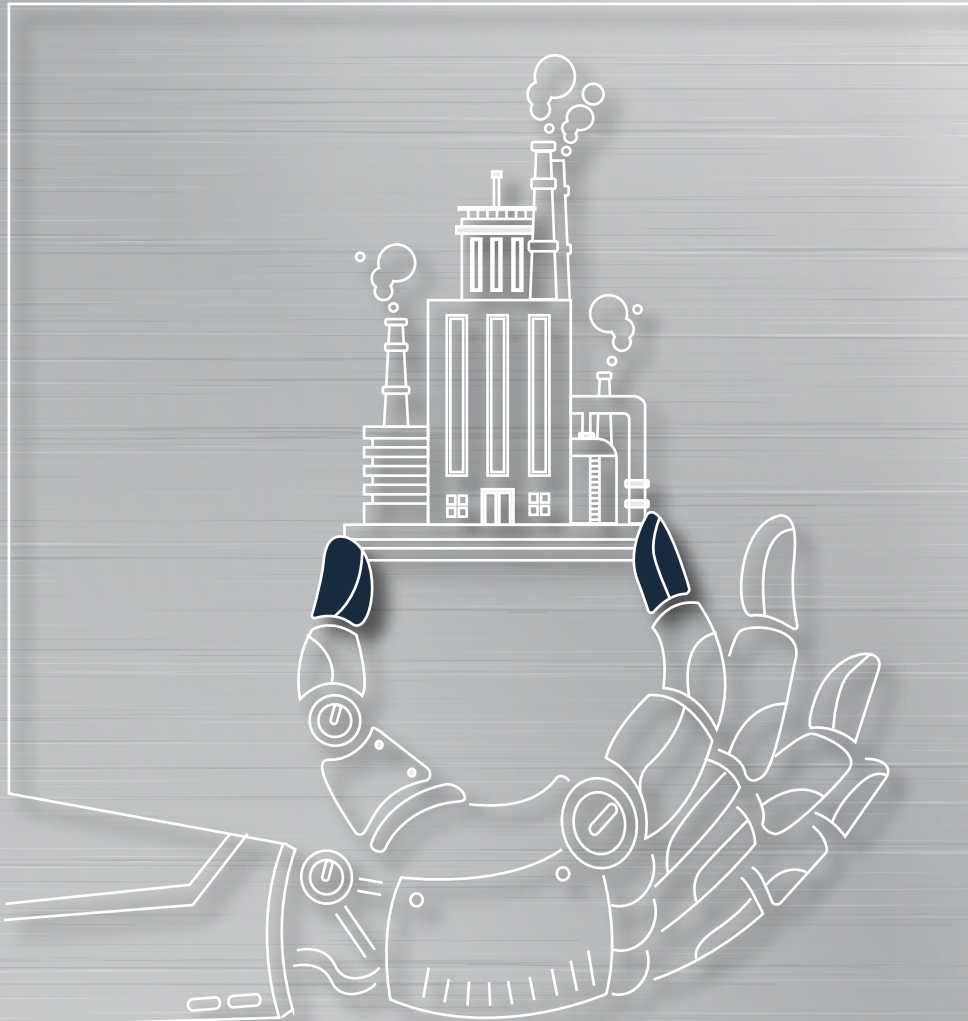




HAVELLS



LV SWITCHGEAR CONTROLGEAR & POWER QUALITY SOLUTIONS

Pricelist w.e.f. 15th April, 2022

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

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Fully Automated Plant



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
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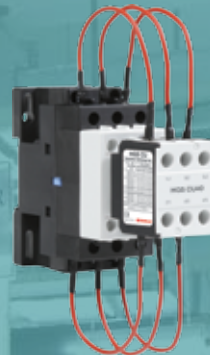
HGS - Trusted Global Range

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*	938.00
	9 A	4 kW	5.0 HP	25 A	3	0	1	HGS 9	IHPHA009101*	938.00
	12 A	5.5 kW	7.5 HP	30 A	3	1	0	HGS 12	IHPHA012110*	1092.00
	12 A	5.5 kW	7.5 HP	30 A	3	0	1	HGS 12	IHPHA012101*	1092.00
	18 A	9 kW	12.5 HP	40 A	3	1	0	HGS 18	IHPHA018110*	1265.00
	18 A	9 kW	12.5 HP	40 A	3	0	1	HGS 18	IHPHA018101*	1265.00
2	25 A	11 kW	15 HP	45 A	3	1	0	HGS 25	IHPHA025210*	1588.00
	25 A	11 kW	15 HP	45 A	3	0	1	HGS 25	IHPHA025201*	1588.00
	32 A	15 kW	20 HP	55 A	3	1	0	HGS 32	IHPHA032210*	3348.00
	32 A	15 kW	20 HP	55 A	3	0	1	HGS 32	IHPHA032201*	3348.00
	40 A	22 kW	30 HP	60 A	3	1	0	HGS 40	IHPHA040210*	4991.00
	40 A	22 kW	30 HP	60 A	3	0	1	HGS 40	IHPHA040201*	4991.00
3	50 A	25 kW	35 HP	70 A	3	2	2	HGS 50	IHPHA050300*	6744.00
	65 A	37 kW	50 HP	85 A	3	2	2	HGS 65	IHPHA065300*	8444.00
4	75 A	45 kW	60 HP	110 A	3	2	2	HGS 75	IHPHA075400*	10110.00
	85 A	45 kW	60 HP	125 A	3	2	2	HGS 85	IHPHA085400*	11917.00
	100 A	45 kW	60 HP	135 A	3	2	2	HGS 100	IHPHA100400*	17180.00
5	115 A	59 kW	75 HP	160 A	3	2	2	HGS 115	IHPHA115500*	20647.00
	130 A	75 kW	100 HP	180 A	3	2	2	HGS 130	IHPHA130500*	21255.00
	150 A	80 kW	100 HP	210 A	3	2	2	HGS 150	IHPHA150500*	25909.00
6	185 A	100 kW	135 HP	275 A	3	2	2	HGS 185	IHPHA185600*	29965.00
	225 A	110 kW	150 HP	315 A	3	2	2	HGS 225	IHPHA225600*	32570.00
	265 A	132 kW	180 HP	350 A	3	2	2	HGS 265	IHPHA265600*	36660.00
7	300 A	150 kW	200 HP	400 A	3	2	2	HGS 300	IHPHA300700*	45021.00
	400 A	220 kW	300 HP	500 A	3	2	2	HGS 400	IHPHA400700*	56296.00
	500 A	280 kW	380 HP	550 A	3	2	2	HGS 500	IHPHA500700*	81099.00
8	630 A	375 kW	500 HP	750 A	3	2	2	HGS 630	IHPHA630800*	126520.00
	800 A	450 kW	610 HP	900 A	3	2	2	HGS 800	IHPHA800800*	204134.00



*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	Auxilliary 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*	21255.00
	150 A	80 kW	100 HP	210 A	3	2	2	HGS 150	IHPHA150500*	25909.00
6	185 A	100 kW	135 HP	275 A	3	2	2	HGS 185	IHPHA185600*	29965.00
	225 A	110 kW	150 HP	315 A	3	2	2	HGS 225	IHPHA225600*	32570.00
	265 A	132 kW	180 HP	350 A	3	2	2	HGS 265	IHPHA265600*	36660.00
7	300 A	150 kW	200 HP	400 A	3	2	2	HGS 300	IHPHA300700*	45021.00
	400 A	220 kW	300 HP	500 A	3	2	2	HGS 400	IHPHA400700*	56296.00
	500 A	280 kW	380 HP	550 A	3	2	2	HGS 500	IHPHA500700*	81099.00
8	630 A	375 kW	500 HP	750 A	3	2	2	HGS 630	IHPHA630800*	126520.00
	800 A	450 kW	610 HP	900 A	3	2	2	HGS 800	IHPHA800800*	204134.00



*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 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*	1124.00	2NO + 2NC	IHPHC016122*	1239.00
	20	4NO	IHPHC020100*	1150.00	2NO + 2NC	IHPHC020122*	1265.00
	25	4NO	IHPHC025100*	1240.00	2NO + 2NC	IHPHC025122*	1405.00
	32	4NO	IHPHC032100*	1271.00	2NO + 2NC	IHPHC032122*	1455.00
Frame 2	40	4NO	IHPHC040100*	1918.00	2NO + 2NC	IHPHC040122*	2071.00
	50	4NO	IHPHC050200*	2505.00	2NO + 2NC	IHPHC050222*	2807.00
	60	4NO	IHPHC060200*	4777.00	2NO + 2NC	IHPHC060222*	5356.00



*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 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*	905.00	POR
		3	1	HGR 31	IHHAC31*	905.00	
		4	0	HGR 40	IHHAC40*	905.00	
		0	4	HGR 04	IHHAC04*	905.00	
		1	3	HGR 13	IHHAC13*	905.00	

*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 Coil

Material	Material description	Per Unit LP (₹) with DC Coil
IHPHF009100*	9A 2P HGS Contactor	754.00
IHPHF012100*	12A 2P HGS Contactor	823.00
IHPHF016100*	16A 2P HGS Contactor	842.00
IHPHF018100*	18A 2P HGS Contactor	869.00
IHPHF025200*	25A 2P HGS Contactor	968.00
IHPHF032200*	32A 2P HGS Contactor	1062.00
IHPHF040200*	40A 2P HGS Contactor	1100.00
IHPHF065310*	60A 2P HGS Contactor	3410.00

Coil Voltage Selection Table (3)

HGS 2 Pole Contactor

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



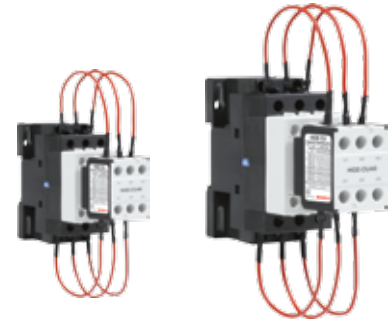
Magnetic Contactor

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*	1959.00
3 kVAr	0	1	IHPHE003101*	1959.00
5 kVAr	1	0	IHPHE005110*	2055.00
5 kVAr	0	1	IHPHE005101*	2055.00
10 kVAr	1	0	IHPHE010110*	2489.00
10 kVAr	0	1	IHPHE010101*	2489.00
12.5 kVAr	1	0	IHPHE12X110*	2811.00
12.5 kVAr	0	1	IHPHE12X101*	2811.00
15 kVAr	1	0	IHPHE015110*	3442.00
15 kVAr	0	1	IHPHE015101*	3442.00
20 kVAr	1	0	IHPHE020210*	3784.00
20 kVAr	0	1	IHPHE020201*	3784.00
25 kVAr	1	0	IHPHE025210*	4316.00
25 kVAr	0	1	IHPHE025201*	4316.00
33.3 kVAr	1	0	IHPHE33X210*	6256.00
33.3 kVAr	0	1	IHPHE33X201*	6256.00
40 kVAr	2	2	IHPHE040322*	11597.00
50 kVAr	2	2	IHPHE050422*	12065.00
66 kVAr	2	2	IHPHE066422*	14159.00



*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- tion	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	30	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	586.00
		HGS50-HGS 100		ISSPCU1970	
		HGS115- HGS 800		ISSPCU1971	693.00
Aux Contact Block (Top Mounting)	2 NC	HGS9-HGS100	HGS TB	ISSPCU1961	366.00
	1 NO+1NC			ISSPCU1962	
	2 NO			ISSPCU1963	
	4NC			ISSPCU1964	605.00
	1 NO+3NC			ISSPCU1965	
	2NO +2 NC			ISSPCU1966	
	3NO+1NC			ISSPCU1967	
	4NO			ISSPCU1968	
Mechanical Interlock Unit		HGS 9-HGS 40	HGS MIU	ISSPCU1972	794.00
		HGS50-HGS 100		ISSPCU1973	1866.00
		HGS115- HGS 265		ISSPCU1974	3301.00
		HGS 300- HGS 800		ISSPCU1975	3743.00
Mechanical Latching Block (Top Mounting)	220 V AC	HGS 9-HGS 100	HGS MLB	ISSPCU1976	1871.00
Electronic Timer (Top Mounting)		HGS 9-HGS 100	HGS ET	ISSPCU1977	2530.00
Surge Absorber		HGS 9-HGS 100	HGS SA	ISSPCU1984	1595.00
Clamping Diode		HGS 9-HGS 100	HGS CD	ISSPCU1978	794.00



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	491.00
	110 V			ISSPCU1987	
	240 V			ISSPCU1989	
	415 V			ISSPCU2050	
	150 V-300 V			ISSPCU2215	
	260 V-440 V	ISSPCU2134			
	24 V	HGS 25-HGS 40	AC	ISSPCU1993	
	110 V			ISSPCU1995	
	240 V			ISSPCU1997	
	415 V			ISSPCU2053	
	150 V-300 V			ISSPCU2216	
	260 V-440 V	ISSPCU2135			
	24 V	HGS 50-HGS 65	AC	ISSPCU2001	1604.00
	110 V			ISSPCU2003	
	240 V			ISSPCU2005	
	415 V			ISSPCU2007	
	260 V-440 V			ISSPCU2136	
	24 V	HGS 75-HGS 100	AC	ISSPCU2009	
	110 V			ISSPCU2011	
	240 V			ISSPCU2013	
	415 V			ISSPCU2015	
	260 V-440 V			ISSPCU2137	
	24 Vac-26 Vac, 24 Vdc	HGS 115-HGS 150	AC/DC Universal	On Request	5000.00
	100 Vac-240 Vac				
	100 Vac -220 Vdc				
	380 Vac-450 Vac	HGS 185-HGS 265	AC/DC Universal	ISSPCU1980	On Request
	24 Vac-26 Vac, 24 Vdc				7080.00
	100 Vac-240 Vac				On Request
	100 Vdc -220 Vdc	HGS 300-HGS 500	AC/DC Universal	ISSPCU1981	9206.00
	380 Vac-450 Vac				On Request
100 Vac-240 Vac	On Request				
100 Vdc -220 Vdc	HGS 630-HGS 800	AC/DC Universal	On Request	On Request	
380 Vac-450 Vac				On Request	
110 Vac-127 Vac				18877.00	
100 Vdc -110 Vdc				On Request	
200 Vac-240 Vac	HGS 9-HGS 100	DC	On Request	On Request	
200 Vdc -220 Vdc					
380 Vac-450 Vac					
24 V	Control Coil -HGSD	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 In 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	2250.00
IHHMPBB2B0	MPCB HGSM 0.16 A - 0.25 A 100 kA	2250.00
IHHMPBC2D0	MPCB HGSM 0.25 A - 0.4 A 100 kA	2250.00
IHHMPBD2E0	MPCB HGSM 0.4 A - 0.63 A 100 kA	2551.00
IHHMPBE2F0	MPCB HGSM 0.63 A - 1 A 100 kA	2551.00
IHHMPBF2G0	MPCB HGSM 1 A - 1.6 A 100 kA	2571.00
IHHMPBG2R0	MPCB HGSM 1.6 A - 2.5 A 100 kA	2571.00
IHHMPBH2I0	MPCB HGSM 2.5 A - 4 A 100 kA	2663.00
IHHMPBJ2J0	MPCB HGSM 4 A - 6.3 A 100 kA	2663.00
IHHMPBK2K0	MPCB HGSM 6.3 A - 10 A 100 kA	2847.00
IHHMPBL2L0	MPCB HGSM 9 A - 14 A 15 kA	3206.00
IHHMPBN2M0	MPCB HGSM 13 A - 18 A 15 kA	3652.00
IHHMPBQ2T0	MPCB HGSM 17 A - 23 A 15 kA	3841.00
IHHMPBS2N0	MPCB HGSM 20 A - 25 A 15 kA	3841.00
IHHMPBT2P0	MPCB HGSM 24 A - 32 A 10 kA	6703.00

