

# PRICE LIST

Effective : 5th July 2021



BHARTIA

BCH

BCH  
ELECTRIC  
LIMITED



## 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 14001:2015 and ISO 9001:2015 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



**Switchgear & Controlgear**



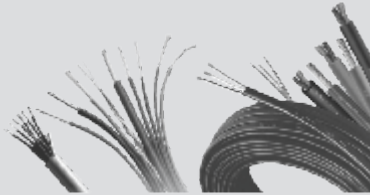
**Motor Starters & Submersible Pump Starters**



**MCB & MCB Distribution Boxes**



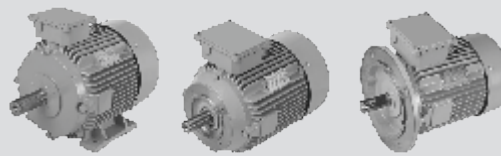
**Enclosure Systems**



**Wires & Cables**



**Power Factor Control Product**



**Motors**



**Automation Product**



**Motor Control Centres (MCCs), Power Control Centres (PCCs) & Custom Built Products**



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vir<sup>TM</sup> protect

YOUR TRUSTED GUARDIAN  
UV-C SANITISATION BOX

**CATCODE:  
USE050303**

For prices contact  
our nearest sales office

**BCH VIROPROTECT**  
**SIZE: 500(W) X 275 (H) X 275 (D) MM**  
**CAPACITY: 30 LITRES**

**FEATURES:**

- Disinfection & Decontamination from Bacteria & Viruses
- Adjustable timer for ease of sanitization of different sized items
- Designed for 360 degrees of illumination
- UV-C Light based sanitization process
- Auto Cut-OFF for safety (from UV radiation)
- Prevents surface to human transmission
- Ergonomic design with front loading



Certified Philips 11W UV-C tubes 11000 hours usable life  
Tested & certified sanitization process  
Kills 99.99% Viruses  
Chemical free process



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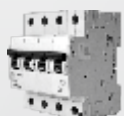
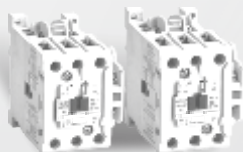
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Works 2 : 64-68, Sector-7, IIE, Pant Nagar, Rudrapur, Udham Singh Nagar - 263 153 (Uttarakhand) Tel. : 05944-250214/16 Fax : 05944-250215

# Low Voltage Switch Gear & Control Gear Products



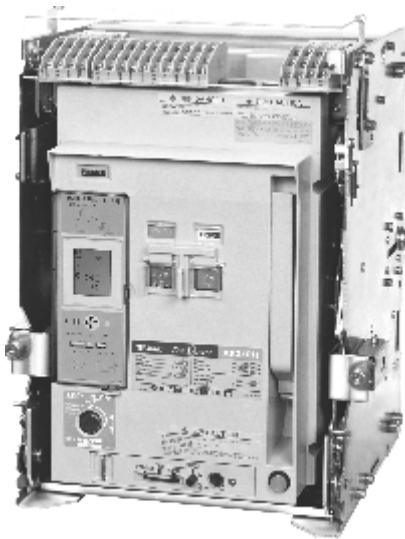
- Air Circuit Breakers
- MCCBs
  - Resilient, Tembreak 2
- MCB, Isolator, MCB Distribution Boxes, RCCB 
- FSU, SDFU
- AC Contactors
- DC Contactors
- Solid State Relays
- Overload Relays
- Electronic Overcurrent Relays (BOCR)
- Motor Protection Circuit Breakers (MPCB)
- Limit Switches
- Push Buttons, Indicating Lights, LEDs
- Foot Switches
- AC Solenoids & Brakes
- DC Brakes
- Plugs & Sockets
- Plug & Socket Boxes
- Rewireable Fuse Switches
- Pneumatic Timers
- Motor Starters
  - DOL
  - Mini Manual
  - Star Delta
  - Spares-Motor Starters & Supersible Pump Starters
- Submersible Pump Starters
  - Three Phase (DOL and Star Delta)
  - Single Phase
- Oil Immersed Starters



# Air Circuit Breakers..... BCH

## TemPower2 Range of Air Circuit Breakers

HSN Code : 8536



@ ACBs with higher breaking capacity and higher current ratings are also available On Request  
 MF: Manual Fixed Breaker, EF: Electrical Fixed Breaker  
 MDO : Manual Draw out, EDO : Electrical Draw out

### Releases

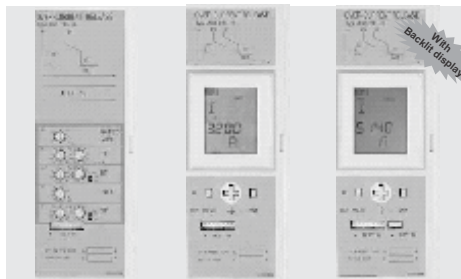
TemPower2 provides positive protection for electric power systems.

The TemPower2 Series is equipped with an RMS sensing over-current release (OCR) having a wide range of protection function and capabilities.

Frame	Current rating (A)	Poles	Breaking capacity (Icu=Ics=Icw for 1 sec)	MRP [₹]			
				Fixed Breaker		Draw out breaker	
				MF	EF	MDO	EDO
AR208S	800A	3 4	65kA	On request			
AR212S	1250A	3 4	65kA				
AR216S	1600A	3 4	65kA				
AR220S	2000A	3 4	65kA				
AR325S	2500A	3 4	85kA				
AR332S	3200A	3 4	85kA				
AR440S	4000A	3 4	100kA				
AR650S	5000A	3 4	100kA				
AR663S	6300A	3 4	100kA				

\*Standard MRP, means a standard breaker with

- A) Auxiliary Switch (4 change over)
  - B) Closing coil (In case of Motorised ACBs)
  - C) 1 No Draw out handle (in case of draw out ACB)
  - D) Terminations are standard as per : Horizontal : Upto (AR216S)  
Vertical : (AR220S, AR325S, AR332S, AR440S, AR650S and AR663S)
  - E) Calibration : 40° C
  - F) Neutral CT is required to be ordered when Ground Fault option is required in the release (example AGR11BL-GL)
- Note : Above price is with over current release (OCR) Type AGR-11BL-AL with standard Functions LSI  
 Long Time (L), Short Time (S) and Instantaneous (I)



Standard OCR with adjustment dial Type AGR-11B. Standard OCR with LCD-'Ammeter' Type AGR-21B, 22B. Enhanced OCR with LCD-'Analyser' Type AGR-31B.

- For General Feeder circuits (L Characteristics)
- For General Feeder circuits (R Characteristics)
- For Generator protection (S Characteristics)

### Protection features

- |                      |                                  |
|----------------------|----------------------------------|
| <b>Standard</b>      | ■ N-phase protection             |
| ■ Long time delay    | ■ Earth leakage                  |
| ■ Short time delay   | ■ Two channel pre trip           |
| ■ Instantaneous      | ■ Advance LCD display            |
| <b>Optional</b>      | ■ Contact temperature monitoring |
| ■ Ground fault       | ■ Communication protocol         |
| ■ Reverse Power trip | ■ Phase rotation protection      |

For prices contact our nearest sales office.

Please note that the price of the ACBs mentioned above is only indicative, to get an actual quote please fill in the ACB Ordering form provided overleaf

HSN Code : 8538

Over current releases (OCR)	Functions	MRP [₹]
AGR-11BL-GL	LSIG*	On Request
AGR-21BL-PS	LSI with LCD display	On Request
AGR-21BL-PG	LSIG with LCD & Communication	On Request
AGR-31BL-PS	LSI with LCD display with energy metering, earth leakage and PTA	On Request
AGR-31BL-PG	LSIG with LCD display with energy metering, earth leakage and PTA	On Request
AGR-21BR-PS	LSI with LCD display with current metering and PTA	On Request
AGR-21BR-PG	LSIG with LCD display with current metering and PTA	On Request

\* When using a 3 Pole ACB in a 3 phase 4 wire system, additional Neutral CT is required for OCR type AGR-11BL-GL

# All accessories and spares like SHUNT, CLOSING, UNDER VOLTAGE release, castle lock, safety shutter, door interlock, motor charging units, etc. are available on request

\* For more details refer product catalogue



HSN Code : 8536

## Frame 1

- High Performance Compact Size
- Suitability for Isolation
- Rated at 50° C
- Line Load Interchangeability
- Double Insulation
- Thermal Magnetic Trip unit



Frame -1 :  
 $I_{cu}/I_{cs} = 10/7.5, 15/15, 25/25, 30/15, 36/18, 50/25, 50/50$  kA

## Frame 2

- High Performance Compact Size
- Suitability for Isolation
- Rated at 50° C
- Line Load Interchangeability
- Double Insulation
- Thermal Magnetic Trip unit



Frame -2 :  
 $I_{cu}/I_{cs} = 25/25, 36/18, 36/27, 36/36, 50/25, 50/50$  kA

Complete range RAL-7016 (Dark Grey) front Facia

# Spreader Link available as standard ( for MCCB without spreader, please contact our sales team)

All above MCCBs have fixed (non adjustable) Magnetic setting

MCCBs with different  $I_{cu}/I_{cs}$  combination can be made available On Request

For MCCBs with 'Magnetic only' protection, prices available On Request.

All needed accessories are mentioned on page no 4  
 (Extended terminals for all ratings is also available as accessory)

$I_{cu}$ (Overload Setting)	Rated Current	Cat. No.	MRP [₹]
10kA @ (Fixed)	100, 80	XFE***G#	2200
	100, 80 (without spreader terminals)	XFE***G-WT	2090
	63, 50, 40, 32, 25, 20, 16	XFE***G	1990
15kA ~ (Fixed)	100, 80	XFN***P#	4710
	63, 50, 40, 32, 25, 20, 16	XFN***P	4600
25kA ~ (Adjustable)	100, 80	XFS***PV#	7200
	63, 50, 40, 32, 25, 20, 16	XFS***PV	7080
30kA ^ (Adjustable)	100, 80	XFH***NV#	5400
	63, 50, 40, 32, 25, 20, 16	XFH***NV	5280
36kA ^ (Adjustable)	100, 80	XFL***NV#	6950
	63, 50, 40, 32, 25, 20, 16	XFL***NV	6830
50kA ^ (Adjustable)	100, 80	XFV***NV#	11660
	63, 50, 40, 32, 25, 20, 16	XFV***NV	11540
50kA ~ (Adjustable)	100, 80	XFV***PV#	12250
	63, 50, 40, 32	XFV***PV	12100

XFE series with RAL-7035 (Light Grey) front Facia  
 Other series with RAL-7016 (Dark Grey) front Facia

~ means  $I_{cs} = 100\% I_{cu}$   
 @ means  $I_{cs} = 75\% I_{cu}$   
 ^ means  $I_{cs} = 50\% I_{cu}$

## Code - Current Rating

Rating	16A	20A	25A	32A	40A	50A	63A	80A	100A
*Code	016	020	025	032	040	050	063	080	100

$I_{cu}$ Overload Setting	Rated Current	Cat No.	MRP [₹]
25kA ~ Adjustable	250	XF2E250PV#	20810
	200	XF2E200PV#	17750
	160	XF2E160PV	13670
	125	XF2E125PV	10500
36kA ^ Adjustable	250	XF2N250NV#	14720
	200	XF2N200NV#	12830
	160	XF2N160NV	9720
	125	XF2N125NV	8360
36kA @ Adjustable	250	XF2N250GV#	21900
	200	XF2N200GV#	19900
	160	XF2N160GV	15190
	125	XF2N125GV	11360
36kA ~ Adjustable	250	XF2N250PV#	22460
	200	XF2N200PV#	20310
	160	XF2N160PV	16100
50kA ^ Adjustable	125	XF2N125PV	12080
	250	XF2H250NV#	23310
	200	XF2H200NV#	21540
50kA ~ Adjustable	160	XF2H160NV	17900
	125	XF2H125NV	13190
	250	XF2H250PV#	25030
50kA ~ Adjustable	200	XF2H200PV#	23030
	160	XF2H160PV	19430
	125	XF2H125PV	17270

~ means  $I_{cs} = 100\% I_{cu}$   
 @ means  $I_{cs} = 75\% I_{cu}$   
 ^ means  $I_{cs} = 50\% I_{cu}$

\* For more details refer product catalogue



Frame -3 :  
 $I_{cu}/I_{cs} = 36/36, 50/50 \text{ kA}$   
 (Spreader terminal available by default)

Spreader Link available as standard ( for MCCB without spreader, please contact our sales team)  
 MCCBs with different  $I_{cu} / I_{cs}$  combination can be made available On Request  
 For MCCBs with 'Magnetic only' protection, prices available On Request.



**Frame 3**

- High Performance Compact Size
- Suitability for Isolation
- Rated at 50° C
- Line Load Interchangeability
- Double Insulation
- Thermal Magnetic Trip Unit (TMTU)
  - Overload Setting: 0.8-1.0 In
  - Short Circuit Setting: 6-10 In

HSN Code : 8536

$I_{cu}$ (Overload Setting)	Rated Current	Cat. No.	MRP [₹]
36kA ~ (Adjustable)	630	XF3N630PV	36180
	500	XF3N500PV	33150
	400	XF3N400PV	28890
	320	XF3N320PV	27530
50kA ~ (Adjustable)	630	XF3H630PV	38480
	500	XF3H500PV	36120
	400	XF3H400PV	31450
	320	XF3H320PV	29810

~ means  $I_{cs} = 100\% I_{cu}$

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

HSN Code : 8536

$I_{cu}$ (Overload Setting)	Rated Current	Cat. No.	MRP [₹]
36kA ~ (Adjustable)	630	XF3N630PE-LSIG	49740
	400	XF3N400PE-LSIG	45260
50kA ~ (Adjustable)	630	XF3H630PE-LSIG	53590
	400	XF3H400PE-LSIG	48400

~ means  $I_{cs} = 100\% I_{cu}$

**ACCESSORIES FOR Resilient RANGE OF MCCBs**  
 HSN Code : 8538

Type	Product	Rating	Cat No.	MRP [₹]
Internal Accessories	Shunt Release	220V - 415V F1	XFST220V	1410
		220V - 415V F2	XF2SHT220V	1410
		220V - 415V F3	XF3SHT220V	2350
	Under Voltage Release	240V F1	XFUV240VA	1870
		240V F2	XF2UV240VA	1890
		240V F3	XF3UV240VA	2940
		415V F1	XFUV415VA	2160
		415V F2	XF2UV415VA	2160
		415V F3	XF3UV415VA	2940
	Auxiliary Contacts	1 C/O + 1 C/O	XFALAX11	1540
2 C/O		XFAX2	1540	

HSN Code : 8538

Type	Product	Rating	Cat No.	MRP [₹]	
External Accessories	Din Rail	F1	F1DIN	220	
		Extended Rotary Handle	F1	F1ROHE	1900
			F2	F2ROHE	1960
	F3		F3ROHE	4100	
	Extended Terminals	F1	ACMF1TP100	390	
		F2	ACMF2TP250	1410	
		Phase Barriers	F1	F1PB	90
	F2		F2PB	240	
	F3		F3PB	260	

HSN Code : 8536

Type	Product	Rating	Cat No.	MRP [₹]
External Accessories	MCCB Enclosure	F1	F1EU3P	1010
		F2	F2EU3P	1980

\* For more details refer product catalogue

Effective from 05.07.2021

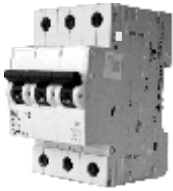
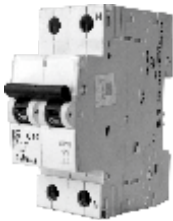
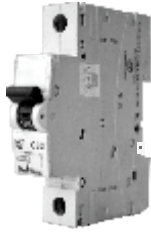




**New**

**HSN Code : 8536**

- Line load interchangeability
- Suitable for isolation
- Suitable for IT systems
- Current limiting design
- Possibility of bus bar termination at both ends



Pole	Standard pack of	Rating	Lower Rating Cat. No.	MRP (per unit) [₹]	Rating	B Curve Cat. No.	MRP (per unit) [₹]	C Curve Cat. No.	MRP (per unit) [₹]
1P	12 units	5A	BCHX10SPC05	400	6A	BCHX10SPB06	240	BCHX10SPC06	240
		4A	BCHX10SPC04	400	10A	BCHX10SPB10	240	BCHX10SPC10	240
		3A	BCHX10SPC03	400	16A	BCHX10SPB16	240	BCHX10SPC16	240
		2A	BCHX10SPC02	400	20A	BCHX10SPB20	240	BCHX10SPC20	240
		1A	BCHX10SPC01	400	25A	BCHX10SPB25	240	BCHX10SPC25	240
		0.5A	BCHX10SPCL5	400	32A	BCHX10SPB32	240	BCHX10SPC32	240
					40A	BCHX10SPB40	560	BCHX10SPC40	560
					50A	BCHX10SPB50	560	BCHX10SPC50	560
					63A	BCHX10SPB63	560	BCHX10SPC63	560
		1P+N	6 units				6A		
					10A			BCHX10SNC10	730
					16A			BCHX10SNC16	730
					20A			BCHX10SNC20	730
					25A			BCHX10SNC25	730
					32A			BCHX10SNC32	730
					40A			BCHX10SNC40	1090
					50A			BCHX10SNC50	1090
			63A			BCHX10SNC63	1090		
2P	6 units	5A	BCHX10DPC05	1110	6A	BCHX10DPB06	785	BCHX10DPC06	785
		4A	BCHX10DPC04	1110	10A	BCHX10DPB10	785	BCHX10DPC10	785
		3A	BCHX10DPC03	1110	16A	BCHX10DPB16	785	BCHX10DPC16	785
		2A	BCHX10DPC02	1110	20A	BCHX10DPB20	785	BCHX10DPC20	785
		1A	BCHX10DPC01	1110	25A	BCHX10DPB25	785	BCHX10DPC25	785
		0.5A	BCHX10DPCL5	1110	32A	BCHX10DPB32	785	BCHX10DPC32	785
					40A	BCHX10DPB40	1235	BCHX10DPC40	1235
					50A	BCHX10DPB50	1235	BCHX10DPC50	1235
					63A	BCHX10DPB63	1235	BCHX10DPC63	1235
		3P	4 units	5A	BCHX10TPC05	1525	6A	BCHX10TPB06	1245
4A	BCHX10TPC04			1525	10A	BCHX10TPB10	1245	BCHX10TPC10	1245
3A	BCHX10TPC03			1525	16A	BCHX10TPB16	1245	BCHX10TPC16	1245
2A	BCHX10TPC02			1525	20A	BCHX10TPB20	1245	BCHX10TPC20	1245
1A	BCHX10TPC01			1525	25A	BCHX10TPB25	1245	BCHX10TPC25	1245
0.5A	BCHX10TPCL5			1525	32A	BCHX10TPB32	1245	BCHX10TPC32	1245
					40A	BCHX10TPB40	1900	BCHX10TPC40	1900
					50A	BCHX10TPB50	1900	BCHX10TPC50	1900
					63A	BCHX10TPB63	1900	BCHX10TPC63	1900
3P+N	3 units						6A		
					10A			BCHX10TNC10	1560
					16A			BCHX10TNC16	1560
					20A			BCHX10TNC20	1560
					25A			BCHX10TNC25	1560
					32A			BCHX10TNC32	1560
					40A			BCHX10TNC40	2115
					50A			BCHX10TNC50	2115
			63A			BCHX10TNC63	2115		
4P	3 units	5A	BCHX10FPC05	2095	6A	BCHX10FPB06	1675	BCHX10FPC06	1675
		4A	BCHX10FPC04	2095	10A	BCHX10FPB10	1675	BCHX10FPC10	1675
		3A	BCHX10FPC03	2095	16A	BCHX10FPB16	1675	BCHX10FPC16	1675
		2A	BCHX10FPC02	2095	20A	BCHX10FPB20	1675	BCHX10FPC20	1675
		1A	BCHX10FPC01	2095	25A	BCHX10FPB25	1675	BCHX10FPC25	1675
		0.5A	BCHX10FPCL5	2095	32A	BCHX10FPB32	1675	BCHX10FPC32	1675
					40A	BCHX10FPB40	2395	BCHX10FPC40	2395
					50A	BCHX10FPB50	2395	BCHX10FPC50	2395
					63A	BCHX10FPB63	2395	BCHX10FPC63	2395

HSN Code : 8536



Poles	Standard Pack of	Rating	Cat. No.	MRP (per unit) [₹]
2P	6 units	40A	BCHISODP40	500
	6 units	63A	BCHISODP63	605
3P	4 units	40A	BCHISOTP40	900
	4 units	63A	BCHISOTP63	1005
4P	3 units	40A	BCHISOFP40	1055
	3 units	63A	BCHISOFP63	1125

## MCB DISTRIBUTION BOXES



HSN Code : 8537



Description	No. of Modules (Incoming + Outgoing)	Single Door		Double Door	
		Cat. No.	MRP [₹]	Cat. No.	MRP [₹]
4 WAY, SPN DB	4	BCHSPNSD04W	950	BCHSPNDD04W	1630
6 WAY, SPN DB	6	BCHSPNSD06W	970	BCHSPNDD06W	1670
8 WAY, SPN DB	8	BCHSPNSD08W	1200	BCHSPNDD08W	1920
12 WAY, SPN DB	12	BCHSPNSD12W	1570	BCHSPNDD12W	2570
16 WAY, SPN DB	16	BCHSPNSD16W	2010	BCHSPNDD16W	3290

HSN Code : 8537



Description	No. of Modules (Incoming + Outgoing)	Single Door		Double Door	
		Cat. No.	MRP [₹]	Cat. No.	MRP [₹]
4 WAY, HTPN DB	8+12	BCHHTPNSD04W	3305	BCHHTPNDD04W	4140
6 WAY, HTPN DB	8+18	BCHHTPNSD06W	3965	BCHHTPNDD06W	5160
8 WAY, HTPN DB	8+24	BCHHTPNSD08W	4365	BCHHTPNDD08W	6410
12 WAY, HTPN DB	8+36	BCHHTPNSD12W	5795	BCHHTPNDD12W	9180

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	9430
6 WAY, DD, MCB I/C, VERTICAL TPN DB	BCHVTPNDD06W-A	8+18	11810
8 WAY, DD, MCB I/C, VERTICAL TPN DB	BCHVTPNDD08W-A	8+24	13300
12 WAY, DD, MCB I/C, VERTICAL TPN DB	BCHVTPNDD12W-A	8+36	16990

All above DB's are double door

# MCB DISTRIBUTION BOXES ..... BCH

**HSN Code : 8537**



Description	Cat. No.	Suitable for Resilient MCCB Frame	MRP [₹]
4 WAY, DD, 125A, MCCB I/C, VERTICAL TPN DB	BCHVTPNDD04W-B	FRAME 1	12850
8 WAY, DD, 125A, MCCB I/C, VERTICAL TPN DB	BCHVTPNDD08W-B	FRAME 1	15655
12 WAY, DD, 125A, MCCB I/C, VERTICAL TPN DB	BCHVTPNDD12W-B	FRAME 1	19960
4 WAY, DD, 250A, MCCB I/C, VERTICAL TPN DB	BCHVTPNDD04W-C	FRAME 2	15660
8 WAY, DD, 250A, MCCB I/C, VERTICAL TPN DB	BCHVTPNDD08W-C	FRAME 2	19140
12 WAY, DD, 250A, MCCB I/C, VERTICAL TPN DB	BCHVTPNDD12W-C	FRAME 2	22350

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	14840
6 WAY, DD, 7 SEGMENT PHASE SEGREGATED DB	BCHPHSGDD06W	8+12+18	16720
8 WAY, DD, 7 SEGMENT PHASE SEGREGATED DB	BCHPHSGDD08W	8+12+24	18670
12 WAY, DD, 7 SEGMENT PHASE SEGREGATED DB	BCHPHSGDD12W	8+12+36	23720

All above DB's are double door

**HSN Code : 8537**



Description	Cat. No.	No. of Modules (Incoming + Outgoing)	MRP [₹]
4 WAY, 40A, DD, PHASE SELECTOR DB	BCHPHSLDD04W-40		17340
6 WAY, 40A, DD, PHASE SELECTOR DB	BCHPHSLDD06W-40		17390
8 WAY, 40A, DD, PHASE SELECTOR DB	BCHPHSLDD08W-40		19770
12 WAY, 40A, DD, PHASE SELECTOR DB	BCHPHSLDD12W-40		22680
4 WAY, 63A, DD, PHASE SELECTOR DB	BCHPHSLDD04W-63		18140
6 WAY, 63A, DD, PHASE SELECTOR DB	BCHPHSLDD06W-63		18560
8 WAY, 63A, DD, PHASE SELECTOR DB	BCHPHSLDD08W-63		20470
12 WAY, 63A, DD, PHASE SELECTOR DB	BCHPHSLDD12W-63		22680

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	6780
3 ROW, 13 MODULE, DD, ROW DB	BCHROWDB3R13	13	7990
4 ROW, 13 MODULE, DD, ROW DB	BCHROWDB4R13	13	8850

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		1295
SPN-20A, P&S DB	BCHPSDBSPN20		1295
TPN-20A, P&S DB	BCHPSDBTPN20		3730
TPN-30A, P&S DB	BCHPSDBTPN30		3730

**HSN Code : 8537**



Description	Cat. No.	No. of Modules (Incoming + Outgoing)	MRP [₹]
SP, ONE WAY MCB DB	BCHOWMCBDBSP		530
DP, ONE WAY MCB DB	BCHOWMCBDBDP		530
TP, ONE WAY MCB DB	BCHOWMCBDBTP		570
FP, ONE WAY MCB DB	BCHOWMCBDBFP		570





### RCCB, Double Pole

HSN Code : 8536

Description	Cat. No.	MRP [₹]
25A - 30mA	BCHRCB030DPC25	3095
40A - 30mA	BCHRCB030DPC40	3170
63A - 30mA	BCHRCB030DPC63	4255
25A - 100mA	BCHRCB100DPC25	3130
40A - 100mA	BCHRCB100DPC40	3245
63A - 100mA	BCHRCB100DPC63	4350
25A - 300mA	BCHRCB300DPC25	3130
40A - 300mA	BCHRCB300DPC40	3475
63A - 300mA	BCHRCB300DPC63	4350

All above RCCB's are 'AC' type



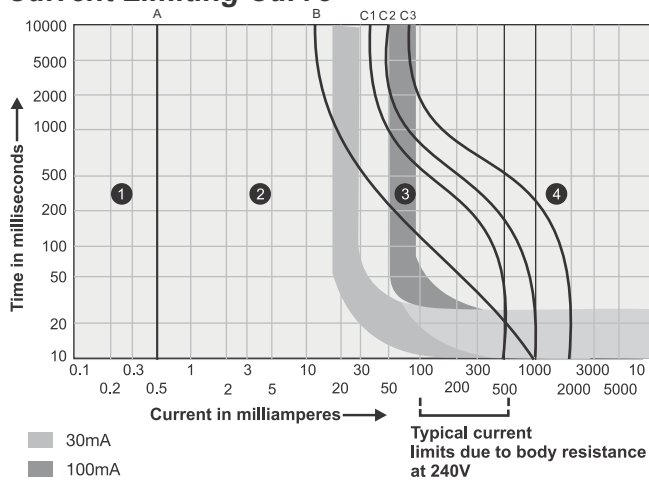
### RCCB, Four Pole

HSN Code : 8536

Description	Cat. No.	MRP [₹]
25A - 30mA	BCHRCB030FPC25	3995
40A - 30mA	BCHRCB030FPC40	4115
63A - 30mA	BCHRCB030FPC63	4630
25A - 100mA	BCHRCB100FPC25	4115
40A - 100mA	BCHRCB100FPC40	4285
63A - 100mA	BCHRCB100FPC63	4630
25A - 300mA	BCHRCB300FPC25	4115
40A - 300mA	BCHRCB300FPC40	4305
63A - 300mA	BCHRCB300FPC63	4630

All above RCCB's are 'AC' type

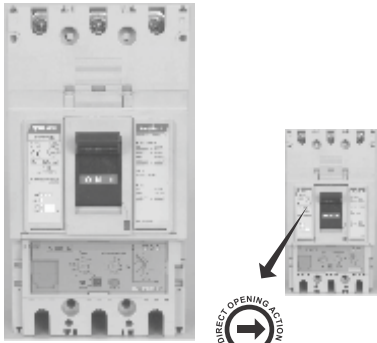
### Current Limiting Curve



### 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.

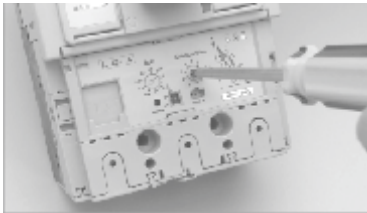
## Total Protection Complete Control



**TemBreak**



User friendly adjustment



Clear Trip Indication



**OFF**



**ON**



**TRIP**

### Tembreak 2 MCCB with 10kA\* breaking capacity

HSN Code : 8536

Frame	Pole	Current (A)	Type	Code	Cat. No.	MRP [₹]
E100SF	3	10-40	Fix-Thermal	■	XT2E100SF3F■U0	6340
	3	50-75	Fix-Thermal	■	XT2E100SF3F■U0	6340
	3	100	Fix-Thermal	A0	XT2E100SF3FA0U0	6680

\* Ics = 50%

### Tembreak 2 MCCB with 25kA\* breaking capacity

HSN Code : 8536

Frame	Pole	Current (A)	Type	Code	Cat. No.	MRP [₹]
S160SCF	3	15-40	Fix-Thermal	■	XT2S160SCF3F■U0	7060
	4		Fix-Thermal	■	XT2S160SCF4F■U0	9890
	3	50-75	Fix-Thermal	■	XT2S160SCF3F■U0	7060
	4		Fix-Thermal	■	XT2S160SCF4F■U0	9890
	3	100	Fix-Thermal	A0	XT2S160SCF3FA0U0	7410
	4		Fix-Thermal	A0	XT2S160SCF4FA0U0	10370
	3	125	Fix-Thermal	AB	XT2S160SCF3FABU0	7890
	4		Fix-Thermal	AB	XT2S160SCF4FABU0	10880
3	160	Fix-Thermal	AF	XT2S160SCF3FAFU0	9400	
4		Fix-Thermal	AF	XT2S160SCF4FAFU0	11430	
S160SCJ	3	25-40	Adj-Thermal	■	XT2S160SCJ3F■U0	9810
	4		Adj-Thermal	■	XT2S160SCJ4F■U0	13080
	3	63-80	Adj-Thermal	■	XT2S160SCJ3F■U0	9810
	4		Adj-Thermal	■	XT2S160SCJ4F■U0	13080
	3	100	Adj-Thermal	A0	XT2S160SCJ3FA0U0	10300
	4		Adj-Thermal	A0	XT2S160SCJ4FA0U0	13730
	3	125	Adj-Thermal	AB	XT2S160SCJ3FABU0	10810
	4		Adj-Thermal	AB	XT2S160SCJ4FABU0	14410
	3	160	Adj-Thermal	AF	XT2S160SCJ3FAFU0	11340
	4		Adj-Thermal	AF	XT2S160SCJ4FAFU0	15150

\*Ics = 50%

### Code - Current Rating

Rating	15A	20A	30A	32A	40A	50A	60A	63A	75A	100A	125A	150A	160A	175A	200A	225A	250A	400A	630A	800A	1000A	1250A	1600A	2000A
■Code	15	20	30	32	40	50	60	63	75	A0	AB	AE	AF	AG	B0	BB	BE	D0	630	800	1000	1250	1600	2000

Plugin versions Available on request

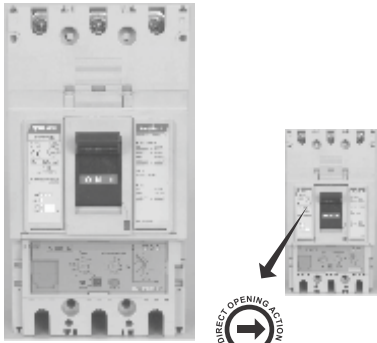
Accessories are mentioned on page no 12

\* For more details refer product catalogue



## Total Protection Complete Control Tembreak 2 MCCB with 25kA\* breaking capacity

HSN Code : 8536



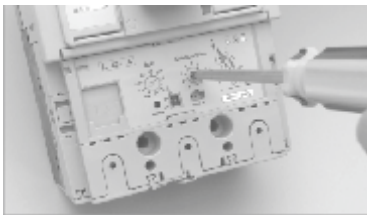
TemBreak



Frame	Pole	Current (A)	Type	Code	Cat. No.	MRP [₹]
E400NJ	3	250	Adj-Thermal	BE	XT2E400NJ3FBEU0	38390
	4		Adj-Thermal	BE	XT2E400NJ4FBEU0	51150
	3	400	Adj-Thermal	D0	XT2E400NJ3FD0U0	40290
	4		Adj-Thermal	D0	XT2E400NJ4FD0U0	53680

\*Ics = 100%

### User friendly adjustment



## Tembreak 2 MCCB with 36kA\* breaking capacity

HSN Code : 8536

Frame	Pole	Current(A)	Type	Code	Cat. No.	MRP [₹]
S250NJ	3	160	Adj-Thermal	AF	XT2S250NJ3FAFU0	22480
	4		Adj-Thermal	AF	XT2S250NJ4FAFU0	28920
	3	200	Adj-Thermal	B0	XT2S250NJ3FB0U0	22490
	4		Adj-Thermal	B0	XT2S250NJ4FB0U0	30150
	3	250	Adj-Thermal	BE	XT2S250NJ3FBEU0	24280
	4		Adj-Thermal	BE	XT2S250NJ4FBEU0	30400
S400CJ	3	400	Adj-Thermal	D0	XT2S400CJ3FD0U0	44150
	4		Adj-Thermal	D0	XT2S400CJ4FD0U0	58870
S800CJ	3	630	Adj-Thermal	630	XT2S800CJ3F630U0	63250
	4		Adj-Thermal	630	XT2S800CJ4F630U0	84340
	3	800	Adj-Thermal	800	XT2S800CJ3F800U0	66420
	4		Adj-Thermal	800	XT2S800CJ4F800U0	88550
S250NE	3	125	Electronic	AB	XT2S250NE3FABU0	57070
	4		Electronic	AB	XT2S250NE4FABU0	76090
	3	250	Electronic	BE	XT2S250NE3FBEU0	59930
	4		Electronic	BE	XT2S250NE4FBEU0	79900
E630NE	3	630	Electronic	630	XT2E630NE3F630U0	70370
	4				XT2E630NE4F630U0	93830

\*Ics = 100%

Clear Trip Indication



OFF



ON



TRIP

### Code - Current Rating

Rating	15A	20A	30A	32A	40A	50A	60A	63A	75A	100A	125A	150A	160A	175A	200A	225A	250A	400A	630A	800A	1000A	1250A	1600A	2000A
Code	15	20	30	32	40	50	60	63	75	A0	AB	AE	AF	AG	B0	BB	BE	D0	630	800	1000	1250	1600	2000

Plugin versions Available on request

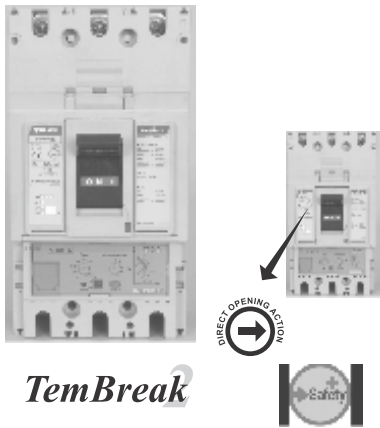
Accessories are mentioned on page no 12

\* For more details refer product catalogue

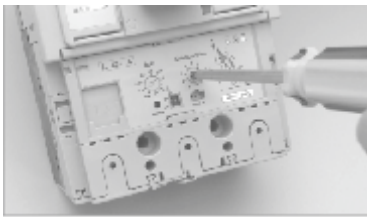
Total Protection Complete Control

Tembreak 2 MCCB with 50kA\* breaking capacity

HSN Code : 8536



User friendly adjustment



Clear Trip Indication



OFF



ON



TRIP

Frame	Pole	Current (A)	Type	Code	Cat. No.	MRP [₹]
S400NF	3	125	Fix-Thermal	AB	XT2S400NF3FABU0	40890
	4		Fix-Thermal	AB	XT2S400NF4FABU0	54530
	3	160	Fix-Thermal	AF	XT2S400NF3FAFU0	41710
	4		Fix-Thermal	AF	XT2S400NF4FAFU0	55620
	3	200	Fix-Thermal	B0	XT2S400NF3FB0U0	42540
	4		Fix-Thermal	B0	XT2S400NF4FB0U0	56730
	3	225	Fix-Thermal	BB	XT2S400NF3FBBU0	42580
	4		Fix-Thermal	BB	XT2S400NF4FBBU0	56760
	3	250	Fix-Thermal	BE	XT2S400NF3FBEU0	43190
	4		Fix-Thermal	BE	XT2S400NF4FBEU0	57590
	3	320	Fix-Thermal	BF	XT2S400NF3FBFU0	43840
	4		Fix-Thermal	BF	XT2S400NF4FBFU0	58450
3	400	Fix-Thermal	D0	XT2S400NF3FD0U0	44510	
4		Fix-Thermal	D0	XT2S400NF4FD0U0	59340	
S800NF	3	630	Fix-Thermal	630	XT2S800NF3F630U0	69120
	4		Fix-Thermal	630	XT2S800NF4F630U0	92160
	3	800	Fix-Thermal	800	XT2S800NF3F800U0	71230
	4		Fix-Thermal	800	XT2S800NF4F800U0	94960
S400NJ	3	250	Adj-Thermal	BE	XT2S400NJ3FBEU0	41350
	4		Adj-Thermal	BE	XT2S400NJ4FBEU0	55140
	3	400	Adj-Thermal	D0	XT2S400NJ3FD0U0	44350
	4		Adj-Thermal	D0	XT2S400NJ4FD0U0	59130
S800NJ	3	630	Adj-Thermal	630	XT2S800NJ3F630U0	69630
	4		Adj-Thermal	630	XT2S800NJ4F630U0	92830
	3	800	Adj-Thermal	800	XT2S800NJ3F800U0	73070
	4		Adj-Thermal	800	XT2S800NJ4F800U0	97420
S400NE	3	250	Electronic	BE	XT2S400NE3FBEU0	63990
	4		Electronic	BE	XT2S400NE4FBEU0	85320
	3	400	Electronic	D0	XT2S400NE3FD0U0	67190
	4		Electronic	D0	XT2S400NE4FD0U0	89580
S630CE	3	630	Electronic	630	XT2S630CE3F630U0	71430
	4	630	Electronic	630	XT2S630CE4F630U0	93990
S800NE	3	800	Electronic	800	XT2S800NE3F800U0	93110
	4	800	Electronic	800	XT2S800NE4F800U0	124130
S1000SE	3	1000	Electronic	1000	XT2S1000SE3F1000U0	111740
	4	1000	Electronic	1000	XT2S1000SE4F1000U0	149120
S1250SE	3	1250	Electronic	1250	XT2S1250SE3F1250U0	167660
	4	1250	Electronic	1250	XT2S1250SE4F1250U0	223560
S1600SE	3	1600	Electronic	1600	XT2S1600SE3F1600U0	226360
S1600SE	4				XT2S1600SE4F1600U0	301810

\*Ics = 100%

### Code - Current Rating

Rating	15A	20A	30A	32A	40A	50A	60A	63A	75A	100A	125A	150A	160A	175A	200A	225A	250A	400A	630A	800A	1000A	1250A	1600A	2000A
Code	15	20	30	32	40	50	60	63	75	A0	AB	AE	AF	AG	B0	BB	BE	D0	630	800	1000	1250	1600	2000

\* For more details refer product catalogue

Note : MCCB's upto 2000A rating & 200KA breaking capacity available on request. Plug in versions available on request.



