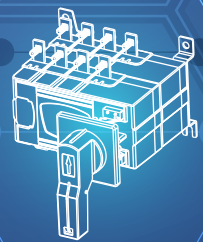
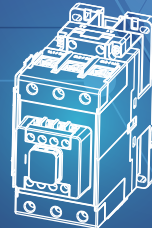
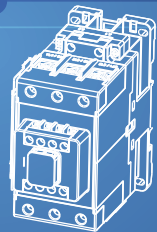
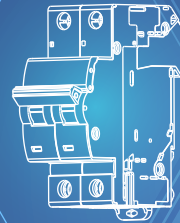
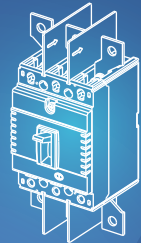
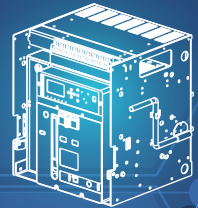




HAVELLS

**LV - SWITCHGEAR,
CONTROLGEAR & POWER
QUALITY SOLUTIONS**



Price List w.e.f 21st July 2021

Note: All Switchgear and Controlgear Products to be billed at 18% *GST.
*Subject to change as per Govt. Notification

CONTENTS

Controlgear NEW

3 Pole Power Contactors _____	9
4 Pole & 2 Pole Power Contactors _____	11
Capacitor Duty Contactors _____	12
Contactors Selection Chart with DC Load _____	13
MPCB _____	16
Type 2 Coordination Chart _____	17
Thermal Overload Relay _____	21
Industrial Starter _____	25
Street Light Panel _____	28
Agri Starter - DOL, DOL Submersible & ASD Submersible Starter _____	30
Single Phase DOL Starter, Single Phase Submersible Starter _____	31

Industrial Switchgear

Titania Air Circuit Breaker _____	38
HIM Moulded Case Circuit Breaker _____	45
Loadline Moulded Case Circuit Breaker _____	50
Loadline Microprocessor Moulded Case Circuit Breaker _____	53
St- Δ -dx Series Miniature circuit breaker (MCB) _____	57
PowerSafe Load Bank MCCB Panel Boards _____	64
Euroload Changeover Switch _____	66
Instaline / Instaprime Automatic Transfer Switch _____	66
Euroload By-Pass Changeover Switch _____	67
Euroload Switch Disconnecter _____	67
Kompact Switch Disconnecter Fuse _____	68
Busbar Chamber _____	72
Hibreak Fuse Base _____	72
HBC Fuse Link _____	73

Power Quality Solutions & Components

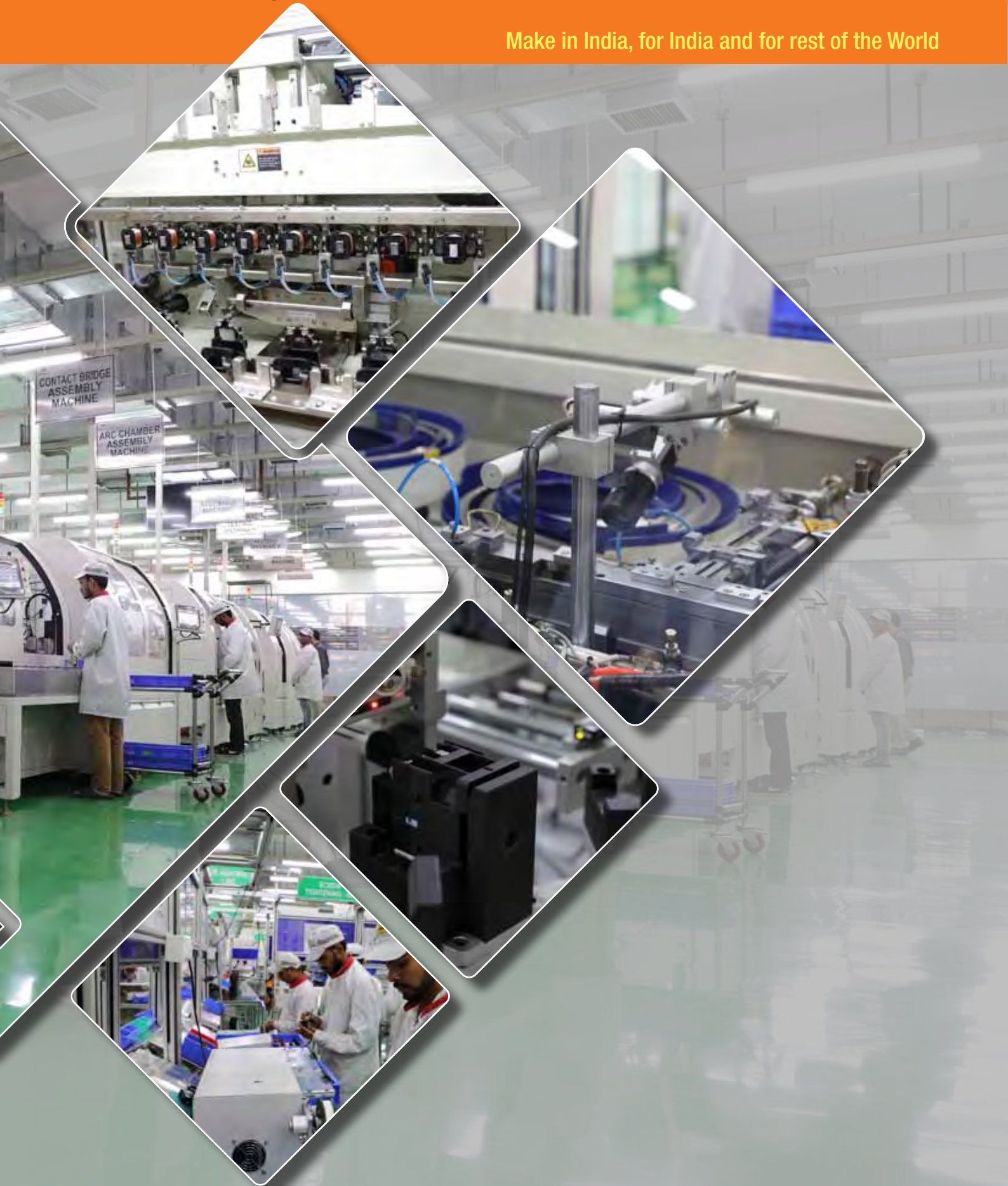
APFC Panel _____	77
IPFC Relay _____	81
Cylindrical Capacitors (MPP Type) _____	82
Square Cap Capacitors (MPP Type) _____	83
Ultra Heavy Duty Capacitors (APP Type) _____	85
Mixed Dielectric Capacitors _____	85
HD Harmonic Detuned Reactors _____	87
Thyristor Switch _____	87
Active Harmonic Filter and Broad Band Filter _____	89
Agri Boost Capacitors _____	91
Single Phase Capacitors _____	91

Fully Automated Plant



Industry 4.0

Make in India, for India and for rest of the World



HGS - Trusted Global Range

Contactors, Overload Relays, Starters & MPCBs

Motor Control Solutions for higher Safety, Reliability & Performance

Range:

- Contactor ratings from 9 A to 800 A
- Relay ratings 0.12 A to 800 A
- Capacitor duty contactor ratings 3 kVAr to 66 kVAr
- MPCB rating 0.1 A to 32 A
- Complete range of accessories

Salient Features / Customer benefits:

- High Electrical and Mechanical life
- High Endurance / Switching Frequency
- Low Power Dissipation / Coil Consumption
- Class-H Insulation for Contactors
- Dust free cover
- Terminal Barrier & Shrouds
- Nut Retaining Washer
- Universal AC / DC Coil > 115 A Ratings
- Removable Arc Chutes
- Ref. Standard IS/IEC 60947-4-1

Contactor (HGS)



Overload Relay (HGST)



HGS Rated Current
Rated Insulation Voltage

18 AF	40 AF	65 AF	100 AF	150 AF	265 AF	500 AF	800 AF
9 A, 12 A, 18 A	25 A, 32 A, 40 A	50 A, 65 A	75 A, 85 A, 100 A	115 A, 130 A, 150 A	185 A, 225 A, 265 A	300 A, 400 A, 500 A	630 A, 800 A
800 V	800 V	1,000 V	1,000 V	1,000 V	1,000 V	1,000 V	1,000 V

HGST Setting Current

0.12 A - 18 A	7 A - 40 A	7 A - 65 A	17 A - 100 A	48 A - 150 A	48 A - 265 A	90 A - 500 A	378 A - 800 A
---------------	------------	------------	--------------	--------------	--------------	--------------	---------------

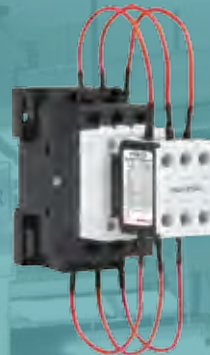
HGS - Trusted Global Range

Contactors, Overload Relays, Starters & MPCBs

Motor Control Solutions for higher Safety, Reliability & Performance



4 Pole Contactor
Ratings - 16 A to 60 A (AC-1)



Capacitor Duty Contactor
Ratings - 3 kVAr to 66 kVAr



DOL Starters
Ratings - 0.55 kW to 37 kW
(0.75 HP to 50 HP)



Reversing Starters
Ratings - 1.5 kW to 15 kW
(2 HP to 20 HP)



ASD Starters
Ratings - 7.5 kW to 110 kW
(10 HP to 150 HP)



ASD three phase Submersible Starters
Ratings - 22 kW to 37 kW
(30 HP to 50 HP)

HGS - Magnetic Contactor

With H Class Insulation

IEC 60947
CE
KERI
CB
Mairne Approvals (7s)



Magnetic Contactor

3 Pole Power Contactors with AC Coil

Features:

- Range : 9 A – 800 A, AC-3 in 8 Frames
- Conforms to IS / IEC 60947-4-1
- Snap fit construction up to 40 A
- Class H Insulation
- Cassette Type Design and universal Coil from 115 A to 800 A
- Completely Shield for dusty atmosphere
- Nut Retaining Washer for quick termination
- DIN rail mounting up to 100 A
- Protection degree IP 20

HSN Code: 8536

Frame Size	AC-3 Duty Rating at 415 V, 50 Hz			AC-1 Duty Rating at 415 V, 50 Hz	Power Poles	Auxiliary Contact Arrangement		Type	Item Code	Per Unit LP (₹)
	I _e A	kW	HP	I _{th} A		NO	NC			
1	9 A	4 kW	5.0 HP	25 A	3	1	0	HGS 9	IHPHA009110*	861.00
	9 A	4 kW	5.0 HP	25 A	3	0	1	HGS 9	IHPHA009101*	861.00
	12 A	5.5 kW	7.5 HP	30 A	3	1	0	HGS 12	IHPHA012110*	1002.00
	12 A	5.5 kW	7.5 HP	30 A	3	0	1	HGS 12	IHPHA012101*	1002.00
	18 A	9 kW	12.5 HP	40 A	3	1	0	HGS 18	IHPHA018110*	1161.00
	18 A	9 kW	12.5 HP	40 A	3	0	1	HGS 18	IHPHA018101*	1161.00
2	25 A	11 kW	15 HP	45 A	3	1	0	HGS 25	IHPHA025110*	1444.00
	25 A	11 kW	15 HP	45 A	3	0	1	HGS 25	IHPHA025101*	1444.00
	32 A	15 kW	20 HP	55 A	3	1	0	HGS 32	IHPHA032110*	3044.00
	32 A	15 kW	20 HP	55 A	3	0	1	HGS 32	IHPHA032101*	3044.00
	40 A	22 kW	30 HP	60 A	3	1	0	HGS 40	IHPHA040110*	4537.00
	40 A	22 kW	30 HP	60 A	3	0	1	HGS 40	IHPHA040101*	4537.00
3	50 A	25 kW	35 HP	70 A	3	2	2	HGS 50	IHPHA050300*	6131.00
	65 A	37 kW	50 HP	85 A	3	2	2	HGS 65	IHPHA065300*	7676.00
4	75 A	45 kW	60 HP	110 A	3	2	2	HGS 75	IHPHA075400*	9191.00
	85 A	45 kW	60 HP	125 A	3	2	2	HGS 85	IHPHA085400*	10834.00
	100 A	45 kW	60 HP	135 A	3	2	2	HGS 100	IHPHA100400*	15618.00
5	115 A	59 kW	75 HP	160 A	3	2	2	HGS 115	IHPHA115500*	18770.00
	130 A	75 kW	100 HP	180 A	3	2	2	HGS 130	IHPHA130500*	19323.00
	150 A	80 kW	100 HP	210 A	3	2	2	HGS 150	IHPHA150500*	23554.00
6	185 A	100 kW	135 HP	275 A	3	2	2	HGS 185	IHPHA185600*	27241.00
	225 A	110 kW	150 HP	315 A	3	2	2	HGS 225	IHPHA225600*	29609.00
	265 A	132 kW	180 HP	350 A	3	2	2	HGS 265	IHPHA265600*	33327.00
7	300 A	150 kW	200 HP	400 A	3	2	2	HGS 300	IHPHA300700*	40928.00
	400 A	220 kW	300 HP	500 A	3	2	2	HGS 400	IHPHA400700*	51178.00
	500 A	280 kW	380 HP	550 A	3	2	2	HGS 500	IHPHA500700*	73726.00
8	630 A	375 kW	500 HP	750 A	3	2	2	HGS 630	IHPHA630800*	115018.00
	800 A	450 kW	610 HP	900 A	3	2	2	HGS 800	IHPHA800800*	185576.00



*To complete the Cat no. suffix the coil voltage from the coil voltage table (Table-1)

- Note:
1. For additional aux. contacts front/side mounted and mechanical interlock - refer accessories table.
 2. Standard Spare coil are available on request.

Magnetic Contactor

3 Pole Power Contactors with DC Coil

HSN Code: 8536

Frame Size	AC-3 Duty Rating at 415 V, 50 Hz			AC-1 Duty Rating at 415 V, 50 Hz	Power Poles	Auxiliary Contact Arrangement		Type	Item Code	Per Unit LP (₹)
	I _e A	kW	HP	I _{th} A		NO	NC			
1	9 A	4 kW	5.0 HP	25 A	3	1	0	HGSD 9	IHPHA009110*	POR
	9 A	4 kW	5.0 HP	25 A	3	0	1	HGSD 9	IHPHA009101*	
	12 A	5.5 kW	7.5 HP	30 A	3	1	0	HGSD 12	IHPHA012110*	
	12 A	5.5 kW	7.5 HP	30 A	3	0	1	HGSD 12	IHPHA012101*	
	18 A	9 kW	12.5 HP	40 A	3	1	0	HGSD 18	IHPHA018110*	
	18 A	9 kW	12.5 HP	40 A	3	0	1	HGSD 18	IHPHA018101*	
2	25 A	11 kW	15 HP	45 A	3	1	0	HGSD 25	IHPHA025210*	
	25 A	11 kW	15 HP	45 A	3	0	1	HGSD 25	IHPHA025201*	
	32 A	15 kW	20 HP	55 A	3	1	0	HGSD 32	IHPHA032210*	
	32 A	15 kW	20 HP	55 A	3	0	1	HGSD 32	IHPHA032201*	
	40 A	22 kW	30 HP	60 A	3	1	0	HGSD 40	IHPHA040210*	
	40 A	22 kW	30 HP	60 A	3	0	1	HGSD 40	IHPHA040201*	
3	50 A	25 kW	35 HP	70 A	3	2	2	HGSD 50	IHPHA050300*	
	65 A	37 kW	50 HP	85 A	3	2	2	HGSD 65	IHPHA065300*	
4	75 A	45 kW	60 HP	110 A	3	2	2	HGSD 75	IHPHA075400*	
	85 A	45 kW	60 HP	125 A	3	2	2	HGSD 85	IHPHA085400*	
	100 A	45 kW	60 HP	135 A	3	2	2	HGSD 100	IHPHA100400*	
5	115 A	59 kW	75 HP	160 A	3	2	2	HGS 115	IHPHA115500*	
	130 A	75 kW	100 HP	180 A	3	2	2	HGS 130	IHPHA130500*	19323.00
	150 A	80 kW	100 HP	210 A	3	2	2	HGS 150	IHPHA150500*	23554.00
6	185 A	100 kW	135 HP	275 A	3	2	2	HGS 185	IHPHA185600*	27241.00
	225 A	110 kW	150 HP	315 A	3	2	2	HGS 225	IHPHA225600*	29609.00
	265 A	132 kW	180 HP	350 A	3	2	2	HGS 265	IHPHA265600*	33327.00
7	300 A	150 kW	200 HP	400 A	3	2	2	HGS 300	IHPHA300700*	40928.00
	400 A	220 kW	300 HP	500 A	3	2	2	HGS 400	IHPHA400700*	51178.00
	500 A	280 kW	380 HP	550 A	3	2	2	HGS 500	IHPHA500700*	73726.00
8	630 A	375 kW	500 HP	750 A	3	2	2	HGS 630	IHPHA630800*	115018.00
	800 A	450 kW	610 HP	900 A	3	2	2	HGS 800	IHPHA800800*	185576.00



*To complete the Cat no. suffix the coil voltage from the coil voltage table (Table-1)

Coil Voltage Selection Table (1)

9 A - 100 A AC Coil

Product	24 Vac	110 Vac	240 Vac	150 Vac-300 Vac	260 Vac-440 Vac	415 Vac
HGS Power Contactor (9 A - 100 A)	B	H	N	S*	W	T

*upto 40 A AC 3

9 A - 100 A DC Coil

Product	24 Vdc	48 Vdc	110 Vdc	220 Vdc
HGS Power Contactor (9 A - 100 A)	C	F	K	P

115 A - 500 A AC / DC Universal Coil

Product	24 V(AC/DC)	110 V- 220V(AC/DC)	240Vac	415Vac
HGS Power Contactor (115 A - 265 A) Universal Coil (AC/DC)	B	N	N	T
HGS Power Contactor (300 A - 500 A) Universal Coil (AC/DC)		N	N	T



630 A - 800 A AC / DC Universal Coil

Product	110 V(AC/DC)	200 Vac - 240 Vac 200 Vdc - 220 Vdc	415 Vac
HGS Power Contactor (630 A - 800 A) Universal Coil (AC/DC)	H	N	T

Magnetic Contactor

4 Pole Power Contactors with AC / DC Coil

Features:

- Range: 16 A to 60 A, AC-1
- Conforms to IS / IEC 60947-4-1
- Class H Insulation
- Snap fit construction
- Completely Shielded for dusty atmosphere
- Low VA burden Coils

Frame Size	AC 1 Duty	Power Poles	Item Code	Per Unit LP (₹)	Power Poles	Item Code	Per Unit LP (₹)
Frame 1	16	4NO	IHPHC016100*	1022.00	2NO + 2NC	IHPHC016122*	1126.00
	20	4NO	IHPHC020100*	1045.00	2NO + 2NC	IHPHC020122*	1150.00
	25	4NO	IHPHC025100*	1127.00	2NO + 2NC	IHPHC025122*	1277.00
	32	4NO	IHPHC032100*	1155.00	2NO + 2NC	IHPHC032122*	1323.00
Frame 2	40	4NO	IHPHC040100*	1744.00	2NO + 2NC	IHPHC040122*	1883.00
	50	4NO	IHPHC050200*	2277.00	2NO + 2NC	IHPHC050222*	2552.00
	60	4NO	IHPHC060200*	4343.00	2NO + 2NC	IHPHC060222*	4869.00



*To complete the Cat no. suffix the coil voltage from the coil voltage table (Table-2)

Magnetic Contactor

Aux Contactor / Control Relay - HGS Series with AC / DC Coil

Features:

- Applicable standard IEC 60947-5-1
- Protection degree IP20
- Common accessories for HGS Range
- Class H Insulation

Frame size	I _{th}	Contact arrangement		Type	Item Code	Per Unit LP (₹) with AC Coil	Per Unit LP (₹) with DC Coil
		NO	NC				
1	16 A	2	2	HGR 22	IHHAC22*	830.00	POR
		3	1	HGR 31	IHHAC31*	830.00	
		4	0	HGR 40	IHHAC40*	830.00	
		0	4	HGR 04	IHHAC04*	830.00	
		1	3	HGR 13	IHHAC13*	830.00	

*To complete the Cat no. suffix the coil voltage from the coil voltage table (Table-2)

Coil Voltage Selection Table (2)

HGS 4 Pole / Aux Contactor

Product	24 Vac	110 Vac	240 Vac	150 Vac-300 Vac	260 Vac-440 Vac	415 Vac
HGS 4 Pole / Aux Contactor	B	H	N	S	W	T

HGS 4 Pole / Aux Contactor

Product	24 Vdc	48 Vdc	110 Vdc	220 Vdc
HGS 4 Pole / Aux Contactor	C	F	K	P



Magnetic Contactor

HGS 2 Pole Contactor with AC / DC Coil

Material	Material description	Per Unit LP (₹) with DC Coil
IHPHF016100	16A 2P HGS Contactor	650.00
IHPHF012100	12A 2P HGS Contactor	680.00
IHPHF009100	9A 2P HGS Contactor	622.00
IHPHF018100	18A 2P HGS Contactor	750.00
IHPHF025200	25A 2P HGS Contactor	880.00
IHPHF032200	32A 2P HGS Contactor	965.00
IHPHF040200	40A 2P HGS Contactor	1000.00



Coil Voltage Selection Table (3)

HGS 2 Pole Contactor

Product	150 Vac-300 Vac	240 Vac
HGS 2 Pole Contactor	S	N

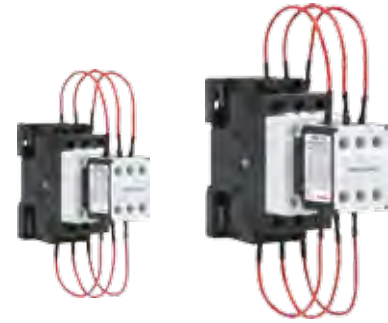
Magnetic Contactor

Capacitor Duty Contactor

Features:

- Range : 3 kVAr to 66 kVAr
- Low VA burden coils
- Standard accessories for HGS Series
- Class H Insulation
- High making and breaking frequency 240 cycle / hour
- Handle high inrush current capability
- Utilization category AC-6b

kVAr Rating AC-6b 415 V / 440 V	Inst. Aux. Contact		Item Code	Per Unit LP (₹)
	NO	NC		
3 kVAr	1	0	IHPHE003110*	1781.00
3 kVAr	0	1	IHPHE003101*	1781.00
5 kVAr	1	0	IHPHE005110*	1868.00
5 kVAr	0	1	IHPHE005101*	1868.00
10 kVAr	1	0	IHPHE010110*	2263.00
10 kVAr	0	1	IHPHE010101*	2263.00
12.5 kVAr	1	0	IHPHE12X110*	2555.00
12.5 kVAr	0	1	IHPHE12X101*	2555.00
15 kVAr	1	0	IHPHE015110*	3129.00
15 kVAr	0	1	IHPHE015101*	3129.00
20 kVAr	1	0	IHPHE020210*	3440.00
20 kVAr	0	1	IHPHE020201*	3440.00
25 kVAr	1	0	IHPHE025210*	3924.00
25 kVAr	0	1	IHPHE025201*	3924.00
33.3 kVAr	1	0	IHPHE33X210*	5687.00
33.3 kVAr	0	1	IHPHE33X201*	5687.00
40 kVAr	2	2	IHPHE040322*	10543.00
50 kVAr	2	2	IHPHE050422*	10968.00
66 kVAr	2	2	IHPHE066422*	12872.00



*To complete the Cat no. suffix the coil voltage from the coil voltage table (Table-3)

Coil Voltage Selection Table (3)

3 kVAr - 66 kVAr AC Coil

Product	24 Vac	110 Vac	240 Vac	150 Vac-300 Vac	260 Vac-440 Vac	415 Vac
HGS Power Contactor (3 kVAr - 66 kVArA)	B	H	N	S*	W	T

*upto 33.3 kVAr for AC - 6B



**For Power Quality Solutions
please refer Page no. 75**

Contactor Selection Chart with DC Load

Conne- ction	Application	Operation Voltage	HGS9	HGS12	HGS18	HGS25	HGS32	HGS40	HGS50	HGS65	HGS75	HGS85	HGS100	HGS115	HGS130	HGS150	HGS185	HGS225	HGS265	HGS300	HGS400	HGS500	HGS630	HGS800	
2 Poles in Series	DC1 Resistive Load (L/R≤1ms)	24 V	10	12	18	20	25	35	50	65	65	75	80	100	120	150	180	220	260	300	400	500	630	800	
		48 V	10	12	18	20	25	35	40	65	65	65	65	100	100	120	180	180	220	240	240	300	300	800	
		110 V	6	10	13	15	25	25	35	35	45	45	50	50	80	80	100	150	150	180	200	200	220	220	630
		220 V	3	7	8	10	12	12	12	15	15	15	20	20	50	50	100	150	150	180	200	200	220	220	630
	DC3,DC5 DC Motor Load (L/R≤15ms)	24 V	8	12	12	20	25	35	45	45	45	65	65	100	120	150	180	220	260	300	400	500	630	800	
		48 V	4	6	6	15	20	20	25	25	25	40	40	60	60	100	150	150	180	200	200	260	260	800	
		110 V	2.5	4	4	8	10	10	15	15	15	20	20	40	40	80	120	120	130	150	150	180	180	630	
		220 V	0.8	1.2	1.2	2	3	3	3.5	3.5	3.5	5	5	30	30	60	80	80	80	90	90	130	130	210	
	3 Poles in Series	DC13 Coil Load (L/R≤40ms)	24 V	8	12	12	20	25	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			48 V	4	6	6	12	15	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			110 V	2	3	3	3	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			220 V	0.3	0.5	0.5	1.2	1.2	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC1 Resistive Load (L/R≤1ms)		24 V	10	12	18	20	25	35	35	50	65	65	75	80	100	120	150	180	220	260	300	400	500	630	800
		48 V	10	12	18	20	25	35	35	50	65	65	75	80	100	120	150	180	220	260	300	400	500	630	800
		110 V	8	12	18	20	25	35	35	50	65	65	75	80	100	100	150	180	220	260	300	400	500	630	800
		220 V	8	12	18	20	25	35	30	40	50	50	55	60	80	80	150	180	220	260	300	300	400	500	630
DC3,DC5 DC Motor Load (L/R≤15ms)		24 V	8	12	12	20	25	35	35	50	50	50	80	80	100	120	150	180	220	260	300	400	500	630	800
		48 V	6	10	10	20	25	30	30	35	35	35	60	60	90	90	130	180	220	260	280	280	400	500	800
		110 V	4	8	8	15	20	20	30	30	30	30	50	50	80	80	120	150	150	180	200	200	260	260	630
		220 V	2	4	4	8	10	10	12	12	12	12	20	20	50	50	80	100	100	130	150	150	180	180	310
DC13 Coil Load (L/R≤40 ms)	24 V	8	12	12	20	25	35	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	48 V	6	10	10	15	25	35	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	110 V	3	5	5	10	12	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	220 V	0.8	2	2	4	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Accessories - HGS Series Contactors

HSN Code: 8536

Description	Configuraton	Suitable for	Type	Item Code	Per Unit LP (₹)
Aux Contact Block (Side Mounting)	1 NO+1NC	HGS 9-HGS 40	HGS SB	ISSPCU1969	533.00
		HGS50-HGS 100		ISSPCU1970	
		HGS115- HGS 800		ISSPCU1971	630.00
Aux Contact Block (Top Mounting)	2 NC	HGS9-HGS100	HGS TB	ISSPCU1961	333.00
	1 NO+1NC			ISSPCU1962	
	2 NO			ISSPCU1963	
	4NC			ISSPCU1964	550.00
	1 NO+3NC			ISSPCU1965	
	2NO +2 NC			ISSPCU1966	
	3NO+1NC			ISSPCU1967	
	4NO			ISSPCU1968	
Mechanical Interlock Unit		HGS 9-HGS 40	HGS MIU	ISSPCU1972	722.00
		HGS50-HGS 100		ISSPCU1973	1696.00
		HGS115- HGS 265		ISSPCU1974	3001.00
		HGS 300- HGS 800		ISSPCU1975	3403.00
Mechanical Latching Block (Top Mounting)	220 V AC	HGS 9-HGS 100	HGS MLB	ISSPCU1976	1701.00
Electronic Timer (Top Mounting)		HGS 9-HGS 100	HGS ET	ISSPCU1977	2300.00
Surge Absorber		HGS 9-HGS 100	HGS SA	ISSPCU1984	1450.00
Clamping Diode		HGS 9-HGS 100	HGS CD	ISSPCU1978	722.00



Spares

Control Coils - HGS and HGSD Contactors

Description	Voltage	Suitable for	Type	Item Code	Per Unit LP			
Control Coil -HGS	24 V	HGS 9-HGS 18	AC	ISSPCU1985	459.00			
	110 V			ISSPCU1987				
	240 V			ISSPCU1989				
	415 V			ISSPCU2050				
	150 V-300 V	HGS 25-HGS 40	AC	ISSPCU2215				
	260 V-440 V			ISSPCU2134				
	24 V			ISSPCU1993				
	110 V			ISSPCU1995				
	240 V	HGS 50-HGS 65	AC	ISSPCU1997		1499.00		
	415 V			ISSPCU2053				
	150 V-300 V			ISSPCU2216				
	260 V-440 V			ISSPCU2135				
	24 V	HGS 75-HGS 100	AC	ISSPCU2001	1726.00			
	110 V			ISSPCU2003				
	240 V			ISSPCU2005				
	415 V			ISSPCU2007				
	260 V-440 V	HGS 115-HGS 150	AC/DC Universal	ISSPCU2136		On Request		
	24 V			ISSPCU2009				
	110 V			ISSPCU2011				
	240 V			ISSPCU2013				
	415 V	HGS 185-HGS 265	AC/DC Universal	ISSPCU2015		On Request		
	260 V-440 V			ISSPCU2137				
	24 Vac-26 Vac, 24 Vdc			HGS 300-HGS 500		AC/DC Universal	ISSPCU1980	6617.00
	100 Vac-240 Vac						On Request	
	100 Vac -220 Vdc	On Request						
	380 Vac-450 Vac	On Request						
	24 Vac-26 Vac, 24 Vdc	HGS 630-HGS 800	AC/DC Universal	ISSPCU1981	8604.00			
	100 Vac-240 Vac			On Request				
100 Vdc -220 Vdc	On Request							
380 Vac-450 Vac	On Request							
110 Vac-127 Vac	HGS 9-HGS 100	DC	On Request	On Request				
100 Vdc -110 Vdc			ISSPCU1982	17642.00				
200 Vac-240 Vac			On Request					
200 Vdc -220 Vdc			On Request					
380 Vac-450 Vac								
Control Coil -HGSD	24 V	HGS 9-HGS 100	DC	On Request	On Request			
	48 V							
	110 V							
	220 V							



MPCB specially coordinated for IE2, IE3 & IE4 Motors

MPCB Motor Protection Circuit Breaker - HGSM Series



Features:

- Insulation Voltage U_i : 690 V
- Impulse withstand voltage: 6 kV
- Rated frequency: 50 Hz / 60 Hz
- Magnetic tripping: 13 I_n max
- Tripping class: 10 A
- Mechanical Life: 100000 cycles
- Electrical Life: 100000 cycles

Item Code	ITEM DESCRIPTION	Per Unit LP (₹)
IHHMPBA2A0	MPCB HGSM 0.1 A - 0.16 A 100 kA	POR
IHHMPBB2B0	MPCB HGSM 0.16 A - 0.25 A 100 kA	
IHHMPBC2D0	MPCB HGSM 0.25 A - 0.4 A 100 kA	
IHHMPBD2E0	MPCB HGSM 0.4 A - 0.63 A 100 kA	
IHHMPBE2F0	MPCB HGSM 0.63 A - 1 A 100 kA	
IHHMPBF2G0	MPCB HGSM 1 A - 1.6 A 100 kA	
IHHMPBG2R0	MPCB HGSM 1.6 A - 2.5 A 100 kA	
IHHMPBH2I0	MPCB HGSM 2.5 A - 4 A 100 kA	
IHHMPBJ2J0	MPCB HGSM 4 A - 6.3 A 100 kA	
IHHMPBK2K0	MPCB HGSM 6.3 A - 10 A 100 kA	
IHHMPBL2L0	MPCB HGSM 9 A - 14 A 15 kA	
IHHMPBN2M0	MPCB HGSM 13 A - 18 A 15 kA	
IHHMPBQ2T0	MPCB HGSM 17 A - 23 A 15 kA	
IHHMPBS2N0	MPCB HGSM 20 A - 25 A 15 kA	
IHHMPBT2P0	MPCB HGSM 24 A - 32 A 10 kA	

*Under Voltage, Shunt Release & IP 65 Enclosure available on request

Type 2 Coordination for DOL Starter



Fuse protected type 2 coordination chart - Iq=50 kA, IS / IEC: 60947-4-1

- The selection chart is valid only for complete Havells combinations i.e. SDF + Fuse + HGS Contactor + HGST Overload relay.
- The Selection chart is for trip class 10 A.
- For selection of long starting / heavy duty applications e.g. reciprocating compressor, ID/FD fans etc. please consult Havells.

