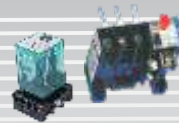




PRICE LIST

Effective : 10th May 2022

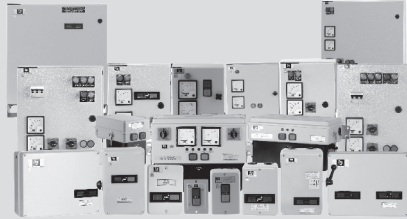


BCH
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LIMITED

Our Products



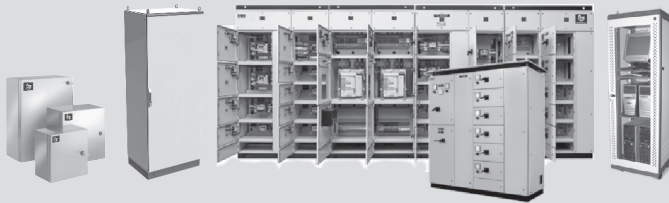
Switchgear & Controlgear



Motor Starters & Submersible Pump Starters



MCB & MCB Distribution Boxes



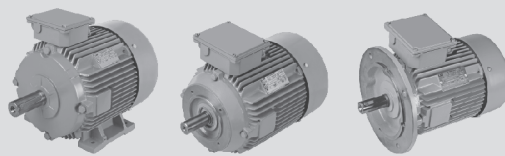
Enclosure Systems



Wires & Cables



Power Factor Control Product



Motors



Automation Product



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

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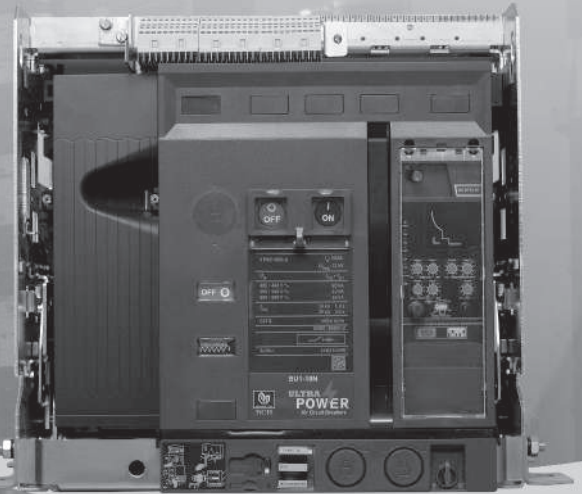


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ULTRA 
POWER
Air Circuit Breakers

COMPLETE RANGE OF CIRCUIT BREAKERS



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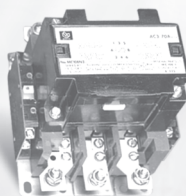
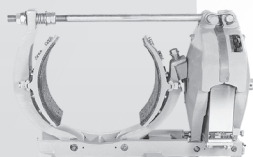
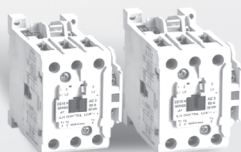
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E-mail : marketing@bchindia.com • www.bchindia.com


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 : 0129-2304024

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



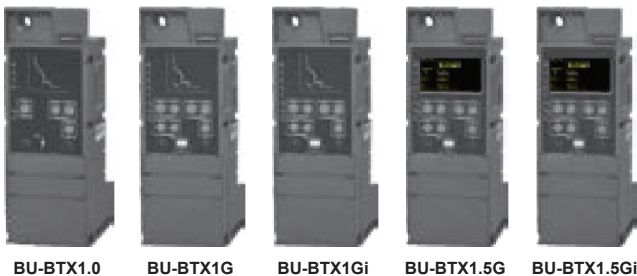
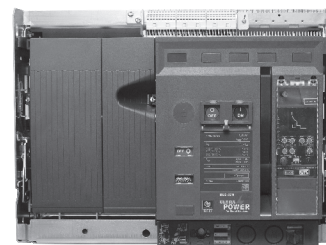
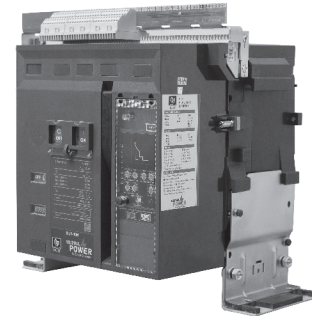
- Air Circuit Breakers
- MCCBs
- MCB, Isolator, MCB Distribution Boxes, RCCB 
- FSU, SDFU
- AC Contactors
- DC Contactors
- Solid State Relays
- Overload Relays
- Electronic Overcurrent Relays (BOCR)
- Motor Protection Circuit Breakers (MPCB)
- Limit Switches
- Push Buttons, Indicating Lights, LEDs
-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

Air Circuit Breakers.....BCH



Range of Air Circuit Breakers **New**

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



BU-BTX1.0 BU-BTX1G BU-BTX1Gi BU-BTX1.5G BU-BTX1.5Gi



BU-BTX3.5/3.5H BU-BTX4.5

BTX Release for Protection & Control Unit:

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

Breaking Capacities:

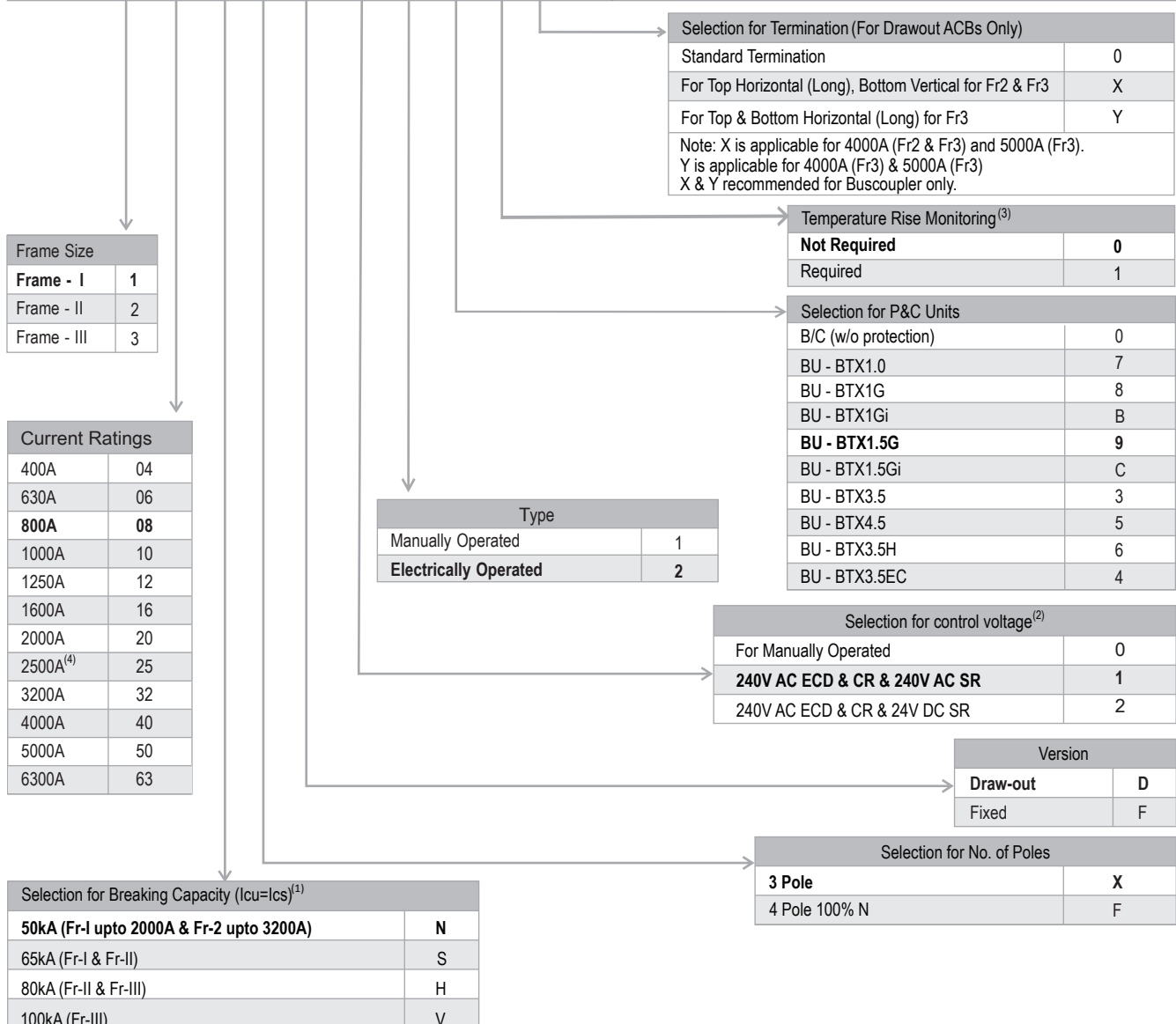
$I_{cu} = I_{cs} = I_{cw}$

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

Air Circuit Breakers.....BCH



BU 1 08 N X D 1 2 9 0 0 | **BU1800N 3P ED 1.5G BotV**



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

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

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

Type	
Manually Operated	1
Electrically Operated	2

Temperature Rise Monitoring ⁽³⁾	
Not Required	0
Required	1

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

Selection for control voltage ⁽²⁾	
For Manually Operated	0
240V AC ECD & CR & 240V AC SR	1
240V AC ECD & CR & 24V DC SR	2

Version	
Draw-out	D
Fixed	F

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

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

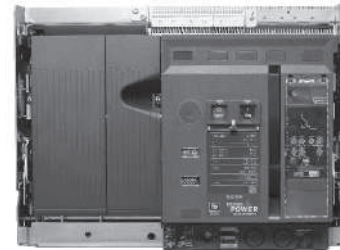
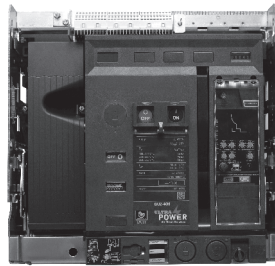
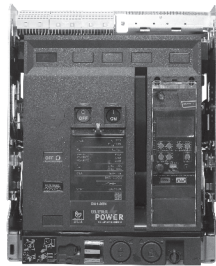
Please Note : (1) For Icu values please refer product catalogue
 (2) Other options of control voltage are available as accessory
 (3) Temperature protection is available in BU-BTX3.5/3.5H/4.5
 (4) For Fr-1, 2500A selection, please contact the nearest branch

ULTRA POWER ACBs are offered with following standard features:

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

Air Circuit Breakers.....BCH

ULTRA POWER ACBs with BU-BTX1G (LSING - BCD Switches) - 3 Pole
Air Circuit Breakers



HSN Code : 8536

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

HSN Code : 8536

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

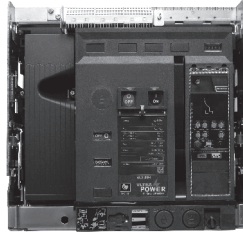
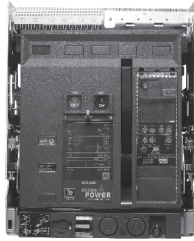
M.R.P. changes for product customization	M.R.P. [₹]
MDO to EDO or MF to EF conversion (Includes ECD 240V AC, CR 240V AC & SR 240V AC or 24V DC)	*
Buscoupler (without protection release)	
BU-BTX1.0 (LSI - BCD Switches)	
BU-BTX1Gi (LSING + Inbuilt ZSI - BCD Switches)	
BU-BTX1.5G (LSING + Current Metering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

* Available on request



Air Circuit Breakers.....BCH

ULTRA
POWER ACBs with BU-BTX1G (LSING - BCD Switches) - 4 Pole
Air Circuit Breakers



HSN Code : 8536

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

HSN Code : 8536

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

Accessories of Air Circuit Breakers



Draw-out ACBs Terminal Adaptors

HSN Code : 8538

Description	Cat. No.	M.R.P. [₹]
Terminal Adaptor for Draw-out ULTRA ACBs		
Frame-1 400-2000A N/S/H (Vertical / Horizontal)	BLCA609630000	*
Frame-2 400-3200A N/S/H (Vertical / Horizontal)	BLCA609640000	



Operation Counter



Door Interlock

HSN Code : 8538

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

* Available on request

Air Circuit Breakers..... BCH

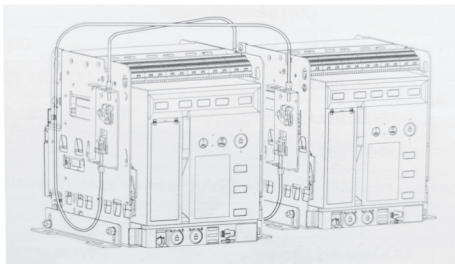
ULTRA POWER Accessories of Air Circuit Breakers
Air Circuit Breakers



HSN Code : 8538

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

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



Mechanical Interlock using Bowden Cable

HSN Code : 8538

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

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

HSN Code : 8538

Description	Cat. No.	M.R.P. [₹]	
Electrical Charging Device (ECD)			
240V AC / 250V DC	BLECD903590000	*	
415V AC / 400V DC	BLECD903610000		
Closing Release (CR)			
220 - 240V AC / 220 - 250V DC	BLCR90817B000		
415V AC	BLCR90817D000		
Shunt Release (SR)			
24-30V DC	BLSH908160400		
110V AC / 110V DC	BLSH908160A00		
220 - 240V AC / 220 - 250V DC	BLSH908160B00		
415V AC	BLSH908160D00		
Under Voltage Release (UVR) with time delay (0-1-3-5 sec)			
240V AC / 220V DC	BLUV90818B000		
415V AC	BLUV90818D000		

HSN Code : 8538

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



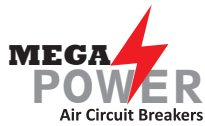
HSN Code : 8538

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

* Available on request



Air Circuit Breakers.....BCH



S1 Range of Air Circuit Breakers New

- Conforms to IS/IEC 60947-2
- Current rating from 800A to 4000A
- Available in 3 Pole/4 Pole, Manually & Electrically operated, Fixed & Draw-out versions
- High short time withstand capacity, Icu = Ics = Icw for 1 sec for total selectivity
- High mechanical and electrical operating life
- 100% rated neutral pole
- Common height and depth across the range
- Protection through Microprocessor releases (BR18G)
- Self diagnostic Microprocessor based Releases with on-load testing through TEST button
- Inbuilt thermal memory
- Protection Releases conform to EMI/EMC standards



Mega power S1 ACB

Breaking Capacities Offered:

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

MEGA POWER S1 3 & 4 Pole Draw-out ACBs

HSN Code : 8536

Rating	Breaking Capacity Icu=Ics=Icw (1 sec)	Version	Microprocessor Based BR18G			
			3 Pole		4 Pole	
			Cat. No.	M.R.P. [₹]	Cat. No.	M.R.P. [₹]
800A	50kA	MDO	BM960420000	On Request	BM960620000	On Request
800A	50kA	EDO	BM960520000		BM960720000	
1000A	50kA	MDO	BM960430000		BM960630000	
1000A	50kA	EDO	BM960530000		BM960730000	
1250A	50kA	MDO	BM960440000		BM960640000	
1250A	50kA	EDO	BM960540000		BM960740000	
1600A	50kA	MDO	BM960450000		BM960650000	
1600A	50kA	EDO	BM960550000		BM960750000	
2000A	50kA	MDO	BM960460000		BM960660000	
2000A	50kA	EDO	BM960560000		BM960760000	
2500A	60kA	MDO	BM960470000		BM960670000	
2500A	60kA	EDO	BM960570000		BM960770000	

MEGA POWER S1 3 & 4 Pole Fixed ACBs

HSN Code : 8536

Rating	Breaking Capacity Icu=Ics=Icw (1 sec)	Version	Microprocessor Based BR18G	
			3 Pole	
			Cat. No.	MRP [₹]
630A	50kA	MF	BM955610000	On Request
800A	50kA	MF	BM955620000	
1000A	50kA	MF	BM955630000	
1250A	50kA	MF	BM955640000	
1600A	50kA	MF	BM955650000	

Air Circuit Breakers.....BCH



MEGA POWER H2 3 & 4 Pole Draw-out ACBs

HSN Code : 8536

Rating	Breaking Capacity Icu=Ics=Icw (1 sec)	Version	Type	Microprocessor Based BR18G			
				3 Pole		4 Pole	
				Cat. No.	M.R.P. [₹]	Cat. No.	M.R.P. [₹]
3200A	75kA	MDO	H2	BM948220000	On Request	BM948260000	On Request
3200A	75kA	EDO	H2	BM948240000		BM948280000	
4000A	75kA	MDO	H2	BM948230000		BM948270000	
4000A	75kA	EDO	H2	BM948250000		BM948290000	

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



MEGA POWER ACBs are offered with following standard features:

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

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

Accessories for Mega Power ACB's



LTPB



Shunt Release



UV Release

HSN Code : 8538

HSN Code : 8538

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

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

Note :

- a. The Numerical in brackets, against various accessories indicate the SICs required for wiring purpose in Draw-Out breakers
- b. Shunt release requires one set of auxiliary contacts
- c. Maximum 24 SICs can be fitted on an ACB. In Electrical ACBs 5 SICs are prewired for control circuit purpose

HSN Code : 8538

Description	Cat. No.	M.R.P. [₹]
Protection Releases		
Microprocessor based type BR18G	BMBR960300000	On Request



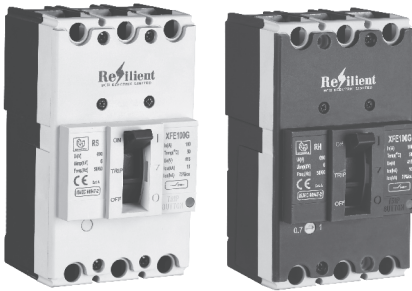
MCCB BCH

XF Frame 1 / XA1 With Thermal - Magnetic Release:

RATING (A) I_{cu} (kA)	16	20	25	32	40	50	63	80	100	125
10/ 15/ 25/ 30/ 36/ 50	XF Frame 1 - 3 Pole									
18	XA1 - 4 POLE									

XF Frame 1 - 3 Pole

- Conforms to IS/IEC 60947-2
- Range: 16A - 100A
- High Performance Compact Size
- Suitability for Isolation
- Rated at 50 C °
- Line Load Interchangeability
- Double Insulation
- Thermal Magnetic Trip unit
 - Overload Setting: 0.7-1.0 I_n
 - Short Circuit Setting: Fixed



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

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

XA1 Frame - 4 Pole

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



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

HSN Code : 8536

Type	Release Range (A)	Breaking Capacity I _{cu} /I _{cs} at 415V AC	3 Pole		Std. Pkg.
			Cat. No.	MRP [₹]	
XF Frame1	16, 20, 25, 32, 40, 50, 63	10/7.5kA (Fixed)	XFE***G	2210	1
	80, 100 (w/o spreader terminal)		XFE***G-WT	2320	1
	80, 100		XFE***G#	2470	1
	16, 20, 25, 32, 40, 50, 63	15/15kA (Fixed)	XFN***P	5060	1
	80, 100		XFN***P#	5160	1
	16, 20, 25, 32, 40, 50, 63	25/25kA	XFS***PV	7930	1
	80, 100		XFS***PV#	8070	1
	16, 20, 25, 32, 40, 50, 63	30/15kA	XFH***NV	5760	1
	80, 100		XFH***NV#	5890	1
	16, 20, 25, 32, 40, 50, 63	36/18kA	XFL***NV	7520	1
	80, 100		XFL***NV#	7650	1
	16, 20, 25, 32, 40, 50, 63	50/25kA	XFV***NV	12930	1
	80, 100		XFV***NV#	13060	1
	32, 40, 50, 63	50/50kA	XFV***PV	13560	1
80, 100	XFV***PV#		13720	1	

Note: Phase barriers are supplied along with all MCCBs.
#Spreader terminals available as standard. (For MCCB without spreader, please contact our nearest branch)

Code - Current Rating XF Frame 1 - 3 Pole

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

HSN Code : 8536

Type	Release Range (A)	Breaking Capacity I _{cu} /I _{cs} at 415V AC	4 Pole		Std. Pkg.
			Cat. No.	MRP [₹]	
XA1	32	18/18kA	XA1R032PV4	8530	1
	40		XA1R040PV4	8530	1
	63		XA1R063PV4	8250	1
	100		XA1R100PV4	8250	1
	125		XA1R125PV4	10450	1

Note: - Phase barriers are supplied along with all MCCBs.
- Spreader terminals available as accessories.

MCCB BCH

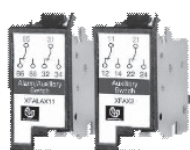
Accessories - XF Frame 1 / XA1 MCCBs:



Shunt Release



UV Release



ATAC



Extended Rotary Handle



MCCB Enclosure

Accessories for XF Frame 1 - 3 Pole HSN Code : 8538

Description	Internal		
	Cat. No.	MRP [₹]	Std. Pkg.
Auxiliary + Trip Alarm Contact			
1 C/O + 1C/O	XFALAX11	1700	1
2 C/O	XFAX2	1700	1
Shunt Release			
220V - 415V F1 (XF range)	XFSHT220V	1490	1
Under Voltage Release			
240V F1	XFUV240VA	1970	1
415V F1	XFUV415VA	2270	1

HSN Code : 8538

Description	External		
	Cat. No.	MRP [₹]	Std. Pkg.
Spreader Terminals	ACMF1TP100	410	Set of 6
Extended Rotary Handle	F1ROHE	2000	1
Din Rail	F1DIN	240	1
Phase Barriers	F1PB	100	Set of 4
MCCB Enclosure	F1EU3P	1080	1



Auxiliary Contact



ATAC



Shunt Release



UV Release



Spreader Terminals



Direct ROM



Extended ROM

Accessories for XA1 MCCBs - 4 Pole HSN Code : 8538

Description	Internal		
	Cat. No.	MRP [₹]	Std. Pkg.
Auxiliary Contact			
1 C/O - Right	XB01A12AUX1	990	1
2 C/O - Right	XB01A12AUX2	1760	1
Trip Alarm Contact			
1 C/O - Right	XB01A12ALR1	990	1
Auxiliary + Trip Alarm Contact			
1 C/O + 1C/O - Right	XB01A12ALAX1	1690	1
Shunt Release			
24V DC - Left	XB01A12SHT24V	1810	1
240/415V AC - Left	XB01A12SHTUNI	1970	1
Under Voltage Release			
240V AC - Left	XB01A12UV240V	3280	1

HSN Code : 8538

Description	External			
	Cat. No.	MRP [₹]	Std. Pkg.	
Spreader Terminals				
XA1 - 4 Pole	XB0A1100FPST	630	Set of 8	
XA1 - 4 Pole	XB0A1125FPST	750	Set of 8	
Rotary Handle				
XA1	Direct ROM	XB0A1ROHD	1270	1
	Extended ROM	XB0A1ROHE	1640	1

XF2/XA2 With Thermal - Magnetic Release:

RATING (A) I _{cu} (kA)	125	160	200	250
25	XF2 - 3 Pole			
25	XA2 - 4 Pole			
36	XF2 - 3 Pole			
36	XA2 - 4 Pole			
50	XF2 - 3 Pole			

HSN Code : 8536

XF2 Frame - 3 Pole

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



XF2 Frame :
I_{cu}/I_{cs} = 25/25, 36/18, 36/27, 36/36, 50/25, 50/50 kA

Type	Release Range (A)	Breaking Capacity I _{cu} /I _{cs} at 415V AC	3 Pole		Std. Pkg.
			Cat. No.	MRP [₹]	
XF2 range	125	25/25kA	XF2E125PV	11550	1
	160		XF2E160PV	15040	1
	200		XF2E200PV#	19530	1
	250		XF2E250PV#	22900	1
	125	36/18kA	XF2N125NV	9370	1
	160		XF2N160NV	10790	1
	200		XF2N200NV#	13600	1
	250	36/27kA	XF2N250NV#	15610	1
	125		XF2N125GV	12730	1
	160		XF2N160GV	17020	1
	200		XF2N200GV#	22290	1
	250	36/36kA	XF2N250GV#	24530	1
	125		XF2N125PV	14260	1
	160		XF2N160PV	19000	1
	200		XF2N200PV#	23970	1
	250	50/25kA	XF2N250PV#	26510	1
	125		XF2H125NV	14780	1
	160		XF2H160NV	20050	1
	200		XF2H200NV#	24130	1
	250	50/50kA	XF2H250NV#	26110	1
125	XF2H125PV		19870	1	
160	XF2H160PV		22350	1	
200	XF2H200PV#		26490	1	
250		XF2H250PV#	28790	1	

Note: Phase barriers are supplied along with all MCCBs.

#Spreader terminals available as standard.

(For MCCB without spreader, please contact our nearest branch)

XA2 Frame - 4 Pole

- Conforms to IS/IEC 60947-2
- Range: 160A to 250A, 4P
- Compact size
- Wide Range of snap fit Internal and External Accessories
- Adjustable Overload Setting: 0.8 - 1.0 x In



XA2 Frame :
I_{cu}/I_{cs} = 25/12.5, 36/18 kA

HSN Code : 8536

Type	Release Range (A)	Breaking Capacity I _{cu} /I _{cs} at 415V AC	4 Pole		Std. Pkg.
			Cat. No.	MRP [₹]	
XA2	160	25/12.5kA	XA2E160NV4	14880	1
	200		XA2E200NV4	17910	1
	250		XA2E250NV4	20480	1
	160	36/18kA	XA2N160NV4	16350	1
	200		XA2N200NV4	21870	1
	250		XA2N250NV4	24380	1

Note: - Phase barriers are supplied along with all MCCBs.

- Spreader terminals available as accessories.

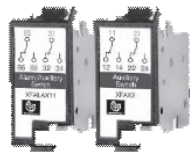
Accessories - XF2/XA2 Frame MCCBs:



Shunt Release



UV Release



ATAC



Extended Rotary Handle



MCCB Enclosure

Accessories for XF2 range - 3 Pole HSN Code : 8538

Description	Internal		
	Cat. No.	MRP [₹]	Std. Pkg.
Auxiliary + Trip Alarm Contact			
1 C/O + 1C/O	XFALAX11	1700	1
2 C/O	XFAX2	1700	1
Shunt Release			
220V - 415V F2 (XF2 range)	XF2SHT220V	1490	1
Under Voltage Release			
240V F2	XF2UV240VA	1990	1
415V F2	XF2UV415VA	2270	1

HSN Code : 8538

Description	External		
	Cat. No.	MRP [₹]	Std. Pkg.
Spreader Terminals	ACMF2TP250	1500	Set of 6
Extended Rotary Handle	F2ROHE	2060	1
Phase Barriers	F2PB	260	Set of 4
MCCB Enclosure	F2EU3P	2200	1



Auxiliary Contact



ATAC



Shunt Release



UV Release



Spreader Terminals



Direct ROM



Extended ROM

Accessories for XA2 MCCBs - 4 Pole HSN Code : 8538

Description	Internal		
	Cat. No.	MRP [₹]	Std. Pkg.
Auxiliary Contact			
1 C/O - Right	XB01A12AUX1	990	1
2 C/O - Right	XB01A12AUX2	1760	1
Trip Alarm Contact			
1 C/O - Right	XB01A12ALR1	990	1
Auxiliary + Trip Alarm Contact			
1 C/O + 1C/O - Right	XB01A12ALAX1	1690	1
Shunt Release			
24V DC - Left	XB01A12SHT24V	1810	1
240/415V AC - Left	XB01A12SHTUNI	1970	1
Under Voltage Release			
240V AC - Left	XB01A12UV240V	3280	1

HSN Code : 8538

Description	External			
	Cat. No.	MRP [₹]	Std. Pkg.	
Spreader Terminals				
XA2 - 4 Pole	XB12A2250FPST	2250	Set of 8	
Rotary Handle				
XA2	Direct ROM	XB1A2ROHD	1360	1
	Extended ROM	XB1A2ROHE	1740	1

XF3/XA3 With Thermal - Magnetic Release:

RATING (A) I _{cu} (kA)	320	400	500	630
36	XF3 - 3 Pole			
50	XF3 - 3 Pole			
50	XA3 - 4 POLE			

HSN Code : 8536

XF3 Frame - 3 Pole

- Conforms to IS/IEC 60947-2
- Range: 320A - 630A
- High Performance Compact Size
- Suitability for Isolation
- Rated at 50 C °
- Line Load Interchangeability
- Double Insulation
- Thermal Magnetic Trip unit



XF3 Frame :
I_{cu}/I_{cs} = 36/36, 50/50 kA

Type	Release Range (A)	Breaking Capacity I _{cu} /I _{cs} at 415V AC	3 Pole		Std. Pkg.
			Cat. No.	MRP [₹]	
XF3 range	320	36/36kA	XF3N320PV	30840	1
	400		XF3N400PV	32360	1
	500		XF3N500PV	38790	1
	630		XF3N630PV	42340	1
	320	50/50kA	XF3H320PV	33090	1
	400		XF3H400PV	34910	1
	500		XF3H500PV	42270	1
	630		XF3H630PV	45030	1

Note: Phase barriers are supplied along with all MCCBs.