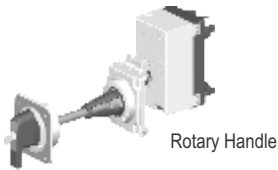
# ACCESSORIES *TemBreak* MCCB..... BCH

## ACCESSORIES FOR TEMBREAK-2 RANGE OF MCCB

HSN Code : 8538



Motor Operator



Rotary Handle

Type	Description	up to 125A	250A	400A & 800A	MRP [₹]
Aux Switch	1 Change over	T2AX00M3SWA			1970
Alarm Switch	1 Change over	T2AL00M3SWA			1970
Shunt Release	100-120VAC	T2SH00A10WA			5010
Shunt Release	200-240VAC	T2SH00A20WA			4550
Shunt Release	380-450VAC	T2SH00A40WA			5610
UV Release	200-240VAC	T2UV00A20NWA			6600
UV Release	380-450VAC	T2UV00A40NWA			6910
Motor Operator	110VAC	T2MC12A10NA	T2MC25A10NA		On Request
Motor Operator	220VAC	T2MC12A20NA	T2MC25A20NA		On Request
Motor Operator	240VAC	T2MC12A24NA	T2MC25A24NA		On Request
Motor Operator	100-240VAC			T2MC40A10NA	On Request
Rotary Handle	Panel Mounted (IP54)	T2HP12R5BNA			8960
Rotary Handle	Panel Mounted (IP54)		T2HP25R5BNA		12450
Rotary Handle	Panel Mounted (IP54)			T2HP40R5BNA	14770
				T2HP80R5BNA	18090

## Extended Terminals for All TEMBREAK-2 MCCBs

HSN Code : 8538

Frame	For	Cat. No.	MRP [₹]
125A FRAME	3 Pole	ACMTP1253	850
	4 Pole	ACMTP1254	1190
160A/250A FRAME	3 Pole	ACMTP2503	1310
	4 Pole	ACMTP2504	2270
400A FRAME	3 Pole	ACMTP4003	3470
	4 Pole	ACMTP4004	4010

One set = 6 Nos. Links for 3 Pole MCCBs  
One set = 8 Nos. Links for 4 Pole MCCBs

\* For more details refer product catalogue

## Switch Disconnecter Fuse Units



Suitable for DIN / BOLTED fuses in open execution

HSN Code : 8536

Rating (A) AC-23A	Cat No.	Fuse Type	Type	MRP [₹]
32A	PSFS323ND00	DIN	TPN	2220
32A	PSFS323ND000	DIN	TPN	2220
32A	PSFS323NB	Bolted	TPN	2220
32A	PSFS323B	Bolted	TP	2170
63A	PSFS633ND00	DIN	TPN	3070
63A	PSFS633ND000	DIN	TPN	3070
63A	PSFS633NB	Bolted	TPN	3070
63A	PSFS633B	Bolted	TP	2990
100	PSFS1003*	DIN/Bolted	TP	5750
100	PSFS1003N*	DIN/Bolted	TPN	6020
125	PSFS1253*	DIN/Bolted	TP	7600
125	PSFS1253N*	DIN/Bolted	TPN	8150
160	PSFS160*	DIN/Bolted	TP	8350
160	PSFS1603N*	DIN/Bolted	TPN	9070
200	PSFS2003B	Bolted	TP	10420
200	PSFS2003NB	Bolted	TPN	10700

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

## Switch Disconnecter

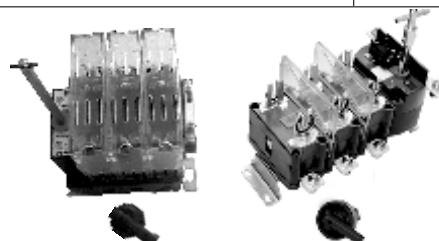
HSN Code : 8536

Rating (A) AC-23A	Cat No.	Fuse Type	Type	MRP [₹]
32A	PSSD323N	-	TPN	2030
63A	PSSD633N	-	TPN	2790
100A	PSSD1003N	-	TPN	5480
125A	PSSD1253N	-	TPN	6810
160A	PSSD1603N	-	TPN	7670
200A	PSSD2003N	-	TPN	8670

## Fuse Switch Units Type FS

HSN Code : 8538

Rating (A) AC-23A	Cat No.	Fuse Type	Type	MRP [₹]
32A	FS0N	BOLTED	TP	2330
63A	FS1N	BOLTED	TP	3170
Shroud	AC21TS			200
1NO+1NC	AC21EB11	for FS0 / FS1N		580
Neutral	AC21L	for FS0 / FS1N-		260
Handle assembly-32A	SP21FS0H	for FS0		380
Handle assembly-63A	SP21FS1H	for FS1		380



### Switch Disconnecter Fuse

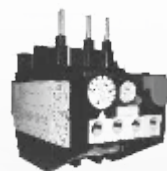
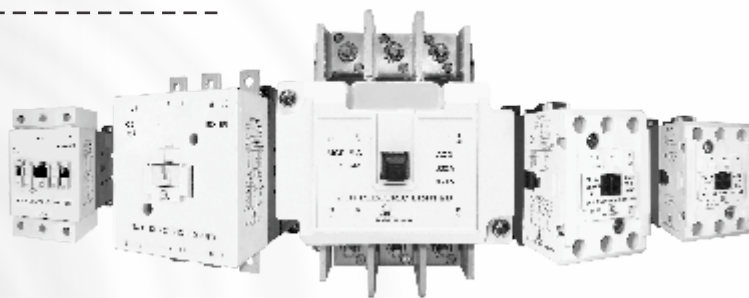
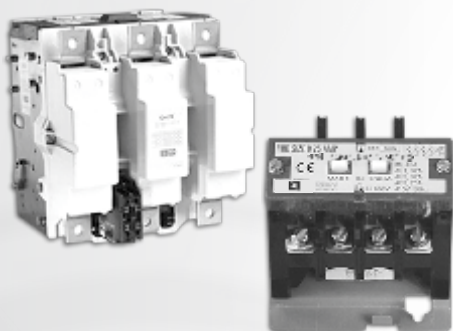
- Conforms to IS 13947-3
- TPN/TP version
- AC 23A duty
- Mechanism with 4 Breaks per pole
- Handle with door interlock and padlock



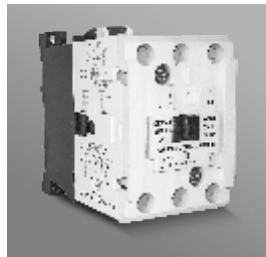
# Controlgear

- DUROS FREEDOM CONTACTORS
- CITATION SERIES
- AGRI CONTACTORS
- CAPACITY DUTY CONTACTORS
- DEFINITE PURPOSE CONTACTORS

- **Contactors**
- **Overload Relays**
- **Electronic Over Current Relay**
- **Motor Protection Circuit Breaker**
- **Solid State Relay**
- **Push Buttons & Indicating Lights**



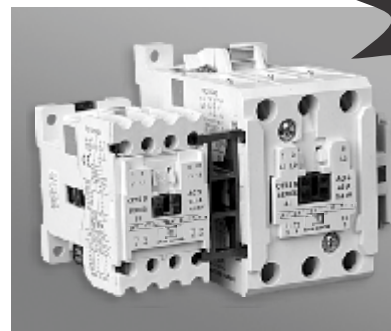
## DUROS FREEDOM RANGE



- Conforms to IEC 60947-4-1 / IS 13947
- No derating upto -20°C to 60°C
- 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



**Design Flexibility**

Interlocking 2 Different frames using a common Mechanical Interlock (Upto 75A)



### 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





# Contactors ..... BCH

## Duros Freedom Series 3 Pole AC Control

HSN Code : 8536

Size	AC1 Rating	AC3 Rating 415 V			Aux. Contact	Cat. No.	MRP [₹]	Lot Size
		A	HP	KW				
A	20	6	3	2.2	1NO	CE15ANS3 ■ B-N	1130	1
					1NC	CE15ANC3 ■ B-N		
B	20	9.1	5.5	4	1NO	CE15BNS3 ■ B-N	1190	
					1NC	CE15BNC3 ■ B-N		
C	20	12	7.5	5.5	1NO	CE15CNS3 ■ B-N	1360	
					1NC	CE15CNC3 ■ B-N		
D	32	16	10	7.5	1NO	CE15DN3. ■ B10-N	1540	
					1NC	CE15DN3. ■ B01-N		
	32	18	10	7.5	1NO	CE15D1N3. ■ B10-N	1550	
					1NC	CE15D1N3. ■ B01-N		
E	40	25	15	11	1NO	CE15EN3. ■ B10-N	2120	
					1NC	CE15EN3. ■ B01-N		
F	40	32	20	15	1NO	CE15FN3. ■ B10-N	4220	
					1NC	CE15FN3. ■ B01-N		
G	60	40	30	22	1NO+1NC	CE15GN3 ■	6270	
					-	CE15GN3 ■ NB	5940	
H	75	50	33.5	25	1NO+1NC	CE15HN3 ■	7900	
					-	CE15HN3 ■ NB	7590	
J	80	65	50	37	1NO+1NC	CE15JN3 ■	10740	
					-	CE15JN3 ■ NB	10430	
K	80	73	50	37	1NO+1NC	CE15KN3 ■	11030	
					-	CE15KN3 ■ NB	10680	
	80	75	50	37	1NO+1NC	CE15K1N3 ■	11130	
					-	CE15K1N3 ■ NB	10740	
K-1	115	80	53	40	1NO+1NC	BCH15KT.3.11. ■	12650	
L	125	95	62	47	1NO+1NC	BCH15LT.3.11. ■	15280	
M	135	110	80	60	1NO+1NC	BCH15MT.3.11. ■	18770	
N	230	150	100	75	1NO+1NC	BCH15NT.3.11. ■	24970	
P	250	175	125	95	1NO+1NC	BCH15PT.3.11. ■	31120	
R	300	200	150	100	1NO+1NC	MCE15RN3 ■ 7	36100	
S0	315	265	186	140	1NO+1NC	MCE15S0N3 ■ 7	44700	
S	315	300	220	160	1NO+1NC	MCE15SN3 ■ 7	49360	

## Duros Freedom Series 3 Pole 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. ■	63330
BCH55	600	450	320	240	2NO+2NC	BCH55.3.22. ■	81440
BCH57	760	550	420	315	2NO+2NC	BCH57.3.22. ■	91790
BCH62	1000	700	533	400	2NO+2NC	BCH62.3.22. ■	167540
BCH64	1000	860	666	500	2NO+2NC	BCH64.3.22. ■	272890
BCH76	1200	1000	800	600	1NO+2NC	BCH76.3.12. ■	485810
BCH78	1350	1200	933	700	1NO+2NC	BCH78.3.12. ■	514900

■ For Standard Coil Voltage Codes refer page 24

■ For Non Standard Coil Voltages, extra MRP to be added to Contactor MRP for :

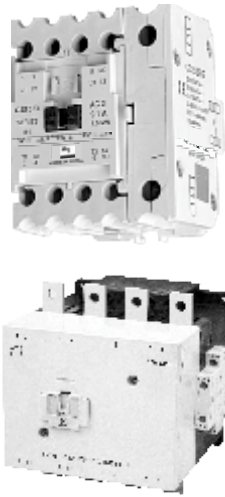
Contactor size

{ A ~ K @ ₹40  
 { K-1 ~ S @ ₹110  
 { BCH 54 ~ BCH 57 @ ₹220

## Duros Freedom series 4 Pole contactors (AC Control)

- 100% rated add-on 4th pole for flexibility (32A to 80A AC1)
- Low energy consumption

HSN Code : 8536

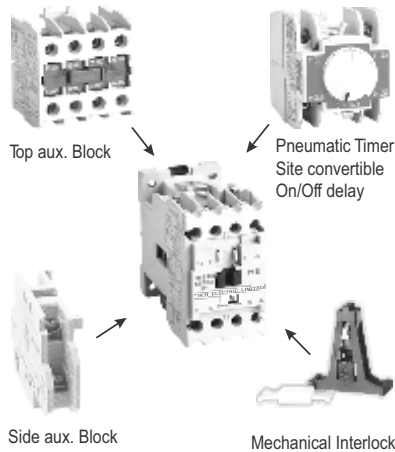


AC1 Rating (A)	Cat. No.	MRP [₹]
20	CE15CN4 ■ B-N	1670
32	CE15DN4 ■-N	1740
40	CE15EN4 ■-N	2630
60	CE15GN4 ■	6330
75	CE15HN4 ■	8400
80	CE15JN4 ■	9680
200	BCH15MN.4.11.■	21910
250	BCH15NN.4.11.■	24200
300	BCH15PN.4.11.■	43320

## Contactor : 3 Pole DC Control Type CE15

HSN Code : 8536

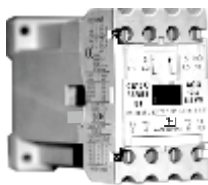
### Common Accessories 'upto 73A'



AC3 (A) at 415VAC	KW	Aux Contact	Cat No.	MRP [₹]
6	2.2	1NC	CE15ANC3 ■-N	1600
		1NO	CE15ANS3 ■-N	
9	4.4	1NC	CE15BNC3 ■-N	1740
		1NO	CE15BNS3 ■-N	
12	5.5	1NC	CE15CNC3 ■-N	1830
		1NO	CE15CNS3 ■-N	
16	7.5	-	CE15DN3 ■-N	2220
25	11	-	CE15EN3 ■-N	2970
32	15	-	CE15FN3 ■-N	6290
40	22	-	CE15GN3 ■	7450
50	25	-	CE15HN3 ■	9500
65	37	-	CE15JN3 ■	11300
73	37	-	CE15KN3 ■	13310
75	37	-	CE15K1N3 ■	13310

■ For Coil Voltage Codes refer Table on page 24

## Pure DC Duros Freedom Series 3 Pole DC Control Type CE16



### DC Control

- Standard voltages 24VDC, 110VDC, 220VDC

AC3 (A) at 415VAC	KW	Aux Contact	Cat No.	MRP [₹]
9.1	4	1NO	CE16BNS3*B	1810
		1NC	CE16BNC3*B	
12	5.5	1NO	CE16CNS3*B	1910
		1NC	CE16CNC3*B	
16	7.5	1NO+1NC	CE16DN3*B	2330
25	11	1NO+1NC	CE16EN3*B	3180
32	15	1NO+1NC	CE16FN3*B	6620

HSN Code : 8536

\*Coil Codes :  
DC control

24V	U1
48V	W1
110V	A1
220V	B1
60V	X1
125V	E1



Pure DC

## Control Relay HSN Code : 8536

Aux Contact	Cat No.	MRP [₹]
2NO+2NC	D16CR22*	1970
3NO+1NC	D16CR31*	
4NO	D16CR40*	

\*Coil Codes : DC control

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

## Control Relays Freedom Series HSN Code : 8536

Size	Contact Configuration	Cat No.	MRP [₹]		Lot Size
			AC	DC	
CR	2NO+2NC 3NO+1NC 4NO	D15CR22 ■-N D15CR31 ■-N D15CR40 ■-N	1280	1970	1

■ For Standard Coil Voltage Codes refer page 24

■ For Non Standard Coil Voltages, extra MRP to be added to Contactor / Control relay MRP for :

Contactor size { A ~ K @ ₹40  
BCH15MN ~ BCH15PN @ ₹110  
D15CR ~ D16CR @ ₹40



## Freedom series Capacitor duty contactor (AC Control)

HSN Code : 8536



kVAR rating at 415V 3Ph 50Hz	Cat No.	Aux Contacts	MRP [₹]
5	CCD.05.11.■	1NO+1NC	2370
10	CCD.10.11.■	1NO+1NC	2580
15	CCD.15.11.■	1NO+1NC	3770
20	CCD.20.11.■	1NO+1NC	4420
25	CCD.25.11.■	1NO+1NC	5480
30	CCD.30.11.■	1NO+1NC	8630
40	CCD.40.11.■	1NO+1NC	13160
50	CCD.50.21.■	2NO+1NC	13830
60	CCD.60.21.■	2NO+1NC	15520

- For Standard Coil Voltage refer table on page no. 24
- For Non Standard Coil Voltages, extra MRP to be added to Contactor MRP for :  
 Contactor size { CCD.05 ~ CCD.40 @ ₹40  
 CCD.50 ~ CCD.60 @ ₹110

## 'NHD' Series 2 Pole Contactor

HSN Code : 8536

### 2 Pole Contactors



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

Ith (A)	AC3 (A) 240V AC	Cat. No.	MRP [₹]	Lot Size
20	12	CPG 212 ■	1320	1
25	16	CPG 216 ■	1500	
35	20	CPG 220 ■	1970	
40	25	CPG 225 ■	2220	
40	32	CPG 232 ■	2545	
50	40	CPG 240 ■	2730	

- For Coil Voltage Codes refer Table on page 24

## 'NHD' Series 4 Pole Contactor

HSN Code : 8536

### 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

Size	AC1 (A)	AC3 Rating at 415 V			Cat. No.	MRP [₹]	Lot Size
		(A)	HP	KW			
CP12	20	12	7.5	5.5	CP12N ■	2490	1
00	20	16	10	7.5	C00N ■	2820	
CP20	30	20	12.5	9.3	CP20N ■	3620	
0	32	25	15	11	N0N ■	5040	
01	40	32	20	15	N01N ■	6360	
1	50	40	25	18.5	N1N ■	7740	

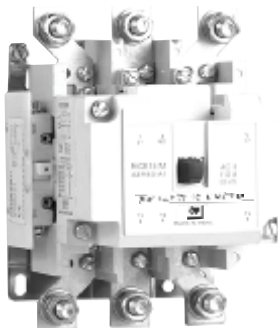
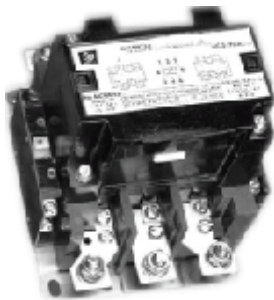
HSN Code : 8538

Description	Orientation	Cat. No.	MRP [₹]	Lot Size
Auxiliary Contact Blocks - NHD	1NO	001CB10	285	1
	1NO+1NC	001CB11	340	
	2NO	001CB20		
	2NC	001CB02		

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



- Quick connect plugin terminals
- Specially designed low VA coil



## Definite Purpose Contactors

HSN Code : 8536

1 Pole				2 Pole			
AC3 (A)	Type	Cat. No.	MRP [₹]	AC3 (A)	Type	Cat. No.	MRP [₹]
25	1 Pole	CPD251CK	840	20	2P, 140-200VAC	CPD202BL	930
25	1 Pole with Neutral	CPD251NCK	860	25	2P, 220-240VAC	CPD252H	970
40	1 Pole	CPD401CK	910	25	2P, 415VAC	CPD252M	
40	1 Pole with Neutral	CPD401NCK	980	40	2P, 220-240VAC	CPD402H	1020
				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*			

## Citation Series 3 Pole AC Control

HSN Code : 8536

Size	AC3 Rating at 415 V			Cat. No. (with Aux. contact 2NO+2NC)	MRP [₹]	Cat. No. (with Aux. contact 1NO+1NC)	MRP [₹]	Cat. No. (without Aux. contact)	MRP [₹]
	Amps	HP	KW						
C4	32	20	15	C4NE22 ■	5870	C4NE11 ■	5490	C4NE00 ■	4870
D	40	30	22	MC10DN22 ■	9290	MC10DN11 ■	8180	MC10DN00 ■	8120
E	70	50	37	MC10EN22 ■	16650	MC10EN11 ■	16310	MC10EN00 ■	16000

▪ Standard coil voltages are 24, 110, 220, 240 & 415 V AC, 50 Hz. For voltage codes refer Table on page 24

HSN Code : 8536

Size	AC1 Rating	AC3 Rating 415 V			Aux. Contact	Cat. No.	MRP [₹]	Lot Size
		A	HP	KW				
L	140	80	53	40	1NO+1NC	MCE15LN3 ■ 5	14370	1
M	150	95	62	47	1NO+1NC	MCE15M0N3 ■ 5	17240	
M-5	150	110	80	60	1NO+1NC	MCE15MN3 ■ 5	21090	
N	300	140	100	75	1NO+1NC	MCE15NN3 ■ 7	31460	1
Q	300	185	120	90	1NO+1NC	MCE15QN3 ■ 7	35620	

## Other Freedom Series Contactors

### Duros Freedom Series 3 Pole AC Control

Size	Ac1 Rating	AC3 Rating 415 V			Aux. Contact	Cat. No.	MRP [₹]	Lot Size
		A	HP	KW				
D	32	16	10	7.5	1NO+1NC	CE15DN3 ■ B-N	1740	1
					-	CE15DN3 ■ -N	1430	
	32	18	10	7.5	1NO+1NC	CE15D1N3 ■ B-N	1750	
					-	CE15D1N3 ■ -N	1440	
E	40	25	15	11	1NO+1NC	CE15EN3 ■ B-N	2320	
					-	CE15EN3 ■ -N	1980	
F	40	32	20	15	1NO+1NC	CE15FN3 ■ B-N	4420	
					-	CE15FN3 ■ -N	4010	

▪ For Standard Coil Voltage refer table on pageno. 24

▪ For Non Standard Coil Voltages, extra MRP to be added to Contactor MRP for :

Contactor size

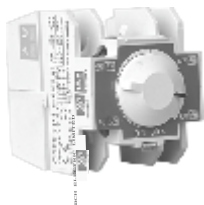
$$\left\{ \begin{array}{l} D \sim F @ ₹40 \\ C4 \sim E @ ₹50 \\ L \sim Q @ ₹110 \end{array} \right.$$



# Accessories - Contactors ..... BCH

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

HSN Code : 8538



Horizontal Mechanical Interlocks

Vertical Mechanical Interlocks

Accessories	Configuration	Cat No.	Contactors Type	MRP [₹]
Aux. Contact Block (side Mounting)	1NO	C320KGSR10	CE15 & CR	200
	1NO+1NC	C320KGSR11		500
	1NC	C320KGSR01		200
	2NO	C320KGSR20		490
	1NO+1NC	BCH15S11	BCH15	620
	1NO+1NC	MC320KB11	MCE15R	790
	1NO+1NC (Late break type)	MC320KAS11	MCE15S0 & MCE15S	760
	2NO+2NC	EF22	BCH54 to BCH64	6470
	1NO+1NC	EB11	BCH76 to BCH78	10050
4th Neutral Switching Pole	800A	NP800/5	BCH54 to 57	33240
	1000A	NP1000/6	BCH62 to 64	39520
	1000A	NP1000/7	BCH76 to 78	45000
Aux. Contact Block (Front Mounting)	1NO	C320KGTC10	CE15, CR	200
	1NC	C320KGTC01		
	2NO	C320KGT*20		290
	2NC	C320KGT*02		
	1NO+1NC	C320KGT*11	520	
	2NO+2NC	C320KGT*22		
	3NO+1NC	C320KGT*31		
	4NO	C320KGT*40		
	1NO+3NC	C320KGT*13		
	4NC	C320KGT*04	BCH15	1210
	4NO	BCH15T40		
	3NO+1NC	BCH15T31		
	2NO+2NC	BCH15T22		960
	1NO+1NC	BCH15T11		
	1NO	BCH15T10		330
1NC	BCH15T01			
Pneumatic Timer Block "ON/OFF" Delay site selectable	1NO+1NC (0.1 to 30 sec)	C320TP1	CE15 & CR	1410
	1NO+1NC (10 to 180 sec)	C320TP2		
Mechanical Interlocks	-	C321KM60	CE15 & CR	460
	-	MC321KM3	MCE15R to MCE15S	1410
	Horizontal	BM5H	BCH54 to 57	8540
		BM6H	BCH62 to 64	14930
		BM7H	BCH76 to 78	39570
	Vertical	BM5V	BCH54 to 57	8540
		BM6V	BCH62 to 64	14930
		BM7V	BCH76 to 78	35110
	Horizontal	BM0H	BCH15KT/LT/MT	470
		BM3H	BCH15NT/PT/MN/NN/PN	510

\*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

# Accessories - Contactors ..... BCH



## Add-on accessories for sizes A to K, CR, BCH15KT to BCH15PT, R, S0 & S1 HSN Code : 8538

Accessories	Configuration	Cat No.	Contactors Type	MRP [₹]
Coil Surge Suppressors	24-48V (50/60Hz)	MC320LR11	CE15, CR	460
	110-240V (50/60Hz)	MC320LR12		
Mechanical latch #	§ to complete the cat no. suffix code given	AM5- §	BCH54 to BCH57	23700
		Am6 §	BCH62 to BCH64	33520

# 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

## 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	680
	1NO+1NC	MC320KB11	N & Q	790
Aux. block add-on (Late break type)	1NO+1NC	MC320KAS11	L, M, M-5, N & Q	760
	1NO+1NC	AC34EA11	C4, D & E	540
Mechanical Interlock		MC321KM1	C4 & D	580
		MC321KM2	L, M, M-5 & E	630
		MC321KM3	N & Q	1410
Base block	1NO+1NC	MC320KB2	C4 & D	610
	1NO+1NC	AC35EB11	E	600

## Spare Contacts set for Duro Freedom Contactors HSN Code : 8538

Size	Consisting of	Cat. No.	MRP [₹]
A	Complete top housing Consisting of fixed & moving contacts	SBANS3 SBANC3 SBAN4	920
B		SBBNS3 SBBNC3 SBBN4	980
C		SBCNS3 SBCNC3 SBCN4	1070
D		SBDN3	1300
E		SBEN3	1530
F		SBFN3	3010
G	6 Fixed contacts 3 Moving Contacts	6-65-4	2640
H	3 springs	6-65-6	3270
J	6 Arc Bonnets	6-65-15	4440
K	3 Spring Retainer	6-65-17	4590
BCH15KT	Complete set of 6 fixed & 3 moving contacts with hardware, contact springs, spring retainers and arc runners	CP-BCH15KT-3	4910
BCH15LT		CP-BCH15LT-3	5640
BCH15MT		CP-BCH15MT-3	6080
BCH15NT		CP-BCH15NT-3	10030
BCH15PT		CP-BCH15PT-3	10030
R	6 Fixed contacts 3 Moving contacts 12 CSK screws & washers	6-288	16160
S0	3 Springs Spring retainers Self tapping screws & washers	6-286-S0	21830
S	6 Arc Chute assly & screws	6-286	22030
BCH54	Complete set of 6 fixed & 3 moving contacts with hardware, contact springs, spring retainers and arc runners	CP-BCH54-3	27500
BCH55		CP-BCH55-3	31700
BCH57		CP-BCH57-3	44670
BCH62		CP-BCH62-3	81630
BCH64		CP-BCH64-3	100350
BCH76		CP-BCH76-3	238730
BCH78		CP-BCH78-3	268260

## Spare Contacts set for NHD & Citation Contactors HSN Code : 8538

Size	Consisting of	Cat.No.	MRP [₹]
C00N	<b>(4 - Pole contact kit)</b> 8 Fixed main contacts 4 Moving main contacts 4 Spring & 4 retainers	SP90A1	1325
N0N		SP90B1	3020
N01N		SP90D1	3585
N1N		SP90C1	4035
C00N	<b>(1 - Pole contact kit)</b> 2 Fixed main contacts 1 Moving main contacts 1 Spring & 1 retainers	SP90A01	350
N0N		SP90B01	770
N01N		SP90D01	915
N1N		SP90C01	1025
CPG216	4 Fixed contacts	CPG162PSP	650
CPG225	2 Main contacts	CPG252PSP	1640
CPG240	2 Spring retainers	CPG402PSP	2020
C4	6 Fixed main contacts 6 Pan head screws 6 Helical lock washers	SP34K	2530
MC10D	6 Fixed Main Contacts 3 Compression springs 3 Retainers	6-334	3490
MC10E	Same as above plus 6 Blow outs 6 M5/M4 self tapping screws	6-335	6590
L	6 Fixed Contacts 6 Pan Head Screws	6-385-L0	5070
M	6 Helical Lock Washers 3 Moving contacts 3 Springs, 3 Retainers	6-385-M	5460
M-5	6 Blowouts 6 self tapping screws	6-385	5770
N	6 Fixed contacts 12 CSK screws & washers	6-293	13430
Q	3 Moving contacts 3 Springs, Spring Retainers, Self tapping screws & Washers	6-288-Q	16070

## Spare ARC chambers - BCH15KT to BHC15PT, BCH54 to BCH78 HSN Code : 8538

Contactors	Cat. No.	MRP [₹]
BCH15KT	PF-BCH15KT	710
BCH15LT	PF-BCH15LT	
BCH15MT	PF-BCH15MT	
BCH15NT	PF-BCH15NT	1250
BCH15PT	PF-BCH15PT	
BCH54/BCH55/BCH57 (for all 3 poles)	PF-BCH5	8650
BCH62/BCH64 (for all 3 poles)	PF-BCH6	23990
BCH76/78 (for single pole)	3PF-BCH78	51670

# Contactors ..... BCH

## Spare Coil - size CR, A to K, 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 ■	530
	CE16, D16 (Pure DC)	MC16FW ■	860
	D, E, F	MC15FW ■	600
	G, H, J, K	MC15KW ■	1550
	BCH15KT/LT	B02. ■	1460
	BCH15MT	B022. ■	2490
	BCH15NT/PT/MN/NN/PN	B031. ■	4980
	R, S0, S	9-2412- ■	4520
Magnetic coil (set of two)	BCH54/ BCH55/ BCH57	B51. ■	10160
Feeder group		FG51. ■	10440
Magnetic coil (set of two)	BCH62/ BCH64	B61. ■	28770
Feeder group		FG61. ■	34520
Magnetic coil (set of two)	BCH76/ BCH78	B8- ■	79700
Feeder group		FG78- ■	80770

■ To specify coil voltage please refer page no.24

■ For Non Standard Coil Voltages, extra MRP to be added to Coil MRP for :

Contacteur size

{ A ~ K @ ₹40  
 CR, CE16, D16 @ ₹40  
 BCH15KT ~ PN @ ₹110, R ~ S @ ₹110  
 BCH54 ~ BCH57 @ ₹220

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

## Spare Coil - NHD & Citation Contactors

HSN Code : 8538

Description	Cat. No.	MRP [₹]	Lot size
Carrier for NHD	SP90CC	190	1
Carrier for CPG	CPG2PCC	120	1
Magnetic coil for NHD	SP90MC*	435	10
Magnetic coil for MCE15L, MCE15M0, MCE15M	9-2268- ■	2050	1
Magnetic coil for MCE15N & MCE15Q	9-2412- ■	4520	1
Magnetic coil for C4 & MC10D	9-2267- ■	1280	1
Magnetic coil for MC10E type	9-2268- ■	2050	1

■ To specify coil voltage please refer page no. 24

■ For Non Standard coil voltages, extra MRP to be added to coil MRP for :

Contacteur size :

L ~ Q @ ₹110  
 C4 ~ E @ ₹50



# Coil Voltage Table ..... BCH

**COIL VOLTAGE: MASTER TABLE**

CR RELAY	PRODUCT	24V		48V		110V		160-220V		220V		220-240V		230-360V		240V		190-400V		260-400V		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				
DROS FREEDOM	#CR Relay	U	U3	W	W3	A	A3	-	B	B3	-	AC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	#CE15A-F	U	U3	W	W3	A	A3	-	B	B3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	#CE15G-K	U	U3	W	W3	A	A3	-	B	B3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	BCH15KT-LT	U	-	W	-	A	-	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	BCH15MT-PT	24	-	48	-	110	-	-	-	-	-	-	220	-	-	-	-	-	-	-	-	-	-	-	380	-	-	440	550	-	-	-			
BCH15MN-PN	24	-	48	-	110	-	-	-	-	-	-	220	-	-	-	-	-	-	-	-	-	-	-	380	-	-	440	550	-	-	-				
MCE15R-S	U	U3	-	-	A	A3	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
BCH54-64	-	-	-	-	110	110	-	220	-	220	220	220	220	-	-	-	-	-	-	-	-	-	-	380	380	380	440	-	-	-	-	-			
BCH76&78	-	-	-	-	A7	A17	-	B7	-	-	-	H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
CPG 12,16,20	U	-	-	-	A	-	-	BW	-	-	-	H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
CPG 12,16,20	U	-	-	-	A	-	-	BW	-	-	-	H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SHAKTI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CP12N, C00N, CP20N, N01N	U	-	-	-	A	-	-	BW	-	-	-	H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N01N & N1N	U	-	-	-	A	-	-	-	-	-	-	H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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

#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.