*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	1530.00
	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	1557.00
	12 A - 18 A			IHHR13CT	1709.00



Thermal Over Load Relay - HGST Series

IEC 60947 | CE | KERI | CB | Mairne Approvals (7s)

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	1709.00	
	8 A - 12.0 A			IHHR23CR		
	12 A - 18 A			IHHR23CT		
	15 A - 22 A			IHHR23CU		
	17 A - 25 A			IHHR23CV		1913.00
	22 A - 32 A			IHHR23CW		2415.00
	28 A - 40 A			IHHR23CX		2507.00
3	7 A - 10.0 A	HGS50 HGS65	HGST65	IHHR33CQ	2996.00	
	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		
	28 A - 40 A			IHHR33CX		3548.00
	34 A - 50 A			IHHR33CY		4225.00
	45 A - 65 A			IHHR33C1		4225.00
4	17 A - 25 A	HGS75 HGS85 HGS100	HGST100	IHHR43CV	3478.00	
	22 A - 32 A			IHHR43CW		
	28 A - 40 A			IHHR43CX		
	34 A - 50 A			IHHR43CY		
	45 A - 65 A			IHHR43C1		4399.00
	52 A - 75 A			IHHR43C2		4904.00
	59 A - 85 A			IHHR43C3		4904.00
	70 A - 100 A			IHHR43C4		4904.00
5	48 A - 80 A	HGS115 HGS130 HGS150	HGST150	IHHR53C5	7342.00	
	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	7889.00	
	69 A - 115 A			IHHR63C6		
	78 A - 130 A			IHHR63C7		
	90 A - 150 A			IHHR63C8		
	111 A - 185 A			IHHR63C9		8704.00
	135 A - 225 A			IHHR63C11		9577.00
	159 A - 265 A			IHHR63C12		9577.00
7	90 A - 150 A	HGS300 HGS400 HGS500	HGST500	IHHR73C8	9586.00	
	111 A - 185 A			IHHR73C9		
	135 A - 225 A			IHHR73C11		
	159 A - 265 A			IHHR73C12		
	180 A - 300 A			IHHR73C13		10501.00
	240 A - 400 A			IHHR73C14		12239.00
	300 A - 500 A			IHHR73C15		12239.00
8	378 A - 630 A	HGS630 HGS800	HGST800	IHHR83C16	26254.00	
	480 A - 800 A			IHHR83C17		



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	Contactors Rating	Overload Relay Range (A)	Item Code	Per Unit LP (₹)
0.75 HP	0.6 kW	12	1 A - 1.6 A	IHHDOLFA*E	3101.00
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	
10 HP	7.5 kW	18	13 A -18 A	IHHDOLNA*E	3723.00
15 HP	11.2 kW	32	18 A -25 A	IHHDOLPB*E	6012.00
20 HP	14.9 kW	32	22 A - 32 A	IHHDOLWB*	9674.00
25 HP	18.7 kW	40	28 A - 40 A	IHHDOLXB*	16012.00
30 HP	22.4 kW	50	34 A - 50 A	IHHDOLYC*	16901.00
40 HP	29.8 kW	65	45 A - 65 A	IHHDOL1C*	18765.00
50 HP	37.3 kW	85	59 A - 85 A	IHHDOL3D*	21761.00



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	Contactors Size	Overload Relay Range (A)	Item Code	Per Unit LP (₹)
10 HP	7.5 kW	18	8.0 A - 12 A	IHHASDRA*	11251.00
12.5 HP	9.3 kW	18	8.0 A - 12 A	IHHASDTA*	11405.00
15 HP	11 kW	25	12 A - 18.0 A	IHHASDTB*	11456.00
20 HP	15 kW	25	15 A - 22 A	IHHASDUB*	12019.00
25 HP	19 kW	32	17 A - 25 A	IHHASDVB*	14511.00
30 HP	22.5 kW	32	22 A - 32 A	IHHASDWB*	15833.00
35 HP	26 kW	32	28 A - 40 A	IHHASDXB*	23502.00
50 HP	37 kW	50	34 A - 50 A	IHHASDYC*	40130.00
60 HP	45 kW	50	45 A - 65 A	IHHASD1C*A	58889.00
75 HP	55 kW	65	45 A - 65 A	IHHASD1C*B	64778.00
90 HP	67.5 kW	85	59 A - 85 A	IHHASD3D*	75818.00
100 HP	75 kW	100	70 A - 100 A	IHHASD4D*	79548.00
125 HP	90 kW	115	78 A - 130 A	IHHASD7E*	109585.00
150 HP	110 kW	150	90 A - 150 A	IHHASD8E*	111161.00



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	Contactors Size	Overload Relay Range (A)	Item Code	Per Unit LP (₹)
2 HP	1.5 kW	18	2.8 A - 4.2 A	IHHREVKA*	10703.00
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*	14467.00
20 HP	14.9 kW	32	28 A - 40 A	IHHREVXB*	21700.00



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	Contactors 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*	32763.00
35 HP	26.1 kW	50.75	29.30	50	34 A - 50 A	IHHSSDYC*A	34716.00
40 HP	29.8 kW	58	33.49	65	34 A - 50 A	IHHSSDYC*B	38183.00
45 HP	33.6 kW	65.25	37.67	75	45 A - 65 A	IHHSSD1D*	47732.00
50 HP	37.5 kW	72.5	41.86	85	52 A - 75 A	IHHSSD2D*	52067.00



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	Contactors 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*	33705.00
35 HP	26.1 kW	50.75	29.30	50	34 A - 50 A	100 A	IHHSDYC*A	35695.00
40 HP	29.8 kW	58	33.49	65	34 A - 50 A	100 A	IHHSDYC*B	39228.00
45 HP	33.6 kW	65.25	37.67	75	45 A - 65 A	125 A	IHHSD1D*	48959.00
50 HP	37.5 kW	72.5	41.86	85	52 A - 75 A	125 A	IHHSD2D*	53376.00














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	150.00		Start Push Button
Stop Push Button - Red	ICELL00003	151.00		Stop Push Button
Motor ON Indicating Light-Green	ICELKL00015	246.00		Motor ON Indicating
Motor Trip Indicating Light-Yellow	ICELKL00013	246.00		Motor Trip Indicating
SPP	ISCELXL00063	2594.00		SPP
Combined Voltmeter & Ammeter	ISCELMX0007	1013.00		AV Meter
Terminal Block 6 way	ICELPSMX001	378.00		TB 6 Way
Terminal Block 3 way	ICELPSMX002	227.00		TB 3 Way
VOLT.SEL SW. C/G	ICELQL00021	353.00		Volt Sel Switch
Timer	ICELRPSL005	2235.00		Timer
Mini Rocker Switch - SPP By Pass	ISCELEL00218	37.00		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 (150 Vac - 300 Vac) 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	28450.00
	1	6 kW	Astronomical	32 A TP	40 A TPN	IHXTS0306A	28450.00
	2	12 kW	Digital 24 hour	65 A TP	63 A TPN	IHXTS09120	43899.00
	2	12 kW	Astronomical	65 A TP	63 A TPN	IHXTS0912A	43899.00
1	1	6 kW	Digital 24 hour	32 A TP	40 A SPN	IHXSS01060	21331.00
	1	6 kW	Astronomical	32 A TP	40 A SPN	IHXSS0106A	21331.00
	1	12 kW	Digital 24 hour	65 A TP	63 A SPN	IHXSS03120	32054.00
	1	12 kW	Astronomical	65 A TP	63 A SPN	IHXSS0312A	32054.00





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*	2631.00
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*	3161.00
15 HP	11 kW	32 A	17.4 A - 24 A	IHADOAM1*	3721.00

*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	8316.00
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	8748.00
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	9184.00
15 HP	11.19 kW	28.55 A	32 A	22 A - 30 A	IHSDOAN1*A	10198.00

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 A	5.85 A	3.8 A - 6.0 A	20 A	IHSASAH1*A	14608.00
7.5 HP	15.19 A	8.77 A	6 A - 9.3 A	20 A	IHSASAJ1*A	
10 HP	20.25 A	11.69 A	8.9 A - 13.5 A	20 A	IHSASAK1*A	15877.00
12.5 HP	25.31 A	14.61 A	13.2 A - 20 A	20 A	IHSASAL1*A	
15 HP	30.38 A	17.54 A	13.2 A - 20 A	20 A	IHSASAL1*B	16223.00
17.5 HP	35.44 A	20.46 A	17.4 A - 24 A	25 A	IHSASAM1*A	
20 HP	40.50 A	23.38 A	22 A - 30 A	32 A	IHSASAN1*A	18590.00

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	1787.00
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	1836.00
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	4403.00
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	4859.00
1.5 HP	1.1 kW	8.9 A - 13.5 A	20 A	120 μ F - 150 μ F	50 μ F	IHADOAK1FA	
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	5195.00
2 HP	1.5 kW	13.2 A - 20 A	20 A	150 μ F - 200 μ F	36+36 μ F	IHADOAL1FA	
2 HP	1.5 kW	13.2 A - 20 A	20 A	150 μ F - 200 μ F	50+50 μ F	IHADOAL1FB	6162.00
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	6162.00
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	2393.00
	25 A	40 A	4	UC1 25 F	IHPBC025100*	25 A 4P Contactor	3102.00
	32 A	45 A	4	UC1 32 F	IHPBC032100*	32 A 4P Contactor	3778.00
	40 A	63 A	4	UC1 40 F	IHPBC040100*	40 A 4P Contactor	5313.00
2	20 A	32 A	2	UC1 20 D	IHPBF020100*	20 A 2P Contactor	1120.00
	25 A	40 A	2	UC1 25 D	IHPBF025100*	25 A 2P Contactor	1555.00
	40 A	63 A	2	UC1 40 D	IHPBF040100*	40 A 2P Contactor	2093.00



*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	1481.00
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	
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	836.00
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	246.00
Housing 4P		ISCPMPCX014	397.00
Carrier Assembly 2P		ISSPEX0447	70.00
Carrier Assembly 4P		ISSPEX0446	102.00
2P Contactor Coil	140 V - 270 V	ISSPEP0008	529.00
4P Contactor Coil	200 V - 400 V	ISSPEP0007	529.00
	415 V (260 V - 440 V)	ISSPEP0009	605.00
	240 V (140 V - 270 V)	ISSPEP0011	605.00
Single Fixed Contact 2P / 4P	20 A	ISSPEX0428	82.00
	25 A	ISSPEX0429	112.00
	32 A	ISSPEX0430	120.00
	40 A	ISSPEX0439	144.00
Single Moving Contact 2P / 4P	20 A	ISSPEX0431	125.00
	25 A	ISSPEX0432	177.00
	32 A	ISSPEX0433	201.00
	40 A	ISSPEX0440	246.00
Contact Kit 2P Contactor	20 A	ISSPEX0441	567.00
	25 A	ISSPEX0442	798.00
	40 A	ISSPEX0444	1051.00
Contact Kit 4P Contactor	20 A	ISSPEX0434	1031.00
	25 A	ISSPEX0435	1605.00
	32 A	ISSPEX0436	1725.00
	40 A	ISSPEX0445	1719.00



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	120.00
ON / OFF Push Button Assembly URJA	ISSPEX0438	120.00



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	177.00
	5+16 Element (1.5-2 HP) 1.12 kW - 1.50 kW	ISCELXLX0002	334.00
	5+25 Element (3-5 HP) 2.24 kW - 3.73 kW	ISCELXLX0003	384.00
Neon Light Indicator Red		ISCELKLX0006	70.00
Front Add-on Aux.Cont.Blck	2NO	ISSPEX0427	378.00
Combined AV Meter	30 A - 300 V	ISCELMLX0006	1008.00
	25 A - 500 V	ISCELMLX0007	1013.00
	50 A - 500 V	ISCELMLX0008	1114.00
Terminal Block	2 Way SPSS	ISCPTMPSX032	37.00
	5 Way	ISCELXPX0003	139.00



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	151.00
Stop Push Button - Red	ICELL00003	151.00
Motor ON Indicating Light-Green	ICELKL00015	246.00
Motor Trip Indicating Light-Yellow	ICELKL00013	246.00
SPP	ISCELXL00063	2594.00
Combined Voltmeter & Ammeter	ISCELMLX0007	1013.00
Terminal Block 6 way	ICELPSMX001	378.00
Terminal Block 3 way	ICELPSMX002	227.00
VOLT.SEL SW. C/G	ICELQL00021	353.00
Timer	ICELRPSL005	2235.00
Front Block 1NO 1NC	ISPNAFM711	397.00
Mini Rocker Switch - SPP By Pass	ISCELEL00218	37.00