Spreader terminals available as standard.

(For MCCB without spreader, please contact our nearest branch)

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

XA3 Frame - 4 Pole

- Conforms to IS/IEC 60947-2
- Range: 320A to 400A, 4P
- Compact size
- Wide Range of snap fit Internal and External Accessories
- Adjustable Overload Setting: 0.8 - 1.0 x I_n



XA3 Frame :
I_{cu}/I_{cs} = 50/25 kA

HSN Code : 8536

Type	Release Range (A)	Breaking Capacity I _{cu} /I _{cs} at 415V AC	4 Pole		Std. Pkg.
			Cat. No.	MRP [₹]	
XA3 Range	400	50/25kA	XA3H400NV4	34070	1

Note: Phase barriers are supplied along with all MCCBs.

Spreader terminals available as accessories.

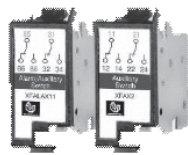
Accessories - XF3/XA3 Frame MCCBs:



Shunt Release



UV Release



ATAC



Extended Rotary Handle



Accessories for XF3 range - 3 Pole

HSN Code : 8538

Description	Internal		
	Cat. No.	MRP [₹]	Std. Pkg.
Auxiliary + Trip Alarm Contact			
1 C/O + 1C/O	XFALAX11	1700	1
2 C/O	XFAX2	1700	1
Shunt Release			
220V - 415V F3 (XF3 range)	XF3SHT220V	2470	1
Under Voltage Release			
240V F3	XF3UV240VA	3090	1
415V F3	XF3UV415VA	3090	1

HSN Code : 8538

Description	External		
	Cat. No.	MRP [₹]	Std. Pkg.
Extended Rotary Handle	F3ROHE	4310	1
Phase Barriers	F3PB	280	Set of 4



Auxiliary Contact



ATAC



Shunt Release



UV Release



Spreader Terminals



Direct ROM



Extended ROM

Accessories for XA3 MCCBs - 4 Pole

HSN Code : 8538

Description	Internal		
	Cat. No.	MRP [₹]	Std. Pkg.
Auxiliary Contact			
1 C/O	XB234A3AUX1	1150	1
2 C/O	XB234A3AUX2	2230	1
Trip Alarm Contact			
1 C/O - Right	XB234ALR1	1220	1
Auxiliary + Trip Alarm Contact			
1 C/O + 1C/O - Right	XB234ALAX1	2240	1
Shunt Release			
110/240/415V AC , 110/220V DC	XB234A3SHTUNI	2900	1
Under Voltage Release			
240V AC - Left	XB23UV240V	4030	1

HSN Code : 8538

Description	External		
	Cat. No.	MRP [₹]	Std. Pkg.
Spreader Terminals			
4 Pole	XB3400FPST	4720	Set of 8
Rotary Handle			
Direct ROM	XB3A3ROHD	2100	1
Extended ROM	XB3A3ROHE	3460	1

XB0/XB1 Range With Thermal - Magnetic Release:

RATING (A) I _{cu} =I _{cs} (kA)	100	125	160	200	250	320	400	630
25	XB0 - 4 Pole							
25		XB1 - 4 Pole						
36	XB0 - 4 Pole			XB2 - 4 Pole		XB3S - 4 Pole		
36		XG1 - 4 Pole				XB3 - 4 Pole		XB3 - 4 Pole
50		XG1 - 4 Pole						XB3 - 4 Pole
50				XB2 - 4 Pole		XB3 - 4 Pole		

XG1 Frame - 4 Pole

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



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

XB Range - 4 Pole

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



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

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

HSN Code : 8536

Type	Release Range (A)	Breaking Capacity I _{cu} /I _{cs}	4 Pole		Std. Pkg.	
			Cat. No.	MRP [₹]		
XB0	40	36/18kA	XB0L040NV4	11140	1	
	63		XB0L063NV4	10840	1	
	100		XB0V100NV4	10840	1	
	125		XB0N125NV4	12590	1	
XB1	63	25/25kA	XB0S063PV4	11280	1	
	100		XB0S100PV4	11280	1	
	125		XB1E125PV4	14200	1	
	160		XB1E160PV4	18330	1	
	200		XB1E200PV4	22040	1	
	250		XB1E250PV4	25090	1	
XG1	100	36/36kA	XG1N100PV4	13460	1	
	125		XG1N125PV4	15270	1	
	160		XG1N160PV4	19340	1	
XB2	200		XB2N200PV4	28800	1	
	250		XB2N250PV4	30540	1	
XB3S	320		XB3SN320PV4	37250	1	
	400		XB3SN400PV4	37250	1	
XB3	320		XB3N320PV4	47450	1	
	630		XB3N630PV4	51490	1	
XG1	125		50/50kA	XG1H125PV4	21320	1
	160			XG1H160PV4	25100	1
XB2	200			XB2H200PV4	33960	1
	250	XB2H250PV4		34790	1	
XB3	320	XB3H320PV4		40470	1	
	400	XB3H400PV4		40470	1	
XB3	630	XB3H630PV4		56960	1	

General Information

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

Special Applications

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

@ Motorized version available for XB2 AND XB3 Frames

* XB0 : I_{cs} = 50% I_{cu}

** For XB0, XB1, XB3S Short circuit setting : 9 I_n

XG1/XB Range With Microprocessor Release:

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

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



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

XB-BMR (LSI)

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



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

XG1-GMR (LSI)

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

HSN Code : 8536

Type	Release Range (A)	Breaking Capacity I _{cu} /I _{cs}	3 Pole		4 Pole		Std. Pkg.
			Cat. No.	MRP [₹]	Cat. No.	MRP [₹]	
XG1	10-40	36/36kA	XG1L040PE3-LSI	18140	XG1L040PE4-LSI	22820	1
	16-63		XG1L063PE3-LSI	18140	XG1L063PE4-LSI	22820	1
	25-100		XG1L100PE3-LSI	18140	XG1L100PE4-LSI	22820	1
	40-160		XG1N160PE3-LSI	22970	XG1N160PE4-LSI	31910	1
XB2	100-250	50/50kA	XB2N250PE3-LSI	31700	XB2N250PE4-LSI	43440	1
	160-400		XB3N400PE3-LSI	39310	XB3N400PE4-LSI	48530	1
250-630			XB3N630PE3-LSI	43820	XB3N630PE4-LSI	57010	1
	XG1		10-40	XG1V040PE3-LSI	21620	XG1V040PE4-LSI	29980
16-63		XG1V063PE3-LSI	21620	XG1V063PE4-LSI	29980	1	
25-100		XG1V100PE3-LSI	21620	XG1V100PE4-LSI	29980	1	
40-160		XG1H160PE3-LSI	28290	XG1H160PE4-LSI	37010	1	
XB2	100-250	50/50kA	XB2H250PE3-LSI	36270	XB2H250PE4-LSI	46430	1
	160-400		XB3H400PE3-LSI	43020	XB3H400PE4-LSI	55490	1
250-630			XB3H630PE3-LSI	47210	XB3H630PE4-LSI	61570	1
	XB4		320-800	XB4H800PE3-LSI	70920	XB4H800PE4-LSI	89310
400-1000		XB4H1000PE3-LSI	99250	XB4H1000PE4-LSI	143620	1	
500-1250		XB4H1250PE3-LSI	123840	XB4H1250PE4-LSI	167580	1	

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

General Information

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

XF3 Range With Microprocessor Release - LSIG (3 Pole)



XF3 Frame - LSIG :
I_{cu}/I_{cs} = 36/36, 50/50 kA

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

HSN Code : 8536

Type	Release Range (A)	Breaking Capacity I _{cu} /I _{cs} at 415V AC	3 Pole		Std. Pkg.
			Cat. No.	MRP [₹]	
XF3 range	160 - 400	36/36kA	XF3N400PE-LSIG	51600	1
	250 - 630		XF3N630PE-LSIG	56210	1
	160 - 400	50/50kA	XF3H400PE-LSIG	55180	1
	250 - 630		XF3H630PE-LSIG	60560	1

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

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



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

XB-BMR (LSIG)

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



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

XG1-GMR (LSIG)

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

With Microprocessor Release BMR2.0 & GMR3 :

HSN Code : 8536

Type	Release Range (A)	Breaking Capacity I _{cu} /I _{cs}	3 Pole		4 Pole		Std. Pkg.	
			Cat. No.	MRP [₹]	Cat. No.	MRP [₹]		
XG1	10-40	36/36kA	XG1L040PE3-LSIG	33290	XG1L040PE4-LSIG	38320	1	
	16-63		XG1L063PE3-LSIG	33290	XG1L063PE4-LSIG	38320	1	
	25-100		XG1L100PE3-LSIG	33290	XG1L100PE4-LSIG	38320	1	
	40-160		XG1N160PE3-LSIG	37820	XG1N160PE4-LSIG	46880	1	
XB2	40-100		-	-	XB2V100PE4-LSIG	42920	1	
	63-160		-	-	XB2N160PE4-LSIG	52510	1	
	100-250		XB2N250PE3-LSIG	44020	XB2N250PE4-LSIG	54120	1	
XB3	160-400		XB3N400PE3-LSIG	53140	XB3N400PE4-LSIG	61570	1	
	250-630		XB3N630PE3-LSIG	57600	XB3N630PE4-LSIG	70460	1	
XG1	10-40		50/50kA	XG1V040PE3-LSIG	36200	XG1V040PE4-LSIG	43190	1
	16-63			XG1V063PE3-LSIG	36200	XG1V063PE4-LSIG	43190	1
	25-100			XG1V100PE3-LSIG	36200	XG1V100PE4-LSIG	43190	1
	40-160	XG1H160PE3-LSIG		43620	XG1H160PE4-LSIG	51990	1	
XB2	40-100	-		-	XB2L100PE4-LSIG	48370	1	
	63-160	-		-	XB2H160PE4-LSIG	56160	1	
	100-250	XB2H250PE3-LSIG		47000	XB2H250PE4-LSIG	57160	1	
XB3	160-400	XB3H400PE3-LSIG		56380	XB3H400PE4-LSIG	66030	1	
	250-630	XB3H630PE3-LSIG		61250	XB3H630PE4-LSIG	78910	1	
XB4	320-800	XB4H800PE3-LSIG		98160	XB4H800PE4-LSIG	117660	1	
	400-1000	XB4H1000PE3-LSIG		126430	XB4H1000PE4-LSIG	169180	1	
	500-1250	XB4H1250PE3-LSIG		148120	XB4H1250PE4-LSIG	191610	1	

@ Motorized version available for XB2 and XB3 Frames

General Information

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

MCCB BCH

Accessories - XB/XG1 Range MCCBs:

HSN Code : 8538



Auxiliary contact



TAC



Shunt Release



UV Release

Description	Internal		
	Cat. No.	M.R.P	Std. Pkg.
Auxiliary Contact			
XB0, XB1 - 1 C/O - Right	XB01A12AUX1	990	1
XB0, XB1 - 2 C/O - Right	XB01A12AUX2	1760	1
XG1 - 1 C/O	XG1AUX1	990	1
XB2, XB3S, XB3, XB4 - 1 C/O	XB234A3AUX1	1150	1
XB2, XB3S, XB3, XB4 - 2 C/O	XB234A3AUX2	2230	1
Trip Alarm Contact			
XB0, XB1 - 1 C/O - Right	XB01A12ALR1	990	1
XG1 - 1 C/O	XG1AUX1	990	1
XB2, XB3S, XB3, XB4 - 1 C/O - Right	XB234ALR1	1220	1
Auxiliary 1 C/O + TAC 1 C/O			
XB0, XB1 - Right	XB01A12ALAX1	1690	1
XB2, XB3S, XB3, XB4 - Right	XB234ALAX1	2240	1
Shunt Release			
XB0, XB1 - 24V DC - Left	XB01A12SHT24V	1810	1
XB0, XB1 - 240/415V AC - Left	XB01A12SHTUNI	1970	1
XG1 - 240V AC	XG1SHT240V	2640	1
XB2, XB3S, XB3, XB4 - 110/240/415V AC, 110/220V DC	XB234A3SHTUNI	2900	1
Under Voltage Release			
XB0, XB1 - 240V AC - Left	XB01A12UV240V	3280	1
XG1 - 240V AC	XG1UV240V	3320	1
XB2, XB3S, XB3 - 240V AC - Left**	XB23UV240V	4030	1
XB4 - 240V AC - Left**	XB4UV240V	4610	1

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



Spreader terminals



Direct ROM



Extended ROM

HSN Code : 8538

Description	External		
	Cat. No.	M.R.P	Std. Pkg.
Spreader Terminals - 3 Pole			
XB0-100 - 3 Pole	XB0A1100TPST	400	Set of 6
XB0-125D - 3 Pole	XB0A1125TPST	520	Set of 6
XG1 - 160 - 3 Pole	XG160TPST	1590	Set of 6
XB1, XB2 - 250 - 3 Pole	XB12A2250TPST	1700	Set of 6
XB3S/XB3-400 - 3 Pole	XB3400TPST	3290	Set of 6
XB3-630 - 3 Pole	XB3630TPST	3810	Set of 6
XB4-800 - 3 Pole	XB4800TPST	8000	Set of 6
XB4-1000 - 3 Pole	XB41000TPST	16020	Set of 12
XB4-1250 - 3 Pole	XB41250TPST	31660	Set of 6
Spreader Terminals - 4 Pole			
XB0-100 - 4 Pole	XB0A1100FPST	630	Set of 8
XB0-125D - 4 Pole	XB0A1125FPST	750	Set of 8
XG1 - 160 - 4 Pole	XG160FPST	2100	Set of 8
XB1, XB2 - 250 - 4 Pole	XB12A2250FPST	2250	Set of 8
XB3S/XB3-400 - 4 Pole	XB3400FPST	4720	Set of 8
XB3-630 - 4 Pole	XB3630FPST	4830	Set of 8
XB4-800 - 4 Pole	XB4800FPST	10220	Set of 8
XB4-1000 - 4 Pole	XB41000FPST	20440	Set of 16
XB4-1250 - 4 Pole	XB41250FPST	40500	Set of 8

Note: Phase barriers are supplied along with MCCBs

HSN Code : 8538

Description	External		
	Cat. No.	M.R.P	Std. Pkg.
Rotary Handle			
XB0 Direct ROM	XB0A1ROHD	1270	1
XB1 Direct ROM	XB1A2ROHD	1360	1
XG1 Direct ROM	XG1ROHD	1390	1
XB2 Direct ROM	XB2ROHD	1400	1
XB3S, XB3 Direct ROM	XB3A3ROHD	2100	1
XB0 Extended ROM	XB0A1ROHE	1640	1
XB1 Extended ROM	XB1A2ROHE	1740	1
XG1 Extended ROM	XG1ROHE	1880	1
XB2 Extended ROM	XB2ROHE	2120	1
XB3S, XB3 Extended ROM	XB3A3ROHE	3460	1
XB4 Extended ROM	XB4ROHE	4390	1
Stored Energy Electrical Operating Mechanism			
XB2 - 240V AC*		30890	
XB3 - 240V AC*		38740	

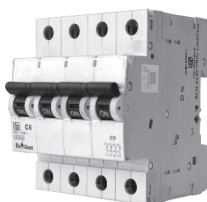
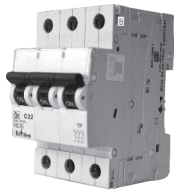
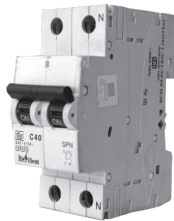
* Available as customised factory fitted solutions, please contact nearest sales office

New HSN Code : 8536



Salient Features:

- Line load interchangeability
- Suitable for isolation
- Suitable for IT systems
- Current limiting design
- 45mm panel cutout, suitable for standard MCB distribution boards
- Possibility of busbar termination at both ends



Pole	Standard pack of	Rating	B Curve Cat. No.	MRP (per unit) [₹]	C Curve Cat. No.	MRP (per unit) [₹]	Rating	Lower Rating Cat. No.	MRP (per unit) [₹]
1P	12 units	6A	BCHX10SPB06	260	BCHX10SPC06	260	0.5A 1A 2A 3A 4A 5A	BCHX10SPCL5	420
		10A	BCHX10SPB10	260	BCHX10SPC10	260		BCHX10SPC01	420
		16A	BCHX10SPB16	260	BCHX10SPC16	260		BCHX10SPC02	420
		20A	BCHX10SPB20	260	BCHX10SPC20	260		BCHX10SPC03	420
		25A	BCHX10SPB25	260	BCHX10SPC25	260		BCHX10SPC04	420
		32A	BCHX10SPB32	260	BCHX10SPC32	260		BCHX10SPC05	420
		40A	BCHX10SPB40	590	BCHX10SPC40	590			
		50A	BCHX10SPB50	590	BCHX10SPC50	590			
1P+N	6 units	6A			BCHX10SNC06	765			
		10A			BCHX10SNC10	765			
		16A			BCHX10SNC16	765			
		20A			BCHX10SNC20	765			
		25A			BCHX10SNC25	765			
		32A			BCHX10SNC32	765			
		40A			BCHX10SNC40	1145			
		50A			BCHX10SNC50	1145			
2P	6 units	6A	BCHX10DPB06	825	BCHX10DPC06	825	0.5A 1A 2A 3A 4A 5A	BCHX10DPCL5	1165
		10A	BCHX10DPB10	825	BCHX10DPC10	825		BCHX10DPC01	1165
		16A	BCHX10DPB16	825	BCHX10DPC16	825		BCHX10DPC02	1165
		20A	BCHX10DPB20	825	BCHX10DPC20	825		BCHX10DPC03	1165
		25A	BCHX10DPB25	825	BCHX10DPC25	825		BCHX10DPC04	1165
		32A	BCHX10DPB32	825	BCHX10DPC32	825		BCHX10DPC05	1165
		40A	BCHX10DPB40	1295	BCHX10DPC40	1295			
		50A	BCHX10DPB50	1295	BCHX10DPC50	1295			
3P	4 units	6A	BCHX10TPB06	1305	BCHX10TPC06	1305	0.5A 1A 2A 3A 4A 5A	BCHX10TPCL5	1600
		10A	BCHX10TPB10	1305	BCHX10TPC10	1305		BCHX10TPC01	1600
		16A	BCHX10TPB16	1305	BCHX10TPC16	1305		BCHX10TPC02	1600
		20A	BCHX10TPB20	1305	BCHX10TPC20	1305		BCHX10TPC03	1600
		25A	BCHX10TPB25	1305	BCHX10TPC25	1305		BCHX10TPC04	1600
		32A	BCHX10TPB32	1305	BCHX10TPC32	1305		BCHX10TPC05	1600
		40A	BCHX10TPB40	1990	BCHX10TPC40	1990			
		50A	BCHX10TPB50	1990	BCHX10TPC50	1990			
3P+N	3 units	6A			BCHX10TNC06	1635			
		10A			BCHX10TNC10	1635			
		16A			BCHX10TNC16	1635			
		20A			BCHX10TNC20	1635			
		25A			BCHX10TNC25	1635			
		32A			BCHX10TNC32	1635			
		40A			BCHX10TNC40	2215			
		50A			BCHX10TNC50	2215			
4P	3 units	6A	BCHX10FPB06	1755	BCHX10FPC06	1755	0.5A 1A 2A 3A 4A 5A	BCHX10FPCL5	2195
		10A	BCHX10FPB10	1755	BCHX10FPC10	1755		BCHX10FPC01	2195
		16A	BCHX10FPB16	1755	BCHX10FPC16	1755		BCHX10FPC02	2195
		20A	BCHX10FPB20	1755	BCHX10FPC20	1755		BCHX10FPC03	2195
		25A	BCHX10FPB25	1755	BCHX10FPC25	1755		BCHX10FPC04	2195
		32A	BCHX10FPB32	1755	BCHX10FPC32	1755		BCHX10FPC05	2195
		40A	BCHX10FPB40	2510	BCHX10FPC40	2510			
		50A	BCHX10FPB50	2510	BCHX10FPC50	2510			
	63A	BCHX10FPB63	2565	BCHX10FPC63	2565				

HSN Code : 8536



Poles	Standard Pack of	Rating	Cat. No.	MRP (per unit) [₹]
2P	6 units	40A	BCHISODP40	525
	6 units	63A	BCHISODP63	650
3P	4 units	40A	BCHISOTP40	945
	4 units	63A	BCHISOTP63	1080
4P	3 units	40A	BCHISOFP40	1105
	3 units	63A	BCHISOFP63	1205

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	1030	BCHSPNDD04W	1765
6 WAY, SPN DB	6	BCHSPNSD06W	1050	BCHSPNDD06W	1805
8 WAY, SPN DB	8	BCHSPNSD08W	1300	BCHSPNDD08W	2075
12 WAY, SPN DB	12	BCHSPNSD12W	1700	BCHSPNDD12W	2780
16 WAY, SPN DB	16	BCHSPNSD16W	2175	BCHSPNDD16W	3555

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	3570	BCHHTPNDD04W	4475
6 WAY, HTPN DB	8+18	BCHHTPNSD06W	4285	BCHHTPNDD06W	5575
8 WAY, HTPN DB	8+24	BCHHTPNSD08W	4715	BCHHTPNDD08W	6925
12 WAY, HTPN DB	8+36	BCHHTPNSD12W	6260	BCHHTPNDD12W	9915

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	10185
6 WAY, DD, MCB I/C, VERTICAL TPN DB	BCHVTPNDD06W-A	8+18	12755
8 WAY, DD, MCB I/C, VERTICAL TPN DB	BCHVTPNDD08W-A	8+24	14365
12 WAY, DD, MCB I/C, VERTICAL TPN DB	BCHVTPNDD12W-A	8+36	18350

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	13880
8 WAY, DD, 125A, MCCB I/C, VERTICAL TPN DB	BCHVTPNDD08W-B	FRAME 1	16905
12 WAY, DD, 125A, MCCB I/C, VERTICAL TPN DB	BCHVTPNDD12W-B	FRAME 1	21555
4 WAY, DD, 250A, MCCB I/C, VERTICAL TPN DB	BCHVTPNDD04W-C	FRAME 2	16910
8 WAY, DD, 250A, MCCB I/C, VERTICAL TPN DB	BCHVTPNDD08W-C	FRAME 2	20670
12 WAY, DD, 250A, MCCB I/C, VERTICAL TPN DB	BCHVTPNDD12W-C	FRAME 2	24135

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	16025
6 WAY, DD, 7 SEGMENT PHASE SEGREGATED DB	BCHPHSGDD06W	8+12+18	18055
8 WAY, DD, 7 SEGMENT PHASE SEGREGATED DB	BCHPHSGDD08W	8+12+24	20160
12 WAY, DD, 7 SEGMENT PHASE SEGREGATED DB	BCHPHSGDD12W	8+12+36	25615

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		18725
6 WAY, 40A, DD, PHASE SELECTOR DB	BCHPHSLDD06W-40		18780
8 WAY, 40A, DD, PHASE SELECTOR DB	BCHPHSLDD08W-40		21350
12 WAY, 40A, DD, PHASE SELECTOR DB	BCHPHSLDD12W-40		24490
4 WAY, 63A, DD, PHASE SELECTOR DB	BCHPHSLDD04W-63		19590
6 WAY, 63A, DD, PHASE SELECTOR DB	BCHPHSLDD06W-63		20045
8 WAY, 63A, DD, PHASE SELECTOR DB	BCHPHSLDD08W-63		22105
12 WAY, 63A, DD, PHASE SELECTOR DB	BCHPHSLDD12W-63		24490

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	7325
3 ROW, 13 MODULE, DD, ROW DB	BCHROWDB3R13	13	8630
4 ROW, 13 MODULE, DD, ROW DB	BCHROWDB4R13	13	9560

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		1400
SPN-20A, P&S DB	BCHPSDBSPN20		1400
TPN-20A, P&S DB	BCHPSDBTPN20		4030
TPN-30A, P&S DB	BCHPSDBTPN30		4030

HSN Code : 8537



Description	Cat. No.	No. of Modules (Incoming + Outgoing)	MRP [₹]
SP, ONE WAY MCB DB	BCHOWMCBDBSP		575
DP, ONE WAY MCB DB	BCHOWMCBDBDP		575
TP, ONE WAY MCB DB	BCHOWMCBDBTP		620
FP, ONE WAY MCB DB	BCHOWMCBDBFP		620



RCCB, Double Pole

HSN Code : 8536

Description	Cat. No.	MRP [₹]
25A - 30mA	BCHRCB030DPC25	3230
40A - 30mA	BCHRCB030DPC40	3305
63A - 30mA	BCHRCB030DPC63	4440
25A - 100mA	BCHRCB100DPC25	3265
40A - 100mA	BCHRCB100DPC40	3385
63A - 100mA	BCHRCB100DPC63	4535
25A - 300mA	BCHRCB300DPC25	3265
40A - 300mA	BCHRCB300DPC40	3625
63A - 300mA	BCHRCB300DPC63	4535

All above RCCB's are 'AC' type



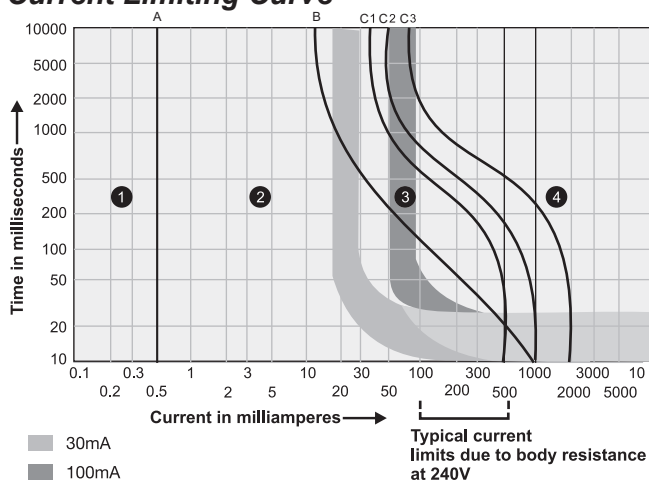
RCCB, Four Pole

HSN Code : 8536

Description	Cat. No.	MRP [₹]
25A - 30mA	BCHRCB030FPC25	4165
40A - 30mA	BCHRCB030FPC40	4290
63A - 30mA	BCHRCB030FPC63	4830
25A - 100mA	BCHRCB100FPC25	4290
40A - 100mA	BCHRCB100FPC40	4470
63A - 100mA	BCHRCB100FPC63	4830
25A - 300mA	BCHRCB300FPC25	4290
40A - 300mA	BCHRCB300FPC40	4490
63A - 300mA	BCHRCB300FPC63	4830

All above RCCB's are 'AC' type

Current Limiting Curve



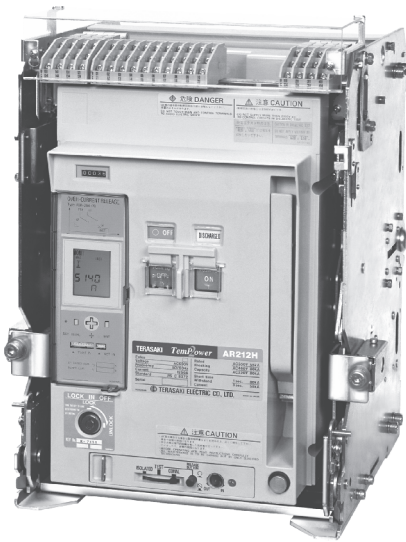
Effect of Current

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.