# Overload Relay ..... BCH

## Citation-M Overload Relays (Direct Mounting) with built-in single phase protection

### 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 cover
- Special Mechanism ensuring closest protection to motor
- Contact mounting & separate mounting
- Successfully tested for Type-2 Coordination
- Suitable for almost all makes of Contactors
- Proven and tested

HSN Code : 8536

HSN Code : 8538

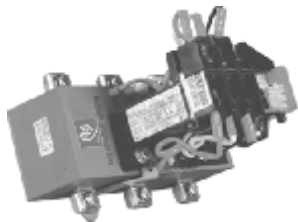
Relay Range	Cat. No.	MRP [₹]	Terminal Block for individual mounting	MRP [₹]
0.195 - 0.31	MC305ANA3A	1560	(Incoming) MC305TB1 (Outgoing) MC305TB3	180
0.30 - 0.48	MC305ANA3B			
0.47 - 0.75	MC305ANA3C			
0.72 - 1.14	MC305ANA3D			
1.07 - 1.70	MC305ANA3E			
1.58 - 2.50	MC305ANA3F			
2.40 - 3.80	MC305ANA3G			
3.80 - 6.00	MC305ANA3H			
6.00 - 9.30	MC305ANA3J			
8.90 - 13.50	MC305ANA3K			
13.20 - 20.00	MC305ANA3L	1720	(Incoming) MC305TB2 (Outgoing) MC305TB3	
17.40 - 24.00	MC305ANA3M	1900		
22.00 - 30.00	MC305ANA3N*	2460		
23.00 - 32.00	MC305ANA3P*	2480	(Incoming) MC305TB2 (Outgoing) MC305TB3	
26.00 - 40.00	MC305ANA3Q*	2700		

\* 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	250
L to N	MC305DM2	260

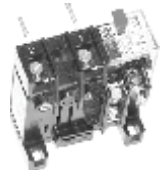
### CT Operated Overload Relay



## CT Operated Overload Relays-Individual Mounting HSN Code : 8536

Relay Range (A)	Cat. No.	MRP [₹]
24.4-39.0	CT1MC305ANA3C	3660
37.6-60.0	CT2MC305ANA3C	4720
56.4-90.0	CT3MC305ANA3C	5790
84.6-135.0	CT4MC305ANA3C	5880
131.6-210.0	CT5MC305ANA3C	8900
188.0-300.0	CT6MC305ANA3C	10630
263.2-420.0	CT7MC305ANA3C	11000
376.0-600.0	CT8MC305ANA3C	12240

### WP 2 Pole Overload Relay



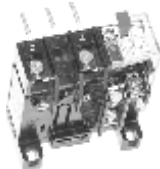
- Perfect protection to single phase Motors against overloads
- Ambient temperature compensated

## 2 Pole Overload Relays (Direct Mounting)

HSN Code : 8536

Relay Range (A)	Cat. No.	MRP [₹]
1.58-2.50	MC307ANA2F	815
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	940
17.40-24.00	MC307ANA2M	1005
22.00-30.00	MC307ANA2N	1175
23.00-32.00	MC307ANA2P	1200

### WP Overload Relay



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

## WP Overload Relays for WP & Oil Starter

HSN Code : 8536

Relay Range (A)	Cat. No. (WP Starter / Oil Starter)	MRP [₹]
6.00 - 9.30	MC307ANA3J / MC307ANA3J-OS	1440
8.90 - 13.50	MC307ANA3K / MC307ANA3K-OS	1600
13.20 - 20.00	MC307ANA3L / MC307ANA3L-OS	1770
17.40 - 24.00	MC307ANA3M / MC307ANA3M-OS	1770
22.00 - 30.00	MC307ANA3N	2130
23.00 - 32.00	MC307ANA3P (Spare for Oil Starter)	2195

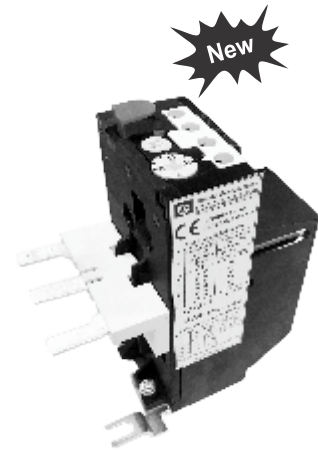
# Overload Relay ..... BCH

## Duros 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



MC318GNA

### Freedom Overload Relays

HSN Code : 8536

HSN Code : 8538

Relay Range (A)	Cat. No.	MRP [₹]	Accessories
0.1-0.16	MC318ANA3A	1480	Adaptor for Individual mounting Cat. No. <b>C318F1</b>  MRP Rs. 370
0.16-0.25	MC318ANA3B		
0.25-0.40	MC318ANA3C		
0.40-0.63	MC318ANA3D		
0.63-1.00	MC318ANA3E		
1.0-1.40	MC318ANA3F		
1.3-1.80	MC318ANA3G		
1.7-2.4	MC318ANA3H		
2.2-3.1	MC318ANA3J		
2.8-4.0	MC318ANA3K		
3.5-5.0	MC318ANA3L		
4.5-6.5	MC318ANA3M		
6.0-8.5	MC318ANA3N		
7.5-11	MC318ANA3P		
10.0-14.0	MC318ANA3Q		
13.0-19.0	MC318ANA3R	1690	Adaptor for Individual mounting Cat No. C318F2  MRP Rs.415
18.0-25.0	MC318ANA3S		
24.0-32.0	MC318ANA3T	2340	
22.0-32.0	MC318GNA3B	2530	
29.0-42.0	MC318GNA3C	2540	
36.0-52.0	MC318GNA3D	3430	
45.0-63.0	MC318GNA3E	3820	
60.0-80.0	MC318GNA3F	4710	

# Electronic Overcurrent Relay ..... BCH

## BOCR SS



- Over Current
- Locked Rotor
- Phase Loss

## BOCR SSD



- Over Current
- Locked Rotor
- Phase Loss

## BOCR DS3/DS1



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

## BOCR 3DE



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

## BOCR 3EZ



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

## BOCR PMZ



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

## BOCR PFZ



- Phase Reversal
- Locked Rotor
- Ground Fault
- 4-20mA analog output

## BOCR IFDM/IFDZ



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

## Bhartia Electronic Overcurrent Relay

HSN Code : 8536

Model	Current Range	Cat. No.	Type	MRP [₹]
BOCR SS 05	0.5-6A	MP21SS005	Analog model	4180
BOCR SS 30	3.0 -30A	MP21SS030		
BOCR SS 60	5.0-60A	MP21SS060		
BOCR SSD 05	0.5-6A	MP22SSD005	Digital model/ Inbuilt display	7570
BOCR SSD 30	3.0 -30A	MP22SSD030		
BOCR SSD 60	10-60A	MP22SSD060		
BOCR DS3 05	0.5-6A	MP34DS3005	Analog model (Definite time)	6440
BOCR DS3 30	3.0 -30A	MP34DS3030		
BOCR DS3 60	5.0-60A	MP34DS3060		
BOCR DS1 05	0.5-6A	MP32DS1005	Analog model (Inverse time)	6440
BOCR DS1 30	3.0 -30A	MP32DS1030		
BOCR 3DE	0.5-60A	MP353DE800	Inbuilt display	21340
BOCR FDE <sup>#</sup>	0.5-60A	MP35FDE800	Flush mounted display	23470
BOCR 3EZ	0.5-60A	MP363EZ800	Inbuilt display	23230
BOCR FEZ <sup>#</sup>	0.5-60A	MP36FEZ800	Flush mounted display	25550
BOCR PMZ	0.5-60A	MP37PMZ060	4-20mA analog output/ Inbuilt display	49240
BOCR PFZ <sup>#</sup>	0.5-60A	MP37PFZ060	4-20mA analog output/ Flush mounted display	48950
BOCR IFDM <sup>#</sup>	0.5-60A	MP39-IFDM400H	RS-485 comm./ Flush mounted display	28840
BOCR IFDZ <sup>#</sup>	0.5-60A	MP39-IFMZ400H	RS-485 comm./Earth fault/ Flush mounted display	36570

Note: Use suitable CT for currents above 60A

### Control Voltage suffix for BOCR

Model no.	Control voltage					
	24-240 VAC/DC	380-440 VAC	100-240 VAC	24 VDC	100-240 VAC/DC	85-250 VAC/DC
BOCR-SS	S4	W1	-	-	-	-
BOCR-SSD	S4	W4	-	-	-	-
BOCR-DS3	S4	-	-	-	-	-
BOCR-DS1	S5	-	-	-	-	-
BOCR-3DE/FDE	-	-	Z4	U1	-	-
BOCR-3EZ/FEZ	-	-	Z4	C4	-	-
BOCR-PMZ/PFZ	-	-	-	-	-	Z7
BOCR-IFDM/IFDZ	-	-	-	-	U4	-

### CTs

HSN Code : 8536

Cat No.	Description	MRP [₹]
2CT-D1-100-C	2CT EP 100/5	2630
2CT-D2-200-C	2CT EP 200/5	
2CT-D3-300-C	2CT EP 300/5	2850
2CT-D4-400-C	2CT EP 400/5	3130
3CT-H1-100-C	3CT version 100/5	4060
3CT-HH-150-C	3CT version 150/5	4100
3CT-H2-200-C	3CT version 200/5	4320
3CT-H3-300-C	3CT version 300/5	4590
3CT-H4-400-C	3CT version 400/5	4870
ZCT-035	ZCT version 35mm hole	4680
ZCT-080	ZCT version 80mm hole	6220
ZCT-120	ZCT version 120mm hole	11460

ZCT must be used for ground Fault protection alongwith BOCR

### # Cable for separate display Models

HSN Code : 8536

Cat No.	For model	Range	MRP [₹]
CABLE-RJ45-003	BOCR-IFDM/IFDZ	CABLE-RJ45 3m EOOCR-IFD model	1480
CABLE-15-003Q	BOCR-FDE/FEZ/PFZ	CABLE-15-EP 3M FEZ/FDE/PFZ	1360

Note : Cable must be ordered separately along with the EOOCR



# MPCB

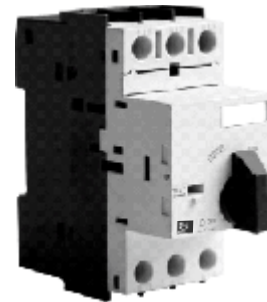
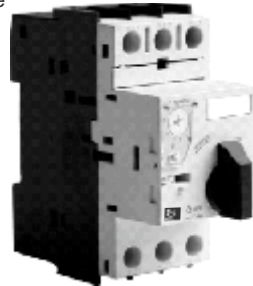
BCH

HSN Code : 8536

## MPH range (0.1 to 32A)

**NEW**

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



## Accessories MPH range MPCB



Front mounted aux contact



Side mounted aux contact



Trip indicator - side mounted



UV/Shunt - side mounted



Extended handle - 32A MPCB

Plastic enclosure - 32A MPCB



Cat code	Description	MRP[₹]
<b>(A) Thermal-Magnetic release</b>		
MPH32-0.16	MPCB 3P TM 0.1- 0.16A	3350
MPH32-0.25	MPCB 3P TM 0.16-0.25A	3400
MPH32-0.4	MPCB 3P TM 0.25-0.4A	
MPH32-0.63	MPCB 3P TM 0.4-0.63A	3520
MPH32-1.0	MPCB 3P TM 0.63-1.0A	3730
MPH32-1.6	MPCB 3P TM 1.0-1.6A	
MPH32-2.5	MPCB 3P TM 1.6-2.5A	3800
MPH32-4.0	MPCB 3P TM 2.5-4.0A	
MPH32-6.3	MPCB 3P TM 4.0-6.3A	3890
MPH32-10	MPCB 3P TM 6.3-10.0A	3950
MPH32-16	MPCB 3P TM 10.0-16.0A	4370
MPH32-20	MPCB 3P TM 16.0-20.0A	5210
MPH32-25	MPCB 3P TM 20.0-25.0A	5590
MPH32-32	MPCB 3P TM 25.0-32.0A	8780
<b>(B) With magnetic trip only (no Thermal release)</b>		
MPH32M-0.16	MPCB 3P Mag only 0.16 A	3260
MPH32M-0.25	MPCB 3P Mag only 0.25 A	3310
MPH32M-0.4	MPCB 3P Mag only 0.4 A	
MPH32M-0.63	MPCB 3P Mag only 0.63 A	3430
MPH32M-1.0	MPCB 3P Mag only 1.0 A	3370
MPH32M-1.6	MPCB 3P Mag only 1.6 A	
MPH32M-2.5	MPCB 3P Mag only 2.5 A	3570
MPH32M-4.0	MPCB 3P Mag only 4.0 A	
MPH32M-6.3	MPCB 3P Mag only 6.3 A	3650
MPH32M-10	MPCB 3P Mag only 10 A	3620
MPH32M-16	MPCB 3P Mag only 16 A	3950
MPH32M-20	MPCB 3P Mag only 20 A	4230
MPH32M-25	MPCB 3P Mag only 25 A	4200
MPH32M-32	MPCB 3P Mag only 32 A	7360

HSN Code : 8538

Cat code	Description	MRP[₹]
MPHF11	Front aux contact 1NO+1 NC MPCB	630
MPHS11	Side aux contact 1NO+1 NC MPCB	820
MPHT11	MPCB Trip Indicator	970
MPH024UR	UV Rel. 24V 50HZ MPCB	1600
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	1310
MPH440SR	Shunt Rel. 365-440V 50/60HZ MPCB	
MPH127SR	Shunt Rel. 100-127V 50/60HZ MPCB	
MPH34	Extnd rotary handle 32A	1740
B31SMA1	Plastic enclosure for MPH32 MPCB	1740

Effective from 05.07.2021

# MPCB ..... BCH

## MPE Range (0.1 - 25A)



- Conforms to IEC 60947
- Perfect Coordinated system for Motor Control
- Electrical Life : 100000 Operations
- Excellent Current limiting characteristics
- Modular Snap fit Accessories

### MPCB (with thermal & magnetic release) HSN Code : 8536

Cat ref	Setting Range (A)	Motor Rating in kW at 415 V	MRP [₹]
MPE-01	0.1...0.16	-	2910
MPE-02	0.16...0.25	0.06	
MPE-03	0.25...0.4	0.12	3210
MPE-04	0.4...0.63	0.18	
MPE-05	0.63...1	0.25, 0.37	3260
MPE-06	1...1.6	0.55	
MPE-07	1.6...2.5	0.75, 1.1	3320
MPE-08	2.5...4	1.5	
MPE-10	4...6.3	2.2, 3	3480
MPE-14	6.3...10	4, 5	
MPE-16	10...16	5.5, 9	4050
MPE-20	16...20	11	4320
MPE-22	20...25	12.5	4650



### Accessories of MPE Range

HSN Code : 8538



Reference	Contacts	MRP [₹]
Auxiliary	Switch	
MPA-0010	1NO	510
MPA-0001	1NC	
MPA-0011	1NO + 1NC	700
MPA-0020	2NO	
Enclosures (IP55)		
MPA-EF	Flush mounted	970
MPA-ES	Surface mounted	1080
Voltage Releases		
MPA-U ■	Under Voltage Release	1500
MPA-S ■	Shunt Release	

■ A: 110 VAC, K: 240 VAC, M: 415 VAC, U: 24 VAC, R: 42 VAC

HSN Code : 8538

Reference	Tap-o *	MRP [₹]
Bus Bar		
MPA-BB245	2 Tap-o (45mm)	710
MPA-BB345	3 Tap-o (45mm)	900
MPA-BB445	4 Tap-o (45mm)	1080
MPA-BB545	5 Tap-o (45mm)	1190
MPA-BB263	2 Tap-o (63mm)	710
MPA-BB463	4 Tap-o (63mm)	1070
MPA-BB1	Incoming Block	650

\*centre to centre distance.

## MS32 range (0.1 to 32A)

- Auxiliary switch for side mounting & flush mounting
- Indication of release with trip indicating auxiliary switch

**HSN Code : 8536**



Cat ref	Setting range (A)	Motor rating in KW at 415V	MRP[₹]
MS32-0.16	0.1-0.16	-	2970
MS32-0.25	0.16-0.25	0.06	
MS32-0.4	0.25-0.4	0.09	
MS32-0.63	0.4-0.63	0.12 to 0.18	3170
MS32-1.0	0.63-1.0	0.18 to 0.25	
MS32-1.6	1.0-1.6	0.37 to 0.55	3230
MS32-2.5	1.6-2.5	0.75	3400
MS32-4.0	2.5-4	1.1 to 1.5	3490
MS32-6.3	4-6.3	2.2	
MS32-10	6.3-10	3 to 4	3960
MS32-14.0	9-14	5.5	
MS32-18	13-18	7.5	4210
MS32-23	17-23	9 to 11	4500
MS32-27	20-27	11	4890
MS32-32	25-32	15	7350



## Accessories - MS32 range

**HSN Code : 8538**

Cat ref	type	Contacts	MRP[₹]
HS11	Aux contact side mounting	1NO+1NC	740
HSV10	Aux contact top mounting	1NO	620
HSV01		1NC	
HRS10	Trip indicating block top mounting	1NO	450
HRS01		1NC	
MS32-UR	Under voltage release	-	1600
MS32-AR	Shunt release	-	

**Note:** For further details, please contact nearest sales office

# Solid State Relay ..... BCH

## 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 <sup>2</sup> t (A <sup>2</sup> S)	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SC941110L	5	12A	72	600V AC	12-280V AC	4-30V DC	1740
SC942110L	5	25A	288	600V AC	12-280V AC	4-30V DC	2040
SC944110L	5	40A	612	600V AC	12-280V AC	4-30V DC	2630

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 <sup>2</sup> t (A <sup>2</sup> S)	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SC941160L	5	12A	72	600V AC	12-280V AC	4-30V DC	1760
SC942160L	5	25A	288	600V AC	12-280V AC	4-30V DC	2070
SC944160L	5	40A	612	600V AC	12-280V AC	4-30V DC	2680
SC945160L	5	50A	1500	600V AC	12-280V AC	4-30V DC	5470
SC947160L	5	75A	5000	600V AC	12-280V AC	4-30V DC	6090

MOQ - Minimum Order Qty.

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

Cat. No.	MOQ	AC51 Rating	I <sup>2</sup> t(A <sup>2</sup> S)	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SC962160L	5	25A	265	1200V AC	24-600V AC	5-30V DC	7380
SC965160L	5	50A	1500	1200V AC	24-600V AC	5-30V DC	9290
SC967100	2	75A	5000	1200V AC	24-600V AC	5-30V DC	13790

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

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

Cat. No.	MOQ	AC51 Rating	I <sup>2</sup> t(A <sup>2</sup> S)	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SO942560*	2	25A	600	600V AC	12-280V AC	7-30V DC	4660
SO963460*	2	35A	1250	1200V AC	24-600V AC	3.5-32V DC	5570
SO945460*	2	50A	2500	600V AC	12-280V AC	3-32V DC	5900
SO965460*	2	50A	2800	1200V AC	24-600V AC	3.5-32V DC	6210
SO967460*	2	90A	7200	1200V AC	24-600V AC	3.5-32V DC	7170

\*Non Sock Items, allow 4-6 weeks delivery time

MOQ - Minimum Order Qty.

# Solid State Relay ..... BCH



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

HSN Code : 8536

Cat. No.	MOQ	AC51 Rating	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SU942460*	44	25A	600V AC	12-280AAC	3-32V DC	On Request
SU963460*	44	35A	1200V AC	24-600V AC	3.5-32V DC	On Request
SU965460*	44	50A	1200V AC	24-600V AC	3.5-32V DC	3500
SU967460*	44	75A	1200V AC	24-600V AC	3.5-32V DC	3770

\*Non Stock items, allow 4-6 weeks delivery time.

### 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



## 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 <sup>2</sup> t(A <sup>2</sup> S)	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SO842074*	2	25A	600	600V AC	12-275V AC	3-32V DC	5680
SO863070*	2	35A	1250	1200V AC	24-510V AC	3.5-32V DC	6270
SO845070*	2	50A	2500	600V AC	12-275V AC	3-32V DC	6720
SO848070*	2	95A	14400	600V AC	12-275V AC	3-32V DC	10110
SO889060*	2	125A	24000	1600V AC	24-600V AC	3.5-32V DC	26870

\*Non Sock Items, allow 4-6 weeks delivery time

MOQ - Minimum Order Qty.

## Single Phase SSR's for Motor Control Applications

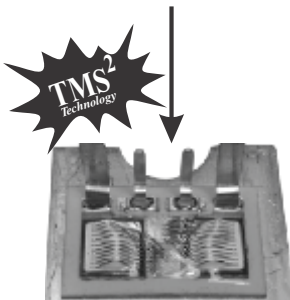
SC7 Series 1-Phase Without LED (Random Switching)

HSN Code : 8536

Cat. No.	MOQ	AC51 Rating	AC53 Rating	I <sup>2</sup> t (A <sup>2</sup> S)	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SC741110L	5	12A	2.5A	72	600V AC	12-280 AC	4-30V DC	1720
SC761110L	5	12A	2.5A	72	1200V AC	24-520V AC	5-30V DC	2560
SC742110L	5	25A	5A	312	600V AC	12-280 AC	4-30V DC	2030
SC762110L	5	25A	5A	265	1200V AC	24-520V AC	5-30V DC	3630
SC744110L	5	40A	9A	612	600V AC	12-280 AC	4-30V DC	3920
SC764110L	5	50A	12A	1500	1200V AC	24-520V AC	5-30V DC	8910
SC767110L	5	75A	16A	5000	1200V AC	24-520V AC	5-30V DC	14030
SC768110L	5	95A	20A	11000	1200V AC	24-520V AC	5-30V DC	14470
SC769110L	5	125A	30A	20000	1200V AC	24-520V AC	5-30V DC	23330

MOQ - Minimum Order Qty.

Direct Copper Bonding Technology



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

## SO7 Series 1-Phase With LED in okpac® Housing IP20 Protection (Random Switching)

HSN Code : 8536

Cat. No.	MOQ	AC51 Rating	AC53 Rating	I <sup>2</sup> t(A <sup>2</sup> S)	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SO745090	2	50A	12A	2500	600V AC	12-275V AC	3-32V DC	7900
SO767090	2	75A	16A	7200	1200V AC	24-510V AC	3.5-32V DC	11600
SO768090	2	95A	20A	14400	1200V AC	24-510V AC	3.5-32V DC	13590
SO769090	2	125A	30A	24000	1200V AC	24-510V AC	3.5-32V DC	19940

\*Non Sock Items, allow 4-6 weeks delivery time

MOQ - Minimum Order Qty.



# Solid State Relay ..... BCH

## Three Phase SSR's SVT 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>								
SVT861394	2	12A	2.5A	72	1200V AC	24-520V AC	8.5-30V DC	24810
SVT864374	2	50A	12A	1500	1200V AC	24-520V AC	10-32V DC	30270
SVT868394E	2	95A	24A	5000	1200V AC	24-520V AC	8.5-30V DC	31750
SVT869394	2	125A	32A	20000	1200V AC	24-520V AC	8.5-30V DC	37660
<b>AC CONTROL</b>								
SVT864994	2	50A	12A	1500	1200V AC	24-520V AC	90-240V AC	31750
SVT967960	2	75A	-	1500	1200V AC	24-520V AC	90-240V AC	35730
SVT869994	2	125A	32A	20000	1200V AC	24-520V AC	90-240V AC	39130

MOQ - Minimum Order Qty.



Common IP20 Protective Cover for SC series SSR.



Heat Sink - 65 mm

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

## Accessories for SSR HSN Code : 8538

Cat. No.	MOQ	Description	MRP [₹]
SC1K4600	20	IP20 Cover SC*	55
SCHS6 DIN	20	Din Clip	160
SCHS2200	5	Heat Sink 2.2K/W	990
SCHS1100	5	Heat Sink 1.1 K/W	3200
SCHS0900	5	Heat Sink 0.9 K/W	3780
SCHS0300	5	Heat Sink 0.3K/W	6170

\*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

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

BCH

## 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	32070
Double pole Normally Open	15A	2NO+2NC	D912x1522	On request
	25A	2NO+2NC	D912x2522	On request
	50A	2NO+2NC	D912x5022	68935
Mechanically Interlocked 2 Nos. SP NO	15A	2NO+2NC	M912x1522	On request
	25A	2NO+2NC	M912x2522	On request
	50A	2NO+2NC	M912x5022	76455
<b>150 Amperes</b>				
Single pole Normally Open	150A	2NO+2NC	914x22	54760
Double pole Normally Open	150A	2NO+2NC	D914x22	117400
Mechanically Interlocked 2 Nos. SP NO	150A	2NO+2NC	M914x22	123890
Single pole Normally Closed	150A	1NO+1NC	924x11	56405
Double Pole Normally Closed	150A	2NO+2NC	D924x22	119665
Single pole Normally Open with Holdout Coil #	150A	1NO+1NC	934x11/#	59365
Single pole Normally Open with AC Blow out Coil	150A	2NO+2NC	974x22	69420
<b>300 Amperes</b>				
Single pole Normally Open	300A	2NO+2NC	915x22	79515
Double pole Normally Open	300A	2NO+2NC	D915x22	169335
Mechanically Interlocked 2 Nos. SP NO	300A	2NO+2NC	M915x22	176055
Single pole Normally Closed	300A	1NO+1NC	925x11	79915
Double Pole Normally Closed	300A	2NO+2NC	D925x22	172625
Single pole Normally Open with Holdout Coil #	300A	1NO+1NC	935x11/#	86285
Single pole Normally Open with AC Blow out Coil	300A	2NO+2NC	975x22	100540



- 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	177205
Double pole Normally Open	600A	2NO+2NC	D916x22	367950
Mechanically Interlocked 2 Nos. SP NO	600A	2NO+2NC	M916x22	373910
Single pole Normally Closed	600A	1NO+1NC	926x11	182150
Single pole Normally Open with Holdout Coil#	600A	1NO+1NC	936x11/#	225130
Single pole Normally Open with AC Blow out Coil	600A	2NO+2NC	976x22	231710

- # For 934 / 935 / 936 with holdout coil use hold out suffix code from table on page no.37
- For coil voltage refer table on page no.37
- \* 150, 300 & 600 Amps replace 'x' by 'y' for surface mounting rear connection, 'z' for elevated mounting rear connection
- \* Add Rs. 3635/- for AC Control

## Double Pole DC Mill Duty Contactor HSN Code : 8536

A	Auxilliary Contacts	Cat. No.	Unit Price [₹]
150A	2NO+2NC	954x22	Contact Branch office
300A	2NO+2NC	955x22	for Price

# DC Contactors ..... BCH

## 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*	15535	9C9P101	26605	9C9T101	38570	9C9V101	83955
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	3525	9C9P105	4850	9C9T105	7875	9C9V105	21415
Contact Lever with Braid (for Single Pole)	1 No.	9C9J106	4290	9C9P106	6995	9C9T106	9260	9C9V106	16060
Contact Lever with Braid (for Double Pole) <sup>†</sup>	1 No.	9C9J106	4290	9C9P106	6995	9C9T106	9260	9C9V103	16060
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	1460	9C9P107	2025	9C9T107	2925	9C9V107	4245
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	2470	9C9T108	4360	9C9V108	5260
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	2950	9C9T109	4360	9C9V109	5585
Terminal Block	1	9C9J110	1970	9C9P110	2585	9C9T110	3615	9C9V110	4515
No Volt Coil for 912, 914, 915, 916, 934, 935 & 936 **Suffix voltage code	1	9C9J111■	7925	9C9P111■	12120	9C9T111 ■	15945	9C9V111 ■	27475
No Volt Coil for 924, 925, 926 **Suffix voltage code	1	-	-	9C9P112■	15945	9C9T112 ■	24770	9C9V112 ■	40015
Coil clamp for 914 & 934	1	-	-	9C9P118	270	-	-	-	-
Coil clamp for 924, 915, 935, 916 & 936	1	-	-	9C9P118	270	9C9T118	270	9C9V118	On request

■ Suffix coil voltage code from table on page 37  
■ Please add Rs. 3635 for AC control

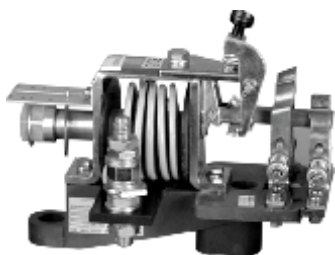
\* Only item a to e is supplied in this set  
† For two Poles, need to order for 2 Nos.

# DC Contactors ..... BCH

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

Description	Cat. No.	MRP [₹]
1NO+1NC Auxilliary Contact Block	AC10E11	6185
2NO Auxilliary Contact Block	AC10E20	6185
2NC Auxilliary Contact Block	AC10E02	6185
Single unit driver with mounting plate (50A)	9C9J115	On request
Double unit driver with mounting plate (50A)	9C9J116	On request
Single unit driver with mounting plate (150-600A)	9C9P116	On request
Double unit driver with mounting plate (150-600A)	9C9P117	On request
Hold out coil for 934, 935 & 936	9C9P113- #	19245
Condenser 50 + 50uF for 934, 935 & 936	9C9P114	1060
Mechanical interlock for 150/300/600A	AC10M4/M8/M12	6895
Rectifier 110/240 V	SP30R	3635

# Suffix hold out coil code from table



- 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

## 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

## 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	18775
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	22000
B3K23	179-39	69.0	40 to 120	
B3L23	179-38	109.0	70 to 190	
B3M23	179-37	179.0	100 to 300	23985
B3N23	179-36	299.0	200 to 600	
B3Y23	179-36.2	199.0	200 to 600	29180
B3P23		549.0	300 to 900	
B3R23		500.0	500 to 1500	

\* With 1NO + 1NC Contacts

## Coil Voltage table - DC Mill Duty Contactor

		24V	48V	55V	110V		220V	240V	250V
	PRODUCT	DC	DC	DC	AC	DC	DC	AC	F1
DC CONTACTOR	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

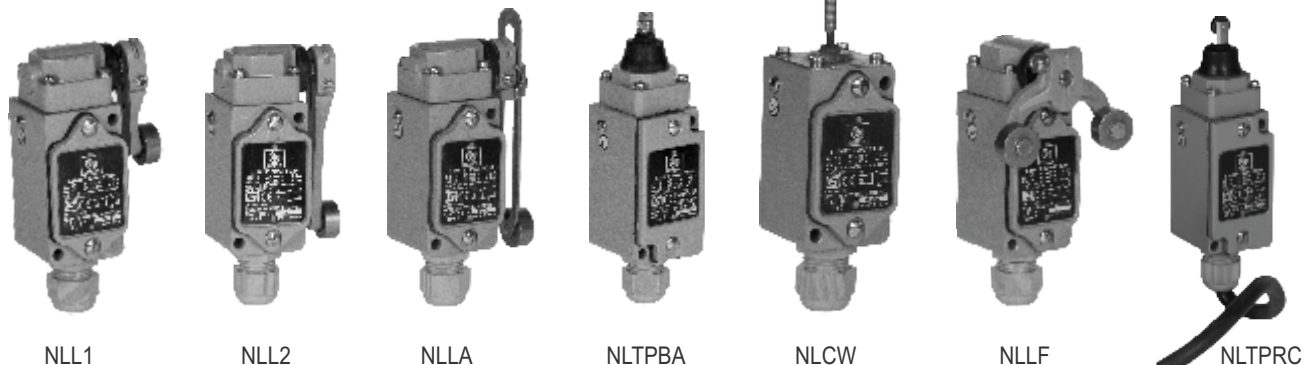
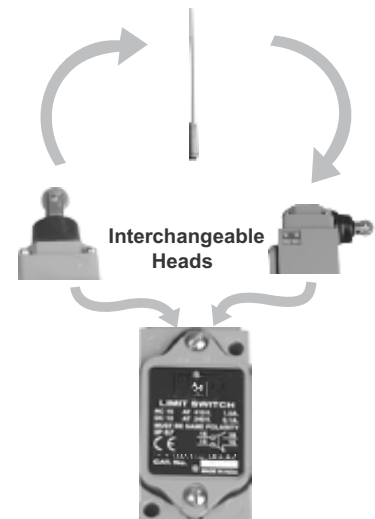
1. For other coil voltages, please contact nearest sales office
2. AC control is not available for 934, 935, 936 versions.
3. For ordering spare coils for D912, D914, D915 and D916 Contactors, please order coils with 50% voltage rating as that of control voltage.  
Example to order coils for D914 X 22B1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

## 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	1895	NLL1C NLL2C NLLAC	2065	NLL1-22 NLL2-22 NLLA-22	2895	NLL1-22C NLL2-22C NLLA-22C	3000
	Maintained Type Maintained Type Maintained Type	NLL1M NLL2M NLLAM	2130	NLL1MC NLL2MC NLLAMC	2235	NLL1M-22 NLL2M-22 NLLAM-22	3205	NLL1M-22C NLL2M-22C NLLAM-22C	3265
Push Roller	Top Side	NLTPR	1895	NLTPRC	2065	NLTPR-22	2895	NLTPR-22C	3000
		NLSPR	2080	NLSPRC	2235	NLSPR-22	3125	NLSPR-22C	3265
Push Button	Top Adjustable Side Adjustable	NLTPBA	1895	NLTPBAC	2065	NLTPBA-22	2820	NLTPBA-22C	3000
		NLSPBA	2080	NLSPBAC	2235	NLSPBA-22	3120	NLSPBA-22C	3265
Cat Whisker	Nylon Rod Steel Rod	NLCW	1665	NLCWC	1790	NLCW-22	2755	NLCW-22C	2895
		NLJW	1895	NLJWC	2025	NLJW-22	2895	NLJW-22C	3000
Fork Type	Roller in same line Offset Rollers	NLLF NLLFO	2130	NLLFC NLLFOC	2235	NLLF-22 NLLFO-22	3210	NLLF-22C NLLFO-22C	3265
	Roller in same line Maintained Offset Rollers Maintained	NLLFM NLLFOM	2495	NLLFMC NLLFOMC	2590	NLLFM-22 NLLFOM-22	3470	NLLFM-22C NLLFOM-22C	3540