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



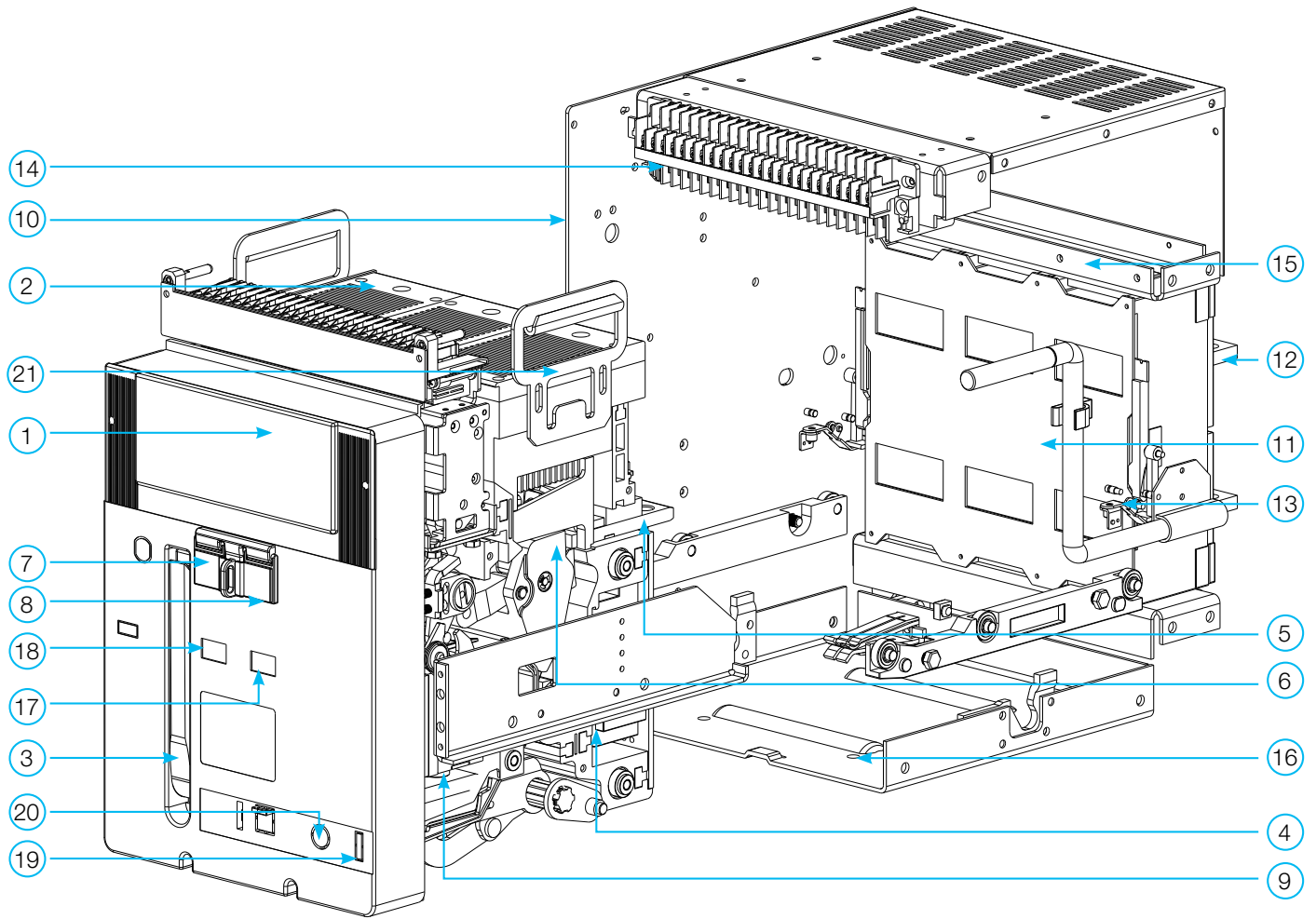
Mini Rocker Switch



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**#	121260.00	IHATE21060**#	157640.00	IHATE4106\$***	IHATE5106\$***
800 A	50 kA	IHATE11080**#	121260.00	IHATE21080**#	157640.00	IHATE4108\$***	IHATE5108\$***
1000 A	50 kA	IHATE11100**#	123620.00	IHATE21100**#	160705.00	IHATE4110\$***	IHATE5110\$***
1250 A	50 kA	IHATE11120**#	135000.00	IHATE21120**#	170000.00	IHATE4112\$***	IHATE5112\$***
1600 A	50 kA	IHATE11160**#	147230.00	IHATE21160**#	185000.00	IHATE4116\$***	IHATE5116\$***
2000 A	50 kA	IHATE11200**#	170000.00	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**#	132000.00	IHATS21060**#	203230.00	IHATS4106\$***	IHATS5106\$***
800 A	65 kA	IHATS11080**#	132000.00	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**#	190000.00	IHATS21200**#	280000.00	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**#	153525.00	IHAPE21060**#	195000.00	IHAPE4106\$***	IHAPE5106\$***
800 A	50 kA	IHAPE11080**#	153525.00	IHAPE21080**#	195000.00	IHAPE4108\$***	IHAPE5108\$***
1000 A	50 kA	IHAPE11100**#	160340.00	IHAPE21100**#	208440.00	IHAPE4110\$***	IHAPE5110\$***
1250 A	50 kA	IHAPE11120**#	165830.00	IHAPE21120**#	215575.00	IHAPE4112\$***	IHAPE5112\$***
1600 A	50 kA	IHAPE11160**#	183855.00	IHAPE21160**#	236000.00	IHAPE4116\$***	IHAPE5116\$***
2000 A	50 kA	IHAPE11200**#	217595.00	IHAPE21200**#	282000.00	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**#	166335.00	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**#	270000.00	IHAFS21200**#	394220.00	IHAFS4120\$***	IHAFS5120\$***
2500 A	75 kA	IHAFH11250**#	290000.00	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)

Titania +

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		17760.00
Micro processor release IPRE+ (LI)	Reduce		7700.00
Micro processor release IPR3+ (LSI+ LCD Display+Thermal Memory+ Zone selectivity+ Current & Voltage Mesurment+ Advance protection +Over Tempeture Protection)	Add		26135.00
Micro processor release IPR5+(LCD Display+Thermal Memory+ Zone selectivity+ Advance protection+ Advance Mesurment Over Tempeture Protection+ Maximum Demand + Communication)	Add		36380.00
To Convert Electrical version from Manual version (includes Motor, Shunt trip & Closing Coil)	Add		41260.00



Undervoltage release

5. Under Voltage Trip Device (UVT)

HSN Code: 8538

S.No.	SAP Code	Description	Per Unit LP (₹)
1	ISACX0196	220 VAC	4470.00
2	ISACX0197	415 VAC	4470.00



Shunt Trip Coil / Closing Coil

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	34900.00
2	ISACX0147	Charging Motor 230 V	34900.00

6. Shunt Trip / Closing Coil

HSN Code: 8538

S.No.	SAP Code	Description	Per Unit LP (₹)
1	ISACX0170	24 VDC	3180.00
2	ISACX0168	110 VAC/DC	3180.00
3	ISACX0167	220 VAC/DC	3180.00
4	ISACX0212	415 VAC	3180.00

3. Main CTs

HSN Code: 8504

S.No.	SAP Code	Description	Per Unit LP (₹)
1	ICELFACL018	CT 400 A	3015.00
2	ICELFACL001	CT 630 A	3015.00
3	ICELFACL002	CT 800 A	3015.00
4	ICELFACL003	CT 1000A	3175.00
5	ICELFACL004	CT 1250 A	3175.00
6	ICELFACL005	CT 1600 A	3175.00
7	ICELFACL006	CT 2000 A	4265.00
8	ICELFACL007	CT 2500A	4265.00

7. Key Lock / Key Interlock

HSN Code: 8301

S.No.	SAP Code	Description	Per Unit LP (₹)
1	ISACX0301	On/Off Button cover	405.00
2	ISACX0353	Key lock (1 lock+1 key)	1635.00
3	ISACX0181	Key interlock (2 locks+1 keys)	2290.00
4	ISACX0210	Key interlock (3 locks+2 keys)	4820.00
5	ISACX0332	Castle Lock Unit (1 lock+1 key)	3860.00
6	ISSACX0437	Castle Lock Unit (2 lock+1 key)	6800.00
7	ISSACX0436	Castle Lock Unit (3 lock+2 key)	10830.00
8	ISACX0341	Drawout position Lock	1985.00

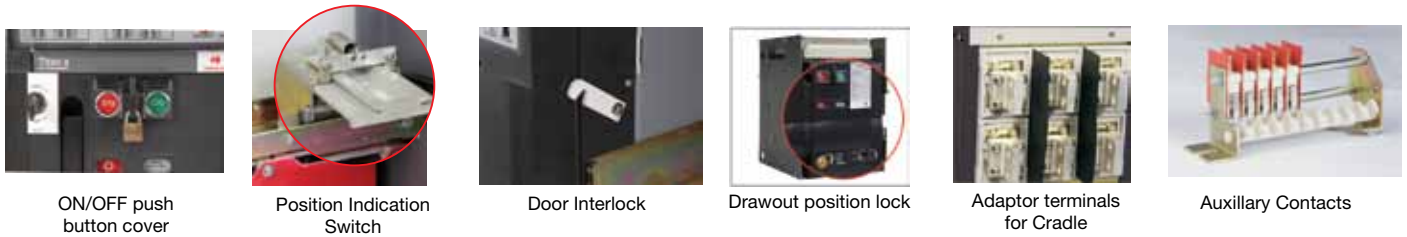
4. Neutral CTs

HSN Code: 8504

S.No.	SAP Code	Description	Per Unit LP (₹)
1	ICELFACL019	NCT 400 A	3015.00
2	ICELFACL012	NCT 630 A	3015.00
3	ICELFACL013	NCT 800 A	3015.00
4	ICELFACL014	NCT 1000A	3175.00
5	ICELFACL015	NCT 1250 A	3175.00
6	ICELFACL016	NCT 1600 A	3175.00
7	ICELFACL017	NCT 2000 A	4265.00
8	ICELFACL021	NCT 2500A	4265.00

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	4735.00
3	ISSACP0434	1600 A	6700.00

9. Other Accessories

HSN Code: 8538

S.No.	SAP Code	Description	Per Unit LP (₹)
1	ISACX0208	Door Interlock	2910.00
2	ISACX0028	Close open cycle counter	2870.00

10. Other Accessories

HSN Code: 8536

S.No.	SAP Code	Description	Per Unit LP (₹)
5	ISACX0207	Spring charge indication switch	1900.00
6	ISACX0349	Trip indication Switch	1200.00
7	ISACX0139	Aux. switch (5 c/o additional)	2920.00
8	ISACX0182	Position indication switch	2090.00
9	ISACX0302	Field test unit	2800.00

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

*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 Terminals Shunt Trip Device 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.

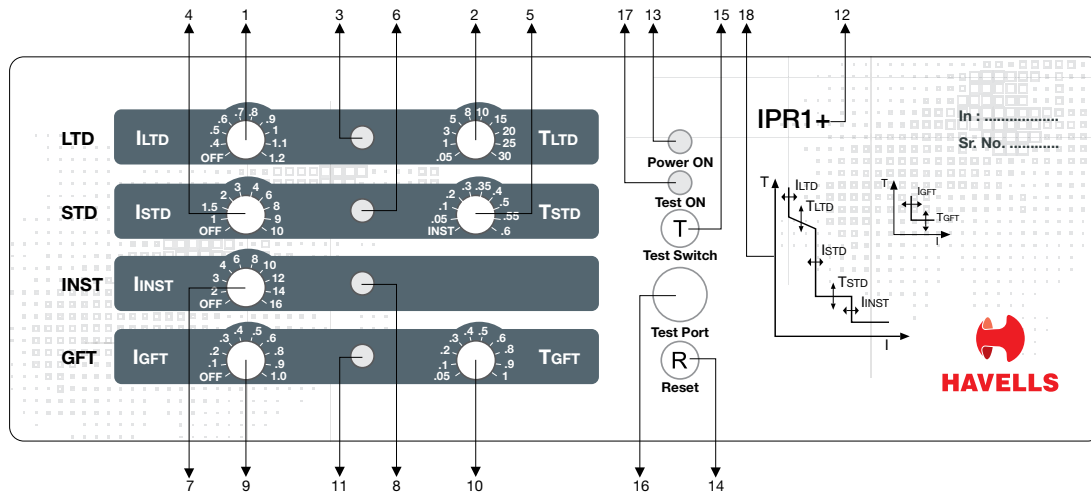
*All orders should be accompanied with ACB order form included in catalogue.

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

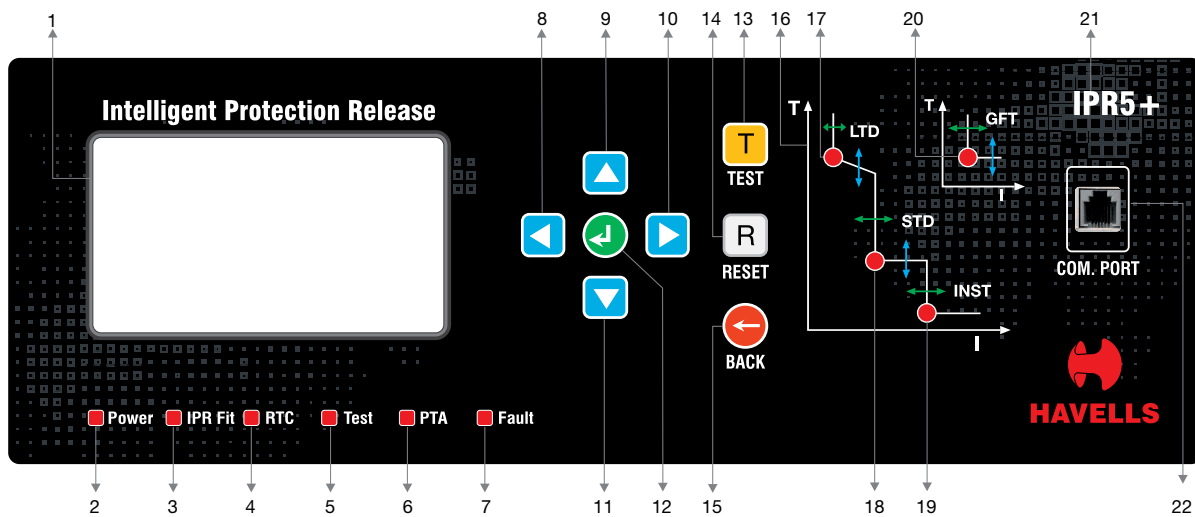
Titania Air Circuit Breaker

(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				
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.
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"/>					
		Door Interlock <input type="checkbox"/>	Key Interlock	1L+1K <input type="checkbox"/>				
				2L+1K <input type="checkbox"/>				
				3L+2K <input type="checkbox"/>				

Note :

1. Please specify the voltages for closing coil, shunt trip coil and UVT, available voltages are 24 VDC, 110 VAC / DC, 220 VAC / DC and 415 VAC and for motor available voltages are 220 VAC / DC and 110 VAC / DC.