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

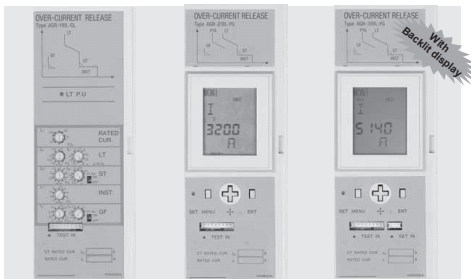
TemPower2 provides positive protection for electric power systems.

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

- | | |
|----------------------|----------------------------------|
| Standard | ▪ N-phase protection |
| ▪ Long time delay | ▪ Earth leakage |
| ▪ Short time delay | ▪ Two channel pre trip |
| ▪ Instantaneous | ▪ Advance LCD display |
| Optional | ▪ 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

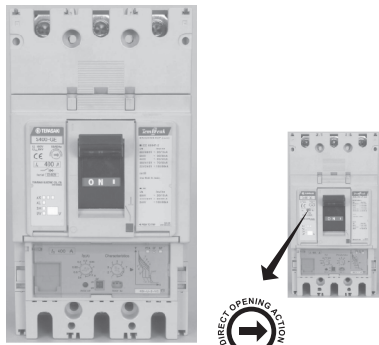
Over current releases (OCR)	Functions	MRP [₹]
AGR-11BL-GL	LSIG*	On Request
AGR-21BL-PS	LSI with LCD display	On Request
AGR-21BL-PG	LSIG with LCD & Communication	On Request
AGR-31BL-PS	LSI with LCD display with energy metering, earth leakage and PTA	On Request
AGR-31BL-PG	LSIG with LCD display with energy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

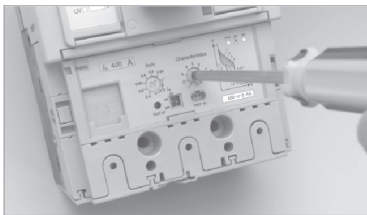
Total Protection Complete Control



TemBreak



User friendly adjustment



Clear Trip Indication



OFF



ON



TRIP

Tembreak 2 MCCB

HSN Code : 8536

Frame	Pole	Current (A)	Breaking Capacity Icu/Ics	Type	Cat. No.	MRP [₹]
E100SF	3	10-100	10/5kA	Fix-Thermal	XT2E100SF3F■U0	On request
S160SCF	3	15-160	25/12.5kA	Fix-Thermal	XT2S160SCF3F■U0	On request
	4				XT2S160SCF4F■U0	On request
S160SCJ	3	25-160	25/12.5kA	Adj-Thermal	XT2S160SCJ3F■U0	On request
	4				XT2S160SCJ4F■U0	On request
E400NJ	3	250-400	25/25kA	Adj-Thermal	XT2E400NJ3F■U0	On request
	4				XT2E400NJ4F■U0	On request
S250NJ	3	160-250	36/36kA	Adj-Thermal	XT2S250NJ3F■U0	On request
	4				XT2S250NJ4F■U0	On request
S400CJ	3	400	36/36kA	Adj-Thermal	XT2S400CJ3F■U0	On request
	4				XT2S400CJ4F■U0	On request
S800CJ	3	630-800	36/36kA	Adj-Thermal	XT2S800CJ3F■U0	On request
	4				XT2S800CJ4F■U0	On request
S250NE	3	125-250	36/36kA	Electronic	XT2S250NE3F■U0	On request
	4				XT2S250NE4F■U0	On request
E630NE	3	630	36/36kA	Electronic	XT2E630NE3F■U0	On request
	4				XT2E630NE4F■U0	On request
S400NF	3	125-400	50/50kA	Fix-Thermal	XT2S400NF3F■U0	On request
	4				XT2S400NF4F■U0	On request
S800NF	3	630-800	50/50kA	Fix-Thermal	XT2S800NF3F■U0	On request
	4				XT2S800NF4F■U0	On request
S400NJ	3	250-400	50/50kA	Adj-Thermal	XT2S400NJ3F■U0	On request
	4				XT2S400NJ4F■U0	On request
S800NJ	3	630-800	50/50kA	Adj-Thermal	XT2S800NJ3F■U0	On request
	4				XT2S800NJ4F■U0	On request
S400NE	3	250-400	50/50kA	Electronic	XT2S400NE3F■U0	On request
	4				XT2S400NE4F■U0	On request
S630CE	3	630	50/50kA	Electronic	XT2S630CE3F■U0	On request
	4				XT2S630CE4F■U0	On request
S800NE	3	800	50/50kA	Electronic	XT2S800NE3F■U0	On request
	4				XT2S800NE4F■U0	On request
S1000SE	3	1000	50/50kA	Electronic	XT2S1000SE3F■U0	On request
	4				XT2S1000SE4F■U0	On request
S1250SE	3	1250	50/50kA	Electronic	XT2S1250SE3F■U0	On request
	4				XT2S1250SE4F■U0	On request
S1600SE	3	1600	50/50kA	Electronic	XT2S1600SE3F■U0	On request
	4				XT2S1600SE4F■U0	On request

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

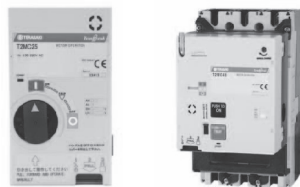
Accessories are mentioned on page no 25

* For more details refer product catalogue

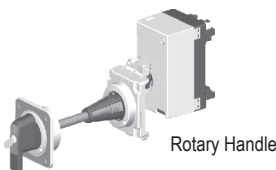
ACCESSORIES *TemBreak* MCCB..... BCH

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			On Request
Alarm Switch	1 Change over	T2AL00M3SWA			On Request
Shunt Release	100-120VAC	T2SH00A10WA			On Request
Shunt Release	200-240VAC	T2SH00A20WA			On Request
Shunt Release	380-450VAC	T2SH00A40WA			On Request
UV Release	200-240VAC	T2UV00A20NWA			On Request
UV Release	380-450VAC	T2UV00A40NWA			On Request
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			On Request
Rotary Handle	Panel Mounted (IP54)		T2HP25R5BNA		On Request
Rotary Handle	Panel Mounted (IP54)			T2HP40R5BNA	On Request
				T2HP80R5BNA	On Request

Extended Terminals for All TEMBREAK-2 MCCBs

HSN Code : 8538

Frame	For	Cat. No.	MRP [₹]
125A FRAME	3 Pole	ACMTP1253	On Request
	4 Pole	ACMTP1254	On Request
160A/250A FRAME	3 Pole	ACMTP2503	On Request
	4 Pole	ACMTP2504	On Request
400A FRAME	3 Pole	ACMTP4003	On Request
	4 Pole	ACMTP4004	On Request

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	2420
32A	PSFS323ND000	DIN	TPN	2420
32A	PSFS323NB	Bolted	TPN	2420
32A	PSFS323B	Bolted	TP	2370
63A	PSFS633ND00	DIN	TPN	3440
63A	PSFS633ND000	DIN	TPN	3440
63A	PSFS633NB	Bolted	TPN	3350
63A	PSFS633B	Bolted	TP	3260
100	PSFS1003*	DIN/Bolted	TP	6900
100	PSFS1003N*	DIN/Bolted	TPN	7230
125	PSFS1253*	DIN/Bolted	TP	9120
125	PSFS1253N*	DIN/Bolted	TPN	9780
160	PSFS1603*	DIN/Bolted	TP	10020
160	PSFS1603N*	DIN/Bolted	TPN	10890
200	PSFS2003B	Bolted	TP	11360
200	PSFS2003NB	Bolted	TPN	11670

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

Switch Disconnecter

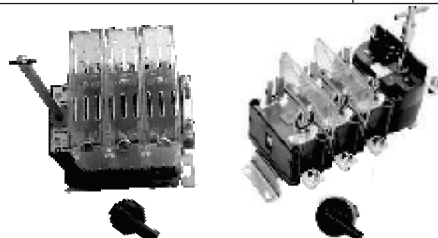
HSN Code : 8536

Rating (A) AC-23A	Cat No.	Fuse Type	Type	MRP [₹]
32A	PSSD323N	-	TPN	2220
63A	PSSD633N	-	TPN	3050
100A	PSSD1003N	-	TPN	6580
125A	PSSD1253N	-	TPN	8180
160A	PSSD1603N	-	TPN	9210
200A	PSSD2003N	-	TPN	9460

Fuse Switch Units Type FS

HSN Code : 8538

Rating (A) AC-23A	Cat No.	Fuse Type	Type	MRP [₹]
32A	FS0N	BOLTED	TP	2610
63A	FS1N	BOLTED	TP	3520
Shroud	AC21TS			220
1NO+1NC	AC21EB11	for FS0 / FS1N		640
Neutral	AC21L	for FS0 / FS1N-		290
Handle assembly-32A	SP21FS0H	for FS0		420
Handle assembly-63A	SP21FS1H	for FS1		420



Switch Disconnecter Fuse

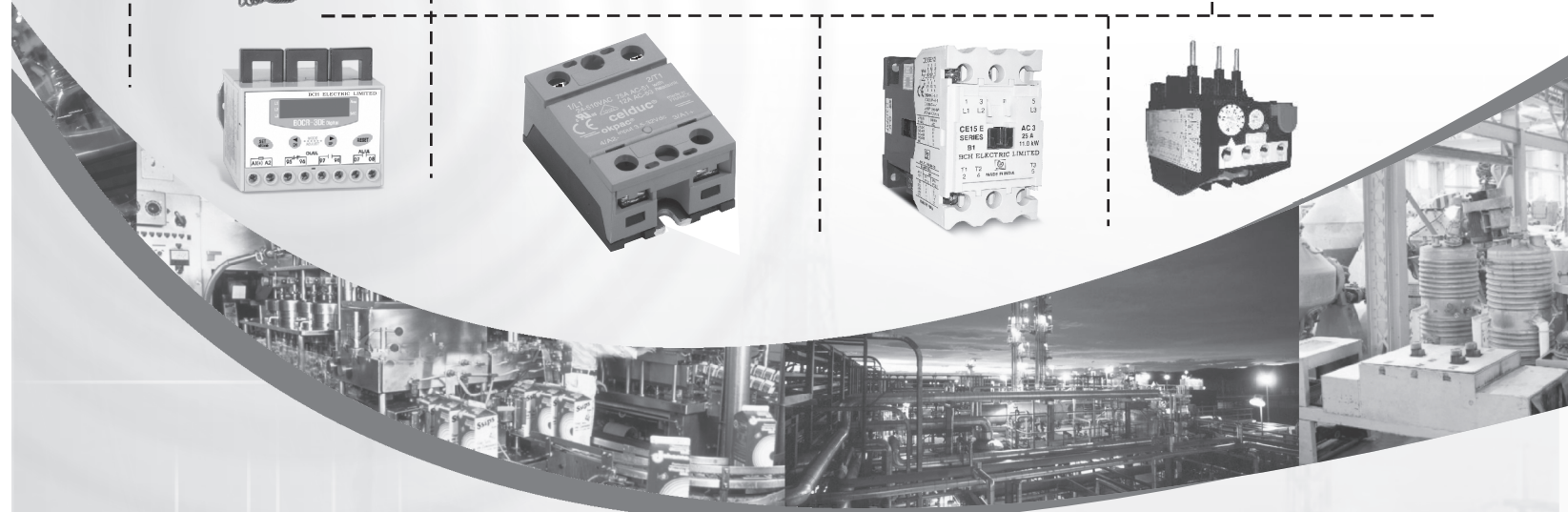
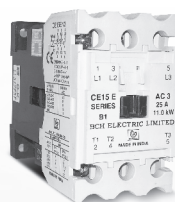
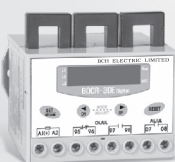
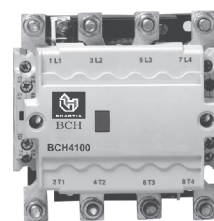
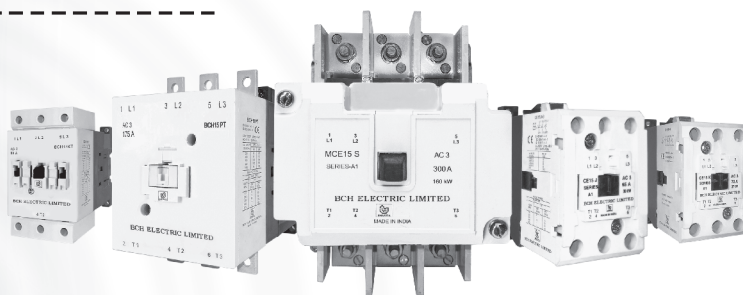
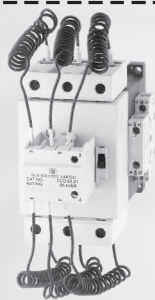
- Conforms to IS 13947-3
- TPN/TP version
- AC 23A duty
- Mechanism with 4 Breaks per pole
- Handle with door interlock and padlock



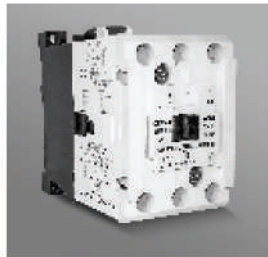
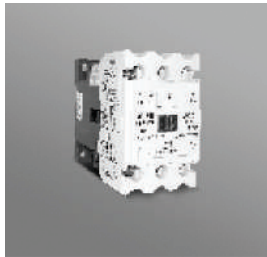
Controlgear

- 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**



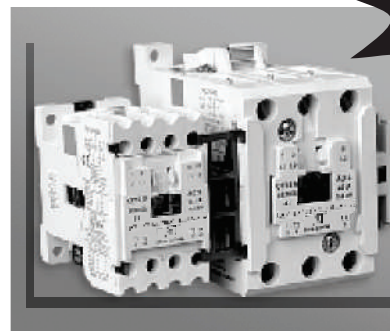
FREEDOM RANGE



- 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

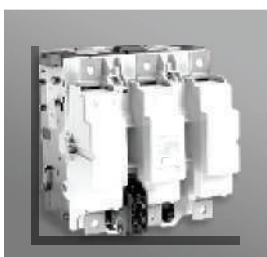


Interlocking 2 Different frames using a common Mechanical Interlock (Upto 75A)



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

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	1260	1
					1NC	CE15ANC3 ■ B-N		
B	20	9.1	5.5	4	1NO	CE15BNS3 ■ B-N	1300	
					1NC	CE15BNC3 ■ B-N		
C	20	12	7.5	5.5	1NO	CE15CNS3 ■ B-N	1490	
					1NC	CE15CNC3 ■ B-N		
D	32	16	10	7.5	1NO	CE15DN3. ■ B10-N	1680	
					1NC	CE15DN3. ■ B01-N		
	32	18	10	7.5	1NO	CE15D1N3. ■ B10-N	1690	
					1NC	CE15D1N3. ■ B01-N		
E	40	25	15	11	1NO	CE15EN3. ■ B10-N	2340	
					1NC	CE15EN3. ■ B01-N		
F	40	32	20	15	1NO	CE15FN3. ■ B10-N	4650	
					1NC	CE15FN3. ■ B01-N		
G	60	40	30	22	1NO+1NC	CE15GN3 ■	7030	
					-	CE15GN3 ■ NB	6660	
H	75	50	33.5	25	1NO+1NC	CE15HN3 ■	8850	
					-	CE15HN3 ■ NB	8510	
J	80	65	50	37	1NO+1NC	CE15JN3 ■	12030	
					-	CE15JN3 ■ NB	11690	
K	80	73	50	37	1NO+1NC	CE15KN3 ■	12360	
					-	CE15KN3 ■ NB	11970	
	80	75	50	37	1NO+1NC	CE15K1N3 ■	12470	
					-	CE15K1N3 ■ NB	12030	
K-1	115	80	53	40	1NO+1NC	BCH15KT.3.11. ■	13790	
L	125	95	62	47	1NO+1NC	BCH15LT.3.11. ■	16660	
M	135	110	80	60	1NO+1NC	BCH15MT.3.11. ■	20460	
N	230	150	100	75	1NO+1NC	BCH15NT.3.11. ■	27220	
P	250	175	125	95	1NO+1NC	BCH15PT.3.11. ■	33930	
R	300	200	150	100	1NO+1NC	MCE15RN3 ■ 7	41160	
S0	315	265	186	140	1NO+1NC	MCE15S0N3 ■ 7	48730	
S	315	300	220	160	1NO+1NC	MCE15SN3 ■ 7	53810	

Freedom Series 3 Pole AC/DC Control

HSN Code : 8536

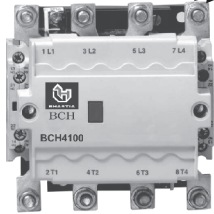
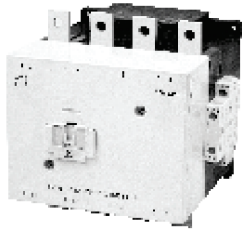
Size	AC1 Rating(A)	AC3 Rating 415 V			Aux. Contact	Cat. No.	MRP [₹]
		A	HP	KW			
BCH54	600	400	320	240	2NO+2NC	BCH54.3.22. ■	69030
BCH55	600	450	320	240	2NO+2NC	BCH55.3.22. ■	88770
BCH57	760	550	420	315	2NO+2NC	BCH57.3.22. ■	100060
BCH62	1000	700	533	400	2NO+2NC	BCH62.3.22. ■	177600
BCH64	1000	860	666	500	2NO+2NC	BCH64.3.22. ■	286540
BCH76	1200	1000	800	600	1NO+2NC	BCH76.3.12. ■	519820
BCH78	1350	1200	933	700	1NO+2NC	BCH78.3.12. ■	550950

■ For Standard Coil Voltage Codes refer page 37

■ 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



- 20A to 400A AC1 (4 Pole)
- As per IS/IEC 60947-4-1
- Wide band coil 40A to 100A AC1

Freedom series 4 Pole contactors (AC Control)

HSN Code : 8536

AC1 rating (A)	Cat No.	Aux Contact	MRP [₹]
20	CE15CN4-B-N	#	1760
40	BCH4040	#	2650
63	BCH4063	#	6720
80	BCH4080	#	10410
100	BCH4100	#	13440
130	BCH4130	#	15690
160	BCH15MNO.4.11.	1NO+1NC	21280
200	BCH15MN.4.11.	1NO+1NC	25200
250	BCH15NN.4.11.	1NO+1NC	27830
300	BCH15PN.4.11.	1NO+1NC	49820
400	BCH4400	2NO+2NC	86500

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

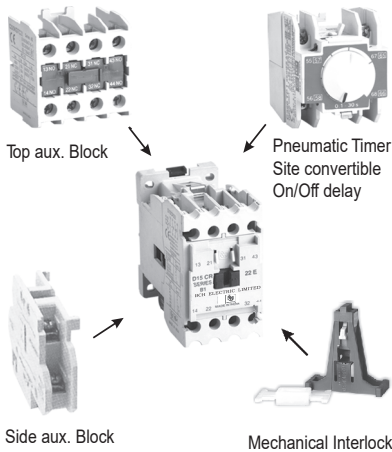
Contactor : 3 Pole DC Control Type CE15

HSN Code : 8536

AC3 (A) at 415VAC	KW	Aux Contact	Cat No.	MRP [₹]
6	2.2	1NC	CE15ANC3-N	1780
		1NO	CE15ANS3-N	
9	4.4	1NC	CE15BNC3-N	1900
		1NO	CE15BNS3-N	
12	5.5	1NC	CE15CNC3-N	2000
		1NO	CE15CNS3-N	
16	7.5	-	CE15DN3-N	2420
25	11	-	CE15EN3-N	3270
32	15	-	CE15FN3-N	6920
40	22	-	CE15GN3	8350
50	25	-	CE15HN3	10640
65	37	-	CE15JN3	12660
73	37	-	CE15KN3	14910
75	37	-	CE15K1N3	14910

For Coil Voltage Codes refer Table on page 37

Common Accessories 'upto 73A'



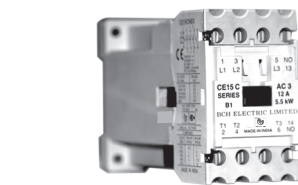
Pure DC Freedom Series 3 Pole DC Control Type CE16

HSN Code : 8536

AC3 (A) at 415VAC	KW	Aux Contact	Cat No.	MRP [₹]
9.1	4	1NO	CE16BNS3*B	1980
		1NC	CE16BNC3*B	
12	5.5	1NO	CE16CNS3*B	2090
		1NC	CE16CNC3*B	
16	7.5	1NO+1NC	CE16DN3*B	2540
25	11	1NO+1NC	CE16EN3*B	3500
32	15	1NO+1NC	CE16FN3*B	7290

*Coil Codes : DC control

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



DC Control

- Standard voltages 24VDC, 110VDC, 220VDC



Pure DC Control Relay HSN Code : 8536

Aux Contact	Cat No.	MRP [₹]
2NO+2NC	D16CR22*	2170
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	1410	2170	1

For Standard Coil Voltage Codes refer page 37

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

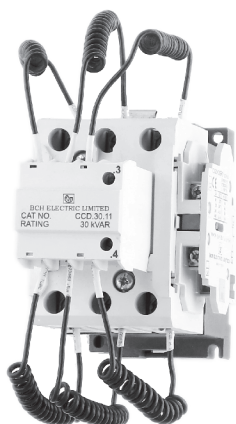
Effective from 10.05.2022

Contactors BCH



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	2490
10	CCD.10.11.▪	1NO+1NC	2710
15	CCD.15.11.▪	1NO+1NC	3960
20	CCD.20.11.▪	1NO+1NC	4650
26	CCD.26.11.▪	1NO+1NC	5810
30	CCD.30.11.▪	1NO+1NC	9070
40	CCD.40.11.▪	1NO+1NC	13820
50	CCD.50.21.▪	2NO+1NC	14530
60	CCD.60.21.▪	2NO+1NC	16300

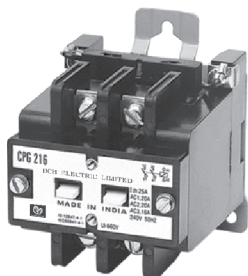
- For Standard Coil Voltage refer table on page no. 37
- For Non Standard Coil Voltages, extra MRP to be added to Contactor MRP for :
Contactor size

{ 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 37

'NHD' Series 4 Pole Contactor

HSN Code : 8536

4 Pole Contactors



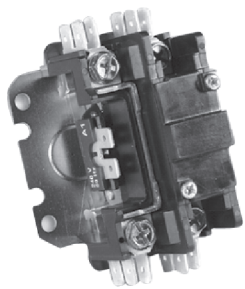
- Superior Weld Resistant Contacts
- Rugged and heavy duty
- High Grade moulding for extremely long life
- Encapsulated Coil
 - : Shock Proof & Moisture Proof
 - : Withstand large voltage fluctuations

Size	AC1 (A)	AC3 Rating at 415 V			Cat. No.	MRP [₹]	Lot Size
		(A)	HP	KW			
CP12	20	12	7.5	5.5	CP12N ▪	2515	1
00	20	16	10	7.5	C00N ▪	2870	
CP20	30	20	12.5	9.3	CP20N ▪	3695	
0	32	25	15	11	N0N ▪	5095	
01	40	32	20	15	N01N ▪	6425	
1	50	40	25	18.5	N1N ▪	7820	

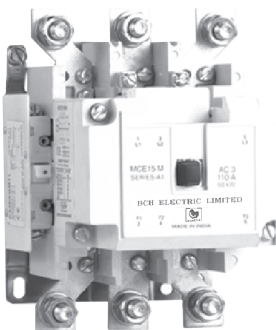
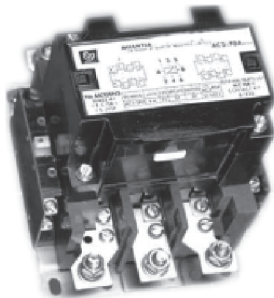
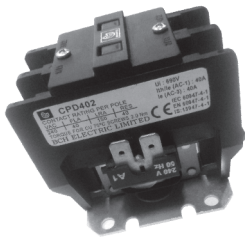
HSN Code : 8538

Description	Orientation	Cat. No.	MRP [₹]	Lot Size
Auxiliary Contact Blocks - NHD	1NO	001CB10	305	1
	1NO+1NC	001CB11	355	
	2NO	001CB20		
	2NC	001CB02		

- Standard coil voltages are 24, 110, 220/240 & 380/415 VAC, 50 Hz. For voltage codes refer Table on page 37



- 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	890	20	2P, 140-200VAC	CPD202BL	980
25	1 Pole with Neutral	CPD251NCK	910	25	2P, 220-240VAC	CPD252H	1020
40	1 Pole	CPD401CK	960	25	2P, 415VAC	CPD252M	
40	1 Pole with Neutral	CPD401NCK	1030	40	2P, 220-240VAC	CPD402H	1080
				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 ■	6340	C4NE11 ■	5930	C4NE00 ■	5260
D	40	30	22	MC10DN22 ■	10040	MC10DN11 ■	8840	MC10DN00 ■	8770
E	70	50	37	MC10EN22 ■	17990	MC10EN11 ■	17620	MC10EN00 ■	17280

■ Standard coil voltages are 24, 110, 220, 240 & 415 V AC, 50 Hz. For voltage codes refer Table on page 37

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	16390	1
M	150	95	62	47	1NO+1NC	MCE15M0N3 ■ 5	19660	
M-5	150	110	80	60	1NO+1NC	MCE15MN3 ■ 5	24050	
N	300	140	100	75	1NO+1NC	MCE15NN3 ■ 7	35870	1
Q	300	185	120	90	1NO+1NC	MCE15QN3 ■ 7	40610	

Other Freedom Series Contactors

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	1900	1
					-	CE15DN3 ■ -N	1560	
	32	18	10	7.5	1NO+1NC	CE15D1N3 ■ B-N	1910	
					-	CE15D1N3 ■ -N	1570	
E	40	25	15	11	1NO+1NC	CE15EN3 ■ B-N	2560	
					-	CE15EN3 ■ -N	2180	
F	40	32	20	15	1NO+1NC	CE15FN3 ■ B-N	4870	
					-	CE15FN3 ■ -N	4420	

■ For Standard Coil Voltage refer table on pageno. 37

■ 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

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

HSN Code : 8538

Accessories	Configuration	Cat No.	Contactors Type	MRP [₹]
 Aux. Contact Block (side Mounting)	1NO	C320KGSR10	CE15 & CR	230
	1NO+1NC	C320KGSR11		580
	1NC	C320KGSR01		230
	2NO	C320KGSR20		580
	1NO+1NC	BCH15S11	BCH15	690
	1NO+1NC	MC320KB11	MCE15R	910
	1NO+1NC (Late break type)	MC320KAS11	MCE15S0 & MCE15S	880
	2NO+2NC	EF22	BCH54 to BCH64	7120
	1NO+1NC	EB11	BCH76 to BCH78	11060
		1NO+1NC (1st left)^	BCH4A04041SL11	BCH4040
1NO+1NC (1st right)^		BCH4A04041SR11	BCH4040	820
1NO+1NC (1st left)^		BCH4A06131SL11	BCH4063-130	890
1NO+1NC (1st right)^		BCH4A06131SR11	BCH4063-130	890
4th Neutral Switching Pole	800A	NP800/5	BCH54 to 57	36570
	1000A	NP1000/6	BCH62 to 64	43480
	1000A	NP1000/7	BCH76 to 78	49500
 Aux. Contact Block (Front Mounting)	1NO	C320KGTC10	CE15, CR	230
	1NC	C320KGTC01		
	2NO	C320KGT*20		340
	2NC	C320KGT*02		
	1NO+1NC	C320KGT*11		
	2NO+2NC	C320KGT*22		
	3NO+1NC	C320KGT*31	600	
	4NO	C320KGT*40		
	1NO+3NC	C320KGT*13	BCH15	1340
	4NC	C320KGT*04		
	4NO	BCH15T40		
	3NO+1NC	BCH15T31		
	2NO+2NC	BCH15T22		1060
	1NO+1NC	BCH15T11		
1NO	BCH15T10	370		
1NC	BCH15T01			
	1NO+1NC^	BCH4A0413T11	BCH4040-063	550
	1NO+1NC (0.1 to 30 sec)	C320TP1	CE15 & CR	1630
1NO+1NC (10 to 180 sec)	C320TP2			
 Horizontal Mechanical Interlocks	-	C321KM60	CE15 & CR	530
	-	MC321KM3	MCE15R to MCE15S	1560
	Horizontal	BM5H	BCH54 to 57	9400
		BM6H	BCH62 to 64	16430
		BM7H	BCH76 to 78	43530
	Vertical	BM5V	BCH54 to 57	9400
		BM6V	BCH62 to 64	16430
		BM7V	BCH76 to 78	38630
	 Vertical Mechanical Interlocks	BM0H	BCH15KT/LT/MT	520
		BM3H	BCH15NT/PT/MN/NN/PN	570
		BCH4M0404	BCH4040	570
		BCH4M0608	BCH4063-080	1150
BCH4M1013		BCH4100-130#	5370	
BCH4M4040		BCH4400	9140	

^ Minimum order qty 10 nos.