Fuse protected- Type '2' Co-ordination selection for HGS DOL Starter
IE2 Motor, Iq-50 kA @ 415 V, 3 Ph, 50 Hz as per IS/IEC 60947-4-1 Standard

Sr. No.	Motor : 3 ϕ , 415 V, 50 Hz / 60 Hz, 4P, 1500 revolution per minute			Contactor (HGS)		Relay (HGST)		Nominal Backup Fuse		SDF
	HP	P (kW)	Ie (A) Max	Type	Rating AC3 (A)	Type	Rating (A)	Type	Rating (A)	
1	0.5	0.37	1.1	HGS 9	9	HGST18	0.8--1.2	BS	4	H-TIA 32
2	0.75	0.55	1.4	HGS 9	9	HGST18	1.1-1.6	DIN	6	H-CD-00-32
3	1	0.75	1.7	HGS 9	9	HGST18	1.5-2.1	DIN	6	H-CD-00-32
4	1.5	1.1	2.4	HGS 9	9	HGST18	2.0-3.0	DIN	6	H-CD-00-32
5	2	1.5	3.2	HGS 9	9	HGST18	2.8-4.2	DIN	10	H-CD-00-32
6	3	2.2	4.8	HGS 9	9	HGST18	4.0-6.0	DIN	16	H-CD-00-32
7	5	3.7	7.4	HGS 9	9	HGST18	6-9.0	DIN	20	H-CD-00-32
8	7.5	5.5	11.2	HGS 12	12	HGST18	8-12.0	DIN	25	H-CD-00-32
9	10	7.5	15	HGS 18	18	HGST18	12-18.0	DIN	32	H-CD-00-32
10	12.5	9.3	19	HGS 25	25	HGST40	15-22	DIN	40	H-CD-00-63
11	15	11	21	HGS 25	25	HGST40	17-25	DIN	50	H-CD-00-63
12	20	15	28	HGS 32	32	HGST40	22-32	DIN	63	H-CD-00-63
13	25	18.5	34	HGS 40	40	HGST40	28-40	DIN	80	H-CD-00-100
14	30	22	40	HGS 50	50	HGST65	34-50	DIN	100	H-CD-00-100
15	40	30	57	HGS 65	65	HGST65	45-65	DIN	125	H-CD-00-125
16	50	37	64	HGS 85	85	HGST100	52-75	DIN	125	H-CD-00-125
17	60	45	77	HGS 85	85	HGST100	59-85	DIN	160	Size 1-160
18	73	55	101	HGS 115	115	HGST150	69-115	DIN	160	Size 1-160
19	100	75	134	HGS 150	150	HGST150	90-150	DIN	200	Size 1-200
20	120	90	160	HGS 185	185	HGST265	111-185	DIN	250	Size 1-250
21	150	110	190	HGS 225	225	HGST265	135-225	DIN	300	Size 2-320
22	177	132	228	HGS 265	265	HGST265	159-265	DIN	400	Size 2-400
23	215	160	269	HGS 300	300	HGST500	180-300	DIN	400	Size 2-400
24	270	200	350	HGS 400	400	HGST500	240-400	DIN	500	Size 3-630
25	340	250	430	HGS 500	500	HGST500	300-500	DIN	630	Size 3-630

Type 2 Coordination for Star Delta Starter



High Energy Efficient ready



Fuse protected- Type '2' Co-ordination selection for HGS Star Delta Starter
IE2 Motor, Iq-50 kA @ 415 V, 3 Ph, 50 Hz as per IS/IEC 60947-4-1 Standard

Sr. No.	Motor : 3 ϕ , 415 V, 50 Hz / 60 Hz, 4P, 1500 revolution per minute				Contactor (HGS)				Relay (HGST)		Nominal Backup Fuse		SDF
	HP	P (kW)	Ie (A) Max	Ie (A) Max Ph	Type Line/Delta	Rating AC3 (A)	Type Star	Rating AC3 (A)	Type	Rating (A)	Type	Rating (A)	
1	5.5	4	7.8	4.5	HGS 9	9	HGS 9	9	HGST18	3-5.0	DIN	16	H-CD-00-32
2	7.5	5.5	11.2	6.5	HGS 9	9	HGS 9	9	HGST18	5.6-8	DIN	20	H-CD-00-32
3	10	7.5	15	9.2	HGS 12	12	HGS 9	9	HGST18	8-12.0	DIN	25	H-CD-00-32
4	15	11	21	12.0	HGS 12	12	HGS 9	9	HGST18	8-12.0	DIN	32	H-CD-00-32
5	20	15	28	16.2	HGS 25	25	HGS 18	18	HGST40	12-18.0	DIN	40	H-CD-00-63
6	25	18.5	34	19.7	HGS 32	32	HGS 25	25	HGST40	15-22	DIN	50	H-CD-00-63
7	30	22	40	23.2	HGS 40	40	HGS 25	25	HGST40	17-25	DIN	63	H-CD-00-63
8	40	30	57	30.6	HGS 40	40	HGS 25	25	HGST40	22-32	DIN	80	H-CD-00-100
9	50	37	64	37.5	HGS 40	40	HGS 32	32	HGST40	28-40	DIN	100	H-CD-00-100
10	60	45	77	45.0	HGS 50	50	HGS 40	40	HGST65	34-50	DIN	100	H-CD-00-100
11	75	55	101	55.4	HGS 65	65	HGS 40	40	HGST65	45-65	DIN	100	H-CD-00-100
12	100	75	134	75.6	HGS 85	85	HGS 65	65	HGST 100	59-85	DIN	160	Size 1-160
13	120	90	156	90.0	HGS 100	100	HGS 85	85	HGST 100	70-100	DIN	160	Size 1-160
14	150	110	190	113.0	HGS 115	115	HGS 115	115	HGST 150	78-130	DIN	200	Size 1-200
15	177	132	228	133.0	HGS 150	150	HGS 115	115	HGST 150	90-150	DIN	250	Size 1-250
16	215	160	269	162.0	HGS 185	185	HGS 115	115	HGST 265	111-185	DIN	300	Size 2-320
17	268	200	350	202.0	HGS 225	225	HGS 185	185	HGST 265	135-225	DIN	400	Size 2-400
18	335	250	430	248.0	HGS 265	265	HGS 265	265	HGST 265	159-265	DIN	500	Size 2-500

Type 2 Coordination for DOL Starter

Fuse protected type 2 coordination chart - Iq=50 kA, IS / IEC: 60947-4-1

- The selection chart is valid only for complete Havells combinations i.e. SDF + Fuse + HGS Contactor + HGST Overload relay.
- The Selection chart is for trip class 10 A.
- For selection of long starting / heavy duty applications e.g. reciprocating compressor, ID/FD fans etc. please consult Havells.



**Fuse protected- Type '2' Co-ordination selection for HGS DOL Starter
IE3 / IE4 Motor, Iq-50 kA @ 415 V, 3 Ph, 50 Hz as per IS/IEC 60947-4-1 Standard**

Sr. No.	Motor : 3 ϕ , 415 V, 50 Hz / 60 Hz, 4P, 1500 revolution per minute			Contactor (HGS)		Relay (HGST)		Nominal Backup Fuse		SDF
	HP	P (kW)	Ie (A) Max	Type	Rating AC3 (A)	Type	Rating (A)	Type	Rating (A)	
1	0.5	0.37	0.99	HGS 9	9	HGST18	0.8-1.2	BS	4	H-TIA 32
2	0.75	0.55	1.2	HGS 9	9	HGST18	1.1-1.6	BS	4	H-TIA 32
3	1	0.75	1.7	HGS 9	9	HGST18	1.5-2.1	DIN	6	H-CD-00-32
4	1.5	1.1	2.2	HGS 9	9	HGST18	2-3.0	DIN	10	H-CD-00-32
5	2	1.5	3.1	HGS 12	12	HGST18	2.8-4.2	DIN	10	H-CD-00-32
6	3	2.2	4.3	HGS 12	12	HGST18	4.0-6.0	DIN	16	H-CD-00-32
7	3.7	4	8.2	HGS 12	12	HGST18	6-9	DIN	20	H-CD-00-32
8	5	3.7	7.3	HGS 12	12	HGST18	5.6-8	DIN	25	H-CD-00-32
9	7.5	5.5	11.0	HGS 12	12	HGST18	8-12	DIN	32	H-CD-00-32
10	10	7.5	14.0	HGS 32	32	HGST40	12-18	DIN	40	H-CD-00-63
11	15	11	20.0	HGS 32	32	HGST40	15-22	DIN	50	H-CD-00-63
12	20	15	27.0	HGS 32	32	HGST40	22-32	DIN	63	H-CD-00-63
13	25	18.5	34.0	HGS 40	40	HGST40	28-40	DIN	80	H-CD-00-100
14	30	22	40.0	HGS 50	50	HGST65	34-50	DIN	80	H-CD-00-100
15	40	30	55.0	HGS 65	65	HGST65	45-65	DIN	100	H-CD-00-100
16	50	37	64.0	HGS 85	85	HGST100	52-75	DIN	125	H-CD-00-125
17	60	45	77.0	HGS 100	100	HGST100	59-85	DIN	160	Size 1-160
18	73	55	95.0	HGS 115	115	HGST150	69-115	DIN	160	Size 1-160
19	100	75	129.0	HGS 150	150	HGST150	90-150	DIN	200	Size 1-200
20	125	90	151.0	HGS 185	185	HGST265	111-185	DIN	250	Size 1-250
21	150	110	186.0	HGS 225	225	HGST265	135-225	DIN	300	Size 2-320
22	180	132	221.0	HGS 265	265	HGST265	159-265	DIN	400	Size 2-400
23	220	160	267.0	HGS 300	300	HGST500	180-300	DIN	500	Size 2-630
24	270	200	332.0	HGS400	400	HGST500	240-400	DIN	630	Size 3-630
25	340	250	420	HGS500	500	HGST500	300-500	DIN	630	Size 3-630

Type 2 Coordination for Star Delta Starter



High Energy Efficient ready



Fuse protected- Type '2' Co-ordination selection for HGS Star Delta Starter
IE3/IE4 Motor, Iq-50 kA @ 415 V , 3 Ph, 50 Hz as per IS/IEC 60947-4-1 Standard

Sr. No.	Motor : 3 ϕ , 415 V, 50 Hz / 60 Hz, 4P, 1500 revolution per minute				Contactor (HGS)				Relay (HGST)		Nominal Backup Fuse		SDF
	HP	P (kW)	Ie (A) Max	Ie (A) Max Ph	Type Line/Delta	Rating AC3 (A)	Type Star	Rating AC3 (A)	Type	Rating (A)	Type	Rating (A)	
1	7.5	5.5	11.5	6.7	HGS 25	25	HGS 9	9	HGST40	7-10	DIN	20	H-CD-00-32
2	10	7.5	15	8.7	HGS 25	25	HGS 9	9	HGST40	7-10	DIN	25	H-CD-00-32
3	15	11	21	12.2	HGS 32	32	HGS 12	12	HGST40	12-18	DIN	32	H-CD-00-32
4	20	15	29	16.8	HGS 32	32	HGS 12	12	HGST40	12-18.0	DIN	40	H-CD-00-63
5	25	18.5	34	19.7	HGS 40	40	HGS 32	32	HGST40	15-22	DIN	50	H-CD-00-63
6	30	22	40	23.2	HGS 50	50	HGS 32	32	HGST65	22-32	DIN	63	H-CD-00-63
7	40	30	57	33.1	HGS 65	65	HGS 40	40	HGST65	28-40	DIN	80	H-CD-00-100
8	50	37	64	37.1	HGS 85	85	HGS 40	40	HGST 100	34-50	DIN	100	H-CD-00-100
9	60	45	77	44.7	HGS 85	85	HGS 40	40	HGST 100	34-50	DIN	100	H-CD-00-100
10	75	55	101	58.6	HGS 115	115	HGS 65	65	HGST 150	48-80	DIN	125	H-CD-00-125
11	100	75	134	77.7	HGS 150	150	HGS 65	65	HGST 150	48-80	DIN	160	Size 1-160
12	120	90	156	90.5	HGS 185	185	HGS 65	65	HGST 265	69-115	DIN	160	Size 1-160
13	150	110	190	110.2	HGS 225	225	HGS 115	115	HGST 265	78-130	DIN	200	Size 1-200
14	177	132	228	132.2	HGS 265	265	HGS 115	115	HGST 265	90-150	DIN	250	Size 1-250
15	215	160	269	156.0	HGS 300	300	HGS 115	115	HGST 500	135-225	DIN	300	Size 2-320
16	268	200	350	203.0	HGS 400	400	HGS 225	225	HGST 500	135-225	DIN	400	Size 2-400
17	335	250	430	249.0	HGS 500	500	HGS 265	265	HGST 500	159-265	DIN	500	Size 2-500



Thermal Over Load Relay (Auto/ Manual Reset)

Features:

- Range : 0.12 A – 800 A available in 8 Frames
- Conforms to IS/IEC 60947-4-1
- Protection against overload & phase loss protection
- Auto / manual reset facility
- Contactor mounting / Individual mounting with adaptor
- Transparent protection cover for dust application

HSN Code: 8536

Relay Frame size	Relay Range (A)	Suitable for Contactor Frame size	Type	Item Code	Per Unit LP (₹)
1	0.12 A - 0.18 A	HGS9 HGS12 HGS18	HGST18	IHHR13CA	1417.00
	0.18 A - 0.26 A			IHHR13CB	
	0.25 A - 0.35 A			IHHR13CC	
	0.34 A - 0.5 A			IHHR13CD	
	0.5 A - 0.7 A			IHHR13CE	
	0.6 A - 0.9 A			IHHR13CF	
	0.8 A - 1.2 A			IHHR13CG	
	1.1 A - 1.6 A			IHHR13CH	
	1.5 A - 2.1 A			IHHR13CJ	
	2 A - 3 A			IHHR13CZ	
	2.8 A - 4.2 A			IHHR13CK	
	3 A - 5 A			IHHR13CL	
	4 A - 6 A			IHHR13CM	
	5.6 A - 8 A			IHHR13CN	
	6 A - 9 A			IHHR13CP	
	8 A - 12 A			IHHR13CR	1442.00
	12 A - 18 A			IHHR13CT	1582.00



Thermal Over Load Relay - HGST Series

Relay Frame size	Relay Range (A)	Suitable for Contactor Frame size	Type	Item Code	Per Unit LP (₹)	
2	7 A - 10.0 A	HGS25 HGS32 HGS40	HGST40	IHHR23CQ	1582.00	
	8 A - 12.0 A			IHHR23CR		
	12 A - 18 A			IHHR23CT		
	15 A - 22 A			IHHR23CU		
	17 A - 25 A			IHHR23CV		1771.00
	22 A - 32 A			IHHR23CW		2236.00
	28 A - 40 A			IHHR23CX		2321.00
3	7 A - 10.0 A	HGS50 HGS65	HGST65	IHHR33CQ	2774.00	
	8 A - 12.0 A			IHHR33CR		
	12 A - 18 A			IHHR33CT		
	15 A - 22 A			IHHR33CU		
	17 A - 25 A			IHHR33CV		
	22 A - 32 A			IHHR33CW		3285.00
	28 A - 40 A			IHHR33CX		3912.00
	34 A - 50 A			IHHR33CY		3912.00
4	17 A - 25 A	HGS75 HGS85 HGS100	HGST100	IHHR43CV	3220.00	
	22 A - 32 A			IHHR43CW		
	28 A - 40 A			IHHR43CX		
	34 A - 50 A			IHHR43CY		
	45 A - 65 A			IHHR43C1		4073.00
	52 A - 75 A			IHHR43C2		4541.00
	59 A - 85 A			IHHR43C3		4541.00
	70 A - 100 A			IHHR43C4		4541.00
5	48 A - 80 A	HGS115 HGS130 HGS150	HGST150	IHHR53C5	6798.00	
	69 A - 115 A			IHHR53C6		
	78 A - 130 A			IHHR53C7		
	90 A - 150 A			IHHR53C8		
6	48 A - 80 A	HGS185 HGS225 HGS265	HGST265	IHHR63C5	7305.00	
	69 A - 115 A			IHHR63C6		
	78 A - 130 A			IHHR63C7		
	90 A - 150 A			IHHR63C8		
	111 A - 185 A			IHHR63C9		8059.00
	135 A - 225 A			IHHR63C11		8868.00
	159 A - 265 A			IHHR63C12		8868.00
7	90 A - 150 A	HGS300 HGS400 HGS500	HGST500	IHHR73C8	8876.00	
	111 A - 185 A			IHHR73C9		
	135 A - 225 A			IHHR73C11		
	159 A - 265 A			IHHR73C12		
	180 A - 300 A			IHHR73C13		9723.00
	240 A - 400 A			IHHR73C14		11332.00
	300 A - 500 A			IHHR73C15		11332.00
8	378 A - 630 A	HGS630 HGS800	HGST800	IHHR83C16	24309.00	
	480 A - 800 A			IHHR83C17		



Accessories - HGST Thermal Overload Relay

Mounting Block - HGST Series

Description	Item Code	Suitable for Mounting on Contactors	Per Unit LP (₹)
Mounting Block Fr 1 (with HGT 3 A - 5 A) Overload Relay	ISSPCU2121	HGST18	2035.00
Mounting Block Fr 2	ISSPCU2131	HGST40	645.00
Mounting Block Fr 3	ISSPCU2141	HGST65	685.00
Mounting Block Fr 4	ISSPCU2151	HGST100	745.00

Tougher & Trusted





HGS - New Starter Range

Range:

- Direct Online Starter - E Series 0.6 kW to 37.3 kW (0.75 HP to 50 HP)
- Fully Automatic Star - Delta Starter (ASD) 7.5 kW to 110 kW (10 HP to 150 HP)
- Reversing Starter - 1.5 kW to 14.9 kW (2 HP to 20 HP)
- Standard Automatic Star Delta Submersible Pump Starter - 22.4 kW to 37.5 kW (30 HP to 50 HP)
- Automatic Star Delta Submersible Pump Starter DLX - 22.4 kW to 37.5 kW (30 HP to 50 HP)

Features & Benefits (HGS Motor Starter)

Single Phasing Protection: HGST relays have in-built single phase failure protection. A very sensitive tripping mechanism provides reliable protection against single phasing & overload conditions. HGST relays are compensated for variation in ambient temperature.

IP 54 degree of protection: Corrosion resistant powder coated enclosure with IP 54 protection class makes HGS starters most suitable in all climatic conditions.

Stop & Test Facility: This type of dual facility enables the user to stop the motor operation during emergency by pressing the test button which will open the contacts and will stop the motor.

To test the contact operation of the thermal overload relay, the test button can be pulled up to change the contact status for prompt testing. The voltage supplied for the power consumption of the coil, capacitance of control circuit and others need to be reviewed to apply an appropriate conductor length within the limit.

Trip mechanisms: These thermal overload relays are provided with built-in manual tripping mechanisms so that they can be manually trip without supplying power to the main circuit. The relay will trip in case of overloads or single phasing conditions and can be seen by Yellow flag for trip indication.

Protection Cover: The front of the HGST Relay operating side is covered with a transparent protection cover so that the current value setting and reset operating method cannot be changed arbitrarily.

To change the setting, lift the transparent cover up.

Reset Button / Selector: Using a driver reset mode can be set. In Manual mode (H) push the button to reset the relay and while changing the relay to Automatic mode (A) from Manual mode resetting will be done automatically.

Separation of reset button and test button - Prevents malfunction

Ease of Maintenance: Contactor & Overload Relay mounted on base plate, easily removable for maintenance if required.

Specification: Confirms to IS / IEC 60947-4-1

Motor Starter



Motor Starter

Features:

- Range : 0.6 kW to 37.3 kW (0.75 HP to 50 HP)
- Conforms to IS/IEC 60947-4-1
- Provided with Protection Degree IP 54
- Extended wide band coil
- FRLS (Fire retardant low smoke) Internal wiring
- Starter Type - Air Break
- Class H Insulation

Direct Online Starter - HGS Series

HSN Code: 8536

HP	kW	Contactora Rating	Overload Relay Range (A)	Item Code	Per Unit LP (₹)
0.75 HP	0.6 kW	12	1 A - 1.6 A	IHHDOLFA*E	2871.00
1 HP	0.7 kW	12	1.6 A -2.5 A	IHHDOLGA*E	
2 HP	1.5 kW	12	2.5 A -4 A	IHHDOLHA*E	
3 HP	2.2 kW	12	4.0 A -6.0 A	IHHDOLJA*E	
5 HP	3.7 kW	12	7 A -10 A	IHHDOLLA*E	
7.5 HP	5.6 kW	18	10 A -13 A	IHHDOLMA*E	3447.00
10 HP	7.5 kW	18	13 A -18 A	IHHDOLNA*E	
15 HP	11.2 kW	32	18 A -25 A	IHHDOLPB*E	5567.00
20 HP	14.9 kW	32	22 A - 32 A	IHHDOLWB*	8957.00
25 HP	18.7 kW	40	28 A - 40 A	IHHDOLXB*	14826.00
30 HP	22.4 kW	50	34 A - 50 A	IHHDOLYC*	15649.00
40 HP	29.8 kW	65	45 A - 65 A	IHHDOL1C*	17375.00
50 HP	37.3 kW	85	59 A - 85 A	IHHDOL3D*	20149.00



AC Coil

Code*	T	W
AC Voltage	415 V	260 V - 440 V

Motor Starter

Features:

- Range : 7.5 kW to 110 kW (10 HP to 150 HP)
- Conforms to IS/IEC 60947-4-1
- Provided with Protection Degree IP 54
- Extended wide band coil
- FRLS (Fire retardant low smoke) Internal wiring
- Starter Type - Air Break
- Class H Insulation

Fully Automatic Star-Delta Starter (ASD) - HGS Series

HSN Code: 8536

HP	kW	Contactora Size	Overload Relay Range (A)	Item Code	Per Unit LP (₹)
10 HP	7.5 kW	18	8.0 A - 12 A	IHHASDRA*	10418.00
12.5 HP	9.3 kW	18	8.0 A - 12 A	IHHASDTA*	10560.00
15 HP	11 kW	25	12 A - 18.0 A	IHHASDTB*	10607.00
20 HP	15 kW	25	15 A - 22 A	IHHASDUB*	11129.00
25 HP	19 kW	32	17 A - 25 A	IHHASDVB*	13436.00
30 HP	22.5 kW	32	22 A - 32 A	IHHASDWB*	14660.00
35 HP	26 kW	32	28 A - 40 A	IHHASDXB*	21761.00
50 HP	37 kW	50	34 A - 50 A	IHHASDYC*	37157.00
60 HP	45 kW	50	45 A - 65 A	IHHASD1C*A	54527.00
75 HP	55 kW	65	45 A - 65 A	IHHASD1C*B	59980.00
90 HP	67.5 kW	85	59 A - 85 A	IHHASD3D*	70202.00
100 HP	75 kW	100	70 A - 100 A	IHHASD4D*	73656.00
125 HP	90 kW	115	78 A - 130 A	IHHASD7E*	101468.00
150 HP	110 kW	150	90 A - 150 A	IHHASD8E*	102927.00



AC Coil

Code*	T	W
AC Voltage	415 V	260 V - 440 V

- Starters are supplied with standard coil voltage 415 Vac
- For other voltages please specify coil code from the below table. (*suffix code)

Motor Starter

Features:

- Range : 1.5 kW to 14.9 kW (2 HP to 20 HP)
- Conforms to IS/IEC 60947-4-1
- Provided with Protection Degree IP 54
- Extended wide band coil
- FRLS (Fire retardant low smoke) Internal wiring
- Starter Type - Air Break
- Class H Insulation

Reversing Starter - HGS Starter

HSN Code: 8536

HP	kW	Contactor Size	Overload Relay Range (A)	Item Code	Per Unit LP (₹)
2 HP	1.5 kW	18	2.8 A - 4.2 A	IHHREVKA*	9910.00
3 HP	2.2 kW	18	4.0 A - 6.0 A	IHHREVMA*	
5 HP	3.7 kW	18	6.0 A - 9.0 A	IHHREVPA*	
7.5 HP	5.6 kW	18	8.0 A - 12 A	IHHREVRA*	
10 HP	7.5 kW	18	12 A - 18.0 A	IHHREVTA*	
15 HP	11.2 kW	32	17 A - 25 A	IHHREVVB*	13395.00
20 HP	14.9 kW	32	28 A - 40 A	IHHREVXB*	20093.00



AC Coil

Code*	T	W
AC Voltage	415 V	260 V - 440 V

Automatic Star Delta Submersible Starter (Standard) - HGS Series

Features:

- Range : 22.4 kW to 37.5 kW (30 HP to 50 HP)
- Conforms to IS/IEC 60947-4-1
- Provided with Protection Degree IP 54
- Extended wide band coil
- FRLS (Fire retardant low smoke) Internal wiring
- In-built metering
- Class H Insulation

HSN Code: 8536

HP	kW	Full load Line Current	Full Load phase current	Contactor Size	Overload Relay Range (A)	Item Code	Per Unit LP (₹)
30 HP	22.4 kW	43.5	25.12	50	28 A - 40 A	IHHSSDXC*	30336.00
35 HP	26.1 kW	50.75	29.30	50	34 A - 50 A	IHHSSDYC*A	32144.00
40 HP	29.8 kW	58	33.49	65	34 A - 50 A	IHHSSDYC*B	35355.00
45 HP	33.6 kW	65.25	37.67	75	45 A - 65 A	IHHSSD1D*	44196.00
50 HP	37.5 kW	72.5	41.86	85	52 A - 75 A	IHHSSD2D*	48210.00



Automatic Star Delta Submersible Starter DLX (with short-circuit Protection) - HGS Series

Features:

- Range : 22.4 kW to 37.5 kW (30 HP to 50 HP)
- Conforms to IS/IEC 60947-4-1
- Provided with Protection Degree IP 54
- Extended wide band coil
- FRLS (Fire retardant low smoke) Internal wiring
- In-built metering & MCB
- Class H Insulation

HSN Code: 8536

HP	kW	Full load Line Current	Full Load phase current	Contactor Size	Overload Relay Range (A)	TP MCB Rating (A)	Item Code	Per Unit LP (₹)
30 HP	22.4 kW	43.5	25.12	50	28 A - 40 A	100 A	IHHSDXC*	31208.00
35 HP	26.1 kW	50.75	29.30	50	34 A - 50 A	100 A	IHHSDYC*A	33051.00
40 HP	29.8 kW	58	33.49	65	34 A - 50 A	100 A	IHHSDYC*B	36322.00
45 HP	33.6 kW	65.25	37.67	75	45 A - 65 A	125 A	IHHSD1D*	45332.00
50 HP	37.5 kW	72.5	41.86	85	52 A - 75 A	125 A	IHHSD2D*	49422.00














AC Coil

Code*	T	W
AC Voltage	415 V	260 V - 440 V

Spares Motor Starter - HGS Series

HSN Code: 8538

Type	Item Code	Per Unit LP (₹)		
Start Push Button - Green	ICELL00002	140.00		Start Push Button
Stop Push Button - Red	ICELL00003	141.00		Stop Push Button
Motor ON Indicating Light-Green	ICELKL00015	230.00		Motor ON Indicating
Motor Trip Indicating Light-Yellow	ICELKL00013	230.00		Motor Trip Indicating
SPP	ISCELXL00063	2424.00		SPP
Combined Voltmeter & Ammeter	ISCEMLX0007	947.00		AV Meter
Terminal Block 6 way	ICELPSMX001	353.00		TB 6 Way
Terminal Block 3 way	ICELPSMX002	212.00		TB 3 Way
VOLT.SEL SW. C/G	ICELQL00021	330.00		Volt Sel Switch
Timer	ICELRPSL005	2089.00		Timer
Mini Rocker Switch - SPP By Pass	ISCELEL00218	35.00		Mini Rocker Switch

Street Light Panel



HGS Smarty Series

Features:

- Range : 6 kW to 12 kW
- Conforms to IS/IEC 60947-4-1
- Provided with Protection Degree IP 54
- Extended wide band coil
- FRLS (Fire retardant low smoke) Internal wiring
- In-built Short-Circuit Protection
- Class H Insulation

HSN Code: 8537

Phase	Frame Size	Max. Load (kW)	Timer	Contactor Rating (A)	MCB Rating	SAP Code	Per Unit LP (₹)
3	1	6 kW	Digital 24 hour	32 A TP	40 A TPN	IHXTS03060	25864.00
	1	6 kW	Astronomical	32 A TP	40 A TPN	IHXTS0306A	25864.00
	2	12 kW	Digital 24 hour	65 A TP	63 A TPN	IHXTS09120	39908.00
	2	12 kW	Astronomical	65 A TP	63 A TPN	IHXTS0912A	39908.00
1	1	6 kW	Digital 24 hour	32 A TP	40 A SPN	IHXSS01060	19392.00
	1	6 kW	Astronomical	32 A TP	40 A SPN	IHXSS0106A	19392.00
	1	12 kW	Digital 24 hour	65 A TP	63 A SPN	IHXSS03120	29140.00
	1	12 kW	Astronomical	65 A TP	63 A SPN	IHXSS0312A	29140.00





HAVELLS

Agricultural Motor Starter



Motor Starter

Features:

- Range : 0.56 kW to 11 kW (0.75 HP to 15 HP)
- Conforms to IS/IEC 60947-4-1
- Provided with Protection Degree IP 54
- Extended wide band coil
- FRLS (Fire retardant low smoke) Internal wiring
- Starter Type - Air Break
- Class H Insulation

Direct Online Starter - (Ideal for Agri Pump Application) HSN Code: 8536

HP	kW	Contactor	O/L Relay	Motor Starter	
		(A)	(A)	Cat. No.	List Price in ₹ Per Unit
0.75 HP	0.56 kW	20 A	1.07 A - 1.7 A	IHADOAE1*	2436.00
1 HP	0.75 kW	20 A	1.58 A - 2.5 A	IHADOAF1*	
2 HP	1.50 kW	20 A	2.4 A - 3.8 A	IHADOAG1*	
3 HP	2.24 kW	20 A	3.8 A - 6.0 A	IHADOAH1*	
5 HP	3.73 kW	20 A	6.0 A - 9.3 A	IHADOAJ1*	
7.5 HP	5.60 kW	20 A	8.9 A - 13.5 A	IHADOAK1*	
		20 A	13.2 A - 20 A	IHADOAK1*A	
		20 A	17.4 A - 24 A	IHADOAK1*B	
10 HP	7.50 kW	25 A	13.2 A - 20 A	IHADOAL1*	2927.00
15 HP	11 kW	32 A	17.4 A - 24 A	IHADOAM1*	3445.00

*To complete the Cat no. suffix the coil voltage from the coil voltage table

AC Coil

Code*	K
AC Voltage	260 V-440 V

Direct Online Starter Submersible Pump Controller (Standard)

3 Phase - Agri Series

HSN Code: 8536

HP	kW	Max. Operational Current (A)	Contactor AC3 (A)	OLR (A)	Cat No.	List Price in ₹ Per Unit
1 HP	0.75 kW	1.90 A	20 A	1.58 A - 2.5 A	IHSDOAF1*A	7700.00
2 HP	1.50 kW	3.81 A	20 A	3.8 A - 6.0 A	IHSDOAH1*A	
3 HP	2.24 kW	5.71 A	20 A	3.8 A - 6.0 A	IHSDOAH1*B	
5 HP	3.73 kW	9.52 A	20 A	8.9 A - 13.5 A	IHSDOAK1*A	
7.5 HP	5.60 kW	14.27 A	20 A	13.2 A - 20 A	IHSDOAL1*A	8100.00
10 HP	7.50 kW	19.03 A	25 A	13.2 A - 20 A	IHSDOAL1*B	
12.5 HP	9.30 kW	23.79 A	32 A	17.4 A - 24 A	IHSDOAM1*A	8504.00
15 HP	11.19 kW	28.55 A	32 A	22 A - 30 A	IHSDOAN1*A	9443.00

AC Coil

Code*	K
AC Voltage	260 V - 440 V

Automatic Star Delta Submersible Pump Controller (Standard)

3 Phase - Agri Series

HSN Code: 8536

HP	Max Operating Current 135% (A)	Phase Current (A)	OLR (A)	Contactor AC3 (A)	Cat. No.	List Price in ₹ Per Unit
5 HP	10.13 kW	5.85 A	3.8 A - 6.0 A	20 A	IHSASAH1*A	13526.00
7.5 HP	15.19 kW	8.77 A	6 A - 9.3 A	20 A	IHSASAJ1*A	
10 HP	20.25 kW	11.69 A	8.9 A - 13.5 A	20 A	IHSASAK1*A	14701.00
12.5 HP	25.31 kW	14.61 A	13.2 A - 20 A	20 A	IHSASAL1*A	
15 HP	30.38 kW	17.54 A	13.2 A - 20 A	20 A	IHSASAL1*B	15021.00
17.5 HP	35.44 kW	20.46 A	17.4 A - 24 A	25 A	IHSASAM1*A	
20 HP	40.50 kW	23.38 A	22 A - 30 A	32 A	IHSASAN1*A	17213.00

AC Coil

Code*	K
AC Voltage	260 V - 440 V



Motor Starter

NEW

Features:

- Range : 0.37 kW to 2.2 kW (0.5 HP to 3 HP)
- Conforms to IS/IEC 60947-4-1
- Provided with Protection Degree IP 54
- Extended wide band coil
- FRLS (Fire retardant low smoke) Internal wiring
- Starter type Air break
- Class H Insulation

Direct Online Starter Single Phase

HP	kW	FLC (A)	Contactor (A)	O/L Relay (A)	Cable Size mm ²		Max Backup Fuse Rating (A)	Item Code	Per Unit LP (₹)
					AL	CU			
0.5 HP	0.37 kW	3.12 A	20 A	3.8 A - 6.0 A	1.5 mm ²	1 mm ²	20 A	IHUDOLG1F1	1655.00
1 HP	0.75 kW	6.24 A	20 A	6 A - 9.3 A	1.5 mm ²	1 mm ²	25 A	IHUDOLH1F1	
1.5 HP	1.1 kW	9.15 A	20 A	8.9 A - 13.5 A	2.5 mm ²	1.5 mm ²	32 A	IHUDOLK1F1	
2 HP	1.5 kW	12.47 A	20 A	13.2 A - 20 A	4 mm ²	2.5 mm ²	50 A	IHUDOLK1FA	1700.00
3 HP	2.2 kW	18.71 A	25 A	17.4 A - 24 A	6 mm ²	4 mm ²	63 A	IHUDOLL1F1	



AC Coil

Code*	F
AC Voltage	140 V - 270 V

- Starters are supplied with standard coil voltage 415 Vac
- For other voltages please specify coil code from the below table. (*suffix code)

Submersible Pump Controller Single Phase

HSN Code: 8536

HP Rating	kW	Overload Relay (A)	Contactor (A)	Start Capacitor μ F (MFD)	Run Capacitor μ F (MFD)	Cat No.	List Price in ₹ Per Unit
0.5 HP	0.37 kW	3.8 A - 6.0 A	20 A	80 μ F - 100 μ F	25 μ F	IHADOAH1F1	4077.00
0.5 HP	0.37 kW	3.8 A - 6.0 A	20 A	80 μ F - 100 μ F	36 μ F	IHADOAJ1FA	
1 HP	0.75 kW	6 A - 9.3 A	20 A	100 μ F - 120 μ F	36 μ F	IHADOAJ1FB	
1 HP	0.75 kW	6 A - 9.3 A	20 A	100 μ F - 120 μ F	50 μ F	IHADOAJ1FC	
1 HP	0.75 kW	6 A - 9.3 A	20 A	120 μ F - 150 μ F	50 μ F	IHADOAJ1FD	
1.5 HP	1.1 kW	8.9 A - 13.5 A	20 A	120 μ F - 150 μ F	50 μ F	IHADOAK1FA	4499.00
1.5 HP	1.1 kW	8.9 A - 13.5 A	20 A	150 μ F - 200 μ F	36+36 μ F	IHADOAK1FB	
2 HP	1.5 kW	13.2 A - 20 A	20 A	150 μ F - 200 μ F	36+36 μ F	IHADOAL1FA	4810.00
2 HP	1.5 kW	13.2 A - 20 A	20 A	150 μ F - 200 μ F	50+50 μ F	IHADOAL1FB	
2 HP	1.5 kW	13.2 A - 20 A	20 A	200 μ F - 250 μ F	50+36 μ F	IHADOAL1FC	
3 HP	2.2 kW	17.4 A - 24 A	25 A	200 μ F - 250 μ F	50+50 μ F	IHADOAM1FA	5706.00
3 HP	2.2 kW	17.4 A - 24 A	25 A	200 μ F - 250 μ F	50+36+36 μ F	IHADOAM1FB	



Spares Motor Starter

Contactor 4 Pole & 2 Pole (20 A to 40 A)