2. For details of Protection Releases, please refer the chart of technical features.

*3. Communication Software on Chargeble basis.

OFV-6

Compact, Reliable & Robust

HIM - Moulded Case Circuit Breakers



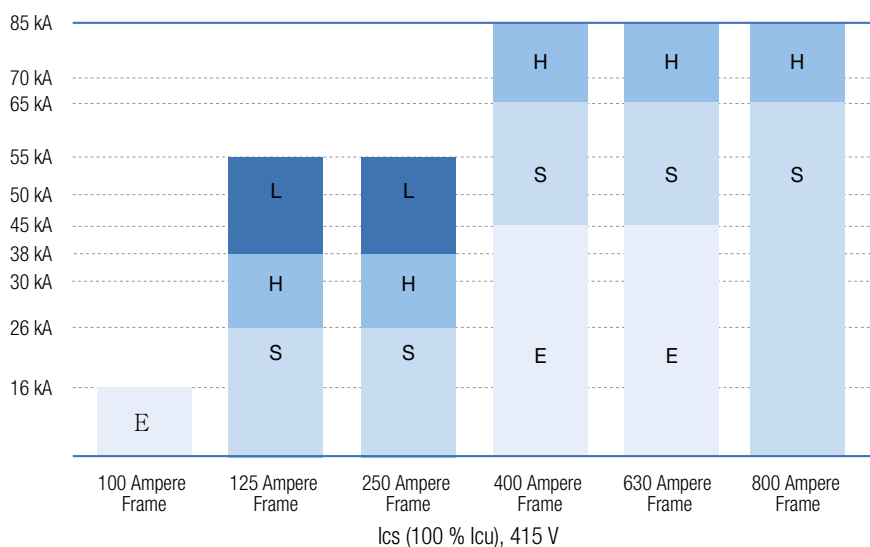
Wide range of Circuit Breakers catering all kind of electrical applications

- HIM Series MCCBs upto 800 A are 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 provide 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	3200.00	IHDA3BBT0016	4405.00	IHDA3BBF0016	5655.00
		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		IHDA3BBT0100		IHDA3BBF0100	
26	15	16	HIM 125	IHDA6OBD0016	5255.00	IHDA6OBT0016	7180.00	IHDA6OBF0016	9905.00
		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	IHDA6OBT0125	IHDA6OBF0125	11955.00			
		150	HIM 250		IHD2HOBT0150		14315.00	IHD2HOBF0150	17010.00
		160			IHD2HOBT0160		IHD2HOBF0160		
		200			IHD2HOBT0200		19115.00	IHD2HOBF0200	24205.00
		225			IHD2HOBT0225		21835.00	IHD2HOBF0225	27540.00
		250			IHD2HOBT0250			IHD2HOBF0250	
38	20	16	HIM 125	IHDA6TBD0016	7380.00	IHDA6TBT0016	10160.00	IHDA6TBF0016	12570.00
		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	8380.00	IHDA6TBT0125	11600.00	IHDA6TBF0125	14115.00	
		150	HIM 250		IHD2HTBT0150		17435.00	IHD2HTBF0150	20605.00
		160			IHD2HTBT0160		IHD2HTBF0160		
		200			IHD2HTBT0200		20270.00	IHD2HTBF0200	25145.00
		225			IHD2HTBT0225		22740.00	IHD2HTBF0225	27880.00
		250			IHD2HTBT0250			IHD2HTBF0250	
45	20	300	HIM 400	IHDA9UBT0300		28000.00	IHDA9UBF0300	33820.00	
		350		IHDA9UBT0350		IHDA9UBF0350			
		400		IHDA9UBT0400		IHDA9UBF0400			
		500	HIM 630		IHD3HUBT0500	40430.00	IHD3HUBF0500	48900.00	
		630			IHD3HUBT0630		IHD3HUBF0630		

Note : Adjustable thermal (80% -100%) - In TP & FP upto HIM 250. #TP with Switched Neutral.
Adjustable thermal (63% -100%) - In TP & FP From HIM 400 to HIM 800.
2 nos for TP & 3 nos for FP phase separator is available in standard packaging alongwith MCCB.
MCCBs are without extended terminals, however extended terminals are available on request at extra price for these ratings

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

Effective from 15th April, 2022 **HAVELLS 45**



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	9840.00	IHDA6VBT0016	13645.00	IHDA6VBF0016	16630.00	
		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		20170.00
		150	HIM 250		IHD2HVBT0150	21780.00	IHD2HVBF0150	25965.00		
		160			IHD2HVBT0160		IHD2HVBF0160			
		200			IHD2HVBT0200		IHD2HVBF0200			
		225			IHD2HVBT0225		IHD2HVBF0225			
250			IHD2HVBT0250	24300.00	IHD2HVBF0250	30550.00				
65	25	300	HIM 400			IHDA9LBT0300	30700.00	IHDA9LBF0300	36325.00	
		350				IHDA9LBT0350		IHDA9LBF0350		
		400				IHDA9LBT0400		IHDA9LBF0400		
		500	HIM 630			44045.00	IHD3HLBT0500	IHD3HLBF0500	54140.00	
		630					IHD3HLBT0630	IHD3HLBF0630		
		700	HIM 800			49760.00	IHD4HLBT0700	IHD4HLBF0700	64195.00	
		800					IHD4HLBT0800	IHD4HLBF0800		
		300					HIM 400			
350	IHDA9MBT0350	IHDA9MBF0350								
400	IHDA9MBT0400	IHDA9MBF0400								
500	HIM 630		51735.00	IHD3HMBT0500	IHD3HMBF0500	63605.00				
630				IHD3HMBT0630	IHD3HMBF0630					
700	HIM 800		59495.00	IHD4HMBT0700	IHD4HMBF0700	76535.00				
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	2700.00	
48 Vdc	ISSLEU0805		
100 Vdc - 110 Vdc	ISSLEU0909		
100 Vac - 120 Vac	ISSLEU0910	3305.00	
200 Vac - 230 Vac	ISSLEU0893		ISSLEU0914
380 Vac - 415 Vac	ISSLEU0894		ISSLEU0895
		ISSLEU0896	



SHT



UVT

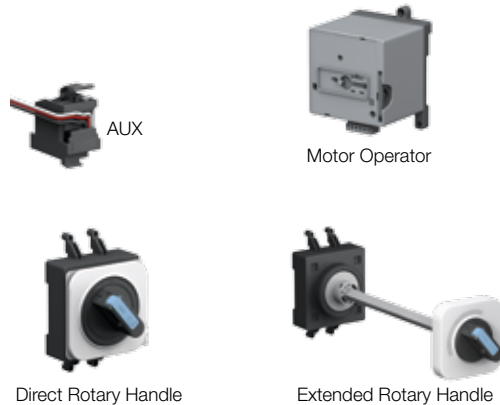
Note : Adjustable thermal (80% -100%) - In TP & FP upto HIM 250. #TP with Switched Neutral.
 Adjustable thermal (63% -100%) - In TP & FP From HIM 400 to HIM 800.
 2 nos for TP & 3 nos for FP phase separator is available in standard packaging alongwith MCCB.
 MCCBs are without extended terminals, however 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	900.00	ISSLEU0793	990.00
2-Changeover	ISSLEU0792	1595.00		
Alarm Switch (Left side only)	ISSLEU0794	900.00	ISSLEU0796	990.00
Alarm Switch (Right side only)	ISSLEU0795			
Auxiliary + Alarm Switch				
Left side only	ISSLEU0799	1550.00		
Right side only	ISSLEU0797			
Pad Lock Device	ISSLEU0844	1100.00	ISSLEU0845	1350.00
DIN Rail	ISSLEU0887	790.00		
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	1280.00	ISSLEU0809	1280.00	ISSLEU0812	1280.00	ISSLEU0815	1855.00	ISSLEU0916	2895.00
Door Mounting	ISSLEU0820	1695.00	ISSLEU0821	1795.00	ISSLEU0822	1965.00	ISSLEU0823	3050.00	ISSLEU0824	3775.00
Mechanical Interlock										
2 Pole	ISSLEU0825	1240.00	ISSLEU0829	1240.00						
3 Pole	ISSLEU0826	2310.00	ISSLEU0830	2310.00	ISSLEU0833	2800.00	ISSLEU0836	4480.00	ISSLEU0838	5195.00
4 Pole (N-R-S-T)	ISSLEU0828	2750.00	ISSLEU0832	2750.00	ISSLEU0835	3400.00	ISSLEU0837	5250.00	ISSLEU0843	6160.00
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	175.00	ISSLEX1160	225.00	ISSLEX1162	615.00	ISSLEX1164	1590.00	ISSLEX1168	1680.00	ISSLEX1166	3450.00
4 Pole (Set of 4)	ISSLEX1159	275.00	ISSLEX1161	325.00	ISSLEX1163	945.00	ISSLEX1165	2075.00	ISSLEX1169	2250.00	ISSLEX1167	4250.00
Terminal Cover - Long Type												
2 Pole	ISSLEU0858	475.00	ISSLEU0864	475.00								
3 Pole	ISSLEU0859	715.00	ISSLEU0865	715.00	ISSLEU0869	990.00	ISSLEU0873	2035.00	ISSLEU0877	2035.00		
4 Pole	ISSLEU0860	810.00	ISSLEU0866	810.00	ISSLEU0870	1155.00	ISSLEU0874	2840.00	ISSLEU0878	2840.00		
Phase Barrier												
2 Pole (Set of 1)	ISSLEU0924	55.00	ISSLEU0924	55.00	ISSLEU0882	75.00						
3 Pole (Set of 2)	ISSLEU0880	110.00	ISSLEU0880	110.00	ISSLEU0883	155.00	ISSLEU0885	630.00	ISSLEU0885	630.00	ISSLEU0885	630.00
4 Pole (Set of 3)	ISSLEU0881	165.00	ISSLEU0881	165.00	ISSLEU0884	230.00	ISSLEU0886	945.00	ISSLEU0886	945.00	ISSLEU0886	945.00
Enclosure												
3 Pole	ISSBOU1189	1760.00	ISSBOU1191	1855.00	ISSBOU1193	2420.00	ISSBOU1195	8900.00	ISSBOU1197	9245.00	ISSBOU1199	9245.00
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

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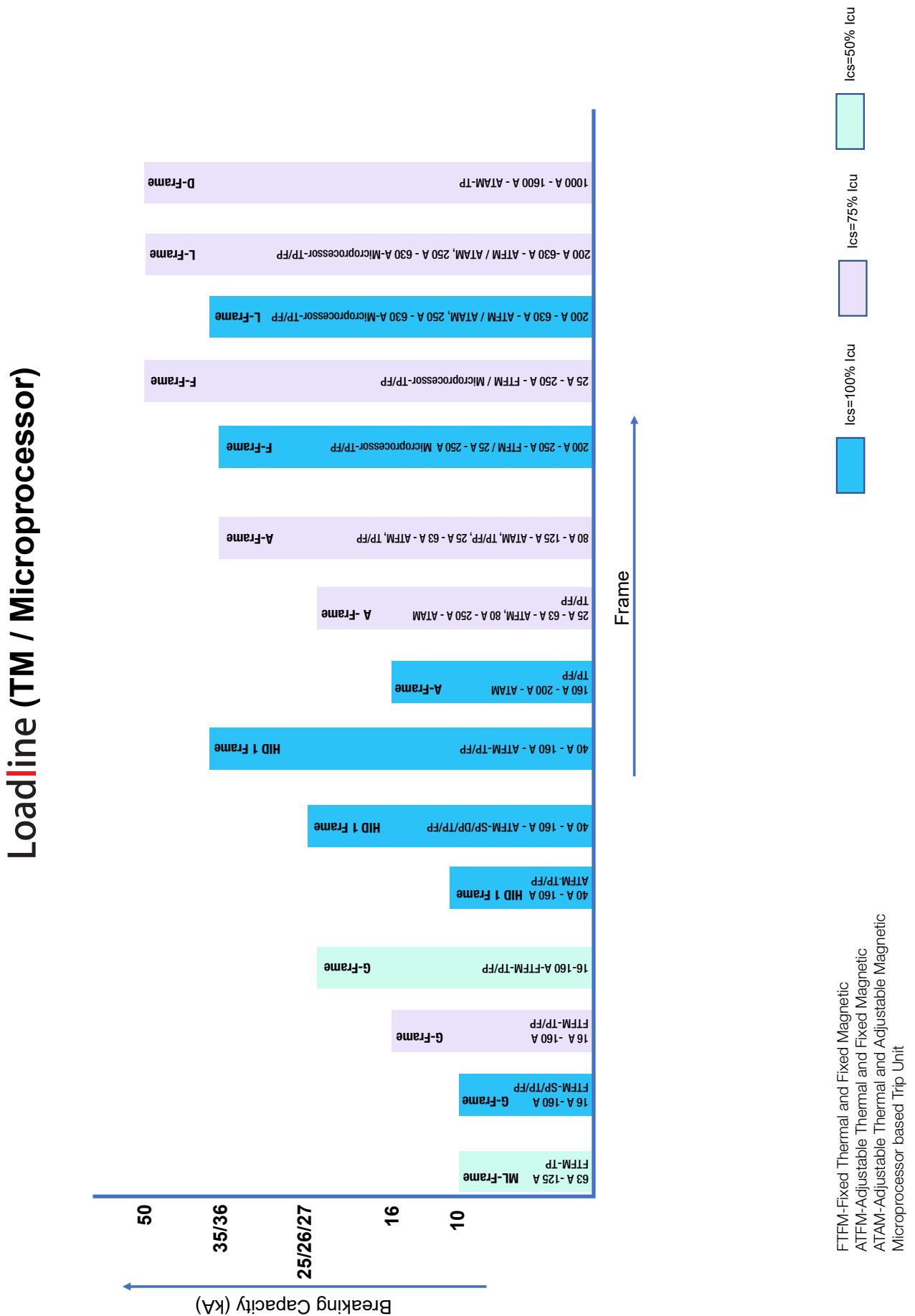
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Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