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

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

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	510
	110-240V (50/60Hz)	MC320LR12		
Mechanical latch #	§ to complete the cat no. suffix code given	AM5- §	BCH54 to BCH57	26070
		Am6 §	BCH62 to BCH64	36880

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	790
	1NO+1NC	MC320KB11	N & Q	910
Aux. block add-on (Late break type)	1NO+1NC	MC320KAS11	L, M, M-5, N & Q	880
	1NO+1NC	AC34EA11	C4, D & E	630
Mechanical Interlock		MC321KM1	C4 & D	640
		MC321KM2	L, M, M-5 & E	700
		MC321KM3	N & Q	1560
Base block	1NO+1NC	MC320KB2	C4 & D	710
	1NO+1NC	AC35EB11	E	690

Spare Contacts set for Freedom Contactors

HSN Code : 8538

Size	Consisting of	Cat. No.	MRP [₹]
A	Complete top housing Consisting of fixed & moving contacts	SBANS3 SBANC3 SBAN4	1020
B		SBBNS3 SBBNC3 SBBN4	1080
C		SBCNS3 SBCNC3 SBCN4	1180
D		SBDN3	1430
E		SBEN3	1690
F		SBFN3	3320
G		6 Fixed contacts 3 Moving Contacts	6-65-4
H	3 springs	6-65-6	3600
J	6 Arc Bonnets	6-65-15	4890
K	3 Spring Retainer	6-65-17	5050
BCH15KT	Complete set of 6 fixed & 3 moving contacts with hardware, contact springs, spring retainers and arc runners	CP-BCH15KT-3	5410
BCH15LT		CP-BCH15LT-3	6210
BCH15MT		CP-BCH15MT-3	6690
BCH15NT		CP-BCH15NT-3	11040
BCH15PT		CP-BCH15PT-3	11040
BCH15MN0		CP-BCH15MN0-4	12650
BCH15MN		CP-BCH15MN-4	13530
BCH15NN		CP-BCH15NN-4	14850
BCH15PN		CP-BCH15PN-4	15510
R		6 Fixed contacts 3 Moving contacts 12 CSK screws & washers	6-288
S0	3 Springs Spring retainers	6-286-S0	24020
S	Self tapping screws & washers 6 Arc Chute assly & screws	6-286	24240
BCH54	Complete set of 6 fixed & 3 moving contacts with hardware, contact springs, spring retainers and arc runners	CP-BCH54-3	30250
BCH55		CP-BCH55-3	34870
BCH57		CP-BCH57-3	49140
BCH62		CP-BCH62-3	89800
BCH64		CP-BCH64-3	120420
BCH76		CP-BCH76-3	262610
BCH78		CP-BCH78-3	295090

Spare Contacts set for NHD & Citation Contactors

HSN Code : 8538

Size	Consisting of	Cat.No.	MRP [₹]
C00N N0N N01N N1N	(4 - Pole contact kit) 8 Fixed main contacts 4 Moving main contacts 4 Spring & 4 retainers	SP90A1 SP90B1 SP90D1 SP90C1	1145 2135 2640 2970
C00N N0N N01N N1N	(1 - Pole contact kit) 2 Fixed main contacts 1 Moving main contacts 1 Spring & 1 retainers	SP90A01 SP90B01 SP90D01 SP90C01	305 545 675 755
CPG216 CPG225 CPG240	4 Fixed contacts 2 Main contacts 2 Spring retainers	CPG162PSP CPG252PSP CPG402PSP	585 1480 1820
C4	6 Fixed main contacts 6 Pan head screws 6 Helical lock washers	SP34K	2790
MC10D	6 Fixed Main Contacts 3 Compression springs 3 Retainers	6-334	3840
MC10E	Same as above plus 6 Blow outs 6 M5/M4 self tapping screws	6-335	7250
L	6 Fixed Contacts 6 Pan Head Screws	6-385-L0	5580
M	6 Helical Lock Washers 3 Moving contacts	6-385-M	6280
M-5	3 Springs, 3 Retainers 6 Blowouts 6 self tapping screws	6-385	6350
N	6 Fixed contacts 12 CSK screws & washers	6-293	15450
Q	3 Moving contacts 3 Springs, Spring Retainers, Self tapping screws & Washers	6-288-Q	18490
New BCH4	Contact kit BCH4040 Contact kit BCH4063 Contact kit BCH4080 Contact kit BCH4100 Contact kit BCH4130 Contact kit BCH4400	- BCH4K06 BCH4K08 BCH4K10 BCH4K13 BCH4K40	- 3440 4810 5980 7310 37510

Spare ARC chambers - BCH15KT to BHC15PT, BCH54 to BCH78

HSN Code : 8538

Contactors	Cat. No.	MRP [₹]
BCH15KT	PF-BCH15KT	790
BCH15LT	PF-BCH15LT	
BCH15MT	PF-BCH15MT	
BCH15NT	PF-BCH15NT	1380
BCH15PT	PF-BCH15PT	
BCH54/BCH55/BCH57 (for all 3 poles)	PF-BCH5	9520
BCH62/BCH64 (for all 3 poles)	PF-BCH6	26390
BCH76/78 (for single pole)	3PF-BCH78	54260

Contactors BCH

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

HSN Code : 8538

Size	For Size	Cat. No.	MRP [₹]	
Magnetic coil	CR, A,B, C	MC15CW ■	590	
	CE16, D16 (Pure DC)	MC16FW ■	950	
	D, E, F	MC15FW ■	660	
	G, H, J, K	MC15KW ■	1710	
	BCH15KT/LT	B02. ■	1610	
	BCH15MT	B022. ■	2740	
	BCH15NT / PT / MN / NN / PN	B031. ■	5480	
	R, S0, S	9-2412- ■	4980	
		BCH4040	BCH4C0404 ■	500
		BCH4063-080	BCH4C0608 ■	550
		BCH4100-130	BCH4C1013 ■	1560
		BCH4400	BCH4C4040 ■	9640
Magnetic coil (set of two)	BCH54/ BCH55/ BCH57	B51. ■	11180	
Feeder group		FG51. ■	11490	
Magnetic coil (set of two)	BCH62/ BCH64	B61. ■	33090	
Feeder group		FG61. ■	38670	
Magnetic coil (set of two)	BCH76/ BCH78	B8- ■	87670	
Feeder group		FG78- ■	88850	

- To specify coil voltage please refer page no.37
- For Non Standard Coil Voltages, extra MRP to be added to Coil MRP for :
Contactor 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	115	1
Carrier for CPG	CPG2PCC	75	1
Magnetic coil for NHD	SP90MC*	455	10
Magnetic coil for MCE15L, MCE15M0, MCE15M	9-2268- ■	2260	1
Magnetic coil for MCE15N & MCE15Q	9-2412- ■	4980	1
Magnetic coil for C4 & MC10D	9-2267- ■	1410	1
Magnetic coil for MC10E type	9-2268- ■	2260	1

- To specify coil voltage please refer page no. 37
- For Non Standard coil voltages, extra MRP to be added to coil MRP for :
Contactor size :
L ~ Q @ ₹110
C4 ~ E @ ₹50

Coil Voltage Table BCH

COIL VOLTAGE: MASTER TABLE

CR RELAY	PRODUCT	24V		48V		110V		160-220V		220V		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	
FREEDOM	#CR Relay	U	U3	W	W3	A	A3	-	B	B3	-	-	-	-	-	-	-	-	-	-	L	L	-	M	M	C	C	D	D	
	#CE15A-F	U	U3	W	W3	A	A3	-	B	B3	-	-	-	-	-	-	-	-	-	-	L	L	-	M	M	C	C	D	D	
	#CE15G-K	U	U3	W	W3	A	A3	-	B	B3	-	-	-	-	-	-	-	-	-	-	L	L	-	M	M	C	C	D	D	
	BCH15KT-LT	U	-	W	-	A	-	-	B	-	-	-	-	-	-	-	-	-	-	-	L	L	-	M	M	C	C	D	D	
	BCH15MT-PT	24	-	48	-	110	-	-	-	-	-	220	-	-	-	-	-	-	-	-	-	-	-	380	-	440	550	-	-	
BCH15MN-PN	24	-	48	-	110	-	-	-	-	-	220	-	-	-	-	-	-	-	-	-	-	-	380	-	440	550	-	-		
BCH4040-400	-	-	-	-	A	-	-	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M	-	-	-	-		
MCE15R-S	U	U3	-	-	A	A3	-	B	-	-	-	-	-	-	-	-	-	-	-	-	L	L	-	M	M	C	C	D	D	
BCH54-64	-	-	-	-	110	110	-	220	220	220	-	-	-	-	-	-	-	-	-	-	380	380	-	380	440	-	-	-	-	
BCH76&78	-	-	-	-	A7	A17	-	B7	-	-	H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CPG 12,16,20	U	-	-	-	A	-	-	BW	-	-	H	-	-	-	-	-	-	-	-	-	-	-	N	-	-	-	-	-	-	-
CPG 12,16,20	U	-	-	-	A	-	-	BW	-	-	H	-	-	-	-	-	-	-	-	-	-	-	N	-	-	-	-	-	-	-
SHAKTI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Z	G	-	-	-	-	N	-	-	-	-	-	-	-
CP12N, C00N, CP20N, N0N	U	-	-	-	A	-	-	BW	-	-	H	-	-	-	-	-	-	-	-	-	-	-	N	-	C	C	D	D	-	-
N01N & N1N	U	-	-	-	A	-	-	-	-	-	H	LV	-	-	-	-	-	-	-	-	-	-	N	-	C	-	-	-	-	-
C4 & D	-	-	-	-	A	-	-	-	B	-	-	-	-	-	-	-	-	-	-	-	L	L	-	M	M	C	C	D	D	-
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

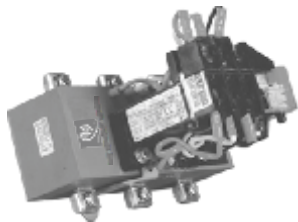
Relay Range	Cat. No.	MRP [₹]	Terminal Block for individual mounting	MRP [₹]
0.195 - 0.31	MC305ANA3A	1670	(Incoming) MC305TB1 (Outgoing) MC305TB3	220
0.30 - 0.48	MC305ANA3B			
0.47 - 0.75	MC305ANA3C			
0.72 - 1.14	MC305ANA3D			
1.07 - 1.70	MC305ANA3E			
1.58 - 2.50	MC305ANA3F			
2.40 - 3.80	MC305ANA3G			
3.80 - 6.00	MC305ANA3H			
6.00 - 9.30	MC305ANA3J			
8.90 - 13.50	MC305ANA3K			
13.20 - 20.00	MC305ANA3L	1850	(Incoming) MC305TB2 (Outgoing) MC305TB3	
17.40 - 24.00	MC305ANA3M	2040		
22.00 - 30.00	MC305ANA3N*	2640		
23.00 - 32.00	MC305ANA3P*	2660	(Incoming) MC305TB2 (Outgoing) MC305TB3	
26.00 - 40.00	MC305ANA3Q*	2890		

* 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	280
L to N	MC305DM2	290

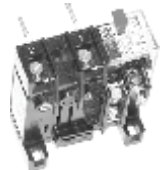
CT Operated Overload Relay



CT Operated Overload Relays-Individual Mounting HSN Code : 8536

Relay Range (A)	Cat. No.	MRP [₹]
24.4-39.0	CT1MC305ANA3C	4400
37.6-60.0	CT2MC305ANA3C	5670
56.4-90.0	CT3MC305ANA3C	6950
84.6-135.0	CT4MC305ANA3C	7060
131.6-210.0	CT5MC305ANA3C	10680
188.0-300.0	CT6MC305ANA3C	12230
263.2-420.0	CT7MC305ANA3C	12650
376.0-600.0	CT8MC305ANA3C	14690

WP 2 Pole Overload Relay



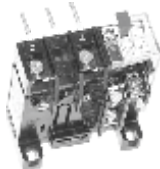
- Perfect protection to single phase Motors against overloads
- Ambient temperature compensated

2 Pole Overload Relays (Direct Mounting)

HSN Code : 8536

Relay Range (A)	Cat. No.	MRP [₹]
1.58-2.50	MC307ANA2F	900
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	1040
17.40-24.00	MC307ANA2M	1110
22.00-30.00	MC307ANA2N	1295
23.00-32.00	MC307ANA2P	1325

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	1590
8.90 - 13.50	MC307ANA3K / MC307ANA3K-OS	
13.20 - 20.00	MC307ANA3L / MC307ANA3L-OS	1765
17.40 - 24.00	MC307ANA3M / MC307ANA3M-OS	1955
22.00 - 30.00	MC307ANA3N	2350
23.00 - 32.00	MC307ANA3P (Spare for Oil Starter)	2420

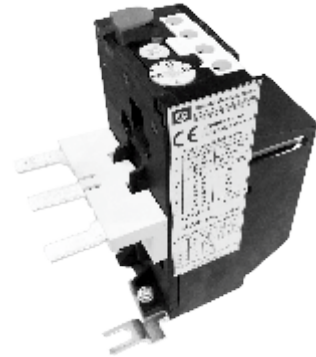
Overload Relay BCH

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	1560	Adaptor for Individual mounting Cat. No. C318F1 MRP Rs. 430
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	1780	Adaptor for Individual mounting Cat No. C318F2 MRP Rs.480
18.0-25.0	MC318ANA3S		
24.0-32.0	MC318ANA3T	2460	
22.0-32.0	MC318GNA3B	2660	
29.0-42.0	MC318GNA3C	2670	
36.0-52.0	MC318GNA3D	3610	
45.0-63.0	MC318GNA3E	4020	
60.0-80.0	MC318GNA3F	4950	

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	4270
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	7730
BOCR SSD 30	3.0 -30A	MP22SSD030		
BOCR SSD 60	10-60A	MP22SSD060		
BOCR DS3 05	0.5-6A	MP34DS3005	Analog model (Definite time)	6570
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)	6570
BOCR DS1 30	3.0 -30A	MP32DS1030		
BOCR 3DE	0.5-60A	MP353DE800	Inbuilt display	21770
BOCR FDE#	0.5-60A	MP35FDE800	Flush mounted display	24650
BOCR 3EZ	0.5-60A	MP363EZ800	Inbuilt display	23700
BOCR FEZ#	0.5-60A	MP36FEZ800	Flush mounted display	26830
BOCR PMZ	0.5-60A	MP37PMZ060	4-20mA analog output/ Inbuilt display	50230
BOCR PFZ#	0.5-60A	MP37PFZ060	4-20mA analog output/ Flush mounted display	49930
BOCR IFDM#	0.5-60A	MP39-IFDM400H	RS-485 comm./ Flush mounted display	29420
BOCR IFDZ#	0.5-60A	MP39-IFMZ400H	RS-485 comm./Earth fault/ Flush mounted display	37310

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	2770
2CT-DH-150-C	2CT EP 150/5	
2CT-D2-200-C	2CT EP 200/5	
2CT-D3-300-C	2CT EP 300/5	3000
2CT-D4-400-C	2CT EP 400/5	3290
3CT-H1-100-C	3CT version 100/5	4270
3CT-HH-150-C	3CT version 150/5	4430
3CT-H2-200-C	3CT version 200/5	4670
3CT-H3-300-C	3CT version 300/5	4960
3CT-H4-400-C	3CT version 400/5	5260
ZCT-035	ZCT version 35mm hole	5060
ZCT-080	ZCT version 80mm hole	6600
ZCT-120	ZCT version 120mm hole	11690

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 EOCCR-IFD model	1560
CABLE-15-003Q	BOCR-FDE/FEZ/PFZ	CABLE-15-EP 3M FEZ/FDE/PFZ	1430

Note : Cable must be ordered separately along with the EOCCR

MPCB

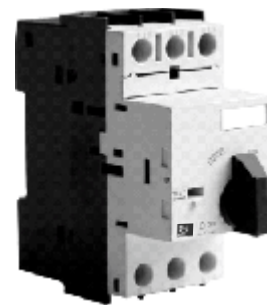
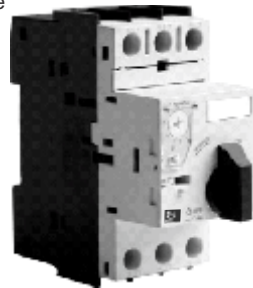
BCH

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[₹]
(A) Thermal-Magnetic release		
MPH32-0.16	MPCB 3P TM 0.1- 0.16A	3520
MPH32-0.25	MPCB 3P TM 0.16-0.25A	3570
MPH32-0.4	MPCB 3P TM 0.25-0.4A	
MPH32-0.63	MPCB 3P TM 0.4-0.63A	3700
MPH32-1.0	MPCB 3P TM 0.63-1.0A	3920
MPH32-1.6	MPCB 3P TM 1.0-1.6A	
MPH32-2.5	MPCB 3P TM 1.6-2.5A	3990
MPH32-4.0	MPCB 3P TM 2.5-4.0A	
MPH32-6.3	MPCB 3P TM 4.0-6.3A	4090
MPH32-10	MPCB 3P TM 6.3-10.0A	4150
MPH32-16	MPCB 3P TM 10.0-16.0A	4590
MPH32-20	MPCB 3P TM 16.0-20.0A	5480
MPH32-25	MPCB 3P TM 20.0-25.0A	5870
MPH32-32	MPCB 3P TM 25.0-32.0A	9220
(B) With magnetic trip only (no Thermal release)		
MPH32M-0.16	MPCB 3P Mag only 0.16 A	3430
MPH32M-0.25	MPCB 3P Mag only 0.25 A	3480
MPH32M-0.4	MPCB 3P Mag only 0.4 A	
MPH32M-0.63	MPCB 3P Mag only 0.63 A	3610
MPH32M-1.0	MPCB 3P Mag only 1.0 A	3540
MPH32M-1.6	MPCB 3P Mag only 1.6 A	
MPH32M-2.5	MPCB 3P Mag only 2.5 A	3750
MPH32M-4.0	MPCB 3P Mag only 4.0 A	
MPH32M-6.3	MPCB 3P Mag only 6.3 A	3840
MPH32M-10	MPCB 3P Mag only 10 A	3910
MPH32M-16	MPCB 3P Mag only 16 A	4150
MPH32M-20	MPCB 3P Mag only 20 A	4450
MPH32M-25	MPCB 3P Mag only 25 A	4410
MPH32M-32	MPCB 3P Mag only 32 A	7730

HSN Code : 8538

Cat code	Description	MRP[₹]
MPHF11	Front aux contact 1NO+1 NC MPCB	670
MPHS11	Side aux contact 1NO+1 NC MPCB	870
MPHT11	MPCB Trip Indicator	1020
MPH024UR	UV Rel. 24V 50HZ MPCB	1680
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	1380
MPH440SR	Shunt Rel. 365-440V 50/60HZ MPCB	
MPH127SR	Shunt Rel. 100-127V 50/60HZ MPCB	
MPH34	Extnd rotary handle 32A	1380
B31SMA1	Plastic enclosure for MPH32 MPCB	1830

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	-	3060
MPE-02	0.16...0.25	0.06	
MPE-03	0.25...0.4	0.12	3380
MPE-04	0.4...0.63	0.18	
MPE-05	0.63...1	0.25, 0.37	3430
MPE-06	1...1.6	0.55	
MPE-07	1.6...2.5	0.75, 1.1	3490
MPE-08	2.5...4	1.5	
MPE-10	4...6.3	2.2, 3	3660
MPE-14	6.3...10	4, 5	
MPE-16	10...16	5.5, 9	4260
MPE-20	16...20	11	4540
MPE-22	20...25	12.5	4890



Accessories of MPE Range

HSN Code : 8538



Reference	Contacts	MRP [₹]
Auxiliary	Switch	
MPA-0010	1NO	550
MPA-0001	1NC	
MPA-0011	1NO + 1NC	750
MPA-0020	2NO	
Enclosures (IP55)		
MPA-EF	Flush mounted	1020
MPA-ES	Surface mounted	1140
Voltage Releases		
MPA-U ■	Under Voltage Release	1580
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)	750
MPA-BB345	3 Tap-o (45mm)	950
MPA-BB445	4 Tap-o (45mm)	1140
MPA-BB545	5 Tap-o (45mm)	1250
MPA-BB263	2 Tap-o (63mm)	750
MPA-BB463	4 Tap-o (63mm)	1130
MPA-BB1	Incoming Block	690

*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	-	3120
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	3330
MS32-1.0	0.63-1.0	0.18 to 0.25	
MS32-1.6	1.0-1.6	0.37 to 0.55	3400
MS32-2.5	1.6-2.5	0.75	3570
MS32-4.0	2.5-4	1.1 to 1.5	3670
MS32-6.3	4-6.3	2.2	
MS32-10	6.3-10	3 to 4	4160
MS32-14.0	9-14	5.5	
MS32-18	13-18	7.5	4330
MS32-23	17-23	9 to 11	4730
MS32-27	20-27	11	5140
MS32-32	25-32	15	7720



Accessories - MS32 range

HSN Code : 8538

Cat ref	type	Contacts	MRP[₹]
HS11	Aux contact side mounting	1NO+1NC	810
HSV10	Aux contact top mounting	1NO	660
HSV01		1NC	
HRS10	Trip indicating block top mounting	1NO	480
HRS01		1NC	
MS32-UR	Under voltage release	-	1680
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 ² t (A ² S)	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SC941110L	5	12A	72	600V AC	12-280V AC	4-30V DC	1920
SC942110L	5	25A	288	600V AC	12-280V AC	4-30V DC	2250
SC944110L	5	40A	612	600V AC	12-280V AC	4-30V DC	3320

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 ² t (A ² S)	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SC941160L	5	12A	72	600V AC	12-280V AC	4-30V DC	1940
SC942160L	5	25A	288	600V AC	12-280V AC	4-30V DC	2280
SC944160L	5	40A	612	600V AC	12-280V AC	4-30V DC	3380
SC945160L	5	50A	1500	600V AC	12-280V AC	4-30V DC	6020
SC947160L	5	75A	5000	600V AC	12-280V AC	4-30V DC	6700

MOQ - Minimum Order Qty.



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

HSN Code : 8536

Cat. No.	MOQ	AC51 Rating	I ² t(A ² S)	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SO942560*	2	25A	600	600V AC	12-280V AC	7-30V DC	5130
SO963460*	2	35A	1250	1200V AC	24-600V AC	3.5-32V DC	6650
SO945460*	2	50A	2500	600V AC	12-280V AC	3-32V DC	7080
SO965460*	2	50A	2800	1200V AC	24-600V AC	3.5-32V DC	7410
SO967460*	2	90A	7200	1200V AC	24-600V AC	3.5-32V DC	8550

MOQ - Minimum Order Qty.

Innovation - Performance-Design

- Removable IP20 flaps.
- Only 29 mm height.
- Designed for all types of loads.
- TMS² Technology with very long life expectancy.
- Control Status LED.
- Very low zero cross level.
- UL/cUL, VDE (EN60950), IEC/EN60947-4-3, CE marking

Solid State Relay 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	4030
SU967460*	44	75A	1200V AC	24-600V AC	3.5-32V DC	4340

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



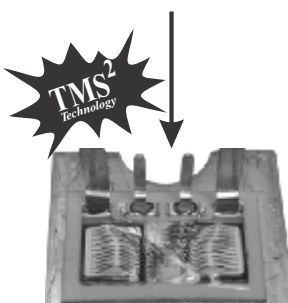
Single Phase SSR's for Capacitor Control Applications SO8 Series 1-Phase With LED in okpac® Housing IP20 Protection

HSN Code : 8536

Cat. No.	MOQ	AC51 Rating	$I^2t(A^2S)$	Peak Voltage	Operating Voltage	Control Voltage	MRP [₹]
SO842074*	2	25A	600	600V AC	12-275V AC	3-32V DC	6250
SO863070*	2	35A	1250	1200V AC	24-510V AC	3.5-32V DC	6900
SO845070*	2	50A	2500	600V AC	12-275V AC	3-32V DC	7400
SO848070*	2	95A	14400	600V AC	12-275V AC	3-32V DC	11130
SO889060*	2	125A	24000	1600V AC	24-600V AC	3.5-32V DC	29560

MOQ - Minimum Order Qty.