HSN Code: 8536

Frame Size	AC-3 Duty Rating at 415 V, 50 Hz le (A)	AC-1 Duty Rating at 415 V, 50 Hz le (A)	Power Poles	Type	Item Code	Item Description	Per Unit LP (₹)
1	20 A	25 A	4	UC1 20 F	IHPBC020100*	20 A 4P Contactor	2236.00
	25 A	40 A	4	UC1 25 F	IHPBC025100*	25 A 4P Contactor	2899.00
	32 A	45 A	4	UC1 32 F	IHPBC032100*	32 A 4P Contactor	3531.00
	40 A	63 A	4	UC1 40 F	IHPBC040100*	40 A 4P Contactor	4965.00
	20 A	32 A	2	UC1 20 D	IHPBF020100*	20 A 2P Contactor	1047.00
	25 A	40 A	2	UC1 25 D	IHPBF025100*	25 A 2P Contactor	1453.00
	40 A	63 A	2	UC1 40 D	IHPBF040100*	40 A 2P Contactor	1956.00

*To complete the Cat no. suffix the coil voltage from the coil voltage table

AC Coil

Code*	F	K
AC Voltage	140 V - 270 V	260 V - 440 V



Thermal Overload Relay 3 Pole & 2 Pole

HSN Code: 8536

Relay Range (A)	Suitable for Contactor Frame Size	Poles	Type	Item Code	Item Description	Per Unit LP (₹)
1.07 A - 1.7 A	1	3	UR1 E	IHAR13CE	3P Thermal O/L Relay A/M	1384.00
1.58 A - 2.5 A		3	UR1 F	IHAR13CF	3P Thermal O/L Relay A/M	
2.4 A - 3.8 A		3	UR1 G	IHAR13CG	3P Thermal O/L Relay A/M	
3.8 A - 6.0 A		3	UR1 H	IHAR13CH	3P Thermal O/L Relay A/M	
6 A - 9.3 A		3	UR1 J	IHAR13CJ	3P Thermal O/L Relay A/M	
8.9 A - 13.5 A		3	UR1 K	IHAR13CK	3P Thermal O/L Relay A/M	
13.2 A - 20 A		3	UR1 L	IHAR13CL	3P Thermal O/L Relay A/M	
17.4 A - 24 A		3	UR1 M	IHAR13CM	3P Thermal O/L Relay A/M	
22 A - 30 A		3	UR1 N	IHAR13CN	3P Thermal O/L Relay A/M	
3.8 A - 6 A	1	2	UR1 H	IHAR12CH	2P Thermal O/L Relay A/M	715.00
6 A - 9.3 A		2	UR1 J	IHAR12CJ	2P Thermal O/L Relay A/M	
8.9 A - 13.5 A		2	UR1 K	IHAR12CK	2P Thermal O/L Relay A/M	
13.2 A - 20 A		2	UR1 L	IHAR12CL	2P Thermal O/L Relay A/M	781.00
17.4 A - 24 A		2	UR1 M	IHAR12CM	2P Thermal O/L Relay A/M	
22 A - 30 A		2	UR1 N	IHAR12CN	2P Thermal O/L Relay A/M	



Spares Motor Starter

Spare Agri Contactor 2P / 4P

HSN Code: 8538

Type	Rating	Item Code	Per Unit LP (₹)
Housing 2P		CPSMPCX016	230.00
Housing 4P		ISCPMPCX014	371.00
Carrier Assembly 2P		ISSPEX0447	65.00
Carrier Assembly 4P		ISSPEX0446	95.00
2P Contactor Coil	140 V - 270 V	ISSPEP0008	494.00
4P Contactor Coil	200 V - 400 V	ISSPEP0007	494.00
	415 V (260 V - 440 V)	ISSPEP0009	565.00
	240 V (140 V - 270 V)	ISSPEP0011	565.00
Single Fixed Contact 2P / 4P	20 A	ISSPEX0428	77.00
	25 A	ISSPEX0429	105.00
	32 A	ISSPEX0430	112.00
	40 A	ISSPEX0439	135.00
Single Moving Contact 2P / 4P	20 A	ISSPEX0431	117.00
	25 A	ISSPEX0432	165.00
	32 A	ISSPEX0433	188.00
	40 A	ISSPEX0440	230.00
Contact Kit 2P Contactor	20 A	ISSPEX0441	530.00
	25 A	ISSPEX0442	746.00
	40 A	ISSPEX0444	982.00
Contact Kit 4P Contactor	20 A	ISSPEX0434	964.00
	25 A	ISSPEX0435	1500.00
	32 A	ISSPEX0436	1612.00
	40 A	ISSPEX0445	1607.00



Contactor 4 Pole & 2 Pole (20 A to 40 A)

DOL Starter - Spares

HSN Code: 8538

Type	Item Code	Per Unit LP (₹)
NO Switch URJA	ISSPEX0437	112.00
ON / OFF Push Button Assembly URJA	ISSPEX0438	112.00



NO Switch



ON / OFF PB

Single Phase Sub. Starter - Spares

HSN Code: 8538

Type		Item Code	Per Unit LP (₹)
PB Red for SPSS with 1NC Element		ISCELXLX0001	165.00
	5+16 Element (1.5-2 HP) 1.12 kW - 1.50 kW	ISCELXLX0002	312.00
	5+25 Element (3-5 HP) 2.24 kW - 3.73 kW	ISCELXLX0003	359.00
Neon Light Indicator Red		ISCELKLX0006	65.00
Front Add-on Aux.Cont.Blck	2NO	ISSPEX0427	353.00
Combined AV Meter	30 A - 300 V	ISCEMLX0006	942.00
	25 A - 500 V	ISCEMLX0007	947.00
	50 A - 500 V	ISCEMLX0008	1041.00
Terminal Block	2 Way SPSS	ISCPTMPSX032	35.00
	5 Way	ISCELXPX0003	130.00



PB Red



PB Green



Neon Light



Front Add-on



AV Meter



TB 2Way



TB 5Way

DOL & ASD Sub. Starter - Spares

HSN Code: 8538

Type	Item Code	Per Unit LP (₹)
Start Push Button - Green	ICELL00002	141.00
Stop Push Button - Red	ICELL00003	141.00
Motor ON Indicating Light-Green	ICELKL00015	230.00
Motor Trip Indicating Light-Yellow	ICELKL00013	230.00
SPP	ISCELXL00063	2424.00
Combined Voltmeter & Ammeter	ISCELMLX0007	947.00
Terminal Block 6 way	ICELPSMX001	353.00
Terminal Block 3 way	ICELPSMX002	212.00
VOLT.SEL SW. C/G	ICELQL00021	330.00
Timer	ICELRPSL005	2089.00
Front Block 1NO 1NC	ISPNAFM711	371.00
Mini Rocker Switch - SPP By Pass	ISCELEL00218	35.00



Start Push Button



Stop Push Button



Motor ON Indicating



Motor Trip Indicating



SPP



AV Meter



TB 6 Way



TB 3 Way



Volt Sel Switch



Timer



Front Block



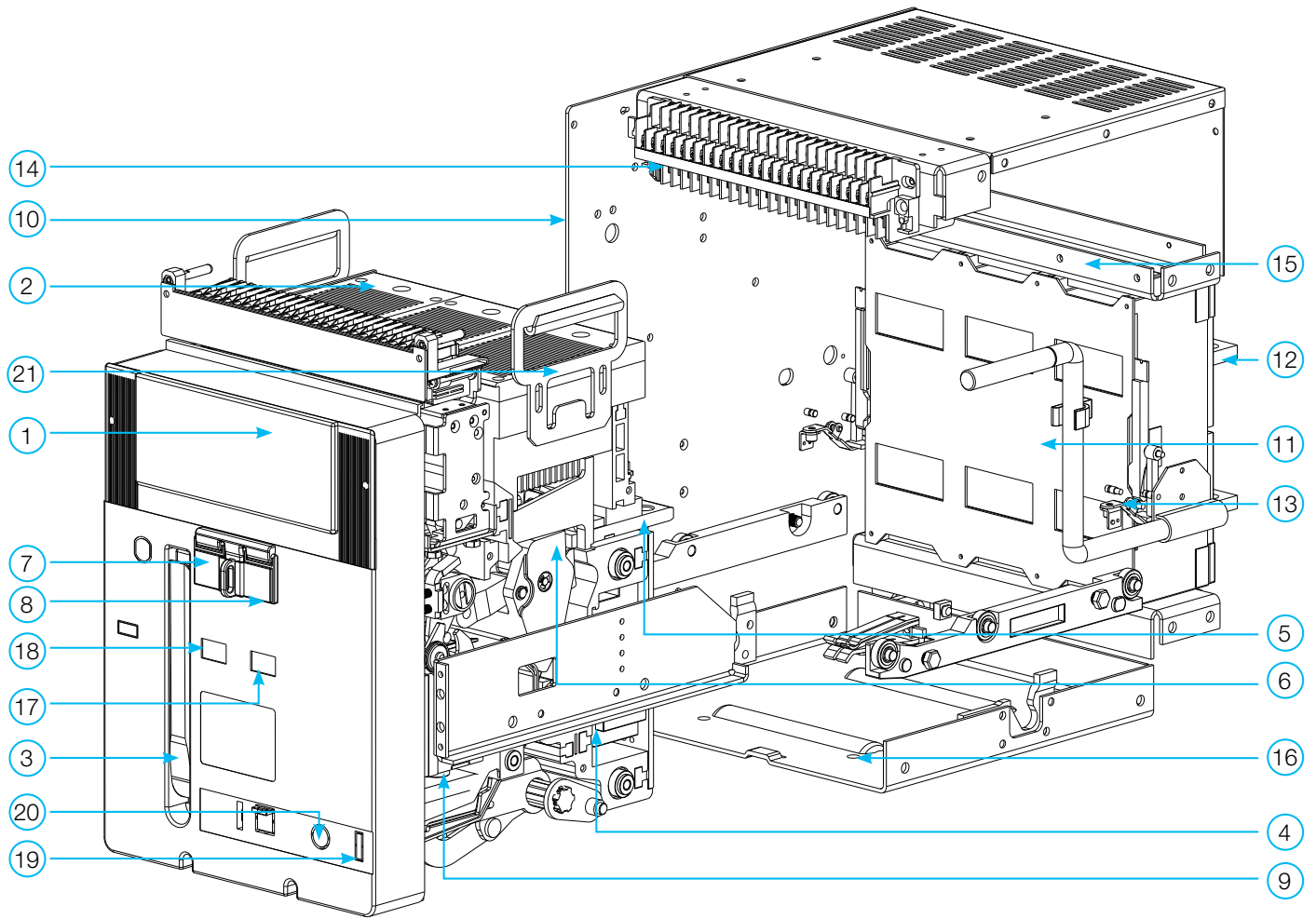
Mini Rocker Switch



Industrial Switchgear



Construction of ACB



- | | | | |
|-------------------------|----------------------------|---|--------------------------------------|
| 1. Over Current Release | 6. Moving Contact assembly | 11. Safety Shutter | 16. Mounting Holes |
| 2. Arc Chute | 7. Push Button "OFF" | 12. Terminals | 17. Spring charge indicator |
| 3. Charging Handle | 8. Push Button "ON" | 13. Pad lock facility for safety shutter | 18. ACB ON OFF indicator |
| 4. Pole Unit | 9. Shunt Trip Coil | 14. Control Terminals | 19. ACB connection status indication |
| 5. Terminal assembly | 10. Cradle Unit | 15. Position Indication Switch (Optional) | 20. Cradle rake in / out slot |
| | | | 21. Lifting Plate |

Titania Air Circuit Breaker

(Conforms to IS/IEC:60947-2)



3 Pole ACB with Microprocessor Release IPR 1+

Current Rating	Rated Ultimate Short-circuit Breaking Capacity Ics = 100 % Icu at	MANUAL				ELECTRICAL*	
		Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	Item Code	
(A)	415 V (kA)	Fixed		Drawout		Fixed	Drawout
630 A	50 kA	IHATE11060**#	112275.00	IHATE21060**#	145960.00	IHATE4106\$***	IHATE5106\$***
800 A	50 kA	IHATE11080**#	112275.00	IHATE21080**#	145960.00	IHATE4108\$***	IHATE5108\$***
1000 A	50 kA	IHATE11100**#	114460.00	IHATE21100**#	148800.00	IHATE4110\$***	IHATE5110\$***
1250 A	50 kA	IHATE11120**#	129555.00	IHATE21120**#	159685.00	IHATE4112\$***	IHATE5112\$***
1600 A	50 kA	IHATE11160**#	136325.00	IHATE21160**#	179935.00	IHATE4116\$***	IHATE5116\$***
2000 A	50 kA	IHATE11200**#	164450.00	IHATE21200**#	223245.00	IHATE4120\$***	IHATE5120\$***

3 Pole ACB with Microprocessor Release IPR 1+

Current Rating	Rated Ultimate Short-circuit Breaking Capacity Ics = 100 % Icu at	MANUAL				ELECTRICAL*	
		Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	Item Code	
(A)	415 V (kA)	Fixed		Drawout		Fixed	Drawout
630 A	65 kA	IHATS11060**#	128625.00	IHATS21060**#	203230.00	IHATS4106\$***	IHATS5106\$***
800 A	65 kA	IHATS11080**#	128625.00	IHATS21080**#	203230.00	IHATS4108\$***	IHATS5108\$***
1000 A	65 kA	IHATS11100**#	138130.00	IHATS21100**#	219625.00	IHATS4110\$***	IHATS5110\$***
1250 A	65 kA	IHATS11120**#	167170.00	IHATS21120**#	242395.00	IHATS4112\$***	IHATS5112\$***
1600 A	65 kA	IHATS11160**#	176920.00	IHATS21160**#	263610.00	IHATS4116\$***	IHATS5116\$***
2000 A	65 kA	IHATS11200**#	180210.00	IHATS21200**#	268510.00	IHATS4120\$***	IHATS5120\$***
2500 A	75 kA	IHATH11250**#	220415.00	IHATH21250**#	328420.00	IHATH4125\$***	IHATH5125\$***

4 Pole ACB with Microprocessor Release IPR 1+

Current Rating	Rated Ultimate Short-circuit Breaking Capacity Ics = 100 % Icu at	MANUAL				ELECTRICAL*	
		Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	Item Code	
(A)	415 V (kA)	Fixed		Drawout		Fixed	Drawout
630 A	50 kA	IHAPE11060**#	142155.00	IHAPE21060**#	184800.00	IHAPE4106\$***	IHAPE5106\$***
800 A	50 kA	IHAPE11080**#	142155.00	IHAPE21080**#	184800.00	IHAPE4108\$***	IHAPE5108\$***
1000 A	50 kA	IHAPE11100**#	148460.00	IHAPE21100**#	193000.00	IHAPE4110\$***	IHAPE5110\$***
1250 A	50 kA	IHAPE11120**#	153545.00	IHAPE21120**#	199605.00	IHAPE4112\$***	IHAPE5112\$***
1600 A	50 kA	IHAPE11160**#	170240.00	IHAPE21160**#	221305.00	IHAPE4116\$***	IHAPE5116\$***
2000 A	50 kA	IHAPE11200**#	201475.00	IHAPE21200**#	271640.00	IHAPE4120\$***	IHAPE5120\$***

4 Pole ACB with Microprocessor Release IPR 1+

Current Rating	Rated Ultimate Short-circuit Breaking Capacity Ics = 100 % Icu at	MANUAL				ELECTRICAL*	
		Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	Item Code	
(A)	415 V (kA)	Fixed		Drawout		Fixed	Drawout
630 A	65 kA	IHAFS11060**#	166335.00	IHAFS21060**#	287120.00	IHAFS4106\$***	IHAFS5106\$***
800 A	65 kA	IHAFS11080**#	176605.00	IHAFS21080**#	287120.00	IHAFS4108\$***	IHAFS5108\$***
1000 A	65 kA	IHAFS11100**#	192530.00	IHAFS21100**#	294570.00	IHAFS4110\$***	IHAFS5110\$***
1250 A	65 kA	IHAFS11120**#	215645.00	IHAFS21120**#	329940.00	IHAFS4112\$***	IHAFS5112\$***
1600 A	65 kA	IHAFS11160**#	252455.00	IHAFS21160**#	386255.00	IHAFS4116\$***	IHAFS5116\$***
2000 A	65 kA	IHAFS11200**#	264575.00	IHAFS21200**#	394220.00	IHAFS4120\$***	IHAFS5120\$***
2500 A	75 kA	IHAFH11250**#	284170.00	IHAFH21250**#	403155.00	IHAFH4125\$***	IHAFH5125\$***

* Please refer table A to Product price list
 To replace \$ Please refer table 1 at page-40
 To replace ** Please refer table 2 at page-40
 To replace # Please refer table 3 at page-40

*** 3200 A to 6300 A, 4 Pole ACB is also available with 100% Neutral (Price available on request)

Note : Prices on request
 3200 A to 6300 A (Please refer page No 39)

Titania Air Circuit Breaker

(Conforms to IS/IEC:60947-2)

Rating*	Pole	MANUAL		ELECTRICAL	
		Fixed	Drawout	Fixed	Drawout
3200 A	3 Pole / 4 Pole	Price on Request			
4000 A					
5000 A					
6300 A					

Table - A

List prices Charges for product different version wrt IPR1+ ACB List Price			Per Unit LP (₹)
Bus Coupler w/o Protection	Reduce		16600.00
Micro processor release IPRE+ (LI)	Reduce		7200.00
Micro processor release IPR3+ (LSI+ LCD Display+Thermal Memory+ Zone selectivity+ Current & Voltage Mesurment+ Advance protection +Over Tempeture Protection)	Add		24425.00
Micro processor release IPR5+(LCD Display+Thermal Memory+ Zone selectivity+ Advance protection+ Advance Mesurment Over Tempeture Protection+ Maximum Demand + Communication)	Add		34000.00
To Convert Electrical version from Manual version (includes Motor, Shunt trip & Closing Coil)	Add		38200.00

4. Neutral CTs *2

HSN Code: 8504

S.No.	SAP Code	Description	Per Unit LP (₹)
1	ICELFACL019	NCT 400 A	2690.00
2	ICELFACL012	NCT 630 A	2690.00
3	ICELFACL013	NCT 800 A	2690.00
4	ICELFACL014	NCT 1000A	2835.00
5	ICELFACL015	NCT 1250 A	2835.00
6	ICELFACL016	NCT 1600 A	2835.00
7	ICELFACL017	NCT 2000 A	3810.00
8	ICELFACL021	NCT 2500A	3810.00



Undervoltage release

5. Under Voltage Trip Device (UVT)

HSN Code: 8538

S.No.	SAP Code	Description	Per Unit LP (₹)
1	ISACX0196	220 VAC/DC	4245.00
2	ISACX0197	415 VAC	4245.00

1. Communication Software

HSN Code: 8538

S.No.	SAP Code	Description	Per Unit LP (₹)
1	SACX0346	Communication software for IRP-5+	POR

2. Spring Charging Motor

HSN Code: 8538

S.No.	SAP Code	Description	Per Unit LP (₹)
1	ISACX0358	Charging Motor 110 V	32315.00
2	ISACX0147	Charging Motor 230 V	32315.00

3. Main CTs *1

HSN Code: 8504

S.No.	SAP Code	Description	Per Unit LP (₹)
1	ICELFACL018	CT 400 A	2690.00
2	ICELFACL001	CT 630 A	2690.00
3	ICELFACL002	CT 800 A	2690.00
4	ICELFACL003	CT 1000A	2835.00
5	ICELFACL004	CT 1250 A	2835.00
6	ICELFACL005	CT 1600 A	2835.00
7	ICELFACL006	CT 2000 A	3810.00
8	ICELFACL007	CT 2500A	3810.00



Shunt Trip Coil / Closing Coil

6. Shunt Trip / Closing Coil

HSN Code: 8538

S.No.	SAP Code	Description	Per Unit LP (₹)
1	ISACX0170	24 VDC	2945.00
2	ISACX0168	110 VAC/DC	2945.00
3	ISACX0167	220 VAC/DC	2945.00
4	ISACX0212	415 VAC	2945.00

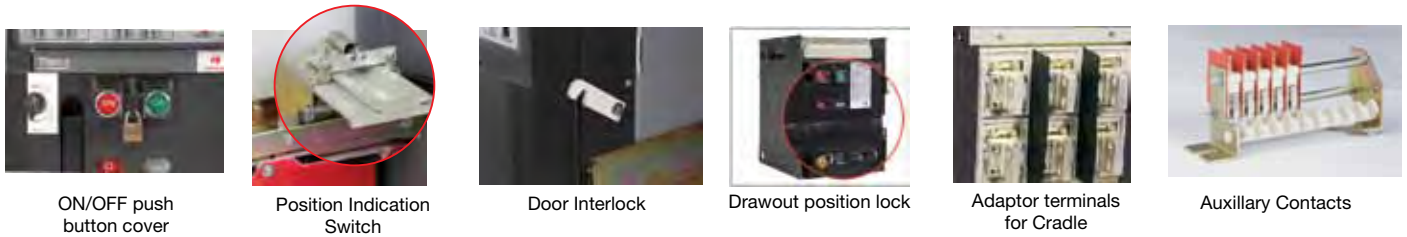
7. Key Lock / Key Interlock

HSN Code: 8301

S.No.	SAP Code	Description	Per Unit LP (₹)
1	ISACX0301	On/Off Button cover	370.00
2	ISACX0353	Key lock (1 lock+1 key)	1485.00
3	ISACX0181	Key interlock (2 locks+1 keys)	2080.00
4	ISACX0210	Key interlock (3 locks+2 keys)	4380.00
5	ISACX0332	Castle Lock Unit (1 lock+1 key)	3510.00
6	ISSACX0437	Castle Lock Unit (2 lock+1 key)	6180.00
7	ISSACX0436	Castle Lock Unit (3 lock+2 key)	9845.00
8	ISACX0341	Drawout position Lock	1805.00

Titania Air Circuit Breaker

(Conforms to IS/IEC:60947-2)



8. Adaptor Type Terminals (additional price)

(6 nos. reqd. for 3 pole & 8 nos. for 4 pole ACB) HSN Code: 8538

S.No.	SAP Code	Description	Per Unit LP (₹)
1	ISSACX0174	630/800 A	4305.00
2	ISSACX0164	1000/1250 A	4305.00
3	ISSACP0434	1600 A	6700.00

9. Other Accessories

HSN Code: 8538

S.No.	SAP Code	Description	Per Unit LP (₹)
1	ISACX0208	Door Interlock	2765.00
2	ISACX0303	Mal Insertation prevention device	580.00
3	ISACX0028	Close open cycle counter	2725.00
4	ISACX0340	Mechanical Interlock through wire	POR

10. Other Accessories

HSN Code: 8536

S.No.	SAP Code	Description	Per Unit LP (₹)
5	ISACX0207	Spring charge indication switch	1600.00
6	ISACX0349	Trip indication Switch	1000.00
7	ISACX0139	Aux. switch (5 c/o additional)	2600.00
8	ISACX0182	Position indication switch	2090.00
9	ISACX0302	Field test unit	2410.00

*ACBs are supplied with following accessories as standard fitment:

Manual Fixed	Manual Drawout	Electrical Fixed	Electrical Drawout
Aux. Contact Unit 5CO	Aux. Contact Unit 5CO Safety Shutter Aux. Isolating contact unit Horizontal Terminals	Horizontal Terminals Shunt Trip Device Charging Motor Closing Coil	Aux. Contact Unit 5CO Safety Shutter Aux. Isolating contact unit Horizontal Trip Device Shunt Terminals Charging Motor Closing Coil

*Additional accessories except standard fitment are available on extra price.

*Neutral CT is supplied as a standard fitment in 4 Pole ACBs.

*Neutral CT prices are to be added for 3 Pole ACBs for ground fault protection.

*All orders should be accompanied with ACB order form included in catalogue.

*1 This CT is required for GFT in 3 pole ACBs for 4 Pole ACBs main CTs is used as neutral CT.

Table 1

Closing Coil & Charging Motor		
CC (Voltage)	CM (Voltage)	\$
24 V	220 V	A
110 V	220 V	B
220 V	220 V	C
415 V	220 V	D
24 V	110 V	E
110 V	110 V	F
220 V	110 V	G
415 V	110 V	H

Table 2

UVT & SHT		
UVT (Voltage)	SHT (Voltage)	**
415 V	24 V	01 (Zero one)
415 V	110 V	02
415 V	220 V	03
415 V	415 V	04
415 V	0	05
220 V	24 V	06
220 V	110 V	07
220 V	220 V	08
220 V	415 V	09
220 V	0	10
110 V	24 V	11
110 V	110 V	12
110 V	220 V	13
110 V	415 V	14
110 V	0	15
24 V	24 V	16
24 V	110 V	17
24 V	220 V	18
24 V	415 V	19
24 V	0	20
0	24 V	21
0	110 V	22
0	220 V	23
0	415 V	24
0	0	00 (Zero Zero)

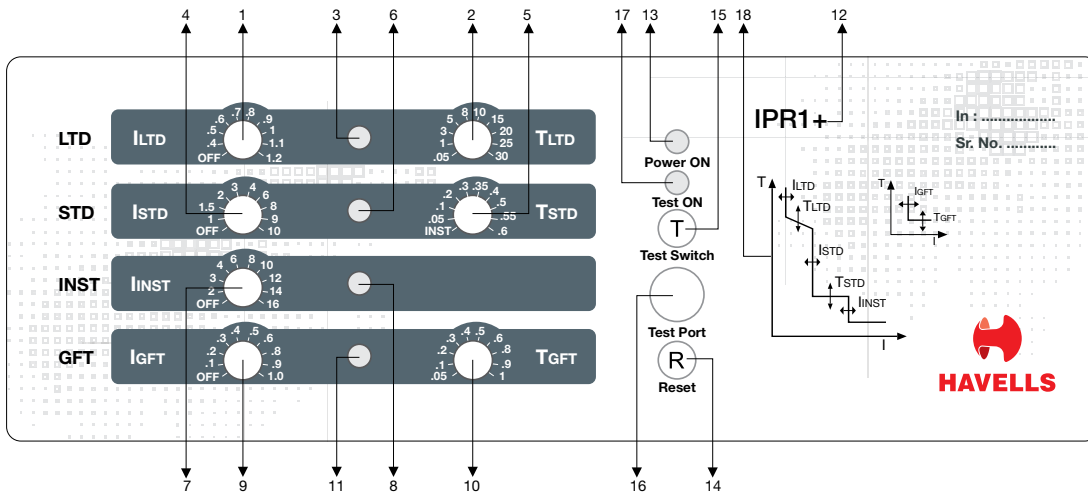
Table 3

Current Transformer	#
CT Rating is same as of ACB	0 (Zero)
400 A	A
630 A	B
800 A	C
1000A	D
1250 A	E
1600 A	F
2000 A	G

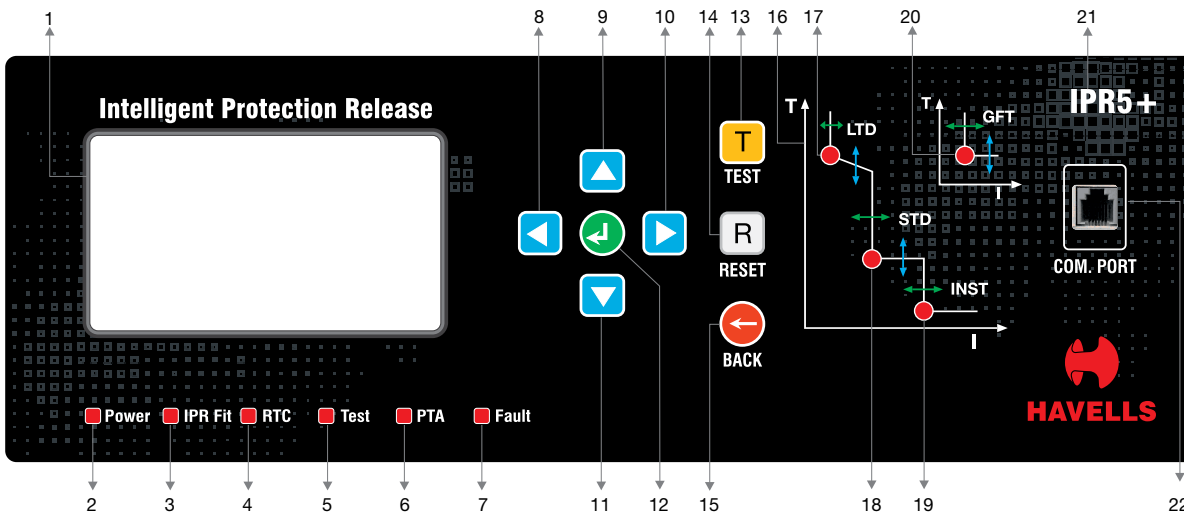
Titania Air Circuit Breaker

(Conforms to IS/IEC:60947-2)

Intelligent Protection Releases



Ref.	Description	Ref.	Description
1	Rotary switch for setting LTD current	10	Rotary switch for setting GFT time
2	Rotary switch for setting LTD Time	11	LED indication for GFT fault
3	LED indication for LTD fault	12	Product identification code
4	Rotary switch for setting STD current	13	LED for "Power ON"
5	Rotary switch for setting STD time	14	Reset push button
6	LED indication for STD fault	15	Test push button
7	Rotary switch for setting INST current	16	Socket for test supply
8	LED indication for INST fault	17	LED for "Test ON"
9	Rotary switch for setting GFT current	18	Time current characteristics curve



Ref.	Description	Ref.	Description
1	LCD Screen	12	Enter / Save Push Button
2	LED for "Power ON"	13	Test Push Button
3	LED for "IPR Fit"	14	Reset Push Button
4	#LED for "RTC (Ready to Close)"	15	Back Push Button
5	LED for "Test ON"	16	Time Current Characteristic Curve
6	LED for "PTA (Pre-Trip Alarm)"	17	LED Indication for LTD Fault
7	LED for "Faults"	18	LED Indication for STD Fault
8	Scroll "Left" Push Button	19	LED Indication for INST Fault
9	Scroll "Up" Push Button	20	LED Indication for GFT Fault
10	Scroll "Right" Push Button	21	Product Identification Code
11	Scroll "Down" Push Button	22	MODBUS RS-485 Communication Port

Titania Air Circuit Breaker

(Conforms to IS/IEC:60947-2)

New Range of Intelligent Protection Release (IPR)+



S. No.	Features	IPR E+	IPR 1+	IPR 3+	IPR 5+
	Release settings:	●	●	●	●
1	LTD	Current Setting	●	●	●
		Time Setting	●	●	●
2	STD	Current Setting	●	●	●
		Time Setting	●	●	●
3	INST	●	●	●	●
4	GFT	Current Setting	●	●	●
		Time Setting	●	●	●
5	PTA	Current Setting		●	●
		Time Setting		●	●
6	Function Blocking	●	●	●	●
7	Field Test Function	●	●	●	●
8	IPR Fit Indicator			●	●
9	Load Shedding Function			●	●
10	Reset Function	●	●	●	●
11	Thermal Memory			●	●
12	LED Indications	●	●	●	●
13	Fault History on Display			●	●
14	Making Current Release	●	●	●	●
15	Zone Selectivity			●	●
16	Circuit Breaker Fail Protection			●	●
17	Operation Counter			●	●
18	Contact Erosion Indicator			●	●
19	Ready to Close (RTC)*			●	●
20	I ² t ON/OFF			●	●
21	LCD Display			●	●
22	Bar Graphs Indication			●	●
23	External Relay Card*			●	●
	Advanced Protection			●	●
24	Under Voltage Release			●	●
25	Over Voltage Release			●	●
26	Under Frequency protection			●	●
27	Over Frequency protection			●	●
28	Voltage unbalance protection			●	●
29	Phase sequence protection			●	●
30	Over Temperature Protection			●	●
	Measurement Module			●	●
31	Current (Both in 3 phase & neutral)			●	●
32	Voltage (both Line & Phase)			●	●
33	Frequency (Hz.)			●	●
34	Temperature (deg. C)			●	●
35	Maximum Demand				●
36	Apparent Power (KVA)				●
37	Real Power (KW)				●
38	Reactive Power (KVAR)				●
39	Power factor				●
40	Communication Enabled (MODBUS)				●

*Provided on request. #Communication software provided on request.

Note: IPR+ releases do not require any external power supply for their basic protection functioning. For other functions and display to run, they require an external power supply of 12 Vdc - 24 Vdc.

Titania Air Circuit Breaker

(Conforms to IS/IEC:60947-2)

Order Form

Please check in front of appropriate box. Fill separate sheet for each type of ACB

CUSTOMER/ DEALER NAME	ORDER NO./DATE	END USER NAME													
<table border="1"> <tr> <td rowspan="2">Rating of ACB</td> <td>630 A <input type="checkbox"/></td> <td>1000 A <input type="checkbox"/></td> <td>1600 A <input type="checkbox"/></td> <td>2500 A <input type="checkbox"/></td> <td>4000 A <input type="checkbox"/></td> <td rowspan="2">6300 A <input type="checkbox"/></td> <td rowspan="2">Qty.</td> </tr> <tr> <td>800 A <input type="checkbox"/></td> <td>1250 A <input type="checkbox"/></td> <td>2000 A <input type="checkbox"/></td> <td>3200 A <input type="checkbox"/></td> <td>5000 A <input type="checkbox"/></td> </tr> </table>			Rating of ACB	630 A <input type="checkbox"/>	1000 A <input type="checkbox"/>	1600 A <input type="checkbox"/>	2500 A <input type="checkbox"/>	4000 A <input type="checkbox"/>	6300 A <input type="checkbox"/>	Qty.	800 A <input type="checkbox"/>	1250 A <input type="checkbox"/>	2000 A <input type="checkbox"/>	3200 A <input type="checkbox"/>	5000 A <input type="checkbox"/>
Rating of ACB	630 A <input type="checkbox"/>	1000 A <input type="checkbox"/>		1600 A <input type="checkbox"/>	2500 A <input type="checkbox"/>	4000 A <input type="checkbox"/>	6300 A <input type="checkbox"/>	Qty.							
	800 A <input type="checkbox"/>	1250 A <input type="checkbox"/>	2000 A <input type="checkbox"/>	3200 A <input type="checkbox"/>	5000 A <input type="checkbox"/>										
Breaking Capacity Icu	Upto 2500 A	50 kA <input type="checkbox"/>	65 kA <input type="checkbox"/>	75 kA <input type="checkbox"/>											
	3200 A to 6300 A		100 kA <input type="checkbox"/>	150 kA <input type="checkbox"/>											
No. of Poles	3 <input type="checkbox"/>		4 <input type="checkbox"/>	4 <input type="checkbox"/>											
			(100% Neutral)	(50% Neutral for V-Series only)											
Mounting	Fixed <input type="checkbox"/>	Drawout <input type="checkbox"/>	Standard (for E&S series) <input type="checkbox"/> Vertical terminals (for H&V series) <input type="checkbox"/>												
	Note: For E & S series - Adapter terminals are on demand														
Spring Charging Operation	Manual <input type="checkbox"/>	Electrical <input type="checkbox"/>	Closing Coil _____ VAC / DC Tripping Coil _____ VAC / DC Motor _____ V												
Release	Upto 2500 A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
		Without Release	IPR E+	IPR 1+	IPR 3+	IPR 5+									
	3200 A to 6300 A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
		Without Release	LN	LA	LP	LH									
	Setting: O/L _____ A, S/C _____ A, Inst. _____ A, GFT _____ A, CT Rating _____ A, Neutral CT <input type="checkbox"/>														
	Note: Unless otherwise specified O/L will be set at maximum value and all other settings would be set at mid values.														
Other Accessories	Close open cycle counter	<input type="checkbox"/>	Five c/o additional Aux. contacts	<input type="checkbox"/>											
	Field test unit	<input type="checkbox"/>	Shunt Trip	<input type="checkbox"/>											
	Position Indication Switch	<input type="checkbox"/>	UVT	<input type="checkbox"/>											
	Spring Charge Indication Switch	<input type="checkbox"/>	Trip Indication Switch	<input type="checkbox"/>											
	Mechanical Interlock	<input type="checkbox"/>	Key Lock	<input type="checkbox"/>											
	Mal Insertion Prevention device	<input type="checkbox"/>													
	Door Interlock	<input type="checkbox"/>	Key Interlock	2L+1K <input type="checkbox"/> 3L+2K <input type="checkbox"/>											

Note :

- Please specify the voltages for closing coil, shunt trip and UVT, available voltages are 24 V DC, 110 V AC / DC, 220 V AC / DC and 415 V AC and for motor available voltages are 220 V AC / DC and 110 V AC / DC.
- For details of Over current release, please refer the technical catalogue.