- 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 ..... BCH



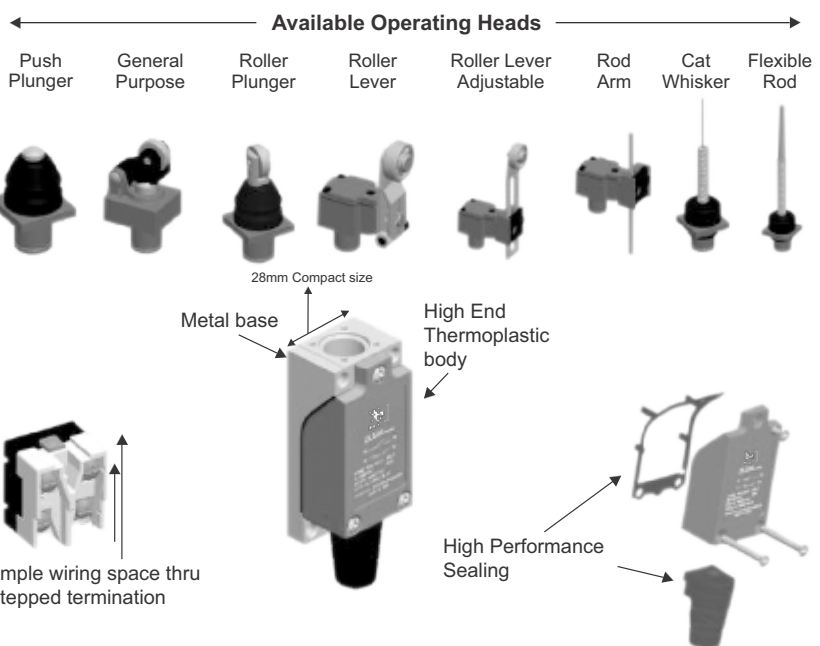
## Mini Limit Switch NEW

HSN Code : 8536

Type		Cat. No.	MRP [₹]
General Purpose Type		DLSMAR	1245
Top Plunger	Standard	DLSMPP	
Push Roller	Standard	DLSMRP	
	Cross	DLSMRPX	
Roller Lever	39mm	DLSMRL	1290
	Adjustable	DLSMRLA	
Rod Arm	Adjustable	DLSMJWA	1370
Cat's Whisker	Steel Spring	DLSMSW	
Flexible Rod	Nylon	DLSMSR	

### Applications

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



## Precision Limit Switch

HSN Code : 8536

Type of Operator	1NO+1NC		2NO+2NC		Lot Size
	Cat. No.	MRP [₹]	Cat. No.	MRP [₹]	
Roller Lever	PSRL-L or R	800	PSRL-L-2 or R-2	990	1
Six Inch Lever	PSSIL-L or R		PSSIL-L-2 or R-2		
Top Push Roller	PSTPR*		PSTPR*-2		
Top Push Button	PSTPB		PSTPB-2		
Type	Cat. No	MRP [₹]	Cat. No	MRP [₹]	Lot Size
Spare Contact Block	SP20S1	755	SP20S2	945	

- Conforming to 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
- Snap action contacts
- Frequency of operation 2500 Operations / hr

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

# Limit Switches ..... BCH

## 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	On Request

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

## Heavy Duty General Purpose Limit Switch

HSN Code : 8536

Snap Action Type L	Angular Roller Top Plunger	LLGS LPGS	1270
-----------------------	-------------------------------	--------------	------

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

HSN Code : 8536

Type	Description	Cat. No.	MRP [₹]
Roller Lever	Standard-38MM	LL1	2720
	Standard-76.2mm	LL2	
	Adjustable	LLA	
Push Roller	Maintained Type LL1	LL1M	2840
	Maintained Type LL2	LL2M	
	Maintained Type LLA	LLAM	
Push Button	Top	LTPR	2660
	Side	LSPR	
Push Button	Top Adjustable	LTPBA	2885
	Side Adjustable	LSPBA	
Cat Whisker	Nylon Rod	LCW	2175
	Steel Rod	LJW	2705
Fork Type	Roller in same line	LLF	2445
	Offset Rollers	LLFO	2445
	Roller in same line	LLFM	2860
	Maintained	LLFOM	2860
	Offset Rollers		
Maintained			

## Oil Tight Limit Switch - Spares

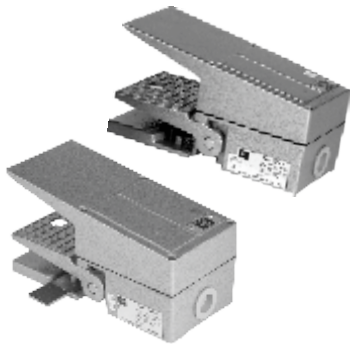
HSN Code : 8538

Description	Suitable for	Cat. No.	MRP [₹]
38 mm lever	NLL1, LL1	SP40L1	450
76.2 mm lever	NLL2, LL2	SP40L2	570
Adjustable lever	NLLA, LLA	SP40LA	570
Fork lever in Line	LLF	SP40LF	690
Fork lever Offset	LLFO	SP40LFO	690
Operating Head	LLGS, LPGS	SP40HLG	825
Operating Head	Lever Type	SP40HL	890
Operating Head Maintained	Lever Type	SP40HLM	1030
Operating Head	Top Push	SP 40HTP*	890
	Side Push	SP 40HSP*	990
Operating Head	Cat Whisker Nylon Rod	SP40CW	610
	Cat Whisker Steel Rod	SP40JW	825
Limit Switch Unit Assembly 1NO+1NC	Type 'L' & 'NL' (Except LLGS / LPGS)	SP40S1	1270
Limit Switch Unit Assembly 2NO+2NC		SP40S2	2100
Limit Switch Unit Assembly 1NO+1NC	LLGS / LPGS	SP40S1WOM	825
Oil tight Conduit	Type 'NL'	SP40CE	485

\* B = Button      R = Roller

# Foot Switch & Push Button 30.5mm..... BCH

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	4295	1
One	1NO+1NC	2	With Latch	FSGX1L	4525	
One	2NO+2NC	2	With Guard	FSGX2	4665	
One	2NO+2NC	2	With Latch	FSGX2L	4870	
Two	2NO+2NC	2	With Guard	FSGY1	5265	
Two	2NO+2NC	2	With Latch	FSGY1L	5605	
Two	4NO+4NC	2	With Guard	FSGY2	6145	
Two	4NO+4NC	2	With Latch	FSGY2L	6260	
Two	2NO+2NC	3	With Guard	FSGZ1M	5355	
Two	4NO+4NC	3	With Guard	FSGZ2M	6130	

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	SP20S1	755
Spare Contact Block 2NO+2NC	FSG	SP20S2	945
Spare Cover with Guard	FSG	SP20CG	1720

- 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

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

HSN Code : 8536



### 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

Type	Description	Cat. No.	MRP [₹]	HSN Code	Lot Size
Actuator	<b>Standard flush Button</b>				
	Red	TSFB-R	250	8536	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	265	8536	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	315	8536	10	
-Spring return Green	TMH-G	315			
-Turn to release Red	TMHL-R	345			
-Turn to release Green	TMHL-G	345			
Selector Actuator -2 or 3 position	TSSA ***	630	8536	10	
Cylindrical Lock -2 or 3 positions	TCL***	910	8536	10	
Station	Start/Stop Pushbutton	E20EA	1025	8536	1
Contact Block	1NO +1NC	050N1	315	8536	20
	2NO	050N2			
	2NC	050N3			
Aluminium Diecast Enclosure	One button	TEN-1	1035	8536	1
	Two buttons	TEN-2	1190		
	Three buttons	TEN-3	1690		
<b>HSN Code : 8538</b>					
Accessories	Wrench for retaining ring	TWN	310	8538	1
	Plug for hole	TPL	140		
	Legend plate	050L^	60		

Note: \* Position-2 or 3 • Function M-maintained, S-Springreturn ■ Cam code 1/2/3 ^ Suffix Legend Code  
Effective from 05.07.2021

# Push Button 30.5mm..... BCH

## Oil Tight Indicating Light - E 30.5mm HSN Code : 8536

Description	Application	Cat. No.	List Price [₹]	HSN Code	Lot Size
(Without lens) Direct type	AC & DC	TILD•10	450	8536	1
Transformer type	AC	TILT•10	565	8536	1
<b>HSN Code : 8538</b>					
Polycarbonate Lens	-	LENS*	70	8538	10
Spare Bulb	AC & DC	SP61L#	80	8538	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 [₹]	HSN Code	Lot Size
Signal lamp transformer	TR■	325	8538	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	-	-	-	-	-	-
Suffix code 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
Suffix code E22 (22.5mm)	36	37	38	-	24	26	-	05	-	12	-	03	27	01	-

# Push Button 22.5mm ..... BCH

## Push Button & Indicating Lights - 22.5 mm



HSN Code : 8536



Description	Type	Cat. No.	MRP[₹]	Lot Size	
Push Button Actuators with Mounting Adaptor	Opaque	Flush	HEA11*M	110	10
		Extended	HEA12*M	115	
	Illuminated**	Flush	HEB11*M	165	
		Extended	HEB12*M	170	
	Mushroom Head 28mm Colour - Red/Black	Momentary	HEA21*M	150	10
		Twist to Release	HEA23*M	200	
		Stayput Key Release	HEA25*M	395	
		Mushroom Head 40mm Colour - Red/Black	Momentary	HEA22*M	
Light Source Units (LSU)	LSU with Bulb-Direct Type	6/12/24/48/60/110V ac/dc	HLSUD#	105	10
	LSU with Bulb-Resistance Type ■	110V ac/dc & 240V ac	HLSUR#	115	
	Basic Unit with Mounting Adaptor	Lamp Holder & Lens	HPL22*	100	
LED Indicating Light	Standard 6/12/24/48/60/110/240/415V ac*** 6-60V ac/dc; 110 & 240V dc	Color - R/Y/G/A	HFB2X*#	215	10
		Blue	HFB2XL#	440	1
		Clear	HFB2XC#	610	1
	Universal 24-240V ac/dc	Color - R/Y/G/A	HFB2X*UH4	295	
		Blue	HFB2XLUH4	545	
	Surge Protected 12-60V ac/dc; 110/240/415V ac; 110/240V dc	Color - R/Y/G/A	HFB2S*#	285	10
		Blue	HFB2SL#	470	1
		Clear	HFB2SC#	655	1
	Low Voltage Glow Protected 110V/240/415V ac	Color - R/Y/G/A	HFB2P*□	325	10
		Blue	HFB2PLH	585	1
	Surge & Low Voltage Glow Protected 110V/240/415V ac	Color - R/Y/G/A	HFB2SP*□	330	10
		Blue	HFB2SPLH	590	1
Selector Operators with Mounting Adaptor	Selector Key Operator (Color - Black)	2pos Maintained	Pls refer Ordering Sequence & Circuit Combination Table for exact Cat. Ref.	365	1
		2pos Spr Ret R>L		365	
		3pos Maintained		380	
		3pos Spr Ret L>C		380	
		3pos Spr Ret R>C		380	
		3pos Spr Ret L>C<R		380	
	Selector Knob or Lever Opaque	2pos Maintained		280	
		2pos Spr Ret R>L		280	
		3pos Maintained		300	
		3pos Spr Ret L>C		300	
		3pos Spr Ret R>C		300	
		3pos Spr Ret L>C<R		300	
	Selector Knob or Lever Illuminated •	2pos Maintained		315	
		2pos Spr Ret R>L		315	
		3pos Maintained		325	
		3pos Spr Ret L>C		340	
		3pos Spr Ret R>C		340	
		3pos Spr Ret L>C<R		340	

\* Colour Code Table 1 # Voltage Code Table 2 @ For extended bulb version, use code HLSUTE#

■ Not suitable for illuminated push button types

\*\*Light Source Unit (LSU) needs to be ordered separately.

\*\*\*LED indicating light (standard) 550VAC, Prices are available on request.



# Push Button 22.5mm .....

BCH

Push Button - 22.5 mm



HSN Code : 8536



Description	Type	Cat. No.	MRP [₹]	Lot Size
Contact Block		1NO	HCB10	100
		1NC	HCB01	
	Early Make	1NO	HCB10EM	On request
	Late Break	1NC	HCB01LB	
		1NO+1NC	HCB11	165
		2NO	HCB20	

## Ordering Sequence for Selector Operators

H	E				M
		A - Opaque ; B - Illuminated	Table 3 - Position/Cam	Table 4 - Type	Table 1 Color

HSN Code : 8538

Description	Type	Cat. No.	MRP [₹]	Lot Size
Spares & Accessories	Filament Bulb	Normal Bulb	9ED2#	55
	Filament Bulb	Extended Bulb	9ED3#	55
	Mounting Adaptor		HMR	55
	Lens for Indicating Lamp		H8ED1*	55
	Knob for Illum. Selector Actuator		H9ED1K*	55
	Lever for Illum. Selector Actuator		H9ED1L*	55
	Legend Plate with Std Inscription	Flush/Extended PB	8EA9 +	55
	Rubber Boot for IP66 Protection		HRB*	65
	Padlock to Prevent Operation		8EA1	85

## SELECTION CRITERIA FOR

### 3 POSITION SELECTOR OPERATOR CAM:

Selector Operators with CAM1 :

- When the Selector operator lever / knob is moved to the left side, it operated the left side contact block.
- When the Selector operator lever / knob is moved to the right side, it operates the right side contact block.

Selector Operator with CAM2 :

- When the Selector operator lever / knob is moved to the left side, it operates the left side contact block.
- When the Selector operator lever / knob is moved to the right side, it operates **both the right side contact block and the left side contact blocks.**

\* Color Code Table 1 # Voltage Code Table 2 + See Suffix code table on page 42

## Suffix Code Tables

Table 1		
Applicable for	(*) Color	Code
Opaque, Illuminated	Red	R
Opaque, Illuminated	Yellow	Y
Opaque, Illuminated	Green	G
Opaque, Illuminated	Blue	L
Opaque	Black	B
Illuminated	Amber	A
Opaque	White	W
Illuminated	Clear	C

Table 3	
Selector Operator Version	Code
Sel. Lever 2 pos	8L
Sel. Key 2 pos	8Y
Sel. Knob 2 pos	8K
Sel. Lever 3 pos Cam1	6L
Sel. Key 3 pos Cam1	6Y
Sel. Knob 3 pos Cam1	6K
Sel. Lever 3 pos Cam2	7L
Sel. Key 3 pos Cam2	7Y
Sel. Knob 3 pos Cam2	7K

Table 4		
Applicable for	Type	Code
Selector Operator	Maintained in All Position	D
Selector Operator	Spring Return Right>Centre	R
Selector Operator	Spring Return Left>Centre	T
Selector Operator	Spr. Return Left>Centre<Right	S

## Suffix Code Tables

Table 2		
Applicable for	(*) Voltage	Code
LSU, LED	6V AC/DC (DIRECT)	P4
LSU, LED	12V AC/DC (DIRECT)	S4
LSU, LED	24V AC/DC (DIRECT)	U4
LSU, LED	48V AC/DC (DIRECT)	W4
LSU, LED	60V AC/DC (DIRECT)	Y4
LSU	110V AC/DC (DIRECT)	A4
LSU	110V AC/DC (RESISTOR)	A4
LED	110/120V AC	E
LED	110/120V DC	E1
LED	220/240V AC	H
LED	220/240V DC	H1
LSU	110V/6V (TRANSFORMER)	AP
LSU	110V/24V (TRANSFORMER)	AU
LSU	240V/6V (TRANSFORMER)	KP
LSU	240V/24V (TRANSFORMER)	KU
LSU	415V/6V (TRANSFORMER)	MP
LSU	415V/24V (TRANSFORMER)	MU
LED	415V AC	M
LED	220/240V AC (DIODE+RESISTOR)	H

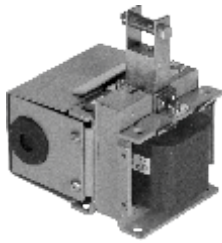
Note : Key type Sel Operator available in Opaque version & Black color only.

# AC Solenoids & Brakes ..... BCH

**GST to be charged extra**

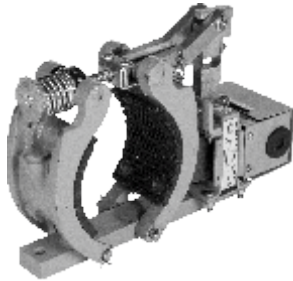
## AC Solenoid - Pull Type

**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■	4445
D	S-51, S-71 S-52, S-72	31.4	6.75	SLD■ SLD2■	6560
E	S-250	40	10	SPSLEM	14280

\* 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■	10850	AC50D4	1850
S-5	5.5	139.7	25 35	34.0 48.0	Continuous Intermittent	S-51■ S-52■	15525	AC50D5	2555
S-7	7	177.8	50 75	68.0 102.0	Continuous Intermittent	S-71■ S-72■	17755	AC50D7	3075
S-250	9.84	250	109	147.0	Continuous	S-2501M	37540	AC50D25	6220

- 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

- For Intermittent duty (S-250 brake), please contact branch office

### Range

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

### Features

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

## AC Solenoid Brakes - Voltage Codes

Coil Voltage	110	220	415
AC	A	B	M

## Spares For AC Solenoid Brake

**GST to be charged extra**

**HSN Code : 8505**

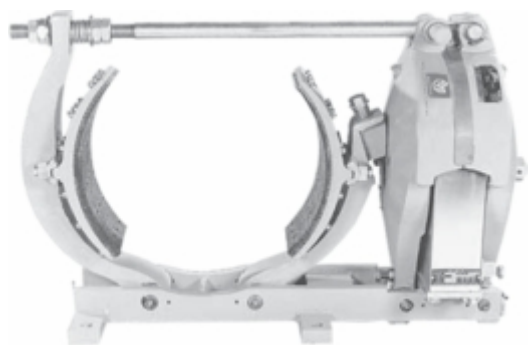
Description	Brake Size : 4"		Brake Size : 5.5"		Brake Size : 7.0"		Brake Size : 10"	
	Cat. No.	List Price [₹]	Cat. No.	List Price [₹]	Cat. No.	List Price [₹]	Cat. No.	List Price [₹]
Brake lining	SP50L1	1390	SP50L2	2060	SP50L3	2760	SP50L4	5405
Brake shoe Assembly*	SP50SA1	3865	SP50SA2	4985	SP50SA3	8220	SP50SA4	16555
Brake Coil -Continuous -Intermittent	SP50MC01	2140	SP50MC21■ SP50MC22■	4265	SP50MC21■ SP50MC22■	4265	SP50MC31■	11270

\* 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 ..... BCH



- 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**

**Proven and time tested**

**New**

**Heavy duty encapsulated coil with class 'F' insulation**



### 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	50210	CACS1*MAE	53995	CACS2*MAE	75000
160mm	SMH160						
8"/200mm	SMH8	13.8	59105	CACA1*MAE	60190	CACJ2*MAE	77995
	SMH200	13.8					
10"/250mm	SMH10	27.7	72560	CACB1*MAE	63860	CACK2*MAE	87800
	SMH250	27.7					
13"/300mm	SMH13	76.0	118790	CACC1*MAE	68865	CACL2*MAE	102235
	SMH300	76.0					
16"/400mm	SMH16	138.8	191205	CACD1*MAE	79295	CACM2*MAE	111100
	SMH400	138.8					
19"/500mm	SMH19	277.0	308255	CACE1*MAE	95880	CACN2*MAE	140365
	SMH500	277.0					
23"/600mm	SMH23	555.0	487865	CACF1*MAE	123620	CACP2*MAE	177585
	SMH600	555.0					
30"/700mm	SMH30	1242.0	1086425	CACG1*MAE	488045	-	-
	SMH700	1242.0					
800mm	SMH800	1242.0	1177090	CACG1*MAE	488045	-	-

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

- 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

Prices of 'Brakes with Asbestos free liners' available on request.

- 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. 6725/- 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 ..... BCH



## Resistance Boxes for DC Electromagnetic Brakes

**GST to be charged extra**

**HSN Code : 8505**

Suitable for Shunt Type		Permanent Series Resistance Box for 230 V DC Supply For Single Brake		Permanent Series Resistance Box for 230 V AC Supply For Single Brake		Permanent Economy Resistance Box for 415 V AC Supply For Single Brake		Permanent Economy Resistance Box for 415 V AC Supply For Double Brake	
Cat No.	Torque KGM	Cat No.	List Price [₹]	Cat No.	List Price [₹]	Cat No.	List Price [₹]	Cat No.	List Price [₹]
SMH150 / SMH160	8	CDCS101D	6995	CARS10KE	6395	CARS10ME	12910	CARS20ME	On request
SMH8 / SMH200	13.8	CDCA101D CDIA101D*	7265	CARA10KE	6610	CARA10ME	12910	CARA20ME	On request
SMH10 / SMH250	27.7	CDCB101D CDIB101D*	8615	CARB10KE	7610	CARB10ME	12910	CARB20ME	On request
SMH13 / SMH300	76.0	CDCC101D CDIC101D*	9945	CARC10KE	9030	CARC10ME	14780	CARC20ME	On request
SMH16 / SMH400	138.8	CDCD101D CDID101D*	10645	CARD10KE	9705	CARD10ME	17180	CARD20ME	On request
SMH19 / SMH500	277.0	CDCE101D CDIE101D*	11395	CARE10KE	10400	CARE10ME	19065	CARE20ME	On request
SMH23 / SMH600	555.0	CDCF101D CDIF101D*	12980	CARF10KE	11680	CARF10ME	20495	CARF20ME	On request
SMH30 / SMH700	1242.0	CDCG101D CDIG101D*	31440	-	-	CARG10ME	35360	-	-
SMH800	1242.0	CDIG101D*	31440	-	-	CARG10ME	35360	-	-

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 ..... BCH

**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	121770
	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	173735
	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	235385
	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	368380
19"/500mm	414,612,810	277.0	368	SME19H1 SME500H1	180.0	272	SME1901 SME50001	565925
	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	915605
	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.**



**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	34220	9GDA01	40525	9GDB01	48980	9GDC01	77760
 Coil Series for inch for mm	-	-	9GDA02/ 9GDA03	90155	9GDB02/ 9GDB03	141315	9GDC02/ 9GDC03	182755
 Torque Adj. Screw Assembly	9GDS04	3255	9GDA04	3400	9GDB04	3400	9GDC04	5920
 Torque Spring	9GDS05	8870	9GDA05	9265	9GDB05	10940	9GDC05	17720
 Wedge Assembly with Bolt, Spring and Washers for inch/mm	9GDS20/ 9GDS22	1260	9GDA20/ 9GDA22	1445	9GDB20/ 9GDB22	1680	9GDC20/ 9GDC22	2565
 Pin set for Lever & Armature Consisting of a) Pin Lever 2 Nos. b) Pin armature 2 Nos.	9GDS06	4470	9GDA06	4690	9GDB06	4690	9GDC06 9GDC06-2#	5920
 Coller Set of Lever & Armature Consisting of a) Coller Lever 4 Nos. a) Coller Armature 4 Nos.	9GDS07	4470	9GDA07	4690	9GDB07	4690	9GDC07	5620
 Bush Set for Lever & Armature Consisting of a) Bush Lever 4 Nos. a) Bush Armature 4 Nos.	9GDS08	8870	9GDA08	9300	9GDB08	9300	9GDC08	10135
 Pull Rod Assembly with nuts, spring & washer	9GDS29	3625	9GDA29	3795	9GDB29	4690	9GDC29	7215
 Grease Nipple (1 set consist 8 Nos.)	9GDS09	1260	9GDA09	1340	9GDB09	1340	9GDC09	1350
 * Shoe Assembly with Clamp & Bolts (1 set consist 2 Nos.) for inch/mm	9GDS10/ 9GDS11	9235	9GDA10/ 9GDA11	9195	9GDB10/ 9GDB11	11410	9GDC10/ 9GDC11	17720
 * Shoe Lining without Bolts for inch for mm (1 set consist 2 Nos.)	9GDS12/ 9GDS13	3125	9GDA12/ 9GDA13	3255	9GDB12/ 9GDB13	4095	9GDC12/ 9GDC13	5920
 * Shoe Lining with Bolts for inch for mm (1 set consist 2 Nos.)	9GDS23/ 9GDS26	4230	9GDA23/ 9GDA26	4690	9GDB23/ 9GDB26	5920	9GDC23/ 9GDC26	8455
 Dust Cover (made of jeans cloth & painted with fire retardent al. paint).	-	-	9GDA30	5220	9GDB30	5220	9GDC30	6210
 mm Size Cast Steel Drum without Hard Chrome Plaiting	9GDS14	10095	9GDA14	11110	9GDB14	17105	9GDC14	28825
 mm Size Cast Steel Drum with Hard Chrome Plaiting	9GDS14P	13635	9GDA14P	15900	9GDB14P	24830	9GDC14P	41770
 Cast Steel Drum without Hard Chrome Plaiting* for inch	-	-	9GDA15	11520	9GDB15	17730	9GDC15	29975
 Cast Steel Drum with Hard Chrome Plaiting* for inch	-	-	9GDA15P	16535	9GDB15P	25095	9GDC15P	43470

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

\* Prices of 'Asbestos free' Shoe Assembly / Shoe Lining without Bolt / Shoe Lining with Bolt available on request.



















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

# DC Brakes..... BCH

**GST to be charged extra**

## Spares & Accessories - DC Brakes

**HSN Code : 8505**

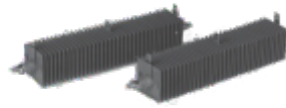
Description	16"/400 mm		19"/500 mm		23"/600 mm		30"/700 mm/800mm	
	Cat No.	List Price [₹]	Cat No.	List Price [₹]	Cat No.	List Price [₹]	Cat No.	List Price [₹]
 Coil Shunt	9GDD01	118205	9GDE01	165965	9GDF01	260825	9GDG01	590935
 Coil Series	for inch 9GDD02 for mm 9GDD03	268890	9GDE02 9GDE03	350740	9GDF02 9GDF03	542180	-	-
 Torque Adj. Screw Assembly	9GDD04	8845	9GDE04	12610	9GDF04	20155	9GDG04	42230
 Torque Spring	9GDD05	27230	9GDE05	37675	9GDF05	62385	9GDG05	133895
 Wedge Assembly with Bolt, for inch Spring and Washers	for inch 9GDD20/ for mm 9GDD22	3400	9GDE20/ 9GDE22	5105	9GDF20/ 9GDF22	8005	9GDG20/ 9GDG22	17740
 Pin set for Lever & Armature Consisting of a) Pin Lever 2 Nos. for inch for mm b) Pin Armature 2 Nos.	9GDD06* 9GDD06-2#	7215	9GDE06* 9GDE06-2#	7215	9GDF06* 9GDF06-2#	10135	9GDG06 <sup>++</sup>	30685
 Coller Set of Lever & Armature Consisting of a) Coller Lever 4 Nos. b) Coller Armature 4 Nos.	9GDD07	5620	9GDE07	5515	9GDF07	6895	9GDG07 <sup>+</sup>	11320
 Bush Set for Lever & Armature Consisting of a) Bush Lever 4 Nos. b) Bush Armature 4 Nos.	9GDD08	10370	9GDE08	10865	9GDF08	13905	9GDG08 <sup>++</sup>	24735
 Pull Rod Assembly with nuts, spring & washer	9GDD29	10940	9GDE29	15135	9GDF29	20340	9GDG29	53220
 Grease Nipple ( 1 set consist 8 Nos.)	9GDD09	1375	9GDE09	2375	9GDF09	2375	9GDG09	2620
 Shoe Assembly with Clamp & Bolts for inch ( 1 set consist 2 Nos.)	for inch 9GDD10/ for mm 9GDD11	27270	9GDE10/ 9GDE11	37730	9GDF10/ 9GDF11	60315	9GDG10/ 9GDG11 9GDG11A <sup>+++</sup>	133895 139975
 Shoe Lining without Bolts for inch ( 1 set consist 2 Nos.)	for inch 9GDD12/ for mm 9GDD13	9275	9GDE12/ 9GDE13	15135	9GDF12/ 9GDF13	22395	9GDG12/ 9GDG13 9GDG13A <sup>+++</sup>	42320 44375
 Shoe Lining with Bolts for inch ( 1 set consist 2 Nos.)	for inch 9GDD23/ for mm 9GDD26	11410	9GDE23/ 9GDE26	18880	9GDF23/ 9GDF26	29335	9GDG23/ 9GDG26 9GDG26A <sup>+++</sup>	52345 56860
 Dust Cover (made of jeans cloth & painted with fire reterdent al. paint).	9GDD30	6720	9GDE30	8310	9GDF30	8720	-	-
 mm Size Cast Steel Drum without Hard Chrome Plaiting	9GDD14	36040	9GDE14	57875	9GDF14	81605	-	-
 mm Size Cast Steel Drum with Hard Chrome Plaiting	9GDD14P	53660	9GDE14P	84540	9GDF14P	124840	-	-
 Cast Steel Drum without Hard Chrome Plaiting* for inch	9GDD15	37585	9GDE15	60585	9GDF15	83845	-	-
 Cast Steel Drum with Hard Chrome Plaiting* for inch	9GDD15P	56080	9GDE15P	88635	9GDF15P	130825	9GDG15P	221655

\* 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 ..... BCH



**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	10520
9GDX02	1x10"/250mm	2x8"/200mm	2	16400
9GDX03	1x13"/300mm 1x16"/400mm	2x10"/250mm	2	22215
9GDX04	1x19"/500mm	2x13"/300mm 2x16"/400mm	2	29335
9GDX05	1x23"/600mm	2x19"/500mm	2	41840
9GDX06	-	2x23"/600mm	2	83720
9GDX07	1x30"/700 & 800mm	-	2	116085



**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	1945
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	4345	8385	8840	
10	250	4345			
13	300	5955			
16	400	6385			
19	500	9920			
23	600	13900			

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

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# Plugs & Sockets ..... BCH



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

HSN Code : 8536

Rating	Pins	Type	Cat No.	MRP [₹]
20A, 250V	2P + E	Plug	MP20	230
		Socket	Ms20	255
30A, 440V	3P + E	Plug	MP30	535
		Socket	Ms30	565



## Plastic Plugs & Socket Type 'PS'

HSN Code : 8536

Rating	Pins	Type	Cat No.	MRP [₹]
20A, 250V	3	Plug	PS16AA7	260
		Flush Mounting Socket	PS16BA7	375
		Socket with Wall Mounting Box	PS16DA7	460
20A, 415V	4	Plug	PS16AA1	320
		Flush Mounting Socket	PS16BA1	490
		Socket with Wall Mounting Box	PS16DA1	570
32A, 415V	3	Plug	PS32AA7	565
		Socket	PS32BA7	565
	4	Plug	PS32AA1	595
		Socket	PS32BA1	595
	5	Plug	PS32AA5	630
		Socket	PS32BA5	630

- 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	1725
		Plug with inclined Handle	299/12B	1455

## 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	805
		Plug with inclined Handle	215B	785
30A, 415V	4	Panel Mounting Socket	2413B	840
		Plug with inclined Handle	213B	820
30A, 415V	5	Panel Mounting Socket	2417B	875
		Plug with inclined Handle	217B	855

Note : \*Loose Conduit Box Straight (Cat. No. 9J101) MRP - Rs. 295/- each  
 \*Spare Handle Inclined (Cat. No. 9J108) MRP -Rs. 145/- each.

