA	-
176X260X92	16	BIL-AB-7.18	1640	BIL-AP-7.18	1795	BIL-PC-7.18	1950
225X315X90	16	BIL-AB-7.19	1155	NA	-	NA	-
260X350X90	10	BIL-AB-7.20	2535	NA	-	NA	-
58X84X33	100	BIL-AB-7.01L	305	BIL-AP-7.01L	325	NA	-
70X100X50	100	BIL-AB-7.02L	440	BIL-AP-7.02L	470	BIL-PC-7.02L	500
80X160X55	84	BIL-AB-7.03L	730	BIL-AP-7.03L	780	NA	-



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\*GST to be charged extra

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# 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



# LT Power Capacitors



## MPP Can type capacitors



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

HSN Code : 8532

KVAR	Normal Duty		Heavy Duty	
	Cat. No.	MRP [₹]	Cat. No.	MRP [₹]
1	BCHMCN001B	430	BCHMCH001B	625
2	BCHMCN002B	855	BCHMCH002B	1230
3	BCHMCN003B	1275	BCHMCH003B	1890
4	BCHMCN004B	1715	BCHMCH004B	2450
5	BCHMCN005B	2070	BCHMCH005B	2780
7.5	BCHMCN007B	3090	BCHMCH007B	4165
10	BCHMCN010B	3700	BCHMCH010B	5130
12.5	BCHMCN012B	4640	BCHMCH012B	6410
15	BCHMCN015B	5550	BCHMCH015B	7695
20	BCHMCN020B	7400	BCHMCH020B	10265
25	BCHMCN025B	9250	BCHMCH025B	12815

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



KVAR	Normal Duty		Heavy Duty	
	Cat. No.	MRP [₹]	Cat. No.	MRP [₹]
1	BCHMBN001B	495	BCHMBH001B	625
2	BCHMBN002B	965	BCHMBH002B	1230
3	BCHMBN003B	1445	BCHMBH003B	1840
4	BCHMBN004B	1915	BCHMBH004B	2460
5	BCHMBN005B	2250	BCHMBH005B	2930
7.5	BCHMBN007B	3385	BCHMBH007B	4325
10	BCHMBN010B	4475	BCHMBH010B	5755
12.5	BCHMBN012B	5620	BCHMBH012B	7200
15	BCHMBN015B	6735	BCHMBH015B	8635
20	BCHMBN020B	8965	BCHMBH020B	11525
25	BCHMBN025B	11200	BCHMBH025B	14410

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

# LT Power Capacitors



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

HSN Code : 8532

KVAR	APP Capacitor		SHD Capacitor	
	Cat. No.	MRP [₹]	Cat. No.	MRP [₹]
1	BCHAPS001B	1840	BCHSHD001B	2865
2	BCHAPS002B	2865	BCHSHD002B	5680
3	BCHAPS003B	4275	BCHSHD003B	8505
4	BCHAPS004B	5685	-	-
5	BCHAPS005B	6740	BCHSHD005B	12140
7.5	BCHAPS007B	9615	BCHSHD007B	18225
10	BCHAPS010B	12830	BCHSHD010B	24295
12.5	BCHAPS012B	16050	BCHSHD012B	30355
15	BCHAPS015B	19240	BCHSHD015B	36430
20	BCHAPS020B	25665	BCHSHD020B	48570
25	BCHAPS025B	32095	BCHSHD025B	60705

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

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

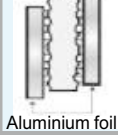
HSN Code : 8504

KVAR	Aluminium wound		Copper wound	
	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

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

Double thick double hazy pp film

### 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

## APFC Relay

### Intelligent Power Factor Controllers (IPFC)

Steps	Cat. No.	Voltage	Brief description	MRP [₹]
12 STEP - 3φ	RG3-12C	230V	12 Step intelligent PFC	47595
12 STEP - 3φ	RG3-12CS	230V	12 Step intelligent PFC with RS 485 communication	53525
15 STEP - 3φ	RG3-15C	230V	15 Step , Intelligent PFC relay	49880
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	60340
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 KVAh
- 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	18445
6 STEP - 1 φ	RG-6T-415-96	415V	PFC (96X96) WITH 6 STEPS , 415 V	18445
6 STEP - 1 φ	RG-6T-230	230V	PFC (144X144) WITH 6 STEPS, 230 V	19270
6 STEP - 1 φ	RG-6T-415	415V	PFC (144X144) WITH 6 STEPS, 415 V	19270
8 STEP - 1 φ	RG-8T-230	230V	PFC (144X144) WITH 8 STEPS, 230 V	21905
8 STEP - 1 φ	RG-8T-415	415V	PFC (144X144) WITH 8 STEPS, 415 V	21905
8 STEP - 3 φ	RG3-8T-230	230V	PFC 144X144, 8 STEPS,230V UNBALANCE LOAD	29435
12 STEP - 1 φ	RG-12T-230	230V	PFC (144X144) WITH 12 STEPS, 230 V	27430
12 STEP - 1 φ	RG-12T-415	415V	PFC (144X144) WITH 12 STEPS, 415 V	27430
12 STEP - 3 φ	RG3-12T-230	230V	PFC 144X144,12 STEPS,230V UNBALANCE LOAD	35650

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, gasketing shop, fabrication shop equipped 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 environment.