Compact, Reliable & Robust HIM - Moulded Case Circuit Breakers



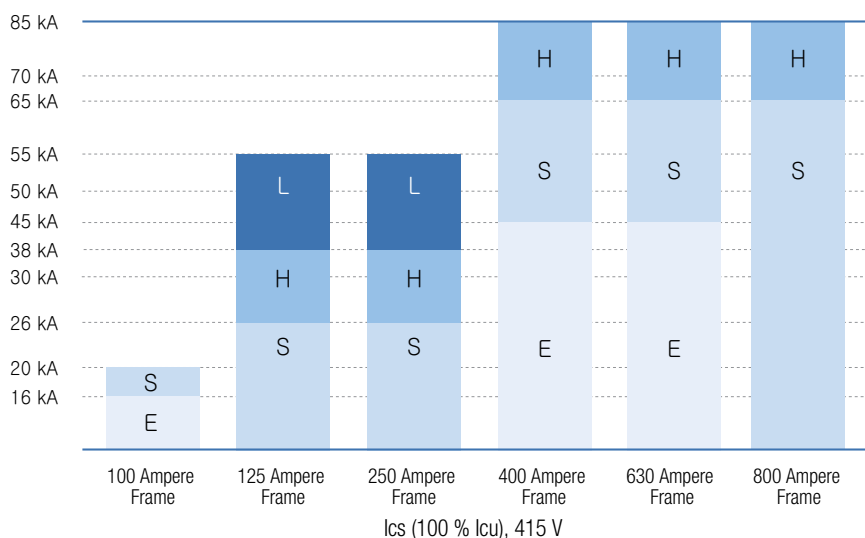
Wide range of Circuit Breakers catering all kind of electrical applications:

- HIM Series MCCBs upto 800 A is the natural selection for all kind of electrical distribution / applications.
- Double protective layer ensures high level of safety,
- High Electrical / Mechanical endurance for upgraded service life / dependability.
- All type of accessories for different frame provides greater control over distribution.
- Suitable for isolation.

Advanced Breaking Performance and Various Selectivity

- Wide Product Range: 100 A - 800 A in 5 different frames.
- Thermal magnetic release with thermal adjustability in entire range.
- High breaking capacity with $I_{cs} = 100\% I_{cu}$ from 16 kA to 85 kA.
- 2P, 3P and 4P versions available.
- Standardized Height of Products by Frame: 100 A - 250 A (68 mm), 400 A - 800 A (110 mm).

Rated Short-Circuit Current by Ampere Frame, ($I_{cs} = 100\% I_{cu}$)



Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)



HIM MCCB

Conforms to IS/IEC60947-2

Ics=Icu=100%

16A to 800A

Up to 85kA breaking capacities

Adjustable Thermal & Fixed Magnetic



Rated Ultimate Short-circuit Breaking Capacity Ics=100% Icu at 415 Vac (kA rms)	Rated Ultimate Short-circuit Breaking Capacity Icu at 250 V (2P)-DC (kA)	Current Rating (A)	Frame	Double Pole Cat. No.	Per Unit LP (₹)	Three Pole Cat. No.	Per Unit LP (₹)	Four Pole # Cat. No.	Per Unit LP (₹)
16	5	16	HIM 100	IHDA3BBD0016	2935.00	IHDA3BBT0016	4035.00	IHDA3BBF0016	5185.00
		20		IHDA3BBD0020		IHDA3BBT0020		IHDA3BBF0020	
		25		IHDA3BBD0025		IHDA3BBT0025		IHDA3BBF0025	
		32		IHDA3BBD0032		IHDA3BBT0032		IHDA3BBF0032	
		40		IHDA3BBD0040		IHDA3BBT0040		IHDA3BBF0040	
		50		IHDA3BBD0050		IHDA3BBT0050		IHDA3BBF0050	
		63		IHDA3BBD0063		IHDA3BBT0063		IHDA3BBF0063	
		80		IHDA3BBD0080		IHDA3BBT0080		IHDA3BBF0080	
	100	IHDA3BBD0100	3205.00	IHDA3BBT0100	4390.00	IHDA3BBF0100	5655.00		
26	15	16	HIM 125	IHDA6OBD0016	5030.00	IHDA6OBT0016	6875.00	IHDA6OBF0016	9485.00
		20		IHDA6OBD0020		IHDA6OBT0020		IHDA6OBF0020	
		25		IHDA6OBD0025		IHDA6OBT0025		IHDA6OBF0025	
		32		IHDA6OBD0032		IHDA6OBT0032		IHDA6OBF0032	
		40		IHDA6OBD0040		IHDA6OBT0040		IHDA6OBF0040	
		50		IHDA6OBD0050		IHDA6OBT0050		IHDA6OBF0050	
		63		IHDA6OBD0063		IHDA6OBT0063		IHDA6OBF0063	
		80		IHDA6OBD0080		IHDA6OBT0080		IHDA6OBF0080	
		100		IHDA6OBD0100		IHDA6OBT0100		IHDA6OBF0100	
		125		IHDA6OBD0125		6150.00		IHDA6OBT0125	
		150	HIM 250			IHD2HOBT0150	13100.00	IHD2HOBF0150	15565.00
		160				IHD2HOBT0160		IHD2HOBF0160	
		200				IHD2HOBT0200		IHD2HOBF0200	
		225				IHD2HOBT0225		IHD2HOBF0225	
250				IHD2HOBT0250	19850.00	IHD2HOBF0250	25035.00		
38	20	16	HIM 125	IHDA6TBD0016	6590.00	IHDA6TBT0016	9070.00	IHDA6TBF0016	11225.00
		20		IHDA6TBD0020		IHDA6TBT0020		IHDA6TBF0020	
		25		IHDA6TBD0025		IHDA6TBT0025		IHDA6TBF0025	
		32		IHDA6TBD0032		IHDA6TBT0032		IHDA6TBF0032	
		40		IHDA6TBD0040		IHDA6TBT0040		IHDA6TBF0040	
		50		IHDA6TBD0050		IHDA6TBT0050		IHDA6TBF0050	
		63		IHDA6TBD0063		IHDA6TBT0063		IHDA6TBF0063	
		80		IHDA6TBD0080		IHDA6TBT0080		IHDA6TBF0080	
		100		IHDA6TBD0100		IHDA6TBT0100		IHDA6TBF0100	
		125		IHDA6TBD0125		7550.00		IHDA6TBT0125	
		150	HIM 250			IHD2HTBT0150	15800.00	IHD2HTBF0150	18675.00
		160				IHD2HTBT0160		IHD2HTBF0160	
		200				IHD2HTBT0200		IHD2HTBF0200	
		225				IHD2HTBT0225		IHD2HTBF0225	
250				IHD2HTBT0250	21000.00	IHD2HTBF0250	25745.00		
45	20	300	HIM 400			IHDA9UBT0300	25600.00	IHDA9UBF0300	31380.00
		350				IHDA9UBT0350		IHDA9UBF0350	
		400				IHDA9UBT0400		IHDA9UBF0400	
		500	HIM 630			IHD3HUBT0500	35000.00	IHD3HUBF0500	42335.00
		630				IHD3HUBT0630		IHD3HUBF0630	



Rated Ultimate Short-circuit Breaking Capacity Ics=100% Icu at 415 Vac (kA rms)	Rated Ultimate Short-circuit Breaking Capacity Icu at 250 V (2P)-DC (kA)	Current Rating (A)	Frame	Double Pole Cat. No.	Per Unit LP (₹)	Three Pole Cat. No.	Per Unit LP (₹)	Four Pole # Cat. No.	Per Unit LP (₹)	
55	30	16	HIM 125	IHDA6VBD0016	8585.00	IHDA6VBT0016	11900.00	IHDA6VBF0016	14505.00	
		20		IHDA6VBD0020		IHDA6VBT0020		IHDA6VBF0020		
		25		IHDA6VBD0025		IHDA6VBT0025		IHDA6VBF0025		
		32		IHDA6VBD0032		IHDA6VBT0032		IHDA6VBF0032		
		40		IHDA6VBD0040		IHDA6VBT0040		IHDA6VBF0040		
		50		IHDA6VBD0050		IHDA6VBT0050		IHDA6VBF0050		
		63		IHDA6VBD0063		IHDA6VBT0063		IHDA6VBF0063		
		80		IHDA6VBD0080		IHDA6VBT0080		IHDA6VBF0080		
		100		IHDA6VBD0100		IHDA6VBT0100		IHDA6VBF0100		
		125	IHDA6VBD0125	IHDA6VBT0125	IHDA6VBF0125	18120.00				
		150	HIM 250		IHD2HVBT0150	10965.00	IHD2HVBF0150	19800.00	IHD2HVBF0150	23605.00
		160			IHD2HVBT0160		IHD2HVBF0160			
		200			IHD2HVBT0200		IHD2HVBF0200			
		225			IHD2HVBT0225		IHD2HVBF0225			
250	IHD2HVBT0250	IHD2HVBF0250								
65	25	300	HIM 400			IHDA9LBT0300	27900.00	IHDA9LBF0300	33545.00	
		350				IHDA9LBT0350		IHDA9LBF0350		
		400				IHDA9LBT0400		IHDA9LBF0400		
		500	HIM 630				IHD3HLBT0500	38200.00	IHD3HLBF0500	46955.00
		630					IHD3HLBT0630		IHD3HLBF0630	
		700					HIM 800			
800	IHD4HLBT0800	IHD4HLBF0800								
85	40	300	HIM 400			IHDA9MBT0300	35100.00	IHDA9MBF0300	40415.00	
		350				IHDA9MBT0350		IHDA9MBF0350		
		400				IHDA9MBT0400		IHDA9MBF0400		
		500	HIM 630				46000.00	IHD3HMBT0500	56550.00	
		630						IHD3HMBT0630		IHD3HMBF0630
		700						HIM 800		
		800	IHD4HMBT0800	IHD4HMBF0800						

Accessories for HIM Series Moulded Case Circuit Breakers

Description	HIM 100 / 125 / 250 / Frame	HIM 400 / 630 / 800 Frame	
Shunt Trip			
24 Vdc	ISSLEU0800	1675.00	
48 Vdc	ISSLEU0801		
60 Vdc	ISSLEU0802		
100 Vdc -120 Vdc	ISSLEU1634		
125 Vdc	ISSLEU0803		
100 Vdc -125 Vdc		ISSLEU0907	
100 Vac -120 Vac	ISSLEU0905	1675.00	
200 Vac -250 Vac	ISSLEU0906		ISSLEU0908
380 Vac - 415 Vac	ISSLEU0888		ISSLEU0890
			On Request
Under Voltage Release			
24 Vdc	ISSLEU0804	2460.00	
48 Vdc	ISSLEU0805		
100 Vdc - 110 Vdc	ISSLEU0909		
100 Vac - 120 Vac	ISSLEU0910	3150.00	
200 Vac - 230 Vac	ISSLEU0893		ISSLEU0914
380 Vac - 415 Vac	ISSLEU0894		ISSLEU0895
			ISSLEU0896



SHT



UVT

Note : *Adjustable thermal (80% -100%) - In TP & FP only. #TP with Switched Neutral.

MCCBs are without extended terminals, however extended terminals are available on request at extra price for these ratings

Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

Accessories for HIM Series Moulded Case Circuit Breakers

Description	HIM 100 / 125 / 250 / Frame		HIM 400 / 630 / 800 Frame	
Auxiliary Contact (250 Vac / 250 Vdc) (450 Vac / 250 Vdc)				
1-Changeover	ISSLEU0791	820.00	ISSLEU0793	900.00
2-Changeover	ISSLEU0792	1450.00		
Alarm Switch (Left side only)	ISSLEU0794	820.00	ISSLEU0796	900.00
Alarm Switch (Right side only)	ISSLEU0795			
Auxiliary + Alarm Switch				
Left side only	ISSLEU0799	1400.00		
Right side only	ISSLEU0797			
Pad Lock Device	ISSLEU0844	1100.00	ISSLEU0845	1350.00
DIN Rail	ISSLEU0887	720.00		
Auxiliary Handle			ISSLEU0846	1350.00



Description	HIM 100 Frame	HIM 125 Frame	HIM 250 Frame	HIM 400 Frame	HIM 630 / 800 Frame					
Rotary Handle										
Direct mounting	ISSLEU0806	1165.00	ISSLEU0809	1165.00	ISSLEU0812	1165.00	ISSLEU0815	1750.00	ISSLEU0916	2705.00
Door Mounting	ISSLEU0820	1695.00	ISSLEU0821	1695.00	ISSLEU0822	1785.00	ISSLEU0823	2535.00	ISSLEU0824	3530.00
Mechanical Interlock										
2 Pole	ISSLEU0825	1125.00	ISSLEU0829	1125.00						
3 Pole	ISSLEU0826	2100.00	ISSLEU0830	2100.00	ISSLEU0833	2560.00	ISSLEU0836	4080.00	ISSLEU0838	4725.00
4 Pole (N-R-S-T)	ISSLEU0828	2505.00	ISSLEU0832	2505.00	ISSLEU0835	3090.00	ISSLEU0837	4780.00	ISSLEU0843	5600.00
Motor Operator										
24 Vdc	ISSLEU0917		ISSLEU0897		ISSLEU0899		ISSLEU0901		ISSLEU0903	
110 Vac / Vdc	ISSLEU0918	28385.00	ISSLEU0920	28385.00	ISSLEU0921	28385.00	ISSLEU0922	40275.00	ISSLEU0923	44875.00
240 Vac / Vdc	ISSLEU0919		ISSLEU0898		ISSLEU0900		ISSLEU0902		ISSLEU0904	

Description	HIM 100 Frame	HIM 125 Frame	HIM 250 Frame	HIM 400 Frame	HIM 630 Frame	HIM 800 Frame						
Spreader Terminals - Extended Type												
3 Pole (Set of 3)	ISSLEX1158	150.00	ISSLEX1160	200.00	ISSLEX1162	575.00	ISSLEX1164	1590.00	ISSLEX1168	1590.00	ISSLEX1166	2900.00
4 Pole (Set of 4)	ISSLEX1159	240.00	ISSLEX1161	285.00	ISSLEX1163	835.00	ISSLEX1165	1960.00	ISSLEX1169	1960.00	ISSLEX1167	3750.00
Terminal Cover - Long Type												
2 Pole	ISSLEU0858	430.00	ISSLEU0864	430.00								
3 Pole	ISSLEU0859	650.00	ISSLEU0865	650.00	ISSLEU0869	900.00	ISSLEU0873	1850.00	ISSLEU0877	1850.00		
4 Pole	ISSLEU0860	735.00	ISSLEU0866	735.00	ISSLEU0870	1050.00	ISSLEU0874	2585.00	ISSLEU0878	2800.00		
Phase Barrier												
2 Pole (Set of 1)	ISSLEU0924	50.00	ISSLEU0924	50.00	ISSLEU0882	70.00						
3 Pole (Set of 2)	ISSLEU0880	100.00	ISSLEU0880	100.00	ISSLEU0883	140.00	ISSLEU0885	600.00	ISSLEU0885	600.00	ISSLEU0885	600.00
4 Pole (Set of 3)	ISSLEU0881	150.00	ISSLEU0881	150.00	ISSLEU0884	210.00	ISSLEU0886	900.00	ISSLEU0886	900.00	ISSLEU0886	900.00
Enclosure												
3 Pole	ISSBOU1189	1605.00	ISSBOU1191	1750.00	ISSBOU1193	2200.00	ISSBOU1195	800.00	ISSBOU1197	8560.00	ISSBOU1199	8560.00
4 Pole	ISSBOU1190		ISSBOU1192		ISSBOU1194		ISSBOU1196		ISSBOU1198		ISSBOU1200	



HAVELLS

The Compact Reliable Performer

Loadline MCCB Range



● Current Rating: 15 A to 1600 A ● Execution: 1P, 2P, 3P & 4P ● Breaking Capacity: 10 kA to 50 kA

□ Compact □ Thermal and Magnetic release □ Precise and reliable protection

buy online** at shop.havells.com

**Online shopping is applicable on select products.
©2018. www.havells.com

/havells

/havellsindia

YouTube/havellsindia

/havells_india

ISO 9001:2015

CARE360
24x7 customer care center

Search us on WhatsApp
+91-9911775333
for any website related queries.

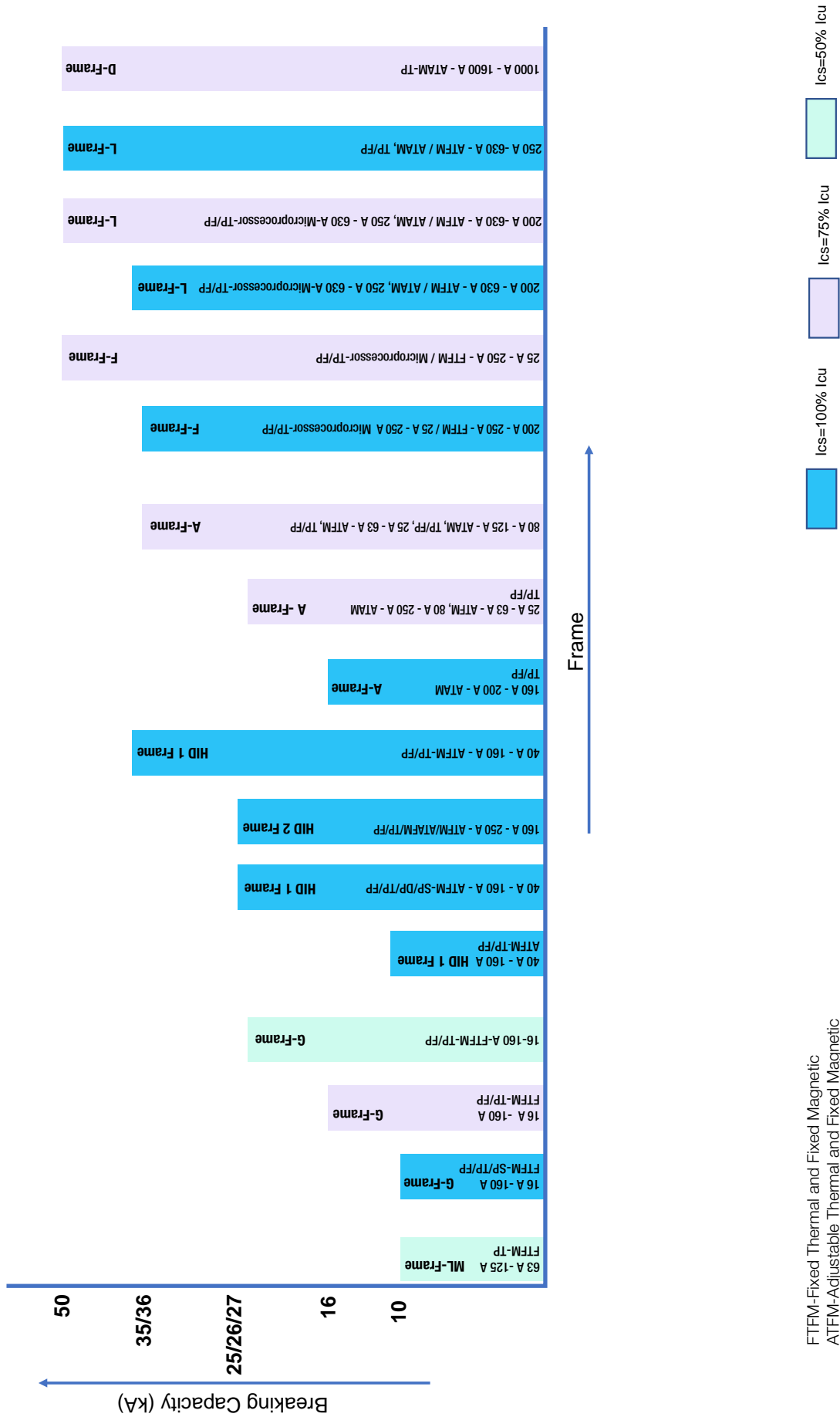
For CARE 360, Call us at : Toll Free No. : 08040 771212
For orders, information or viewing near Havells Gallery Store,
please e-mail to: gallery@havells.com

Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

MCCB Selection Chart

Loadline (TM / Microprocessor)



FTFM-Fixed Thermal and Fixed Magnetic
 ATFM-Adjustable Thermal and Fixed Magnetic
 ATAM-Adjustable Thermal and Adjustable Magnetic
 Microprocessor based Trip Unit

Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

Fixed Thermal & Fixed Magnetic

HSN Code: 8536

Rated Ultimate Shortcircuit Breaking Capacity Icu at 415 V (kA rms)	Rated Service short circuit Breaking Capacity Ics = % Icu at 415 V (kA rms)	Current Rating (A)	Frame	Three Pole Cat. No.	Per Unit LP (₹)	Four Pole Cat. No.	Per Unit LP (₹)				
10	50%	15A	SH	IHLSHAAT0015	POR						
		20A		IHLSHAAT0020	POR						
		32A		IHLSHAAT0032	POR						
		40A		IHLSHAAT0040	POR						
		63A	ML1	IHLM1AAT0063	1700.00						
		80A		IHLM1AAT0080#	1775.00						
		100A		IHLM1AAT0100#	1850.00						
		125A		IHLM1AAT0125#	2585.00						
	100%	25A	GS (Suitable for DC application Ics=Icu=10 kA at 250 VDC, 3 pole in series)	IHLGST0025	1900.00	IHLGSF0025	2490.00				
		32A		IHLGST0032		IHLGSF0032					
		40A		IHLGST0040		IHLGSF0040					
		50A		IHLGST0050		IHLGSF0050					
		63A		IHLGST0063	1920.00	IHLGSF0063		2535.00			
		80A		IHLGST0080#	2045.00	IHLGSF0080#		3080.00			
		100A		IHLGST0100#	3180.00	IHLGSF0100#		3765.00			
		125A		IHLGST0125#	3800.00	IHLGSF0125#		5030.00			
		150A		IHLGST0150#		IHLGSF0150#					
		160A		IHLGST0160#		IHLGSF0160#					
16	75%	25A	GN	IHLGNT0025	3685.00	IHLGNF0025	4350.00				
		32A		IHLGNT0032		IHLGNF0032					
		40A		IHLGNT0040		IHLGNF0040					
		50A		IHLGNT0050		IHLGNF0050					
		63A		IHLGNT0063	IHLGNF0063	4745.00					
		80A		IHLGNT0080#	IHLGNF0080#						
		100A		IHLGNT0100#	IHLGNF0100#						
		125A		IHLGNT0125#	IHLGNF0125#			4820.00			
		150A		IHLGNT0150#	4840.00	IHLGNF0150#		5600.00			
		160A		IHLGNT0160#		IHLGNF0160#					
		25		50%	25A	GH		IHLGHT0025	4425.00	IHLGHF0025	5570.00
					32A			IHLGHT0032		IHLGHF0032	
40A	IHLGHT0040		IHLGHF0040								
50A	IHLGHT0050		IHLGHF0050								
63A	IHLGHT0063		IHLGHF0063		5645.00						
80A	IHLGHT0080#		IHLGHF0080#								
100A	IHLGHT0100#		IHLGHF0100#								
125A	IHLGHT0125#		5205.00				IHLGHF0125#	6845.00			
150A	IHLGHT0150#		7850.00		IHLGHF0150#		9160.00				
160A	IHLGHT0160#				IHLGHF0160#						
35	100%	200A	FN	IHLFN30200	15725.00	IHLFN40200	21065.00				
		250A		IHLFN30250	17655.00	IHLFN40250	23030.00				
50	75%	25A	FH	IHLFHT0025	8865.00	IHLFHF0025	10060.00				
		32A		IHLFHT0032		IHLFHF0032					
		40A		IHLFHT0040		IHLFHF0040					
		50A		IHLFHT0050		IHLFHF0050					
		63A		IHLFHT0063	IHLFHF0063	11250.00					
		80A		IHLFHFA30080	9470.00			IHLFHFA40080			
		100A		IHLFH30100				IHLFH40100			
		125A		IHLFH30125	11320.00			IHLFH40125	14510.00		
		160A		IHLFH30160	14205.00	IHLFH40160		17760.00			
		200A		IHLFH30200	16520.00	IHLFH40200		22295.00			
		250A		IHLFH30250	18245.00	IHLFH40250		24330.00			

Phase barriers are supplied along with MCCBs
 Spreader terminals are available as an accessories, refer page no. 54
 # Both side terminal are included
 *Product available for sales from September 2021.

Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

Adjustable Thermal & Fixed Magnetic

HSN Code: 8536

Rated Ultimate Shortcircuit Breaking Capacity Icu at 415 V (kA rms)	Rated Service short circuit Breaking Capacity Ics = % Icu at 415 V (kA rms)	Current Rating (A)	Frame	Three Pole Cat. No.	Per Unit LP (₹)	Four Pole Cat. No.	Per Unit LP (₹)	
10	100%	40 A	HID 1	IHLE1ABT0040	3305.00	IHLE1ABF0040	3855.00	
		50 A		IHLE1ABT0050		IHLE1ABF0050		
		63 A		IHLE1ABT0063		IHLE1ABF0063		
		80 A		IHLE1AB30080	3420.00	IHLE1AB40080		3965.00
		100 A		IHLE1AB30100		IHLE1AB40100		
		125 A		IHLE1AB30125	4465.00	IHLE1AB40125		5325.00
		160 A		IHLE1AB30160	5095.00	IHLE1AB40160		6145.00
25	75%	25 A	AS (Suitable for DC application Ics=Icu=10 kA at 250 V DC, 3 pole in series)	IHLAST0025	POR	IHLASF0025	POR	
		32 A		IHLAST0032		IHLASF0032		
		40 A		IHLAST0040		IHLASF0040		
		50 A		IHLAST0050		IHLASF0050		
		63 A		IHLAST0063		IHLASF0063		
27	100%	40 A	HID 1	IHA13DBT0040	5845.00	IHA13DBF0040	6810.00	
		50 A		IHA13DBT0050		IHA13DBF0050		
		63 A		IHA13DBT0063		IHA13DBF0063		
		80 A		IHA13DB30080	7125.00	IHA13DB40080		8495.00
		100 A		IHA13DB30100		IHA13DB40100		
		125 A		IHA13DB30125	8140.00	IHA13DB40125		9825.00
		160 A		IHA13DB30160	9700.00	IHA13DB40160		11630.00
26	100%	160 A	HID 2*	IHAE2OB30160	9700.00	IHAE2OB40160	11630.00	
		200 A		IHAE2OB30200	9830.00	IHAE2OB40200	12100.00	
		250 A		IHAE2OB30250	10620.00	IHAE2OB40250	13430.00	
35	75%	25 A	AN	IHLANT0025	POR	IHLANF0025	POR	
		32 A		IHLANT0032		IHLANF0032		
		40 A		IHLANT0040		IHLANF0040		
		50 A		IHLANT0050		IHLANF0050		
		63 A		IHLANT0063		IHLANF0063		
36	100%	40 A	HID 1	IHA13EBT0040	7710.00	IHA13EBF0040	9185.00	
		50 A		IHA13EBT0050		IHA13EBF0050		
		63 A		IHA13EBT0063		IHA13EBF0063		
		80 A		IHA13EB30080	8885.00	IHA13EB40080		10480.00
		100 A		IHA13EB30100		IHA13EB40100		
		125 A		IHA13EB30125	9760.00	IHA13EB40125		11415.00
		160 A	IHA13EB30160	18720.00	IHA13EB40160	22345.00		
		200 A	LS	IHLLSEB30200	21000.00	IHLLSEB40200		25085.00
		250 A		IHLLSEB30250	21760.00	IHLLSEB40250		26735.00
		320 A		IHLLSEB30320	21760.00	IHLLSEB40320		26735.00
		400 A		IHLLSEB30400	29750.00	IHLLSEB40400		36850.00
		500 A		IHLLSEB30500	29750.00	IHLLSEB40500		36850.00
		630 A		IHLLSEB30630	20800.00	IHLLSEB40630		24630.00
200 A	LN	IHLLNFB30200		22500.00	IHLLNFB40200	26620.00		
250 A		IHLLNFB30250	23075.00	IHLLNFB40250	27925.00			
320 A		IHLLNFB30320	23075.00	IHLLNFB40320	27925.00			
400 A		IHLLNFB30400	31595.00	IHLLNFB40400	38790.00			
500 A		IHLLNFB30500	31595.00	IHLLNFB40500	38790.00			
630 A		IHLLNFB30630	24000.00	IHLLNFB40630	28120.00			
250 A		L*	IHLLSFB30250	24575.00	IHLLSFB40250	29425.00		
320 A	IHLLSFB30320		24575.00	IHLLSFB40320	29425.00			
400 A	IHLLSFB30400		33095.00	IHLLSFB40400	40290.00			
500 A	IHLLSFB30500		33095.00	IHLLSFB40500	40290.00			
630 A	IHLLSFB30630		33095.00	IHLLSFB40630	40290.00			



Phase barriers are supplied along with MCCBs
 Spreader terminals are available as an accessories, refer page no. 55
 # Both side terminal are included
 *Product available for sales from September 2021.
 HIM 250 Accessories are used for HID2 MCCB, please refer page no. 46 & 47

List Prices (LP) are in Indian ₹ as per Regular Terms & Conditions

Effective from 21st July, 2021 **HAVELLS 51**

Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

Adjustable Thermal & Adjustable Magnetic

HSN Code: 8536

Rated Ultimate Shortcircuit Breaking Capacity Icu at 415 V (kA rms)	Rated Service short circuit Breaking Capacity Ics = % Icu at 415 V (kA rms)	Current Rating (A)	Frame	Three Pole Cat. No.	Per Unit LP (₹)	Four Pole Cat. No.	Per Unit LP (₹)
16	100%	160 A	AS	IHLASBC30160	7125.00	IHLASBC40160	9660.00
		200 A		IHLASBC30200	8115.00	IHLASBC40200	10545.00
25	75%	80 A	AS (Suitable for DC application Ics=Icu=10 kA at 250 V DC, 3 pole in series)	IHLASDC30080	6245.00	IHLASDC40080	7560.00
		100 A		IHLASDC30100	6245.00	IHLASDC40100	7560.00
		125 A		IHLASDC30125	7930.00	IHLASDC40125	9380.00
		160 A	AN (Suitable for DC application Ics=Icu=10 kA at 250 V DC, 3 pole in series)	IHLANDC30160	8820.00	IHLANDC40160	10555.00
		200 A		IHLANDC30200	8940.00	IHLANDC40200	11000.00
		250 A		IHLANDC30250	9655.00	IHLANDC40250	12210.00
35	75%	80 A	AN	IHLANEC30080	8555.00	IHLANEC40080	10205.00
		100 A		IHLANEC30100	8550.00	IHLANEC40100	10200.00
		125 A		IHLANEC30125	10020.00	IHLANEC40125	11560.00
36	100%	200 A	LS	IHLLSEC30200	19450.00	IHLLSEC40200	23080.00
		250 A		IHLLSEC30250	21765.00	IHLLSEC40250	25855.00
		320 A		IHLLSEC30320	22505.00	IHLLSEC40320	27475.00
		400 A		IHLLSEC30400	22505.00	IHLLSEC40400	27475.00
		500 A		IHLLSEC30500	30625.00	IHLLSEC40500	37725.00
		630 A		IHLLSEC30630	30625.00	IHLLSEC40630	37725.00
50	75%	200 A	LN	IHLLNFC30200	21570.00	IHLLNFC40200	25395.00
		250 A		IHLLNFC30250	23275.00	IHLLNFC40250	27390.00
		320 A		IHLLNFC30320	23575.00	IHLLNFC40320	28650.00
		400 A		IHLLNFC30400	23575.00	IHLLNFC40400	28650.00
		500 A		IHLLNFC30500	32000.00	IHLLNFC40500	39290.00
		630 A		IHLLNFC30630	32000.00	IHLLNFC40630	39290.00
	100%	250 A	L*	IHLLSFC30250	24775.00	IHLLSFC40250	28890.00
		320 A		IHLLSFC30320	25075.00	IHLLSFC40320	30150.00
		400 A		IHLLSFC30400	25075.00	IHLLSFC40400	30150.00
		500 A		IHLLSFC30500	33500.00	IHLLSFC40500	40790.00
		630 A		IHLLSFC30630	33500.00	IHLLSFC40630	40790.00
		1000 A		DN	IHLDNT1000	115705.00	
1250 A	IHLDNT1250	132655.00					
1600 A	IHLDNT1600	142980.00					

Single Pole And Double Pole MCCB

Rated Ultimate Shortcircuit Breaking Capacity Icu at 240 V AC (kA rms)	Rated Service short circuit Breaking Capacity Ics = % Icu at 240 V AC (kA rms)	Current Rating (A)	Frame	Single Pole Cat. No.	Per Unit LP (₹)	Rated Ultimate Shortcircuit Breaking Capacity Icu at 240 V AC (kA rms)	Rated Service short circuit Breaking Capacity Ics = % Icu at 240 V AC (kA rms)	Double Pole Cat. No.	Per Unit LP (₹)	
10	100%	25 A	GS	IHLGSS0025	900.00	36	100%			
		32 A		IHLGSS0032						
		40 A		IHLGSS0040						
		50 A		IHLGSS0050	900.00					
		63 A		IHLGSS0063						
		80 A		IHLGSS0080#	910.00					
		100 A		IHLGSS0100#						
		125 A		IHLGSS0125#	1095.00					
		150 A		IHLGSS0150#	1165.00					
		160 A		IHLGSS0160#	1180.00					
27	100%	40 A	HID 1	IHA13DBS0040	3075.00	36	100%	IHA13DBD0040	4495.00	
		50 A		IHA13DBS0050						
		63 A		IHA13DBS0063						
		80 A		IHA13DB10080	3745.00			IHA13DB20080		
		100 A		IHA13DB10100				IHA13DB20100		
		125 A		IHA13DB10125				IHA13DB20125		5480.00
		160 A		IHA13DB10160				IHA13DB20160		6265.00

Phase barriers are supplied along with MCCBs
 Spreader terminals are available as an accessories, refer page no. 54
 # Both side terminal are included
 *Product available for sales from September 2021.

Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

Microprocessor MCCB

Adjustable Overload, Short-circuit, Ground fault (4 Pole) & Fixed Instantaneous Neutral Protection (4 Pole)

Rated Ultimate Shortcircuit Breaking Capacity Icu at 415 V (kA rms)	Rated Service short circuit Breaking Capacity Ics = % Icu at 415 V (kA rms)	Current Rating (A)	Frame	Three Pole Cat. No.	Per Unit LP (₹)	Four Pole Cat. No.	Per Unit LP (₹)	
35	100%	25 A	FEN	IHLFENT0025	12600.00	IHLFENF0025	16310.00	
		32 A		IHLFENT0032		IHLFENF0032		
		40 A		IHLFENT0040		IHLFENF0040		
		50 A		IHLFENT0050		IHLFENF0050		
		63 A		IHLFENT0063		IHLFENF0063		
		80 A		IHLFEN30080		IHLFEN40080		
		100 A		IHLFEN30100		IHLFEN40100		
		125 A		IHLFEN30125		IHLFEN40125		
		160 A		IHLFEN30160		IHLFEN40160		20150.00
		200 A		IHLFEN30200		IHLFEN40200		25575.00
		250 A		IHLFEN30250		IHLFEN40250		25900.00
36	100%	250 A	LES	IHLLSEE30250	28025.00	IHLLSEE40250	33920.00	
		320 A		IHLLSEE30320		IHLLSEE40320		
		400 A		IHLLSEE30400		IHLLSEE40400		
		500 A		IHLLSEE30500		IHLLSEE40500		42455.00
		630 A		IHLLSEE30630		IHLLSEE40630		
50	75%	25 A	FEH	IHLFEHT0025	15015.00	IHLFEHF0025	19190.00	
		32 A		IHLFEHT0032		IHLFEHF0032		
		40 A		IHLFEHT0040		IHLFEHF0040		
		50 A		IHLFEHT0050		IHLFEHF0050		
		63 A		IHLFEHT0063		IHLFEHF0063		
		80 A		IHLFEH30080		IHLFEH40080		
		100 A		IHLFEH30100		IHLFEH40100		
		125 A		IHLFEH30125		IHLFEH40125		18970.00
		160 A		IHLFEH30160		IHLFEH40160		24300.00
		200 A		IHLFEH30200		IHLFEH40200		28890.00
		250 A		IHLFEH30250		IHLFEH40250		29250.00
		250 A	LEN	IHLLNFE30250	30665.00	IHLLNFE40250	38400.00	
		320 A		IHLLNFE30320		IHLLNFE40320		
		400 A		IHLLNFE30400		IHLLNFE40400		
		500 A		IHLLNFE30500		IHLLNFE40500		43740.00
		630 A		IHLLNFE30630		IHLLNFE40630		

Phase barriers are supplied along with MCCBs
 Spreader terminals are available as an accessories, refer page no. 54
 # Both side terminal are included



Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

Spreader Terminal kit (1 side)

Frame Size	RATING	POLE	FG CODES	Per Unit LP (₹)
AS, AN, AH	80 A~100 A	TP	ISSLAX0121	230.00
		FP	ISSLAX0122	300.00
	125 A~200 A	TP	ISSLAX0124	340.00
		FP	ISSLAX0125	450.00
	250 A	TP	ISSLAX0127	650.00
		FP	ISSLAX0128	900.00
LS, LN	200 A~400 A	TP	ISSLLX0065	1100.00
		FP	ISSLLX0066	1580.00
	500 A~630 A	TP	ISSLLX0067	1270.00
		FP	ISSLLX0068	1720.00
FN, FH	80 A~100 A	TP	ISSLFX0074	230.00
		FP	ISSLFX0075	300.00
	125 A~160 A	TP	ISSLFX0076	340.00
		FP	ISSLFX0077	450.00
	200 A~250 A	TP	ISSLFX0078	650.00
		FP	ISSLFX0079	900.00
HID 1	80 A~100 A	SP	ISSLHX4273	65.00
	125 A~160 A	SP	ISSLHX4274	80.00
	80 A~100 A	DP	ISSLHX4275	120.00
	125 A~160 A	DP	ISSLHX4276	150.00
	80 A~100 A	TP	ISSLHX4277	215.00
	125 A~160 A	TP	ISSLHX4278	285.00
	80 A~100 A	FP	ISSLHX4279	215.00
	125 A~160 A	FP	ISSLHX4280	285.00

Accessories for Loadline MCCB Enclosures

HSN Code: 8538

Sl.No.	Description	Item Code	Per Unit LP (₹)
1.	'ML' Frame TP	IHEMTP	1855.00
2.	'G' Frame TP	IHEGTP	1855.00
3.	'G' Frame FP	IHEGFP	1855.00
4.	'A' Frame TP	IHEATP	2140.00
5.	'A' Frame FP	IHEAFP	2140.00
6.	'F' Frame TP	IHEFTP	2250.00
7.	'F' Frame FP	IHEFFP	2250.00
8.	'L' Frame TP	IHELTP	8450.00
9.	'L' Frame FP	IHELFP	8450.00
10.	HID 1 Frame TP	ISSBOU1117	2005.00
11.	HID 1 Frame FP	ISSBOU1118	2005.00



Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

Loadline Moulded Case Circuit Breakers Accessories

HSN Code: 8538

Description	'G' / 'ML' Frame		'A' Frame		HID 1 Frame		'L' Frame		'F' Frame		'D' Frame	
	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)
Shunt Trip												
100 Vac - 110 Vac	IHLGS110		IHLAS110	1500.00	ISSLEU0438		IHLLS110		IHLLSTF110		IHLLSTD110	
220 Vac - 240 Vac	IHLGS240	1110.00	IHLAS240	1500.00	ISSLEU0439	1500.00	IHLLS240	2060.00	IHLLSTF240	1500.00	IHLLSTD240	2070.00
380 Vac - 415 Vac	IHLGS415		IHLAS415		ISSLEU0440		IHLLS415		IHLLSTF415		IHLLSTD415	
Under Voltage Release												
110 Vac - 120 Vac	IHLGU110		IHLAU110		-	-	IHLLU110		IHLVRF110		IHLUVRD110	
220 Vac - 240Vac	IHLGU240	1530.00	IHLAU240	2300.00	-	-	IHLLU240	2810.00	IHLVRF240	2300.00	IHLUVRD240	2530.00
380 Vac - 440 Vac	IHLGU440		IHLAU440		-	-	IHLLU415		IHLVRF440		IHLUVRD440	
Auxiliary Contact (250Vac/250Vdc) (450Vac/250Vdc)												
1-Changeover	IHLASG1CO	750.00	IHLAA1CO	800.00	ISSLEU0444	800.00	IHLA1CO	865.00	IHLASF1CO	865.00	IHLASD1CO	1700.00
2-Changeover	IHLASG2CO	1200.00	IHLAA2CO	1250.00	ISSLEU0445	1250.00	IHLA2CO	1500.00	IHLASF2CO	1250.00	IHLASD2CO	2070.00
Rotary Handle												
Direct mounting	IHLGD000	1088.00	IHLAD000	1500.00								
Door Mounting	IHLGRN30	1350.00	IHLARN30	1800.00	ISSLEU0494	1695.00	IHLRN30	2630.00	IHLRRHF30	1800.00	IHLRRHD30	5445.00
Trip Alarm Contact (Factory Fitted)	IHLALG1CO	750.00	IHLALA1CO	800.00	ISSLEU0447	800.00	IHLB000	865.00	IHLALF1CO	865.00	-	-

Note : Following additional accessories are available on request :

- Terminal Shrouds for G, A, F frame
- Dolly Pad Lock for G, A, F, C & L frame
- Factory fitted Castelli Lock available in C and D frame
- \$ - Back Studs (Price on Request)
- * - Factory Fitted only
- # - Replace #* with rating

Earth Fault Relay for MCCBs

Sl. No.	MCCBs Current Range (A)	Item Code**	HSN Code: 8538 Per Unit LP (₹)
1	25 A - 100 A	IHEF1100	6445.00
2	125 A - 200 A	IHEF2200	7315.00
3	250 A - 400 A	IHEF3400	8535.00
4	500 A - 800 A	IHEF4800	10645.00

- The above prices are inclusive of CBCT.

** For operating the Earth Fault Relay a Shunt Trip or an LVR has to be used.

Note : *For operating Shunt Trip for G Frame, a separate auxiliary switch would be required in which case one c/o. will be used with the shunt trip, leaving one c/o. free for use. Door mounting clamps for G & AA Frame are supplied free of cost on request basis.



STVD_x

SMART TECHNOLOGY ADVANTAGE

SOLUTION FROM POWER TO FINAL DISTRIBUTION

Full Range of mounting & wiring accessories with Communication architecture



MCB



'C' Series MCB

(In accordance with IS/IEC 60898-1 & IS/IEC 60947-2) 240 V/415 V, 50 Hz, 10 kA.

HSN Code - 8536

Rating	SP Cat. No.	List Price in ₹ Per Unit	SPN Cat. No.	List Price in ₹ Per Unit	DP Cat. No.	List Price in ₹ Per Unit
0.5 A-5 A	DHMZCSPF0x5-005	454.00	DHMZCSNF0x5-005	1005.00	DHMZCDPF0x5-005	1180.00
6 A-32 A	DHMZCSPF006-032	261.00	DHMZCSNF006-032	866.00	DHMZCDPF006-032	886.00
40 A	DHMZCSPF040	624.00	DHMZCSNF040	1292.00	DHMZCDPF040	1378.00
50 A	DHMZCSPF050	690.00	DHMZCSNF050	1374.00	DHMZCDPF050	1494.00
63 A	DHMZCSPF063	690.00	DHMZCSNF063	1374.00	DHMZCDPF063	1494.00
Rating	TP Cat. No.	List Price in ₹ Per Unit	TPN Cat. No.	List Price in ₹ Per Unit	FP Cat. No.	List Price in ₹ Per Unit
0.5 A-5 A	DHMZCTPF0x5-005	1503.00	DHMZCTNF0x5-005	2197.00	DHMZCFPF0x5-005	2342.00
6 A-32 A	DHMZCTPF006-032	1400.00	DHMZCTNF006-032	1936.00	DHMZCFPF006-032	2012.00
40 A	DHMZCTPF040	2038.00	DHMZCTNF040	2682.00	DHMZGCFPF040	2710.00
50 A	DHMZCTPF050	2135.00	DHMZCTNF050	2724.00	DHMZCFPF050	2820.00
63 A	DHMZCTPF063	2135.00	DHMZCTNF063	2724.00	DHMZCFPF063	2820.00

'D' Series MCB

(In accordance with IEC 60898-1) 240 V/415 V, 50 Hz Suitable for high inrush current loads.

HSN Code - 8536

*Prices available on demand.

Higher Rating MCB (80 A to 125 A) 'C' Series, (In accordance with IEC 60947-2) 240 V/415 V, 50 Hz, 10 kA

HSN Code - 8536



Rating	SP Cat. No.	List Price in ₹ Per Unit	DP Cat. No.	List Price in ₹ Per Unit	TP Cat. No.	List Price in ₹ Per Unit	FP Cat. No.	List Price in ₹ Per Unit
80 A	DHMJCSPF080	2192.00	DHMJCDF080	4791.00	DHMJCTPF080	6996.00	DHMJCFF080	8396.00
100 A	DHMJCSPF100	2455.00	DHMJCDF100	4920.00	DHMJCTPF100	7362.00	DHMJCFF100	9172.00
125 A	DHMJCSPF125	2692.00	DHMJCDF125	5622.00	DHMJCTPF125	8283.00	DHMJCFF125	9736.00

RCCB



RCCB - 'AC' Type

(In accordance with IS 12640-1 & IEC 61008-1) 240 V/415 V, 50 Hz with 10 kA short circuit withstand capacity

HSN Code - 8536

Rating (DP)	30 mA Cat. No.	List Price in ₹ Per Unit	100 mA Cat. No.	List Price in ₹ Per Unit	300 mA Cat. No.	List Price in ₹ Per Unit
16 A	DHRZCMDf030016	3604.00	DHRZCMDf100016	3523.00	DHRZCMDf300016	3625.00
25 A	DHRZCMDf030025	3604.00	DHRZCMDf100025	3523.00	DHRZCMDf300025	3625.00
32 A	DHRZCMDf030032	3631.00	DHRZCMDf100032	3591.00	DHRZCMDf300032	3736.00
40 A	DHRZCMDf030040	3631.00	DHRZCMDf100040	3591.00	DHRZCMDf300040	3736.00
63 A	DHRZCMDf030063	4756.00	DHRZCMDf100063	4756.00	DHRZCMDf300063	4895.00
80 A	DHRZCMDf030080	7634.00	DHRZCMDf100080	7634.00	DHRZCMDf300080	7634.00
100 A	DHRZCMDf030100	7751.00	DHRZCMDf100100	7751.00	DHRZCMDf300100	7751.00
Rating (FP)	30 mA Cat. No.	List Price in ₹ Per Unit	100 mA Cat. No.	List Price in ₹ Per Unit	300 mA Cat. No.	List Price in ₹ Per Unit
16 A	DHRZCMFF030016	4494.00	DHRZCMFF100016	4347.00	DHRZCMFF300016	4475.00
25 A	DHRZCMFF030025	4494.00	DHRZCMFF100025	4347.00	DHRZCMFF300025	4475.00
32 A	DHRZCMFF030032	4528.00	DHRZCMFF100032	4428.00	DHRZCMFF300032	4558.00
40 A	DHRZCMFF030040	4528.00	DHRZCMFF100040	4428.00	DHRZCMFF300040	4558.00
63 A	DHRZCMFF030063	4768.00	DHRZCMFF100063	4768.00	DHRZCMFF300063	4908.00
80 A	DHRZCMFF030080	8017.00	DHRZCMFF100080	8017.00	DHRZCMFF300080	8017.00
100 A	DHRZCMFF030100	8224.00	DHRZCMFF100100	8224.00	DHRZCMFF300100	8224.00

RCCB - 'A' Type

(In accordance with IS 12640-1 & IEC 61008-1) 240 V/415 V, 50 Hz with 10 kA short circuit withstand capacity

HSN Code - 8536



Rating (DP)	30 mA Cat. No.	List Price in ₹ Per Unit	100 mA Cat. No.	List Price in ₹ Per Unit	300 mA Cat. No.	List Price in ₹ Per Unit
16 A	DHRZAMDF030016	4570.00	DHRZAMDF100016	4413.00	DHRZAMDF300016	4413.00
25 A	DHRZAMDF030025	4570.00	DHRZAMDF100025	4413.00	DHRZAMDF300025	4413.00
32 A	DHRZAMDF030032	4901.00	DHRZAMDF100032	4701.00	DHRZAMDF300032	4701.00
40 A	DHRZAMDF030040	4901.00	DHRZAMDF100040	4701.00	DHRZAMDF300040	4701.00
63 A	DHRZAMDF030063	5779.00	DHRZAMDF100063	5599.00	DHRZAMDF300063	5599.00
Rating (FP)	30 mA Cat. No.	List Price in ₹ Per Unit	100 mA Cat. No.	List Price in ₹ Per Unit	300 mA Cat. No.	List Price in ₹ Per Unit
16 A	DHRZAMFF030016	5507.00	DHRZAMFF100016	5335.00	DHRZAMFF300016	5335.00
25 A	DHRZAMFF030025	5507.00	DHRZAMFF100025	5335.00	DHRZAMFF300025	5335.00
32 A	DHRZAMFF030032	5586.00	DHRZAMFF100032	5414.00	DHRZAMFF300032	5414.00
40 A	DHRZAMFF030040	5586.00	DHRZAMFF100040	5414.00	DHRZAMFF300040	5414.00
63 A	DHRZAMFF030063	5871.00	DHRZAMFF100063	5770.00	DHRZAMFF300063	5770.00

SUPPORT MODULES



Auxiliary Contact For MCB & RCCB

In accordance with IS/IEC 60947-5-1, 240 V, 50 Hz

HSN Code - 8536

CODE	DESCRIPTION	List Price in ₹ Per Unit
DHMAHSPF006	1NO + 1NC (MCB)	742.00
DHRAHSPF006	1NO + 1NC (RCCB)	742.00



Shunt Trip

In accordance with IS/IEC 60947-3-1, 240 V, 50 Hz

HSN Code - 8536

CODE	RATING	List Price in ₹ Per Unit
DHMZNP1X0002110	12 V	1457.00
DHMZNP1X0002200	24 V	1457.00
DHMZNP1X0002310	48 V	1457.00
DHMZNP1X0002400	240 V	1457.00



Under Voltage / Over Voltage

HSN Code - 8536

CODE	DESCRIPTION	List Price in ₹ Per Unit
DHMZNP1X0003510	OVT HGD63H Option Single Phase	1340.00
DHMZNP3X0003510	OVT HGD63H Option Three Phase	3303.00
DHMZNP1X0003110	UVT Single Phase 240 Vac	1340.00
DHMZNP1X0004110	UVT-OVT 1 Phase 240 Vac	1541.00
DHMZNP3X0004110	UVT-OVT 3 Phase 240 Vac	3656.00
DHMZNP1X0003210	UVT delay 1 Phase 240 Vac	1477.00
DHMZNP3X0003210	UVT delay 3 Phase 240 Vac	3445.00

RCBO

RCBO is designed for use in domestic, commercial and industrial distribution systems at the most downstream circuit for ensuring protection from leakage current, short circuit & over load to the user for a particular circuit. In normal use, it is safe to use and free of threat to user as well as to environment.



Electromechanical 2 P RCBOs used as (SPN & 2 P RCBOs)

(In accordance with IS 12640-2 & IEC 61009-1) 240 V/415 V, 50 Hz, with 10 kA short circuit capacity

HSN Code - 8536

Rating (SPN)	30 mA Cat. No.	List Price in ₹ Per Unit	100 mA Cat. No.	List Price in ₹ Per Unit	300 mA Cat. No.	List Price in ₹ Per Unit
16 A	DHBMACDP4030016	4150.00	DHBMACDP4100016	4492.00	DHBMACDP4300016	4882.00
25 A	DHBMACDP4030025	4150.00	DHBMACDP4100025	4492.00	DHBMACDP4300025	4882.00
32 A	DHBMACDP4030032	4272.00	DHBMACDP4100032	4615.00	DHBMACDP4300032	5006.00
40 A	DHBMACDP4030040	4701.00	DHBMACDP4100040	5249.00	DHBMACDP4300040	5676.00
63 A	DHBMACDP4030063	5768.00	DHBMACDP4100063	6074.00	DHBMACDP4300063	6378.00

Electromechanical 4P RCBOs used as (TPN & FP RCBOs)

(In accordance with IS 12640-2 & IEC 61009-1) 240 V/415 V, 50 Hz, with 10 kA short circuit capacity

HSN Code - 8536



Rating (TPN)	30 mA Cat. No.	List Price in ₹ Per Unit	100 mA Cat. No.	List Price in ₹ Per Unit	300 mA Cat. No.	List Price in ₹ Per Unit
16 A	DHBMACTN8030016	5249.00	DHBMACTN8100016	5646.00	DHBMACTN8300016	5891.00
25 A	DHBMACTN8030025	5249.00	DHBMACTN8100025	5646.00	DHBMACTN8300025	5891.00
32 A	DHBMACTN8030032	5371.00	DHBMACTN8100032	5768.00	DHBMACTN8300032	6012.00
40 A	DHBMACTN8030040	5433.00	DHBMACTN8100040	6092.00	DHBMACTN8300040	6409.00
63 A	DHBMACTN8030063	6470.00	DHBMACTN8100063	6752.00	DHBMACTN8300063	6752.00

RCBO - A Type (SPN - 2 M)

(In accordance with IS 12640-2 & IEC 61009-1) 240 V/415 V, 50 Hz, with 10 kA short circuit capacity

HSN Code - 8536



Rating (SPN)	30 mA Cat. No.	List Price in ₹ Per Unit	100 mA Cat. No.	List Price in ₹ Per Unit	300 mA Cat. No.	List Price in ₹ Per Unit
6 A	DHCEACSN2030006	4041.00	DHCEACSN2100006	4041.00	DHCEACSN2300006	4041.00
10 A	DHCEACSN2030010	4041.00	DHCEACSN2100010	4041.00	DHCEACSN2300010	4041.00
16 A	DHCEACSN2030016	4041.00	DHCEACSN2100016	4041.00	DHCEACSN2300016	4041.00
20 A	DHCEACSN2030020	4041.00	DHCEACSN2100020	4041.00	DHCEACSN2300020	4041.00
25 A	DHCEACSN2030025	4041.00	DHCEACSN2100025	4041.00	DHCEACSN2300025	4041.00
32 A	DHCEACSN2030032	4041.00	DHCEACSN2100032	4041.00	DHCEACSN2300032	4041.00
40 A	DHCEACSN2030040	4981.00	DHCEACSN2100040	4981.00	DHCEACSN2300040	4981.00

SPD

Type 1+2 AC Surge Protection Device

HSN Code - 8536

Order Code	Poles	Uc (V)	In (kA)	Iimp (kA)	I _{max} (kA)	Up (kV)	Remote Signaling	List Price in ₹ Per Unit
DHSAANBC50320	TP+N	320 V	20 kA	12.5 kA	50 kA	1.5 kV	No	9260.00
DHSAANAC50320	1P+N	320 V	20 kA	12.5 kA	50 kA	1.5 kV	No	5040.00
DHSAARBC50320	TP+N	320 V	20 kA	12.5 kA	50 kA	1.5 kV	Yes	9465.00
DHSAARAC50320	1P+N	320 V	20 kA	12.5 kA	50 kA	1.5 kV	Yes	5250.00



Cartridges

HSN Code - 8536

Order Code	Pole	Uc (V)	In (kA)	Iimp (kA)	I _{max} (kA)	Up (kV)	List Price in ₹ Per Unit
DSSRCX0149	L - N	320 V	20 kA	12.5 kA	50 kA	1.5 kV	2354.00
DSSRCX0150	N - PE	255 V	40 kA	12.5 kA	70 kA	1.5 kV	2889.00

Type 2 AC Surge Protection Device

HSN Code - 8536



Order Code	Poles	Uc (V)	In (kA)	I _{max} (kA)	Up (kV)	Remote Signaling	List Price in ₹ Per Unit
DHSA2N1N40320	1P	320 V	20 kA	40 kA	1.5 kV	No	1530.00
DHSA2N1N40275	1P	275 V	20 kA	40 kA	1.3 kV	No	1530.00
DHSA2NAN40320	1P+N	320 V	20 kA	40 kA	1.5 kV	No	2555.00
DHSA2NAN40275	1P+N	275 V	20 kA	40 kA	1.3 kV	No	2555.00
DHSA2NBN40320	TP+N	320 V	20 kA	40 kA	1.5 kV	No	4545.00
DHSA2NBN40275	TP+N	275 V	20 kA	40 kA	1.3 kV	No	4545.00
DHSA2R1N40320	1P	320 V	20 kA	40 kA	1.5 kV	Yes	1695.00
DHSA2R1N40275	1P	275 V	20 kA	40 kA	1.3 kV	Yes	1695.00
DHSA2RAN40320	1P+N	320 V	20 kA	40 kA	1.5 kV	Yes	2720.00
DHSA2RAN40275	1P+N	275 V	20 kA	40 kA	1.3 kV	Yes	2720.00
DHSA2RBN40320	TP+N	320 V	20 kA	40 kA	1.5 kV	Yes	4715.00
DHSA2RBN40275	TP+N	275 V	20 kA	40 kA	1.3 kV	Yes	4715.00

Cartridges

HSN Code - 8536

Order Code	Pole	Uc (V)	In (kA)	I _{max} (kA)	Up (kV)	List Price in ₹ Per Unit
DSSRCX0151	L - N	320 V	20 kA	40 kA	1.5 kV	963.00
DSSRCX0152	L - N	275 V	20 kA	40 kA	1.3 kV	963.00
DSSRCX0153	N - PE	255 V	20 kA	40 kA	1.5 kV	1284.00

Type 1+2 Photovoltaic Surge Protection Device

HSN Code - 8535



Order Code	U _{cpv} (V)	In (kA)	I _{imp} (kA)	I _{max} (kA)	Up (kV)	Remote Signaling	List Price in ₹ Per Unit
DHSDANCC6012H	1200 Vdc	20 kA	12.5 kA	60 kA	4 kV	No	9560.00
DHSDARCC6012H	1200 Vdc	20 kA	12.5 kA	60 kA	4 kV	Yes	9760.00
DHSDANCB4012H	1200 Vdc	20 kA	6 kA	40 kA	4 kV	No	5065.00
DHSDARCB4012H	1200 Vdc	20 kA	6 kA	40 kA	4 kV	Yes	5265.00

Cartridges

HSN Code - 8536

Order Code	Pole	U _{cpv} (V)	In (kA)	I _{imp} (kA)	I _{max} (kA)	Up (kV)	List Price in ₹ Per Unit
DSSRCX0154	-	1200 Vdc	20 kA	6 kA	40 kA	4 kV	1284.00

Type 2 Photovoltaic Surge Protection Device

HSN Code - 8535



Order Code	U _{cpv} (V)	In (kA)	I _{max} (kA)	Up (kV)	Remote Signaling	List Price in ₹ Per Unit
DHSD2NCN4012H	1200 Vdc	20 kA	40 kA	4 kV	No	2600.00
DHSD2RCN4012H	1200 Vdc	20 kA	40 kA	4 kV	Yes	2770.00
DHSD2N2N40600	600 Vdc	20 kA	40 kA	4 kV	No	2200.00

Cartridges

HSN Code - 8536

Order Code	Pole	U _{cpv} (V)	In (kA)	I _{max} (kA)	Up (kV)	List Price in ₹ Per Unit
DSSRCX0155	-	1200 Vdc	20 kA	40 kA	4 kV	749.00

Dataline Surge Protection Device

HSN Code - 8536



Order Code	Un (V)	In (kA)	I _{imp} (kA)	I _{max} (kA)	Up (V)	Remote Signaling	List Price in ₹ Per Unit
DHSDDN1A20006	6 V	5 kA	5 kA	20 kA	20 kV	No	2215.00
DHSDDN1A20012	12 V	5 kA	5 kA	20 kA	30 kV	No	2215.00
DHSDDN1A20024	24 V	5 kA	5 kA	20 kA	40 kV	No	2365.00
DHSDDN1A20048	48 V	5 kA	5 kA	20 kA	70 kV	No	2365.00

* Spare Cartridges Available on Request.

TIME SWITCH

Time switches are used in residential, commercial and industrial premises to improve comfort and save energy by switching loads automatically as per real time. Havells offers a variety of time switches to precisely meet the requirements of different applications. The range offers several feature benefits such as different options of minimum switching time, internal battery to enable the timing function in case of power failure, daily and weekly versions, simple and compact design.



Time Switch

HSN Code - 9107

Description	Cat. No.	List Price in ₹ Per Unit
24 Hour Analog Time Switch (SST* - 15 min)	DHTED15016	3003.00
24 Hour Analog Time Switch (SST* - 30 min)	DHTED30016	2716.00
Astronomical + Digital Time Switch-3 years	DHTQB01016	3114.00
Digital Weekly Time Switch-3 years	DHTJW01016	2881.00
Multifunction Time Switch-10 years	DHTLB01016	5420.00
Twilight Time Switch	DHTPNN025	2796.00
Staircase Time Switch-3 years	DHTMNX5016	1574.00

* Shortest Switching Time

ACCL

3 Module SPN ACCL (Automatic Source Changeover with Current Limiter)

HSN Code - 8536



Mains Rating	Gen Rating	Product Code	Description	List Price in ₹ Per Unit
SPN 30 (6000 W)	SPN 1.5 (300 W)	DHADOSN301X	30 A/1.5 A ACCL W/O GEN START/STOP	1930.00
SPN 30 (6000 W)	SPN 2.5 (500 W)	DHADOSN302X	30 A/2.5 A ACCL W/O GEN START/STOP	1930.00
SPN 30 (6000 W)	SPN 3 (600 W)	DHADOSN3003	30 A/03 A ACCL W/O GEN START/STOP	1930.00
SPN 30 (6000 W)	SPN 4 (800 W)	DHADOSN3004	30 A/04 A ACCL W/O GEN START/STOP	1930.00
SPN 30 (6000 W)	SPN 5 (1000 W)	DHADOSN3005	30 A/05 A ACCL W/O GEN START/STOP	1930.00
SPN 30 (6000 W)	SPN 6 (1200 W)	DHADOSN3006	30 A/06 A ACCL W/O GEN START/STOP	1930.00
SPN 30 (6000 W)	SPN 9 (1800 W)	DHADOSN3009	30 A/09 A ACCL W/O GEN START/STOP	1930.00
SPN 30 (6000 W)	SPN 12 (2400 W)	DHADOSN3012	30 A/12 A ACCL W/O GEN START/STOP	1930.00
SPN 30 (6000 W)	SPN 15 (3000 W)	DHADOSN3015	30 A/15 A ACCL W/O GEN START/STOP	1930.00
SPN 30 (6000 W)	SPN 20 (4000 W)	DHADOSN3020	30 A/20 A ACCL W/O GEN START/STOP	1930.00

MCB Isolator

MCB ISOLATOR (Switching Devices)

MCB Isolators (AC-22 A, In accordance with IS/IEC 60947-3) 240 V/415 V, 50 Hz

HSN Code - 8536



Rating	SP Cat. No.	List Price in ₹ Per Unit	DP Cat. No.	List Price in ₹ Per Unit
40 A	-	-	DHMZIDPX040	530.00
63 A	-	-	DHMZIDPX063	687.00
80 A	-	-	DHMZIDPX080	934.00
100 A	-	-	DHMZIDPX100	945.00
125 A	-	-	DHMZIDPX125	1020.00
Rating	TP Cat. No.	List Price in ₹ Per Unit	FP Cat. No.	List Price in ₹ Per Unit
40 A	DHMZITPX040	1064.00	DHMZIFPX040	1249.00
63 A	DHMZITPX063	1204.00	DHMZIFPX063	1263.00
80 A	DHMZITPX080	1423.00	DHMZIFPX080	1658.00
100 A	DHMZITPX100	1433.00	DHMZIFPX100	1669.00
125 A	DHMZITPX125	1462.00	DHMZIFPX125	1837.00

Industrial Plug

Industrial Plug

HSN Code - 8536



Rating	Poles	Code	Type	Earth-Contact position	Std. / Master Packing (No. of Unit/s)	List Price in ₹ Per Unit
16 A	2P+E	DHQBA63016	IP44	6h	4 N	427.00
32 A	2P+E	DHQBA63032	IP44	6h	4 N	600.00
16 A	3P+N+E	DHQBA65016	IP44	6h	4 N	520.00
32 A	3P+N+E	DHQBA65032	IP44	6h	4 N	775.00
16 A	2P+E	DHQBB63016	IP67	6h	4 N	732.00
32 A	2P+E	DHQBB63032	IP67	6h	4 N	1154.00
16 A	3P+N+E	DHQBB65016	IP67	6h	4 N	1001.00
32 A	3P+N+E	DHQBB65032	IP67	6h	2 N	1196.00
63 A	2P+E	DHQBB63063	IP67	6h	1 N	2563.00
63 A	3P+N+E	DHQBB65063	IP67	6h	1 N	3041.00

Industrial Connector

Industrial Connector

HSN Code - 8536



Rating	Poles	Code	Type	Earth-Contact position	Std. / Master Packing (No. of Unit/s)	List Price in ₹ Per Unit
16 A	2P+E	DHQDA63016	IP44	6h	4 N	562.00
32 A	2P+E	DHQDA63032	IP44	6h	4 N	709.00
16 A	3P+N+E	DHQDA65016	IP44	6h	4 N	672.00
32 A	3P+N+E	DHQDA65032	IP44	6h	4 N	904.00
16 A	2P+E	DHQDB63016	IP67	6h	4 N	989.00
32 A	2P+E	DHQDB63032	IP67	6h	4 N	1380.00
16 A	3P+N+E	DHQDB65016	IP67	6h	4 N	1320.00
32 A	3P+N+E	DHQDB65032	IP67	6h	2 N	1551.00
63 A	3P+N+E	DHQDB65063	IP67	6h	1 N	3535.00

Wall Mounted Socket

Industrial Wall Mounted Socket

HSN Code - 8536



Rating	Poles	Code	Type	Earth-Contact position	Std. / Master Packing (No. of Unit/s)	List Price in ₹ Per Unit
16 A	2P+E	DHQSA63016	IP44	6h	2 N	659.00
32 A	2P+E	DHQSA63032	IP44	6h	2 N	904.00
16 A	3P+N+E	DHQSA65016	IP44	6h	2 N	732.00
32 A	3P+N+E	DHQSA65032	IP44	6h	2 N	947.00
16 A	2P+E	DHQSB63016	IP67	6h	2 N	1093.00
32 A	2P+E	DHQSB63032	IP67	6h	2 N	1526.00
16 A	3P+N+E	DHQSB65016	IP67	6h	2 N	1386.00
32 A	3P+N+E	DHQSB65032	IP67	6h	2 N	1661.00
63 A	3P+N+E	DHQSB65063	IP67	6h	1 N	4060.00

Panel Socket

Industrial Panel Socket

HSN Code - 8536



Rating	Poles	Code	Type	Earth-Contact position	Std. / Master Packing (No. of Unit/s)	List Price in ₹ Per Unit
16 A	2P+E	DHQCA63016	IP44	6h	6 N	391.00
32 A	2P+E	DHQCA63032	IP44	6h	4 N	677.00
16 A	3P+N+E	DHQCA65016	IP44	6h	4 N	636.00
32 A	3P+N+E	DHQCA65032	IP44	6h	4 N	770.00
16 A	2P+E	DHQCB63016	IP67	6h	4 N	782.00
32 A	2P+E	DHQCB63032	IP67	6h	4 N	916.00
16 A	3P+N+E	DHQCB65016	IP67	6h	4 N	911.00
32 A	3P+N+E	DHQCB65032	IP67	6h	3 N	1191.00
63 A	3P+N+E	DHQCB65063	IP67	6h	1 N	3174.00

Plug & Socket (Reefer Container)



Industrial Plug & Socket for Reefer Container

HSN Code - 8536

Category	Rating	Poles	Code	Type	Earth-Contact position	Std. / Master Packing (No. of Unit/s)	List Price in ₹ Per Unit
Panel Socket	32 A	3P+E	DHQCB34032	IP67	3h	4 N	1191.00
Plug	32 A	3P+E	DHQBB34032	IP67	3h	4 N	1196.00
Connector	32 A	3P+E	DHQDB34032	IP67	3h	4 N	1551.00
Wall mounted socket	32 A	3P+E	DHQSB34032	IP67	3h	2 N	1661.00
Interlock socket	32 A	3P+E	DHQWB34032	IP67	3h	1 N	7306.00

Interlocking Socket



Industrial Interlocking Socket

HSN Code - 8536

Rating	Poles	Code	Type	Earth-Contact position	Std. / Master Packing (No. of Unit/s)	List Price in ₹ Per Unit
16 A	2P+E	DHQIA63016	IP44	6h	1 N	5456.00
32 A	2P+E	DHQIA63032	IP44	6h	1 N	6996.00
16 A	3P+N+E	DHQIA65016	IP44	6h	1 N	7690.00
32 A	3P+N+E	DHQIA65032	IP44	6h	1 N	8258.00
16 A	2P+E	DHQWB63016	IP67	6h	1 N	5634.00
32 A	2P+E	DHQWB63032	IP67	6h	1 N	7306.00
16 A	3P+N+E	DHQWB65016	IP67	6h	1 N	7916.00
32 A	3P+N+E	DHQWB65032	IP67	6h	1 N	8788.00

Solution with Insulated Plug & Socket



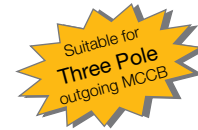
Solution with Insulated Plug & Socket

HSN Code - 8536

Rating	Poles	Code	Type	Earth-Contact position	Std. / Master Packing (No. of Unit/s)	List Price in ₹ Per Unit
16 A	2P+E	DHDPBDP016	IP40	6h	1 N	1394.00
16 A	3P+N+E	DHDPBTN016	IP40	6h	1 N	1680.00
32 A	2P+E	DHDPBDP032	IP40	6h	1 N	1908.00
32 A	3P+N+E	DHDPBTN032	IP40	6h	1 N	2155.00
32 A	3P+N+E	DHDPBEN032	8	6h	1 N	3090.00
63 A	3P+N+E	DHDPBEN063	8	6h	1 N	7990.00

Note: MCB to be bought separately.