Direct Copper Bonding Technology



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

Solid State Relay 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 ² t(A ² S)	Peak Voltage	Operating	Control Voltage	MRP [₹]
DC CONTROL								
SVT861394	2	12A	2.5A	72	1200V AC	24-520V AC	8.5-30V DC	29570
SVT864374	2	50A	12A	1500	1200V AC	24-520V AC	10-32V DC	36080
SVT869394	2	125A	32A	20000	1200V AC	24-520V AC	8.5-30V DC	44800
AC CONTROL								
SVT864994	2	50A	12A	1500	1200V AC	24-520V AC	90-240V AC	37840
SVT967960	2	75A	-	1500	1200V AC	24-520V AC	90-240V AC	42590
SVT869994	2	125A	32A	20000	1200V AC	24-520V AC	90-240V AC	46630

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*	70
SCHS6 DIN	20	Din Clip	180
SCHS2200	5	Heat Sink 2.2K/W	1090
SCHS1100	5	Heat Sink 1.1 K/W	3520
SCHS0900	5	Heat Sink 0.9 K/W	4160
SCHS0300	5	Heat Sink 0.3K/W	6790

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

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

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

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

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 I²t rating lower than that of SSR I²t) must be used.

DC Contactors

BCH

DC Mill Duty Contactor HSN Code : 8536

No. of poles	(A)	Auxilliary Contacts	Cat. No.	MRP [₹]
50 Amperes				
Single pole Normally Open	15A	2NO+2NC	912x1522	On request
	25A	2NO+2NC	912x2522	On request
	50A	2NO+2NC	912x5022	36885
Double pole Normally Open	15A	2NO+2NC	D912x1522	On request
	25A	2NO+2NC	D912x2522	On request
	50A	2NO+2NC	D912x5022	79280
Mechanically Interlocked 2 Nos. SP NO	15A	2NO+2NC	M912x1522	On request
	25A	2NO+2NC	M912x2522	On request
	50A	2NO+2NC	M912x5022	87925
150 Amperes				
Single pole Normally Open	150A	2NO+2NC	914x22	62975
Double pole Normally Open	150A	2NO+2NC	D914x22	135010
Mechanically Interlocked 2 Nos. SP NO	150A	2NO+2NC	M914x22	142475
Single pole Normally Closed	150A	1NO+1NC	924x11	64870
Double Pole Normally Closed	150A	2NO+2NC	D924x22	137615
Single pole Normally Open with Holdout Coil #	150A	1NO+1NC	934x11/#	68270
Single pole Normally Open with AC Blow out Coil	150A	2NO+2NC	974x22	79835
300 Amperes				
Single pole Normally Open	300A	2NO+2NC	915x22	91445
Double pole Normally Open	300A	2NO+2NC	D915x22	194740
Mechanically Interlocked 2 Nos. SP NO	300A	2NO+2NC	M915x22	202465
Single pole Normally Closed	300A	1NO+1NC	925x11	91905
Double Pole Normally Closed	300A	2NO+2NC	D925x22	198520
Single pole Normally Open with Holdout Coil #	300A	1NO+1NC	935x11/#	99230
Single pole Normally Open with AC Blow out Coil	300A	2NO+2NC	975x22	115625



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

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

DC Mill Duty Contactor HSN Code : 8536

No. of poles	(A)	Auxilliary Contacts	Cat. No	MRP [₹]
600 Amperes				
Single pole Normally Open	600A	2NO+2NC	916x22	203790
Double pole Normally Open	600A	2NO+2NC	D916x22	423145
Mechanically Interlocked 2 Nos. SP NO	600A	2NO+2NC	M916x22	430000
Single pole Normally Closed	600A	1NO+1NC	926x11	209475
Single pole Normally Open with Holdout Coil#	600A	1NO+1NC	936x11/#	258900
Single pole Normally Open with AC Blow out Coil	600A	2NO+2NC	976x22	266470

- # 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.49
- * 150, 300 & 600 Amps replace 'x' by 'y' for surface mounting rear connection, 'z' for elevated mounting rear connection
- * Add Rs. 4185/- 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*	17870	9C9P101	30600	9C9T101	44360	9C9V101	96550
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	4055	9C9P105	5580	9C9T105	9060	9C9V105	24630
Contact Lever with Braid (for Single Pole)	1 No.	9C9J106	4935	9C9P106	8045	9C9T106	10650	9C9V106	18470
Contact Lever with Braid (for Double Pole) [†]	1 No.	9C9J106	4935	9C9P106	8045	9C9T106	10650	9C9V103	18470
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	1680	9C9P107	2330	9C9T107	3365	9C9V107	4885
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	2845	9C9T108	5015	9C9V108	6050
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	3395	9C9T109	5015	9C9V109	6425
Terminal Block	1	9C9J110	2270	9C9P110	2975	9C9T110	4160	9C9V110	5195
No Volt Coil for 912, 914, 915, 916, 934, 935 & 936 **Suffix voltage code	1	9C9J111■	9115	9C9P111■	13940	9C9T111■	18340	9C9V111■	31600
No Volt Coil for 924, 925, 926 **Suffix voltage code	1	-	-	9C9P112■	18340	9C9T112■	28490	9C9V112■	46020
Coil clamp for 914 & 934	1	-	-	9C9P118	315	-	-	-	-
Coil clamp for 924, 915, 935, 916 & 936	1	-	-	9C9P118	315	9C9T118	315	9C9V118	On request

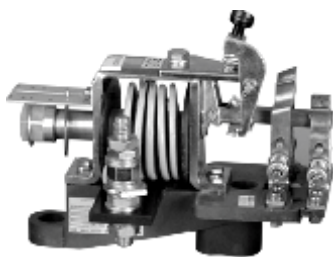
■ Suffix coil voltage code from table on page 49
■ Please add Rs. 4185 for AC control

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

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

Description	Cat. No.	MRP [₹]
1NO+1NC Auxilliary Contact Block	AC10E11	7115
2NO Auxilliary Contact Block	AC10E20	7115
2NC Auxilliary Contact Block	AC10E02	7115
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- #	22135
Condenser 50 + 50uF for 934, 935 & 936	9C9P114	1220
Mechanical interlock for 150/300/600A	AC10M4/M8/M12	7930
Rectifier 110/240 V	SP30R	4185

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	20655
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	24200
B3K23	179-39	69.0	40 to 120	
B3L23	179-38	109.0	70 to 190	
B3M23	179-37	179.0	100 to 300	26385
B3N23	179-36	299.0	200 to 600	
B3Y23	179-36.2	199.0	200 to 600	32100
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

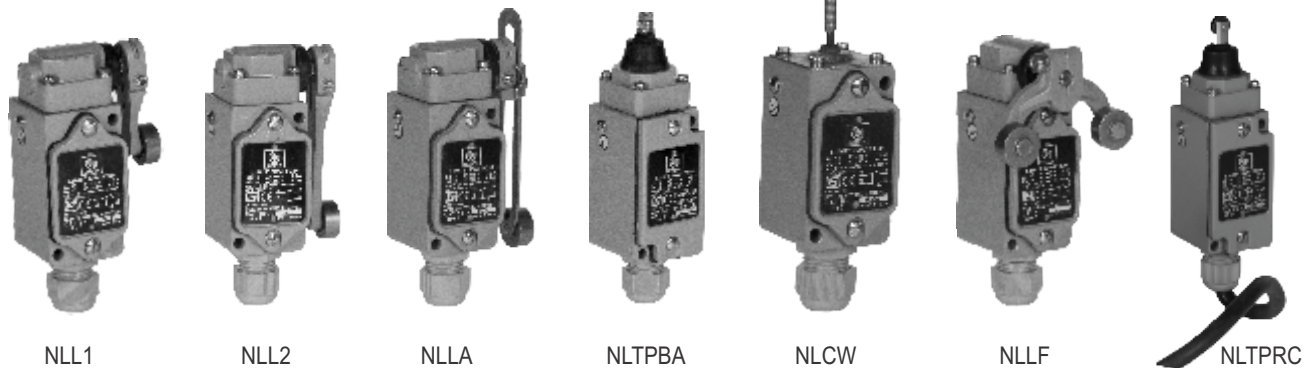
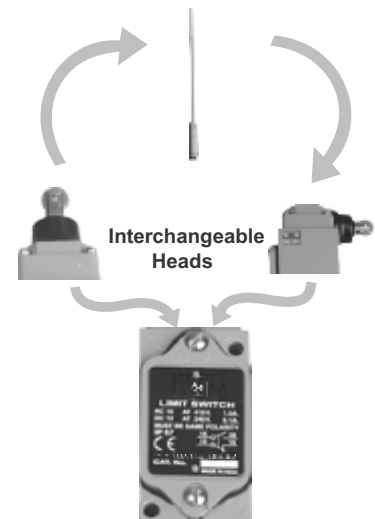
1. For other coil voltages, please contact nearest sales office
2. AC control is not available for 934, 935, 936 versions.
3. For ordering spare coils for D912, D914, D915 and D916 Contactors, please order coils with 50% voltage rating as that of control voltage.
Example to order coils for D914 X 22B1 (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	2070	NLL1C NLL2C NLLAC	2255	NLL1-22 NLL2-22 NLLA-22	3160	NLL1-22C NLL2-22C NLLA-22C	3270
	Maintained Type Maintained Type Maintained Type	NLL1M NLL2M NLLAM	2325	NLL1MC NLL2MC NLLAMC	2440	NLL1M-22 NLL2M-22 NLLAM-22	3495	NLL1M-22C NLL2M-22C NLLAM-22C	3560
Push Roller	Top Side	NLTPR	2070	NLTPRC	2255	NLTPR-22	3160	NLTPR-22C	3270
		NLSPR	2270	NLSPRC	2440	NLSPR-22	3410	NLSPR-22C	3560
Push Button	Top Adjustable Side Adjustable	NLTPBA	2070	NLTPBAC	2255	NLTPBA-22	3075	NLTPBA-22C	3270
		NLSPBA	2270	NLSPBAC	2440	NLSPBA-22	3500	NLSPBA-22C	3560
Cat Whisker	Nylon Rod Steel Rod	NLCW	1885	NLCWC	1955	NLCW-22	3005	NLCW-22C	3160
		NLJW	2070	NLJWC	2210	NLJW-22	3160	NLJW-22C	3270
Fork Type	Roller in same line Offset Rollers	NLLF NLLFO	2325	NLLFC NLLFOC	2440	NLLF-22 NLLFO-22	3500	NLLF-22C NLLFO-22C	3560
	Roller in same line Maintained Offset Rollers Maintained	NLLFM NLLFOM	2720	NLLFMC NLLFOMC	2825	NLLFM-22 NLLFOM-22	3785	NLLFM-22C NLLFOM-22C	3860

- 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



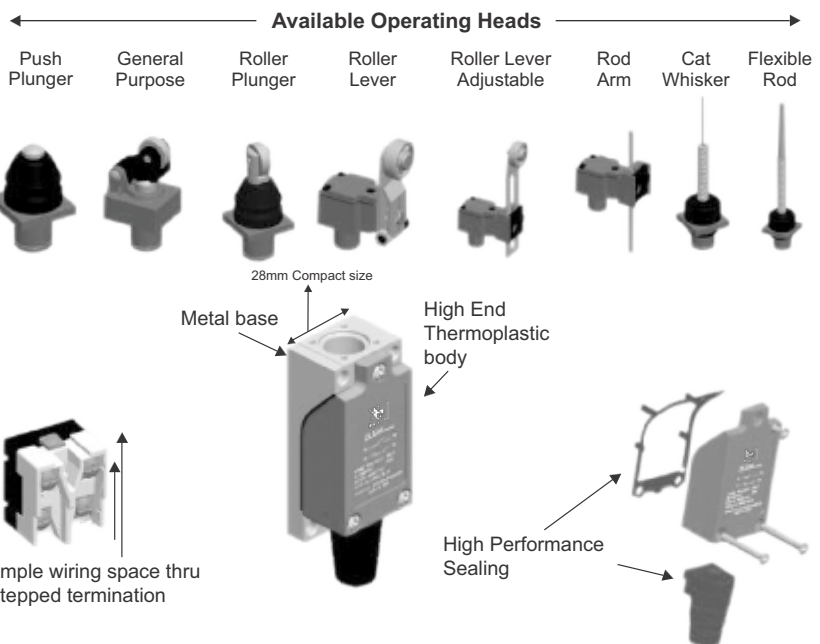
Mini Limit Switch NEW

HSN Code : 8536

Type		Cat. No.	MRP [₹]
General Purpose Type		DLSMAR	1360
Top Plunger	Standard	DLSMPP	
Push Roller	Standard	DLSMRP	
	Cross	DLSMRPX	
Roller Lever	39mm	DLSMRL	1410
	Adjustable	DLSMRLA	
Rod Arm	Adjustable	DLSMJWA	1495
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	875	PSRL-L-2 or R-2	1080	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	825	SP20S2	1035	

- 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	1385
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Oil Tight Limit Switch - Snap Action Type L IP 65

HSN Code : 8536

Type	Description	Cat. No.	MRP [₹]
Roller Lever	Standard-38MM	LL1	2965
	Standard-76.2mm	LL2	
	Adjustable	LLA	
Push Roller	Maintained Type LL1	LL1M	3100
	Maintained Type LL2	LL2M	
	Maintained Type LLA	LLAM	
Push Button	Top	LTPR	2990
	Side	LSPR	3260
Cat Whisker	Top Adjustable	LTPBA	3145
	Side Adjustable	LSPBA	
Fork Type	Nylon Rod	LCW	2375
	Steel Rod	LJW	2950
Fork Type	Roller in same line	LLF	2670
	Offset Rollers	LLFO	2670
	Roller in same line Maintained	LLFM	3120
	Offset Rollers Maintained	LLFOM	3120

Oil Tight Limit Switch - Spares

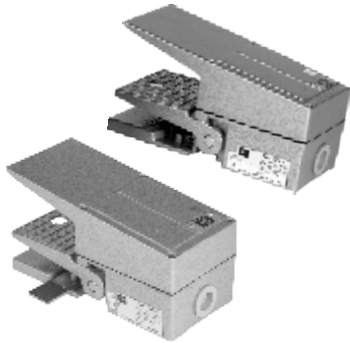
HSN Code : 8538

Description	Suitable for	Cat. No.	MRP [₹]
38 mm lever	NLL1, LL1	SP40L1	495
76.2 mm lever	NLL2, LL2	SP40L2	625
Adjustable lever	NLLA, LLA	SP40LA	625
Fork lever in Line	LLF	SP40LF	755
Fork lever Offset	LLFO	SP40LFO	755
Operating Head	LLGS, LPGS	SP40HLG	900
Operating Head	Lever Type	SP40HL	975
Operating Head Maintained	Lever Type	SP40HLM	1125
Operating Head	Top Push	SP 40HTP*	975
	Side Push	SP 40HSP*	1080
Operating Head	Cat Whisker Nylon Rod	SP40CW	665
	Cat Whisker Steel Rod	SP40JW	900
Limit Switch Unit Assembly 1NO+1NC	Type 'L' & 'NL' (Except LLGS / LPGS)	SP40S1	1385
Limit Switch Unit Assembly 2NO+2NC		SP40S2	2290
Limit Switch Unit Assembly 1NO+1NC	LLGS / LPGS	SP40S1WOM	900
Oil tight Conduit	Type 'NL'	SP40CE	530

* 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	4815	1
One	1NO+1NC	2	With Latch	FSGX1L	5070	
One	2NO+2NC	2	With Guard	FSGX2	5225	
One	2NO+2NC	2	With Latch	FSGX2L	5455	
Two	2NO+2NC	2	With Guard	FSGY1	5900	
Two	2NO+2NC	2	With Latch	FSGY1L	6280	
Two	4NO+4NC	2	With Guard	FSGY2	6885	
Two	4NO+4NC	2	With Latch	FSGY2L	7015	
Two	2NO+2NC	3	With Guard	FSGZ1M	6000	
Two	4NO+4NC	3	With Guard	FSGZ2M	6870	

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	825
Spare Contact Block 2NO+2NC	FSG	SP20S2	1035
Spare Cover with Guard	FSG	SP20CG	1930

- 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	Standard flush Button Red Green Black Yellow Blue Orange White	TSFB-R	275	8536	20
		TSFB-G			
		TSFB-B			
		TSFB-Y			
		TSFB-BL			
		TSFB-O			
		TSFB-W			
	Long Button Red Green Black Yellow Blue Orange White	TLB-R	295	8536	10
		TLB-G			
		TLB-B			
		TLB-Y			
		TLB-BL			
Mushroom Head -Spring return Red -Spring return Green -Turn to release Red -Turn to release Green	TMH-R	350	8536	10	
	TMH-G	350			
	TMHL-R	380			
	TMHL-G	380			
Selector Actuator -2 or 3 position	TSSA ***	695	8536	10	
	Cylindrical Lock -2 or 3 positions	TCL***	1005	8536	10
Station	Start/Stop Pushbutton	E20EA	1080	8536	1
Contact Block	1NO +1NC	050N1	350	8536	20
	2NO	050N2			
	2NC	050N3			
Aluminium Diecast Enclosure	One button	TEN-1	1140	8536	1
	Two buttons	TEN-2	1310		
	Three buttons	TEN-3	1775		
HSN Code : 8538					
Accessories	Wrench for retaining ring	TWN	345	8538	1
	Plug for hole	TPL	155		
	Legend plate	050L^	70		

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

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	495	8536	1
Transformer type	AC	TILT•10	625	8536	1
HSN Code : 8538					
Polycarbonate Lens	-	LENS*	80	8538	10
Spare Bulb	AC & DC	SP61L#	90		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■	360	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	120	10
		Extended	HEA12*M	125	
	Illuminated**	Flush	HEB11*M	175	
		Extended	HEB12*M	180	
	Mushroom Head 28mm Colour - Red/Black	Momentary	HEA21*M	160	10
		Twist to Release	HEA23*M	210	
		Stayput Key Release	HEA25*M	415	
		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#	115	10
	LSU with Bulb-Resistance Type ■	110V ac/dc & 240V ac	HLSUR#	125	
	Basic Unit with Mounting Adaptor	Lamp Holder & Lens	HPL22*	105	
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*#	230	10
		Blue	HFB2XL#	465	1
		Clear	HFB2XC#	645	1
	Universal 24-240V ac/dc	Color - R/Y/G/A	HFB2X*UH4	310	
		Blue	HFB2XLUH4	575	
	Surge Protected 12-60V ac/dc; 110/240/415V ac; 110/240V dc	Color - R/Y/G/A	HFB2S*#	300	10
		Blue	HFB2SL#	495	1
		Clear	HFB2SC#	690	1
	Low Voltage Glow Protected 110V/240/415V ac	Color - R/Y/G/A	HFB2P*□	345	10
		Blue	HFB2PLH	615	1
	Surge & Low Voltage Glow Protected 110V/240/415V ac	Color - R/Y/G/A	HFB2SP*□	350	10
		Blue	HFB2SPLH	620	1
Selector Operators with Mounting Adaptor	Selector Key Operator (Color - Black)	2pos Maintained	Pls refer Ordering Sequence & Circuit Combination Table for exact Cat. Ref.	385	1
		2pos Spr Ret R>L		385	
		3pos Maintained		400	
		3pos Spr Ret L>C		400	
		3pos Spr Ret R>C		400	
		3pos Spr Ret L>C<R		400	
	Selector Knob or Lever Opaque	2pos Maintained		295	
		2pos Spr Ret R>L		295	
		3pos Maintained		315	
		3pos Spr Ret L>C		315	
		3pos Spr Ret R>C		315	
		3pos Spr Ret L>C<R		315	
	Selector Knob or Lever Illuminated *	2pos Maintained		335	
		2pos Spr Ret R>L		335	
		3pos Maintained		345	
		3pos Spr Ret L>C		360	
		3pos Spr Ret R>C		360	
		3pos Spr Ret L>C<R		360	

* 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	105	10
		1NC	105	
	Early Make	1NO	115	
	Late Break	1NC	115	
		1NO+1NC	175	
		2NO	175	

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#	60
	Filament Bulb	Extended Bulb	9ED3#	60
	Mounting Adaptor		HMR	60
	Lens for Indicating Lamp		H8ED1*	60
	Knob for Illum. Selector Actuator		H9ED1K*	60
	Lever for Illum. Selector Actuator		H9ED1L*	60
	Legend Plate with Std Inscription	Flush/Extended PB	8EA9 +	60
	Rubber Boot for IP66 Protection		HRB*	70
	Padlock to Prevent Operation		8EA1	90

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

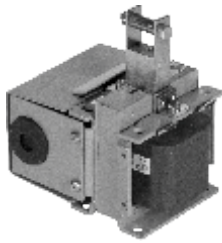
Suffix Code Tables

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
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

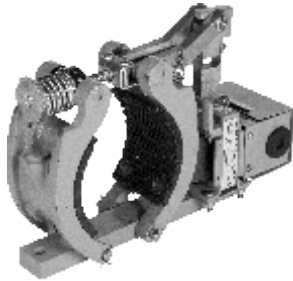


AC Solenoid - Pull Type

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■	5205
D	S-51, S-71 S-52, S-72	31.4	6.75	SLD■ SLD2■	7680
E	S-250	40	10	SPSLEM	16710

* 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■	12265	AC50D4	2035
S-5	5.5	139.7	25 35	34.0 48.0	Continuous Intermittent	S-51■ S-52■	17545	AC50D5	2815
S-7	7	177.8	50 75	68.0 102.0	Continuous Intermittent	S-71■ S-72■	20065	AC50D7	3385
S-250	9.84	250	109	147.0	Continuous	S-2501M	43175	AC50D25	6845

- 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	1460	SP50L2	2165	SP50L3	2900	SP50L4	5680
Brake shoe Assembly*	SP50SA1	4255	SP50SA2	5485	SP50SA3	9045	SP50SA4	18215
Brake Coil -Continuous -Intermittent	SP50MC01	2505	SP50MC21■ SP50MC22■	4995	SP50MC21■ SP50MC22■	4995	SP50MC31■	13190

* 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

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) ⁺			
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	56740	CACS1*MAE	59395	CACS2*MAE	82500
160mm	SMH160						
8"/200mm	SMH8	13.8	66790	CACA1*MAE	66210	CACJ2*MAE	85795
	SMH200	13.8					
10"/250mm	SMH10	27.7	81995	CACB1*MAE	70250	CACK2*MAE	96580
	SMH250	27.7					
13"/300mm	SMH13	76.0	134235	CACC1*MAE	75755	CACL2*MAE	112460
	SMH300	76.0					
16"/400mm	SMH16	138.8	216065	CACD1*MAE	87225	CACM2*MAE	122210
	SMH400	138.8					
19"/500mm	SMH19	277.0	348330	CACE1*MAE	105470	CACN2*MAE	154405
	SMH500	277.0					
23"/600mm	SMH23	555.0	551290	CACF1*MAE	135985	CACP2*MAE	195345
	SMH600	555.0					
30"/700mm	SMH30	1242.0	1227665	CACG1*MAE	536850	-	-
	SMH700	1242.0					
800mm	SMH800	1242.0	1330115	CACG1*MAE	536850	-	-

* 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. 7395/- 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	7695	CARS10KE	7035	CARS10ME	14205	CARS20ME	On request
SMH8 / SMH200	13.8	CDCA101D CDIA101D*	7995	CARA10KE	7275	CARA10ME	14205	CARA20ME	On request
SMH10 / SMH250	27.7	CDCB101D CDIB101D*	9480	CARB10KE	8375	CARB10ME	14205	CARB20ME	On request
SMH13 / SMH300	76.0	CDCC101D CDIC101D*	10940	CARC10KE	9935	CARC10ME	16260	CARC20ME	22220
SMH16 / SMH400	138.8	CDCD101D CDID101D*	11710	CARD10KE	10680	CARD10ME	18900	CARD20ME	23345
SMH19 / SMH500	277.0	CDCE101D CDIE101D*	12535	CARE10KE	11440	CARE10ME	20975	CARE20ME	On request
SMH23 / SMH600	555.0	CDCF101D CDIF101D*	14280	CARF10KE	12850	CARF10ME	22545	CARF20ME	On request
SMH30 / SMH700	1242.0	CDCG101D CDIG101D*	34585	-	-	CARG10ME	38900	-	-
SMH800	1242.0	CDIG101D*	34585	-	-	CARG10ME	38900	-	-

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	137605
	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	196325
	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	265990
	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	416270
19"/500mm	414,612,810	277.0	368	SME19H1 SME500H1	180.0	272	SME1901 SME50001	639500
	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	1034635
	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	40380	9GDA01	47820	9GDB01	57800	9GDC01	91760
 Coil Series for inch for mm	-	-	9GDA02/ 9GDA03	101880	9GDB02/ 9GDB03	159690	9GDC02/ 9GDC03	206515
 Torque Adj. Screw Assembly	9GDS04	3680	9GDA04	3845	9GDB04	3845	9GDC04	6690
 Torque Spring	9GDS05	10025	9GDA05	10470	9GDB05	12365	9GDC05	20025
 Wedge Assembly with Bolt, Spring and Washers for inch/mm	9GDS20/ 9GDS22	1425	9GDA20/ 9GDA22	1635	9GDB20/ 9GDB22	1900	9GDC20/ 9GDC22	2900
 Pin set for Lever & Armature Consisting of a) Pin Lever 2 Nos. b) Pin armature 2 Nos.	9GDS06	5055	9GDA06	5300	9GDB06	5300	9GDC06 9GDC06-2#	6690
 Coller Set of Lever & Armature Consisting of a) Coller Lever 4 Nos. a) Coller Armature 4 Nos.	9GDS07	5055	9GDA07	5300	9GDB07	5300	9GDC07	6355
 Bush Set for Lever & Armature Consisting of a) Bush Lever 4 Nos. a) Bush Armature 4 Nos.	9GDS08	10025	9GDA08	10510	9GDB08	10510	9GDC08	11455
 Pull Rod Assembly with nuts, spring & washer	9GDS29	4100	9GDA29	4290	9GDB29	5300	9GDC29	8155
 Grease Nipple (1 set consist 8 Nos.)	9GDS09	1425	9GDA09	1515	9GDB09	1515	9GDC09	1530
 * Shoe Assembly with Clamp & Bolts (1 set consist 2 Nos.) for inch/mm	9GDS10/ 9GDS11	10440	9GDA10/ 9GDA11	10395	9GDB10/ 9GDB11	12895	9GDC10/ 9GDC11	20025
 * Shoe Lining without Bolts for inch for mm (1 set consist 2 Nos.)	9GDS12/ 9GDS13	3535	9GDA12/ 9GDA13	3680	9GDB12/ 9GDB13	4630	9GDC12/ 9GDC13	6690
 * Shoe Lining with Bolts for inch for mm (1 set consist 2 Nos.)	9GDS23/ 9GDS26	4780	9GDA23/ 9GDA26	5300	9GDB23/ 9GDB26	6690	9GDC23/ 9GDC26	9555
 Dust Cover (made of jeans cloth & painted with fire retardent al. paint).	-	-	9GDA30	5900	9GDB30	5900	9GDC30	7020
 mm Size Cast Steel Drum (150mm) without Hard Chrome Plaiting (160mm)	9GDS15/ 9GDS14	11410	9GDA14	12555	9GDB14	19330	9GDC14	32575
 mm Size Cast Steel Drum (150mm) with Hard Chrome Plaiting (160mm)	9GDS15P/ 9GDS14P	15410	9GDA14P	17970	9GDB14P	28060	9GDC14P	47205
 Cast Steel Drum without Hard Chrome Plaiting* for inch	-	-	9GDA15	13020	9GDB15	20035	9GDC15	33875
 Cast Steel Drum with Hard Chrome Plaiting* for inch	-	-	9GDA15P	18685	9GDB15P	28360	9GDC15P	49215