#### 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 characteristics

- 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

#### Gasketing

- 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.

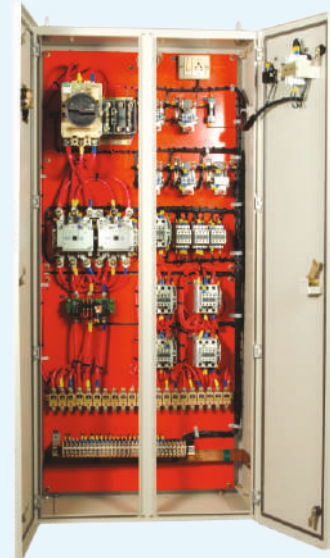
OUTGOING - TP MCB or HRC fuses with fuse base as standard  
(BCH-Resilient 3-P MCCB or SDFU and Compartmentalized outgoing feeders can also be provided depending upon size of panel on request).

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 conjunction with a master controller.



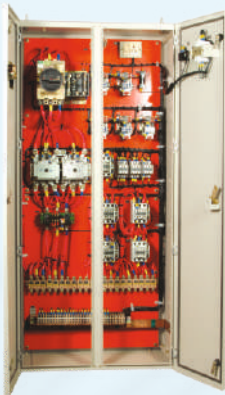
### Design Features

- 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



## 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
- 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

### 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



## 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

Single Outlet	Incomer ( 1 No.)			Standard Version Cat reference	Loop in loop out version Cat reference
	Switch Type	MCCB Type	MCB		
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



## 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 & Specifications

- 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 - BASICATS : 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
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



# 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.



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**



**BCH  
ELECTRIC  
LIMITED**

- 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
- Power Bus Duct



# BCH ELECTRIC LIMITED



www.bchindia.com



**1800-103-9262**

customer@bchindia.com

Visit us at : [www.bchindia.com](http://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 (Uttarakhand) Tel. : 05944-250214/16 Fax : 05944-250215

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Bangalore - 560 027  
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E-mail : bangalore@bchindia.com

**Bhubaneswar**  
Mallick Commercial  
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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Haryana-134 113  
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E-mail: chandigarh@bchindia.com

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E-mail: chennai@bchindia.com

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Coimbatore - 641 018  
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710, Deepali Building, 92  
Nehru Place, New Delhi - 110  
019 Tel. : 011-45720334  
E-mail : delhi2@bchindia.com

**Dehradun**  
8, Co-operative Industrial Estate,  
Patel Nagar, Dehradun-248001  
E-mail: dehradun@bchindia.com

**Faridabad**  
20/4, Mathura Road,  
Faridabad - 121 006 (Haryana)  
Tel.: 0129-4293009  
E-mail : faridabad@bchindia.com

**Hyderabad**  
1-8-303/48/13/102, Arya One,  
2nd Floor, P. G. Road,  
Secunderabad - 500 003  
Tel. : 040-66206263/27890306  
Fax : 040-66207273  
E-mail: hyderabad@bchindia.com

**Indore**  
330-331, Indraprastha Tower,  
3rd Floor, 6, M.G. Road,  
Indore - 452 001  
Tel. : 0731-2510011 / 2510012  
E-mail : indore@bchindia.com

**Jaipur**  
25, Hathroi, Gopalbari,  
Jaipur - 302 001  
Tel. : 0141-2363521  
E-mail : jaipur@bchindia.com

**Jamshedpur**  
A.J. Tower, 2B,  
2nd Floor, R-Road, Bistupur,  
Jamshedpur - 831 001  
E-mail : jamshedpur@bchindia.com

**Kolkata**  
Block 1E, 216,  
Acharya Jagadish Chandra Bose  
Road, Kolkata - 700 017  
Tel. : 033-22871728 / 46021884  
E-mail : kolkata@bchindia.com

**Lucknow**  
Shop No. 3, First Floor,  
Tower T-10, Millennium Place IBB - 2,  
Sushant Golf City, Sultanpur Road,  
Lucknow U.P. - 226030  
Tel. : 0522-4025597/4025997  
E-mail : lucknow@bchindia.com

**Ludhiana**  
S.C.O.- 18, 2nd Floor,  
Farze Gandhi Market,  
Ludhiana - 140 001  
Tel. : 0161-5021807/5022808  
E-mail : ludhiana@bchindia.com

**Madurai**  
12, Parvathi Plaza-3rd Floor,  
70 Feet Road, Ellis Nagar  
Madurai-625016, Tamilnadu  
Email: madurai@bchindia.com

**Mumbai**  
A-151, Mittal Tower,  
Nariman Point,  
Mumbai - 400 021  
Tel. : 022-22822947/22850162  
Fax : 022-22822858  
E-mail : mumbai@bchindia.com

**Patna**  
No.703, 7th Floor, Luv Kush  
Tower, Exhibition Road,  
Patna - 800001

**Pune**  
A-605, 6th Floor,  
Kumar Surabhi Building,  
Pune Satara Road,  
Opposite Sai Baba Temple,  
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  
Housing, Near Cow Circle, Akota, Vadodara - 390 020  
Tel. : 0265-2345068/2345069  
Telefax : 0265-2345068,  
E-mail : vadodara@bchindia.com

**Other Branch Locations**

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**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	Rudrapur	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