'G' Frame Panel Boards, O/G TP MCCBs G-Frame HSN Code: 8537



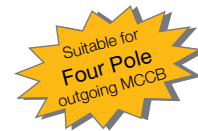
Incomer**	Outgoing* (No. of Ways)	Single Door Item Code	Per Unit LP (₹)	Double Door Item Code	Per Unit LP (₹)
250 A "AA" Frame MCCB	2	IHVG025002	36030.00	IHVG02500200	39360.00
	4	IHVG025004	45260.00	IHVG02500400	48550.00
	6	IHVG025006	51800.00	IHVG02500600	55110.00
	8	IHVG025008	56090.00	IHVG02500800	59400.00
	12	IHVG025012	69260.00	IHVG02501200	72520.00
	16	IHVG025016	81490.00	IHVG02501600	84800.00
400 A "LS" Frame MCCB	2	IHLG040002	42090.00	IHLG04000200	45990.00
	4	IHLG040004	50260.00	IHLG04000400	53910.00
	6	IHLG040006	53500.00	IHLG04000600	56920.00
	8	IHLG040008	57150.00	IHLG04000800	60530.00
	12	IHLG040012	73620.00	IHLG04001200	77070.00
	16	IHLG040016	87420.00	IHLG04001600	90980.00

Single door



* The outgoings number of ways is the number of "G" Frame TP MCCBs that can be mounted. In case of SP MCCBs the number of MCCBs shall be three times the number of ways in TP MCCBs.
** Maximum ratings are indicated for the incoming MCCBs however lower ratings in the same frame can be ordered.
The above prices are for bare enclosures only, incoming and outgoing MCCBs have to be ordered separately.

'G' Frame Panel Boards, O/G FP MCCBs G-Frame HSN Code: 8537



Incomer**	Outgoing* (No. of Ways)	Single Door Item Code	Per Unit LP (₹)	Double Door Item Code	Per Unit LP (₹)
250 A "AA" Frame MCCB	2	IHVGF25002	38780.00	IHVGF2500200	42040.00
	4	IHVGF25004	48230.00	IHVGF2500400	51530.00
	6	IHVGF25006	56790.00	IHVGF2500600	60050.00
	8	IHVGF25008	61290.00	IHVGF2500800	64590.00
	12	IHVGF25012	88910.00	IHVGF2501200	92200.00
400 A "LS" Frame MCCB	2	IHLGF40002	45300.00	IHLGF4000200	49120.00
	4	IHLGF40004	53560.00	IHLGF4000400	57210.00
	6	IHLGF40006	58650.00	IHLGF4000600	62020.00
	8	IHLGF40008	62450.00	IHLGF4000800	65820.00
	12	IHLGF40012	94490.00	IHLGF4001200	97990.00

* The outgoings number of ways is the number of "G" Frame FP MCCBs that can be mounted. In case of SP MCCBs the number of MCCBs shall be four times the number of way in FP O/G MCCBs.
** Maximum ratings are indicated for the incoming MCCBs however lower ratings in the same frame can be ordered.
Outgoing spreader link for MCCB are available on request.
The above prices are for bare enclosures only, incoming and outgoing MCCBs have to be ordered separately.

Accessories : Cable Alley for 'G' / 'A' Frame Panel Boards - Outgoing TP MCCB,

Incomer 'A' & 'L' Frame MCCB

HSN Code: 8537

Sl. No.	Description*	Single Door Item Code	Per Unit LP (₹)	Double Door Item Code	Per Unit LP (₹)
1	Cable Alley I/C 250 A,O/G 3P GF 2/4Way	ISSBOU0674	13970.00	ISSBOU0690	14980.00
2	Cable Alley I/C 250 A,O/G 3P GF 6WAY & 4P 2/4Way	ISSBOU0675	18760.00	ISSBOU0691	19780.00
3	Cable Alley I/C 250 A,O/G 3P GF 8WAY & 4P 6Way	ISSBOU0676	19020.00	ISSBOU0692	20740.00
4	Cable Alley I/C 250 A,O/G 3P GF 12Way	ISSBOU0677	21570.00	ISSBOU0693	22170.00
5	Cable Alley I/C 250 A,O/G 4P GF 8Way	ISSBOU0678	21570.00	ISSBOU0694	22170.00
6	Cable Alley I/C 250 A,O/G 3P GF 16Way & 4P 12Way	ISSBOU0679	25410.00	ISSBOU0696	26370.00
7	Cable Alley I/C 400 A,O/G 3P GF 2/4Way	ISSBOU0680	16540.00	ISSBOU0697	17140.00
8	Cable Alley I/C 400 A,O/G 3P GF 6WAY & 4P 2/4Way	ISSBOU0681	16540.00	ISSBOU0698	17140.00
9	Cable Alley I/C 400 A/630 A/800 A, O/G 3P GF 8Way, 4P 6Way & A/F 6Way	ISSBOU0682	22240.00	ISSBOU0699	23320.00
10	Cable Alley I/C 400 A,O/G 3P GF 12Way	ISSBOU0683	25660.00	ISSBOU0700	26370.00
11	Cable Alley I/C 400 A/630 A/800 A, O/G 4P GF 8Way & TP A/F 8Way	ISSBOU0684	26970.00	ISSBOU0701	27570.00
12	Cable Alley I/C 400 A/630 A/800 A, O/G 4P GF 12Way, TP GF 16Way & TP A/F 12Way	ISSBOU0685	28170.00	ISSBOU0702	28770.00

* Each set of Cable Alley consists of two numbers, one each on LHS and RHS.

‘A’ Frame Panel Boards, O/G TP MCCBs

HSN Code: 8537

Double door

Incomer**	Outgoing* (No. of Ways)	Single Door Item Code	Per Unit LP (₹)	Double Door Item Code	Per Unit LP (₹)
400 A “LS” Frame MCCB	6	IHLA040006	72580.00	IHLA04000600	75220.00
	8	IHLA040008	77530.00	IHLA04000800	80240.00
	12	IHLA040012	99860.00	IHLA04001200	102450.00
630 A “L” Frame MCCB	6	IHLA063006	79785.00	IHLA06300600	84180.00
	8	IHLA063008	85030.00	IHLA06300800	88185.00
	12	IHLA063012	101025.00	IHLA06301200	114010.00
800 A “CN/CH” Frame MCCB	6	IHVA080006	98320.00	IHVA08000600	101610.00
	8	IHVA080008	102120.00	IHVA08000800	105420.00
	12	IHVA080012	134630.00	IHVA08001200	137930.00



* The outgoings number of ways is the number of “A” Frame TP MCCBs that can be mounted.
 ** Maximum ratings are indicated for the incoming MCCBs however lower ratings in the same frame can be ordered.
 Outgoing spreader link for MCCB are available on request.
 The above prices are for bare enclosures only, incoming and outgoing MCCBs have to be ordered separately.

Terminal for G & A Frame Outgoing

S. No.	Description	Item Code	Per Unit LP (₹)
1	Terminal for G Frame Outgoing (Per Pole)	ISSCUPBOP151	100.00
2	Terminal for A Frame Outgoing (Per Pole)	ISSCUPBOP167	250.00

Pre-Wired Meter Module with Voltmeter, Ammeter, Selector Switch, Ct’s Control Fuse & Indicating Lights

HSN Code: 8537

S. No.	Description	Single Door Item Code	Per Unit LP (₹)	Double Door Item Code	Per Unit LP (₹)
1	Prewire Meter Module - Analog	ISSBOU0689	16180.00	ISSBOU0706	16790.00
2	Meter Module - Digital	ISSBOU0711	19900.00	ISSBOU0707	20980.00

Bare Meter Module / MCB Module / Add on Module

HSN Code: 8537

S. No.	Description	Single Door Item Code	Per Unit LP (₹)	Double Door Item Code	Per Unit LP (₹)
1	Meter Module - Analog Provision for Ammeter, Voltmeter - Analog with selector switch	ISSBOU0686	6230.00	ISSBOU0703	7190.00
2	MCB Module	ISSBOU0687	6230.00	ISSBOU0704	7190.00
3	Add on Module	ISSBOU0688	6230.00	ISSBOU0705	7190.00

* Ammeter, Voltmeter, Selector Switch, Control Fuses, Indicating Lights, MCBs etc. have to be ordered separately and are at extra cost.
 ** The above prices are for bare module enclosures only.

Add on Incoming Changeover Switch Enclosure only**

HSN Code: 8537

S. No.	Description	Item Code	Per Unit LP (₹)
1	250 A Incoming change Over switch-F1	ISSBOU0708	11840.00
2	400 A & 630 A Incoming change Over switch - F2	ISSBOU0709	17400.00
3	800 A Incoming change Over switch - F3	ISSBOU0710	20350.00

** The above prices are for bare module enclosures only.



Add on Incoming Changeover Switch with Enclosure

HSN Code: 8537

S. No.	Description	Item Code	Per Unit LP (₹)
1	250 A Incoming change Over switch-F1	ISSBOU0712	47130.00
2	400 A Incoming change Over switch - F2	ISSBOU0713	62460.00
3	630 A Incoming change Over switch - F3	ISSBOU0714	69840.00

Euroload (ON-Load) Changeover Switch (4 Pole) I-0-II

(Conforms to IS/IEC:60947-3)

HSN Code: 8536

Frame Size	Rating (A)	Open Execution Item Code	Per Unit LP (₹)	SS Enclosure Item Code	Per Unit LP (₹)
00	040 A	IHCNFO0040	4855.00	IHCNFE0040	7140.00
00	063 A	IHCNFO0063	5105.00	IHCNFE0063	7605.00
00	100 A	IHCNFO0100	6845.00	IHCNFE0100	9580.00
0	125 A	IHCNFO0125	10225.00	IHCNFE0125	14370.00
0	160 A	IHCNFO0160	10950.00	IHCNFE0160	15305.00
0	200 A	IHCNFO0200	13135.00	IHCNFE0200	17635.00
1	250 A	IHCNFO0250	19000.00	IHCNFE0250	24385.00
1	320 A	IHCNFO0320	20075.00	IHCNFE0320	25505.00
2	400 A	IHCNFO0400	29010.00	IHCNFE0400	37530.00
2	630 A	IHCNFO0630	34470.00	IHCNFE0630	43430.00
3	800 A	IHCNFO0800	51595.00	IHCNFE0800	65545.00
4	1000 A	IHCNFO1000	87875.00	IHCNFE1000	119460.00
4	1250 A	IHCNFO1250	116670.00	IHCNFE1250	159930.00
4	1600 A	IHCNFO1600	138945.00	IHCNFE1600	214760.00
5	2000 A	IHCNFO2000	215270.00	IHCNFE2000	282970.00
5	2500 A	IHCNFO2500	285515.00	IHCNFE2500	361270.00
5	3150 A	IHCNFO3150	390885.00	IHCNFE3150	489425.00



Note :

* Phase Barriers & Handle with door interlock kit is integral part of the Changeover Switch.

** Aux. contacts for signalling and electrical interlocking are optional and provided at extra price.

Instaprime Automatic Transfer Switch

Four Pole, AC-32B, 50 Hz, 415 V
Automatic/Manual Range

HSN Code: 8537

Rating (A)	Open Execution Item Code	Per Unit LP (₹)	Cat. no. 4 pole (Close Execution)	Per Unit LP (₹)
40 A	IHRFBAO040	21490.00	IHRFBAE040	23295.00
63 A	IHRFBAO063	22470.00	IHRFBAE063	24275.00
80 A	IHRFBAO080	23585.00	IHRFBAE080	25385.00
100 A	IHRFBAO100	24385.00	IHRFBAE100	26185.00
125 A	IHRFBAO125	27615.00	IHRFBAE125	29415.00



Instaline Automatic Transfer Switch

Four Pole, AC-31A, 50 Hz, 415 V
Automatic/Manual with complete protection

HSN Code: 8537

Rating A	Item Code 4P	Per Unit LP (₹)
Open Execution		
100 A	IHYFCDO100	46250.00
125 A	IHYFCDO125	52100.00
160 A	IHYFCDO160	53245.00
200 A	IHYFCDO200	71360.00
250 A	IHYFCDO250	77745.00
315 A	IHYFCDO315	83660.00
400 A	IHYFCDO400	95775.00
500 A	IHYFCDO500	113725.00
630 A	IHYFCDO630	125355.00
With Enclosure		
100 A	IHYFCDE100	56525.00
125 A	IHYFCDE125	62375.00
160 A	IHYFCDE160	63520.00
200 A	IHYFCDE200	82215.00
250 A	IHYFCDE250	88600.00
315 A	IHYFCDE315	94515.00
400 A	IHYFCDE400	114670.00
500 A	IHYFCDE500	132620.00
630 A	IHYFCDE630	144250.00



ATS without controller is available on request

Euroload By Pass Switch

Conforms to IS:13947 (Part-3); IEC:60947-3

Four Pole, 415 V

HSN Code: 8536

Frame Size	Current Rating (A)	Open Execution Item Code	Per Unit LP (₹)
00	063 A	IHCBFO0063	9425.00
00	100 A	IHCBFO0100	11110.00
0	125 A	IHCBFO0125	14155.00
0	160 A	IHCBFO0160	16865.00
0	200 A	IHCBFO0200	18140.00
1	250 A	IHCBFO0250	26240.00
1	320 A	IHCBFO0320	27725.00
2	400 A	IHCBFO0400	40065.00
2	630 A	IHCBFO0630	47605.00
3	800 A	IHCBFO0800	71255.00
3	1000 A	IHCBFO1000	121350.00
3	1600 A	IHCBFO1600	191880.00

Accessories:

HSN Code: 8538

Aux. Contact	Item Code	Per Unit LP (₹)
1 NO. 1 NC.	IHCNFAC1CO	370.00
2 NO. 2 NC.	IHCNFAC2CO	500.00

Euroload Switch Disconnecter

(Conforms to IS/IEC:60947-3)

Three Pole, 415 V

HSN Code: 8536

Frame Size	Current Rating A	Open Execution Item Code	Per Unit LP (₹)	SS Enclosure Item Code	Per Unit LP (₹)
0	80 A	IHCSTO0080	1745.00	IHCSTE0080	2715.00
0	100 A	IHCSTO0100	2645.00	IHCSTE0100	3760.00
0	125 A	IHCSTO0125	3520.00	IHCSTE0125	4575.00
0	160 A	IHCSTO0160	4190.00	IHCSTE0160	5780.00
0	200 A	IHCSTO0200	4760.00	IHCSTE0200	5900.00
1	250 A	IHCSTO0250	5950.00	IHCSTE0250	7580.00
1	320 A	IHCSTO0320	6535.00	IHCSTE0320	8310.00
1	400 A	IHCSTO0400	9405.00	IHCSTE0400	11335.00



Euroload Switch Disconnecter

Four Pole, 415 V

HSN Code: 8536

Frame Size	Current Rating A	Open Execution Item Code	Per Unit LP (₹)	SS Enclosure Item Code	Per Unit LP (₹)
00	40 A	IHCSFO0040	1275.00	IHCSFE0040	2095.00
00	63 A	IHCSFO0063	1445.00	IHCSFE0063	2285.00
00	80 A	IHCSFO0080	2135.00	IHCSFE0080	2895.00
00	100 A	IHCSFO0100	3445.00	IHCSFE0100	4215.00
0	125 A	IHCSFO0125	3675.00	IHCSFE0125	4645.00
0	160 A	IHCSFO0160	4395.00	IHCSFE0160	5370.00
0	200 A	IHCSFO0200	5305.00	IHCSFE0200	6405.00
1	250 A	IHCSFO0250	6650.00	IHCSFE0250	8620.00
1	320 A	IHCSFO0320	7290.00	IHCSFE0320	9155.00
2	400 A	IHCSFO0400	10110.00	IHCSFE0400	12640.00
2	630 A	IHCSFO0630	11580.00	IHCSFE0630	14270.00
3	800 A	IHCSFO0800	17260.00	IHCSFE0800	20365.00
4	1000 A	IHCSFO1000	26115.00	IHCSFE1000	36995.00
4	1250 A	IHCSFO1250	39220.00	IHCSFE1250	44505.00
4	1600 A	IHCSFO1600	53970.00	IHCSFE1600	59845.00
5	2000 A	IHCSFO2000	61850.00	IHCSFE2000	78795.00
5	2500 A	IHCSFO2500	80260.00	IHCSFE2500	103130.00
5	3150 A	IHCSFO3150	113225.00	IHCSFE3150	146580.00



Kompact *plus* Switch Disconnecter Fuse

HSN Code: 8537

(Conforms to IS/IEC:60947- Part 1 & 3)

(Panel Mounting Cubicle Type)

Three Pole & Neutral - AC-23 A, 50 Hz, 415 V (with Bolted Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution with Fuses		In Sheet Steel Encl. with Fuses		
32 A	IHKDTF4032	2270.00	IHKDTW4032	3665.00	IHHTIA0032
63 A	IHKDTF4063	3135.00	IHKDTW4063	4540.00	IHHTSS0063
100 A	IHKDTF4100	6330.00	IHKDTW4100	7650.00	IHHTSD0100
125 A	IHKDTF4125	8105.00	IHKDTW4125	9495.00	IHHTSD0125



Kompact *plus* Switch Disconnecter Fuse

Three Pole & Neutral - AC-23 A, 50 Hz, 415 V (with DIN Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution with Fuses		In Sheet Steel Encl. with Fuses		
32 A	IHKFTF4032	3310.00	IHKFTW4032	4425.00	IHHCD00032
63 A	IHKFTF4063	4210.00	IHKFTW4063	5450.00	IHHCD00063
100 A	IHKFTF4100	7195.00	IHKFTW4100	8585.00	IHHCD00100
125 A	IHKFTF4125	9200.00	IHKFTW4125	10610.00	IHHCD00125

Kompact-EZO Switch Disconnecter Fuse (Panel Mounting Cubicle Type)

Three Pole & Neutral - AC-23 A, 50 Hz, 415 V (with Bolted Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution with 3 Fuses		In Sheet Steel Encl. with 3 Fuses		
160 A	IHFSTF4160	9205.00	IHFSTW4160	11890.00	IHHTSF0160
200 A	IHFSTF4200	11865.00	IHFSTW4200	14720.00	IHHTSF0200
250 A	IHFSTF4250	13985.00	IHFSTW4250	16785.00	IHHTSF0250
320 A	IHFSTF4320	17380.00	IHFSTW4320	20725.00	IHHTSK0315
400 A	IHFSTF4400	21935.00	IHFSTW4400	25180.00	IHHTSMF400
630 A	IHFSTF4630	36630.00	IHFSTW4630	40145.00	IHHTLM0630
800 A	IHFSTF4800	42865.00	IHFSTW4800	46420.00	IHHTLM0800



Kompact-EZO Switch Disconnecter Fuse

Three Pole & Neutral - AC-23 A, 50 Hz, 415 V (with DIN Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution with 3 Fuses		In Sheet Steel Encl. with 3 Fuses		
160 A	IHFKTF4160	10305.00	IHFKTW4160	12800.00	IHHCD01160
200 A	IHFKTF4200	12585.00	IHFKTW4200	15910.00	IHHCD01200
250 A	IHFKTF4250	14755.00	IHFKTW4250	17945.00	IHHCD01250
320 A	IHFKTF4320	18280.00	IHFKTW4320	21430.00	IHHCD02315
400 A	IHFKTF4400	21750.00	IHFKTW4400	24940.00	IHHCD02400
630 A	IHFKTF4630	34920.00	IHFKTW4630	38540.00	IHHCD03630

Kompact *plus* Switch Disconnecter Fuse Unit

HSN Code: 8537

(Conforms to IS/IEC:60947- Part 1 & 3)

Four Pole - AC-23 A, 50 Hz, 415 V (with Bolted Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution with 4 Fuses		In Sheet Steel Encl. with 4 Fuses		
32 A	IHKDFF4032	3100.00	IHKDFW4032	4590.00	IHHTIA0032
63 A	IHKDFF4063	3970.00	IHKDFW4063	5460.00	IHHTSS0063
100 A	IHKDFF4100	7940.00	IHKDFW4100	9440.00	IHHTSD0100
125 A	IHKDFF4125	9670.00	IHKDFW4125	11240.00	IHHTSD0125



Kompact *plus* Switch Disconnecter Fuse Unit

Four Pole - AC-23 A, 50 Hz, 415 V (with DIN Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution with 4 Fuses		In Sheet Steel Encl. with 4 Fuses		
32 A	IHKFFF4032	4500.00	IHKFFW4032	5695.00	IHHCD00032
63 A	IHKFFF4063	5440.00	IHKFFW4063	6745.00	IHHCD00063
100 A	IHKFFF4100	9305.00	IHKFFW4100	10780.00	IHHCD00100
125 A	IHKFFF4125	10295.00	IHKFFW4125	11755.00	IHHCD00125

Kompact-EZO Switch Disconnecter Fuse Unit

Four Pole - AC-23 A, 50 Hz, 415 V (with Bolted Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution with 4 Fuses		In Sheet Steel Encl. with 4 Fuses		
160 A	IHFSSF4160	12620.00	IHFSPW4160	15210.00	IHHTSF0160
200 A	IHFSSF4200	14695.00	IHFSPW4200	17415.00	IHHTSF0200
250 A	IHFSSF4250	16860.00	IHFSPW4250	19520.00	IHHTSF0250
320 A	IHFSSF4320	19655.00	IHFSPW4320	22705.00	IHHTSK0315
400 A	IHFSSF4400	22700.00	IHFSPW4400	25535.00	IHHTSMF400
630 A	IHFSSF4630	39475.00	IHFSPW4630	42675.00	IHHTLM0630
800 A	IHFSSF4800	46005.00	IHFSPW4800	49245.00	IHHTLM0800



Kompact-EZO Switch Disconnecter Fuse Unit

Four Pole - AC-23 A, 50 Hz, 415 V (with DIN Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution with 4 Fuses		In Sheet Steel Encl. with 4 Fuses		
160 A	IHFKFF4160	12155.00	IHFKFW4160	14485.00	IHHCD01160
200 A	IHFKFF4200	15305.00	IHFKFW4200	17925.00	IHHCD01200
250 A	IHFKFF4250	15890.00	IHFKFW4250	18370.00	IHHCD01250
320 A	IHFKFF4320	19125.00	IHFKFW4320	21900.00	IHHCD02315
400 A	IHFKFF4400	21125.00	IHFKFW4400	23885.00	IHHCD02400
630 A	IHFKFF4630	40645.00	IHFKFW4630	44040.00	IHHCD03630

Kompact *plus* Switch Disconnecter Fuse

HSN Code: 8537

(Conforms to IS/IEC:60947- Part 1 & 3)

(Panel Mounting Cubicle Type)

Three Pole & Neutral - AC-23 A, 50 Hz, 415 V (without Bolted Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution		In Sheet Steel Encl.		
32 A	IHKDTO4032	1985.00	IHKDTE4032	3380.00	IHHTIA0032
63 A	IHKDTO4063	2775.00	IHKDTE4063	4180.00	IHHTSS0063
100 A	IHKDTO4100	5595.00	IHKDTE4100	6915.00	IHHTSD0100
125 A	IHKDTO4125	7370.00	IHKDTE4125	8760.00	IHHTSD0125



Kompact *plus* Switch Disconnecter Fuse

Three Pole & Neutral - AC-23 A, 50 Hz, 415 V (without DIN Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution		In Sheet Steel Encl.		
32 A	IHKFTO4032	2185.00	IHKFTE4032	3300.00	IHHCD00032
63 A	IHKFTO4063	3040.00	IHKFTE4063	4280.00	IHHCD00063
100 A	IHKFTO4100	5920.00	IHKFTE4100	7310.00	IHHCD00100
125 A	IHKFTO4125	7895.00	IHKFTE4125	9305.00	IHHCD00125

Kompact-EZO Switch Disconnecter Fuse (Panel Mounting Cubicle Type)

Three Pole & Neutral - AC-23 A, 50 Hz, 415 V (without Bolted Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution		In Sheet Steel Encl.		
160 A	IHFSTO4160	8065.00	IHFSTE4160	10750.00	IHHTSF0160
200 A	IHFSTO4200	10725.00	IHFSTE4200	13580.00	IHHTSF0200
250 A	IHFSTO4250	12740.00	IHFSTE4250	15540.00	IHHTSF0250
320 A	IHFSTO4320	15760.00	IHFSTE4320	19105.00	IHHTSK0315
400 A	IHFSTO4400	18875.00	IHFSTE4400	22120.00	IHHTSMF400
630 A	IHFSTO4630	30420.00	IHFSTE4630	33935.00	IHHTLM0630
800 A	IHFSTO4800	35950.00	IHFSTE4800	39505.00	IHHTLM0800

Kompact-EZO Switch Disconnecter Fuse (Panel Mounting Cubicle Type)

Three Pole & Neutral - AC-23 A, 50 Hz, 415 V (without DIN Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution		In Sheet Steel Encl.		
160 A	IHFKTO4160	8415.00	IHFKTE4160	10910.00	IHHCD01160
200 A	IHFKTO4200	10695.00	IHFKTE4200	14020.00	IHHCD01200
250 A	IHFKTO4250	12625.00	IHFKTE4250	15815.00	IHHCD01250
320 A	IHFKTO4320	15550.00	IHFKTE4320	18700.00	IHHCD02315
400 A	IHFKTO4400	18810.00	IHFKTE4400	22000.00	IHHCD02400
630 A	IHFKTO4630	30285.00	IHFKTE4630	33905.00	IHHCD03630
800 A	IHFKTO4800	32850.00	IHFKTE4800	37295.00	

Kompact *plus* Switch Disconnecter Fuse Unit

HSN Code: 8537

(Conforms to IS/IEC:60947- Part 1 & 3)

Four Pole - AC-23 A, 50 Hz, 415 V (without Bolted Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution		In Sheet Steel Encl.		
32 A	IHKDFO4032	2720.00	IHKDFE4032	4210.00	IHHTIA0032
63 A	IHKDFO4063	3490.00	IHKDFE4063	4980.00	IHHTSS0063
100 A	IHKDFO4100	6960.00	IHKDFE4100	8460.00	IHHTSD0100
125 A	IHKDFO4125	8690.00	IHKDFE4125	10260.00	IHHTSD0125

Kompact *plus* Switch Disconnecter Fuse Unit

Four Pole - AC-23 A, 50 Hz, 415 V (without DIN Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution		In Sheet Steel Encl.		
32 A	IHKFFO4032	3000.00	IHKFFE4032	4195.00	IHHCD00032
63 A	IHKFFO4063	3880.00	IHKFFE4063	5185.00	IHHCD00063
100 A	IHKFFO4100	7605.00	IHKFFE4100	9080.00	IHHCD00100
125 A	IHKFFO4125	8555.00	IHKFFE4125	10015.00	IHHCD00125

Kompact-EZO Switch Disconnecter Fuse Unit

Four Pole - AC-23 A, 50 Hz, 415 V (without Bolted Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution		In Sheet Steel Encl.		
160 A	IHFSFO4160	11100.00	IHFSFE4160	13690.00	IHHTSF0160
200 A	IHFSFO4200	13175.00	IHFSFE4200	15895.00	IHHTSF0200
250 A	IHFSFO4250	15200.00	IHFSFE4250	17860.00	IHHTSF0250
320 A	IHFSFO4320	17495.00	IHFSFE4320	20545.00	IHHTSK0315
400 A	IHFSFO4400	18620.00	IHFSFE4400	21455.00	IHHTSMF400
630 A	IHFSFO4630	31195.00	IHFSFE4630	34395.00	IHHTLM0630
800 A	IHFSFO4800	36785.00	IHFSFE4800	40025.00	IHHTLM0800

Kompact-EZO Switch Disconnecter Fuse Unit

Four Pole - AC-23 A, 50 Hz, 415 V (without DIN Type Fuse)

Rating A	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	HBC Fuse Type
	Open Execution		In Sheet Steel Encl.		
160 A	IHFKFO4160	9635.00	IHFKFE4160	11965.00	IHHCD01160
200 A	IHFKFO4200	12785.00	IHFKFE4200	15405.00	IHHCD01200
250 A	IHFKFO4250	13050.00	IHFKFE4250	15530.00	IHHCD01250
320 A	IHFKFO4320	15485.00	IHFKFE4320	18260.00	IHHCD02315
400 A	IHFKFO4400	17205.00	IHFKFE4400	19965.00	IHHCD02400
630 A	IHFKFO4630	34465.00	IHFKFE4630	37860.00	IHHCD03630
800 A	IHFKFO4800	39895.00	IHFKFE4800	44435.00	

Busbar Chambers (Wall Mounted)

Current Rating (A)	No. of	Item Code	Per Unit LP (₹)
63 A	4 WAY	IHBC006304	8450.00
	6 WAY	IHBC006306	9855.00
	8 WAY	IHBC006308	11350.00
100 A	4 WAY	IHBC010004	10145.00
	6 WAY	IHBC010006	14045.00
	8 WAY	IHBC010008	14760.00
200 A	4 WAY	IHBC020004	12690.00
	6 WAY	IHBC020006	16425.00
	8 WAY	IHBC020008	17925.00
250 A	4 WAY	IHBC025004	21005.00
	6 WAY	IHBC025006	33055.00
	8 WAY	IHBC025008	41340.00
315 A	4 WAY	IHBC031504	21945.00
	6 WAY	IHBC031506	34010.00
	8 WAY	IHBC031508	43460.00
400 A	4 WAY	IHBC040004	23710.00
	6 WAY	IHBC040006	35765.00
	8 WAY	IHBC040008	44975.00
630 A	4 WAY	IHBC063004	36310.00
	6 WAY	IHBC063006	48170.00
	8 WAY	IHBC063008	57945.00
800 A	4 WAY	IHBC080004	38625.00
	6 WAY	IHBC080006	51475.00
	8 WAY	IHBC080008	65165.00



HiBreak HBC Fuse Link

(Conforms to IS: 13703-1 & 2-1 / IEC:60269-1 & 2-1)

RH Type - 80 kA, 415 V

Rating (A)	Item Code	Per Unit LP (₹)	STD Packing No. of unit/s
2 A	IHHRH00002	110.00	20 N
6 A	IHHRH00006	110.00	
10 A	IHHRH00010	110.00	
16 A	IHHRH00016	110.00	
20 A	IHHRH00020	110.00	20 N
25 A	IHHRH00025	110.00	
32 A	IHHRH00032	110.00	
40 A	IHHRH00040	120.00	20 N
50 A	IHHRH00050	255.00	20 N
63 A	IHHRH00063	300.00	20 N



DIN Fuse Bases (Fixed Type)

Specification: IEC: 60269-1 & 2-1 / IS: 13703-1 & 2-1.

Rated A	Item Code	Type	Fuse Type	Per Unit LP (₹)	STD Packing No. of unit/s
160 A	IHUC00O160	Open Type Fuse Base	CD-00	410.00	6 N



i Base - DIN Fuse Bases (Fixed Type)

Specification: IEC: 60269-1 & 2-1 / IS: 13703-1 & 2-1.