MCCB Selection Chart



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%	15 A	SH	IHLSHAAT0015	POR		
		20 A		IHLSHAAT0020			
		32 A		IHLSHAAT0032			
		40 A		IHLSHAAT0040			
		63 A	ML1	IHLM1AAT0063	1810.00		
		80 A		IHLM1AAT0080#	1890.00		
		100 A		IHLM1AAT0100#	1970.00		
		125 A		IHLM1AAT0125#	2585.00		
	100%	GS	25 A	IHLGST0025	2045.00	IHLGSF0025	2675.00
			32 A	IHLGST0032	2045.00	IHLGSF0032	2675.00
			40 A	IHLGST0040	2045.00	IHLGSF0040	2675.00
			50 A	IHLGST0050	2045.00	IHLGSF0050	2675.00
			63 A	IHLGST0063	2045.00	IHLGSF0063	2700.00
			80 A	IHLGST0080#	2175.00	IHLGSF0080#	3280.00
			100 A	IHLGST0100#	2175.00	IHLGSF0100#	3280.00
			125 A	IHLGST0125#	3180.00	IHLGSF0125#	3765.00
			150 A	IHLGST0150#	4105.00	IHLGSF0150#	5435.00
			160 A	IHLGST0160#	4105.00	IHLGSF0160#	5435.00
16	75%	GN (Suitable for DC application 5 kA at 250 V DC, 2P in series)	25 A	IHLGNT0025	3995.00	IHLGNF0025	4715.00
			32 A	IHLGNT0032	3995.00	IHLGNF0032	4715.00
			40 A	IHLGNT0040	3995.00	IHLGNF0040	4715.00
			50 A	IHLGNT0050	3995.00	IHLGNF0050	4715.00
			63 A	IHLGNT0063	3945.00	IHLGNF0063	4655.00
			80 A	IHLGNT0080#	4155.00	IHLGNF0080#	5075.00
			100 A	IHLGNT0100#	4155.00	IHLGNF0100#	5075.00
			125 A	IHLGNT0125#	4560.00	IHLGNF0125#	5300.00
			150 A	IHLGNT0150#	5325.00	IHLGNF0150#	6160.00
			160 A	IHLGNT0160#	5325.00	IHLGNT0160#	6160.00
25	50%	GH	25 A	IHLGHT0025	4530.00	IHLGHF0025	5705.00
			32 A	IHLGHT0032	4530.00	IHLGHF0032	5705.00
			40 A	IHLGHT0040	4530.00	IHLGHF0040	5705.00
			50 A	IHLGHT0050	4530.00	IHLGHF0050	5705.00
			63 A	IHLGHT0063	4550.00	IHLGHF0063	5730.00
			80 A	IHLGHT0080#	4740.00	IHLGHF0080#	5805.00
			100 A	IHLGHT0100#	4740.00	IHLGHF0100#	5805.00
			125 A	IHLGHT0125#	5515.00	IHLGHF0125#	7255.00
			150 A	IHLGHT0150#	7850.00	IHLGHF0150#	9160.00
			160 A	IHLGHT0160#	7850.00	IHLGHF0160#	9160.00
35	100%	FN	200 A	IHLFN30200	17025.00	IHLFN40200	22810.00
			250 A	IHLFN30250	19120.00	IHLFN40250	24940.00
50	75%	FH	25 A	IHLFHT0025	10165.00	IHLFHF0025	11535.00
			32 A	IHLFHT0032	10165.00	IHLFHF0032	11535.00
			40 A	IHLFHT0040	10165.00	IHLFHF0040	11535.00
			50 A	IHLFHT0050	10165.00	IHLFHF0050	11535.00
			63 A	IHLFHT0063	10165.00	IHLFHF0063	11535.00
			80 A	IHLFHFA30080	10855.00	IHLFHFA40080	12900.00
			100 A	IHLFH30100	10855.00	IHLFH40100	12900.00
			125 A	IHLFH30125	12600.00	IHLFH40125	16150.00
			160 A	IHLFH30160	15625.00	IHLFH40160	19535.00
			200 A	IHLFH30200	18170.00	IHLFH40200	24525.00
			250 A	IHLFH30250	20070.00	IHLFH40250	26765.00

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

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	4000.00	IHLE1ABF0040	4665.00		
		50 A		IHLE1ABT0050	4000.00	IHLE1ABF0050	4665.00		
		63 A		IHLE1ABT0063	4000.00	IHLE1ABF0063	4665.00		
		80 A		IHLE1AB30080	4170.00	IHLE1AB40080	4835.00		
		100 A		IHLE1AB30100	4170.00	IHLE1AB40100	4835.00		
		125 A		IHLE1AB30125	4822.00	IHLE1AB40125	5750.00		
		160 A		IHLE1AB30160	6165.00	IHLE1AB40160	7435.00		
25	75%	25 A	AS (Suitable for DC application 10 kA at 250 V DC, 2P in series)	IHLAST0025	6570.00	IHLASF0025	7755.00		
		32 A		IHLAST0032	6570.00	IHLASF0032	7755.00		
		40 A		IHLAST0040	6570.00	IHLASF0040	7755.00		
		50 A		IHLAST0050	6570.00	IHLASF0050	7755.00		
		63 A		IHLAST0063	6570.00	IHLASF0063	7755.00		
27	100%	40 A	HID 1	IHA13DBT0040	6245.00	IHA13DBF0040	7275.00		
		50 A		IHA13DBT0050		IHA13DBF0050			
		63 A		IHA13DBT0063		IHA13DBF0063			
		80 A		IHA13DB30080		IHA13DB40080			
		100 A		IHA13DB30100	IHA13DB40100				
		125 A		IHA13DB30125	7505.00	IHA13DB40125	8950.00		
		160 A		IHA13DB30160	8545.00	IHA13DB40160	10315.00		
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	8830.00	IHA13EBF0040	10520.00		
		50 A		IHA13EBT0050		IHA13EBF0050			
		63 A		IHA13EBT0063		IHA13EBF0063			
		80 A		IHA13EB30080		IHA13EB40080			
		100 A		IHA13EB30100		IHA13EB40100			
		125 A		IHA13EB30125		10115.00		IHA13EB40125	11930.00
		160 A		IHA13EB30160		10735.00		IHA13EB40160	12555.00
		200 A	LS	IHLLSEB30200	20270.00	IHLLSEB40200	24195.00		
		250 A		IHLLSEB30250	22740.00	IHLLSEB40250	27165.00		
		320 A		IHLLSEB30320	23990.00	IHLLSEB40320	29475.00		
		400 A		IHLLSEB30400	23990.00	IHLLSEB40400	29475.00		
		500 A		IHLLSEB30500	35155.00	IHLLSEB40500	43545.00		
		630 A		IHLLSEB30630	35155.00	IHLLSEB40630	43545.00		
		200 A		LN	IHLLNFB30200	22465.00	IHLLNFB40200	26600.00	
250 A	IHLLNFB30250	24300.00	IHLLNFB40250		28750.00				
320 A	IHLLNFB30320	25760.00	IHLLNFB40320		31170.00				
400 A	IHLLNFB30400	25760.00	IHLLNFB40400		31170.00				
500 A	IHLLNFB30500	37550.00	IHLLNFB40500		46100.00				
50	75%	630 A	IHLLNFB30630		37550.00	IHLLNFB40630	46100.00		



Adjustable thermal (70%-100%) in TP & FP for HID1 / A frame / D frame
 Adjustable thermal (80%-100%) in TP & FP for L frame
 Phase barriers are supplied along with MCCBs
 Spreader terminals are available as an accessories, refer page no. 54
 # Both side terminal are included
 ##TP with Switched Neutral.

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	7535.00	IHLASBC40160	10345.00
		200 A		IHLASBC30200	8925.00	IHLASBC40200	11295.00
25	75%	80 A	AS (Suitable for DC application 10 kA at 250 V DC 2P in series)	IHLASDC30080	6690.00	IHLASDC40080	8095.00
		100 A		IHLASDC30100		IHLASDC40100	
		125 A		IHLASDC30125		IHLASDC40125	
		160 A	AN (Suitable for DC application 10 kA at 250 V DC 2P in series)	IHLANDC30160	9270.00	IHLANDC40160	11095.00
		200 A		IHLANDC30200	9395.00	IHLANDC40200	11560.00
		250 A		IHLANDC30250	10145.00	IHLANDC40250	12825.00
35	75%	80 A	AN	IHLANEC30080	9140.00	IHLANEC40080	10900.00
		100 A		IHLANEC30100	9140.00	IHLANEC40100	10900.00
		125 A		IHLANEC30125	10705.00	IHLANEC40125	12350.00
36	100%	200 A	LS	IHLLSEC30200	20545.00	IHLLSEC40200	24375.00
		250 A		IHLLSEC30250	22930.00	IHLLSEC40250	27240.00
		320 A		IHLLSEC30320	25840.00	IHLLSEC40320	31550.00
		400 A		IHLLSEC30400		IHLLSEC40400	
		500 A		IHLLSEC30500	35165.00	IHLLSEC40500	43645.00
		630 A		IHLLSEC30630	35165.00	IHLLSEC40630	43645.00
50	75%	200 A	LN	IHLLNFC30200	24770.00	IHLLNFC40200	29160.00
		250 A		IHLLNFC30250	26725.00	IHLLNFC40250	31445.00
		320 A		IHLLNFC30320		IHLLNFC40320	
		400 A		IHLLNFC30400	27065.00	IHLLNFC40400	32895.00
		500 A		IHLLNFC30500	38000.00	IHLLNFC40500	46500.00
		630 A		IHLLNFC30630		IHLLNFC40630	
	75%	DN	1000 A	IHLDNT1000	133060.00		
			1250 A	IHLDNT1250	152555.00		
		1600 A	IHLDNT1600	164425.00			

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	945.00				
		32 A		IHLGSS0032	945.00				
		40 A		IHLGSS0040	945.00				
		50 A		IHLGSS0050	945.00				
		63 A		IHLGSS0063	945.00				
		80 A		IHLGSS0080#	955.00				
		100 A		IHLGSS0100#	955.00				
		125 A		IHLGSS0125#	1150.00				
		150 A		IHLGSS0150#	1225.00				
		160 A		IHLGSS0160#	1240.00				
27	100%	40 A	HID 1	IHA13DBS0040	3285.00	36	100%	IHA13DBD0040	4800.00
		50 A		IHA13DBS0050				IHA13DBD0050	
		63 A		IHA13DBS0063				IHA13DBD0063	
		80 A		IHA13DB10080				IHA13DB20080	
		100 A		IHA13DB10100				IHA13DB20100	
		125 A		IHA13DB10125				IHA13DB20125	
160 A	IHA13DB10160	4500.00	IHA13DB20160	6580.00					

Adjustable thermal (70%-100%) in TP & FP for HID1 / A frame / D frame
 Adjustable thermal (80%-100%) in TP & FP for L frame
 Please refer catalogue for magnetic adjustability details
 Phase barriers are supplied along with MCCBs
 Spreader terminals are available as an accessories, refer page no. 54
 # Both side terminal are included
 ##TP with Switched Neutral

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	13860.00	IHLFENF0025	17940.00	
		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		22165.00
		200 A		IHLFEN30200		IHLFEN40200		28490.00
		250 A		IHLFEN30250		IHLFEN40250		28490.00
36	100%	250 A	LES	IHLLSEE30250	32370.00	IHLLSEE40250	39175.00	
		320 A		IHLLSEE30320	32370.00	IHLLSEE40320	39175.00	
		400 A		IHLLSEE30400	32370.00	IHLLSEE40400	39175.00	
		500 A		IHLLSEE30500	36250.00	IHLLSEE40500	48395.00	
		630 A		IHLLSEE30630	36250.00	IHLLSEE40630	48395.00	
50	75%	25 A	FEH	IHLFEHT0025	16515.00	IHLFEHF0025	21110.00	
		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		
		160 A		IHLFEH30160		IHLFEH40160		26730.00
		200 A		IHLFEH30200		IHLFEH40200		32175.00
		250 A		IHLFEH30250		IHLFEH40250		32175.00
		250 A	LEN	IHLLNFE30250	35265.00	IHLLNFE40250	44160.00	
		320 A		IHLLNFE30320	35265.00	IHLLNFE40320	44160.00	
		400 A		IHLLNFE30400	35265.00	IHLLNFE40400	44160.00	
		500 A		IHLLNFE30500	37690.00	IHLLNFE40500	49430.00	
		630 A		IHLLNFE30630	37690.00	IHLLNFE40630	49430.00	

Phase barriers are supplied along with MCCBs
 Spreader terminals are available as an accessories, refer page no. 54
 Only one internal accessories can be fitted in microprocessor MCCB
 # Both side terminal are included
 ##TP with Switched Neutral