HSN Code : 8538

# Plugs & Sockets ..... BCH

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

HSN Code : 8536

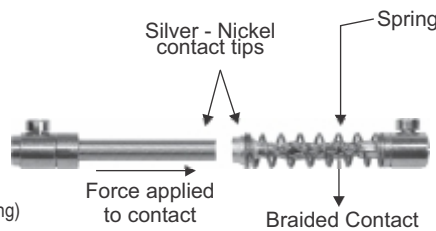
Rating	Pins	Type	Cat No.	MRP [₹]
16A, 415V	5	Plug	DS1A7A1	1245
		Socket	DS1B7A1	1550
		Handle Assembly	SP91PH	240
32A, 415V	5	Plug	DS3A7A1	2070
		Socket	DS3B7A1	2580
		Handle Assembly	SP93PH	250
63A, 415V	5	Plug	DS6A7A1	3380
		Socket	DS6B7A1	4400
		Handle Assembly	SP96PH	355
125A, 415V	5	Plug	DS9A7A1	9760
		Socket	DS9B7A1	13945
		Conduit Box	SP99WB	7115
		Handle Assembly	SP99PH	800

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



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

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



### Quick Disconnect



*Sparkless  
Butt type contact*



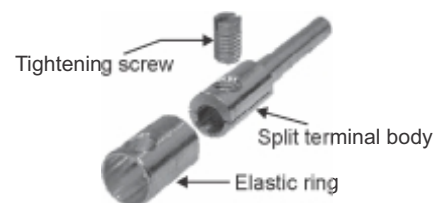
- Self aligning self wiping
- Spring loaded for consistent pressure
- Silver nickle material for extremely low temperature rise

### Safety Disk



No access to live parts

### Vibration proof termination



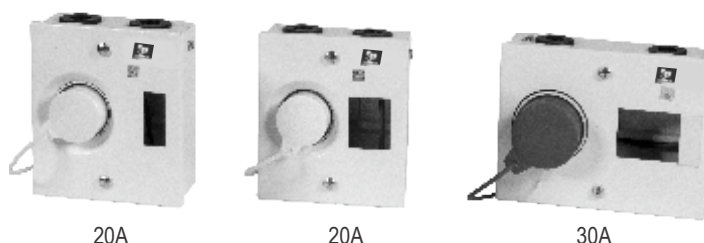


# Plug & Socket Box ..... BCH

## 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	1115
20A, 250V	2P + E	Universal	Plug & Socket Box - DP-MCB Cutout	MPSEU202	1115
30A, 440V	3P + E	Universal	Plug & Socket Box - TPN-MCB Cutout	MPSEU301	2805



## 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	1310
			Plug & Socket Box with DP-MCB Cutout	PSEU202	1345
		Flush	Plug & Socket Box with SP MCB Cutout	PSEF201	1310
			Plug & Socket Box with DP-MCB Cutout	PSEF202	1345
32A, 415V	4	Universal	Plug & Socket Box with 4P MCB Cutout	PSEU324	2910
			5	PSEU325	2970
	4	Flush	Plug & Socket Box with 4P MCB Cutout	PSEF324	2910
			5	PSEF325	2970

## 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	3290
			Plug & Socket Box with DP MCB Cutout	SSEU303	3290
	4	Universal	Plug & Socket Box with 4P MCB Cutout	SSEU304	3375
			5	SSEU305	3450

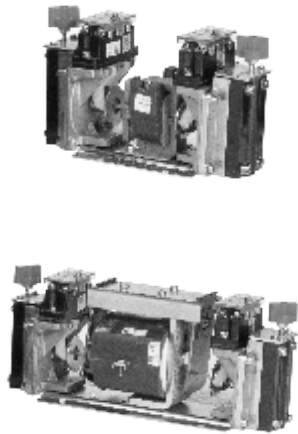
## Stainless Steel Cover Plug & Socket Box Type 'PSEU-SSC'/SSEU-SSC'

HSN Code : 8536



Rating	Pins	Mounting	Type	Cat No.	MRP [₹]
20A, 250V	3	Universal	P&S Box with 'PS' P&S and SP MCB Cutout	PSEU201-SSC	1680
			P&S Box with 'PS' P&S and 4P MCB Cutout	PSEU325-SSC	3400
30A, 415V	3	Universal	Plug & Socket Box with SP MCB Cutout	SSEU303-SSC-MCB1P	3780
			Plug & Socket Box with DP MCB Cutout	SSEU303-SSC	3780
	4	Universal	Plug & Socket Box with 4P MCB Cutout	SSEU304-SSC	3870
			5	Universal	Plug & Socket Box with 3P MCB Cutout
	Plug & Socket Box with 4P MCB Cutout	SSEU305-SSC			3945

## 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	4305	6455
	0.05 - 60 Sec	1NO + 1NC	-	KRTPN10 <sup>■</sup> -1	4455	6815
	0.05 - 180 Sec	1NO + 1NC	-	KRTPN10 <sup>■</sup> -3	5035	7435
	0.05 - 30 Sec	2NO + 2NC	-	KRTPN20 <sup>■</sup> -0	4840	6915
	0.05 - 60 Sec	2NO + 2NC	-	KRTPN20 <sup>■</sup> -1	4945	6995
	0.05 - 180 Sec	2NO + 2NC	-	KRTPN20 <sup>■</sup> -3	5315	7515
PNI	0.05 - 30 Sec	1NO + 1NC	1NO + 1NC	KRTPN11 <sup>■</sup> -0	5250	7520
	0.05 - 60 Sec	1NO + 1NC	1NO + 1NC	KRTPN11 <sup>■</sup> -1	5960	8210
	0.05 - 180 Sec	1NO + 1NC	1NO + 1NC	KRTPN11 <sup>■</sup> -3	6520	8310
	0.05 - 30 Sec	2NO + 2NC	2NO + 2NC	KRTPN22 <sup>■</sup> -0	6585	8580
	0.05 - 60 Sec	2NO + 2NC	2NO + 2NC	KRTPN22 <sup>■</sup> -1	6655	9025
	0.05 - 180 Sec	2NO + 2NC	2NO + 2NC	KRTPN22 <sup>■</sup> -3	7130	9550
Type	Time Range (Secs.)	On-Delay Block	Of-Delay Block	Cat No.	AC	DC
PCN	0.05 - 30 Sec	1NO + 1NC	1NO + 1NC	KRTPCN11 <sup>■</sup> -0	7115	9525
	0.05 - 60 Sec	1NO + 1NC	1NO + 1NC	KRTPCN11 <sup>■</sup> -1	7475	9605
	0.05 - 180 Sec	1NO + 1NC	1NO + 1NC	KRTPCN11 <sup>■</sup> -3	8485	10615
	0.05 - 30 Sec	2NO + 2NC	2NO + 2NC	KRTPCN22 <sup>■</sup> -0	8000	10455
	0.05 - 60 Sec	2NO + 2NC	2NO + 2NC	KRTPCN22 <sup>■</sup> -1	8380	10580
	0.05 - 180 Sec	2NO + 2NC	2NO + 2NC	KRTPCN22 <sup>■</sup> -3	9450	11535

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	5180	-
	150	2NO + 2NC	-	KRTPN20A-3R	On request	-

## Accessories for Time Delay Relay HSN Code : 9107

Description	Cat. No.	MRP [₹]	Lot Size
Contact Block			
1NO+1NC Timed	SP20S3+	945	1
2NO+2NC Timed	SP20S4+	1235	
1NO+1NC Inst.	SP20S5+	945	
2NO+2NC Inst.	SP20S6+	1235	
Magnet Coil			
AC-PN Relays	SP20MC <sup>■</sup>	1325	1
AC-PNI & PCN Relays	SP20MC1 <sup>■</sup>	1325	
DC Relays	SP20MC2 <sup>■</sup>	4310	
Return Spring*			
(PNI & PCN)	SP20RS	220	1
Coil Clip*	SP20CC	355	
Magnet frame assembly without coil	SP20 MA/MA1	1935	1
Knob assembly	SP20KA	65	10

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

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

## Voltage Suffix Code

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

\* KRTPN timers with 24V AC, 110V DC & 550V AC coil voltage, Prices available on request

# Motor Starters ..... BCH

## Direct On Line Starters



- DOL upto 40 HP
- Heavy duty 4 Pole Contactor
- Wide Band Coil Voltages (190-400V, 230-420V, 220-240V, 380-415V)
- Encapsulated & Hermetically sealed coil
- Easy inspection & maintenance

## Auto Start Direct on line Starters

- Automatically starts the Motor when the power comes back
- Upto 24 A relay rating
- Time delay before restart to settle power supply fluctuations
- Monitors power supply condition before restarting
- Protection against single phasing, phase imbalance & phase reversal



## Star Delta Starters



- Semi Automatic upto 40 HP
- Fully Automatic upto 375 HP
- Wide Band Coil Voltages ( 230-360V, 260-400V, 380-415V)
- Single Phase & Overload Protection

## Mini Manual Starters

- Range : 3 - Ph : upto to 10 HP  
          : 1 - Ph : upto 4 HP
- Proven time tested product
- Flush and base mounting



## Mini Manual with UVT coil



- Automatic Version of Mini Manual Starter
- Prevents motor from restarting when power comes back
- Trips the starter automatically in low voltage conditions

## Manual Star Delta Starters

- Contactor based superior design with 25 A heavy duty switch
- Momentary Star position ensures perfect transition
- Ideal for Oil Mills, Flour Mills and agro industries



# Motor Starters - Shakti ..... BCH

## Shakti WP DOL Starter (190-400V AC Coil)

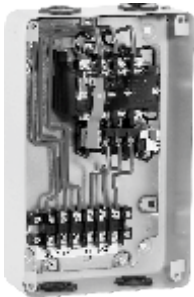
HSN CODE : 8536



Cat Code	Overload Relay Range (A)	Contactor Type	Contactor rating	MRP [₹]	Cat Code (Open Execution)	MRP [₹]
SAWPGZA	2.4 - 3.8	Shakti	12 A	2825	-	-
SAWPHZA	3.8 - 6.0					
SAWPJZA	6.0 - 9.3					
SAWPGZ	2.4 - 3.8		20 A	2865	-	2815
SAWPHZ	3.8 - 6.0					
SAWPJZ	6.0 - 9.3					
SAWPKZ	8.9 - 13.5					
SAWPLZ	13.2 - 20.0			3015	SAWPLZI	3000
SAWPMZ	17.4 - 24.0			3165	SAWPMZI	3150

## Shakti WP DOL Starter (Big Enclosure + TB)

HSN CODE : 8536



Cat Code	Overload Relay Range (A)	Contactor Type	Contactor rating	MRP [₹]
SAWPKZ-BT	8.9 - 13.5	Shakti	20 A	3680
SAWPLZ-BT	13.2 - 20.0			3840
SAWPMZ-BT	17.4 - 24.0			4040

## Shakti DOL Starter (190-400V AC Coil)

HSN CODE : 8536



Cat Code	Overload Relay Range (A)	Contactor Type	Contactor rating	MRP [₹]	Cat Code (Open Execution)	MRP [₹]
SAGZ	2.4 - 3.8	Shakti	20 A	3050	SAGZI	3005
SAHZ	3.8 - 6.0				SAHZI	
SAJZ	6.0 - 9.3				SAJZI	
SAKZ	8.9 - 13.5				SAKZI	
SALZ	13.2 - 20.0			3330	SALZI	3285
SAMZ	17.4 - 24.0			3460	SAMZI	3415

## Shakti Semi Automatic Star Delta Starter with 260-400V AC Coil

HSN CODE : 8536



Cat Code	Overload Relay Range (A)	Contactor Type	Contactor rating	MRP [₹]
SASSGLEG	2.4 - 3.8	Shakti	16 A	10190
SASSHLEG	3.8 - 6.0			
SASSJLEG	6.0 - 9.3			
SASSKLEG	8.9 - 13.5			
SASSKLEG/LOR	13.2 - 20.0			10390
SASSKLEG-M	17.4 - 24.0			10735

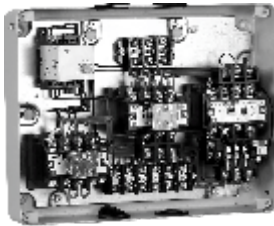
For 380 - 415 V Coil Voltage replace Suffix 'G' by 'N'

For other Coil Voltages, kindly refer "Coil Voltage Master Table" at page 68

# Motor Starters - Shakti..... BCH

## Shakti Fully Automatic Star Delta Starter with 260-400V AC Coil & Electronic Timer

HSN CODE : 8536



Cat Code	Overload Relay Range (A)	Contactor Type	Contactor rating	MRP [₹]
SASAGLEG	2.4 - 3.8	Shakti	16 A	11265
SASAHLEG	3.8 - 6.0			
SASAJLEG	6.0 - 9.3			
SASAKLEG	8.9 - 13.5			
SASAKLEG/LOR	13.2 - 20.0			11460
SASAKLEG/MOR	17.4 - 24.0			11785

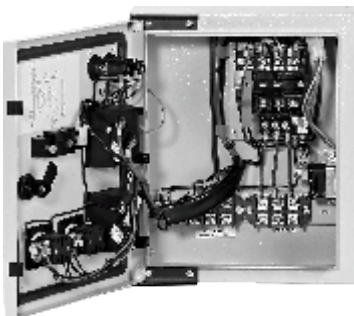
For 380 - 415 V Coil Voltage replace Suffix 'G' by 'N'

## Shakti Auto-Start DOL Starter ( With 5-Sec delay Auto Switch )

HSN CODE : 8536



3 Position Selection (Maunal - Manual SPP - Auto)	Description			MRP [₹]
Cat Code	Overload Relay Range (A)	Contactor Type	Contactor rating	
ASXGZ	2.4 - 3.8	Shakti	20 A	5035
ASXHZ	3.8 - 6.0			
ASXJZ	6.0 - 9.3			
ASXKZ	8.9 - 13.5			
ASXLZ	13.2 - 20.0			5280
ASXMZ	17.4 - 24.0			5585



## Shakti DOL Submersible Pump Starter (with Auto Switch)

HSN CODE : 8536



3 Position Selection (Maunal - Manual SPP - Auto)	Description			MRP [₹]
Cat Code	Overload Relay Range (A)	Contactor Type	Contactor Rating	
CPEYSAGZ	2.4 - 3.8	Shakti	20 A	8515
CPEYSAHZ	3.8 - 6.0			
CPEYSAJZ	6.0 - 9.3			
CPEYSAKZ	8.9 - 13.5			
CPEYSALZ	13.2 - 20.0			9420
CPEYSAMZ	17.4 - 24.0			9915

For 380 - 415 V coil voltage replace suffix "Z" with "N" in the Cat. Code

For Auto switch with 5 min time delay option, kindly contact nearest sales office

For other Coil Voltages, kindly refer "Coil Voltage Master Table" at page 68



# Motor Starters - Citation ..... BCH.

## Citation DOL Motor Starter

HSN CODE : 8536



Cat Code	HP / KW at 3Ø, 415V, 50Hz	Overload Relay Range (A)	Contactor Type	Contactor Rating	MRP [₹]	Cat Code (Open Execution)	MRP [₹]
NADLEN	0.5 / 0.37	0.72 - 1.14	C00N	16 A	4120	NADLENI	4010
NAELEN	0.75 / 0.55	1.07 - 1.70				NAELENI	
NAFLEN	1 / 0.75	1.58 - 2.50				NAFLENI	
NAGLEN	2 / 1.5	2.4 - 3.8				NAGLENI	
NAHLEN	3 / 2.2	3.8 - 6.0				NAHLENI	
NAJLEN	5 / 3.7	6.0 - 9.3				NAJLENI	
NAKLEN	7.5 / 5.5	8.9 - 13.5				NAKLENI	
NALLEN	10 / 7.5	13.2 - 20.0			NALLENI	4255	
NALLEN/MOR	12.5 / 10	17.4 - 24.0	CP20	20 A	5235	NALLENI/MOR	5110

## Citation DOL Motor Starter

(A) with NHD Contactor

HSN CODE : 8536



Cat Code	HP / KW at 3Ø, 415V, 50Hz	Overload Relay Range (A)	Contactor Type	Contactor Rating	MRP [₹]
NAMLEN	15 / 11	17.4 - 24.0	N0N	25A	6910
NAMLEN/NOR	15 / 11	22.0 - 30.0	N0N	25A	7525
NAPLEN/MOR	15 / 11	17.4 - 24.0	N01N	32A	9340
NAPLEN	20 / 15	23.0 - 32.0	N01N	32A	9730
NANLEN	20 / 15	22.0 - 30.0	N1N	40A	10760
NAQLEN	25 / 18.5	26.0 - 40.0	N1N	40A	10920
NACT1LEN	25 / 18.5	24.4 - 39.0	N1N	40A	16510

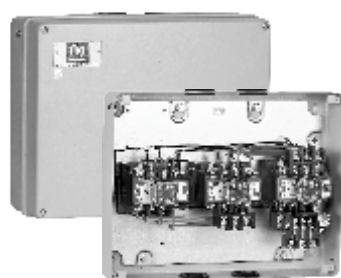
(B) 30 & 40HP DOL Starter

Cat Code	HP / KW at 3Ø, 415V, 50Hz	Overload Relay Range (A)	Contactor Type	Contactor Rating	MRP [₹]
CEHFRGDM*	30 / 22	36.0 - 52.0	Freedom	50A	18295
NACT2LEDM	30 / 22	37.6 - 60.0	Citation D	40A	22660
NACT2LEEM	40 / 30	37.6 - 60.0	Citation E	70A	29090

\*CEHFRGDM consist Freedom Contactor and Freedom OLR

## Citation Semi Automatic Star Delta Starter with NHD Contactor

HSN CODE : 8536

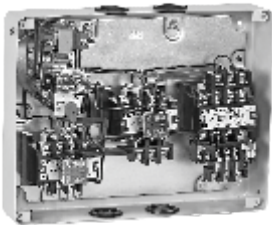


Cat Code	HP / KW at 3Ø, 415V, 50Hz	Overload Relay Range (A)	Contactor Type	Contactor Rating	MRP [₹]
NASSHLEN	5 / 3.7	3.8 - 6.0	C00N	16A	11090
NASSJLEN	10 / 7.5	6.0 - 9.3			
NASSKLEN	15 / 11	8.9 - 13.5			
NASSKLEN/LOR	15 / 11	13.2 - 20.0			
NASSLLEN	20 / 15	13.2 - 20.0	N0N	25A	16835
NASSMLEN	25 / 18.5	17.4 - 24.0			16940
NASSPLEN	25 / 18.5	23.0 - 32.0			18295
NASS01PLEN	35 / 26	23.0 - 32.0	N01N	32A	20880
NASS01QLEN	35 / 26	26.0 - 40.0	N01N	32A	21065
NASSNLEN	35 / 26	22.0 - 30.0	N1N	40A	29725
NASS01CT1LEN	40/30	24.4 - 39.0	N01N	32A	31350
NASSFRGCLEC4M	40/30	29.0 - 42.0 (FR)	C4	32A	33190

# Motor Starters - Citation ..... BCH

## Citation Fully Automatic Star Delta Starter with NHD Contactor & Pneumatic Timers

HSN CODE : 8536



Cat Code	HP / KW at 3Ø, 415V, 50Hz	Overload Relay Range (A)	Contactor Type	Contactor Rating	MRP [₹]
NASAGLEN	3 / 2.2	2.4 - 3.8	C00N	16A	15260
NASAHLEN	5 / 3.7	3.8 - 6.0			
NASAJLEN	10 / 7.5	6.0 - 9.3			
NASAKLEN	15 / 11	8.9 - 13.5			
NASAKLEN/LOR	15 / 11	13.2 - 20.0			
NASALLEN	20 / 15	13.2 - 20.0	N0N	25A	19280
NASAMLEN	25 / 18.5	17.4 - 24.0			19380
NASAPLEN	30 / 22	23.0 - 32.0			20185
NASA01PLEN	35 / 26	23.0 - 32.0	N01N	32A	24155
NASANLEN	35 / 26	22.0 - 30.0	N1N	40A	33875
NASAQLEN	40 / 30	26.0 - 40.0			34070
NASACT1LEN	40 / 30	24.4 - 39.0			38205

## Citation Fully Automatic Star Delta Starter with Citation M Contactor & Pneumatic Timers

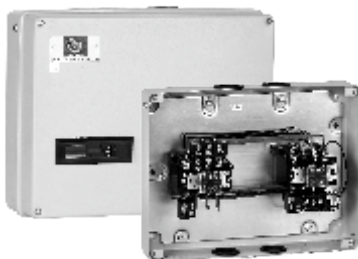
HSN CODE : 8536



Cat Code	HP / KW at 3Ø, 415V, 50Hz	Overload Relay Range (A)	Contactor Type	Contactor Rating	MRP [₹]
NASACT1LEDM	40 / 30	24.4 - 39.0	D	40A	46270
NASACT2LEDM	50 / 37	37.6 - 60.0			47005
NASACT2LEEM	75 / 55	37.6 - 60.0	E	70A	80365
NASACT3LEEM	85 / 65	56.4 - 90.0			85475
NASACT3LEC5M	100 / 75	56.4 - 90.0	M-5	110A	110205
NASACT4LEC5M	135 / 100	84.6 - 135.0			112675
NASACT4LENM	150 / 110	84.6 - 135.0	N	140A	142765
NASACT5LEC6M	250 / 185	131.6 - 210.0	S	300A	212095
NASACT6LEC6M	375 / 280	188.0 - 300.0			240000

## DOL Reversing Starter

HSN CODE : 8536



Cat Code	HP / KW at 3Ø, 415V, 50Hz	Overload Relay Range (A)	Contactor Type	Contactor Rating	MRP [₹]
NARFLEN	1/0.75	1.58 - 2.50	C00N	16 A	10250
NARGLEN	2/1.5	2.4 - 3.8			
NARHLEN	3/2.2	3.8 - 6.0			
NARJLEN	5/3.7	6.0 - 9.3			
NARKLEN	7.5/5.5	8.9 - 13.5			
NARLLEN	10/7.5	13.2 - 20.0	N0N	25 A	14460
NARMLLEN	15/11	17.4 - 24.0	N1N	40 A	17500
NARNLEN	20/15	22.0 - 30.0			19035

For other Coil Voltages, kindly refer "Coil Voltage Master Table" at page 68

# Motor Starters - Citation..... BCH



**Fully Automatic Automatic Star Delta Starter with Citation M Contactor, Pneumatic Timer & Electronic Over Current Relay with Ammeter & Voltmeter**

**HSN CODE : 8536**

Cat Code	HP / KW at 3Ø, 415V, 50Hz	EOCR Range (A)	Contactor Type (Citation)	Contactor Rating (A)	MRP [₹]
NASASS60LEDM-P	50 / 37	5-60 Amp	D	40A	54810
NASASS60LEEM-P	75 / 55	5-60 Amp	E	70A	85740
NASA2CTD1CLEM5M-P	100/ 75	0.5-6 Amp (with CT 100/5) (2CT model)	M-5	110A	121430
NASA2CT150LEM5M-P	135/ 100	0.5-6 Amp (with CT 150/5) (2CT model)	M-5	110A	125800

# Motor Starters - Freedom.....



**Industrial DOL Starters with Freedom Contactor & Overload Relay**

**HSN CODE : 8536**

Cat Code	HP / KW at 3Ø, 415V, 50Hz	Overload Relay Range (A)	Contactor Type	Contactor Rating	MRP [₹]
CEBFM	0.5/0.37	1.0-1.4	Freedom	9 A	3125
CEBGM	0.75/0.55	1.3-1.8	Freedom	9 A	
CEBHM	1.0/0.75	1.7-2.4	Freedom	9 A	
CEBJM	1.5/1.1	2.2-3.1	Freedom	9 A	
CEBKM	2.5/1.5	2.8-4.0	Freedom	9 A	
CEBMM	3.0/2.2	4.5-6.5	Freedom	9 A	
CEBPM	5.0/3.7	7.5-11	Freedom	9 A	3205
CECPM	5.0/3.7	7.5-11	Freedom	12 A	
CECQM	7.5/5.5	10-14	Freedom	12 A	4055
CEDQM	7.5/5.5	10-14	Freedom	18 A	
CEDRM	10/7.5	13-19	Freedom	18 A	

# Wireless Modem.....



**Wireless Modem  
(Compatible With The Complete BCH Starter Family)**

**HSN Code : 8517 62 30**

Cat Code	Description	MRP [₹]
BCH-GSM	Wireless Modem	On request

For other Coil Voltages, kindly refer "Coil Voltage Master Table" at page 68

## 1- Phase Mini Manual Motor Starter upto 4HP (Surface Mounting)

HSN CODE : 8536



Cat Code	Recommended HP 1Ø, 240V	Overload Relay Range (A)	MRP [₹]	Cat Code (with UV Coil)	MRP [₹]
AMLE-10-SP	-	0.23 - 0.47	1445	AMLEH-10-SP	1940
AMLE-20-SP	-	0.46 - 0.80		AMLEH-20-SP	
AMLE-30-SP	1 / 8	0.85 - 1.55		AMLEH-30-SP	
AMLE-40-SP	1 / 6	1.60 - 3.20		AMLEH-40-SP	
AMLE-50-SP	0.5 / 0.75	3.50 - 6.50		AMLEH-50-SP	
AMLE-60-SP	1 to 2	6.80 - 11.7		AMLEH-60-SP	
AMLE-70-SP	2 to 3	11.0 - 20.0		AMLEH-70-SP	

For flush mounting replace 'E' by 'C' and reduce price by ₹ 50

## 3- Phase Mini Manual Motor Starter upto 10 HP (Surface Mounting)

HSN CODE : 8536



Cat Code	Recommended HP at 3Ø, 415V	Overload Relay Range (A)	MRP [₹]	Cat Code (with UV Coil)	MRP [₹]
AMLE-10	-	0.23 - 0.47	1940	AMLEN-10	2230
AMLE-20	-	0.46 - 0.80		AMLEN-20	
AMLE-30	0.50 / 0.75	0.85 - 1.55		AMLEN-30	
AMLE-40	1.00 / 1.50	1.60 - 3.20		AMLEN-40	
AMLE-50	3	3.50 - 6.50		AMLEN-50	
AMLE-60	5	6.80 - 11.7		AMLEN-60	
AMLE-70	10	11.0 - 20.0		AMLEN-70	

For flush mounting replace 'E' by 'C' and reduce price by ₹ 50

## 1-Phase DOL with 2P CPG Contactor & 2P Overload Relay

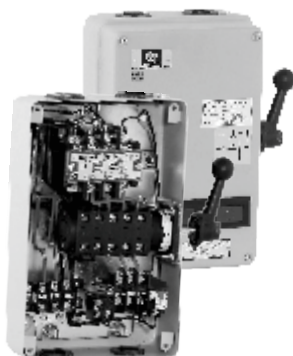
HSN CODE : 8536



Cat Code	HP / KW at 1Ø, 220V, 50Hz	Overload Relay Range (A)	Contactor Type	Contactor Rating	MRP [₹]
NAAEBW-SP	-	1.07 - 1.70	2P CPG	12A	2790
NAAHBW-SP	0.75 / 0.55	3.8 - 6.0		16A	2825
NAHBW-SP	0.75 / 0.55	3.8 - 6.0		12A	2790
NAAJBW-SP	1 / 0.75	6.0 - 9.3		16A	2825
NAJBW-SP	1 / 0.75	6.0 - 9.3		20A	2895
NAKBW-SP	1.5 / 1.10	8.9 - 13.5		25A	3160
NAALBW-SP	2 / 1.5	13.2 - 20.0			3210
NALBW-SP	2 / 1.5	13.2 - 20.0			
NAMBW-SP	3 / 2.2	17.4 - 24.0			

## Manual Star Delta Starter (with 260-400V AC Coil)

HSN CODE : 8536



Cat Code	HP at 3Ø, 415V, 50Hz	Overload Relay Range (A)	Contactor Type	Contactor Rating	MRP [₹]
HASSGLEG	3 HP	2.4 - 3.8	C00N	16 A	6145
HASSHLEG	5 HP	3.8 - 6.0			
HASSJLEG	10 HP	6.0 - 9.3			
HASSKLEG	15 HP	8.9 - 13.5	NON	25 A	6990

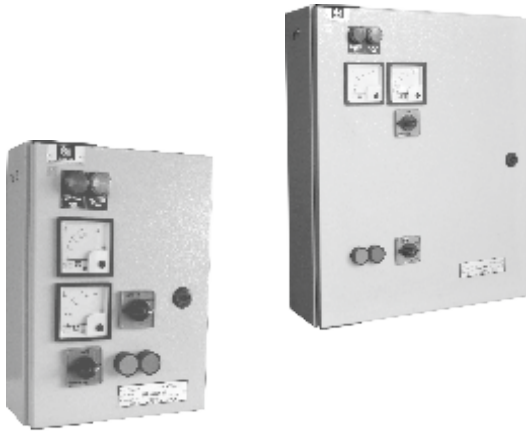
HSN CODE : 8538

HASSW15	SPARE SWITCH FOR 15 HP MSD STARTER	2625
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For other Coil Voltages, kindly refer "Coil Voltage Master Table" at page 68

# Motor Starters (SPS) - Citation.....BCH

## Submersible Pump Starters



### Three Phase

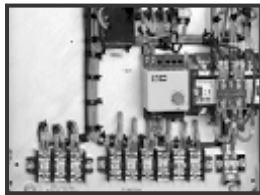
- Direct on line : upto 40 A relay rating
- Star Delta : upto 135 A relay rating
- Protections :
  - Phase failure
  - Phase imbalance
  - Phase reversal
- Short Circuit Protection Thru MCB : In case of Premium models
- Ammeter and Voltmeter
- On/Off and Trip indications
- Powder coated enclosure with PU gasket ensuring excellent finish and reliability
- Provision for connecting Dry run preventor



On/Trip Indicators



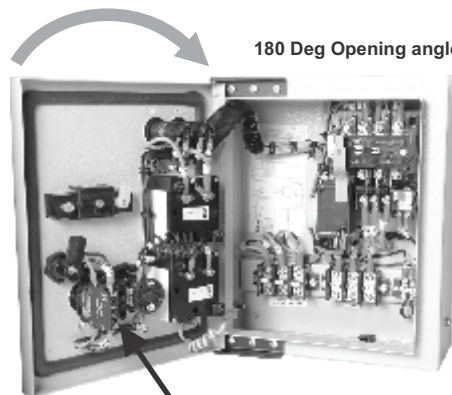
Isolated Terminal blocks for better termination



Properly laid down wires, bunched with cable ties Ferrules for ease of identification

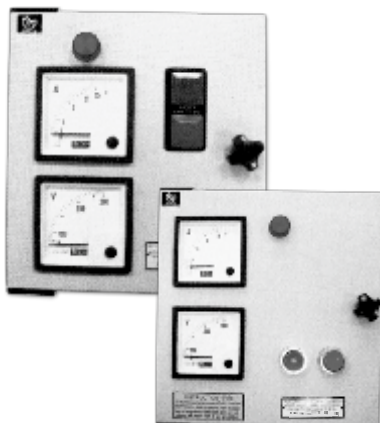


Phase indicators (For std & Premium models)



180 Deg Opening angle

PU Gasket for excellent sealing against dust & water



### Single Phase

With Mini DOL (up to 11.0 - 20.0 A Relay)

- Premium Model (With Ammeter & Voltmeter)

With 2 Pole Contactor + 2 Pole Relay (up to 23.0 - 32.0 A Relay)

- Economy Model (With Ammeter)
- Standard Model (With Ammeter & Voltmeter)
- Provision for connecting dry run preventor



# Motor Starters - Citation 3 - Phase ..... BCH

## Citation Submersible Pump Starter with 3-Position Selection (with Auto Switch) with or without MCB option

DOL (3-Ph)

HSN CODE : 8536



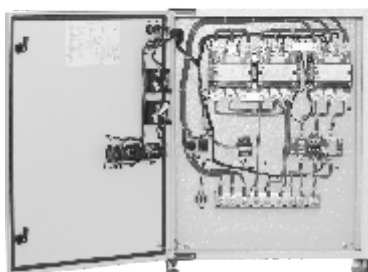
Overload Relay Range (A)	Contactor Type	Contactor Rating	DOL			
			Economy (without Short Circuit Protection)		Premium (with Short Circuit Protection) with MCB	
			Cat Code	MRP [₹]	Cat Code	MRP [₹]
1.58 - 2.50	C00N	16 A	CPEYNAFN*	9065	--	
2.4 - 3.8	C00N	16 A	CPEYNAGN*			
3.8 - 6.0	C00N	16 A	CPEYNAHN*			
6.0 - 9.3	C00N	16 A	CPEYNAJN*		CPPYNAJN*	12875
8.9 - 13.5	C00N	16 A	CPEYNAKN*		CPPYNAKN*	
13.2 - 20.0	C00N	16 A	CPEYNALN*	9715	CPPYNALN*	13775
17.4 - 24.0	N0N	25 A	CPEYNAMN*	10550	CPPYNAMN*	15235
23.0 - 32.0	N01N	32 A	CPEYNA01PN	12015	--	



## Citation Submersible Pump Starter with 3-Position Selection (with Auto Switch) with or without MCB / MCCB options

STAR DELTA (3-Ph)

HSN CODE : 8536



Overload Relay Range (A)	Contactor Type	Contactor Rating	Star Delta			
			Economy (without Short Circuit Protection)		Premium (with Short Circuit Protection) with MCB / MCCB	
			Cat Code	MRP [₹]	Cat Code	MRP [₹]
3.8 - 6.0	C00N	16 A	CPSDEYHN*	17485	--	
6.0 - 9.3	C00N	16 A	CPSDEYJN*		CPSPYJN*	21050
8.9 - 13.5	C00N	16 A	CPSDEYKN*		CPSPYKN*	
13.2 - 20.0	C00N	16 A	CPSDEYLN-C00	17795	--	
17.4 - 24.0	CP20	20 A	CPSDEYMN-CP20	19555	--	
13.2 - 20.0	N0N	25 A	CPSDEYLN	21035	CPSPYLN	25130
17.4 - 24.0	N0N	25 A	CPSDEYMN	22160	CPSPYMN	27155
23.0 - 32.0	N01N	32 A	CPSDEY01PN	27800	--	
22.0 - 30.0	N1N	40 A	CPSDEYNN	34630	CPSPYNN	38245
26.0 - 40.0	N1N	40 A	CPSDEYQN	35140	CPSPYQN	38780
24.4 - 39.0	N1N	40 A	CPSDEYCT1N	37700	CPSPYCT1N	44720
37.6 - 60.0	Citation E	70 A	CPSDEYCT2M	61295	CPSPYCT2M	69000
56.4 - 90.0	Citation E	70 A	CPSDEYECT3M	66695	--	
56.4 - 90.0	Citation M-5	110 A	CPSDEYCT3M	86245	CPSPYCT3M	90945
84.6 - 135.0	Citation M-5	110 A	CPSDEYCT4M	88970	CPSPYCT4M	96740

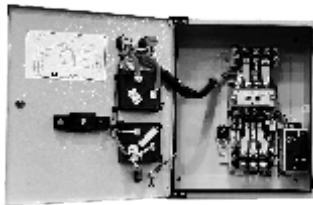
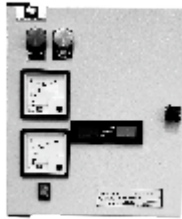
For other Coil Voltages, kindly refer "Coil Voltage Master Table" at page 68

# Motor Starters - Citation P & Shakti P ..... BCH

## Citation P Submersible Pump Starter DOL (3-Ph)

**New**

HSN CODE : 8536



Type	Overload Relay Range (A)	Contactors Rating	Cat Code	Coil	MRP [₹]
CITATION P10	1.58 - 2.5	16 A	CPEYNBF*	N & G	8800
CITATION P10	2.4 - 3.8	16 A	CPEYNBG*	N & G	
CITATION P10	3.8 - 6	16 A	CPEYNBH*	N & G	
CITATION P10	6 - 9.3	16 A	CPEYNBJ*	N & G	
CITATION P10	8.9 - 13.5	16 A	CPEYNBK*	N & G	
CITATION P10	13.2 - 20	16 A	CPEYNBL*	N & G	9060
CITATION P10B	13.2 - 20	20 A	CPEYNBL2*	N & G	9240
CITATION P10H	17.4 - 24	25 A	CPEYNBM*	N & G	9590
CITATION P11	23 - 32	32A	CPEYNBP01*	N & WB	10725
CITATION P11	26 - 40	32A	CPEYNBQ01*	N & WB	10870
CITATION P12	26 - 40	40A	CPEYNBQ*	N & WB	11190

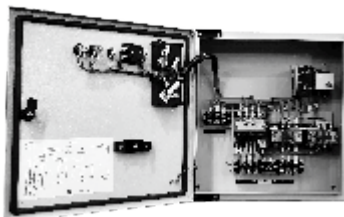
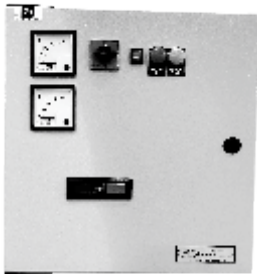
For spare contactor refer page 68

## Citation P Submersible Pump Starter

### STAR DELTA (3-Ph)

**New**

HSN CODE : 8536



Type	Overload Relay Range (A)	Contactors Rating	Cat Code	Coil	MRP [₹]
CITATION P20	6 - 9.3	16 A	CPSDEYNBJ*	N & G	16985
CITATION P20	8.9 - 13.5	16 A	CPSDEYNBK*	N & G	
CITATION P20	13 - 20	16 A	CPSDEYNBL*	N & G	
CITATION P20A	13.2 - 20	20 A	CPSDEYNBL2*	N, LV & G	18090
CITATION P20A	17.4 - 24	20 A	CPSDEYNBM2*	N, LV & G	18190
CITATION P20B	23 - 32A	25 A	CPSDEYNBP*	N, LV & G	20975
CITATION P20H	22 - 30A	32 A	CPSDEYNB01N*	N & WB	21540
CITATION P20H	23 - 32A	32 A	CPSDEYNB01P*	N & WB	21555
CITATION P20H	26 - 40A	32 A	CPSDEYNB01Q*	N & WB	21775
CITATION P21	26 - 40A	40 A	CPSDEYNBQ*	N & WB	26490

For spare contactor refer page 68

## Shakti P DOL Submersible Pump Starter (3-Ph)

**New**

HSN CODE : 8536



Type	Overload Relay Range (A)	Contactors Rating	Cat Code	Coil	MRP [₹]
SHAKTI P6	1.58 - 2.5	12 A	CPEYSBF*	Z & N	7880
SHAKTI P6	2.4 - 3.8	12 A	CPEYSBG*	Z & N	
SHAKTI P6	3.8 - 6	12 A	CPEYSBH*	Z & N	
SHAKTI P6	6 - 9.3	12 A	CPEYSBJ*	Z & N	
SHAKTI P10	8.9 - 13.5	20 A	CPEYSBK*	Z & N	8080
SHAKTI P10	13.2 - 20	20 A	CPEYSBL*	Z & N	8780
SHAKTI P10	17.4 - 24	20 A	CPEYSBM*	Z & N	9240

For spare contactor refer page 67

For other Coil Voltages, kindly refer "Coil Voltage Master Table" at page 68

# Motor Starters 1-Phase SPS ..... BCH

1-Phase SPS With 2P Contactor + Overload Relay (Ammeter + Voltmeter) with 160-220V AC Coil