Rated A	Item Code	Type	Fuse Type	Per Unit LP (₹)	STD Packing No. of unit/s
250 A	IHIC01O250	Open Type Fuse Base	CD-1	825.00	3 N
400 A	IHIC02O400	Open Type Fuse Base	CD-2	1320.00	3 N
630 A	IHIC03O630	Open Type Fuse Base	CD-3	1535.00	3 N



HiBreak HBC Fuse Link

(Conforms to IS: 13703-1 & 2-1 / IEC:60269-1 & 2-1)

HSN Code: 8536



Bolted Type - 80 kA, 415 V

IS Size	Tag Type	BS Type	Rating (A)	Item Code	Per Unit LP (₹)	STD Packing No. of unit/s
F-1	Offset	NS	2 A	IHHNS00002	65.00	20 N
			4 A	IHHNS00004	65.00	
			6 A	IHHNS00006	65.00	
			10 A	IHHNS00010	65.00	
			16 A	IHHNS00016	65.00	
			20 A	IHHNS00020	75.00	
			25 A	IHHNS00025	75.00	
			32 A	IHHNS00032	75.00	
A-2	Offset	TIA	16 A	IHHTIA0016	95.00	10 N
			20 A	IHHTIA0020	95.00	
			25 A	IHHTIA0025	95.00	
			32 A	IHHTIA0032	95.00	
A-3	Offset	TSS	40 A	IHHTSS0040	120.00	10 N
			50 A	IHHTSS0050	120.00	
			63 A	IHHTSS0063	120.00	
A-4	Offset	TSD	80 A	IHHTSD0080	245.00	10 N
			100 A	IHHTSD0100	245.00	
			125 A	IHHTSD0125	245.00	
B-1	Central	TSDC	80 A	IHHTSDC080	250.00	10 N
			100 A	IHHTSDC100	250.00	
			125 A	IHHTSDC125	250.00	
B-2	Central	TSF	160 A	IHHTSF0160	380.00	10 N
			200 A	IHHTSF0200	380.00	
			250 A	IHHTSF0250	415.00	
B-3	Central	TSK	315 A	IHHTSK0315	540.00	3 N
B - 4	Central	TSMF	400 A	IHHTSMF400	1020.00	3 N
C - 1	Central	TSMS	400 A	IHHTSMS400	1020.00	3 N
C - 2	Central	TTS	400 A	IHHTTS0400	1165.00	1 N
C - 2	Central	TLM	630 A	IHHTLM0630	2070.00	1 N
C - 2	Central	TLM	800 A	IHHTLM0800	2305.00	1 N



DIN Type - 80 kA, 415 V

IS Size	Rating (A)	Item Code	Per Unit LP (₹)	STD Packing No. of unit/s
000	32 A	IHHCD11032	330.00	3 N
	63 A	IHHCD11063	340.00	
	100 A	IHHCD11100	365.00	
00	6 A	IHHCD00006	375.00	3 N
	10 A	IHHCD00010	375.00	
	16 A	IHHCD00016	375.00	
	25 A	IHHCD00025	375.00	
	32 A	IHHCD00032	375.00	
	40 A	IHHCD00040	390.00	
	50 A	IHHCD00050	390.00	
	63 A	IHHCD00063	390.00	
	80 A	IHHCD00080	425.00	
	100 A	IHHCD00100	425.00	
01	125 A	IHHCD00125	435.00	3 N
	160 A	IHHCD00160	460.00	
	40 A	IHHCD01040	620.00	
	50 A	IHHCD01050	620.00	
	100 A	IHHCD01100	620.00	
	125 A	IHHCD01125	620.00	
02	160 A	IHHCD01160	630.00	3 N
	200 A	IHHCD01200	630.00	
	250 A	IHHCD01250	710.00	
	250 A	IHHCD02250	710.00	
	315 A	IHHCD02315	910.00	
03	350 A	IHHCD02350	980.00	1 N
	400 A	IHHCD02400	980.00	
	500 A	IHHCD03500	1515.00	
	630 A	IHHCD03630	1545.00	1 N

Comprehensive Power Solutions



Harmonic Duty (MPP, APP,
Mixed Dielectric & GAS Filled)
POWER CAPACITOR & MFD



**LOAD FLOW &
HARMONICS ANALYSIS**



Contactor+
Thyristor Switching
APFC PANEL



High Linearity
HD DETUNED REACTOR



IOT Based / GSM
IPFC RELAY



AHFX System
**ACTIVE HARMONIC
FILTER / SVG**



High PIV
Thyristor Switch



High Linearity
BROAD BAND FILTER

**For more details on load flow analysis
Please contact nearest Havells branch**

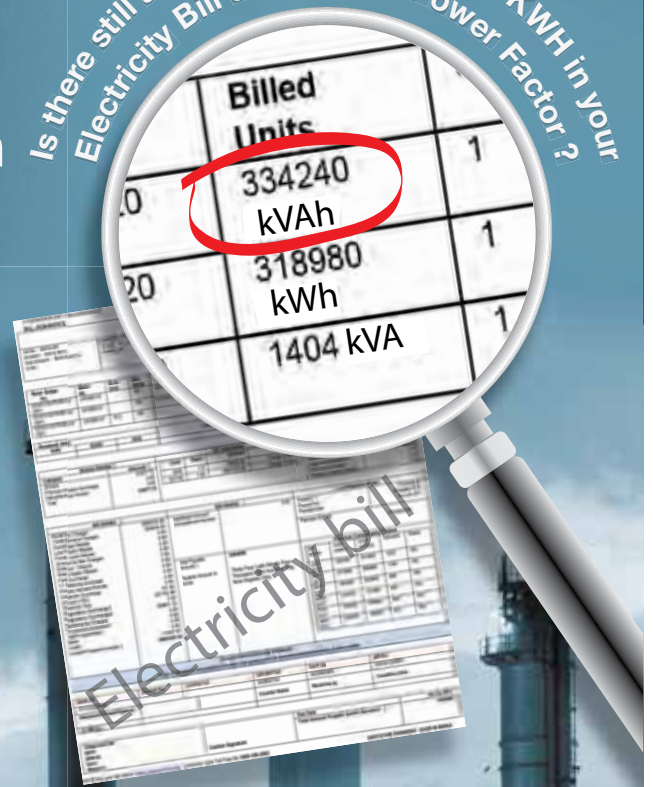


HAVELLS

Install Havells APFC Panel
&
SAVE Money by reducing kVAh

Why pay more
due to low Power Factor

Is there still a difference in kVAh and KWH in your
Electricity Bill due to Low Power Factor ?



Electricity bill



SecuRite APFCS - Automatic Power Factor Correction Panel



Range

- Output Rating: 10 kVAr -1000 kVAr other rating on request
- Switching: Contactor / Thyristorised (Ultra Fast)

Features

- Manufactured with highly precise modern Amada CNC machine
- 11 tank process for corrosion proof powder coating
- Ergonomic, compact and robust design
- Designed with Fully copper conductor
- Super Heavy Duty Capacitor power capacitor for long life
- Advance G-MOS technology based micro processor relay for intelligent power factor control
- Air core reactor for extra safety from inrush current (High currents)
- Provision of top and bottom cable entry

- Automatic temp. control through fans and louvers in panel
- Double side earthing connection
- Ref. Standard: IEC 61921/ IS 8623 / IS 16636 / IEC 61439

Principle Operation

- To continuously sense and monitor the load conditions by the use of the external CT (whose output is fed to the control relay).
- To automatically switch ON and switch OFF relevant capacitor steps to ensure consistent power factor.
- To ensure easy user interface for enabling reliable understanding of system operation, such as display of real time power factor, number of switching operations carried out etc.
- To protect against any electrical faults in a manner that will ensure safe isolation of the power factor correction equipment.

SecuRite APFCS - Automatic Power Factor Correction Panel

IEC: 61921/ IS: 8623 / IS: 16636

HSN Code: 8537

Rating kVAr	Cat. Code	Description	Per Unit LP (₹)
Rated Voltage 415 Vac, 3ø, 50 Hz, Delta Connection, Heavy Duty Cylindrical Capacitor			
10 kVAr	QHKTCB5010X0	10 kVAr / 415 V SecuRite APFC Panel CYCAP	57090.00
12 kVAr	QHKTCB5012X0	12 kVAr / 415 V SecuRite APFC Panel CYCAP	63432.00
15 kVAr	QHKTCB5015X0	15 kVAr / 415 V SecuRite APFC Panel CYCAP	79288.00
25 kVAr	QHKTCB5025X0	25 kVAr / 415 V SecuRite APFC Panel CYCAP	132144.00
30 kVAr	QHKTCB5030X0	30 kVAr / 415 V SecuRite APFC Panel CYCAP	137007.00
50 kVAr	QHKTCB5050X0	50 kVAr / 415 V SecuRite APFC Panel CYCAP	165784.00
75 kVAr	QHKTCB5075X0	75 kVAr / 415 V SecuRite APFC Panel CYCAP	248675.00
100 kVAr	QHKTCB5100X0	100 kVAr / 415 V SecuRite APFC Panel CYCAP	299850.00
125 kVAr	QHKTCB5125X0	125 kVAr / 415 V SecuRite APFC Panel CYCAP	360398.00
150 kVAr	QHKTCB5150X0	150 kVAr / 415 V SecuRite APFC Panel CYCAP	432480.00
175 kVAr	QHKTCB5175X0	175 kVAr / 415 V SecuRite APFC Panel CYCAP	504561.00
200 kVAr	QHKTCB5200X0	200 kVAr / 415 V SecuRite APFC Panel CYCAP	564625.00
225 kVAr	QHKTCB5225X0	225 kVAr / 415 V SecuRite APFC Panel CYCAP	635204.00
250 kVAr	QHKTCB5250X0	250 kVAr / 415 V SecuRite APFC Panel CYCAP	705783.00
275 kVAr	QHKTCB5275X0	275 kVAr / 415 V SecuRite APFC Panel CYCAP	776362.00
300 kVAr	QHKTCB5300X0	300 kVAr / 415 V SecuRite APFC Panel CYCAP	828916.00
325 kVAr	QHKTCB5325X0	325 kVAr / 415 V SecuRite APFC Panel CYCAP	897992.00
350 kVAr	QHKTCB5350X0	350 kVAr / 415 V SecuRite APFC Panel CYCAP	967069.00
Rated Voltage 415 Vac, 3ø, 50 Hz, Delta Connection, Super Heavy Duty Square Cap Capacitor			
100 kVAr	QHKTMB5100X0	100 kVAr / 415 V SecuRite APFC Panel SQCAP	337337.00
125 kVAr	QHKTMB5125X0	125 kVAr / 415 V SecuRite APFC Panel SQCAP	405449.00
150 kVAr	QHKTMB5150X0	150 kVAr / 415 V SecuRite APFC Panel SQCAP	486535.00
175 kVAr	QHKTMB5175X0	175 kVAr / 415 V SecuRite APFC Panel SQCAP	567629.00
200 kVAr	QHKTMB5200X0	200 kVAr / 415 V SecuRite APFC Panel SQCAP	636706.00
225 kVAr	QHKTMB5225X0	225 kVAr / 415 V SecuRite APFC Panel SQCAP	716291.00
250 kVAr	QHKTMB5250X0	250 kVAr / 415 V SecuRite APFC Panel SQCAP	795883.00
275 kVAr	QHKTMB5275X0	275 kVAr / 415 V SecuRite APFC Panel SQCAP	875468.00
300 kVAr	QHKTMB5300X0	300 kVAr / 415 V SecuRite APFC Panel SQCAP	937033.00
325 kVAr	QHKTMB5325X0	325 kVAr / 415 V SecuRite APFC Panel SQCAP	1015124.00
350 kVAr	QHKTMB5350X0	350 kVAr / 415 V SecuRite APFC Panel SQCAP	1093205.00
Rated Voltage 415 Vac, 3ø, 50 Hz, Delta Connection, Super Heavy Duty Square Cap Capacitor with Detuned Reactor (Aluminium)			
100 kVAr	QHKTEB5100X0	100 kVAr / 415 V SecuRite APFC Panel SQCAP DTR	448144.00
125 kVAr	QHKTEB5125X0	125 kVAr / 415 V SecuRite APFC Panel SQCAP DTR	495548.00
150 kVAr	QHKTEB5150X0	150 kVAr / 415 V SecuRite APFC Panel SQCAP DTR	594661.00
175 kVAr	QHKTEB5175X0	175 kVAr / 415 V SecuRite APFC Panel SQCAP DTR	693765.00
200 kVAr	QHKTEB5200X0	200 kVAr / 415 V SecuRite APFC Panel SQCAP DTR	780861.00
225 kVAr	QHKTEB5225X0	225 kVAr / 415 V SecuRite APFC Panel SQCAP DTR	878472.00
250 kVAr	QHKTEB5250X0	250 kVAr / 415 V SecuRite APFC Panel SQCAP DTR	976082.00
275 kVAr	QHKTEB5275X0	275 kVAr / 415 V SecuRite APFC Panel SQCAP DTR	1073684.00
300 kVAr	QHKTEB5300X0	300 kVAr / 415 V SecuRite APFC Panel SQCAP DTR	1153277.00
325 kVAr	QHKTEB5325X0	325 kVAr / 415 V SecuRite APFC Panel SQCAP DTR	1249377.00
350 kVAr	QHKTEB5350X0	350 kVAr / 415 V SecuRite APFC Panel SQCAP DTR	1345485.00

Other Ratings on request

Thyristor Switching Panel (NEW)

Rating kVAr	Cat. Code	Description	Per Unit LP (₹)
10 kVAr - 1000 kVAr	-	10 kVAr -1000 kVAr Thyristor Switching Panel	Price on Request

Current Power Factor $\cos \phi$	Achievable (Target)						Target $\cos \phi = 0.96$				
	0.9	0.91	0.92	0.93	0.94	0.95	0.96	0.97	0.98	0.99	1
0.51	1.20	1.23	1.26	1.29	1.32	1.36	1.40	1.44	1.48	1.54	1.69
0.52	1.16	1.19	1.22	1.25	1.28	1.31	1.35	1.39	1.44	1.50	1.64
0.53	1.11	1.14	1.17	1.20	1.24	1.27	1.30	1.35	1.40	1.46	1.60
0.54	1.08	1.10	1.13	1.16	1.20	1.23	1.27	1.31	1.36	1.42	1.56
0.55	1.04	1.06	1.09	1.12	1.16	1.19	1.23	1.27	1.32	1.38	1.52
0.56	1.00	1.02	1.05	1.09	1.12	1.15	1.19	1.23	1.28	1.34	1.48
0.57	0.96	0.99	1.02	1.05	1.08	1.11	1.15	1.19	1.24	1.30	1.44
0.58	0.92	0.95	0.98	1.01	1.04	1.08	1.11	1.15	1.20	1.26	1.41
0.59	0.89	0.91	0.94	0.97	1.01	1.04	1.08	1.12	1.17	1.23	1.37
0.60	0.85	0.88	0.91	0.94	0.97	1.00	1.04	1.08	1.13	1.19	1.33
0.61	0.82	0.84	0.87	0.90	0.94	0.97	1.01	1.05	1.10	1.16	1.30
0.62	0.78	0.81	0.84	0.87	0.90	0.94	0.97	1.02	1.06	1.12	1.27
0.63	0.75	0.78	0.81	0.84	0.87	0.90	0.94	0.98	1.03	1.09	1.23
0.64	0.72	0.75	0.78	0.81	0.84	0.87	0.91	0.95	1.00	1.07	1.20
0.65	0.69	0.71	0.74	0.77	0.81	0.84	0.88	0.92	0.97	1.03	1.17
0.66	0.65	0.68	0.71	0.74	0.78	0.81	0.85	0.89	0.94	1.00	1.14
0.67	0.62	0.65	0.68	0.71	0.75	0.78	0.82	0.86	0.91	0.97	1.11
0.68	0.59	0.62	0.65	0.68	0.72	0.75	0.79	0.83	0.88	0.94	1.08
0.69	0.57	0.59	0.62	0.65	0.69	0.72	0.76	0.80	0.85	0.91	1.05
0.70	0.54	0.56	0.59	0.63	0.66	0.69	0.73	0.77	0.82	0.88	1.02
0.71	0.51	0.54	0.57	0.60	0.63	0.66	0.70	0.74	0.79	0.85	0.99
0.72	0.48	0.51	0.54	0.57	0.60	0.64	0.67	0.71	0.76	0.82	0.96
0.73	0.45	0.48	0.51	0.54	0.57	0.61	0.64	0.69	0.73	0.79	0.94
0.74	0.43	0.45	0.48	0.51	0.55	0.58	0.62	0.66	0.71	0.77	0.91
0.75	0.40	0.43	0.46	0.49	0.52	0.55	0.59	0.63	0.68	0.74	0.88
0.76	0.37	0.40	0.43	0.46	0.49	0.53	0.56	0.60	0.65	0.71	0.86
0.77	0.35	0.37	0.40	0.43	0.47	0.50	0.44	0.58	0.63	0.69	0.83
0.78	0.32	0.35	0.38	0.41	0.44	0.47	0.51	0.55	0.60	0.66	0.80
0.79	0.29	0.32	0.35	0.38	0.41	0.45	0.48	0.53	0.57	0.63	0.78
0.80	0.27	0.29	0.32	0.36	0.39	0.42	0.46	0.50	0.55	0.61	0.75
0.81	0.24	0.27	0.30	0.33	0.36	0.40	0.43	0.47	0.52	0.58	0.72
0.82	0.21	0.24	0.27	0.30	0.34	0.37	0.41	0.45	0.50	0.56	0.70
0.83	0.19	0.22	0.25	0.28	0.31	0.34	0.38	0.42	0.47	0.53	0.67
0.84	0.16	0.19	0.22	0.25	0.28	0.32	0.35	0.40	0.44	0.50	0.65
0.85	0.14	0.16	0.19	0.23	0.26	0.29	0.33	0.37	0.42	0.48	0.62
0.86	0.11	0.14	0.17	0.20	0.23	0.26	0.30	0.34	0.39	0.45	0.59
0.87	0.08	0.11	0.14	0.17	0.20	0.24	0.28	0.32	0.36	0.43	0.57
0.88	0.06	0.08	0.11	0.15	0.18	0.21	0.25	0.29	0.34	0.40	0.54
0.89	0.03	0.06	0.09	0.12	0.15	0.18	0.22	0.26	0.31	0.37	0.51
0.90	0.00	0.03	0.06	0.09	0.12	0.16	0.19	0.23	0.28	0.34	0.48
0.91		0.00	0.03	0.06	0.09	0.13	0.16	0.21	0.25	0.31	0.46
0.92			0.00	0.03	0.06	0.10	0.13	0.18	0.22	0.28	0.43
0.93				0.00	0.03	0.07	0.10	0.14	0.19	0.25	0.40
0.94					0.00	0.03	0.07	0.11	0.16	0.22	0.36
0.95						0.00	0.04	0.08	0.13	0.19	0.33

Example:
Actual Motor Power P=100 kW
Actual $\cos \phi$ 0.61 Factor F from table 1.01
Target $\cos \phi$ (0) 0.96 Capacitor reactive power $Q_c = 100 \times 1.01 = 101$ kVAR

Selection of Capacitor

(I) Calculation of Required kVAR.

Operating load kW and its average power factor (PF) as per the electricity bill OR we can easily calculate by a simple formula

Average PF = kW / kVA

Operating load kW = kVA Demand x Average PF

Average PF is considered as the initial PF and the final PF is assumed as a target PF. From this information required kVAR can be easily calculated with reference table.

Example: Calculate required kVAR to improve PF from 0.75 to 0.96 for 500 kW installation

kVAR = kW x multiplying factor from table = 500 x 0.590 = 295 kVAR

(II) Selection of Capacitor Duty

Selection of Capacitor Type is first decision to be made

Power Factor Correction Capacitor can be classified as follows.

Splendid Duty - Torrent and Master

Heavy Duty - Champ

SHD & Super Heavy Duty - Warrior and Champion

Ultra Heavy Duty - UHDXL (APP) and UXDXL (Mixed Di-electric)

Refer following table for the capacitor duty based on type of Industry / Application

Power Capacitor Selection Chart on the basis of Application				
% Non linear load	≤ 10%	Up to 15%	Up to 20%	Between 20% to 30%
Square	Master Splendid Duty	Champ HD Plus	Champion SHD / UHDXL / UXDXL	Champ HD Plus + Reactor
Cylindrical	Torrent Splendid Duty	Warrior SHD	Warrior SHD	Warrior SHD + Reactor
Application	These Capacitors are designed for normal loads where non linear factor is <10%. Do not use normal duty capacitors for the application of Heavy Duty and Super Heavy Duty capacitors.	Commercial building with CFL lamps, SMPS, UPS etc.	Heavy Chemical Industries	Steel plant
		Garment industries (Sewing Industry)	Pharmaceutical Industries	Cement Industries
		Bakeries	Automobile plants	Stone crushing
		Flour mills	Paper Industries	Textiles (Production of Yarn/cloth)
		Oil mills	Food processing plants	Forging Industries
		Glass industries	IT Industries	Power frequency induction furnaces
		Rice mills	Fabrication shops	Sugar plants
		Cold storage	Welding shops	Rolling mills
			Machine and tool shop	
Example for Calculating Non Linear Load Installed Transformer Rating = 1000 kVA Non Linear Loads = 100 kVA % Non Linear Load = (Non Linear Load / Transformer Rating) X 100 = (100/1000) X 100 = 10%				
Example of Non Linear Loads: UPS, Arc / Induction furnace, Rectifiers, AC / DC Drives, Computer, CFL, CNC Machines.				

Consulting, Optimizing & Delivering Performance



Accessories

for APFCS Panel Installation Current Transformers

IS: 2705 / IEC: 60044

HSN Code: 8504

Rating	Code	Description	Class / VA Burden	MOQ	Per Unit LP (₹)
25 A / 5 A	QSCMLMX0002	CT 25/5A CL1 5 VA Spare	1.0 / 5 VA	3	908.00
50 A / 5 A	QSCMLML0137	CT 50/5A CL1 5 VA Spare	1.0 / 5 VA	3	918.00
75 A / 5 A	QSCMLMX0003	CT 75/5A CL1 5 VA Spare	1.0 / 5 VA	3	929.00
100 A / 5 A	QSCMLFBOL001	CT 100/5A CL1 5 VA Spare	1.0 / 5 VA	3	945.00
150 A / 5 A	QSCMLML0138	CT 150/5A CL1 5 VA Spare	1.0 / 5 VA	3	955.00
200 A / 5 A	QSCMLML0139	CT 200/5A CL1 5 VA Spare	1.0 / 5 VA	3	976.00
250 A / 5 A	QSCMLML00102	CT 250/5A CL1 5 VA Spare	1.0 / 5 VA	3	987.00
300 A / 5 A	QSCMLML0140	CT 300/5A CL1 5 VA Spare	1.0 / 5 VA	3	1092.00
400 A / 5 A	QSCMLML0122	CT 400/5A CL1 5 VA Spare	1.0 / 5 VA	3	1102.00
450 A / 5 A	QSCMLML0141	CT 450/5A CL1 5 VA Spare	1.0 / 5 VA	3	1118.00
500 A / 5 A	QSCMLMX0004	CT 500/5A CL1 5 VA Spare	1.0 / 5 VA	3	1128.00
600 A / 5 A	QSCMLML0142	CT 600/5A CL1 5 VA Spare	1.0 / 5 VA	3	1139.00
800 A / 5 A	QSCMLML0125	CT 800/5A CL1 5 VA Spare	1.0 / 5 VA	3	1149.00
1000 A / 5 A	QSCMLML0143	CT 1000/5A CL1 5 VA Spare	1.0 / 5 VA	3	1165.00



Other Ratings on request

Intelligent Power Factor Controller

IEC: 61010-1

IPFC (Single CT Sensing)

HSN Code: 9032

<p>Range: 08 and 12 Steps 7 segment LED display Size: 144 mm x 144 mm</p> <p>Features:</p> <ul style="list-style-type: none"> • Auxiliary supply 90 Vac - 550 Vac • Intelligent Power Factor Algorithm • Dual Password Protection • 4 digit display (0.XXX) PF • Alarm Indication on Display • Switching time programmable 1 s to 180 s 	<p>Range: 06, 08 and 12 Steps LCD display Size: 96 mm x 96 mm</p> <p>Features:</p> <ul style="list-style-type: none"> • Auxiliary supply 90 Vac - 550 Vac • Advance 32 bit Micro Controller Base Processing • Intelligent Power Factor Algorithm • With communication facility RS 485 (Optional) • Alarm Indication on Display • Switching time programmable 1 s to 600 s
---	---

IPFC (Three CT Sensing)

<p>Range: 08, 12 and 14 Steps LCD display Relay output Size: 144 mm x 144 mm</p> <p>Features:</p> <ul style="list-style-type: none"> • LCD Type with dual colour backlight • Auxiliary supply 90 Vac - 550 Vac • Dual Password Protection • Automatic CT Polarity detection • NTC Temperature Sensor • Communication Interface RS 485 & ModBus RTU (Only for 12 Relay option) • Power Factor Measurement Range: 0.8 lag to 0.8 lead 	<p>Range: 08 and 12 Steps LCD display Relay / Thyristor output Size: 144 mm x 144 mm</p> <p>Features:</p> <ul style="list-style-type: none"> • Advance Micro-Controller based logic • LCD Type with colour backlight • Auxiliary supply 90 Vac - 550 Vac • Data logging facility (optional) • Automatic CT Polarity detection • Communication Interface RS485 & ModBus RTU GSM / WiFi • Power Factor Measurement Range: 0.8 lag to 0.8 lead
--	--



Steps	Item Code	Description	Standard Pack No of unit/s	Master Pack No of unit/s	Per Unit LP (₹)
Intelligent Power Factor Controller (IPFC CS- 1001) 1 CT					
8	QHOSBS5N0008	IPFC CS 1001-108-90 V / 550 Vac 144 x 144	1 N	5 N	11144.00
12	QHOSBS5N0012	IPFC CS 1001-112-90 V / 550 Vac 144 x 144	1 N	5 N	12938.00
Intelligent Power Factor Controller (IPFC CS- 1003) 3 CT					
8	QHOTBS5H0008	IPFC CS 1003-308-90 V / 550 Vac 144 x 144	1 N	5 N	17867.00
12	QHOTBS5H0012	IPFC CS 1003-312-90 V / 550 Vac 144 x 144	1 N	5 N	22288.00
8/12		IPFC CS 96 x 96	1 N	5 N	Price on request
Intelligent Power Factor Controller (Intello) 1CT					
8	QHOSBS5*	IPFC CS 96 x 96	1 N	5 N	8790.00
Intelligent Power Factor Controller (3CT with GSM / WiFi)					
8/12		IPFC CS	1 N	1 N	Price on request

Manufactured by Swiss Technology



Power Capacitors					
Parameters	Splendid Duty	Heavy Duty / HD Plus	Super Heavy Duty / SHD Plus	Ultra Heavy Duty	Ultra Heavy Duty
Type	MPP	MPP	MPP	APP	Mixed Di-electric
Over Current withstand capacity upto	1.6 X Ir	2.4 X Ir / 2.2 Ir	3.2 X Ir / 3.0 X Ir	4.0 X Ir	5.0 X Ir
Peak Inrush Current Withstand Capacity upto	250 times	350 times / 350 times	500 times / 500 times	525 times	550 times
Losses	0.2 W / kVAr	0.2 W / kVAr	0.2 W / kVAr	0.5 W / kVAr	0.5 W / kVAr
No of switching per year	35000	50000 / 52500	65000 / 80000	125000	135000
Max Ambient Temp (°C)	55	60	65	70	75
Operating life in hours	120000	200000 / 215000	250000 / 300000	325000	400000
Notch Shield	Yes	Yes	Yes	Yes	Yes
Over pressure Disconnecter	Yes	Yes	Yes	-	-
Triple Safety	Yes	Yes	Yes	Yes	Yes



Torrent - Splendid Duty Cylindrical Capacitors

HSN Code: 8532
(IS: 13340 / IEC: 60831)

Rating kVAr	Item Code	Description	Ir A	C μF	Standard Pack No of unit/s	Master Pack No of unit/s	Per Unit LP (₹)
Rated Voltage 440 Vac, 3ø, 50 Hz, Delta Connection							
1 kVAr	QHUTCC5001X0	Torrent 440 V 50 Hz-1 kVAr 3 PH	1.31	3 X 5.5	1 N	16 N	180.00
2 kVAr	QHUTCC5002X0	Torrent 440 V 50 Hz-2 kVAr 3 PH	2.62	3 X 11.0	1 N	16 N	359.00
3 kVAr	QHUTCC5003X0	Torrent 440 V 50 Hz-3 kVAr 3 PH	3.94	3 X 16.4	1 N	16 N	541.00
4 kVAr	QHUTCC5004X0	Torrent 440 V 50 Hz-4 kVAr 3 PH	5.25	3 X 21.9	1 N	16 N	722.00
5 kVAr	QHUTCC5005X0	Torrent 440 V 50 Hz-5 kVAr 3 PH	6.56	3 X 27.4	1 N	16 N	902.00
6 kVAr	QHUTCC5006X0	Torrent 440 V 50 Hz-6 kVAr 3 PH	7.87	3 X 32.9	1 N	8 N	1082.00
7.5 kVAr	QHUTCC5007X5	Torrent 440 V 50 Hz-7.5 kVAr 3P H	9.84	3 X 41.1	1 N	8 N	1353.00
10 kVAr	QHUTCC5010X0	Torrent 440 V 50 Hz-10 kVAr 3 PH	13.12	3 X 54.8	1 N	8 N	1804.00
12.5 kVAr	QHUTCC5012X5	Torrent 440 V 50 Hz-12.5 kVAr 3 PH	16.40	3 X 68.5	1 N	8 N	2255.00
15 kVAr	QHUTCC5015X0	Torrent 440 V 50 Hz-15 kVAr 3 PH	19.68	3 X 82.2	1 N	4 N	2706.00
20 kVAr	QHUTCC5020X0	Torrent 440 V 50 Hz-20 kVAr 3 PH	26.24	3 X 109.6	1 N	4 N	3608.00
25 kVAr	QHUTCC5025X0	Torrent 440 V 50 Hz-25 kVAr 3 PH	32.80	3 X 137.0	1 N	4 N	4510.00
30 kVAr	QHUTCC5030X0	Torrent 440 V 50 Hz-30 kVAr 3 PH	39.37	3 X 164.4	1 N	4 N	5412.00

Warrior - Super Heavy Duty Cylindrical Capacitors (NEW)

HSN Code: 8532
(IS: 13340 / IEC: 60831)

Rating kVAr	Item Code	Description	Ir A	C μF	Standard Pack No of unit/s	Master Pack No of unit/s	Per Unit LP (₹)
Rated Voltage 440 Vac, 3ø, 50 Hz, Delta Connection							
1 kVAr	QHBTC5001X0	Warrior Super Heavy Duty 440 V 50 Hz 1 kVAr 3 PH	1.31	3 X 5.5	1 N	16 N	295.00
2 kVAr	QHBTC5002X0	Warrior Super Heavy Duty 440 V 50 Hz 2 kVAr 3 PH	2.62	3 X 11.0	1 N	16 N	539.00
3 kVAr	QHBTC5003X0	Warrior Super Heavy Duty 440 V 50 Hz 3 kVAr 3 PH	3.94	3 X 16.4	1 N	16 N	809.00
4 kVAr	QHBTC5004X0	Warrior Super Heavy Duty 440 V 50 Hz 4 kVAr 3 PH	5.25	3 X 21.9	1 N	16 N	1079.00
5 kVAr	QHBTC5005X0	Warrior Super Heavy Duty 440 V 50 Hz 5 kVAr 3 PH	6.56	3 X 27.4	1 N	16 N	1348.00
6 kVAr	QHBTC5006X0	Warrior Super Heavy Duty 440 V 50 Hz 7.5 kVAr 3 PH	7.87	3 X 32.9	1 N	8 N	1618.00
7.5 kVAr	QHBTC5007X5	Warrior Super Heavy Duty 440 V 50 Hz 6 kVAr 3 PH	9.84	3 X 41.1	1 N	8 N	2022.00
8 kVAr	QHBTC5008X0	Warrior Super Heavy Duty 440 V 50 Hz 8 kVAr 3 PH	10.50	3 X 43.8	1 N	8 N	2157.00
10 kVAr	QHBTC5010X0	Warrior Super Heavy Duty 440 V 50 Hz 10 kVAr 3 PH	13.12	3 X 54.8	1 N	4 N	2696.00
12.5 kVAr	QHBTC5012X5	Warrior Super Heavy Duty 440 V 50 Hz 12.5 kVAr 3 PH	16.40	3 X 68.5	1 N	4 N	3371.00
15 kVAr	QHBTC5015X0	Warrior Super Heavy Duty 440 V 50 Hz 15 kVAr 3 PH	19.68	3 X 82.2	1 N	4 N	4045.00
20 kVAr	QHBTC5020X0	Warrior Super Heavy Duty 440 V 50 Hz 20 kVAr 3 PH	26.24	3 X 109.6	1 N	4 N	5393.00
25 kVAr	QHBTC5025X0	Warrior Super Heavy Duty 440 V 50 Hz 25 kVAr 3 PH	32.80	3 X 137.0	1 N	4 N	6741.00
Rated Voltage 480 Vac, 3ø, 50 Hz, Delta Connection							
5 kVAr	QHBTC5005X0	Warrior Super Heavy Duty 480 V 50 Hz 5 kVAr 3 PH	6.01	3 x 23.0	1 N	16 N	1391.00
7.5 kVAr	QHBTC5007X5	Warrior Super Heavy Duty 480 V 50 Hz 7.5 kVAr 3 PH	9.02	3 x 34.5	1 N	8 N	2087.00
10 kVAr	QHBTC5010X0	Warrior Super Heavy Duty 480 V 50 Hz 10 kVAr 3 PH	12.03	3 x 46.0	1 N	4 N	2782.00
12.5 kVAr	QHBTC5012X5	Warrior Super Heavy Duty 480 V 50 Hz 12.5 kVAr 3 PH	15.04	3 x 57.6	1 N	4 N	3478.00
15 kVAr	QHBTC5015X0	Warrior Super Heavy Duty 480 V 50 Hz 15 kVAr 3 PH	18.04	3 x 69.1	1 N	4 N	4173.00
20 kVAr	QHBTC5020X0	Warrior Super Heavy Duty 480 V 50 Hz 20 kVAr 3 PH	24.06	3 x 92.1	1 N	4 N	5564.00
25 kVAr	QHBTC5025X0	Warrior Super Heavy Duty 480 V 50 Hz 25 kVAr 3 PH	30.07	3 x 115.1	1 N	4 N	6955.00
Rated Voltage 525 Vac, 3ø, 50 Hz, Delta Connection							
5 kVAr	QHBTCF5005X0	Warrior Super Heavy Duty 525 V 50 Hz 5 kVAr 3 PH	5.50	3 X 19.2	1 N	16 N	1391.00
7.5 kVAr	QHBTCF5007X5	Warrior Super Heavy Duty 525 V 50 Hz 7.5 kVAr 3 PH	8.25	3 X 28.9	1 N	8 N	2087.00
10 kVAr	QHBTCF5010X0	Warrior Super Heavy Duty 525 V 50 Hz 10 kVAr 3 PH	13.75	3 X 48.1	1 N	4 N	2782.00
12.5 kVAr	QHBTCF5012X5	Warrior Super Heavy Duty 525 V 50 Hz 12.5 kVAr 3 PH	14.52	3 X 50.8	1 N	4 N	3478.00
15 kVAr	QHBTCF5015X0	Warrior Super Heavy Duty 525 V 50 Hz 15 kVAr 3 PH	18.37	3 X 64.3	1 N	4 N	4173.00
20 kVAr	QHBTCF5020X0	Warrior Super Heavy Duty 525 V 50 Hz 20 kVAr 3 PH	29.14	3 X 102.0	1 N	4 N	5564.00
25 kVAr	QHBTCF5025X0	Warrior Super Heavy Duty 525 V 50 Hz 25 kVAr 3 PH	27.50	3 x 96.25	1 N	4 N	6955.00

Other Ratings on request

Super Heavy Duty MPP Capacitors - Gas Filled

Rating kVAr	Cat. Code	Description	Per Unit LP (₹)
Available in Voltage 440 V / 480 V / 525 Vac, 3ø, 50 Hz, Delta Connection			
0.5 kVAr to 50 kVAr		Super Heavy Duty Capacitor - MPP Gas Filled	Price on request



Mini / Master - Splendid Duty Square Capacitors

HSN Code: 8532
(IS: 13340 / IEC: 60831)

Rating kVAr	Item Code	Description	I A	C µF	Standard Pack No of unit/s	Master Pack No of unit/s	Per Unit LP (₹)
Rated Voltage 440 Vac, 3ø, 50 Hz, Delta Connection							
1 kVAr	QHNTMC5001X0	Mini Master 440 V 50 Hz-1 kVAr 3 PH	1.31	3 x 5.5	1 N	30 N	300.00
2 kVAr	QHNTMC5002X0	Mini Master 440 V 50 Hz-2 kVAr 3 PH	2.62	3 x 11.0	1 N	30 N	482.00
3 kVAr	QHNTMC5003X0	Mini Master 440 V 50 Hz-3 kVAr 3 PH	3.94	3 x 16.4	1 N	24 N	722.00
kVAr 4	QHNTMC5004X0	Mini Master 440 V 50 Hz-4 kVAr 3 PH	5.25	3 x 21.9	1 N	24 N	963.00
kVAr 5	QHNTMC5005X0	Mini Master 440 V 50 Hz-5 kVAr 3 PH	6.56	3 x 27.4	1 N	24 N	1124.00
6 kVAr	QHNTMC5006X0	Master 440 V 50 Hz-6 kVAr 3 PH	7.87	3 x 32.9	1 N	1 N	1348.00
7.5 kVAr	QHNTMC5007X5	Master 440 V 50 Hz-7.5 kVAr 3 PH	9.84	3 x 41.1	1 N	1 N	1685.00
8 kVAr	QHNTMC5008X0	Master 440 V 50 Hz-8 kVAr 3 PH	10.5	3 x 43.8	1 N	1 N	1798.00
10 kVAr	QHNTMC5010X0	Master 440 V 50 Hz-10 kVAr 3 PH	13.12	3 x 54.8	1 N	1 N	2247.00
12.5 kVAr	QHNTMC5012X5	Master 440 V 50 Hz-12.5 kVAr 3 PH	16.40	3 x 68.5	1 N	1 N	2809.00
15 kVAr	QHNTMC5015X0	Master 440 V 50 Hz-15 kVAr 3 PH	19.68	3 x 82.2	1 N	1 N	3371.00
20 kVAr	QHNTMC5020X0	Master 440 V 50 Hz-20 kVAr 3 PH	26.24	6 x 54.8	1 N	1 N	4494.00
25 kVAr	QHNTMC5025X0	Master 440 V 50 Hz-25 kVAr 3 PH	32.80	6 x 68.5	1 N	1 N	5618.00
30 kVAr	QHNTMC5030X0	Master 440 V 50 Hz-30 kVAr 3 PH	39.37	6 x 82.2	1 N	1 N	6741.00
50 kVAr	QHNTMC5050X0	Master 440 V 50 Hz-50 kVAr 3 PH	65.61	12 x 68.5	1 N	1 N	11235.00