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 (₹)
GS, GN, GH	80 A - 100 A	SP	ISSLGX0153	60.00
		TP	ISSLGX0154	175.00
		FP	ISSLGX0155	275.00
	125 A	SP	ISSLGX0156	75.00
		TP	ISSLGX0157	225.00
		FP	ISSLGX0158	325.00
	160 A	SP	ISSLGX0159	100.00
		TP	ISSLGX0160	300.00
		FP	ISSLGX0161	400.00
AS, AN, AH	80 A~100 A	TP	ISSLAX0121	260.00
		FP	ISSLAX0122	360.00
	125 A~200 A	TP	ISSLAX0124	380.00
		FP	ISSLAX0125	520.00
	250 A	TP	ISSLAX0127	650.00
		FP	ISSLAX0128	945.00
LS, LN	200 A~400 A	TP	ISSLLX0065	1590.00
		FP	ISSLLX0066	2075.00
	500 A~630 A	TP	ISSLLX0067	1680.00
		FP	ISSLLX0068	2250.00
FN, FH	80 A~100 A	TP	ISSLFX0074	260.00
		FP	ISSLFX0075	360.00
	125 A~160 A	TP	ISSLFX0076	380.00
		FP	ISSLFX0077	520.00
	200 A~250 A	TP	ISSLFX0078	650.00
		FP	ISSLFX0079	945.00
HID 1	80 A~100 A	SP	ISSLHX4273	75.00
	125 A~160 A	SP	ISSLHX4274	100.00
	80 A~100 A	DP	ISSLHX4275	150.00
	125 A~160 A	DP	ISSLHX4276	200.00
	80 A~100 A	TP	ISSLHX4277	225.00
	125 A~160 A	TP	ISSLHX4278	300.00
	80 A~100 A	FP	ISSLHX4279	325.00
	125 A~160 A	FP	ISSLHX4280	430.00

Enclosures for MCCBs

HSN Code: 8538

Sl.No.	Description	Item Code	Per Unit LP (₹)
1.	'ML' Frame TP	IHEMTP	1950.00
2.	'G' Frame TP	IHEGTP	1950.00
3.	'G' Frame FP	IHEGFP	1950.00
4.	'A' Frame TP	IHEATP	2245.00
5.	'A' Frame FP	IHEAFP	2245.00
6.	'F' Frame TP	IHEFTP	2360.00
7.	'F' Frame FP	IHEFFP	2360.00
8.	'L' Frame TP	IHELTP	8875.00
9.	'L' Frame FP	IHELFP	8875.00
10.	HID 1 Frame TP	ISSBOU1117	2105.04
11.	HID 1 Frame FP	ISSBOU1118	2105.04



Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

HSN Code: 8538

Loadline Moulded Case Circuit Breakers Accessories

Description	'G' / 'WL' Frame		'A' Frame		HID 1 Frame		'L' Frame		'F' 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 (₹)
Shunt Trip										
100 Vac - 110 Vac	IHLGS110		IHLAS110		ISSLEU0438		IHLLS110		IHLLSTF110	
220 Vac - 240 Vac	IHLGS240	1110.00	IHLAS240	1620.00	ISSLEU0439	1620.00	IHLLS240	2265.00	IHLLSTF240	1620.00
380 Vac - 415 Vac	IHLGS415		IHLAS415		ISSLEU0440		IHLLS415		IHLLSTF415	
Under Voltage Release										
110 Vac - 120 Vac	IHLGU110		IHLAU110		-	-	IHLLU110		IHLUVRF110	
220 Vac - 240Vac	IHLGU240	1680.00	IHLAU240	2485.00	-	-	IHLLU240	3090.00	IHLUVRF240	2485.00
380 Vac - 440 Vac	IHLGU440		IHLAU440		-	-	IHLLU415		IHLUVRF440	
Auxiliary Contact (250Vac/250Vdc) (450Vac/250Vdc)										
1-Changeover	IHLASG1CO	750.00	IHLAA1CO	825.00	ISSLEU0444	825.00	IHLA1CO	950.00	IHLASF1CO	900.00
2-Changeover	IHLASG2CO	1200.00	IHLAA2CO	1375.00	ISSLEU0445	1375.00	IHLA2CO	1650.00	IHLASF2CO	1375.00
Rotary Handle										
Direct mounting	IHLGD000	1140.00	IHLAD000	1500.00						
Door Mounting	IHLGRN30	1420.00	IHLARN30	1950.00	ISSLEU0494	1720.00	IHLRN30	2890.00	IHLRRHF30	1950.00
Padl Lock Device										
Trip Alarm Contact (Factory Fitted)	IHLDPG125	115.00	IHLDPA250	170.00	ISSLEU0448	340.00	IHLPP000	395.00	IHLDPF250	240.00
Auxiliary Contact + Airam Switch (Factory fitted)	IHLALG1CO	750.00	IHLALA1CO	825.00	ISSLEU0447	825.00	IHLB000	950.00	IHLALF1CO	900.00
Auxiliary Contact + Airam Switch (Factory fitted)										
					ISSLEU1772	1650.00				



Earth Fault Relay for MCCBs

HSN Code: 8538

Sl. No.	MCCBs Current Range (A)	Item Code**	Per Unit LP (₹)
1	25 A- 100 A	IHEF1100	6960.00
2	125 A- 200 A	IHEF2200	7900.00
3	250 A- 400 A	IHEF3400	9220.00
4	500 A- 800 A	IHEF4800	11495.00

- 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.



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	486.00	DHMZCSNF0x5-005	1075.00	DHMZCDPF0x5-005	1263.00
6 A-32 A	DHMZCSPF006-032	285.00	DHMZCSNF006-032	927.00	DHMZCDPF006-032	948.00
40 A	DHMZCSPF040	668.00	DHMZCSNF040	1382.00	DHMZCDPF040	1475.00
50 A	DHMZCSPF050	738.00	DHMZCSNF050	1470.00	DHMZCDPF050	1599.00
63 A	DHMZCSPF063	738.00	DHMZCSNF063	1470.00	DHMZCDPF063	1599.00
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	1608.00	DHMZCTNF0x5-005	2351.00	DHMZCFPF0x5-005	2507.00
6 A-32 A	DHMZCTPF006-032	1498.00	DHMZCTNF006-032	2072.00	DHMZCFPF006-032	2154.00
40 A	DHMZCTPF040	2181.00	DHMZCTNF040	2870.00	DHMZGCFPF040	2900.00
50 A	DHMZCTPF050	2284.00	DHMZCTNF050	2915.00	DHMZCFPF050	3017.00
63 A	DHMZCTPF063	2284.00	DHMZCTNF063	2915.00	DHMZCFPF063	3017.00

'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	2392.00	DHMJCDF080	5204.00	DHMJCTPF080	7600.00	DHMJCFF080	9121.00
100 A	DHMJCSPF100	2680.00	DHMJCDF100	5345.00	DHMJCTPF100	7998.00	DHMJCFF100	9963.00
125 A	DHMJCSPF125	2938.00	DHMJCDF125	6107.00	DHMJCTPF125	8997.00	DHMJCFF125	10576.00

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	3784.00	DHRZCMDF100016	3699.00	DHRZCMDF300016	3806.00
25 A	DHRZCMDF030025	3784.00	DHRZCMDF100025	3699.00	DHRZCMDF300025	3806.00
32 A	DHRZCMDF030032	3813.00	DHRZCMDF100032	3771.00	DHRZCMDF300032	3923.00
40 A	DHRZCMDF030040	3813.00	DHRZCMDF100040	3771.00	DHRZCMDF300040	3923.00
63 A	DHRZCMDF030063	4994.00	DHRZCMDF100063	4994.00	DHRZCMDF300063	5140.00
80 A	DHRZCMDF030080	8016.00	DHRZCMDF100080	8016.00	DHRZCMDF300080	8016.00
100 A	DHRZCMDF030100	8139.00	DHRZCMDF100100	8139.00	DHRZCMDF300100	8139.00
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	4719.00	DHRZCMFF100016	4564.00	DHRZCMFF300016	4699.00
25 A	DHRZCMFF030025	4719.00	DHRZCMFF100025	4564.00	DHRZCMFF300025	4699.00
32 A	DHRZCMFF030032	4754.00	DHRZCMFF100032	4649.00	DHRZCMFF300032	4786.00
40 A	DHRZCMFF030040	4754.00	DHRZCMFF100040	4649.00	DHRZCMFF300040	4786.00
63 A	DHRZCMFF030063	5006.00	DHRZCMFF100063	5006.00	DHRZCMFF300063	5153.00
80 A	DHRZCMFF030080	8418.00	DHRZCMFF100080	8418.00	DHRZCMFF300080	8418.00
100 A	DHRZCMFF030100	8635.00	DHRZCMFF100100	8635.00	DHRZCMFF300100	8635.00

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
25 A	DHRZAMDF030025	4799.00	DHRZAMDF100025	4634.00	DHRZAMDF300025	4634.00
40 A	DHRZAMDF030040	5146.00	DHRZAMDF100040	4936.00	DHRZAMDF300040	4936.00
63 A	DHRZAMDF030063	6068.00	DHRZAMDF100063	5879.00	DHRZAMDF300063	5879.00
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
25 A	DHRZAMFF030025	5782.00	DHRZAMFF100025	5602.00	DHRZAMFF300025	5602.00
40 A	DHRZAMFF030040	5865.00	DHRZAMFF100040	5685.00	DHRZAMFF300040	5685.00
63 A	DHRZAMFF030063	6165.00	DHRZAMFF100063	6059.00	DHRZAMFF300063	6059.00

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)	794.00
DHRAHSPF006	1NO + 1NC (RCCB)	794.00



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	1559.00
DHMZNP1X0002200	24 V	1559.00
DHMZNP1X0002310	48 V	1559.00
DHMZNP1X0002400	240 V	1559.00



Under Voltage / Over Voltage

HSN Code - 8536

CODE	DESCRIPTION	List Price in ₹ Per Unit
DHMZNP1X0003510	OVT HGD63H Option Single Phase	1434.00
DHMZNP3X0003510	OVT HGD63H Option Three Phase	3534.00
DHMZNP1X0003110	UVT Single Phase 240 Vac	1434.00
DHMZNP1X0004110	UVT-OVT 1 Phase 240 Vac	1649.00
DHMZNP3X0004110	UVT-OVT 3 Phase 240 Vac	3912.00
DHMZNP1X0003210	UVT delay 1 Phase 240 Vac	1580.00
DHMZNP3X0003210	UVT delay 3 Phase 240 Vac	3686.00

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	4576.00	DHBMACDP4100016	4953.00	DHBMACDP4300016	5382.00
25 A	DHBMACDP4030025	4576.00	DHBMACDP4100025	4953.00	DHBMACDP4300025	5382.00
32 A	DHBMACDP4030032	4710.00	DHBMACDP4100032	5088.00	DHBMACDP4300032	5519.00
40 A	DHBMACDP4030040	5183.00	DHBMACDP4100040	5787.00	DHBMACDP4300040	6258.00
63 A	DHBMACDP4030063	6359.00	DHBMACDP4100063	6697.00	DHBMACDP4300063	7032.00

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	5787.00	DHBMACTN8100016	6224.00	DHBMACTN8300016	6495.00
25 A	DHBMACTN8030025	5787.00	DHBMACTN8100025	6224.00	DHBMACTN8300025	6495.00
32 A	DHBMACTN8030032	5922.00	DHBMACTN8100032	6359.00	DHBMACTN8300032	6629.00
40 A	DHBMACTN8030040	5990.00	DHBMACTN8100040	6717.00	DHBMACTN8300040	7065.00
63 A	DHBMACTN8030063	7134.00	DHBMACTN8100063	7445.00	DHBMACTN8300063	7445.00

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.	100 mA Cat. No.	300 mA Cat. No.	List Price in ₹ Per Unit
6 A	DHCEACSN2030006	DHCEACSN2100006	DHCEACSN2300006	4434.00
10 A	DHCEACSN2030010	DHCEACSN2100010	DHCEACSN2300010	4434.00
16 A	DHCEACSN2030016	DHCEACSN2100016	DHCEACSN2300016	4434.00
20 A	DHCEACSN2030020	DHCEACSN2100020	DHCEACSN2300020	4434.00
25 A	DHCEACSN2030025	DHCEACSN2100025	DHCEACSN2300025	4434.00
32 A	DHCEACSN2030032	DHCEACSN2100032	DHCEACSN2300032	4434.00
40 A	DHCEACSN2030040	DHCEACSN2100040	DHCEACSN2300040	5465.00

SPD

Type 1+2 AC Surge Protection Device

HSN Code - 8536

Order Code	Poles	Uc (V)	In (kA)	Iimp (kA)	Imax (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	14353.00
DHSAANAC50320	1P+N	320 V	20 kA	12.5 kA	50 kA	1.5 kV	No	7812.00
DHSAARBC50320	TP+N	320 V	20 kA	12.5 kA	50 kA	1.5 kV	Yes	14671.00
DHSAARAC50320	1P+N	320 V	20 kA	12.5 kA	50 kA	1.5 kV	Yes	8138.00

Cartridges

HSN Code - 8536

Order Code	Pole	Uc (V)	In (kA)	Iimp (kA)	Imax (kA)	Up (kV)	List Price in ₹ Per Unit
DSSRCX0149	L - N	320 V	20 kA	12.5 kA	50 kA	1.5 kV	3649.00
DSSRCX0150	N - PE	255 V	40 kA	12.5 kA	70 kA	1.5 kV	4478.00





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	4185.00
DHSA2NBN40275	TP+N	275 V	20 kA	40 kA	1.3 kV	No	4185.00
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	4350.00
DHSA2RBN40275	TP+N	275 V	20 kA	40 kA	1.3 kV	Yes	4350.00

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 _{limp} (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	14818.00
DHSDARCC6012H	1200 Vdc	20 kA	12.5 kA	60 kA	4 kV	Yes	15128.00
DHSDANCB4012H	1200 Vdc	20 kA	6 kA	40 kA	4 kV	No	7851.00
DHSDARCB4012H	1200 Vdc	20 kA	6 kA	40 kA	4 kV	Yes	8161.00

Cartridges

HSN Code - 8536

Order Code	Pole	U _{cpv} (V)	In (kA)	I _{limp} (kA)	I _{max} (kA)	Up (kV)	List Price in ₹ Per Unit
DSSRCX0154	-	1200 Vdc	20 kA	6 kA	40 kA	4 kV	3500.00



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	U _n (V)	In (kA)	I _{limp} (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	3374.00
24 Hour Analog Time Switch (SST* - 30 min)	DHTED30016	3051.00
Astronomical + Digital Time Switch-3 years	DHTQB01016	3499.00
Digital Weekly Time Switch-3 years	DHTJW01016	3237.00
Multifunction Time Switch-10 years	DHTLB01016	6090.00
Twilight Time Switch	DHTPNN025	3142.00
Staircase Time Switch-3 years	DHTMNX5016	1768.00