* 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	139485	9GDE01	195840	9GDF01	307775	9GDG01	697305
 Coil Series for inch for mm	9GDD02 9GDD03	303850	9GDE02 9GDE03	396340	9GDF02 9GDF03	612665	-	-
 Torque Adj. Screw Assembly	9GDD04	9995	9GDE04	14250	9GDF04	22780	9GDG04	47720
 Torque Spring	9GDD05	30770	9GDE05	42575	9GDF05	70500	9GDG05	151305
 Wedge Assembly with Bolt, for inch Spring and Washers for mm	9GDD20/ 9GDD22	3845	9GDE20/ 9GDE22	5770	9GDF20/ 9GDF22	9050	9GDG20/ 9GDG22	20050
 Pin set for Lever & Armature Consisting of a) Pin Lever 2 Nos. for inch for mm b) Pin Armature 2 Nos.	9GDD06* 9GDD06-2#	8155	9GDE06* 9GDE06-2#	8155	9GDF06* 9GDF06-2#	11455	9GDG06 ⁺⁺	34675
 Coller Set of Lever & Armature Consisting of a) Coller Lever 4 Nos. b) Coller Armature 4 Nos.	9GDD07	6355	9GDE07	6235	9GDF07	7795	9GDG07 ⁺	12795
 Bush Set for Lever & Armature Consisting of a) Bush Lever 4 Nos. b) Bush Armature 4 Nos.	9GDD08	11720	9GDE08	12280	9GDF08	15715	9GDG08 ⁺⁺	27955
 Pull Rod Assembly with nuts, spring & washer	9GDD29	12365	9GDE29	17105	9GDF29	22985	9GDG29	60140
 Grease Nipple (1 set consist 8 Nos.)	9GDD09	1555	9GDE09	2685	9GDF09	2685	9GDG09	2965
 Shoe Assembly with Clamp & Bolts for inch (1 set consist 2 Nos.) for mm	9GDD10/ 9GDD11	30820	9GDE10/ 9GDE11	42635	9GDF10/ 9GDF11	68160	9GDG10/ 9GDG11 9GDG11A ⁺⁺⁺	151305 158175
 Shoe Lining without Bolts for inch (1 set consist 2 Nos.) for mm	9GDD12/ 9GDD13	10485	9GDE12/ 9GDE13	17105	9GDF12/ 9GDF13	25310	9GDG12/ 9GDG13 9GDG13A ⁺⁺⁺	47825 52925
 Shoe Lining with Bolts for inch (1 set consist 2 Nos.) for mm	9GDD23/ 9GDD26	12895	9GDE23/ 9GDE26	21335	9GDF23/ 9GDF26	33150	9GDG23/ 9GDG26 9GDG26A ⁺⁺⁺	59150 64255
 Dust Cover (made of jeans cloth & painted with fire reterdent al. paint).	9GDD30	7595	9GDE30	9395	9GDF30	9855	-	-
 mm Size Cast Steel Drum without Hard Chrome Plaiting	9GDD14	40730	9GDE14	65400	9GDF14	92215	-	-
 mm Size Cast Steel Drum with Hard Chrome Plaiting	9GDD14P	60640	9GDE14P	95535	9GDF14P	141070	-	-
 Cast Steel Drum without Hard Chrome Plaiting* for inch	9GDD15	42475	9GDE15	68465	9GDF15	94745	-	-
 Cast Steel Drum with Hard Chrome Plaiting* for inch	9GDD15P	63375	9GDE15P	100160	9GDF15P	147835	9GDG15P	250475

* 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	12415
9GDX02	1x10"/250mm	2x8"/200mm	2	18535
9GDX03	1x13"/300mm 1x16"/400mm	2x10"/250mm	2	25105
9GDX04	1x19"/500mm	2x13"/300mm 2x16"/400mm	2	33150
9GDX05	1x23"/600mm	2x19"/500mm	2	47280
9GDX06	-	2x23"/600mm	2	94605
9GDX07	1x30"/700 & 800mm	-	2	131180



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	2200
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	4910	9480	9990	
10	250	4910			
13	300	6730			
16	400	7220			
19	500	11210			
23	600	15710			

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

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

To order Spare Limit Switch assembly, cat codes are:

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

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

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	260
		Socket	Ms20	290
30A, 440V	3P + E	Plug	MP30	605
		Socket	Ms30	640



Plastic Plugs & Socket Type 'PS'

HSN Code : 8536

Rating	Pins	Type	Cat No.	MRP [₹]
20A, 250V	3	Plug	PS16AA7	290
		Flush Mounting Socket	PS16BA7	415
		Socket with Wall Mounting Box	PS16DA7	510
20A, 415V	4	Plug	PS16AA1	355
		Flush Mounting Socket	PS16BA1	540
		Socket with Wall Mounting Box	PS16DA1	630
32A, 415V	3	Plug	PS32AA7	625
		Socket	PS32BA7	625
	4	Plug	PS32AA1	655
		Socket	PS32BA1	655
	5	Plug	PS32AA5	695
		Socket	PS32BA5	695

- 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	1985
		Plug with inclined Handle	299/12B	1625

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	900
		Plug with inclined Handle	215B	880
30A, 415V	4	Panel Mounting Socket	2413B	940
		Plug with inclined Handle	213B	915
30A, 415V	5	Panel Mounting Socket	2417B	980
		Plug with inclined Handle	217B	955

Note : *Loose Conduit Box Straight (Cat. No. 9J101) MRP - Rs. 340/- each
 *Spare Handle Inclined (Cat. No. 9J108) MRP -Rs. 170/- each.

HSN Code : 8538

Plugs & Sockets BCH

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

HSN Code : 8536

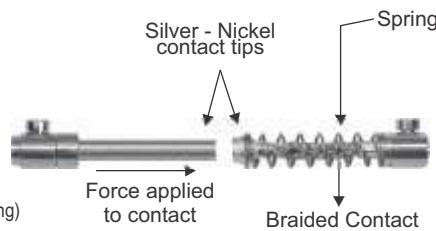
Rating	Pins	Type	Cat No.	MRP [₹]
16A, 415V	5	Plug	DS1A7A1	1435
		Socket	DS1B7A1	1785
		Handle Assembly	SP91PH	280
32A, 415V	5	Plug	DS3A7A1	2385
		Socket	DS3B7A1	2905
		Handle Assembly	SP93PH	290
63A, 415V	5	Plug	DS6A7A1	3720
		Socket	DS6B7A1	5060
		Handle Assembly	SP96PH	410
125A, 415V	5	Plug	DS9A7A1	10980
		Socket	DS9B7A1	15340
		Conduit Box	SP99WB	8185
		Handle Assembly	SP99PH	1015

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

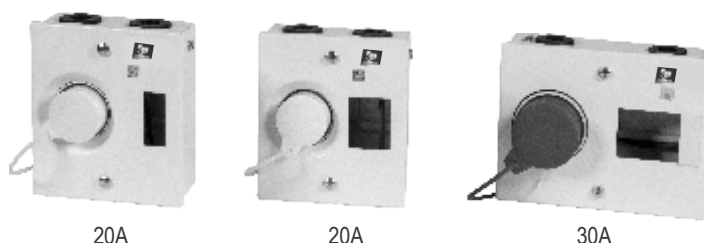


Plug & Socket Box BCH

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	1230
20A, 250V	2P + E	Universal	Plug & Socket Box - DP-MCB Cutout	MPSEU202	1230
30A, 440V	3P + E	Universal	Plug & Socket Box - TPN-MCB Cutout	MPSEU301	3090



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	1445
			Plug & Socket Box with DP-MCB Cutout	PSEU202	1480
		Flush	Plug & Socket Box with SP MCB Cutout	PSEF201	1445
			Plug & Socket Box with DP-MCB Cutout	PSEF202	1480
32A, 415V	4	Universal	Plug & Socket Box with 4P MCB Cutout	PSEU324	3205
			5	PSEU325	3270
	4	Flush	Plug & Socket Box with 4P MCB Cutout	PSEF324	3205
			5	PSEF325	3270

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	3620
			Plug & Socket Box with DP MCB Cutout	SSEU303	3620
	4	Universal	Plug & Socket Box with 4P MCB Cutout	SSEU304	3715
			5	SSEU305	3795

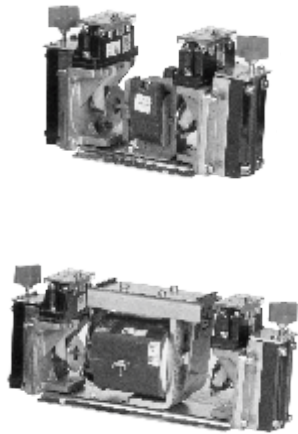
Stainless Steel Cover Plug & Socket Box Type 'PSEU-SSC'/SSEU-SSC'

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	1850
			P&S Box with 'PS' P&S and 4P MCB Cutout	PSEU325-SSC	3740
30A, 415V	3	Universal	Plug & Socket Box with SP MCB Cutout	SSEU303-SSC-MCB1P	4160
			Plug & Socket Box with DP MCB Cutout	SSEU303-SSC	4160
	4	Universal	Plug & Socket Box with 4P MCB Cutout	SSEU304-SSC	4260
			5	Universal	Plug & Socket Box with 3P MCB Cutout
	Plug & Socket Box with 4P MCB Cutout	SSEU305-SSC			4350

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	-	KRTPN10-0	4845	7265
	0.05 - 60 Sec	1NO + 1NC	-	KRTPN10-1	5015	7670
	0.05 - 180 Sec	1NO + 1NC	-	KRTPN10-3	5665	8365
	0.05 - 30 Sec	2NO + 2NC	-	KRTPN20-0	5445	7780
	0.05 - 60 Sec	2NO + 2NC	-	KRTPN20-1	5565	7870
	0.05 - 180 Sec	2NO + 2NC	-	KRTPN20-3	5980	8455
PNI	0.05 - 30 Sec	1NO + 1NC	1NO + 1NC	KRTPN11-0	5910	8460
	0.05 - 60 Sec	1NO + 1NC	1NO + 1NC	KRTPN11-1	6705	9240
	0.05 - 180 Sec	1NO + 1NC	1NO + 1NC	KRTPN11-3	7335	9350
	0.05 - 30 Sec	2NO + 2NC	2NO + 2NC	KRTPN22-0	7410	9655
	0.05 - 60 Sec	2NO + 2NC	2NO + 2NC	KRTPN22-1	7490	10155
	0.05 - 180 Sec	2NO + 2NC	2NO + 2NC	KRTPN22-3	8025	10745
Type	Time Range (Secs.)	On-Delay Block	Of-Delay Block	Cat No.	AC	DC
PCN	0.05 - 30 Sec	1NO + 1NC	1NO + 1NC	KRTPCN11-0	8005	10720
	0.05 - 60 Sec	1NO + 1NC	1NO + 1NC	KRTPCN11-1	8410	10810
	0.05 - 180 Sec	1NO + 1NC	1NO + 1NC	KRTPCN11-3	9550	11945
	0.05 - 30 Sec	2NO + 2NC	2NO + 2NC	KRTPCN22-0	9000	11765
	0.05 - 60 Sec	2NO + 2NC	2NO + 2NC	KRTPCN22-1	9430	11905
	0.05 - 180 Sec	2NO + 2NC	2NO + 2NC	KRTPCN22-3	10635	12980

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	5830	-
	150	2NO + 2NC	-	KRTPN20A-3R	5830	-

Accessories for Time Delay Relay HSN Code : 9107

Description	Cat. No.	MRP [₹]	Lot Size
Contact Block 1NO+1NC Timed	SP20S3+	1065	1
2NO+2NC Timed	SP20S4+	1390	
1NO+1NC Inst.	SP20S5+	1065	
2NO+2NC Inst.	SP20S6+	1390	
Magnet Coil AC-PN Relays	SP20MC ■	1495	1
AC-PNI & PCN Relays	SP20MC1 ■	1495	
DC Relays	SP20MC2 ■	4850	
Return Spring* (PNI & PCN)	SP20RS	250	1
Coil Clip*	SP20CC	400	
Magnet frame assembly without coil	SP20 MA/MA1	2180	1
Knob assembly	SP20KA	75	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° to +65°
- Mechanical and Electrical Life - 10 million operations

Voltage Suffix Code

Coil Voltage	24	110	220	240	415
AC Suffix M 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)

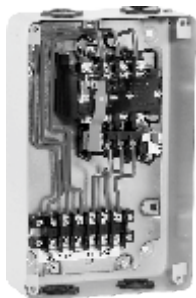
HSN CODE : 8536



Cat Code	Overload Relay Range (A)	Contactor Type	Contactor rating	MRP [₹]	Cat Code (Open Execution)	MRP [₹]
SAWPGZA	2.4 - 3.8	Shakti	12 A	2955	-	-
SAWPHZA	3.8 - 6.0					
SAWPJZA	6.0 - 9.3					
SAWPGZ	2.4 - 3.8		20 A	2995	-	2945
SAWPHZ	3.8 - 6.0					
SAWPJZ	6.0 - 9.3					
SAWPKZ	8.9 - 13.5					
SAWPLZ	13.2 - 20.0			3155	SAWPLZI	3135
SAWPMZ	17.4 - 24.0			3310	SAWPMZI	3295

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	3975
SAWPLZ-BT	13.2 - 20.0			4150
SAWPMZ-BT	17.4 - 24.0			4365

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	3190	SAGZI	3145
SAHZ	3.8 - 6.0				SAHZI	
SAJZ	6.0 - 9.3				SAJZI	
SAKZ	8.9 - 13.5				SAKZI	
SALZ	13.2 - 20.0			3480	SALZI	3435
SAMZ	17.4 - 24.0			3620	SAMZI	3570

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

HSN CODE : 8536



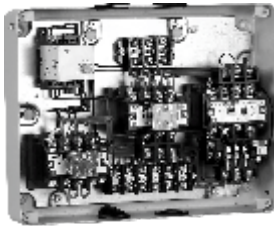
Cat Code	Overload Relay Range (A)	Contactor Type	Contactor rating	MRP [₹]
SASSGLEG	2.4 - 3.8	Shakti	16 A	10805
SASSHLEG	3.8 - 6.0			
SASSJLEG	6.0 - 9.3			
SASSKLEG	8.9 - 13.5			
SASSKLEG/LOR	13.2 - 20.0			11015
SASSKLEG-M	17.4 - 24.0			11380

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

For other Coil Voltages, kindly refer "Coil Voltage Master Table" at page 81

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	11945
SASAHLEG	3.8 - 6.0			
SASAJLEG	6.0 - 9.3			
SASAKLEG	8.9 - 13.5			
SASAKLEG/LOR	13.2 - 20.0			12150
SASAKLEG/MOR	17.4 - 24.0			12495

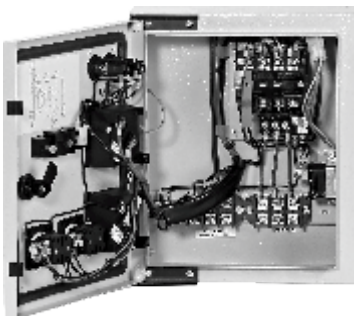
For 380 - 415 V Coil Voltage replace Suffix 'G' by 'N'

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	5440
ASXHZ	3.8 - 6.0			
ASXJZ	6.0 - 9.3			
ASXKZ	8.9 - 13.5			
ASXLZ	13.2 - 20.0			5705
ASXMZ	17.4 - 24.0			6035



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	8920
CPEYSAHZ	3.8 - 6.0			
CPEYSAJZ	6.0 - 9.3			
CPEYSAKZ	8.9 - 13.5			
CPEYSALZ	13.2 - 20.0			9865
CPEYSAMZ	17.4 - 24.0			10385

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 81

Motor Starters - CitationBCH

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	4285	NADLENI	4195
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		4540	NALLENI	4450	
NALLEN/MOR	12.5 / 10	17.4 - 24.0	CP20	20 A	5290	NALLENI/MOR	5340

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	6980
NAMLEN/NOR	15 / 11	22.0 - 30.0	N0N	25A	7605
NAPLEN/MOR	15 / 11	17.4 - 24.0	N01N	32A	9435
NAPLEN	20 / 15	23.0 - 32.0	N01N	32A	9830
NANLEN	20 / 15	22.0 - 30.0	N1N	40A	10870
NAQLEN	25 / 18.5	26.0 - 40.0	N1N	40A	11030

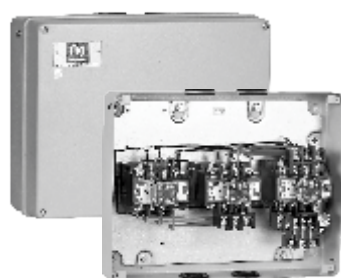
(B) 30 & 40HP DOL Starter

Cat Code	HP / KW at 3Ø, 415V, 50Hz	Overload Relay Range (A)	Contactor Type	Contactor Rating	MRP [₹]
New CEHFRGDM*	30 / 22	36.0 - 52.0	Freedom	50A	19580
NACT2LEDM	30 / 22	37.6 - 60.0	Citation D	40A	23570
NACT2LEEM	40 / 30	37.6 - 60.0	Citation E	70A	30255

*CEHFRGDM consist Freedom Contactor and Freedom OLR

Citation Semi Automatic Star Delta Starter with NHD Contactor

HSN CODE : 8536



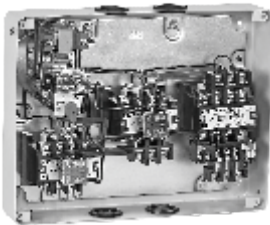
Cat Code	HP / KW at 3Ø, 415V, 50Hz	Overload Relay Range (A)	Contactor Type	Contactor Rating	MRP [₹]
NASSHLEN	5 / 3.7	3.8 - 6.0	C00N	16A	11645
NASSJLEN	10 / 7.5	6.0 - 9.3			
NASSKLEN	15 / 11	8.9 - 13.5			
NASSKLEN/LOR	15 / 11	13.2 - 20.0			
NASSLLEN	20 / 15	13.2 - 20.0	N0N	25A	17680
NASSMLEN	25 / 18.5	17.4 - 24.0			17790
NASSPLEN	25 / 18.5	23.0 - 32.0			19210
NASS01PLEN	35 / 26	23.0 - 32.0	N01N	32A	21925
NASS01QLEN	35 / 26	26.0 - 40.0	N01N	32A	22120
NASSNLEN	35 / 26	22.0 - 30.0	N1N	40A	31215
NASS01CT1LEN	40/30	24.4 - 39.0	N01N	32A	32920
New NASSFRGCLEC4M	40/30	29.0 - 42.0 (FR)	C4	32A	34850

For other Coil Voltages, kindly refer "Coil Voltage Master Table" at page 81

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	16025
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			16800
NASALLEN	20 / 15	13.2 - 20.0	N0N	25A	20245
NASAMLEN	25 / 18.5	17.4 - 24.0			20350
NASAPLEN	30 / 22	23.0 - 32.0			21195
NASA01PLEN	35 / 26	23.0 - 32.0	N01N	32A	25365
NASANLEN	35 / 26	22.0 - 30.0	N1N	40A	35570
NASAQLEN	40 / 30	26.0 - 40.0			35775
NASACT1LEN	40 / 30	24.4 - 39.0			40120

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	48585
NASACT2LEDM	50 / 37	37.6 - 60.0			49360
NASACT2LEEM	75 / 55	37.6 - 60.0	E	70A	84385
NASACT3LEEM	85 / 65	56.4 - 90.0			89750
NASACT3LEC5M	100 / 75	56.4 - 90.0	M-5	110A	115720
NASACT4LEC5M	135 / 100	84.6 - 135.0			118310
NASACT4LENM	150 / 110	84.6 - 135.0	N	140A	155615
NASACT5LEC6M	250 / 185	131.6 - 210.0	S	300A	222700
NASACT6LEC6M	375 / 280	188.0 - 300.0			252000

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	10765
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	14605
NARMLLEN	15/11	17.4 - 24.0	N1N	40 A	17675
NARNLEN	20/15	22.0 - 30.0			19230

For other Coil Voltages, kindly refer "Coil Voltage Master Table" at page 81

Motor Starters - Citation..... BCH



Fully 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	59745
NASASS60LEEM-P	75 / 55	5-60 Amp	E	70A	93460
NASA2CTD1CLEM5M-P	100/ 75	0.5-6 Amp (with CT 100/5) (2CT model)	M-5	110A	132360
NASA2CT150LEM5M-P	135/ 100	0.5-6 Amp (with CT 150/5) (2CT model)	M-5	110A	137125



Fully Automatic Star Delta Starter with NHD Contactor, Electronic Timer & Electronic Over Current Relay with Ammeter & Voltmeter and MCB

HSN CODE : 8536

Cat Code	HP / KW at 3Ø, 415V, 50Hz	EOCR Range (A)	Contactor Type (NHD)	Contactor Rating (A)	MCB Rating	MRP [₹]
NASASS30LEN-P-MCB	25 / 18.5	3-30 Amp	NA25N	25A	40A (TP)	35425

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	3250
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	
CECPM	5.0/3.7	7.5-11	Freedom	12 A	3335
CECQM	7.5/5.5	10-14	Freedom	12 A	
CEDQM	7.5/5.5	10-14	Freedom	18 A	4220
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 81

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	1565	AMLEH-10-SP	2100
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	2060	AMLEN-10	2375
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	3015
NAAHBW-SP	0.75 / 0.55	3.8 - 6.0		16A	3055
NAHBW-SP	0.75 / 0.55	3.8 - 6.0		12A	3015
NAAJBW-SP	1 / 0.75	6.0 - 9.3		16A	3055
NAJBW-SP	1 / 0.75	6.0 - 9.3		20A	3130
NAKBW-SP	1.5 / 1.10	8.9 - 13.5		25A	3415
NAALBW-SP	2 / 1.5	13.2 - 20.0			3470
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	6515
HASSHLEG	5 HP	3.8 - 6.0			
HASSJLEG	10 HP	6.0 - 9.3			
HASSKLEG	15 HP	8.9 - 13.5	NON	25 A	7410

HSN CODE : 8538

HASSW15	SPARE SWITCH FOR 15 HP MSD STARTER				2810
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For other Coil Voltages, kindly refer "Coil Voltage Master Table" at page 81

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

Submersible Pump Starters



Three Phase

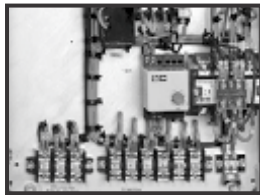
- Direct on line : upto 40 A relay rating
- Star Delta : upto 135 A relay rating
- Protections :
 - Phase failure
 - Phase imbalance
 - Phase reversal
- Short Circuit Protection Thru MCB : In case of Premium models
- Ammeter and Voltmeter
- On/Off and Trip indications
- Powder coated enclosure with PU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



On/Trip Indicators



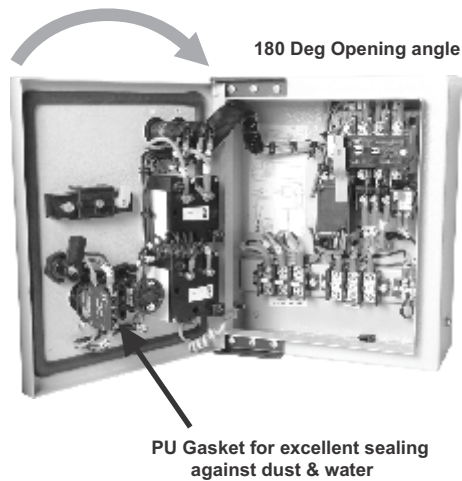
Isolated Terminal blocks for better termination



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

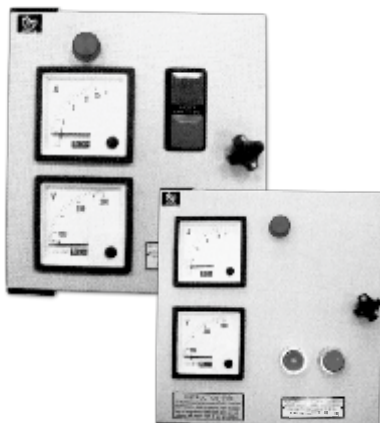


Phase indicators (For std & Premium models)



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



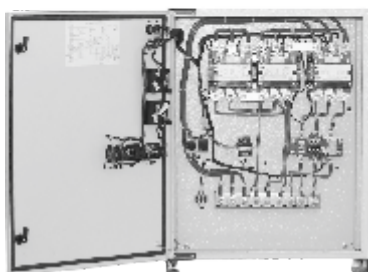
Overload Relay Range (A)	Contactor Type	Contactor Rating	DOL			
			Economy (without Short Circuit Protection)		Premium (with Short Circuit Protection) with MCB	
			Cat Code	MRP [₹]	Cat Code	MRP [₹]
1.58 - 2.50	C00N	16 A	CPEYNAFN*	9475	--	
2.4 - 3.8	C00N	16 A	CPEYNAGN*			
3.8 - 6.0	C00N	16 A	CPEYNAHN*			
6.0 - 9.3	C00N	16 A	CPEYNAJN*		CPPYNAJN*	13780
8.9 - 13.5	C00N	16 A	CPEYNAKN*		CPPYNAKN*	
13.2 - 20.0	C00N	16 A	CPEYNALN*	10155	CPPYNALN*	14740
17.4 - 24.0	N0N	25 A	CPEYNAMN*	11025	CPPYNAMN*	16305
23.0 - 32.0	N01N	32 A	CPEYNA01PN	12560	--	



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*	18360	--	
6.0 - 9.3	C00N	16 A	CPSDEYJN*		CPSPDYJN*	22525
8.9 - 13.5	C00N	16 A	CPSDEYKN*		CPSPDYKN*	
13.2 - 20.0	C00N	16 A	CPSDEYLN-C00	18685	CPSPDYLN-C00	23385
17.4 - 24.0	CP20	20 A	CPSDEYMN-CP20	20535	--	
13.2 - 20.0	N0N	25 A	CPSDEYLN	22090	CPSPDYLN	26890
17.4 - 24.0	N0N	25 A	CPSDEYMN	23270	CPSPPYMN	29060
23.0 - 32.0	N01N	32 A	CPSDEY01PN	29190	CPSPDY01PN	34130
22.0 - 30.0	N1N	40 A	CPSDEYNN	36365	CPSPDYNN	40925
26.0 - 40.0	N1N	40 A	CPSDEYQN	36900	CPSPDYQN	41495
24.4 - 39.0	N1N	40 A	CPSDEYCT1N	39965	CPSPDYCT1N	47855
37.6 - 60.0	Citation E	70 A	CPSDEYCT2M	64975	CPSPDYCT2M	73830
56.4 - 90.0	Citation E	70 A	CPSDEYECT3M	70700	--	
56.4 - 90.0	Citation M-5	110 A	CPSDEYCT3M	91420	CPSPDYCT3M	97315
84.6 - 135.0	Citation M-5	110 A	CPSDEYCT4M	94310	CPSPDYCT4M	103515

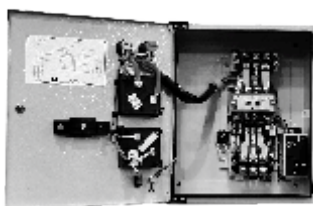
For other Coil Voltages, kindly refer "Coil Voltage Master Table" at page 81

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	9240
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	9515
CITATION P10B	13.2 - 20	20 A	CPEYNBL2*	N & G	9705
CITATION P10H	17.4 - 24	25 A	CPEYNBM*	N & G	10070
CITATION P11	23 - 32	32A	CPEYNBP01*	N & WB	11265
CITATION P11	26 - 40	32A	CPEYNBQ01*	N & WB	11415
CITATION P12	26 - 40	40A	CPEYNBQ*	N & WB	11750