HSN CODE : 8536



HP at 1Ø, 220V, 50Hz	Overload Relay Range (A)	Contactor Rating	Cat Code	Run Capacitor (mfd)	Start Capacitor (mfd)	MRP [₹]
0.5 / 0.75 HP	3.8 - 6.0	12 Amp	CPNSHBW-SPE	25	80/100	4895
0.5 / 0.75 HP	3.8 - 6.0	16 Amp	CPNSHBW-SP	25	80/100	4995
			CPNSHBW-SP(RC36)	36	80/100	5035
			CPNSHBW-RC25-SC120	25	100/120	5155
			CPNSHBW-RC30-SC200	30	150/200	5830
1 HP	6.0 - 9.3	12 Amp	CPNSJBW-SPE	36	100/120	5010
1 HP	6.0 - 9.3	16 Amp	CPNSJBW-SP	36	100/120	5160
			CPNSJBW-RC20SC100	20	80/100	5125
			CPNSJBW-RC25SC100	25	80/100	5200
			CPNSJBW-RC50SC100	50	80/100	5355
			CPNSJBW-RC60SC150	60	120/150	5600
			CPNSJBW-RC72SC150	72	120/150	5720
			CPNSJBW-SP(RC30)	30	100/120	5200
			CPNSJBW-SP(RC50)	50	100/120	5200
			CPNSJBW-SP(SC100)	36	80/100	5550
			CPNSJBW-RC36-SC200	36	150/200	5940
			CPNSKBW-SPE	50	120/150	5480
1.5 HP	8.9 - 13.5	16 Amp	CPNSKBW-SP	50	120/150	5600
			CPNSKBW-RC30SC120	30	100/120	5515
			CPNSKBW-RC36SC120	36	100/120	5535
			CPNSKBW-SP(RC36)	36	120/150	5575
			CPNSKBW-SP(RC72)	36+36	120/150	5750
			CPNSKBW-RC50-SC200	50	150/200	6130
2 HP	13.2 - 20.0	16 Amp	CPNSLBW-SP	72	150/200	5995
			CPNSLBW-SP (2RC36)	36+36	150/200	6085
			CPNSLBW-RC100SC150	100	120/150	6040
			CPNSLBW-RC90SC150	45+45	120/150	6040
			CPNSLBW-SP(SC150)	72	120/150	6155
CPNSLBW-RC72-SC250	72	200/250	6495			
3 HP	17.4 - 24.0	20 Amp	CPNSMBW-SPE	100	200/250	6400
3 HP	17.4 - 24.0	25 Amp	CPNSMBW-SP	100	200/250	6795
			CPNSMBW-SP(2RC50)	50+50	200/250	6920
	22.0 - 30.0		CPNSNBW-SP	100	200/250	7065
			CPNSNBW-SP(2RC50)	50+50	200/250	7265
5 HP	23.0 - 32.0	32 A & 12 A	CPNSPBW-SPE	100+50	200/250	9200
5 HP	23.0 - 32.0	40 A & 16 A	CPNSPBW-SP	100+50	200/250	9520
			CPNSPBW-SP(3RC50)	50+50+50	200/250	9750

\*Suffix "D" in Cat Code for Dry Run Protection panel (only Extra Terminal is provided to connect Dry Run unit)

\*\*For 170-240V coil, replace "BW" in above cat codes with "BBW"

## 1-Phase SPS With 2 Pole Contactor + Overload Relay (With Ammeter)

HSN CODE : 8536

Cat Code	HP at 1Ø, 220V, 50Hz	Relay Range (Amp.)	Contactor Rating	Run Capacitor (mfd)	Start Capacitor(mfd)	MRP [₹]
CPNEHBW-SP	0.5 / 0.75 HP	3.8 - 6.0	16 Amp	25	80/100	4660
CPNEJBW-SP	1 HP	6.0 - 9.3	16 Amp	36	100/120	4915
CPNEKBW-SP	1.5 HP	8.9 - 13.5	16 Amp	50	120/150	5345
CPNELBW-SP	2 HP	13.2 - 20.0	16 Amp	36+36	150/200	5705
CPNEMBW-SP	3 HP	17.4 - 24.0	25 Amp	50+50	200/250	6630
CPNEPBW-SP	5 HP	23.0 - 32.0	40 Amp	50+50+50	200/250	9340

Suffix "D" in Cat Code for Dry Run Protection panel (only Extra Terminal is provided to connect Dry Run unit)

## 1-Phase SPS With Mini Manual DOL Starter (With Ammeter + Voltmeter)

HSN CODE : 8536

Cat Code	HP at 1Ø, 220V, 50Hz	Relay Range (A)	Run Capacitor (mfd)	MRP [₹]
CPPM50-25-SP	0.5 / 0.75 HP	3.5 - 6.5	25	3525
CPPM50H-25-SP	0.5 / 0.75 HP	3.5 - 6.5	25	4010
CPPM60-25-SP	1 HP	6.8 - 11.7	25	3550
CPPM60H-36-SP	1 HP	6.8 - 11.7	36	4035
CPPM60-50-SP	1.5 HP	6.8 - 11.7	50	3735
CPPM60H-50-SP	1.5 HP	6.8 - 11.7	50	4250
CPPM70-50-SP	2 HP	11.0 - 20.0	50	3795
CPPM70H-50-SP	2 HP	11.0 - 20.0	50	4310

# Motor Starters - Oil Immersed..... BCH

## DOL Starter - 3 Phase

HSN CODE : 8536

Cat. Code	Overload Relay Range (A)	HRC Fuse Rating (EE Type) (max)	MRP [₹]
OISWPGT	2.4 - 3.8	16A	3660
OISWPHT	3.8 - 6.0	20A	
OISWPJT	6.0 - 9.3	25A	
OISWPKT	8.9 - 13.5	36A	
OISWPLT	13.2 - 20.0	50A	3730
OISWPMT	17.4 - 24.0	63A	4040

Note : The last alphabet in the Cat No. indicates coil voltage : N-380-415VAC ; T-220-400VAC ; Y-240-400VAC

## Star Delta Starter - Fully Automatic

HSN CODE : 8536

Cat. Code	Overload Relay Range (A)	HRC Fuse Rating (EE Type) (max)	MRP [₹]
OISDAWPJ*	6.0 - 9.3	20A	10580
OISDAWPK*	8.9 - 13.5	32A	
OISDAWPL*	13.2 - 20.0	35A	
OISDAWPM*	17.4 - 24.0	50A	11315
OISDAWPP*	23.0 - 32.0	63A	11850



## Star Delta Starter - Semi Automatic

HSN CODE : 8536

Cat. Code	Overload Relay Range (A)	HRC Fuse Rating (EE Type) (max)	MRP [₹]
OISDSWPJ*	6.0 - 9.3	20A	9500
OISDSWPK*	8.9 - 13.5	32A	
OISDSWPL*	13.2 - 20.0	35A	
OISDSWPM*	17.4 - 24.0	50A	10210
OISDSWPP*	23.0 - 32.0	63A	10715

## Star Delta Starter - Fully Automatic with Auto Unit SPP & 3 Position Auto Manual Switch

HSN CODE : 8536

Cat. Code	Overload Relay Range (A)	HRC Fuse Rating (EE Type) (max)	MRP [₹]
OISDYWPJ*	6.0 - 9.3	20A	12385
OISDYWPK*	8.9 - 13.5	32A	
OISDYWPL*	13.2 - 20.0	35A	
OISDYWPM*	17.4 - 24.0	50A	13170
OISDYWPP*	23.0 - 32.0	63A	13780

## Star Delta Starter - Fully Automatic with Ammeter & Voltmeter

HSN CODE : 8536

Cat. No.	Overload Relay Range (A)	HRC Fuse Rating (EE Type) (max)	MRP [₹]
OISDPYWPL*	13.2 - 20.0	35 A	15225
OISDPYWPM*	17.4 - 24.0	50 A	16020
OISDPYWPP*	23.0 - 32.0	63 A	16755

'N' for 380-415VAC coil & 'Y' for 240-400VAC coil

## Spares for Oil Starter

HSN CODE : 8538

Description	Cat No.	MRP [₹]
Contact kit without coil for DOL - Power & Auxiliary contacts (set of fix contact, moving contact, hex screws, spring washer, spring clip, spring cap, contact spring)	OCK	480
Power kit without coil for all 3 contactor of star delta starter (fix contact, moving contact, hex screw, spring washer, spring clip, spring cap, contact spring )	Upto L Relay - OCKSD20	1185
	M, P Relay OCKSD30	1370
Auxiliary Contact Kit set for Star Delta Starter	Upto L Relay - OCKSDAUX20	315
	M, P Relay OCKSDAUX30	
Coil -Main & Delta Contactor	220-400V	OCT
	240-400V	OCY
	380-415V	OCN
Coil -Star Contactor	220-400V	OCT-STAR
	240-400V	OCY-STAR
	380-415V	OCN-STAR
ON-Push Button	OPB-ON	150
OFF-Push Button	OPB-OFF	
Incoming Mounting KIT for 20A	OCTKSD20	160
Incoming Mounting KIT for 30A	OCTKSD30	225

Overload Relay for Oil Starter - Pls refer along with all other Overload Relay Page 25

# Spares for Starter ..... BCH

## Spares for Shakti Starters

HSN CODE : 8538

Cat. No.	Description	MRP [₹]
SHA	Contact Kit	1315
SHAA	Contact Kit 12A (3+1 Aux)	1070
SHZ	Coil 190- 400 V	425
SHCC	Contact carrier	170
SHPB	Extended Button Assembly	285
SHCO	Contact for DOL	2535
SHACO	Contact for Star Delta	2810
SHCOA	Contact 12A (3+1 Aux)	2195
NCPNYAU*-5S or 5M	SPP (for ASX & OISDY)-6 Wire	1395
CPTB630	Terminal Block 30A 6 way	285
CPAMS-3P/ASX	Auto Manual Switch 3 position	480

## Spares for 3-Phase Submersible Pump Starter

HSN CODE : 8538

Cat. No.	Description	MRP [₹]
NCPYAU*-5S or 5M	SPP (3 Position SPS)-6 Wire	1295
BCHSPP1*-5S or 5M	SPP 6-Wire	1170
CPAM25	Ammeter 25A	610
CPAM50	Ammeter 50A	610
CPAM100	Ammeter 100A	645
CPVM500	Voltmeter 500V	610
SPSATG	Electronic Timer (Star Delta)	1220
CPTB215	Terminal Block 15A 2 way	65
CPTB360	Terminal Block 60A 3 way	215
CPTB660	Terminal Block 60A 6 way	355
CPTB3100	Terminal Block 100A 3 way	735
CPMB	Mounting Bracket Set	130
CPAMS-2P	Auto Manual Switch 2 position	365
CPAMS-3P	Auto Manual Switch 3 position	390
CPVSS	Voltmeter Selector Switch	395
HEA11GM-PB	Start PB ( Green )	200
HEA11RM-PB	Stop PB ( Red )	200
HCB10	Aux Block (1 NO)	100
HCB01	Aux Block (1 NC)	100
HFB2PAH	LED-Amber (R-Y-B)	325
HFB2XAM	LED-Amber (Motor Trip)	215
HFB2XRM	LED-RED (415 VAC)	215

## Spares for Freedom DOL

HSN CODE : 8538

Cat. No.	Description	MRP [₹]
C320SCB	Start Contact Block	195
CEPBI	Push Button - Green	100
CEPBO	Push Button - Red	100

## Spares for Citation M Starters

HSN CODE : 8538

Cat. No.	Description	MRP [₹]
SP100PB3	Start & Stop reset button unit assembly for DOL & SD (upto 150HP)	335
SP100CB	Start actuator Block for DOL	290
SP100CBS	Start actuator Block for SD	290
SP100TB	Terminal Block for Star Delta Starters	275
CPTB975	Terminal Block for SD Starters (40-50 HP)	855
SPSATG	Electronic Timer (Star Delta)	1220
<b>For 250-375 HP SD Starter</b>		
TSFB-R	Push Button (RED)	250
TSFB-G	Push Button (Green)	250
050N1	Aux Contact Block(1NO+1NC)	315

Discontinued Cat Code	SPP Type	Alternate* Cat Code	SPP used in
CPAU*-5*	2-Pos SPP	NCPAU*-5*	2-Pos SPS
CPYAU*-5*	3-Pos SPP	NCPYAU*-5*	3-Pos SPS
CPNYAU*-5*	3-Pos SPP	NCPNYAU*-5*	Oil SD & Auto DOL

\* Extra plate to be used alongwith alternate SPP

## Spares for 1-Phase Submersible Pump Starter

HSN CODE : 8538

Cat. No.	Description	MRP [₹]
ILR-B	"ON" Indication Lamp	85
SPAM-10	Ammeter 10A	610
SPAM-15	Ammeter 15A	
SPAM-25	Ammeter 25A	
SPAM-50	Ammeter 50A	
SPVM-300	Voltmeter 300V	
CPTB530	Terminal Block 30A 5 way (Mini Version)	140
CPTB530H	Terminal Block 30A 5 way (Contr. Version)	230
CPTB330	Terminal Block 30A 3 way	100
CPTB240	Terminal Block 40A 2 way	145
SPGC	"ON" Push Button GREEN upto 24A relay range	280
SPGB	"ON" Push Button GREEN For 32A relay range	280
SPRC	"OFF" Push Button RED	225
MC305TB4	Add-on Terminal Block for 23-32A relay (outgoing side)	180

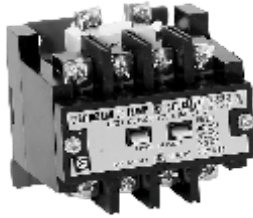




# Spares for Starter..... BCH



## 3 P + 1Aux Contactor



- 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 3 Pole + 1 Aux\* 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 ■	2210
CA16	20	16	10	7.5	CA16 ■	2520
CA20	30	20	12.5	9.3	CA20N ■	3205
NA25	32	25	15	11	NA25N ■	4465
NA32	40	32	20	15	NA32N ■	5630
NA40	50	40	25	18.5	NA40N ■	6720

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

## KIT for NHD

HSN CODE : 8538

Contactor Rating	4P KIT	MRP [₹]	1P KIT	MRP [₹]	3P+1 Aux KIT	MRP [₹]
	Cat Code		Cat Code		Cat Code	
12A	SP90E1	1185	SP90E01	315	SP90E2	1080
16A	SP90A1	1325	SP90A01	350	SP90A2	1210
20A	SP90F1	2090	SP90F01	540	SP90F2	1900
25A	SP90B1	3020	SP90B01	770	SP90B2	2750
32A	SP90D1	3585	SP90D01	915	SP90D2	3265
40A	SP90C1	4035	SP90C01	1025	SP90C2	3670

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

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

## KIT for CPG

HSN CODE : 8538

Contactor Rating	Cat Code	MRP [₹]
12A	CPG122PSP	610
16A	CPG162PSP	650
20A	CPG202PSP	1045
25A	CPG252PSP	1640
32A	CPG322PSP	1795
40A	CPG402PSP	2020

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

## Spares for P series SPS

HSN CODE : 8538

Cat Code	Description	MRP [₹]
CPRS-ON-OFF	ROCKER SWITCH ON-OFF	75
CPTB210	10A, 2 way TB for P series SPS	60
CPLED-R	LED RED 415V	230
CPLED-A	LED AMBER 415V	230
SP100CBP	Start Actuator blkok for P series SPS	290
CPAM10-WH, CPAM15-WH, CPAM25-WH	Ammeter with White Bezel (for Shakti P SPS)	610
CPVM500-WH	Voltmeter 500V White Bezel	610

## Dual Meter

HSN CODE : 9030

Cat. No.	MRP [₹]
CPAM10VM300, CPAM15VM300, CPAM25VM300, CPAM30VM300, CPAM50VM300	840
CPAM10VM500, CPAM15VM500, CPAM30VM500, CPAM60VM500	900
CPAM30-60VM500S72	875
CPAM60-120VM500S72	945
CPAM30-60VM500S96	1115
CPAM60-120VM500S96	1250

## COIL VOLTAGE : MASTER TABLE

	PRODUCT	160-220V	170-240V	220-240V	230-360V	260-400V	310-400V	190-400V	230-420V	275-420V	380-415V	415V	440V	550V
		WORKING VOLTAGE BAND	136-242V	145-264V	187-264V	195.5-396V	221-440V	264-440V	161.5-440V	195.5-462V	234-462V	323-456V	353-456V	374-484V
CPG 2P	CPG216	BW	BBW	H	-	-	-	-	-	-	N	-	-	-
	CPG225	BW	BBW	H	-	-	-	-	-	-	N	-	-	-
	CPG240	BW	BBW	H	-	-	-	-	-	-	N	-	-	-
SHAKTI	SHAKTI DOL	-	-	-	-	G	-	Z	ZB	-	N	-	-	-
	SHAKTI STAR DELTA	-	-	-	-	G	-	Z	-	MB	N	-	-	-
NHD 4P	CP12, C00N, CP20	-	-	H	-	G	-	-	-	MB	N	-	C	D
	NON	-	-	H	LV	G	-	-	-	MB	N	-	C	D
	N01N	-	-	H	LV	-	WB	-	-	-	N	-	-	-
	N1N	-	-	H	-	-	WB	-	-	-	N	-	C	D
CITATION	C4 & MC10D	-	-	-	-	-	-	-	-	-	-	M	C	D
	MC10EN	-	-	-	-	-	-	-	-	-	-	M	C	D
FREEDOM SERIES	MCE15L TO M5	-	-	-	-	-	-	-	-	-	-	M	C	D
	MCE15N, Q & S	-	-	-	-	-	-	-	-	-	-	M	C	D

\* For N1N DL Coil (340-460V) option is available

\* For Citation E & M-5 (70A & 110A) LA Coil (320-400V) option is available



# Enclosure Systems



- **Bhartia Boxes IP: 55, IP: 66**
- **'BCH-SS' (Stainless Steel) Boxes**
- **Terminal Boxes IP:55 & IP:66**
- **Techno - Modular Enclosures**
- **Smartline - Modular Enclosures**
- **Semi-Modular Enclosure**
- **TEOS Plus Enclosure**
- **TCE Series Enclosure**
- **Compartmentalized Enclosure (Fixed & Draw-out)**
- **IT Racks - 19" and ETSI Racks**

# Enclosure Systems .....

**BCH**

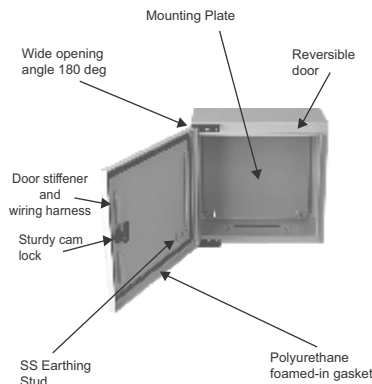
## Bhartia Boxes

**HSN Code : 8538**



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

### Double door version



#### Technical Particulars (BHARTIA BOXES)

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

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

**HSN Code : 8538**

Type	Cat. No.	MOQ	List Price [₹]
Set of Wall Mounting bracket (small)	BIL-WM-S	1	Refer Enclosure Price List w.e.f. 11.06.2021
Set of Wall Mounting bracket (big)	BIL-WM-B	1	
Set of Wall Mounting bracket Kit 20mm	BIL-WM-H20	1	

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.

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	Refer Enclosure Price List w.e.f. 11.06.2021	BIL-60000	Refer Enclosure Price List w.e.f. 11.06.2021
SINGLE DOOR BOX	200x300x150	1	BIL-50010		BIL-60010	
SINGLE DOOR BOX	250x300x150	1	BIL-50020		BIL-60020	
SINGLE DOOR BOX	300x300x150	1	BIL-50030		BIL-60030	
SINGLE DOOR BOX	300x300x200	1	BIL-50050		BIL-60050	
SINGLE DOOR BOX	300x400x150	1	BIL-50060		BIL-60060	
SINGLE DOOR BOX	300x400x200	1	BIL-50080		BIL-60080	
SINGLE DOOR BOX	400x300x150	1	BIL-50090		BIL-60090	
SINGLE DOOR BOX	400x300x200	1	BIL-50110		BIL-60110	
SINGLE DOOR BOX	400x400x150	1	BIL-50120		BIL-60120	
SINGLE DOOR BOX	400x400x200	1	BIL-50140		BIL-60140	
SINGLE DOOR BOX	400x500x150	1	BIL-50150		BIL-60150	
SINGLE DOOR BOX	400x500x200	1	BIL-50170		BIL-60170	
SINGLE DOOR BOX	500x500x200	1	BIL-50180			
SINGLE DOOR BOX	400x600x200	1	BIL-50190	BIL-60190		
SINGLE DOOR BOX	500x600x200	1	BIL-50210	BIL-60210		
SINGLE DOOR BOX	500x700x200	1	BIL-50220			
SINGLE DOOR BOX	500x700x300	1	BIL-50230			
SINGLE DOOR BOX	600x400x200	1	BIL-50240	BIL-60240		
SINGLE DOOR BOX	600x400x300	1	BIL-50250			
SINGLE DOOR BOX	600x500x200	1	BIL-50260	BIL-60260		
SINGLE DOOR BOX	600x600x200	1	BIL-50270			
SINGLE DOOR BOX	600x600x300	1	BIL-50280			
SINGLE DOOR BOX	600x700x200	1	BIL-50290			
SINGLE DOOR BOX	600x800x200	1	BIL-50300			
SINGLE DOOR BOX	600x800x300	1	BIL-50320			
SINGLE DOOR BOX	600x1000x200	1	BIL-50330			
SINGLE DOOR BOX	600x1000x300	1	BIL-50340			
SINGLE DOOR BOX	800x800x300	1	BIL-50310			
SINGLE DOOR BOX	800x1000x200	1	BIL-50350			
SINGLE DOOR BOX	800x1000x250	1	BIL-50360			
SINGLE DOOR BOX	800x1000x300	1	BIL-50390			
SINGLE DOOR BOX	800x1200x300	1	BIL-50395			
DOUBLE DOOR BOX	1000x800x200	1	BIL-50500			
DOUBLE DOOR BOX	1000x800x300	1	BIL-50520			
DOUBLE DOOR BOX	1000x1000x300	1	BIL-50540			
DOUBLE DOOR BOX	1000x1200x300	1	BIL-50550			
DOUBLE DOOR BOX	1000x1400x300	1	BIL-50560			
DOUBLE DOOR BOX	1200x1400x300	1	BIL-50570			
DOUBLE DOOR BOX	1000x1400x400	1	BIL-50580			
DOUBLE DOOR BOX	1200x1400x400	1	BIL-50590			

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	Refer Enclosure Price List w.e.f. 11.06.2021	600WX200D	BIL-16-CAN-6020	1	Refer Enclosure Price List w.e.f. 11.06.2021
250WX150D	BIL-12-CAN-2515	1		600WX300D	BIL-16-CAN-6030	1	
300WX150D	BIL-12-CAN-3015	1		800WX300D	BIL-16-CAN-8030	1	
300WX200D	BIL-12-CAN-3020	1		800WX200D	BIL-16-CAN-8020	1	
400WX150D	BIL-12-CAN-4015	1		800WX250D	BIL-16-CAN-8025	1	
400WX200D	BIL-12-CAN-4020	1		1000WX200D	BIL-16-CAN-1020	1	
500WX200D	BIL-12-CAN-5020	1		1000WX300D	BIL-16-CAN-1030	1	
500WX300D	BIL-12-CAN-5030	1					

\* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.114.

**\*GST to be charged extra**



- Fabricated from 1.2/1.5 mm stainless steel sheet
- Mounting Plate made up of 2.0mm Galvanised steel
- 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.
- 120 deg door open-able concealed hinge door with cam locking arrangement.

## 'BCH - SS' (Stainless Steel)

HSN Code : 8538

Type	Size (WxHxD) mm	MOQ Nos.	Cat No.	List Price [₹]
SINGLE DOOR BOX	200X300X150	3	BIL-90203015	Refer Enclosure Price List w.e.f. 11.06.2021
SINGLE DOOR BOX	300X300X200	3	BIL-90303020	
SINGLE DOOR BOX	400X400X200	3	BIL-90404020	
SINGLE DOOR BOX	400X500X200	3	BIL-90405020	
SINGLE DOOR BOX	400X600X200	3	BIL-90406020	
SINGLE DOOR BOX	500X600X200	3	BIL-90506020	
SINGLE DOOR BOX	600X600X200	3	BIL-90606020	
SINGLE DOOR BOX	600X800X200	3	BIL-90608020	
SINGLE DOOR BOX	500X700X300	3	BIL-90507030	
SINGLE DOOR BOX	800X800X300	3	BIL-90808030	

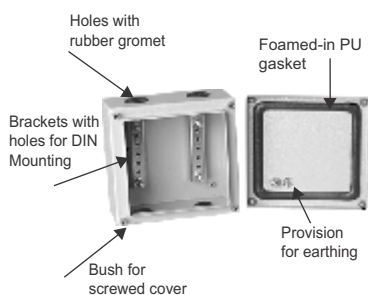
MOQ - Minimum order quantity in nos.  
 Note - SS grade 304

## Terminal Boxes

HSN Code : 8538



- 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

Box Size (W x H x D)	IP-55 Range			IP-66 Range	
	MOQ	Cat. No.	List Price [₹]	Cat. No.	List Price [₹]
150x150x80	5	BIL-70000	Refer Enclosure Price List w.e.f. 11.06.2021	BIL-80000	Refer Enclosure Price List w.e.f. 11.06.2021
200x150x80	-			BIL-80100	
300x150x80	5	BIL-70010		BIL-80010	
200x200x80	5	BIL-70020		BIL-80020	
300x200x80	5	BIL-70030		BIL-80030	
400x200x80	-			BIL-80110	
600x200x80	-			BIL-80130	
150x150x120	5	BIL-70040		BIL-80040	
200x150x120	-			BIL-80150	
300x150x120	5	BIL-70050		BIL-80050	
200x200x120	5	BIL-70060	BIL-80060		
300x200x120	5	BIL-70070	BIL-80070		
400x200x120	5	BIL-70080	BIL-80080		
300x300x120	5	BIL-70090	BIL-80090		
400x150x120	-		BIL-80170		
400x300x120	5	BIL-70180	BIL-80180		
400x400x120	5	BIL-70190	BIL-80190		
500x200x120	5	BIL-70200	BIL-80200		
500x300x120	5	BIL-70210	BIL-80210		
600x200x120	5	BIL-70220	BIL-80220		
600x300x120	5	BIL-70230	BIL-80230		
600x400x120	5	BIL-70240	BIL-80240		
800x200x120	5	BIL-70250	BIL-80250		
800x400x120	5	BIL-70260	BIL-80260		

MOQ-Minimum order quantity in nos.

\* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.114.

**\*GST to be charged extra**



# Enclosure Systems ..... BCH

## 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	Refer Enclosure Price List w.e.f. 11.06.2021	Refer Enclosure Price List w.e.f. 11.06.2021	Refer Enclosure Price List w.e.f. 11.06.2021	Refer Enclosure Price List w.e.f. 11.06.2021	TPL 061804	Refer Enclosure Price List w.e.f. 11.06.2021	TSC 061804	Refer Enclosure Price List w.e.f. 11.06.2021
800 x 1800 x 400	TME 081804					TPL 081804		TSC 081804	
1000 x 1800 x 400	TME 101804					TPL 101804		TSC 101804	
1200 x 1800 x 400	TME 121804					TPL 121804		TSC 121804	
600 x 1800 x 500	TME 061805					TPL 061805		TSC 061805	
800 x 1800 x 500	TME 081805					TPL 081805		TSC 081805	
1000 x 1800 x 500	TME 101805					TPL 101805		TSC 101805	
1200 x 1800 x 500	TME 121805					TPL 121805		TSC 121805	
800 x 1800 x 600	TME 081806					TPL 081806		TSC 081806	
600 x 2000 x 400	TME 062004					TPL 062004		TSC 062004	
800 x 2000 x 400	TME 082004					TPL 082004		TSC 082004	
1000 x 2000 x 400	TME 102004					TPL 102004		TSC 102004	
1200 x 2000 x 400	TME 122004					TPL 122004		TSC 122004	
600 x 2000 x 500	TME 062005					TPL 062005		TSC 062005	
800 x 2000 x 500	TME 082005					TPL 082005		TSC 082005	
1000 x 2000 x 500	TME 102005					TPL 102005		TSC 102005	
1200 x 2000 x 500	TME 122005	TPL 122005	TSC 122005						
600 x 2000 x 600	TME 062006	TPL 062006	TSC 062006						
800 x 2000 x 600	TME 082006	TPL 082006	TSC 082006						
1000 x 2000 x 600	TME 102006	TPL 102006	TSC 102006						
1200 x 2000 x 600	TME 122006	TPL 122006	TSC 122006						
600 x 2000 x 800	TME 062008	TPL 062008	TSC 062008						
800 x 2000 x 800	TME 082008	TPL 082008	TSC 082008						
1000 x 2000 x 800	TME 102008	TPL 102008	TSC 102008						
1200 x 2000 x 800	TME 122008	TPL 122008	TSC 122008						
600 x 2200 x 600	TME 062206	TPL 062206	TSC 062206						
800 x 2200 x 600	TME 082206	TPL 082206	TSC 082206						
1000 x 2200 x 600	TME 102206	TPL 102206	TSC 102206						
1200 x 2200 x 600	TME 122206	TPL 122206	TSC 122206						
600 x 2200 x 800	TME 062208	TPL 062208	TSC 062208						
800 x 2200 x 800	TME 082208	TPL 082208	TSC 082208						
1000 x 2200 x 800	TME 102208	TPL 102208	TSC 102208						
1200 x 2200 x 800	TME 122208	TPL 122208	TSC 122208						

\*Baying kit (BIL-14280) Rs. 1750/- is also available for Enclosure Version. For extra accessories, please contact nearest branch office.

MOQ-Minimum order quantity in nos.

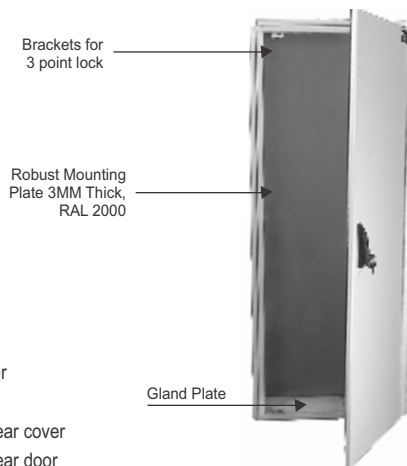
Note : Cutout charges will be extra

Freight charges will be extra at actuals

\* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.114.

**\*GST to be charged extra**





## Modular Enclosures

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

## Features

- Completely modular in all the three 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
  - Drives
  - Starter enclosures
  - Accessories for mounting 19" equipment

### Enclosure Versions

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

To Order And Calculate List Price

- (a) Choose Cat. No. and LP of Enclosure version from 001, 002, 003 or 004
- (b) Add Cat. No. and LP of Plinth
- (c) Add Cat. No. and LP of Side Covers pair

### General Technical Particulars

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

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

\* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.114.

**\*GST to be charged extra**

# Smartline Modular Enclosure ..... BCH

## SmartLine TME

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 500	SLE 061805	Refer Enclosure Price List w.e.f. 11.06.2021	Refer Enclosure Price List w.e.f. 11.06.2021	Refer Enclosure Price List w.e.f. 11.06.2021	Refer Enclosure Price List w.e.f. 11.06.2021	TPL 061805	Refer Enclosure Price List w.e.f. 11.06.2021	SLSC 061805	Refer Enclosure Price List w.e.f. 11.06.2021
800 x 1800 x 600	SLE 081806					TPL 081806		SLSC 081806	
600 x 2000 x 600	SLE 062006					TPL 062006		SLSC 062006	
800 x 2000 x 600	SLE 082006					TPL 082006		SLSC 082006	
1200 x 2000 x 600	SLE 122006					TPL122006		SLSC 122006	
600 x 2000 x 800	SLE 062008					TPL 062008		SLSC 062008	
800 x 2000 x 800	SLE 082008					TPL 082008		SLSC 082008	
1200 x 2000 x 800	SLE 122008					TPL 122008		SLSC 122008	

Note : Cutout / customization charges will be extra.

\*Baying kit (BIL-14280) Rs. 1750/- is also available for Enclosure Version. For extra accessories, please contact nearest branch office.

## 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

- IP-54 degree of protection
- Fabricated from CRCA/GPSP (frame made up of GPSP, doors & covers made up of CRCA sheet).
- Modular construction
- Mounting plate and cable entry plate made up of Galvanized steel [Unpainted]
- Plinth (optional) 100mm high fabricated from CRCA sheet.
- Cable entry provision is given from Bottom as standard
- Foamed-in PU gasket
- Powder coated to RAL : 7035 structure finish
- Hinge design allows 120 deg. Door opening
- 3 point lock provided as standard
- Door stiffener with provision of drilling holes for wiring harness.
- Side Covers - Pair: consisting of 1no. LHS and 1no. RHS cover
- To calculate limiting dimension of the enclosure, add 44mm to the width to account for Side Covers, 22mm to the height for Top Cover & 44mm to the depth on account of Front and Rear door / cover.

**Note :** Upto 800 mm width single door. 1000 mm & 1200 mm width double leaf door

\* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.114.

**\*GST to be charged extra**

# Semi-Modular Floor Standing Enclosure..... BCH

HSN Code : 8538

Size of Enclosure (W x H x D in mm)	Cat. No.	List Price [₹]	Plinth		Side Covers (Pair)	
			Cat. No.	List Price [₹]	Cat. No.	List Price [₹]
600X1800X400	FCS 061804	On Request	FCS-PL 061804	On Request	FCS-SC 061804	On Request
600X1800X500	FCS 061805		FCS-PL 061805		FCS-SC 061805	
800X1800X600	FCS 081806		FCS-PL 081806		FCS-SC 081806	
600X2000X600	FCS 062006		FCS-PL 062006		FCS-SC 062006	
800X2000X500	FCS 082005		FCS-PL 082005		FCS-SC 082005	
800X2000X600	FCS 082006		FCS-PL 082006		FCS-SC 082006	
800X2000X800	FCS 082008		FCS-PL 082008		FCS-SC 082008	
1000X2000X600	FCS 102006		FCS-PL 102006		FCS-SC 102006	
1000X2000X800	FCS 102008		FCS-PL 102008		FCS-SC 102008	
1200X2000X500	FCS 122005		FCS-PL 122005		FCS-SC 122005	
1200X2000X600	FCS122006		FCS-PL122006		FCS-SC122006	
1200X2000X800	FCS 122008		FCS-PL 122008		FCS-SC 122008	

Note : Sizes are available in all FOUR version like TME.

## Enclosure Versions

- Ver-001 - With mounting plate and rear cover.
- Ver-002 - With mounting plate and rear door
- Ver-003 - Without mounting plate and with rear cover
- Ver-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

### Note:

- Cutout / customization charges will be extra.
- Baying Kit (BIL-FCS-14280) is also available for Enclosure Versions.
- For extra accessories, Please contact nearest branch office.

## Technical Particulars (Semi-Modular Enclosure)

- Unique symmetric front and rear welded frame with modular depth member which resultant fastest assembly and uniformity.
- IP-55 Degree of Protection
- Front and Rear Frame welded & depth members are modular
- Fabricated from 2.0mm/1.6mm CRCA
- Mounting plate made of 2mm thick Galvanized sheet
- Cable entry from bottom of panel as standard
- Powder coated to RAL-7035 Structure finish
- Limiting dimension of the enclosure are same as per sizes given
- Adjustable mounting plate depth wise
- Foamed-in PU gasket
- 3 point lock provided as standard
- Door stiffener with provision of drilling holes for wiring harness.
- Side Covers - Flush Type Side cover Pair consisting of 1no LHS and 1no RHS cover



\* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.114.