* 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	2158.00
SPN 30 (6000 W)	SPN 2.5 (500 W)	DHADOSN302X	30 A/2.5 A ACCL W/O GEN START/STOP	2158.00
SPN 30 (6000 W)	SPN 3 (600 W)	DHADOSN3003	30 A/03 A ACCL W/O GEN START/STOP	2158.00
SPN 30 (6000 W)	SPN 4 (800 W)	DHADOSN3004	30 A/04 A ACCL W/O GEN START/STOP	2158.00
SPN 30 (6000 W)	SPN 5 (1000 W)	DHADOSN3005	30 A/05 A ACCL W/O GEN START/STOP	2158.00
SPN 30 (6000 W)	SPN 6 (1200 W)	DHADOSN3006	30 A/06 A ACCL W/O GEN START/STOP	2158.00
SPN 30 (6000 W)	SPN 9 (1800 W)	DHADOSN3009	30 A/09 A ACCL W/O GEN START/STOP	2158.00
SPN 30 (6000 W)	SPN 12 (2400 W)	DHADOSN3012	30 A/12 A ACCL W/O GEN START/STOP	2158.00
SPN 30 (6000 W)	SPN 15 (3000 W)	DHADOSN3015	30 A/15 A ACCL W/O GEN START/STOP	2158.00
SPN 30 (6000 W)	SPN 20 (4000 W)	DHADOSN3020	30 A/20 A ACCL W/O GEN START/STOP	2158.00

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	567.00
63 A	-	-	DHMZIDPX063	735.00
80 A	-	-	DHMZIDPX080	999.00
100 A	-	-	DHMZIDPX100	1011.00
125 A	-	-	DHMZIDPX125	1091.00
Rating	TP Cat. No.	List Price in ₹ Per Unit	FP Cat. No.	List Price in ₹ Per Unit
40 A	DHMZITPX040	1212.00	DHMZIFPX040	1336.00
63 A	DHMZITPX063	1372.00	DHMZIFPX063	1351.00
80 A	DHMZITPX080	1621.00	DHMZIFPX080	1774.00
100 A	DHMZITPX100	1633.00	DHMZIFPX100	1786.00
125 A	DHMZITPX125	1666.00	DHMZIFPX125	1966.00

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	480.00
32 A	2P+E	DHQBA63032	IP44	6h	4 N	674.00
16 A	3P+N+E	DHQBA65016	IP44	6h	4 N	585.00
32 A	3P+N+E	DHQBA65032	IP44	6h	4 N	870.00
16 A	2P+E	DHQBB63016	IP67	6h	4 N	822.00
32 A	2P+E	DHQBB63032	IP67	6h	4 N	1297.00
16 A	3P+N+E	DHQBB65016	IP67	6h	4 N	1125.00
32 A	3P+N+E	DHQBB65032	IP67	6h	2 N	1344.00
63 A	2P+E	DHQBB63063	IP67	6h	1 N	2880.00
63 A	3P+N+E	DHQBB65063	IP67	6h	1 N	3418.00

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	631.00
32 A	2P+E	DHQDA63032	IP44	6h	4 N	797.00
16 A	3P+N+E	DHQDA65016	IP44	6h	4 N	755.00
32 A	3P+N+E	DHQDA65032	IP44	6h	4 N	1016.00
16 A	2P+E	DHQDB63016	IP67	6h	4 N	1111.00
32 A	2P+E	DHQDB63032	IP67	6h	4 N	1551.00
16 A	3P+N+E	DHQDB65016	IP67	6h	4 N	1484.00
32 A	3P+N+E	DHQDB65032	IP67	6h	2 N	1743.00
63 A	3P+N+E	DHQDB65063	IP67	6h	1 N	3972.00

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	740.00
32 A	2P+E	DHQSA63032	IP44	6h	2 N	1016.00
16 A	3P+N+E	DHQSA65016	IP44	6h	2 N	822.00
32 A	3P+N+E	DHQSA65032	IP44	6h	2 N	1065.00
16 A	2P+E	DHQSB63016	IP67	6h	2 N	1229.00
32 A	2P+E	DHQSB63032	IP67	6h	2 N	1715.00
16 A	3P+N+E	DHQSB65016	IP67	6h	2 N	1557.00
32 A	3P+N+E	DHQSB65032	IP67	6h	2 N	1867.00
63 A	3P+N+E	DHQSB65063	IP67	6h	1 N	4562.00

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	439.00
32 A	2P+E	DHQCA63032	IP44	6h	4 N	709.00
16 A	3P+N+E	DHQCA65016	IP44	6h	4 N	715.00
32 A	3P+N+E	DHQCA65032	IP44	6h	4 N	865.00
16 A	2P+E	DHQCB63016	IP67	6h	4 N	879.00
32 A	2P+E	DHQCB63032	IP67	6h	4 N	1029.00
16 A	3P+N+E	DHQCB65016	IP67	6h	4 N	1024.00
32 A	3P+N+E	DHQCB65032	IP67	6h	3 N	1339.00
63 A	3P+N+E	DHQCB65063	IP67	6h	1 N	3567.00

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	1339.00
Plug	32 A	3P+E	DHQBB34032	IP67	3h	4 N	1344.00
Connector	32 A	3P+E	DHQDB34032	IP67	3h	4 N	1743.00
Wall mounted socket	32 A	3P+E	DHQSB34032	IP67	3h	2 N	1867.00
Interlock socket	32 A	3P+E	DHQWB34032	IP67	3h	1 N	8210.00

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	6131.00
32 A	2P+E	DHQIA63032	IP44	6h	1 N	7862.00
16 A	3P+N+E	DHQIA65016	IP44	6h	1 N	8642.00
32 A	3P+N+E	DHQIA65032	IP44	6h	1 N	9280.00
16 A	2P+E	DHQWB63016	IP67	6h	1 N	6332.00
32 A	2P+E	DHQWB63032	IP67	6h	1 N	8210.00
16 A	3P+N+E	DHQWB65016	IP67	6h	1 N	8896.00
32 A	3P+N+E	DHQWB65032	IP67	6h	1 N	9875.00

Solution with Insulated Plug & Socket



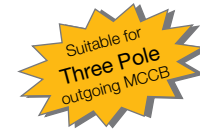
Solution with Insulated Plug & Socket

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	1754.00
16 A	3P+N+E	DHDPBTN016	IP40	6h	1 N	2115.00
32 A	2P+E	DHDPBDP032	IP40	6h	1 N	2401.00
32 A	3P+N+E	DHDPBTN032	IP40	6h	1 N	2712.00
32 A	3P+N+E	DHDPBEN032	8	6h	1 N	3472.00
63 A	3P+N+E	DHDPBEN063	8	6h	1 N	8979.00

Note: MCB to be bought separately.

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



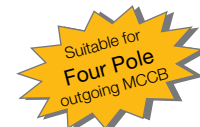
Incomer**	Outgoing* (No. of Ways)	Single Door Item Code	Per Unit LP (₹)	Double Door Item Code	Per Unit LP (₹)
250 A "AA" Frame MCCB	2	IHVG025002	38910.00	IHVG02500200	42510.00
	4	IHVG025004	48880.00	IHVG02500400	52435.00
	6	IHVG025006	55945.00	IHVG02500600	59520.00
	8	IHVG025008	60575.00	IHVG02500800	64150.00
	12	IHVG025012	74800.00	IHVG02501200	78320.00
	16	IHVG025016	88010.00	IHVG02501600	91585.00
400 A "LS" Frame MCCB	2	IHLG040002	45455.00	IHLG04000200	49670.00
	4	IHLG040004	54280.00	IHLG04000400	58225.00
	6	IHLG040006	57780.00	IHLG04000600	61475.00
	8	IHLG040008	61720.00	IHLG04000800	65370.00
	12	IHLG040012	79510.00	IHLG04001200	83235.00
	16	IHLG040016	94415.00	IHLG04001600	98260.00

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	41880.00	IHVGF2500200	45405.00
	4	IHVGF25004	52090.00	IHVGF2500400	55650.00
	6	IHVGF25006	61335.00	IHVGF2500600	64855.00
	8	IHVGF25008	66195.00	IHVGF2500800	69755.00
	12	IHVGF25012	96025.00	IHVGF2501200	99575.00
400 A "LS" Frame MCCB	2	IHLGF40002	48925.00	IHLGF4000200	53050.00
	4	IHLGF40004	57845.00	IHLGF4000400	61785.00
	6	IHLGF40006	63340.00	IHLGF4000600	66980.00
	8	IHLGF40008	67445.00	IHLGF4000800	71085.00
	12	IHLGF40012	102050.00	IHLGF4001200	105830.00

* 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	15090.00	ISSBOU0690	16180.00
2	Cable Alley I/C 250 A,O/G 3P GF 6WAY & 4P 2/4Way	ISSBOU0675	20260.00	ISSBOU0691	21360.00
3	Cable Alley I/C 250 A,O/G 3P GF 8WAY & 4P 6Way	ISSBOU0676	20540.00	ISSBOU0692	22400.00
4	Cable Alley I/C 250 A,O/G 3P GF 12Way	ISSBOU0677	23295.00	ISSBOU0693	23945.00
5	Cable Alley I/C 250 A,O/G 4P GF 8Way	ISSBOU0678	23295.00	ISSBOU0694	23945.00
6	Cable Alley I/C 250 A,O/G 3P GF 16Way & 4P 12Way	ISSBOU0679	27445.00	ISSBOU0696	28480.00
7	Cable Alley I/C 400 A,O/G 3P GF 2/4Way	ISSBOU0680	17865.00	ISSBOU0697	18510.00
8	Cable Alley I/C 400 A,O/G 3P GF 6WAY & 4P 2/4Way	ISSBOU0681	17865.00	ISSBOU0698	18510.00
9	Cable Alley I/C 400 A/630 A, O/G 3P GF 8Way, 4P 6Way & A/F 6Way	ISSBOU0682	24020.00	ISSBOU0699	25185.00
10	Cable Alley I/C 400 A,O/G 3P GF 12Way	ISSBOU0683	27715.00	ISSBOU0700	28480.00
11	Cable Alley I/C 400 A/630 A, O/G 4P GF 8Way & TP A/F 8Way	ISSBOU0684	29130.00	ISSBOU0701	29775.00
12	Cable Alley I/C 400 A/630, O/G 4P GF 12Way, TP GF 16Way & TP A/F 12Way	ISSBOU0685	30425.00	ISSBOU0702	31070.00

* 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

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	78385.00	IHLA04000600	78385.00
	8	IHLA040008	83730.00	IHLA04000800	83730.00
	12	IHLA040012	107850.00	IHLA04001200	107850.00
630 A "L" Frame MCCB	6	IHLA063006	86170.00	IHLA06300600	86170.00
	8	IHLA063008	91830.00	IHLA06300800	91830.00
	12	IHLA063012	109105.00	IHLA06301200	109105.00

Double door



* 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	110.00
2	Terminal for A Frame Outgoing (Per Pole)	ISSCUPBOP167	280.00

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

S. No.	Description	Single Door Item Code	Per Unit LP (₹)	Double Door Item Code	Per Unit LP (₹)
1	Prewire Meter Module - Analog	ISSBOU0689	17475.00	ISSBOU0706	18135.00
2	Meter Module - Digital	ISSBOU0711	21490.00	ISSBOU0707	22660.00

Bare Meter Module / MCB Module / Add on Module

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	6730.00	ISSBOU0703	7765.00
2	MCB Module	ISSBOU0687	6730.00	ISSBOU0704	7765.00
3	Add on Module	ISSBOU0688	6730.00	ISSBOU0705	7765.00

* 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**

S. No.	Description	Item Code	Per Unit LP (₹)
1	250 A Incoming change Over switch-F1	ISSBOU0708	12785.00
2	400 A & 630 A Incoming change Over switch - F2	ISSBOU0709	18790.00

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

Add on Incoming Changeover Switch with Enclosure

S. No.	Description	Item Code	Per Unit LP (₹)
1	250 A Incoming change Over switch-F1	ISSBOU0712	50900.00
2	400 A Incoming change Over switch - F2	ISSBOU0713	67455.00
3	630 A Incoming change Over switch - F3	ISSBOU0714	75425.00

Add on Incoming Automatic Changeover Switch with Enclosure

S. No.	Description	Item Code	Per Unit LP (₹)
1	100A ATS FITT. ENCL P.SAFE	ISSBOU1128	135090.00
2	125A ATS FITT. ENCL P.SAFE	ISSBOU1129	141410.00
3	250A ATS FITT. ENCL P.SAFE	ISSBOU1126	196825.00



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	5100.00	IHCNFE0040	7495.00
00	063 A	IHCNFO0063	5360.00	IHCNFE0063	7985.00
00	100 A	IHCNFO0100	7185.00	IHCNFE0100	10060.00
0	125 A	IHCNFO0125	10735.00	IHCNFE0125	15090.00
0	160 A	IHCNFO0160	11500.00	IHCNFE0160	16070.00
0	200 A	IHCNFO0200	13790.00	IHCNFE0200	18515.00
1	250 A	IHCNFO0250	19950.00	IHCNFE0250	25605.00
1	320 A	IHCNFO0320	21080.00	IHCNFE0320	26780.00
2	400 A	IHCNFO0400	30460.00	IHCNFE0400	39405.00
2	630 A	IHCNFO0630	36195.00	IHCNFE0630	45600.00
3	800 A	IHCNFO0800	54175.00	IHCNFE0800	68820.00
4	1000 A	IHCNFO1000	92270.00	IHCNFE1000	125435.00
4	1250 A	IHCNFO1250	122505.00	IHCNFE1250	167925.00
4	1600 A	IHCNFO1600	145890.00	IHCNFE1600	225500.00
5	2000 A	IHCNFO2000	226035.00	IHCNFE2000	297120.00
5	2500 A	IHCNFO2500	299790.00	IHCNFE2500	379335.00
5	3150 A	IHCNFO3150	410430.00	IHCNFE3150	513895.00