Other Ratings on request

Champ - Heavy Duty Plus Square Capacitors

HSN Code: 8532
(IS: 13340 / IEC: 60831)

Rating kVAr	Item Code	Description	I _r A	C µF	Standard Pack No of unit/s	Master Pack No of unit/s	Per Unit LP (₹)
Rated Voltage 440 Vac, 3ø, 50 Hz, Delta Connection							
1 kVAr	QHBTMC5001X0	Champ 440 V 50 Hz-1 kVAr 3 PH	1.31	3 x 5.5	1 N	30 N	353.00
2 kVAr	QHBTMC5002X0	Champ 440 V 50 Hz-2 kVAr 3 PH	2.62	3 x 11.0	1 N	30 N	642.00
3 kVAr	QHBTMC5003X0	Champ 440 V 50 Hz-3 kVAr 3 PH	3.94	3 x 16.4	1 N	24 N	963.00
4 kVAr	QHBTMC5004X0	Champ 440 V 50 Hz-4 kVAr 3 PH	5.25	3 x 21.9	1 N	24 N	1284.00
5 kVAr	QHBTMC5005X0	Champ 440 V 50 Hz-5 kVAr 3 PH	6.56	3 x 27.4	1 N	1 N	1552.00
6 kVAr	QHBTMC5006X0	Champ 440 V 50 Hz-6 kVAr 3 PH	7.87	3 x 32.9	1 N	1 N	1862.00
7.5 kVAr	QHBTMC5007X5	Champ 440 V 50 Hz-7.5 kVAr 3 PH	9.84	3 x 41.1	1 N	1 N	2327.00
8 kVAr	QHBTMC5008X0	Champ 440 V 50 Hz-8 kVAr 3 PH	10.50	3 x 43.8	1 N	1 N	2482.00
10 kVAr	QHBTMC5010X0	Champ 440 V 50 Hz-10 kVAr 3 PH	13.12	3 x 54.8	1 N	1 N	3103.00
12.5 kVAr	QHBTMC5012X5	Champ 440 V 50 Hz-12.5 kVAr 3 PH	16.40	3 x 68.5	1 N	1 N	3879.00
15 kVAr	QHBTMC5015X0	Champ 440 V 50 Hz-15 kVAr 3 PH	19.68	3 x 82.2	1 N	1 N	4655.00
20 kVAr	QHBTMC5020X0	Champ 440 V 50 Hz-20 kVAr 3 PH	26.24	6 x 54.8	1 N	1 N	6206.00
25 kVAr	QHBTMC5025X0	Champ 440 V 50 Hz-25 kVAr 3PH	32.80	6 x 68.5	1 N	1 N	7758.00
30 kVAr	QHBTMC5030X0	Champ 440 V 50 Hz-30 kVAr 3 PH	39.37	6 x 82.2	1 N	1 N	9309.00
50 kVAr	QHBTMC5050X0	Champ 440 V 50 Hz-50 kVAr 3 PH	65.61	12 x 68.5	1 N	1 N	16318.00
75 kVAr	QHBTMC5075X0	Champ 440 V 50 Hz-75 kVAr 3 PH	98.40	18 x 68.5	1 N	1 N	24476.00
100 kVAr	QHBTMC5100X0	Champ 440 V 50 Hz-100 kVAr 3 PH	131.22	24 x 68.5	1 N	1 N	32635.00

Champ - Heavy Duty Plus Square Capacitors

HSN Code: 8532

(IS: 13340 / IEC: 60831)

Rating kVAr	Item Code	Description	Ir A	C μ F	Standard Pack No of unit/s	Master Pack No of unit/s	Per Unit LP (₹)
Rated Voltage 480 Vac, 3ϕ, 50 Hz, Delta Connection							
5 kVAr	QHBTMD5005X0	Champ 480 V 50 Hz-5 kVAr 3 PH	6.01	3 x 23	1 N	1 N	1685.00
6 kVAr	QHBTMD5006X0	Champ 480 V 50 Hz-6 kVAr 3 PH	7.22	3 x 27.6	1 N	1 N	2022.00
7.5 kVAr	QHBTMD5007X5	Champ 480 V 50 Hz-7.5 kVAr 3 PH	9.02	3 x 34.5	1 N	1 N	2528.00
10 kVAr	QHBTMD5010X0	Champ 480 V 50 Hz-10 kVAr 3 PH	12.03	3 x 46.0	1 N	1 N	3371.00
12.5 kVAr	QHBTMD5012X5	Champ 480 V 50 Hz-12.5 kVAr 3 PH	15.04	3 x 57.6	1 N	1 N	4213.00
15 kVAr	QHBTMD5015X0	Champ 480 V 50 Hz-15 kVAr 3 PH	18.04	3 x 69.1	1 N	1 N	5056.00
20 kVAr	QHBTMD5020X0	Champ 480 V 50 Hz-20 kVAr 3 PH	24.06	6 X 46.0	1 N	1 N	6741.00
25 kVAr	QHBTMD5025X0	Champ 480 V 50 Hz-25 kVAr 3 PH	30.07	6 X 57.6	1 N	1 N	8426.00
30 kVAr	QHBTMD5030X0	Champ 480 V 50 Hz-30 kVAr 3 PH	36.09	6 X 69.1	1 N	1 N	10112.00
50 kVAr	QHBTMD5050X0	Champ 480 V 50 Hz-50 kVAr 3 PH	60.14	12 X 57.6	1 N	1 N	16853.00
60 kVAr	QHBTMD5060X0	Champ 480 V 50 Hz-60 kVAr 3 PH	72.18	12 X 69.1	1 N	1 N	20223.00
Rated Voltage 525 Vac, 3ϕ, 50 Hz, Delta Connection							
5 kVAr	QHBTMF5005X0	Champ 525 V 50 Hz-5 kVAr 3 PH	5.50	3 X 19.2	1 N	1 N	1685.00
6 kVAr	QHBTMF5006X0	Champ 525 V 50 Hz-6 kVAr 3 PH	6.60	3 X 23.1	1 N	1 N	2022.00
7.5 kVAr	QHBTMF5007X5	Champ 525 V 50 Hz-7.5 kVAr 3 PH	8.25	3 X 28.9	1 N	1 N	2528.00
10 kVAr	QHBTMF5010X0	Champ 525 V 50 Hz-10 kVAr 3 PH	11.00	3 X 38.5	1 N	1 N	3371.00
12.5 kVAr	QHBTMF5012X5	Champ 525 V 50 Hz-12.5 kVAr 3 PH	13.75	3 X 48.1	1 N	1 N	4213.00
15 kVAr	QHBTMF5015X0	Champ 525 V 50 Hz-15 kVAr 3 PH	16.50	3 X 57.7	1 N	1 N	5056.00
20 kVAr	QHBTMF5020X0	Champ 525 V 50 Hz-20 kVAr 3 PH	21.99	6 X 38.5	1 N	1 N	6741.00
25 kVAr	QHBTMF5025X0	Champ 525 V 50 Hz-25 kVAr 3 PH	27.49	6 X 48.1	1 N	1 N	8426.00
30 kVAr	QHBTMF5030X0	Champ 525 V 50 Hz-30 kVAr 3 PH	32.99	6 X 57.7	1 N	1 N	10112.00
50 kVAr	QHBTMF5050X0	Champ 525 V 50 Hz-50 kVAr 3 PH	54.99	12 X 48.1	1 N	1 N	17388.00
60 kVAr	QHBTMF5060X0	Champ 525 V 50 Hz-60 kVAr 3 PH	65.98	12 X 57.7	1 N	1 N	20865.00

Champion - Super Heavy Duty (Double Dielectric) Square Capacitors

Rating kVAr	Item Code	Description	Ir A	C μ F	Standard Pack No of unit/s	Master Pack No of unit/s	Per Unit LP (₹)
Rated Voltage 440 Vac, 3ϕ, 50 Hz, Delta Connection							
1 kVAr	QHSTMC5001X0	Champion 440 V 50 Hz-1 kVAr 3 PH	1.31	3 X 5.5	1 N	24 N	728.00
2 kVAr	QHSTMC5002X0	Champion 440 V 50 Hz-2 kVAr 3 PH	2.62	3 X 11.0	1 N	1 N	1455.00
3 kVAr	QHSTMC5003X0	Champion 440 V 50 Hz-3 kVAr 3 PH	3.94	3 X 16.4	1 N	1 N	2183.00
4 kVAr	QHSTMC5004X0	Champion 440 V 50 Hz-4 kVAr 3 PH	5.25	3 X 21.9	1 N	1 N	2910.00
5 kVAr	QHSTMC5005X0	Champion 440 V 50 Hz-5 kVAr 3 PH	6.56	3 X 27.4	1 N	1 N	2408.00
6 kVAr	QHSTMC5006X0	Champion 440 V 50 Hz-6 kVAr 3 PH	7.87	3 X 32.9	1 N	1 N	2889.00
7.5 kVAr	QHSTMC5007X5	Champion 440 V 50 Hz-7.5 kVAr 3 PH	9.84	3 X 41.1	1 N	1 N	3611.00
8 kVAr	QHSTMC5008X0	Champion 440 V 50 Hz-8 kVAr 3 PH	10.5	3 X 43.8	1 N	1 N	3852.00
10 kVAr	QHSTMC5010X0	Champion 440 V 50 Hz-10 kVAr 3 PH	13.12	3 X 54.8	1 N	1 N	4815.00
12.5 kVAr	QHSTMC5012X5	Champion 440 V 50 Hz-12.5 kVAr 3 PH	16.40	3 X 68.5	1 N	1 N	6019.00
15 kVAr	QHSTMC5015X0	Champion 440 V 50 Hz-15 kVAr 3 PH	19.68	6 X 41.1	1 N	1 N	7223.00
20 kVAr	QHSTMC5020X0	Champion 440 V 50 Hz-20 kVAr 3 PH	26.24	6 X 54.8	1 N	1 N	9630.00
25 kVAr	QHSTMC5025X0	Champion 440 V 50 Hz-25 kVAr 3 PH	32.80	6 X 68.5	1 N	1 N	12038.00
30 kVAr	QHSTMC5030X0	Champion 440 V 50 Hz-30 kVAr 3 PH	39.37	12 X 41.1	1 N	1 N	15087.00
50 kVAr	QHSTMC5050X0	Champion 440 V 50 Hz-50 kVAr 3 PH	65.61	12 X 68.5	1 N	1 N	25145.00
75 kVAr	QHSTMC5075X0	Champion 440 V 50 Hz-75 kVAr 3 PH	98.41	18 X 68.5	1 N	1 N	37718.00
100 kVAr	QHSTMC5100X0	Champion 440 V 50 Hz-100 kVAr 3 PH	131.22	24 X 68.5	1 N	1 N	50290.00

Other Ratings on request

Champion - Super Heavy Duty (Double Dielectric) Square Capacitors

HSN Code: 8532

(IS: 13340 / IEC: 60831)

Rating kVAr	Item Code	Description	Ir A	C μ F	Standard Pack No of unit/s	Master Pack No of unit/s	Per Unit LP (₹)
Rated Voltage 480 Vac, 3ϕ, 50 Hz, Delta Connection							
5 kVAr	QHSTMD5005X0	Champion 480 V 50 Hz-5 kVAr 3 PH	6.01	3 X 23.0	1 N	1 N	2408.00
6 kVAr	QHSTMD5006X0	Champion 480 V 50 Hz-6 kVAr 3 PH	7.22	3 X 27.6	1 N	1 N	2889.00
7.5 kVAr	QHSTMD5007X5	Champion 480 V 50 Hz-7.5 kVAr 3 PH	9.02	3 X 34.5	1 N	1 N	3611.00
10 kVAr	QHSTMD5010X0	Champion 480 V 50 Hz-10 kVAr 3 PH	12.03	3 X 46.0	1 N	1 N	4815.00
12.5 kVAr	QHSTMD5012X5	Champion 480 V 50 Hz-12.5 kVAr 3 PH	15.04	3 X 57.6	1 N	1 N	6019.00
15 kVAr	QHSTMD5015X0	Champion 480 V 50 Hz-15 kVAr 3 PH	18.04	6 X 34.5	1 N	1 N	7223.00
20 kVAr	QHSTMD5020X0	Champion 480 V 50 Hz-20 kVAr 3 PH	24.06	6 X 46.0	1 N	1 N	9630.00
25 kVAr	QHSTMD5025X0	Champion 480 V 50 Hz-25 kVAr 3 PH	30.07	6 X 57.6	1 N	1 N	12038.00
30 kVAr	QHSTMD5030X0	Champion 480 V 50 Hz-30 kVAr 3 PH	36.09	12 X 34.5	1 N	1 N	14766.00
50 kVAr	QHSTMD5050X0	Champion 480 V 50 Hz-50 kVAr 3 PH	60.14	12 X 57.6	1 N	1 N	24610.00
60 kVAr	QHSTMD5060X0	Champion 480 V 50 Hz-60 kVAr 3 PH	72.18	18 X 46.0	1 N	1 N	29532.00
Rated Voltage 525 Vac, 3ϕ, 50 Hz, Delta Connection							
5 kVAr	QHSTMF5005X0	Champion 525 V 50 Hz-5 kVAr 3 PH	5.50	3 X 19.2	1 N	1 N	2488.00
6 kVAr	QHSTMF5006X0	Champion 525 V 50 Hz-6 kVAr 3 PH	6.60	3 X 23.1	1 N	1 N	2985.00
7.5 kVAr	QHSTMF5007X5	Champion 525 V 50 Hz-7.5 kVAr 3 PH	8.25	3 X 28.9	1 N	1 N	3732.00
10 kVAr	QHSTMF5010X0	Champion 525 V 50 Hz-10 kVAr 3 PH	11.00	3 X 38.5	1 N	1 N	4976.00
12.5 kVAr	QHSTMF5012X5	Champion 525 V 50 Hz-12.5 kVAr 3 PH	13.75	3 X 48.1	1 N	1 N	6219.00
15 kVAr	QHSTMF5015X0	Champion 525 V 50 Hz-15 kVAr 3 PH	16.50	6 X 28.9	1 N	1 N	7463.00
20 kVAr	QHSTMF5020X0	Champion 525 V 50 Hz-20 kVAr 3 PH	21.99	6 X 38.5	1 N	1 N	9951.00
25 kVAr	QHSTMF5025X0	Champion 525 V 50 Hz-25 kVAr 3 PH	27.49	6 X 48.1	1 N	1 N	12439.00
30 kVAr	QHSTMF5030X0	Champion 525 V 50 Hz-30 kVAr 3 PH	33.00	12 X 28.9	1 N	1 N	15312.00
50 kVAr	QHSTMF5050X0	Champion 525 V 50 Hz-50 kVAr 3 PH	54.99	12 X 48.1	1 N	1 N	25520.00
60 kVAr	QHSTMF5060X0	Champion 525 V 50 Hz-60 kVAr 3 PH	66.00	18 X 38.5	1 N	1 N	30623.00

UHDXL - Ultra Heavy Duty APP Capacitors

HSN Code: 8532

(IS: 13585 / IEC: 60931)

Havells make UHDXL Capacitors are APP type and conforms to IS -13585 & IEC -60931. These capacitors are manufactured by double thickness double fold hazy polypropylene film as dielectric. Independent Aluminium foil is used to form electrode and imported high grade oil is used as impregnating and cooling agent. Inbuilt fuses ensures higher extra reliability and offers everlasting safety mechanism. Brass terminals are used for interconnection of the bank.

Rating kVAr	Cat. Code	Description	Per Unit LP (₹)
Available in Voltage 440 V / 480 V / 525 Vac, 3ϕ, 50 Hz, Delta Connection			
5 kVAr to 15 kVAr	QHQAMC*	Ultra Heavy Duty Cap - APP - 440 V UHDXL	580.00
20 kVAr to 50 kVAr			560.00
5 kVAr to 15 kVAr	QHQAMD*	Ultra Heavy Duty Cap - APP - 480 V UHDXL	610.00
20 kVAr to 50 kVAr			590.00
5 kVAr to 15 kVAr	QHQAMF*	Ultra Heavy Duty Cap - APP - 525 V UHDXL	620.00
20 kVAr to 50 kVAr			600.00

Other Ratings on request

UXDXL - Ultra Heavy Duty Mixed Dielectric

Rating kVAr	Cat. Code	Description	Per Unit LP (₹)
Available in Voltage 440 V / 480 V / 525 Vac, 3ϕ, 50 Hz, Delta Connection			
1 kVAr to 100 kVAr		Ultra Heavy Duty Capacitor - Mixed Dielectric UXDXL	Price on request



Reactive Power Solution for Solar Applications



Solar Smartcap Series

HD Harmonic Detuned Reactor

In a practical network, XL is contributed by the transformers and line inductances and XC is contributed by the PF capacitors. Hence for any industry with power factor correction capacitors installed, there is a possibility of resonance, due to one of the following reasons:

- Parallel resonance within a given electrical system, involving internally generated harmonics and resonance between local capacitors and the predominantly inductive supply (transformers)
- Series resonance between external harmonics (in the supply system and capacitors within electrical system)
- Interactive resonance between different harmonics filters within a given electrical network.

Addition of detuned reactors (in series to capacitors) forcefully shifts the resonant frequency to a safer level. For example, combination of capacitor and 7% detuned filter reactor has the resonance frequency of 189 Hz, which will avoid resonance with 5th harmonic and above.

Range:

- Effective Reactor output 1 kVAr to 100 kVAr
- Available in: Copper & Aluminium
- Detuning Factor: 5.67%, 7% and 14% corresponding to tuning Frequencies of 210 Hz, 189 Hz and 133 Hz for the base of 50 Hz
- Rated Voltage: 200 V, 440 V, 690 V, 800 V
- linearity : 185% to 225% of I_n

Features:

- High linearity 185% to 225%
- Insulation Class H
- High harmonic loading capability
- Temperature protection - NC contact (UL Approved)
- Long expected life time
- Low noise & very low losses
- IEC 61558



HD Harmonic Detuned Reactor

Rating kVAr	Cat. Code	Description	Per Unit LP (₹)
Rated Voltage 440 Vac, F = 50 Hz, P = 7% (Fr = 189 Hz) / Linearity: L > 0.95 Lr for current up to 1.85 . I1 (Aluminium)			
1 kVAr	QHLTLCV001X0	H. D.- REACTOR, 7% , 01 kVAr 440 Vac	3301.00
2 kVAr	QHLTLCV002X0	H. D.- REACTOR, 7% , 02 kVAr 440 Vac	4117.00
3 kVAr	QHLTLCV003X0	H. D.- REACTOR, 7% , 03 kVAr 440 Vac	4934.00
4 kVAr	QHLTLCV004X0	H. D.- REACTOR, 7% , 04 kVAr 440 Vac	5242.00
5 kVAr	QHLTLCV005X0	H. D.- REACTOR, 7% , 05 kVAr 440 Vac	5635.00
10 kVAr	QHLTLCV010X0	H. D.- REACTOR, 7% , 10 kVAr 440 Vac	8000.00
12.5 kVAr	QHLTLCV012X5	H. D.- REACTOR, 7% , 12.5 kVAr 440 Vac	8777.00
15 kVAr	QHLTLCV015X0	H. D.- REACTOR, 7% , 15 kVAr 440 Vac	9389.00
20 kVAr	QHLTLCV020X0	H. D.- REACTOR, 7% , 20 kVAr 440 Vac	11186.00
25 kVAr	QHLTLCV025X0	H. D.- REACTOR, 7% , 25 kVAr 440 Vac	11838.00
50 kVAr	QHLTLCV050X0	H. D.- REACTOR, 7% , 50 kVAr 440 Vac	20758.00
75 kVAr	QHLTLCV075X0	H. D.- REACTOR, 7% , 75 kVAr 440 Vac	27779.00
100 kVAr	QHLTLCV100X0	H. D.- REACTOR, 7% , 100 kVAr 440 Vac	35630.00
Rated Voltage 440 Vac, F = 50 Hz, P = 7% (Fr = 189 Hz) / Linearity: L > 0.95 Lr for current up to 1.85 . I1 (Copper)			
1 kVAr	QHCTLCV001X0	H. D.- REACTOR, 7% , 01 kVAr 440 Vac	4195.00
2 kVAr	QHCTLCV002X0	H. D.- REACTOR, 7% , 02 kVAr 440 Vac	4733.00
3 kVAr	QHCTLCV003X0	H. D.- REACTOR, 7% , 03 kVAr 440 Vac	5416.00
4 kVAr	QHCTLCV004X0	H. D.- REACTOR, 7% , 04 kVAr 440 Vac	6394.00
5 kVAr	QHCTLCV005X0	H. D.- REACTOR, 7% , 05 kVAr 440 Vac	7031.00
10 kVAr	QHCTLCV010X0	H. D.- REACTOR, 7% , 10 kVAr 440 Vac	11054.00
12.5 kVAr	QHCTLCV012X5	H. D.- REACTOR, 7% , 12.5 kVAr 440 Vac	12252.00
15 kVAr	QHCTLCV015X0	H. D.- REACTOR, 7% , 15 kVAr 440 Vac	13570.00
20 kVAr	QHCTLCV020X0	H. D.- REACTOR, 7% , 20 kVAr 440 Vac	16071.00
25 kVAr	QHCTLCV025X0	H. D.- REACTOR, 7% , 25 kVAr 440 Vac	17085.00
50 kVAr	QHCTLCV050X0	H. D.- REACTOR, 7% , 50 kVAr 440 Vac	28080.00
75 kVAr	QHCTLCV075X0	H. D.- REACTOR, 7% , 75 kVAr 440 Vac	40887.00

Note: *5.67% & 14% reactors are available on request

Thyristor Switch

Rating in kVAr	Description	Per Unit LP (₹)
5 kVAr	High PIV Thyristor	Price on Request
10 kVAr	High PIV Thyristor	
12.5 kVAr	High PIV Thyristor	
15 kVAr	High PIV Thyristor	
20 kVAr	High PIV Thyristor	
25 kVAr	High PIV Thyristor	
50 kVAr	High PIV Thyristor	
100 kVAr	High PIV Thyristor	



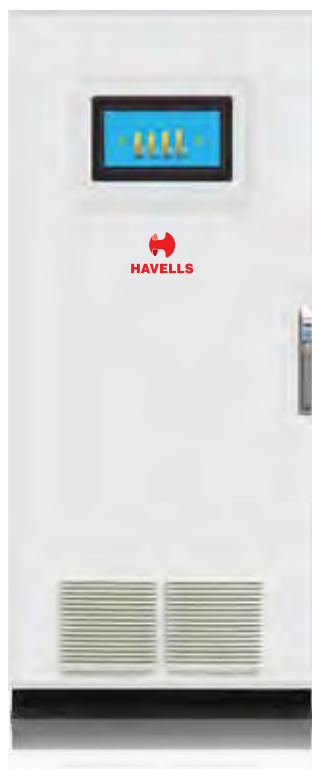
Consulting, Optimizing & Delivering Performance

Power Solutions - Havells



Active Harmonic Filter and Load Balancer (NEW)

HSN Code: 8543



Rating in Ampere	Cat No.	Description	Per Unit LP (₹)
10 A		10 A / 415 AHF Panel	80000.00
20 A		20 A / 415 AHF Panel	160000.00
30 A		30 A / 415 AHF Panel	240000.00
50 A		50 A / 415 AHF Panel	400000.00
75 A		75 A / 415 AHF Panel	600000.00
100 A		100 A / 415 AHF Panel	800000.00
125 A		125 A / 415 AHF Panel	1000000.00
150 A		150 A / 415 AHF Panel	1200000.00
200 A		200 A / 415 AHF Panel	1600000.00
250 A		250 A / 415 AHF Panel	2000000.00
300 A		300 A / 415 AHF Panel	2400000.00
400 A		400 A / 415 AHF Panel	3200000.00
500 A		500 A / 415 AHF Panel	4000000.00

IEEE 519-2014 Guidelines for Harmonics Limits

Recommended Current Harmonics Limits:

Table 2 - Current distortion limits for systems rated 120 V through 69 kV

Maximum harmonic current distortion in percent of I_L						
Individual harmonic order (odd harmonics) ^{a, b}						
I_{sc}/I_L	$3 \leq h < 11$	$11 \leq h < 17$	$17 \leq h < 23$	$23 \leq h < 35$	$35 \leq h \leq 50$	TDD
<20	4.0	2.0	1.5	0.6	0.3	5.0
20<50	7.0	3.5	2.5	1.0	0.5	8.0
50<100	10.0	4.5	4.0	1.5	0.7	12.0
100<1000	12.0	5.5	5.0	2.0	1.0	15.0
>1000	15.0	7.0	6.0	2.5	1.4	20.0



Broad Band Filters are the most effective solutions specially for Variable Frequency Drive Applications for the purpose of blocking harmonics and safe operation of the system.

Broad Band Filter and Hybrid PQ Manager

Range	Per Unit LP (₹)
0.5 kW to 1000 kW (Broad Band Filter)	Price on request
10 kVAr to 3000 kVAr (Hybrid PQ Manager)	Price on request



HAVELLS

Agricultural Duty Capacitor



- Range: 1 kVAR to 15 kVAR
- Voltage: 415 V
- MPP SH, Resin filled
- Low watt loss

Note: For Agricultural use only.

Agri Boost - Normal Duty Cylindrical Capacitors for Agriculture Applications



HSN Code: 8532
(IS: 13340)

Rating kVAr	Item Code	Description	I _r A	C μF	Standard Pack No of unit/s	Master Pack No of unit/s	Per Unit LP (₹)
Rated Voltage 415 Vac, 3φ, 50 Hz, Delta Connection							
1 kVAr	QHATCB5001X0	AGRI BOOST ND 415 V 50 Hz-1 kVAr 3 PH	1.39 A	3 x 6.2	1 N	16 N	221.00
2 kVAr	QHATCB5002X0	AGRI BOOST ND 415 V 50 Hz-2 kVAr 3 PH	2.78 A	3 x 12.3	1 N	16 N	258.00
3 kVAr	QHATCB5003X0	AGRI BOOST ND 415 V 50 Hz-3 kVAr 3 PH	4.17 A	3 x 18.5	1 N	16 N	387.00
4 kVAr	QHATCB5004X0	AGRI BOOST ND 415 V 50 Hz-4 kVAr 3 PH	5.56 A	3 x 24.6	1 N	16 N	517.00
5 kVAr	QHATCB5005X0	AGRI BOOST ND 415 V 50 Hz-5 kVAr 3 PH	6.96 A	3 x 30.8	1 N	16 N	646.00
6 kVAr	QHATCB5006X0	AGRI BOOST ND 415 V 50 Hz-6 kVAr 3 PH	8.35 A	3 x 37.0	1 N	16 N	775.00
7.5 kVAr	QHATCB5007X5	AGRI BOOST ND 415 V 50 Hz-7.5 kVAr 3 PH	10.43 A	3 x 46.2	1 N	16 N	969.00
8 kVAr	QHATCB5008X0	AGRI BOOST ND 415 V 50 Hz-8 kVAr 3 PH	11.13 A	3 x 49.3	1 N	16 N	1033.00
10 kVAr	QHATCB5010X0	AGRI BOOST ND 415 V 50 Hz-10 kVAr 3 PH	13.91 A	3 x 61.6	1 N	16 N	1292.00
12.5 kVAr	QHATCB5012X5	AGRI BOOST ND 415 V 50 Hz-12.5 kVAr 3 PH	17.39 A	3 x 77.0	1 N	8 N	1614.00
15 kVAr	QHATCB5015X0	AGRI BOOST ND 415 V 50 Hz-15 kVAr 3 PH	20.87 A	3 x 92.4	1 N	8 N	1937.00

Other Ratings on request

Hercules - Normal Duty Single Phase Cylindrical Capacitors



HSN Code: 8532
(IS: 13340)

Rating kVAr	Item Code	Description	I _r A	C μF	Standard Pack No of unit/s	Master Pack No of unit/s	Per Unit LP (₹)
Rated Voltage 250 Vac, 1φ, 50 Hz							
1 kVAr	QHNSCS5001X0	HERCULES 250 V 50 Hz-1 kVAr 1 PH	4.00 A	50.92	1 N	16 N	270.00
2 kVAr	QHNSCS5002X0	HERCULES 250 V 50 Hz-2 kVAr 1 PH	8.00 A	101.84	1 N	16 N	444.00
3 kVAr	QHNSCS5003X0	HERCULES 250 V 50 Hz-3 kVAr 1 PH	12.00 A	152.76	1 N	16 N	668.00
4 kVAr	QHNSCS5004X0	HERCULES 250 V 50 Hz-4 kVAr 1 PH	16.00 A	203.68	1 N	16 N	893.00
5 kVAr	QHNSCS5005X0	HERCULES 250 V 50 Hz-5 kVAr 1 PH	16.00 A	254.61	1 N	16 N	1118.00
Rated Voltage 415 Vac, 1φ, 50 Hz							
1 kVAr	QHNSCB5001X0	HERCULES 415 V 50 Hz-1 kVAr 1 PH	2.41 A	18.48	1 N	16 N	270.00
2 kVAr	QHNSCB5002X0	HERCULES 415 V 50 Hz-2 kVAr 1 PH	4.62 A	36.96	1 N	16 N	444.00
3 kVAr	QHNSCB5003X0	HERCULES 415 V 50 Hz-3 kVAr 1 PH	7.23 A	55.44	1 N	16 N	668.00
4 kVAr	QHNSCB5004X0	HERCULES 415 V 50 Hz-4 kVAr 1 PH	9.64 A	73.92	1 N	16 N	893.00
5 kVAr	QHNSCB5005X0	HERCULES 415 V 50 Hz-5 kVAr 1 PH	12.05 A	92.40	1 N	16 N	1118.00
7.5 kVAr	QHNSCB5007X5	HERCULES 415 V 50 Hz-7.5 kVAr 1 PH	18.08 A	138.60	1 N	8 N	1674.00
10 kVAr	QHNSCB5010X0	HERCULES 415 V 50 Hz-10 kVAr 1 PH	24.10 A	184.80	1 N	8 N	2230.00

Other Products

ACB



Loadline & HIM MCCB Series



STV-Dx



Instaprime & Instaline ATS



APFC Panel



Power Capacitor



Active Harmonic Filter



Load Bank



HGS Controlgear



Submersible & Motor Starter



Euroload Changeover Switch



Switch Disconnecter Fuse



REGIONAL & BRANCH OFFICES:

NORTH - REGIONAL OFFICE: Corporate Office: QRG Towers, 2D, Sector-126, Expressway, Noida-201304, Tel: 0120-3331000, Delhi: 011-47676700, 23888200, Chandigarh: 0172-4232400-401, Dehradun: 0135-6670202, Haldwani: 05946-222935/222933, Noida / Haryana: 0120-3331000, Ludhiana: 0161-4676000/24, Amritsar: 0183-5202400/401, Jammu: 0191-2478330, 2479330, Sri Nagar: 0194-2459248, Jaipur: 0141-4211000, 4211011, Jodhpur: 9214201640/41, Lucknow: 0522-4921600/4921649, Kanpur: 0512-6710400

EAST - REGIONAL OFFICE: Kolkata: ICC Tower, 5th Floor, 4 India Exchange Place, Kolkata-700001, Tel: 033-40129851/52, Bhubaneswar: 0674-6668101/102/103/104, Guwahati: 0361-2458923, 2134521, Siliguri: 0353-2525907, Ranchi: 0651-2244861, 2244862, 2244864, 2244868, 2244869, Jamshedpur: 0657-6542492, 09234369436, Patna: 0612-2207221, 2207222, 2207223, 2655518

WEST - REGIONAL OFFICE: 1271, Solitaire Corporate Park, Bldg. No. 12, 7th Floor, Andheri - Ghatkopar Link Road, Chakala, Andheri (East), Mumbai- 400093. Tel: 022 - 67298600-602, Ahmedabad: 079-40061111, 40060738/740, Indore: 0731-4219444/4219422, 0731-2572340, Rajkot: 0281-2481112, 2921212, Nagpur: 0712-2240932, 2242692, 2242699 Pune: 020-26056175-76, Raipur: 0771-4243400/01, Surat: 0261-2350137, 9979890137, Jabalpur: 0761-4064491, Bhopal: 0755-4271544, 0755-4011025,

SOUTH - REGIONAL OFFICE: Chennai: Sigapi Achi Building, No. 18 / 3, 6th Floor, Rukmani Lakshmiipathy Road, Egmore, Chennai-600008, Tel: 044-42280600, 605, Bangalore: 080-49075000, Coimbatore: 0422-4550200/282, Hyderabad: 040-27533372, 27533355, 27533632, Cochin: 0484-4099000, Calicut: 0495-4019193/4/5, Trivandrum: 0471-4015323, Vizag: 0891-6514339, Vijayawada: 0866-2546161/62/67/68/69, Madurai: 0452-4267000, Hubli: 0836-4248660, Trichy: 0431-4041005/06

Representative Offices: • Goa • Solapur • Gwalior • Kathmandu • Bhopal • Kolapur • Vadodara

Warranty Policy:

All the products listed in the price list carry a warranty, against manufacturing defects for a period of 18* months from the date of purchase / 12 months from the date of commissioning, whichever is earlier.

*Proof of purchase to be retained to avail warranty.

Terms & Conditions

- Prices are in Indian ₹.
- This Price List supersedes all our previous Price Lists.
- Prices are subject to change without notice.
- Company reserves the right to issue amendments, which may arise due to any errors in the price list.

Actual products may vary in colour, design, description and colour combination etc. Although every effort has been made to ensure accuracy in the compilation of the technical detail within this publication. Specifications & performance data are constantly changing.

*Copyright Subsists. Imitation of trade dress, graphics and color scheme of this document is a punishable offence."



Scan the QR Code to download Havells mCatalogue

Havells India Ltd.

Corp Office: QRG Towers, 2D, Sector-126, Expressway, Noida-201304 (U.P.)
 Ph. +91-120-3331000, Email:marketing@havells.com, www.havells.com
 Customer Care No.: 08045 77 1313
 Join us on Facebook at www.facebook.com/havells and share your ways to save planet!
 CIN - L31900DL1983PLC016304



HAVELLS

ZHIPL00021/Feb 21/JULY 21