**\*GST to be charged extra**

# TEOS Plus Enclosure ..... BCH-TEKPAN

## TEOS Plus Enclosure

HSN Code : 8538

Size of Enclosure (W x H x D in mm)	Cat. No.	List Price [₹]
600 x 1800 x 500	TEOS061805	On Request
800 x 1800 x 600	TEOS081806	
600 x 2000 x 600	TEOS062006	
800 x 2000 x 600	TEOS082006	
800 x 2000 x 800	TEOS082008	
1200 x 2000 x 600	TEOS122006	
1000 x 2000 x 800	TEOS102008	
1200 x 2000 x 800	TEOS122008	

Front Door, Rear Door, Rear Cover & Mounting plate shall be supplied as per requirement.



## Plinth Corner

HSN Code : 8538

Description	Cat. No.	List Price [₹]
PLINTH CORNER PART H100mm	708.100	On Request

Supply included:- 4 pcs 100mm height corner & mounting accessories.

## Plinth Front Cover

HSN Code : 8538

Description	Cat. No.	List Price [₹]
PLINTH FRONT PROFILE :600	709.160	On Request
PLINTH FRONT PROFILE :800	709.180	
PLINTH FRONT PROFILE :1000	709.100	
PLINTH FRONT PROFILE :1200	709.120	

Supply included:- 2 pcs 100mm height front cover & mounting accessories.

## Plinth Side Cover

HSN Code : 8538

Description	Cat. No.	List Price [₹]
PLINTH SIDE PROFILE :500	710.150	On Request
PLINTH SIDE PROFILE :600	710.160	
PLINTH SIDE PROFILE :800	710.180	

Supply included:- 2 pcs 100mm height side cover & mounting accessories.

## Side Cover

HSN Code : 8538

Description	Cat. No.	List Price [₹]
Pair of side cover 500*1800	706.185	On Request
Pair of side cover 600*1800	706.186	
Pair of side cover 600*2000	706.206	
Pair of side cover 800*1800	706.188	
Pair of side cover 800*2000	706.208	

Supply included:- 2 pcs side cover & mounting accessories

## Technical Particulars (TEOS Plus Enclosure)

- Multifold (12-Fold) structure with 100% Modularity.
- IP-65 Degree of Protection.
- SEISMIC Tested for Zone-4 and UL Certified.
- Easy Assembly & Logistic advantages.
- 4-Point lock with Swing Handle.
- Powder coated to RAL: 7035 Structure Finish.
- Limiting dimension of the enclosure are same as per given dimension.

\* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.114.

**\*GST to be charged extra**



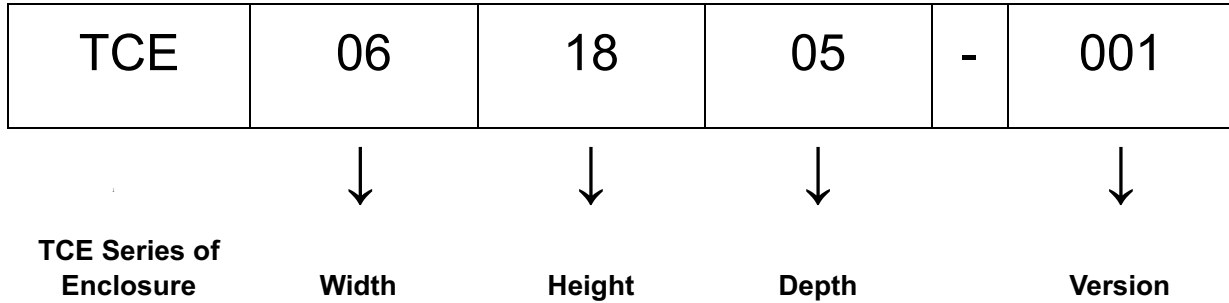
### Note :

- Upto 800 mm width single door. 1000 mm & 1200 mm width double leaf door
- Cutout / customization charges will be extra
- For extra accessories, please contact nearest branch office.

# TCE Series Enclosure..... BCH

## 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: Front Door with Hinge Rear Bolted Cover STD Gland Plate Top Cover Eye Bolt 01 Mounting Plate	Structure: Front Door with Hinge Rear Door with Hinge STD Gland Plate Top Cover Eye Bolt 01 Mounting Plate	Structure: Front Door with Hinge Rear Bolted Cover STD Gland Plate Top Cover Eye Bolt No Mounting Plate	Structure: Front Door with Hinge Rear Door with Hinge STD Gland Plate Top Cover Eye Bolt No Mounting Plate	Structure: Front Door with Hinge Rear Door with Hinge STD Gland Plate Top Cover Eye Bolt 2 Mounting Plate

\* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.114.

**\*GST to be charged extra**



# TCE Series Enclosure.....BCH

## 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 CRCA.

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 and Mounting plate RAL-2000



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

**IK 10**



**CE**

*\* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.114.*

**\*GST to be charged extra**

# TCE Series Enclosure..... BCH

HSN Code: 8538

Size of Enclosure in mm			Cat No.	Enclosure Version*				
Width (H)	Height (H)	Depth (D)		VER-001 LP[ ₹ ]	VER-002 LP[ ₹ ]	VER-003 LP[ ₹ ]	VER-004 LP[ ₹ ]	VER-005 LP[ ₹ ]
600	1800	400	TCE061804	Refer Enclosure Price List w.e.f. 11.06.2021	Refer Enclosure Price List w.e.f. 11.06.2021	Refer Enclosure Price List w.e.f. 11.06.2021	Refer Enclosure Price List w.e.f. 11.06.2021	Refer Enclosure Price List w.e.f. 11.06.2021
800	1800	400	TCE081804					
1000	1800	400	TCE101804					
1200	1800	400	TCE121804					
600	1800	500	TCE061805					
800	1800	500	TCE081805					
1000	1800	500	TCE101805					
1200	1800	500	TCE121805					
800	1800	600	TCE081806					
800	1800	800	TCE081808					
600	2000	400	TCE062004					
800	2000	400	TCE082004					
1000	2000	400	TCE102004					
1200	2000	400	TCE122004					
600	2000	500	TCE062005					
800	2000	500	TCE082005					
1000	2000	500	TCE102005					
1200	2000	500	TCE122005					
600	2000	600	TCE062006					
800	2000	600	TCE082006					
1000	2000	600	TCE102006					
1200	2000	600	TCE122006					
600	2000	800	TCE062008					
800	2000	800	TCE082008					
1000	2000	800	TCE102008					
1200	2000	800	TCE122008					
600	2200	600	TCE062206					
800	2200	600	TCE082206					
1000	2200	600	TCE102206					
1200	2200	600	TCE122206					
600	2200	800	TCE062208					
800	2200	800	TCE082208					
1000	2200	800	TCE102208					
1200	2200	800	TCE122208					

\* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.114.

**\*GST to be charged extra**

# TCE Series Enclosure..... BCH

## TCE Bottom Plinth 100mm Height

HSN Code: 8538

Size in MM		Cat No	LP[ ₹ ]
Width (H)	Depth (D)		
600	400	TCEPL0604	Refer Enclosure Price List w.e.f. 11.06.2021
800	400	TCEPL0804	
1000	400	TCEPL1004	
1200	400	TCEPL1204	
600	500	TCEPL0605	
800	500	TCEPL0805	
1000	500	TCEPL1005	
1200	500	TCEPL1205	
600	600	TCEPL0606	
800	600	TCEPL0806	
1000	600	TCEPL1006	
1200	600	TCEPL1206	
600	800	TCEPL0608	
800	800	TCEPL0808	
1000	800	TCEPL1008	
1200	800	TCEPL1208	



## TCE Side Panel

HSN Code: 8538

Size in MM		Cat No	LP[ ₹ ]
Height (H)	Depth (D)		
1800	400	TCESP0418	Refer Enclosure Price List w.e.f. 11.06.2021
1800	500	TCESP0518	
1800	600	TCESP0618	
1800	800	TCESP0818	
2000	400	TCESP0420	
2000	500	TCESP0520	
2000	600	TCESP0620	
2000	800	TCESP0820	
2200	600	TCESP0622	
2200	800	TCESP0822	

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 on page no.114.

**\*GST to be charged extra**

# TCE Series Enclosure..... BCH

## TCE Series Enclosure Accessories

### Baying system

HSN Code: 8538

Sl. No	Description	Cat No	LP[ ₹ ]
1	Baying Kit	TCE-14280	Refer Enclosure Price List w.e.f. 11.06.2021
2	Combination Angle (Pack of 2)	TCE-14281	

### Mounting plate filler profile

HSN Code: 8538

Sl. No	Description	Cat No	LP[ ₹ ]
1	Filler plate for 1800mm Height	TCE-FP-1800	Refer Enclosure Price List w.e.f. 11.06.2021
2	Filler plate for 2000mm Height	TCE-FP-2000	
3	Filler plate for 2200mm Height	TCE-FP-2200	

### Wiring plan pocket

HSN Code: 8538

Sl. No	Description	Cat No	LP[ ₹ ]
1	File pocket 500mm Width	TCE-TPKT-500	Refer Enclosure Price List w.e.f. 11.06.2021
2	File pocket 600mm Width	TCE-TPKT-600	
3	File pocket 800mm Width	TCE-TPKT-800	

### Lamp rail

HSN Code: 8538

Sl. No	Description	Cat No	LP[ ₹ ]
1	Lamp rail 600mm Width	TCE-LAMP-RAIL-600	Refer Enclosure Price List w.e.f. 11.06.2021
2	Lamp rail 800mm Width	TCE-LAMP-RAIL-800	
3	Lamp rail 1000mm Width	TCE-LAMP-RAIL-1000	
4	Lamp rail 1200mm Width	TCE-LAMP-RAIL-1200	

### Limit switch with fixing arrangement

HSN Code: 8538

Sl. No	Description	Cat No	LP[ ₹ ]
1	BCH Limit switch	TCE-LC	Refer Enclosure Price List w.e.f. 11.06.2021

### Punched section for depth

HSN Code: 8538

Sl. No	Description	Cat No	LP[ ₹ ]
1	Punched section 400mm depth	TCE-PSD-400	Refer Enclosure Price List w.e.f. 11.06.2021
2	Punched section 500mm depth	TCE-PSD-500	
3	Punched section 600mm depth	TCE-PSD-600	
4	Punched section 800mm depth	TCE-PSD-800	

### Punched section for width

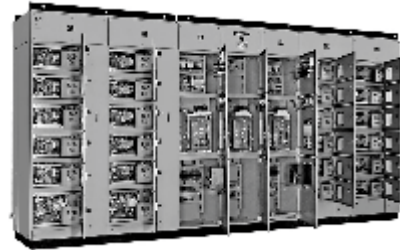
HSN Code: 8538

Sl. No	Description	Cat No	LP[ ₹ ]
1	Punched section 600mm width	TCE-PSW-600	Refer Enclosure Price List w.e.f. 11.06.2021
2	Punched section 800mm width	TCE-PSW-800	
3	Punched section 1000mm width	TCE-PSW-1000	
4	Punched section 1200mm width	TCE-PSW-1200	

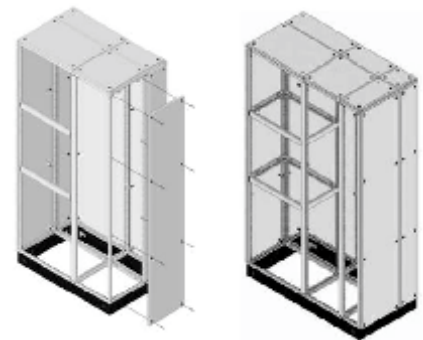
\* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.114.

**\*GST to be charged extra**

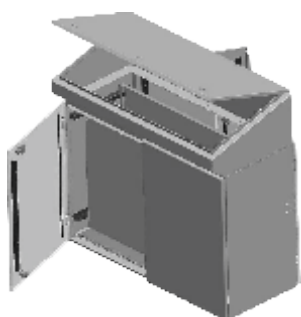
# Highlights of **BCH** Compartmentalized **MCC / PCC / PMCC** Solution (Fixed & Drawed Type)



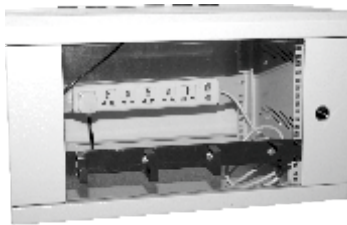
- 100% Modular Structure; can be dispatched in flat pack.
- Flexible compartmentalized -up to From 4.
- IP 54 degree of protection with polyurethane foam gasket.
- Compartment size available from 200mm height & multiplies of 100mm.
- Additional accessories like Cable support, Busbar support, Limit Switch and Lamp brackets are available.
- Adjustable mounting plates (Depth wise at the pitch of 25mm).
- Panel can be expanded 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.



## **BCH** Control Desk







**Key Attributes:**

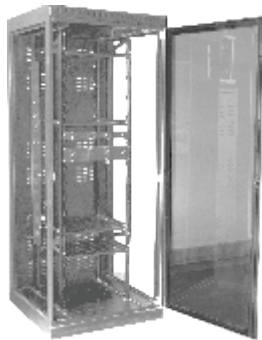
- Aesthetic & robust construction
- Mounting Fan /s in top doesn't take usable "U" space.
- Special type of Wallmounting hardware.
- Provision for earthing available in the cabinets.
- Highly corrosion resistant in nature.
- Power coated to shade RAL : 7035 structure finish.

**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	Refer Enclosure Price List w.e.f. 11.06.2021
9UX550X400	1	BIL-W-9-5504	
6UX550X500	1	BIL-W-6-5505	
9UX550X500	1	BIL-W-9-5505	
12UX550X500	1	BIL-W-12-5505	
15UX550X500	1	BIL-W-15-5505	

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	Refer Enclosure Price List w.e.f. 11.06.2021
24U X 600 X 800	1	BIL-N-062408	
24U X 800 X 600	1	BIL-N-082406	
24U X 800 X 800	1	BIL-N-082408	
30U X 600 X 600	1	BIL-N-063006	
30U X 600 X 800	1	BIL-N-063008	
30U X 800 X 600	1	BIL-N-083006	
30U X 800 X 800	1	BIL-N-083008	
36U X 600 X 600	1	BIL-N-063606	
36U X 600 X 800	1	BIL-N-063608	
36U X 800 X 600	1	BIL-N-083606	
36U X 800 X 800	1	BIL-N-083608	
42U X 600 X 600	1	BIL-N-064206	
42U X 600 X 800	1	BIL-N-064208	
42U X 800 X 600	1	BIL-N-084206	
42U X 800 X 800	1	BIL-N-084208	
45U X 600 X 600	1	BIL-N-064506	
45U X 600 X 800	1	BIL-N-064508	
45U X 800 X 600	1	BIL-N-084506	
45U X 800 X 800	1	BIL-N-084508	

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 on page no.114.

**\*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	Refer Enclosure Price List w.e.f. 11.06.2021
24U X 600 X 1000	1	BIL-S-062410	
30U X 600 X 900	1	BIL-S-063009	
30U X 600 X 1000	1	BIL-S-063010	
36U X 600 X 900	1	BIL-S-063609	
36U X 600 X 1000	1	BIL-S-063610	
42U X 600 X 900	1	BIL-S-064209	
42U X 600 X 1000	1	BIL-S-064210	
42U X 800 X 1000	1	BIL-S-084210	
45U X 600 X 900	1	BIL-S-064509	
45U X 600 X 1000	1	BIL-S-064510	

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	Refer Enclosure Price List w.e.f. 11.06.2021
2200 X 600 x 600	1	ITE-062206	

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	Refer Enclosure Price List w.e.f. 11.06.2021
45U X 600	1	ITE-OF-0645	

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 on page no.114.

**\*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	Refer Enclosure Price List w.e.f. 11.06.2021
Fixed Shelf (800mmD)	BIL-A-FS-L-08	
Fixed Shelf (900mmD)	BIL-A-FS-L-09	
Fixed Shelf (1000mmD)	BIL-A-FS-L-10	
Modem Tray	BIL-A-MD	
Key board tray (Sliding & Rotatory)	BIL-A-KB-06	
Canteliver Shelf (1U)	BIL-A-CS-1	
Canteliver Shelf (2U)	BIL-A-CS-2	
Equipment Support Angle (600mmD)	BIL-A-ESA-06	
Equipment Support Angle (800mmD)	BIL-A-ESA-08	
Equipment Support Angle (900mmD)	BIL-A-ESA-09	
Equipment Support Angle (1000mmD)	BIL-A-ESA-10	
Sliding Shelf (900mmD)	BIL-A-SS-09	
Sliding Shelf (1000mmD)	BIL-A-SS-10	

### Thermal Management

HSN Code : 8538

Description	Cat No.	List Price [₹]
1-Fan (Direct mounted)	BIL-A-SF	Refer Enclosure Price List w.e.f. 11.06.2021
Fan-tray with 2-Fans (FHU)	BIL-A-FHU-2FANS	
Fan-tray with 4-Fans (FHU)	BIL-A-FHU-4FANS	

### Cable Management

HSN Code : 8538

Description	Cat No.	List Price [₹]
Horizontal Cable Manager (1U)	BIL-A-HCM-1U	Refer Enclosure Price List w.e.f. 11.06.2021
Horizontal Cable Manager (2U)	BIL-A-HCM-2U	
Vertical Cable Manager (24U)	BIL-A-VCM-24U	
Vertical Cable Manager (30U)	BIL-A-VCM-30U	
Vertical Cable Manager (36U)	BIL-A-VCM-36U	
Vertical Cable Manager (42U)	BIL-A-VCM-42U	
Vertical Cable Manager (45U)	BIL-A-VCM-45U	

### Power Management

HSN Code : 8538

Description	Cat No.	List Price [₹]
6-Point 5Amp Horizontal Power Strip (19")	BIL-A-HPS-5AMP	Refer Enclosure Price List w.e.f. 11.06.2021
5-Point 5/15Amp Horizontal Power Strip (19")	BIL-A-HPS-15AMP	
12-Point 5Amp Vertical Power Strip	BIL-A-12VPS-5AMP	
10-Point 5/15Amp Vertical Power Strip	BIL-A-10VPS-15AMP	
Earth continuity Kit (Earthing Kit)	BIL-A-ECT	

### Stability Management

HSN Code : 8538

Description	Cat No.	List Price [₹]
Castors (1-Set) Heavy Duty	BIL-A-CAS-HD	Refer Enclosure Price List w.e.f. 11.06.2021
Castors (1-Set) Light Duty	BIL-A-CAS	
Levelling Feet (1-Set)	BIL-A-LF	
Stability Plate	BIL-A-SP	

### Miscellaneous

HSN Code : 8538

Description	Cat No.	List Price [₹]
BAYING KIT	BIL-A-BK	Refer Enclosure Price List w.e.f. 11.06.2021
BLANKING PANEL (1U)	BIL-A-BP-1U	
BLANKING PANEL (2U)	BIL-A-BP-2U	
BLANKING PANEL (3U)	BIL-A-BP-3U	
BLANKING PANEL (4U)	BIL-A-BP-4U	
BLANKING PANEL (5U)	BIL-A-BP-5U	
Captive H/w (set of 10)	BIL-A-Captive-M6	
Wallmounting H/w (set of 4)	BIL-A-wallmounting W	

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

\* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.114.

**\*GST to be charged extra**

# Wires & Cables

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



# Wires & Cables ..... BCH

BCH Three Core Flat Cables with annealed bare & bunched copper conductor insulated & sheathed with PVC for submersible pump motors for voltage grade 1100 V as per I.S. 694 / 2010, conforming & marked with I.S. 694 / 2010 upto 35 sqmm.

## 3 Core Flat Cable PVC Insulated Type CS- 500 Mtrs MOQ

HSN Code : 8544

BCH Code	Flat Cable	LP Per 500 Mtrs in [₹]	Remark
CS0010BM	1.0 Sqmm x 3 core Flat cable	On request	Also Available in 100 mtrs & 1000 mtrs
CS0015BM	1.5 Sqmm x 3 core Flat cable	On request	
CS0025BM	2.5 Sqmm x 3 core Flat cable	On request	
CS0040BM	4.0 Sqmm x 3 core Flat cable	On request	
CS0060BM	6.0 Sqmm x 3 core Flat cable	On request	
CS0080BM	8.0 Sqmm x 3 core Flat cable	On request	
CS0100BM	10 Sqmm x 3 core Flat cable	On request	
CS0160BM	16 Sqmm x 3 core Flat cable	On request	
CS0250BM	25 Sqmm x 3 core Flat cable	On request	
CS0350BM	35 Sqmm x 3 core Flat cable	On request	

BCH Three Core Flat Cables with annealed bare & bunched copper conductor insulated & thick sheathed with PVC for submersible pump motors for voltage grade 1100 V as per I.S. 694 / 2010, conforming & marked with I.S. 694 / 2010 upto 16.0 sqmm.

## 3 Core Flat Cable PVC Insulated Thick Type CFT- 500 Mtrs MOQ

HSN Code : 8544

BCH Code	Flat Cable	LP Per 500 Mtrs in [₹]	Remark
CFT-03-0010BM	1.0 Sqmm x 3 core Flat cable Thick	On request	Also Available in 100 mtrs & 1000 mtrs
CFT-03-0015BM	1.5 Sqmm x 3 core Flat cable Thick	On request	
CFT-03-0025BM	2.5 Sqmm x 3 core Flat cable Thick	On request	
CFT-03-0040BM	4.0 Sqmm x 3 core Flat cable Thick	On request	
CFT-03-0060BM	6.0 Sqmm x 3 core Flat cable Thick	On request	
CFT-03-0100BM	10 Sqmm x 3 core Flat cable Thick	On request	
CFT-03-0160BM	16 Sqmm x 3 core Flat cable Thick	On request	

BCH Three Core Flat Cables with annealed bare & bunched copper conductor XLPE insulated & PVC sheathed for submersible pump motors of voltage grade 1100 V. suitable for heavy duty usage and areas having frequent supply undervoltage / overvoltage conditions upto 16.0 sqmm.

## 3 Core Flat Cable XLPE Insulated Type CFTX- 500 Mtrs MOQ

HSN Code : 8544

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

## 3 Core Flat Cable XLPE Insulated Thick with higher copper conductor Type CFTHX- 500 Mtrs MOQ

HSN Code : 8544

BCH Code	Flat Cable	LP Per 500 Mtrs in [₹]	Remark
CFTHX-03-0040BM	4.0 Sqmm x 3 core Flat cable XLPE insulated Thick with higher copper conductor	On request	Also Available in 100 mtrs & 1000 mtrs
CFTHX-03-0060BM	6.0 Sqmm x 3 core Flat cable XLPE insulated Thick with higher copper conductor	On request	

Note : For price, please contact our nearest sales office.



# Wires & Cables ..... BCH

## Single & Multi Core PVC Flexible Cables As Per IS 694: 2010 - With ISI Marking HSN Code : 8544

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

Cat. No.	Conductor Area (nominal)	Safe Current Carrying Capacity 2 wires, Single Phase		LP Per 100 mtrs in [₹]
		In conduit / Trunking (Amp.)	Unenclosed clipped directly to a surface or on cable tray (Amp.)	
<b>Single Core</b>	(Sq. mm)	(Amp.)	(Amp.)	
CR01-0005A-AAA	0.5	4	4.5	On request
CR01-0008A-AAA	0.75	7	8	On request
CR01-0010A-AAA	1	11	12	On request
CR01-0015A-AAA	1.5	13	16	On request
CR01-0025A-AAA	2.5	18	22	On request
CR01-0040A-AAA	4	24	29	On request
CR01-0060A-AAA	6	31	37	On request
CR01-0100A-AAA	10	42	51	On request
CR01-0160A-AAA	16	57	68	On request
CR01-0250A-AAA	25	71	86	On request
CR01-0350A-AAA	35	91	100	On request
CR01-0500A-AAA	50	120	145	On request
<b>HSN Code : 8544</b>				
CR01-0700A-AAA	70	-	214	On request
CR01-0950A-AAA	95	-	260	On request
CR01-1200A-AAA	120	-	305	On request
CR01-1500A-AAA	150	-	355	On request
CR01-1850A-AAA	185	-	415	On request
CR01-2400A-AAA	240	-	500	On request
CR01-3000A-AAA	300	-	560	On request

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

## Single Core FR PVC Flexible Cables As Per IS 694: 2010 - With ISI Marking HSN Code : 8544

Cat. No.	Conductor Area (nominal)	Safe Current Carrying Capacity 2 wires, Single Phase		LP Per 90 / 100 mtrs in [₹]
		In conduit / Trunking (Amp.)	Unenclosed clipped directly to a surface or on cable tray (Amp.)	
<b>Single Core</b>	(Sq. mm)	(Amp.)	(Amp.)	
CRFR01-0005D-AAA	0.5	4	4.5	On request
CRFR01-0008D-AAA	0.75	7	8	On request
CRFR01-0010D-AAA	1	11	12	On request
CRFR01-0015D-AAA	1.5	13	16	On request
CRFR01-0025D-AAA	2.5	18	22	On request
CRFR01-0040D-AAA	4	24	29	On request
CRFR01-0060D-AAA	6	31	37	On request
CRFR01-0100D-AAA	10	42	51	On request
CRFR01-0160A-AAA*	16	57	68	On request
CRFR01-0250A-AAA*	25	71	86	On request
CRFR01-0350A-AAA*	35	91	100	On request
CRFR01-0500A-AAA*	50	120	145	On request

**Note:** Standard packing of 90m, 100m, 180m & 270m available. For prices of 90m, 100m, 180m & 270m, please contact nearest sales office.  
 All sizes 16 Sq.mm & above will be in 100 mtrs packing

## Single Core FRLS Flexible Cables As Per IS 694: 2010-With ISI Marking HSN Code : 8544

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

**Note:** Standard packing of 90m, 100m, 180m & 270m available. For prices of 90m, 100m, 180m & 270m, please contact nearest sales office.  
 All sizes 16 Sq.mm & above will be in 100 mtrs packing

Standard packing of 16 sqmm & above shall be in lengths of 100m each size / colour.

\* Prices are for 100 mtr coils.

Standard packing of 16 sqmm & above shall be in lengths of 100m each size / colour.

\* Prices are for 100 mtr coils.



# Wires & Cables ..... BCH

## Multi Core PVC Flexible Cables

HSN Code : 8544

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

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

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

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

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

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

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

Sizes 0.5 to 35 Sq. mm from 2 to 4 cores with ISI mark, rest all generally conforming to the IS. Standard packing available in 100 meter coils, longer lengths on drums (500m to 1000m)

# Power Factor Control Products

- **LT Power Capacitors - Cylindrical Type**
- **LT Power Capacitors - Box Type**
- **Freedom Series Capacitor Duty Contactor**
- **Super Heavy Duty Box Type Capacitor**
- **Detuned Reactors**
- **Thyristor Switched Module**
- **Automatic Power Factor Controllers (APFC)  
& Intelligent Power Factor Controllers (IPFC)**
- **Network Analysers**
- **APFC Panels**



# LT Power Capacitors..... BCH

## 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	310	BCHMCH001B	440
2	BCHMCN002B	620	BCHMCH002B	880
3	BCHMCN003B	930	BCHMCH003B	1320
4	BCHMCN004B	1240	BCHMCH004B	1750
5	BCHMCN005B	1500	BCHMCH005B	1990
7.5	BCHMCN007B	2250	BCHMCH007B	2980
10	BCHMCN010B	2700	BCHMCH010B	3680
12.5	BCHMCN012B	3380	BCHMCH012B	4600
15	BCHMCN015B	4050	BCHMCH015B	5520
20	BCHMCN020B	5400	BCHMCH020B	7370
25	BCHMCN025B	6750	BCHMCH025B	9200

Heavy edge Zn Al Alloy MPP film

**MPP Capacitors (IS13340)**

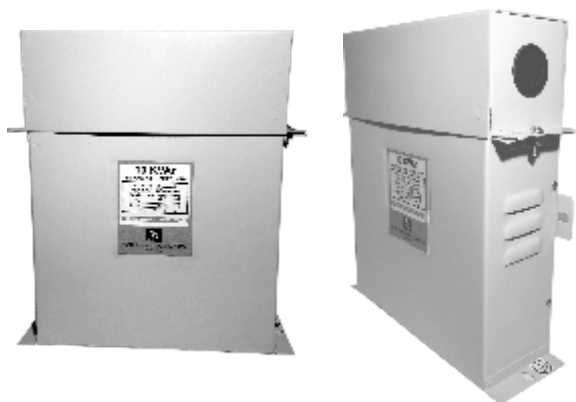
MPP capacitors are manufactured using Zn-Al metallized polypropylene film. These modules are provided with pressure interrupter arrangement for safety against bursting due to internal pressure arised due to prolonged high voltage / current. The modules are assembled in aluminium case or CRCA container

.02 - .03 micron metallised layer

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

HSN Code : 8532

KVAR	Normal Duty		Heavy Duty	
	Cat. No.	MRP [₹]	Cat. No.	MRP [₹]
1	BCHMBN001B	350	BCHMBH001B	440
2	BCHMBN002B	690	BCHMBH002B	880
3	BCHMBN003B	1030	BCHMBH003B	1320
4	BCHMBN004B	1370	BCHMBH004B	1760
5	BCHMBN005B	1610	BCHMBH005B	2070
7.5	BCHMBN007B	2420	BCHMBH007B	3100
10	BCHMBN010B	3210	BCHMBH010B	4130
12.5	BCHMBN012B	4030	BCHMBH012B	5170
15	BCHMBN015B	4830	BCHMBH015B	6200
20	BCHMBN020B	6430	BCHMBH020B	8270
25	BCHMBN025B	8040	BCHMBH025B	10340



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



# LT Power Capacitors..... BCH



## 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	870	BCHSHD001B	1830
2	BCHAPS002B	1730	BCHSHD002B	3640
3	BCHAPS003B	2580	BCHSHD003B	5460
4	BCHAPS004B	3440	-	-
5	BCHAPS005B	4180	BCHSHD005B	7790
7.5	BCHAPS007B	6280	BCHSHD007B	11700
10	BCHAPS010B	7770	BCHSHD010B	15600
12.5	BCHAPS012B	9720	BCHSHD012B	19490
15	BCHAPS015B	11650	BCHSHD015B	23390
20	BCHAPS020B	15540	BCHSHD020B	31190
25	BCHAPS025B	19440	BCHSHD025B	38980

Double thick double hazy pp film

**APP Capacitors**

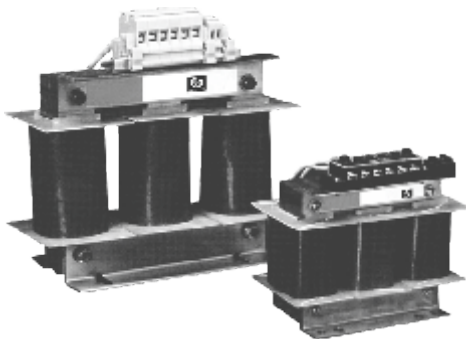
Non self healing APP capacitors manufactured using double hazy and double thick polypropylene films between two electrodes of thick aluminium foil have extended foil construction to ensure low watt losses

Aluminium foil

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

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

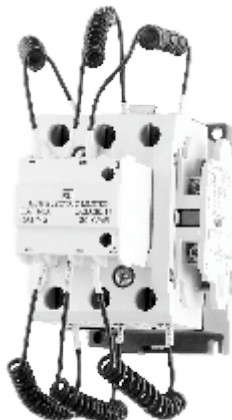
HSN Code : 8504



KVAR	Aluminium wound		Copper wound	
	Cat. No.	MRP [₹]	Cat. No.	MRP [₹]
5	BCHRAL005B	9320	BCHRCU005B	14440
10	BCHRAL010B	11220	BCHRCU010B	16620
15	BCHRAL015B	13890	BCHRCU015B	19310
20	BCHRAL020B	17530	BCHRCU020B	22620
25	BCHRAL025B	19320	BCHRCU025B	25870
50	BCHRAL050B	27020	BCHRCU050B	40460
75	BCHRAL075B	38360	BCHRCU075B	57940
100	BCHRAL100B	44030	BCHRCU100B	72910

## Freedom series Capacitor duty contactor (AC Control)

HSN Code : 8536



kVAR rating at 415V 3Ph 50Hz	Cat No.	Aux Contacts	MRP [₹]
5	CCD.05.11.■	1NO+1NC	2370
10	CCD.10.11.■	1NO+1NC	2580
15	CCD.15.11.■	1NO+1NC	3770
20	CCD.20.11.■	1NO+1NC	4420
25	CCD.25.11.■	1NO+1NC	5480
30	CCD.30.11.■	1NO+1NC	8630
40	CCD.40.11.■	1NO+1NC	13160
50	CCD.50.21.■	2NO+1NC	13830
60	CCD.60.21.■	2NO+1NC	15520

■ Standard coil voltages are 24, 110, 220/240 & 380/415 VAC, 50 Hz. For voltage codes refer Table on page 24  
Effective from 05.07.2021



# LT Power Capacitors..... BCH



## Thyristor Switched Module with Visual Circuit Indicator HSN Code : 8538

KVAR	Type	Rated Voltage (V)	Cat. No.	MRP [₹]
5	TSM	440	BCHTSM005	37390
10	TSM	440	BCHTSM010	37390
15	TSM	440	BCHTSM015	37390
20	TSM	440	BCHTSM020	42660
25	TSM	440	BCHTSM025	42660
50	TSM	440	BCHTSM050	53200
75	TSM	440	BCHTSM075	88320
100	TSM	440	BCHTSM100	88320

## APFC

### Intelligent Power Factor Controllers (IPFC)

Steps	Cat. No.	Voltage	Brief description	MRP [₹]
12 STEP - 3φ	RG3-12C	230V	12 Step intelligent PFC	36460
12 STEP - 3φ	RG3-12CS	230V	12 Step intelligent PFC with RS 485 communication	41010
15 STEP - 3φ	RG3-15C	230V	15 Step , Intelligent PFC relay	38220
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	46240
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-φ, Total W, Total VAR, Total VA, Total KWH, Total KVArh
- Harmonic Measurement (up to 19th)
- THD 1% THD V%
- Programmable THD Protection
- Programmable Discharge Time
- Programmable THD Alarm
- Password Protection for setup
- Overheat Protection (Optional)
- RS-485 Communication (Optional)
- RG-15C - Intelligent relay PFC with smart switching with all 15 steps relay connection
- RG-15C - Intelligent relay PFC with smart switching with all 15 steps relay connection with communication

### Automatic Power Factor Controllers (APFC)

Steps	Cat. No.	Voltage	Brief description	MRP [₹]
6 STEP - 1 φ	RG-6T-230-96	230V	PFC (96X96) WITH 6 STEPS , 230 V	14130
6 STEP - 1 φ	RG-6T-415-96	415V	PFC (96X96) WITH 6 STEPS , 415 V	14130
6 STEP - 1 φ	RG-6T-230	230V	PFC (144X144) WITH 6 STEPS, 230 V	14760
6 STEP - 1 φ	RG-6T-415	415V	PFC (144X144) WITH 6 STEPS, 415 V	14760
8 STEP - 1 φ	RG-8T-230	230V	PFC (144X144) WITH 8 STEPS, 230 V	16780
8 STEP - 1 φ	RG-8T-415	415V	PFC (144X144) WITH 8 STEPS, 415 V	16780
8 STEP - 3 φ	RG3-8T-230	230V	PFC 144X144, 8 STEPS, 230V UNABALANCELOAD	22560
12 STEP - 1 φ	RG-12T-230	230V	PFC (144X144) WITH 12 STEPS, 230 V	21010
12 STEP - 1 φ	RG-12T-415	415V	PFC (144X144) WITH 12 STEPS, 415 V	21010
12 STEP - 3 φ	RG3-12T-230	230V	PFC 144X144, 12 STEPS, 230V UNABALANCELOAD	27310