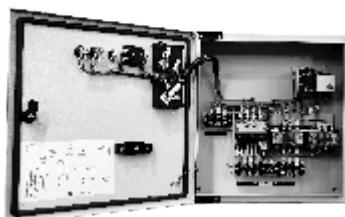
For spare contactor refer page 68

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	17835
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	18995
CITATION P20A	17.4 - 24	20 A	CPSDEYNBM2*	N, LV & G	19100
CITATION P20B	23 - 32A	25 A	CPSDEYNBP*	N, LV & G	22025
CITATION P20H	22 - 30A	32 A	CPSDEYNB01N*	N & WB	22620
CITATION P20H	23 - 32A	32 A	CPSDEYNB01P*	N & WB	22635
CITATION P20H	26 - 40A	32 A	CPSDEYNB01Q*	N & WB	22865
CITATION P21	26 - 40A	40 A	CPSDEYNBQ*	N & WB	27815

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	8255
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	8460
SHAKTI P10	13.2 - 20	20 A	CPEYSBL*	Z & N	9195
SHAKTI P10	17.4 - 24	20 A	CPEYSBM*	Z & N	9675

For spare contactor refer page 67

For other Coil Voltages, kindly refer "Coil Voltage Master Table" at page 81

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	5165
0.5 / 0.75 HP	3.8 - 6.0	16 Amp	CPNSHBW-SP	25	80/100	5270
			CPNSHBW-SP(RC36)	36	80/100	5315
			CPNSHBW-RC25-SC120	25	100/120	5440
			CPNSHBW-RC30-SC200	30	150/200	6155
1 HP	6.0 - 9.3	12 Amp	CPNSJBW-SPE	36	100/120	5365
1 HP	6.0 - 9.3	16 Amp	CPNSJBW-SP	36	100/120	5445
			CPNSJBW-RC20SC100	20	80/100	5410
			CPNSJBW-RC25SC100	25	80/100	5490
			CPNSJBW-RC50SC100	50	80/100	5650
			CPNSJBW-RC60SC150	60	120/150	5910
			CPNSJBW-RC72SC150	72	120/150	6035
			CPNSJBW-SP(RC30)	30	100/120	5490
			CPNSJBW-SP(RC50)	50	100/120	5490
			CPNSJBW-SP(SC100)	36	80/100	5860
			CPNSJBW-RC36-SC200	36	150/200	6270
1.5 HP	8.9 - 13.5	12 Amp	CPNSKBW-SPE	50	120/150	5905
1.5 HP	8.9 - 13.5	16 Amp	CPNSKBW-SP	50	120/150	5940
			CPNSKBW-RC30SC120	30	100/120	5850
			CPNSKBW-RC36SC120	36	100/120	5870
			CPNSKBW-SP(RC36)	36	120/150	5910
			CPNSKBW-SP(RC72)	36+36	120/150	6095
			CPNSKBW-RC50-SC200	50	150/200	6500
2 HP	13.2 - 20.0	16 Amp	CPNSLBW-SP	72	150/200	6355
			CPNSLBW-SP (2RC36)	36+36	150/200	6515
			CPNSLBW-RC100SC150	100	120/150	6405
			CPNSLBW-RC90SC150	45+45	120/150	6525
			CPNSLBW-SP(SC150)	72	120/150	6525
			CPNSLBW-RC72SC250	72	200/250	6885
3 HP	17.4 - 24.0	20 Amp	CPNSMBW-SPE	100	200/250	6785
3 HP	17.4 - 24.0	25 Amp	CPNSMBW-SP	100	200/250	7070
			CPNSMBW-SP(2RC50)	50+50	200/250	7340
	22.0 - 30.0		CPNSNBW-SP	100	200/250	7560
			CPNSNBW-SP(2RC50)	50+50	200/250	7775
5 HP	23.0 - 32.0	32 A & 12 A	CPNSPBW-SPE	100+50	200/250	9845
5 HP	23.0 - 32.0	40 A & 16 A	CPNSPBW-SP	100+50	200/250	10095
			CPNSPBW-SP(3RC50)	50+50+50	200/250	10335

*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	4920
CPNEJBW-SP	1 HP	6.0 - 9.3	16 Amp	36	100/120	5190
CPNEKBW-SP	1.5 HP	8.9 - 13.5	16 Amp	50	120/150	5670
CPNELBW-SP	2 HP	13.2 - 20.0	16 Amp	36+36	150/200	6050
CPNEMBW-SP	3 HP	17.4 - 24.0	25 Amp	50+50	200/250	6900
CPNEPBW-SP	5 HP	23.0 - 32.0	40 Amp	50+50+50	200/250	9905

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	3705
CPPM50H-25-SP	0.5 / 0.75 HP	3.5 - 6.5	25	4215
CPPM60-25-SP	1 HP	6.8 - 11.7	25	3730
CPPM60H-36-SP	1 HP	6.8 - 11.7	36	4240
CPPM60-50-SP	1.5 HP	6.8 - 11.7	50	3925
CPPM60H-50-SP	1.5 HP	6.8 - 11.7	50	4465
CPPM70-50-SP	2 HP	11.0 - 20.0	50	3985
CPPM70H-50-SP	2 HP	11.0 - 20.0	50	4530

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	3975
OISWPHT	3.8 - 6.0	20A	
OISWPJT	6.0 - 9.3	25A	
OISWPKT	8.9 - 13.5	36A	
OISWPLT	13.2 - 20.0	50A	4050
OISWPMT	17.4 - 24.0	63A	4385

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	11850
OISDAWPK*	8.9 - 13.5	32A	
OISDAWPL*	13.2 - 20.0	35A	
OISDAWPM*	17.4 - 24.0	50A	12675
OISDAWPP*	23.0 - 32.0	63A	13275



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	10640
OISDSWPK*	8.9 - 13.5	32A	
OISDSWPL*	13.2 - 20.0	35A	
OISDSWPM*	17.4 - 24.0	50A	11440
OISDSWPP*	23.0 - 32.0	63A	12005

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	13875
OISDYWPK*	8.9 - 13.5	32A	
OISDYWPL*	13.2 - 20.0	35A	
OISDYWPM*	17.4 - 24.0	50A	14755
OISDYWPP*	23.0 - 32.0	63A	15435

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	17055
OISDPYWPM*	17.4 - 24.0	50 A	17945
OISDPYWPP*	23.0 - 32.0	63 A	18770

'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	530
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	1305
	M, P Relay OCKSD30	1510
Auxiliary Contact Kit set for Star Delta Starter	Upto L Relay - OCKSDAUX20	350
	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	165
OFF-Push Button	OPB-OFF	
Incoming Mounting KIT for 20A	OCTKSD20	180
Incoming Mounting KIT for 30A	OCTKSD30	250

Overload Relay for Oil Starter - Pls refer along with all other Overload Relay Page 38

Spares for Starter BCH

Spares for Shakti Starters

HSN CODE : 8538

Cat. No.	Description	MRP [₹]
SHA	Contact Kit	995
SHAA	Contact Kit 12A (1 Aux + 3P)	895
SHZ	Coil 190- 400 V	445
SHCC	Contact carrier	105
SHPB	Extended Button Assembly	300
SHCO	Contact for DOL	2600
SHACO	Contact for Star Delta	2850
SHCOA	Contact 12A (3+1 Aux)	2220
NCPNYAU*-5S or 5M	SPP (for ASX & OISDY)-6 Wire	885
CPTB630	Terminal Block 30A 6 way	315
CPAMS-3P/ASX	Auto Manual Switch 3 position	505

Spares for Citation M Starters

HSN CODE : 8538

Cat. No.	Description	MRP [₹]
SP100PB3	Start & Stop reset button unit assembly for DOL & SD (upto 150HP)	355
SP100CB	Start actuator Block for DOL	305
SP100CBS	Start actuator Block for SD	305
SP100TB	Terminal Block for Star Delta Starters	305
CPTB975	Terminal Block for SD Starters (40-50 HP)	945
SPSATG	Electronic Timer (Star Delta)	1330
For 250-375 HP SD Starter		
TSFB-R	Push Button (RED)	275
TSFB-G	Push Button (Green)	275
050N1	Aux Contact Block(1NO+1NC)	350

Spares for 3-Phase Submersible Pump Starter

HSN CODE : 8538

Cat. No.	Description	MRP [₹]
NCPYAU*-5S or 5M	SPP (3 Position SPS)-6 Wire	885
BCHSPP1*-5S or 5M	SPP 6-Wire	885
CPAM25	Ammeter 25A	645
CPAM50	Ammeter 50A	645
CPAM100	Ammeter 100A	680
CPVM500	Voltmeter 500V	645
SPSATG	Electronic Timer (Star Delta)	1330
CPTB215	Terminal Block 15A 2 way	75
CPTB360	Terminal Block 60A 3 way	240
CPTB660	Terminal Block 60A 6 way	395
CPTB3100	Terminal Block 100A 3 way	810
CPMB	Mounting Bracket Set	140
CPAMS-2P	Auto Manual Switch 2 position	385
CPAMS-3P	Auto Manual Switch 3 position	410
CPVSS	Voltmeter Selector Switch	415
HEA11GM-PB	Start PB (Green)	210
HEA11RM-PB	Stop PB (Red)	210
HCB10	Aux Block (1 NO)	105
HCB01	Aux Block (1 NC)	105
HFB2PAH	LED-Amber (R-Y-B)	345
HFB2XAM	LED-Amber (Motor Trip)	230
HFB2XRM	LED-RED (415 VAC)	230

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	90
SPAM-10	Ammeter 10A	645
SPAM-15	Ammeter 15A	
SPAM-25	Ammeter 25A	
SPAM-50	Ammeter 50A	
SPVM-300	Voltmeter 300V	
CPTB530	Terminal Block 30A 5 way (Mini Version)	155
CPTB530H	Terminal Block 30A 5 way (Contr. Version)	255
CPTB330	Terminal Block 30A 3 way	110
CPTB240	Terminal Block 40A 2 way	160
SPGC	"ON" Push Button GREEN upto 24A relay range	295
SPGB	"ON" Push Button GREEN For 32A relay range	295
SPRC	"OFF" Push Button RED	240
MC305TB4	Add-on Terminal Block for 23-32A relay (outgoing side)	220

Spares for Freedom DOL

HSN CODE : 8538

Cat. No.	Description	MRP [₹]
C320SCB	Start Contact Block	205
CEPBI	Push Button - Green	105
CEPBO	Push Button - Red	105



Spares for Starter..... BCH



1Aux + 3 P 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 1 Aux + 3 P* 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 ■	2235
CA16	20	16	10	7.5	CA16N ■	2565
CA20	30	20	12.5	9.3	CA20N ■	3270
NA25	32	25	15	11	NA25N ■	4510
NA32	40	32	20	15	NA32N ■	5690
NA40	50	40	25	18.5	NA40N ■	6790

*Auxiliary contact is at left side in 1 Aux + 3P 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	1025	SP90E01	275	SP90E2	935
16A	SP90A1	1145	SP90A01	305	SP90A2	1045
20A	SP90F1	1520	SP90F01	395	SP90F2	1380
25A	SP90B1	2135	SP90B01	545	SP90B2	1940
32A	SP90D1	2640	SP90D01	675	SP90D2	2400
40A	SP90C1	2970	SP90C01	755	SP90C2	2700

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

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

KIT for CPG

HSN CODE : 8538

Contactor Rating	Cat Code	MRP [₹]
12A	CPG122PSP	550
16A	CPG162PSP	585
20A	CPG202PSP	945
25A	CPG252PSP	1480
32A	CPG322PSP	1620
40A	CPG402PSP	1820

* 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	80
CPTB210	10A, 2 way TB for P series SPS	70
CPLED-R	LED RED 415V	235
CPLED-A	LED AMBER 415V	235
SP100CBP	Start Actuator blkok for P series SPS	305
CPAM10-WH, CPAM15-WH, CPAM25-WH	Ammeter with White Bezel (for Shakti P SPS)	645
CPVM500-WH	Voltmeter 500V White Bezel	645

Dual Meter

HSN CODE : 9030

Cat. No.	MRP [₹]
CPAM10VM300, CPAM15VM300, CPAM25VM300, CPAM30VM300, CPAM50VM300	885
CPAM10VM500, CPAM15VM500, CPAM30VM500, CPAM60VM500	945
CPAM30-60VM500S72	920
CPAM60-120VM500S72	995
CPAM30-60VM500S96	1175
CPAM60-120VM500S96	1315

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	162-440V	196-462V	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

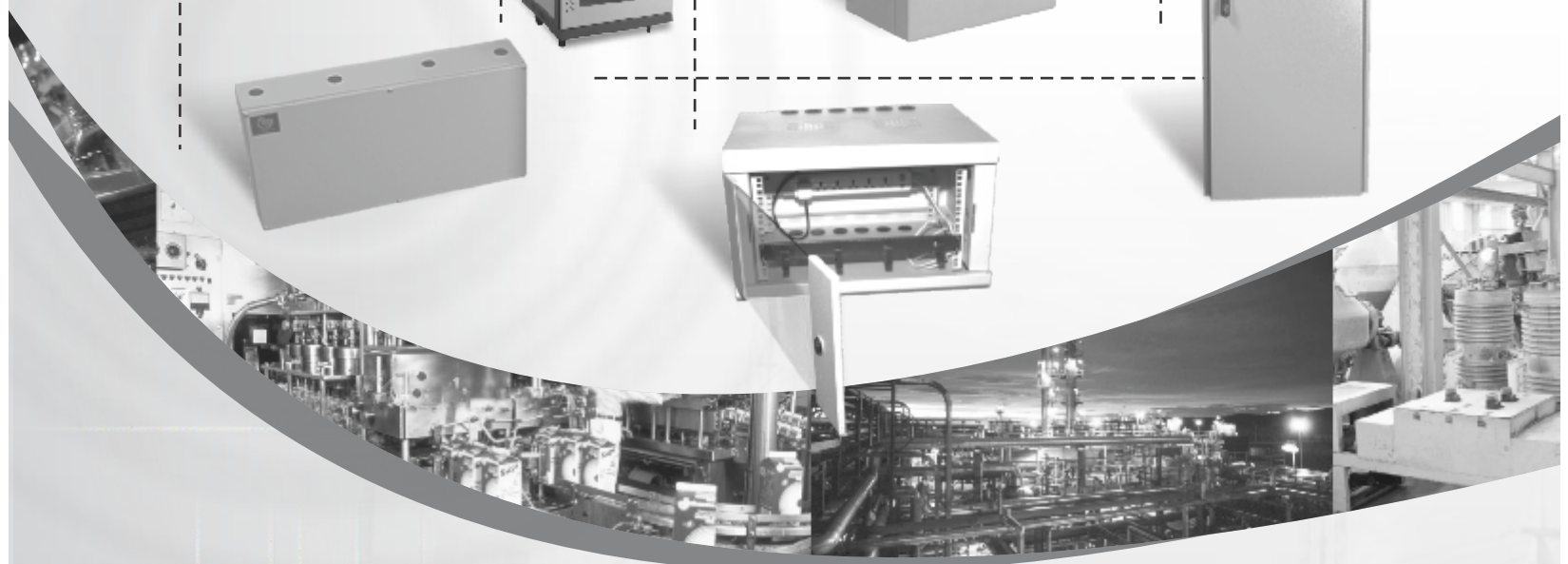
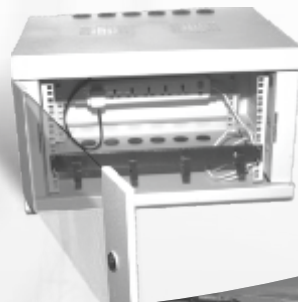
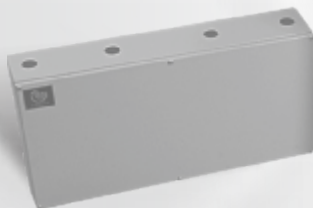
* For N1N DL Coil (340-460V) option is available

* 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
- TEOS Plus Enclosure
- TCE Series Enclosure
- Compartmentalized Enclosure (Fixed & Draw-out)
- IT Racks - 19" and ETSI Racks



Enclosure Systems BCH

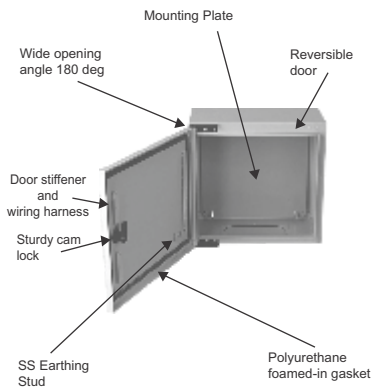
Bhartia Boxes

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. 10.05.2022
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. 10.05.2022	BIL-60000	Refer Enclosure Price List w.e.f. 10.05.2022
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. 10.05.2022	600WX200D	BIL-16-CAN-6020	1	Refer Enclosure Price List w.e.f. 10.05.2022
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.125.

***GST to be charged extra**

Enclosure Systems BCH



- 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. 10.05.2022
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	

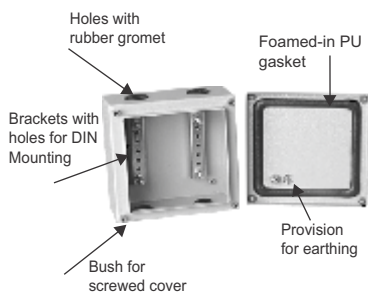
MOQ - Minimum order quantity in nos.
Note - SS grade 304

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. 10.05.2022	BIL-80000	Refer Enclosure Price List w.e.f. 10.05.2022
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.125.

***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. 10.05.2022	Refer Enclosure Price List w.e.f. 10.05.2022	Refer Enclosure Price List w.e.f. 10.05.2022	Refer Enclosure Price List w.e.f. 10.05.2022	TPL 061804	Refer Enclosure Price List w.e.f. 10.05.2022	TSC 061804	Refer Enclosure Price List w.e.f. 10.05.2022
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	TM E 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	TM E 122208	TPL 122208	TSC 122208						

*Baying kit (BIL-14280) Rs. 1875/- is also available for Enclosure Version. For extra accessories, please contact nearest branch office.

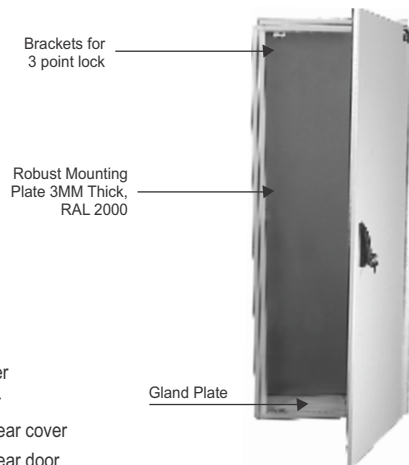
MOQ-Minimum order quantity in nos.

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.125.

***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.125.

***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. 10.05.2022	Refer Enclosure Price List w.e.f. 10.05.2022	Refer Enclosure Price List w.e.f. 10.05.2022	Refer Enclosure Price List w.e.f. 10.05.2022	TPL 061805	Refer Enclosure Price List w.e.f. 10.05.2022	SLSC 061805	Refer Enclosure Price List w.e.f. 10.05.2022
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					TPL 122006		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. 1875/- 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 SideCovers, 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.125.

***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.125.

***GST to be charged extra**



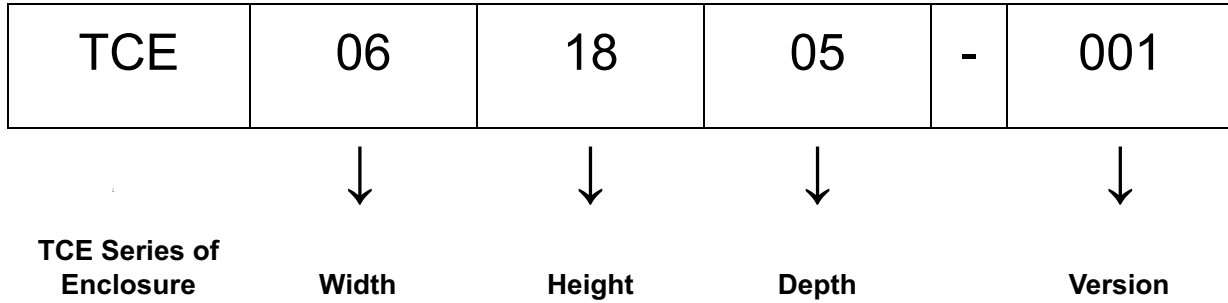
Note :

- 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.125.

***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.125.*

***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. 10.05.2022	Refer Enclosure Price List w.e.f. 10.05.2022	Refer Enclosure Price List w.e.f. 10.05.2022	Refer Enclosure Price List w.e.f. 10.05.2022	Refer Enclosure Price List w.e.f. 10.05.2022
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.125.

***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. 10.05.2022
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. 10.05.2022
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.125.

***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. 10.05.2022
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. 10.05.2022
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. 10.05.2022
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. 10.05.2022
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. 10.05.2022

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. 10.05.2022
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

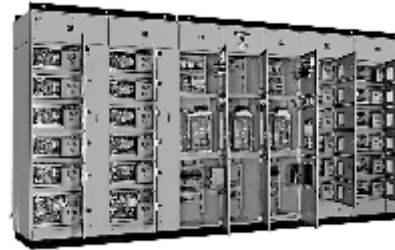
HSN Code: 8538

Sl. No	Description	Cat No	LP[₹]
1	Punched section 600mm width	TCE-PSW-600	Refer Enclosure Price List w.e.f. 10.05.2022
2	Punched section 800mm width	TCE-PSW-800	
3	Punched section 1000mm width	TCE-PSW-1000	
4	Punched section 1200mm width	TCE-PSW-1200	

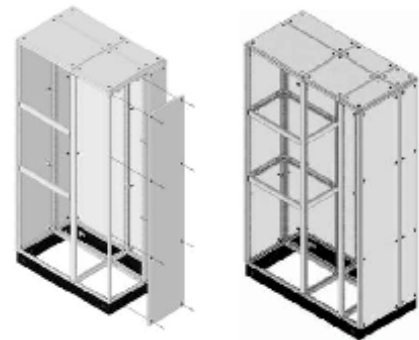
* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.125.

***GST to be charged extra**

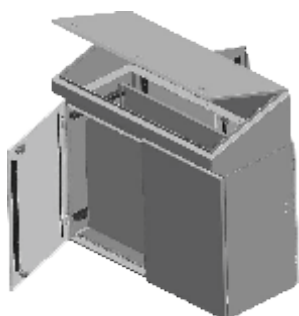
Highlights of **BCH** Compartmentalized **MCC / PCC / PMCC** Solution (Fixed & Drawed Type)



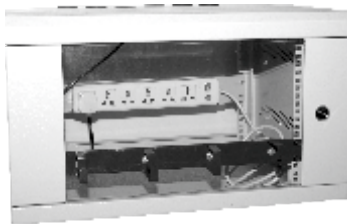
- 100% Modular Structure; can be dispatched in flat pack.
- Flexible compartmentalized -up to From 4.
- IP 54 degree of protection with polyurethane foam gasket.
- Compartment size available from 200mm height & multiplies of 100mm.
- Additional accessories like Cable support, Busbar support, Limit Switch 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



Enclosure Systems *technoRACKS* BCH



Key Attributes:

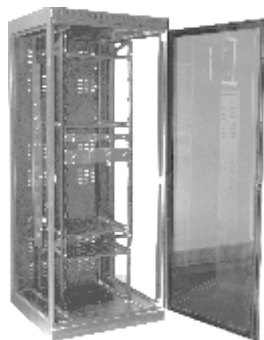
- Aesthetic & robust construction
- Mounting Fan /s in top doesn't take usable "U" space.
- Special type of Wallmounting hardware.
- Provision for earthing available in the cabinets.
- Highly corrosion resistant in nature.
- Power coated to shade RAL : 7035 structure finish.

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. 10.05.2022
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. 10.05.2022
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

* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.125.

***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. 10.05.2022
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. 10.05.2022
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. 10.05.2022
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

* List Prices are Ex-works Faridabad. For detail Refer Enclosure Selling Terms & Conditions on page no.125.

***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. 10.05.2022
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. 10.05.2022
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. 10.05.2022
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. 10.05.2022
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. 10.05.2022
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. 10.05.2022
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-WALLMOUNTHW	

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.125.