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

# Motors

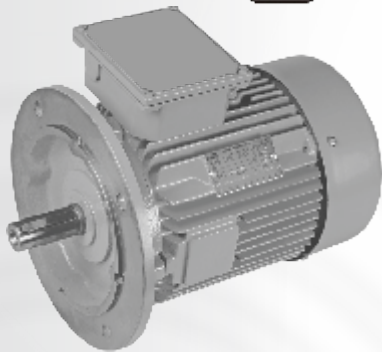
**ENDURA**

Low Voltage AC TEFC Squirrel  
Cage Induction Motors

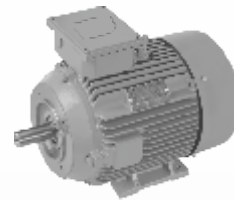
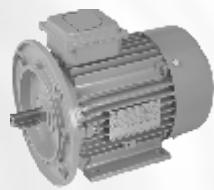
**EFF1  
EFF2**

**50°C**  
ambient temperature

**Class F**

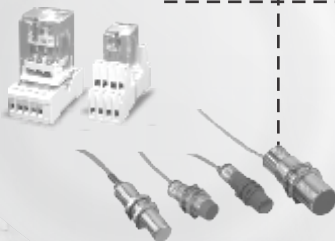


- **0.12 HP to 425 HP**
- **2 to 8 Poles**
- **Vector Plus with forced cooling**
- **Upto 40 intermediate standard ratings**
- **High efficiency, consistent - life long**
- **Low loss for entire life**
- **Inverter duty motor**
- **No deration upto 50° C**
- **Dual coat winding wire as standard feature**
- **6 terminals across the range**
- **Top, LHS, RHS termination flexibility**



# Automation Products

- **AC Drives**
- **Digital DC Drives**
- **Soft Starters**
- **e-prox Sensors**
- **Plug-in Relays**
- **Electronic Timers**



## 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

## SINUS M AC Drive



- 0.4~22Kw 380-480V AC, 3 phase
- Sensorless vector and V/F control
- Integrated braking module
- Build in PID function

**HSN Code - 8504**

Rating (Kw)	Drive Series	Product Code	Supply Details	Remark	Current (A)	MRP [₹]
0.37 - 0.55	SINUS M	SINUS M 4T0001BA2K2	Input - 3 phase 415V AC, Output - 3 phase, 415V AC	With EMC	1.25	28200
0.75 - 0.9	SINUS M	SINUS M 4T0002BA2K2		With EMC	2.50	30600
1.5	SINUS M	SINUS M 4T0003BA2K2		With EMC	4.00	34300
2.2	SINUS M	SINUS M 4T0005BA2K2		With EMC	6.00	37100
3.4	SINUS M	SINUS M 4T0007BA2K2		With EMC	9.00	45500
5.5	SINUS M	SINUS M 4T0011BA2K2		With EMC	12.00	58700
7.5	SINUS M	SINUS M 4T0014BA2K2		With EMC	16.00	69200
11	SINUS M	SINUS M 4T0017BA2K2		With EMC	24.00	121000
15	SINUS M	SINUS M 4T0020BA2K2		With EMC	30.00	139500
18.5	SINUS M	SINUS M 4T0025BA2K2		With EMC	39.00	176700
22	SINUS M	SINUS M 4T0030BA2K2		With EMC	45.00	207800

\*SINUS M available in 1 phase to 3 phase version also



## 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

## 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

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





## 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



## Medium Voltage Soft-Starter

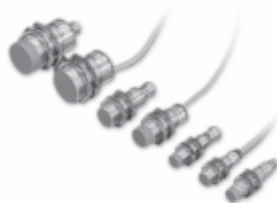
- Power supply 2300VAC to 15000VAC, Rated current 200A to 600A

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



## 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	1115	10
DINE8SN10	8	1.5	NPN-NO	100	1115	
DINE12SP10	12	2	PNP-NO	200	910	
DINE12SN10	12	2	NPN-NO	200	910	
DINE18SP10	18	5	PNP-NO	200	945	
DINE18SN10	18	5	NPN-NO	200	945	
DINE30SP10	30	10	PNP-NO	400	1285	
DINE30SN10	30	10	NPN-NO	400	1285	
Non Flush Version Nominal Voltage 12-30V DC 3 Wire Output LED Indication Integrated cable 3C/2M						
DINE8NP10	8	2	PNP-NO	100	1115	10
DINE8NN10	8	2	NPN-NO	100	1115	
DINE12NP10	12	4	PNP-NO	200	910	
DINE12NN10	12	4	NPN-NO	200	910	
DINE18NP10	18	8	PNP-NO	200	945	
DINE18NN10	18	8	NPN-NO	200	945	
DINE30NP10	30	15	PNP-NO	400	1285	
DINE30NN10	30	15	NPN-NO	400	1285	
Flush Version Nominal Voltage 240V AC* 2 Wire Output LED Indication Integrated cable 3C/2M						
DINE12SA10	12	2	NO	200	1185	10
DINE12SA01	12	2	NC	200	1185	
DINE18SA10	18	5	NO	400	1250	
DINE18SA01	18	5	NC	400	1250	
DINE30SA10	30	10	NO	400	1455	
DINE30SA01	30	10	NC	400	1455	
Non Flush Version Nominal Voltage 240V AC* 2 Wire Output LED Indication Integrated cable 3C/2M						
DINE12NA10	12	4	NO	200	1185	10
DINE12NA01	12	4	NC	200	1185	
DINE18NA10	18	8	NO	400	1250	
DINE18NA01	18	8	NC	400	1250	
DINE30NA10	30	15	NO	400	1455	
DINE30NA01	30	15	NC	400	1455	

\*110V AC input voltage is also available

## **ePROX** 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	2280	10
DCAE18SP10	18	1 to 5	PNP-NO	400	2280	
DCAE30SN10	30	1 to 10	NPN-NO	400	2615	
DCAE30SP10	30	1 to 10	PNP-NO	400	2615	
Non Flush Version 12-30V DC 3 Wire Output LED Indication Integrated 3C/2M						
DCAE18NN10	18	2 to 10	NPN-NO	400	2280	10
DCAE18NP10	18	2 to 10	PNP-NO	400	2280	
DCAE30NN10	30	3 to 15	NPN-NO	400	2615	
DCAE30NP10	30	3 to 15	PNP-NO	400	2615	

### 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	3460	10
DPHE18D2P11	18	200	PNP-NO+NC	200	3460	
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	3475	10
DPHE18RRP11	18	1000	PNP-NO+NC	200	3475	
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	4160	10
DPHE18TBRN11	18	5000	NPN-NO+NC	200	4160	

#### Note :

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



## 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 12mm & 400 mA for 18 mm						
DINE8SP10K	8	1.5	PNP-NO	M8 Connector	1145	10
DINE8SN10K	8	1.5	NPN-NO	M8 Connector	1145	
DINE12SP10K	12	2	PNP-NO	M12 Connector	1140	
DINE12SN10K	12	2	NPN-NO	M12 Connector	1140	
DINE18SP10K	18	5	PNP-NO	M12 Connector	1155	
DINE18SN10K	18	5	NPN-NO	M12 Connector	1155	
DINE30SP10K	30	10	PNP-NO	M12 Connector	1435	
DINE30SN10K	30	10	NPN-NO	M12 Connector	1435	
Non Flush Version Nominal Voltage 12-30V DC 3 Wire Output LED Indication						
DINE8NP10K	8	2	PNP-NO	M8 Connector	1145	10
DINE8NN10K	8	2	NPN-NO	M8 Connector	1145	
DINE12NP10K	12	4	PNP-NO	M12 Connector	1140	
DINE12NN10K	12	4	NPN-NO	M12 Connector	1140	
DINE18NP10K	18	8	PNP-NO	M12 Connector	1155	
DINE18NN10K	18	8	NPN-NO	M12 Connector	1155	
DINE30NP10K	30	15	PNP-NO	M12 Connector	1435	
DINE30NN10K	30	15	NPN-NO	M12 Connector	1435	
Cat. No.	Description Female Connectors				MRP [₹]	
DM8K3	M8 3-Wire straight connector w/o LED & 2 m cable				880	10
DM8K390LE	M8 3-Wire "L" type connector with LED & 2 m cable				880	
DM12K4	M12 4-Wire straight connector w/o LED & 2 m cable				595	
DM12K490	M12 4-Wire "L" type connector w/o LED & 2 m cable				870	
DM12K490LE	M12 4-Wire "L" type connector with LED & 2 m cable				930	
Linear Output Inductive Proximity Sensor - Nominal Voltage 24V DC, 2m Integrated Cable						
DINE18LIN	18	5	0 - 10V	2 m long PVC Cable	1960	10
DINE18LINMA	18	5	4 - 20 mA		1960	

## 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	1360	10
DINE12SD10	12	2	NO	200	940	
DINE18SD10	18	5	NO	400	970	
DINE30SD10	30	10	NO	400	1255	
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	1360	10
DINE12ND10	12	4	NO	200	940	
DINE18ND10	18	8	NO	400	970	
DINE30ND10	30	15	NO	400	1255	

Note : for NC output, replace suffix 10 by 01



## 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	1405	10
DINE8SN10S	8	1.5	NPN-NO	200	1405	
DINE12SP10S	12	2	PNP-NO	200	980	
DINE12SN10S	12	2	NPN-NO	200	980	
DINE18SP10S	18	5	PNP-NO	400	990	
DINE18SN10S	18	5	NPN-NO	400	990	
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	1405	10
DINE8NN10S	8	2	NPN-NO	200	1405	
DINE12NP10S	12	4	PNP-NO	200	980	
DINE12NN10S	12	4	NPN-NO	200	980	
DINE18NP10S	18	8	PNP-NO	400	990	
DINE18NN10S	18	8	NPN-NO	400	990	

## 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	980	10
DINE5025SP10P	50x25x10	5	PNP-NO	200	1025	
DINE1717SN10P	17x17x30	5	NPN-NO	200	980	
DINE5025SN10P	50x25x10	5	NPN-NO	200	1025	

\* 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-ASP Series ..... BCH

## Plug In Relays - Universal (ASPU)

HSN Code - 8536



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

Coil Voltage	Without latch / Manual Testing		With latch / Manual Testing		Contacts	Lot Size
	Cat. No.	MRP [₹]	Cat. No.	MRP [₹]		
8 Pin - contact rating 10A (Res.) at 24V DC/240V AC, LED Indication						
12V DC	ASPU212DLE	370	ASPU212DLET	535	2 C/O	10
24V DC	ASPU224DLE	365	ASPU224DLET	535		
110V DC	ASPU2110DLE	405	ASPU2110DLET	560		
12V AC	ASPU212ALE	405	ASPU212ALET	590		
24V AC	ASPU224ALE	435	ASPU224ALET	580		
110V AC	ASPU2110ALE	430	ASPU2110ALET	575		
240V AC	ASPU2240ALE	470	ASPU2240ALET	635		
11 Pin - contact rating 10A (Res.) at 24V DC/240V AC, LED Indication						
12V DC	ASPU312DLE	450	ASPU312DLET	560	3 C/O	10
24V DC	ASPU324DLE	440	ASPU324DLET	575		
110V DC	ASPU3110DLE	475	ASPU3110DLET	625		
24V AC	ASPU324ALE	495	ASPU324ALET	635		
110V AC	ASPU3110ALE	490	ASPU3110ALET	645		
240V AC	ASPU3240ALE	520	ASPU3240ALET	680		

## 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
8 Pin - contact rating 5A (Res.) at 24V DC/240V AC, LED Indication				
12V DC	ASPS212DLE	2 C/O	330	10
24V DC	ASPS224DLE		330	
48V DC	ASPS248DLE		360	
110V DC	ASPS2110DLE		375	
12V AC	ASPS212ALE		355	
24V AC	ASPS224ALE		360	
110V AC	ASPS2110ALE		355	
240V AC	ASPS2240ALE		405	
11 Pin - contact rating 5A (Res.) at 24V DC/240V AC, LED Indication				
12V DC	ASPS312DLE	3 C/O	405	10
24V DC	ASPS324DLE		405	
48V DC	ASPS348DLE		480	
110V DC	ASPS3110DLE		460	
24V AC	ASPS324ALE		390	
110V AC	ASPS3110ALE		405	
240V AC	ASPS3240ALE		455	

## Sockets for ASPU / ASPS Plug in Relay

HSN Code - 8538

Cat. No.	Type	MRP [₹]	Lot Size
10A, 240V AC, Screw Terminals, 35mm DIN Rail Mounting			
ASSU11	SOCKET 11 PIN FOR ASPS/ASPU Relay	195	10
ASSU8	SOCKET 8 PIN FOR ASPS/ASPU Relay	150	

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

# Plug in Relays-ASP Series ..... BCH

## 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	295	20
24V DC	ASPM424DLE		295	
48V DC	ASPM448DLE		300	
110V DC	ASPM4110DLE		300	
24V AC	ASPM424ALE		320	
110V AC	ASPM4110ALE		330	
240V AC	ASPM4240ALE		330	
8 Pin - contact rating 5A (Res.) at 24V DC/240V AC, LED Indication				
12V DC	ASPM212DLE	2 C/O	250	20
24V DC	ASPM224DLE		250	
48V DC	ASPM248DLE		295	
110V DC	ASPM2110DLE		295	
24V AC	ASPM224ALE		295	
110V AC	ASPM2110ALE		295	
240V AC	ASPM2240ALE		295	

## 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	225	20
ASSM8	SOCKET 8 PIN FOR ASPM Relay	160	

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

## Universal Relays



- Type ARPU
- 10 Amp (Res) Contact rating
- 2 Change over / 3 Change over
- Silver Nickle Contacts
- Built in Mechanical Indicator/ Latching facility
- Wide Coil Voltages
- With and without LED
- 8 Pin / 11 Pin Socket



### Socket & Clamp (ARPU)

35 mm DIN rail mounting Rating : 10A, 250V



## Plug In Relays - Universal (ARPU)

HSN Code - 8536

Coil Voltage	Without LED Indication		With LED Indication		Contacts	Lot Size
	Cat. No.	MRP [₹]	Cat. No.	MRP [₹]		
8 Pin, Contact rating = 10A (Res.) at 24V DC/250V AC; Mechanical indicator with manual testing/latching lever						
12 V DC	ARPU212D	770	ARPU212DLE	1070	2 C/O	10
24V DC	ARPU224D	855	ARPU224DLE	1040		
48V DC	ARPU248D	830	ARPU248DLE	830		
110V DC	ARPU2110D	805	ARPU2110DLE	805		
24VAC	ARPU224A	750	ARPU224ALE	750		
48VAC	ARPU248A	685	ARPU248ALE	805		
110V AC	ARPU2110A	805	ARPU2110ALE	805		
230V AC	ARPU2230A	865	ARPU2230ALE	1055		
11 Pin, Contact rating = 10A (Res.) at 24V DC/250V AC; Mechanical indicator with manual testing/latching lever						
12 V DC	ARPU312D	830	ARPU312DLE	830	3 C/O	10
24V DC	ARPU324D	995	ARPU324DLE	995		
48V DC	ARPU348D	845	ARPU348DLE	880		
110V DC	ARPU3110D	865	ARPU3110DLE	865		
24VAC	ARPU324A	845	ARPU324ALE	850		
48VAC	ARPU348A	845	ARPU348ALE	845		
110V AC	ARPU3110A	775	ARPU3110ALE	1080		
230V AC	ARPU3230A	955	ARPU3230ALE	1115		

## Sockets for ARPU Plug in Relay

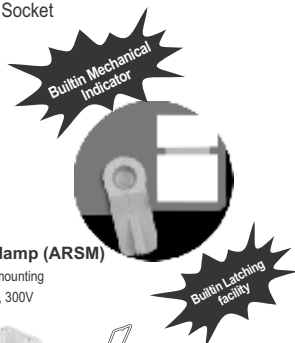
Cat. No.	Type	MRP [₹]	Lot Size
10A, 250V AC, Screw Terminals, 35mm DIN Rail Mounting			
ARSU11	11 Pin Socket	400	10
ARSU8	8 Pin Socket	375	
ARPUCL	Holding Clamp	50	

# Plug in Relays-ARP Series/Timer..... BCH

## Miniature Plug in Relays



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



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



## On Delay



- Fixed Voltage, Fixed Time
- Wide range of input supply - 220VAC; 110VAC; 24V AC/DC
- Large calibrated dial for easy and accurate time setting
- LED indications for Input supply and Output status
- Surface mounting & DIN rail mounting
- 1 changeover relay output (SPDT)
- All Purpose On Delay timer

## Multi Function



- 4 Functions - On delay, Interval, Off delay, Single Shot
- Multi Time Range - Sec / Min / Hr
- Universal Voltage - 24 V- 230VAC/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

## Plug in Relays - Miniature (ARPM)

HSN Code - 8536

Coil Voltage	Without LED Indication		With LED Indication		Contacts	Lot Size
	Cat. No.	MRP [₹]	Cat. No.	MRP [₹]		
14 Pin, Contact rating = 6A (Res.) at 24V DC/250V AC; Mechanical indicator with manual testing/latching lever						
12 V DC	ARPM412D	360	ARPM412DLE	490	4 C/O	10
24V DC	ARPM424D	345	ARPM424DLE	400		
110V DC	ARPM4110D	530	ARPM4110DLE	530		
24V AC	ARPM424A	385	ARPM424ALE	440		
110V AC	ARPM4110A	380	ARPM4110ALE	415		
230V AC	ARPM4230A	395	ARPM4230ALE	440		
8 Pin, Contact rating = 12A (Res.) at 24V DC/250V AC; Mechanical indicator with manual testing/latching lever						
12 V DC	ARPM212D	495	ARPM212DLE	515	2 C/O	10
24V DC	ARPM224D	375	ARPM224DLE	455		
110V DC	ARPM2110D	540	ARPM2110DLE	540		
24V AC	ARPM224A	520	ARPM224ALE	520		
110V AC	ARPM2110A	420	ARPM2110ALE	440		
230V AC	ARPM2230A	400	ARPM2230ALE	470		

## Sockets for ARPM Plug in Relay

Cat. No.	Type	MRP [₹]	Lot Size
Screw Terminals, 35mm DIN Rail Mounting			
ARSM14	14 Pin Socket	320	10
ARSM8	8 Pin Socket	245	
ARPMCL	Holding Clamp	50	

## IBT Electronic Timer

### Fixed Voltage; Fixed Time Range - IBTA

HSN Code - 9107

Cat No.	Time Range	Function	MRP [₹]
IBT00-0-	0.6-6/3-30/6-60/18-180 Sec	On Delay	980

- Voltage Code
- Timing Range for IBTA On Delay Timer

## Voltage Codes

Voltage	Voltage Code
240V AC	1
110V AC	2
24V AC/DC	3
12V DC	4

## Timing Code for IBTA On Delay Timer

Time Range	Code
0.6 - 6 Sec.	1
3 - 30 Sec.	2
6 - 60 Sec.	3
18 - 180 Sec.	4

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

HSN Code - 9107

Cat No.	Time Range	Function	Voltage	MRP [₹]
IBT04500	0.1S - 10 Hr.	On Delay, Off Delay, Interval, Single Shot	24-240V AC/DC	1880



- On Delay
- Off Delay
- Cyclic
- Multifunction
- Star Delta
- Special version for Compressor application
- AC / DC Supply
- Widest timing range from 0.1 sec to 10 Hours in Single Unit
- Calibrated time scale for easy time setting
- DIN rail mounting
- Excellent repeat accuracy

## Electronic Timers

HSN Code - 9107

Description	Cat.No.	MRP [₹]
Timer Encapsulated on delay Timer Type SAS-P (Solid State output) Voltages : 240V AC, 110V AC, 48V AC/DC, 24V AC/DC Time Range : 1 sec. or 0.1-10 Sec. or 1-100 Sec., or 3-300 Sec.	SST00-0-	1035
Encapsulated on delay timer type SAS-CB (Solid State output) (Compressor/Heat pump) Voltages : 240V AC, 110V AC, 48V AC/DC, 24V AC/DC Time Range : 180 Sec. fixed	SST02-00	1035
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	SBT00-00	1805
Delay on break type BCR 0.1 Sec. - 10 Hrs. 240V AC; 24V AC/DC or 110V AC; 24V AC/DC or 12V DC	SBT01-00	1970
Recycling type BDR 0.1 Sec. - 10 Hrs. 240V AC; 24V AC/DC or 110V AC; 24V AC/DC	SBT02-00	2625
Multifunction type BLR 0.1 Sec. - 10 Hrs. 240V AC; 24V AC/DC or 110V AC; 24V AC/DC	SBT03-00	1990

- Voltage Code
- Timing Range for SAS Timer

## Voltage Codes

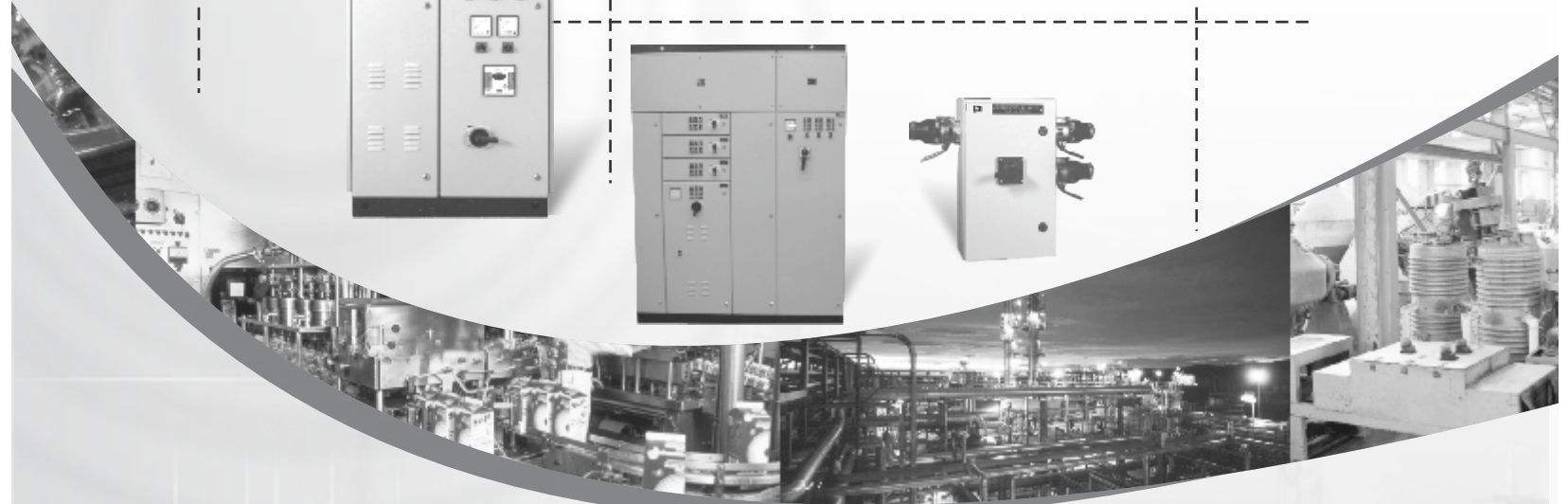
Type	Voltage	Voltage Code
B	240V AC; 24 VAC/DC	1
	110 V AC; 24 VAC/DC	2
	12 V DC	5
SAS	240V AC	1
	110V AC	2
	48V AC/DC	3
	24V AC/DC	4

## Timing Code

Type	Timing	Code
SAS	1 Sec.	0
	10 Sec.	1
	100 Sec.	2
	300 Sec.	3

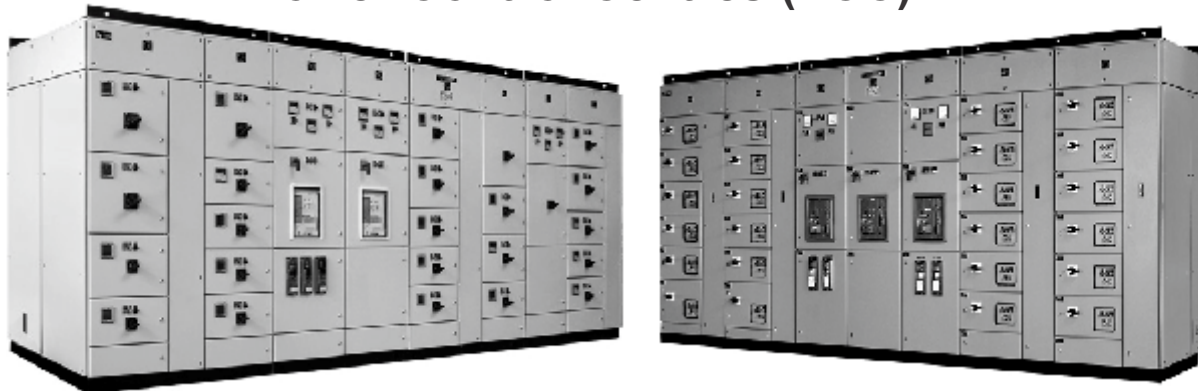
# Custom Built Products

- **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.



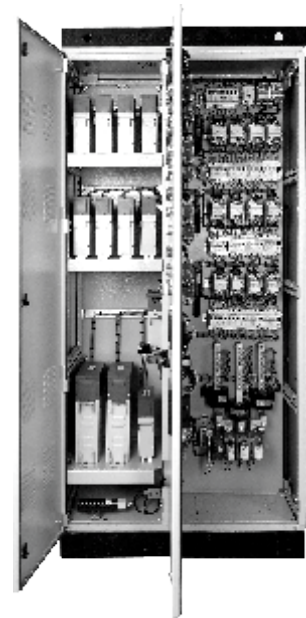
**Five Standard Versions of APFC Panels are available depending upon Switching Sequence, Mode of Control (Automatic & Manual options) & Type of Capacitors (Cylindrical / Box type) used.**

- 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 200KVA<sub>r</sub> in Standard Ratings of 40, 50, 60, 75, 100, 125, 150, 175 & 200 KVA<sub>r</sub> with suitable banking arrangement.
- MOUNTING - Wall Mounting up-to 75KVA<sub>r</sub> & Floor Mounting above 75 KVA<sub>r</sub> 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
- Oprotor Control
- Creep Speed



## DC Crane Control Hoisting Motion

This control is for use with series wound motors drive for crane hoists and is arranged for reversing and dynamic lowering service. control

### Design Features

- Simplified reliable circuitary
- Inductive time limit acceleration on hoisting & lowering
- Better speed control on light or heavy loads when hoisting or lowering
- CRCA Sheet steel construction of the panel.
- 7 Tank pretreated panels for extremely long life



## DC Crane Control (Bridge and Trolley motion)

This controller provides reversing and plugging operation of series wound motors in heavy duty cranes on Trolley services. Upto 5 motor speeds are achieved in conjunction with a master controller.

### Design Features

- Simplified, reliable circuitary
- Rectifier controlled plugging
- Instantaneous and Inverse time delay magnetic overload protection
- No volt protection
- Heavy duty DC Contactors equipped with magnetic blowouts
- CRCA Sheet steel construction of the panel.
- 7 Tank pretreated panels for extremely long life

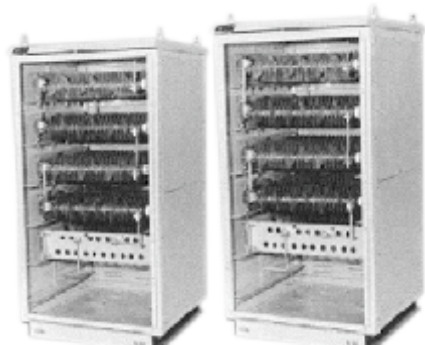
# Resistors & Starters..... BCH

**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**

## Punched Grid Resistors



### Applications:

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

### Features

- Special Chromium 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

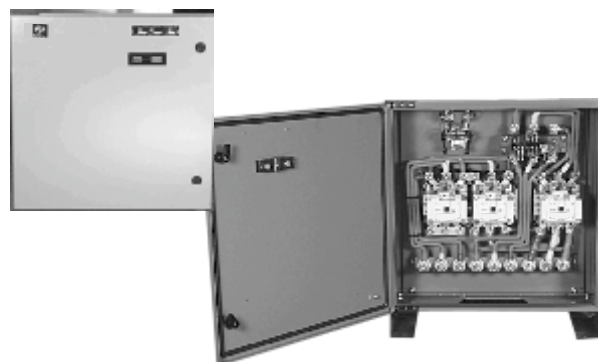
## Special Purpose Starters

- Direct ON Line Starters upto 500 HP
- Star Delta Starters upto 650 HP
- Closed Transition Star Delta Starters upto 650 HP
- Automatic Stator Rotor Starting Panels upto 1000 HP
- DC starter upto 600A

Type	Resistance Per Bank	Continuous Rating	LP
	Ohms	Amps	[₹]
WL10	0.1	225	16930
W12	0.125	200	14975
WL16	0.16	180	17300
WL20	0.2	150	17665
WL25	0.25	134	15595
WL32	0.32	118	13805
WL40	0.4	113	15970
WL50	0.5	100	13490
WL62	0.62	84	17410
WL80	0.8	75	15775
WL100	1	67	14670
WL125	1.25	64	16325
WL160	1.6	57	14090
WL200	2	54	15680
WL250	2.5	48	13845
WL320	3.2	43	12125
WL400	4	40	16890
WL500	5	35	12255
WL625	6.25	33	14000
WL800	8	29	13060
WL1200	12	21	14000
WL1600	16	19	13580

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

Type	Resistance Per Bank	Continuous Rating	LP
	Ohms	Amps	[₹]
WLL20(M)-1	0.325	150	27465
WLL25(M)-1	0.54	134	26260
WLL32(M)-1	0.68	118	22270
WLL50(M)-1	0.864	100	18865



# Power Receptacles..... BCH

## 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 ..... BCH

## 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 - BASIC ATS : PU door-gasket Enclosure, 3nos. Power Contactor, Citation OLR, Start/Stop PB, Motor ON LED		MODEL 2 - PREMIUM Version : PU door- gasket Enclosure, MCCB Incomer, 3nos. Power Contactor, Citation OLR, Electronic SPP, Ammeter/voltmeter with selector switches, Start/Stop PB, Phase & Motor ON/Trip LEDs.	
	HP	Cat. code for Air cooled	Cat. code for Oil cooled	Cat. code for Air cooled
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 for a period of 18\* months from the date of invoicing & 24 months from date of manufacturing whichever is later subject to the provision of proper usage and does not cover defects arising out of fire, accident, inefficient maintenance, faulty operation and willful or accidental damage. The manufacturer shall not be liable for any consequential loss, injury or damages attributable to defect or failure of its products.

\* Proof of purchase to be retained to avail warranty.





a strong commitment  
to serve better  
always ...



**Switchgear | Controlgear | Enclosures | Motor Starters & Submersible Pump Starters |  
Brakes and Crane Controls | MCC | PCC | Customised Solutions | Automation |  
Wires & Cables | Motors | Reactive Power Management**



**BCH**

**BCH  
ELECTRIC  
LIMITED**



- Power Control Products
- Starters & Submersible Pump Starters
- Industrial Enclosures
- Industrial Products
- Wires & Cables
- Motor Control Products
- Power Bus Duct
- Customised Solution
- Automation

*a strong commitment to serve better always ...*



**BHARTIA**

**BCH**

# BCH ELECTRIC LIMITED



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



**1800-103-9262**

[customercare@bchindia.com](mailto:customercare@bchindia.com)

Visit us at : [www.bchindia.com](http://www.bchindia.com)

**Corporate Office :** 1105, New Delhi House, 27, Barakhamba Road, New Delhi-110 001 Tel. : 91-11- 43673100

**CIN :** U31103WB1965PLC026427, **Customercare No.** 1800-103-9262, **E-mail :** [marketing@bchindia.com](mailto:marketing@bchindia.com)

**Registered Office :** Block 1E, 216, Acharya Jagadish Chandra Bose Road, Kolkata - 700 017

**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

**Sales Offices :**

**Ahmedabad**

103, Aaron,  
Nr. SBI Laghuudyug branch,  
Behind Sakar-1  
Gandhigram Railway station,  
Ellis bridge, Ahmedabad - 380006  
Tel. : 079-26589719  
E-mail.: [ahmedabad@bchindia.com](mailto:ahmedabad@bchindia.com)

**Bangalore**

2nd Floor, 130/5,  
K.H. Road (Double road),  
Bangalore - 560 027  
Tel.: 080-41144879 / 22236759  
E-mail : [bangalore@bchindia.com](mailto:bangalore@bchindia.com)

**Bhubaneswar**

Mallick Commercial  
Complex Plot No.: A/69, unit - 3  
Bhubaneswar - 751 001  
Tel.: 0674-2380988  
E-mail.: [bhubaneswar@bchindia.com](mailto:bhubaneswar@bchindia.com)

**Chandigarh (Panchkula)**

SCO -129, 2nd Floor,  
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Tel.: 0172-5078957 / 5049905  
E-mail.: [chandigarh@bchindia.com](mailto:chandigarh@bchindia.com)

**Chennai**

Flat No. 3A, 3rd Floor,  
Sree Apartments,  
No.508, TTK Road,  
Alwarpet, Chennai 600 018  
Tel.: 044-24337046, 24337047  
E-mail : [chennai@bchindia.com](mailto:chennai@bchindia.com)

**Coimbatore**

87, Dr. Nanjappa Road,  
Coimbatore - 641 018  
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E-mail : [coimbatore@bchindia.com](mailto:coimbatore@bchindia.com)

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26A, Barakhamba Road,  
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**Delhi 2**

710, Deepali Building, 92  
Nehru Place, New Delhi - 110 019  
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**Dehradun**

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Fax : 040-66207273  
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Indore - 452 001  
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**Kolkata**

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Acharya Jagadish Chandra Bose Road,  
Kolkata - 700 017  
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**Ludhiana**

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**Mumbai**

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Nariman Point,  
Mumbai - 400 021  
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Pandri, Raipur - 492 004  
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Ayyappa Nagar, K.K.Nagar  
Trichy - 620 021, Tamilnadu  
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E-mail.: [trichy@bchindia.com](mailto:trichy@bchindia.com)

**Vadodara**

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10, Ashapuri Co-Op. Hsg. Soc. Ltd., Opp. VUDA Housing,  
Near Cow Circle, Akota, Vadodara - 390 020  
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**Other Branch Locations**

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**Resident Engineer Locations**

Anantapur	Kanpur	Nashik	Salem	Yamunanagar
Bhopal	Katni	Patna	Siliguri	
Calicut	Karimnagar	Puducherry	Surat	
Gurgaon	Kota	Rajkot	Tirunelveli	
Jalandhar	Midnapur	Ranchi	Udaipur	
Jalgaon	Muzaffarnagar	Rourkela	Vapi	
Jodhpur	Nagpur	Rudrapur	Vijayawada	

Since product improvement is a continuous process, the data furnished in this brochure may undergo revision without prior notice.