***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 conduit / Trunking	Unenclosed clipped directly to a surface or on cable tray	
Single Core	(Sq. mm)	(Amp.)	(Amp.)	in [₹]
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
HSN Code : 8544				
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 conduit / Trunking	Unenclosed clipped directly to a surface or on cable tray	
Single Core	(Sq. mm)	(Amp.)	(Amp.)	in [₹]
FRFR01-0005D-AAA	0.5	4	4.5	On request
FRFR01-0008D-AAA	0.75	7	8	On request
FRFR01-0010D-AAA	1	11	12	On request
FRFR01-0015D-AAA	1.5	13	16	On request
FRFR01-0025D-AAA	2.5	18	22	On request
FRFR01-0040D-AAA	4	24	29	On request
FRFR01-0060D-AAA	6	31	37	On request
FRFR01-0100D-AAA	10	42	51	On request
FRFR01-0160A-AAA *	16	57	68	On request
FRFR01-0250A-AAA *	25	71	86	On request
FRFR01-0350A-AAA *	35	91	100	On request
FRFR01-0500A-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 conduit / Trunking	Unenclosed clipped directly to a surface or on cable tray	
Single Core	(Sq. mm)	(Amp.)	(Amp.)	in [₹]
FRLS01-0005D-AAA	0.5	4	4.5	On request
FRLS01-0008D-AAA	0.75	7	8	On request
FRLS01-0010D-AAA	1	11	12	On request
FRLS01-0015D-AAA	1.5	13	16	On request
FRLS01-0025D-AAA	2.5	18	22	On request
FRLS01-0040D-AAA	4	24	29	On request
FRLS01-0060D-AAA	6	31	37	On request
FRLS01-0100D-AAA	10	42	51	On request
FRLS01-0160A-AAA *	16	57	68	On request
FRLS01-0250A-AAA *	25	71	86	On request
FRLS01-0350A-AAA *	35	91	100	On request
FRLS01-0500A-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

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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	On request	BCHMCH001B	On request
2	BCHMCN002B	On request	BCHMCH002B	On request
3	BCHMCN003B	On request	BCHMCH003B	On request
4	BCHMCN004B	On request	BCHMCH004B	On request
5	BCHMCN005B	On request	BCHMCH005B	On request
7.5	BCHMCN007B	On request	BCHMCH007B	On request
10	BCHMCN010B	On request	BCHMCH010B	On request
12.5	BCHMCN012B	On request	BCHMCH012B	On request
15	BCHMCN015B	On request	BCHMCH015B	On request
20	BCHMCN020B	On request	BCHMCH020B	On request
25	BCHMCN025B	On request	BCHMCH025B	On request

Heavy edge Zn Al Alloy MPP film

.02 - .03 micron metallised layer

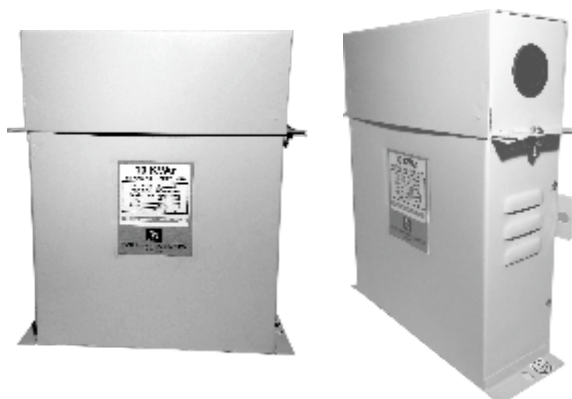
MPP Capacitors (IS13340)

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

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

HSN Code : 8532

KVAR	Normal Duty		Heavy Duty	
	Cat. No.	MRP [₹]	Cat. No.	MRP [₹]
1	BCHMBN001B	On request	BCHMBH001B	On request
2	BCHMBN002B	On request	BCHMBH002B	On request
3	BCHMBN003B	On request	BCHMBH003B	On request
4	BCHMBN004B	On request	BCHMBH004B	On request
5	BCHMBN005B	On request	BCHMBH005B	On request
7.5	BCHMBN007B	On request	BCHMBH007B	On request
10	BCHMBN010B	On request	BCHMBH010B	On request
12.5	BCHMBN012B	On request	BCHMBH012B	On request
15	BCHMBN015B	On request	BCHMBH015B	On request
20	BCHMBN020B	On request	BCHMBH020B	On request
25	BCHMBN025B	On request	BCHMBH025B	On request



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)

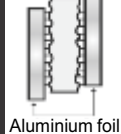
HSN Code : 8532

KVAR	APP Capacitor		SHD Capacitor	
	Cat. No.	MRP [₹]	Cat. No.	MRP [₹]
1	BCHAPS001B	On request	BCHSHD001B	On request
2	BCHAPS002B	On request	BCHSHD002B	On request
3	BCHAPS003B	On request	BCHSHD003B	On request
4	BCHAPS004B	On request	-	On request
5	BCHAPS005B	On request	BCHSHD005B	On request
7.5	BCHAPS007B	On request	BCHSHD007B	On request
10	BCHAPS010B	On request	BCHSHD010B	On request
12.5	BCHAPS012B	On request	BCHSHD012B	On request
15	BCHAPS015B	On request	BCHSHD015B	On request
20	BCHAPS020B	On request	BCHSHD020B	On request
25	BCHAPS025B	On request	BCHSHD025B	On request

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

Double thick double hazy pp film

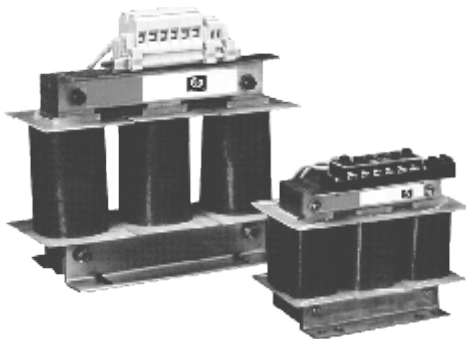
APP Capacitors



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

7% Aluminium wound & Copper wound 440V Detuned Reactors

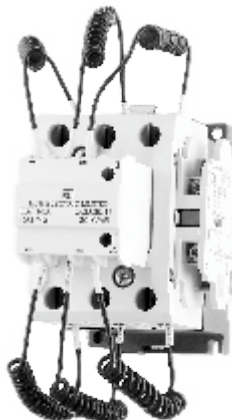
HSN Code : 8504



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

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	2490
10	CCD.10.11.▀	1NO+1NC	2710
15	CCD.15.11.▀	1NO+1NC	3960
20	CCD.20.11.▀	1NO+1NC	4650
26	CCD.26.11.▀	1NO+1NC	5810
30	CCD.30.11.▀	1NO+1NC	9070
40	CCD.40.11.▀	1NO+1NC	13820
50	CCD.50.21.▀	2NO+1NC	14530
60	CCD.60.21.▀	2NO+1NC	16300

▀ Standard coil voltages are 24, 110, 220/240 & 380/415 V AC, 50 Hz. For voltage codes refer Table on page 37

Effective from 10.05.2022

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	On request
10	TSM	440	BCHTSM010	On request
15	TSM	440	BCHTSM015	On request
20	TSM	440	BCHTSM020	On request
25	TSM	440	BCHTSM025	On request
50	TSM	440	BCHTSM050	On request
75	TSM	440	BCHTSM075	On request
100	TSM	440	BCHTSM100	On request

APFC

Intelligent Power Factor Controllers (IPFC)

Steps	Cat. No.	Voltage	Brief description	MRP [₹]
12 STEP - 3φ	RG3-12C	230V	12 Step intelligent PFC	39020
12 STEP - 3φ	RG3-12CS	230V	12 Step intelligent PFC with RS 485 communication	43890
15 STEP - 3φ	RG3-15C	230V	15 Step , Intelligent PFC relay	40900
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	49480
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	15120
6 STEP - 1 φ	RG-6T-415-96	415V	PFC (96X96) WITH 6 STEPS , 415 V	15120
6 STEP - 1 φ	RG-6T-230	230V	PFC (144X144) WITH 6 STEPS, 230 V	15800
6 STEP - 1 φ	RG-6T-415	415V	PFC (144X144) WITH 6 STEPS, 415 V	15800
8 STEP - 1 φ	RG-8T-230	230V	PFC (144X144) WITH 8 STEPS, 230 V	17960
8 STEP - 1 φ	RG-8T-415	415V	PFC (144X144) WITH 8 STEPS, 415 V	17960
8 STEP - 3 φ	RG3-8T-230	230V	PFC 144X144, 8 STEPS, 230V UNBALANCE LOAD	24140
12 STEP - 1 φ	RG-12T-230	230V	PFC (144X144) WITH 12 STEPS, 230 V	22490
12 STEP - 1 φ	RG-12T-415	415V	PFC (144X144) WITH 12 STEPS, 415 V	22490
12 STEP - 3 φ	RG3-12T-230	230V	PFC 144X144, 12 STEPS, 230V UNBALANCE LOAD	29230

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

Motors

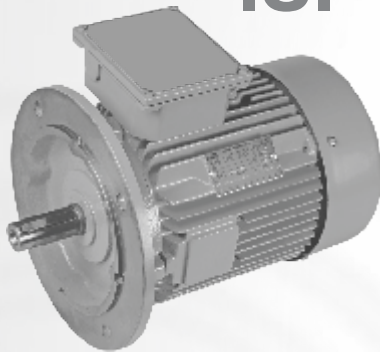
Low Voltage AC TEFC Squirrel
Cage Induction Motors

IE2, IE3 & IE4

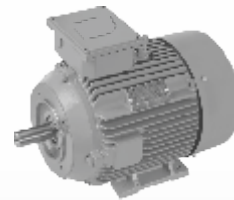
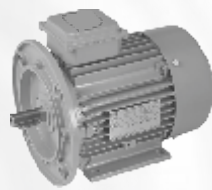
50°C
ambient temperature

Class F

ISI

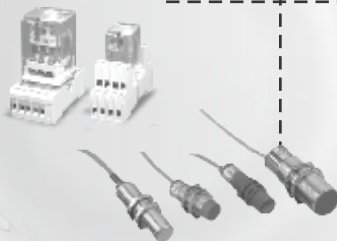
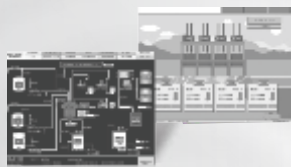


- 0.12 HP to 425 HP
- 2 to 8 Poles
- With forced cooling
- Upto 40 intermediate standard ratings
- High efficiency, consistent - life long
- Low loss for entire life
- Inverter duty motor
- No deration upto 50° C
- Dual coat winding wire as standard feature
- 6 terminals across the range
- Top, LHS,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



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 200-230VAC
- Output - 3 Phase 200-230V AC
- Sensorless vector and V/F control
- Build in PID function

SINUS M AC Drive



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

AC Drive



Sinus Penta AC Drive

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



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

Digital DC Drives



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

Digital DC Drives

HSN Code - 8504

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

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



ASA4.0 Series Soft-Starter

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

Protection:

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



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	1205	10
DINE8SN10	8	1.5	NPN-NO	100	1205	
DINE12SP10	12	2	PNP-NO	200	985	
DINE12SN10	12	2	NPN-NO	200	985	
DINE18SP10	18	5	PNP-NO	200	1025	
DINE18SN10	18	5	NPN-NO	200	1025	
DINE30SP10	30	10	PNP-NO	400	1390	
DINE30SN10	30	10	NPN-NO	400	1390	
Non Flush Version Nominal Voltage 12-30V DC 3 Wire Output LED Indication Integrated cable 3C/2M						
DINE8NP10	8	2	PNP-NO	100	1205	10
DINE8NN10	8	2	NPN-NO	100	1205	
DINE12NP10	12	4	PNP-NO	200	985	
DINE12NN10	12	4	NPN-NO	200	985	
DINE18NP10	18	8	PNP-NO	200	1025	
DINE18NN10	18	8	NPN-NO	200	1025	
DINE30NP10	30	15	PNP-NO	400	1390	
DINE30NN10	30	15	NPN-NO	400	1390	
Flush Version Nominal Voltage 240V AC* 2 Wire Output LED Indication Integrated cable 3C/2M						
DINE12SA10	12	2	NO	200	1280	10
DINE12SA01	12	2	NC	200	1280	
DINE18SA10	18	5	NO	400	1350	
DINE18SA01	18	5	NC	400	1350	
DINE30SA10	30	10	NO	400	1575	
DINE30SA01	30	10	NC	400	1575	
Non Flush Version Nominal Voltage 240V AC* 2 Wire Output LED Indication Integrated cable 3C/2M						
DINE12NA10	12	4	NO	200	1280	10
DINE12NA01	12	4	NC	200	1280	
DINE18NA10	18	8	NO	400	1350	
DINE18NA01	18	8	NC	400	1350	
DINE30NA10	30	15	NO	400	1575	
DINE30NA01	30	15	NC	400	1575	

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

ePROX Range

Capacitive Proximity Switches

HSN Code - 8536



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

General 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	2465	10
DCAE18SP10	18	1 to 5	PNP-NO	400	2465	
DCAE30SN10	30	1 to 10	NPN-NO	400	2825	
DCAE30SP10	30	1 to 10	PNP-NO	400	2825	
Non Flush Version 12-30V DC 3 Wire Output LED Indication Integrated 3C/2M						
DCAE18NN10	18	2 to 10	NPN-NO	400	2465	10
DCAE18NP10	18	2 to 10	PNP-NO	400	2465	
DCAE30NN10	30	3 to 15	NPN-NO	400	2825	
DCAE30NP10	30	3 to 15	PNP-NO	400	2825	

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	3740	10
DPHE18D2P11	18	200	PNP-NO+NC	200	3740	
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	3755	10
DPHE18RRP11	18	1000	PNP-NO+NC	200	3755	
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	4495	10
DPHE18TBRN11	18	5000	NPN-NO+NC	200	4495	

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	1240	10
DINE8SN10K	8	1.5	NPN-NO	M8 Connector	1240	
DINE12SP10K	12	2	PNP-NO	M12 Connector	1235	
DINE12SN10K	12	2	NPN-NO	M12 Connector	1235	
DINE18SP10K	18	5	PNP-NO	M12 Connector	1250	
DINE18SN10K	18	5	NPN-NO	M12 Connector	1250	
DINE30SP10K	30	10	PNP-NO	M12 Connector	1550	
DINE30SN10K	30	10	NPN-NO	M12 Connector	1550	
Non Flush Version Nominal Voltage 12-30V DC 3 Wire Output LED Indication						
DINE8NP10K	8	2	PNP-NO	M8 Connector	1240	10
DINE8NN10K	8	2	NPN-NO	M8 Connector	1240	
DINE12NP10K	12	4	PNP-NO	M12 Connector	1235	
DINE12NN10K	12	4	NPN-NO	M12 Connector	1235	
DINE18NP10K	18	8	PNP-NO	M12 Connector	1250	
DINE18NN10K	18	8	NPN-NO	M12 Connector	1250	
DINE30NP10K	30	15	PNP-NO	M12 Connector	1550	
DINE30NN10K	30	15	NPN-NO	M12 Connector	1550	
Cat. No.	Description Female Connectors				MRP [₹]	
DM8K3	M8 3-Wire straight connector w/o LED & 2 m cable				955	10
DM8K390LE	M8 3-Wire "L" type connector with LED & 2 m cable				955	
DM12K4	M12 4-Wire straight connector w/o LED & 2 m cable				645	
DM12K490	M12 4-Wire "L" type connector w/o LED & 2 m cable				940	
DM12K490LE	M12 4-Wire "L" type connector with LED & 2 m cable				1005	
Linear Output Inductive Proximity Sensor - Nominal Voltage 24V DC, 2m Integrated Cable						
DINE18LIN	18	5	0 - 10V	2 m long PVC Cable	2120	10
DINE18LINMA	18	5	4 - 20 mA		2120	

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	1470	10
DINE12SD10	12	2	NO	200	1020	
DINE18SD10	18	5	NO	400	1050	
DINE30SD10	30	10	NO	400	1360	
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	1470	10
DINE12ND10	12	4	NO	200	1020	
DINE18ND10	18	8	NO	400	1050	
DINE30ND10	30	15	NO	400	1360	

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	1520	10
DINE8SN10S	8	1.5	NPN-NO	200	1520	
DINE12SP10S	12	2	PNP-NO	200	1060	
DINE12SN10S	12	2	NPN-NO	200	1060	
DINE18SP10S	18	5	PNP-NO	400	1070	
DINE18SN10S	18	5	NPN-NO	400	1070	
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	1520	10
DINE8NN10S	8	2	NPN-NO	200	1520	
DINE12NP10S	12	4	PNP-NO	200	1060	
DINE12NN10S	12	4	NPN-NO	200	1060	
DINE18NP10S	18	8	PNP-NO	400	1070	
DINE18NN10S	18	8	NPN-NO	400	1070	

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	1060	10
DINE5025SP10P	50x25x10	5	PNP-NO	200	1110	
DINE1717SN10P	17x17x30	5	NPN-NO	200	1060	
DINE5025SN10P	50x25x10	5	NPN-NO	200	1110	

* 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	410	ASPU212DLET	590	2 C/O	10
24V DC	ASPU224DLE	405	ASPU224DLET	590		
110V DC	ASPU2110DLE	450	ASPU2110DLET	620		
12V AC	ASPU212ALE	450	ASPU212ALET	650		
24V AC	ASPU224ALE	480	ASPU224ALET	640		
110V AC	ASPU2110ALE	475	ASPU2110ALET	635		
240V AC	ASPU2240ALE	520	ASPU2240ALET	700		
11 Pin - contact rating 10A (Res.) at 24V DC/240V AC, LED Indication						
12V DC	ASPU312DLE	495	ASPU312DLET	620	3 C/O	10
24V DC	ASPU324DLE	485	ASPU324DLET	635		
110V DC	ASPU3110DLE	525	ASPU3110DLET	690		
24V AC	ASPU324ALE	545	ASPU324ALET	700		
110V AC	ASPU3110ALE	540	ASPU3110ALET	710		
240V AC	ASPU3240ALE	575	ASPU3240ALET	750		

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	365	10
24V DC	ASPS224DLE		365	
48V DC	ASPS248DLE		400	
110V DC	ASPS2110DLE		415	
12V AC	ASPS212ALE		395	
24V AC	ASPS224ALE		400	
110V AC	ASPS2110ALE		395	
240V AC	ASPS2240ALE		450	
11 Pin - contact rating 5A (Res.) at 24V DC/240V AC, LED Indication				
12V DC	ASPS312DLE	3 C/O	450	10
24V DC	ASPS324DLE		450	
48V DC	ASPS348DLE		530	
110V DC	ASPS3110DLE		510	
24V AC	ASPS324ALE		430	
110V AC	ASPS3110ALE		450	
240V AC	ASPS3240ALE		505	

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	215	10
ASSU8	SOCKET 8 PIN FOR ASPS/ASPU Relay	165	

* 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	325	20
24V DC	ASPM424DLE		325	
48V DC	ASPM448DLE		330	
110V DC	ASPM4110DLE		330	
24V AC	ASPM424ALE		355	
110V AC	ASPM4110ALE		365	
240V AC	ASPM4240ALE		365	
8 Pin - contact rating 5A (Res.) at 24V DC/240V AC, LED Indication				
12V DC	ASPM212DLE	2 C/O	275	20
24V DC	ASPM224DLE		275	
48V DC	ASPM248DLE		325	
110V DC	ASPM2110DLE		325	
24V AC	ASPM224ALE		325	
110V AC	ASPM2110ALE		325	
240V AC	ASPM2240ALE		325	

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	250	20
ASSM8	SOCKET 8 PIN FOR ASPM Relay	180	

* 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	835	ARPU212DLE	1160	2 C/O	10
24V DC	ARPU224D	925	ARPU224DLE	1125		
48V DC	ARPU248D	900	ARPU248DLE	900		
110V DC	ARPU2110D	870	ARPU2110DLE	870		
24VAC	ARPU224A	810	ARPU224ALE	810		
48VAC	ARPU248A	740	ARPU248ALE	870		
110V AC	ARPU2110A	870	ARPU2110ALE	870		
230V AC	ARPU2230A	935	ARPU2230ALE	1140		
11 Pin, Contact rating = 10A (Res.) at 24V DC/250V AC; Mechanical indicator with manual testing/latching lever						
12 V DC	ARPU312D	900	ARPU312DLE	900	3 C/O	10
24V DC	ARPU324D	1075	ARPU324DLE	1075		
48V DC	ARPU348D	915	ARPU348DLE	955		
110V DC	ARPU3110D	935	ARPU3110DLE	935		
24VAC	ARPU324A	915	ARPU324ALE	920		
48VAC	ARPU348A	915	ARPU348ALE	915		
110V AC	ARPU3110A	840	ARPU3110ALE	1170		
230V AC	ARPU3230A	1035	ARPU3230ALE	1205		

Sockets for ARPU Plug in Relay

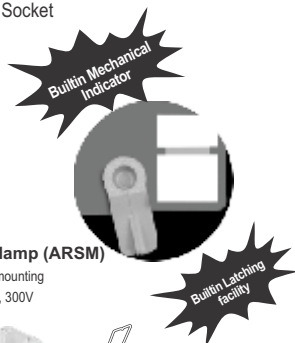
Cat. No.	Type	MRP [₹]	Lot Size
10A, 250V AC, Screw Terminals, 35mm DIN Rail Mounting			
ARSU11	11 Pin Socket	435	10
ARSU8	8 Pin Socket	405	
ARPUCL	Holding Clamp	55	

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	390	ARPM412DLE	530	4 C/O	10
24V DC	ARPM424D	375	ARPM424DLE	435		
110V DC	ARPM4110D	575	ARPM4110DLE	575		
24V AC	ARPM424A	420	ARPM424ALE	480		
110V AC	ARPM4110A	415	ARPM4110ALE	450		
230V AC	ARPM4230A	430	ARPM4230ALE	480		
8 Pin, Contact rating = 12A (Res.) at 24V DC/250V AC; Mechanical indicator with manual testing/latching lever						
12 V DC	ARPM212D	535	ARPM212DLE	560	2 C/O	10
24V DC	ARPM224D	405	ARPM224DLE	495		
110V DC	ARPM2110D	585	ARPM2110DLE	585		
24V AC	ARPM224A	565	ARPM224ALE	565		
110V AC	ARPM2110A	455	ARPM2110ALE	480		
230V AC	ARPM2230A	435	ARPM2230ALE	510		

Sockets for ARPM Plug in Relay

Cat. No.	Type	MRP [₹]	Lot Size
Screw Terminals, 35mm DIN Rail Mounting			
ARSM14	14 Pin Socket	350	10
ARSM8	8 Pin Socket	265	
ARPMCL	Holding Clamp	55	

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	1065

- 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	2040



- 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-	1125
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	1125
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	1960
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	2140
Recycling type BDR 0.1 Sec. - 10 Hrs. 240V AC; 24V AC/DC or 110V AC; 24V AC/DC	SBT02-00	2850
Multifunction type BLR 0.1 Sec. - 10 Hrs. 240V AC; 24V AC/DC or 110V AC; 24V AC/DC	SBT03-00	2160

- Voltage Code
- Timing Range for SAS Timer

Voltage Codes

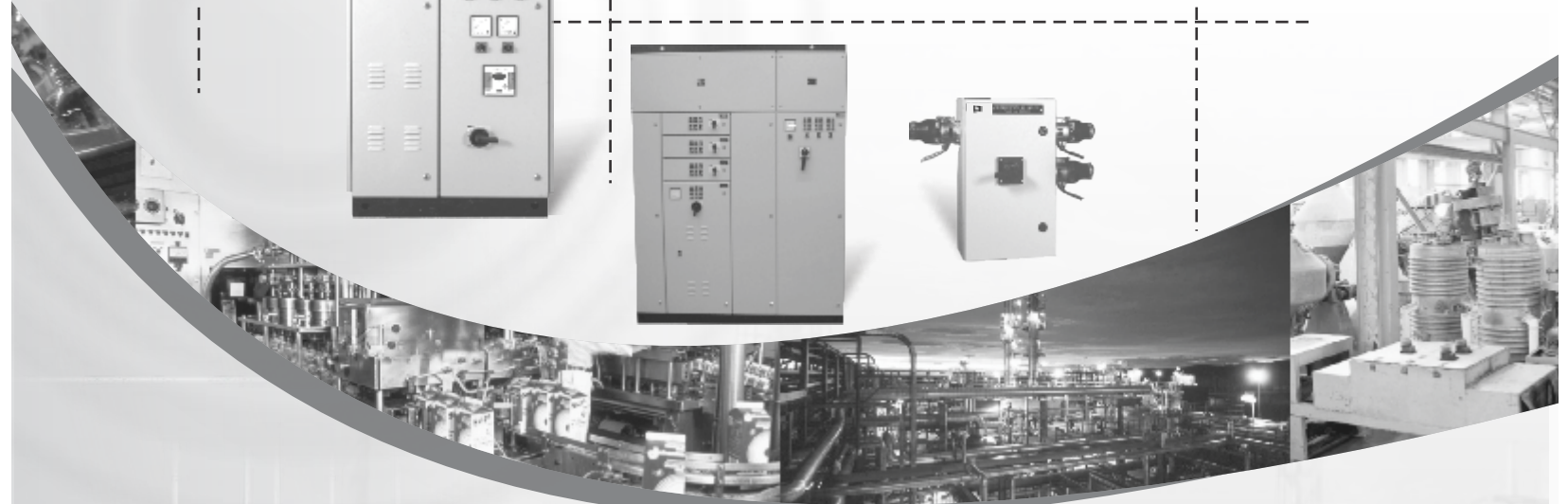
Type	Voltage	Voltage Code
B	240V AC; 24 VAC/DC	1
	110 V AC; 24 VAC/DC	2
	12 V DC	5
SAS	240V AC	1
	110V AC	2
	48V AC/DC	3
	24V AC/DC	4

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_r in Standard Ratings of 40, 50, 60, 75, 100, 125, 150, 175 & 200 KVA_r with suitable banking arrangement.

MOUNTING - Wall Mounting up-to 75KVA_r & Floor Mounting above 75 KVA_r ratings.

INCOMING - BCH-Resilient 3-P MCCB with Rotary handle.

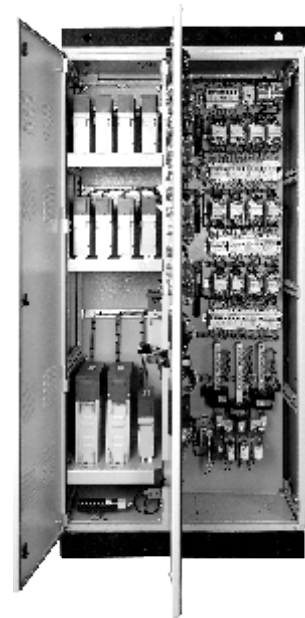
OUTGOING - TP MCB or HRC fuses with fuse base as standard (BCH-Resilient 3-P MCCB or SDFU and Compartmentalized outgoing feeders can also be provided depending upon size of panel on request).

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

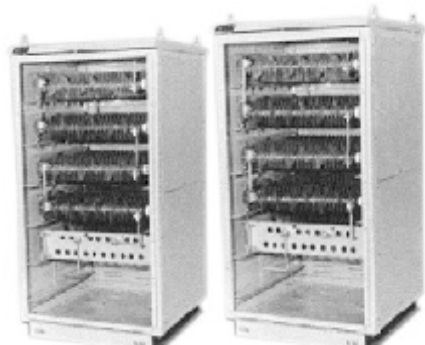
Resistors & Starters..... BCH

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

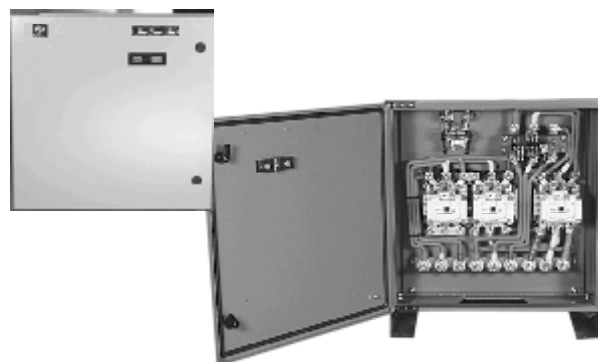
Special Purpose Starters

- 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	18795
W12	0.125	200	16625
WL16	0.16	180	19205
WL20	0.2	150	19610
WL25	0.25	134	17315
WL32	0.32	118	15370
WL40	0.4	113	17730
WL50	0.5	100	14975
WL62	0.62	84	19330
WL80	0.8	75	17515
WL100	1	67	16285
WL125	1.25	64	18125
WL160	1.6	57	15640
WL200	2	54	17405
WL250	2.5	48	15370
WL320	3.2	43	13640
WL400	4	40	18750
WL500	5	35	13605
WL625	6.25	33	15540
WL800	8	29	14500
WL1200	12	21	15540
WL1600	16	19	15075

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

Type	Resistance Per Bank	Continuous Rating	LP
	Ohms	Amps	[₹]
WLL20(M)-1	0.325	150	30490
WLL25(M)-1	0.54	134	29150
WLL32(M)-1	0.68	118	24720
WLL50(M)-1	0.864	100	20945



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.

- Power Control Products
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CIN : U31103WB1965PLC026427, **Customercare No.** 1800-103-9262, **E-mail :** marketing@bchindia.com

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Works 1 : 20/4, Mathura Road, Faridabad -121 006 (Haryana) Tel. : 0129-4063000/4293000 Fax : 0129-2304016

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

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Above Westside,
Shyamal Cross Road,
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E-mail: ahmedabad@bchindia.com

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Bhubaneswar

Mallik Commercial
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Bhubaneswar - 751 001
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Chandigarh (Panchkula)

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Coimbatore - 641 018
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E-mail : coimbatore@bchindia.com

Delhi 1

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Delhi 2

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3rd Floor, 6, M.G. Road,
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Jaipur

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

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3rd Floor, Aastha Trade Centre,
'Q' Road, Bistupur,
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Kolkata

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Lucknow

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Mumbai - 400 021
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Pune - 411 001
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Babylon Capital, Near Oswal
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Vadodra

301, Third Floor, "Florence Classic",
10, Ashapuri Co-Op. Hsg. Soc. Ltd., Opp. VUDA Housing,
Near Cow Circle, Akota, Vadodra - 390 020
Tel. : 0265-2345068/2345069
Telfax : 0265-2345068,
E-mail : vadodra@bchindia.com

Other Branch Locations

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Jalandhar	Midnapur	Ranchi	Udaipur	
Jalgaon	Muzaffarnagar	Rourkela	Vapi	
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Since product improvement is a continuous process, the data furnished in this brochure may undergo revision without prior notice.