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 / AC - 33B*, 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	23210.00	IHRFBAE040	25160.00
63 A	IHRFBAO063	24270.00	IHRFBAE063	26215.00
80 A	IHRFBAO080	25470.00	IHRFBAE080	27415.00
100 A	IHRFBAO100	26335.00	IHRFBAE100	28280.00
125 A	IHRFBAO125	29825.00	IHRFBAE125	31770.00

* Up to 80 A



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 (₹)	Item Code 4P	Per Unit LP (₹)
	Open Execution		With Enclosure	
100 A	IHYFCDO100	48565.00	IHYFCDE100	59350.00
125 A	IHYFCDO125	52100.00	IHYFCDE125	62375.00
160 A	IHYFCDO160	57505.00	IHYFCDE160	68600.00
200 A	IHYFCDO200	72785.00	IHYFCDE200	83860.00
250 A	IHYFCDO250	81630.00	IHYFCDE250	93030.00
315 A	IHYFCDO315	85335.00	IHYFCDE315	96405.00
400 A	IHYFCDO400	97690.00	IHYFCDE400	116965.00
500 A	IHYFCDO500	113725.00	IHYFCDE500	132620.00
630 A	IHYFCDO630	125355.00	IHYFCDE630	144250.00



ATS without controller is available on request

ATS Wire Harness: HSN Code: 8537

Item Code	Per Unit LP (₹)
ISSYAX0201	3200.00

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	9895.00
00	100 A	IHCBFO0100	11665.00
0	125 A	IHCBFO0125	14865.00
0	160 A	IHCBFO0160	17710.00
0	200 A	IHCBFO0200	19045.00
1	250 A	IHCBFO0250	27550.00
1	320 A	IHCBFO0320	29110.00
2	400 A	IHCBFO0400	42070.00
2	630 A	IHCBFO0630	49985.00
3	800 A	IHCBFO0800	74820.00
3	1000 A	IHCBFO1000	127420.00
3	1600 A	IHCBFO1600	201475.00

Accessories:

HSN Code: 8538

Aux. Contact	Item Code	Per Unit LP (₹)
1 NO. 1 NC.	IHCNFACT1CO	390.00
2 NO. 2 NC.	IHCNFACT2CO	525.00

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	1865.00	IHCSTE0080	2905.00
0	100 A	IHCSTO0100	2830.00	IHCSTE0100	4025.00
0	125 A	IHCSTO0125	3765.00	IHCSTE0125	4895.00
0	160 A	IHCSTO0160	4485.00	IHCSTE0160	6185.00
0	200 A	IHCSTO0200	5095.00	IHCSTE0200	6315.00
1	250 A	IHCSTO0250	6365.00	IHCSTE0250	8110.00
1	320 A	IHCSTO0320	6990.00	IHCSTE0320	8890.00
1	400 A	IHCSTO0400	10065.00	IHCSTE0400	12130.00



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	1365.00	IHCSFE0040	2240.00
00	63 A	IHCSFO0063	1545.00	IHCSFE0063	2445.00
00	80 A	IHCSFO0080	2285.00	IHCSFE0080	3100.00
00	100 A	IHCSFO0100	3685.00	IHCSFE0100	4510.00
0	125 A	IHCSFO0125	3930.00	IHCSFE0125	4970.00
0	160 A	IHCSFO0160	4705.00	IHCSFE0160	5745.00
0	200 A	IHCSFO0200	5675.00	IHCSFE0200	6855.00
1	250 A	IHCSFO0250	7115.00	IHCSFE0250	9225.00
1	320 A	IHCSFO0320	7800.00	IHCSFE0320	9795.00
2	400 A	IHCSFO0400	10820.00	IHCSFE0400	13525.00
2	630 A	IHCSFO0630	12390.00	IHCSFE0630	15270.00
3	800 A	IHCSFO0800	18470.00	IHCSFE0800	21790.00
4	1000 A	IHCSFO1000	27945.00	IHCSFE1000	39585.00
4	1250 A	IHCSFO1250	41965.00	IHCSFE1250	47620.00
4	1600 A	IHCSFO1600	57750.00	IHCSFE1600	64035.00
5	2000 A	IHCSFO2000	66180.00	IHCSFE2000	84310.00
5	2500 A	IHCSFO2500	85880.00	IHCSFE2500	110350.00
5	3150 A	IHCSFO3150	121150.00	IHCSFE3150	156840.00



Kompact *plus* Switch Disconnecter Fuse

HSN Code: 8537

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

Switch Disconnecter Fuse (Panel Mounting Cubicle Type) - AC-23A, 50 Hz, 415 V
Kompact Plus



Rating A	Pole	Type of Fuse	With / Without Fuse	Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	Suitable Fuse
				Open Execution		In Sheet Steel Encl.		
32 A	TPN	Bolted Type	With 3 Fuses	IHKDTF4032	2460.00	IHKDTW4032	3965.00	IHHTIA0032
63 A				IHKDTF4063	3385.00	IHKDTW4063	4905.00	IHHTSS0063
100 A				IHKDTF4100	6855.00	IHKDTW4100	8280.00	IHHTSD0100
125 A				IHKDTF4125	8770.00	IHKDTW4125	10270.00	IHHTSD0125
32 A		DIN Type		IHKFTF4032	3575.00	IHKFTW4032	4780.00	IHHCD00032
63 A				IHKFTF4063	4545.00	IHKFTW4063	5880.00	IHHCD00063
100 A				IHKFTF4100	7775.00	IHKFTW4100	9275.00	IHHCD00100
125 A				IHKFTF4125	9935.00	IHKFTW4125	11460.00	IHHCD00125
32 A		Without Fuse	Bolted Type	IHKDTO4032	2145.00	IHKDTE4032	3650.00	IHHTIA0032
63 A				IHKDTO4063	2995.00	IHKDTE4063	4515.00	IHHTSS0063
100 A				IHKDTO4100	6045.00	IHKDTE4100	7470.00	IHHTSD0100
125 A				IHKDTO4125	7960.00	IHKDTE4125	9460.00	IHHTSD0125
32 A			DIN Type	IHKFTO4032	2360.00	IHKFTE4032	3565.00	IHHCD00032
63 A				IHKFTO4063	3285.00	IHKFTE4063	4620.00	IHHCD00063
100 A				IHKFTO4100	6395.00	IHKFTE4100	7895.00	IHHCD00100
125 A				IHKFTO4125	8525.00	IHKFTE4125	10050.00	IHHCD00125
32 A	FP	Bolted Type	With 4 Fuses	IHKDFF4032	3360.00	IHKDFW4032	4965.00	IHHTIA0032
63 A				IHKDFF4063	4290.00	IHKDFW4063	5900.00	IHHTSS0063
100 A				IHKDFF4100	8595.00	IHKDFW4100	10215.00	IHHTSD0100
125 A				IHKDFF4125	10465.00	IHKDFW4125	12160.00	IHHTSD0125
32 A		DIN Type		IHKFFF4032	4860.00	IHKFFW4032	6150.00	IHHCD00032
63 A				IHKFFF4063	5870.00	IHKFFW4063	7280.00	IHHCD00063
100 A				IHKFFF4100	10055.00	IHKFFW4100	11645.00	IHHCD00100
125 A				IHKFFF4125	11120.00	IHKFFW4125	12695.00	IHHCD00125
32 A		Without Fuse	Bolted Type	IHKDFO4032	2940.00	IHKDFE4032	4545.00	IHHTIA0032
63 A				IHKDFO4063	3770.00	IHKDFE4063	5380.00	IHHTSS0063
100 A				IHKDFO4100	7515.00	IHKDFE4100	9135.00	IHHTSD0100
125 A				IHKDFO4125	9385.00	IHKDFE4125	11080.00	IHHTSD0125
32 A			DIN Type	IHKFFO4032	3240.00	IHKFFE4032	4530.00	IHHCD00032
63 A				IHKFFO4063	4190.00	IHKFFE4063	5600.00	IHHCD00063
100 A				IHKFFO4100	8215.00	IHKFFE4100	9805.00	IHHCD00100
125 A				IHKFFO4125	9240.00	IHKFFE4125	10815.00	IHHCD00125

Kompact *plus* Switch Disconnecter Fuse Unit

HSN Code: 8537

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

Switch Disconnecter Fuse (Panel Mounting Cubicle Type) - AC-23 A, 50 Hz, 415 V
Kompact EZO



Rating A	Pole	Type of Fuse		Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	Suitable Fuse				
				Open Execution		In Sheet Steel Encl.						
160 A	TPN	Bolted Type	With 3 Fuses	IHFSTF4160	9970.00	IHFSTW4160	12870.00	IHHTSF0160				
200 A				IHFSTF4200	12845.00	IHFSTW4200	15655.00	IHHTSF0200				
250 A				IHFSTF4250	15125.00	IHFSTW4250	17835.00	IHHTSF0250				
320 A				IHFSTF4320	18805.00	IHFSTW4320	22035.00	IHHTSK0315				
400 A				IHFSTF4400	23745.00	IHFSTW4400	26805.00	IHHTSMF400				
630 A				IHFSTF4630	39680.00	IHFSTW4630	42795.00	IHHTLM0630				
800 A				IHFSTF4800	46430.00	IHFSTW4800	49480.00	IHHTLM0800				
160 A				DIN Type			IHFKTF4160	11130.00	IHFKTW4160	13825.00	IHHCD01160	
200 A							IHFKTF4200	13590.00	IHFKTW4200	16900.00	IHHCD01200	
250 A							IHFKTF4250	15930.00	IHFKTW4250	19060.00	IHHCD01250	
320 A							IHFKTF4320	19750.00	IHFKTW4320	22775.00	IHHCD02315	
400 A							IHFKTF4400	23495.00	IHFKTW4400	26500.00	IHHCD02400	
630 A		IHFKTF4630	37720.00				IHFKTW4630	40950.00	IHHCD03630			
160 A		Bolted Type					Without Fuse	IHFSTO4160	8710.00	IHFSTE4160	11610.00	IHHTSF0160
200 A								IHFSTO4200	11585.00	IHFSTE4200	14395.00	IHHTSF0200
250 A				IHFSTO4250	13760.00	IHFSTE4250		16470.00	IHHTSF0250			
320 A				IHFSTO4320	17020.00	IHFSTE4320		20250.00	IHHTSK0315			
400 A				IHFSTO4400	20385.00	IHFSTE4400		23445.00	IHHTSMF400			
630 A				IHFSTO4630	32855.00	IHFSTE4630		35970.00	IHHTLM0630			
800 A				IHFSTO4800	38825.00	IHFSTE4800		41875.00	IHHTLM0800			
160 A				DIN Type				IHFKTO4160	9090.00	IHFKTE4160	11785.00	IHHCD01160
200 A								IHFKTO4200	11550.00	IHFKTE4200	14860.00	IHHCD01200
250 A								IHFKTO4250	13635.00	IHFKTE4250	16765.00	IHHCD01250
320 A								IHFKTO4320	16795.00	IHFKTE4320	19820.00	IHHCD02315
400 A	IHFKTO4400							20315.00	IHFKTE4400	23320.00	IHHCD02400	
630 A	IHFKTO4630	32710.00	IHFKTE4630				35940.00	IHHCD03630				
800 A	IHFKTO4800	35480.00	IHFKTE4800	39535.00								

Kompact *plus* Switch Disconnecter Fuse

HSN Code: 8537

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



Rating A	Pole	Type of Fuse		Item Code	Per Unit LP (₹)	Item Code	Per Unit LP (₹)	Suitable Fuse		
				Open Execution		In Sheet Steel Encl.				
160 A	TPN	Bolted Type	With 3 Fuses	IHFSTF4160	9970.00	IHFSTW4160	12870.00	IHHTSF0160		
200 A				IHFSTF4200	12845.00	IHFSTW4200	15655.00	IHHTSF0200		
250 A				IHFSTF4250	15125.00	IHFSTW4250	17835.00	IHHTSF0250		
320 A				IHFSTF4320	18805.00	IHFSTW4320	22035.00	IHHTSK0315		
400 A				IHFSTF4400	23745.00	IHFSTW4400	26805.00	IHHTSMF400		
630 A				IHFSTF4630	39680.00	IHFSTW4630	42795.00	IHHTLM0630		
800 A				IHFSTF4800	46430.00	IHFSTW4800	49480.00	IHHTLM0800		
160 A				DIN Type	Without Fuse	IHFKTF4160	11130.00	IHFKTW4160	13825.00	IHHCD01160
200 A		IHFKTF4200	13590.00			IHFKTW4200	16900.00	IHHCD01200		
250 A		IHFKTF4250	15930.00			IHFKTW4250	19060.00	IHHCD01250		
320 A		IHFKTF4320	19750.00			IHFKTW4320	22775.00	IHHCD02315		
400 A		IHFKTF4400	23495.00			IHFKTW4400	26500.00	IHHCD02400		
630 A		IHFKTF4630	37720.00			IHFKTW4630	40950.00	IHHCD03630		
160 A		Bolted Type	Without Fuse			IHFSTO4160	8710.00	IHFSTE4160	11610.00	IHHTSF0160
200 A						IHFSTO4200	11585.00	IHFSTE4200	14395.00	IHHTSF0200
250 A				IHFSTO4250	13760.00	IHFSTE4250	16470.00	IHHTSF0250		
320 A				IHFSTO4320	17020.00	IHFSTE4320	20250.00	IHHTSK0315		
400 A				IHFSTO4400	20385.00	IHFSTE4400	23445.00	IHHTSMF400		
630 A				IHFSTO4630	32855.00	IHFSTE4630	35970.00	IHHTLM0630		
800 A				IHFSTO4800	38825.00	IHFSTE4800	41875.00	IHHTLM0800		
160 A				DIN Type	Without Fuse	IHFKTO4160	9090.00	IHFKTE4160	11785.00	IHHCD01160
200 A		IHFKTO4200	11550.00			IHFKTE4200	14860.00	IHHCD01200		
250 A		IHFKTO4250	13635.00			IHFKTE4250	16765.00	IHHCD01250		
320 A		IHFKTO4320	16795.00			IHFKTE4320	19820.00	IHHCD02315		
400 A		IHFKTO4400	20315.00			IHFKTE4400	23320.00	IHHCD02400		
630 A		IHFKTO4630	32710.00			IHFKTE4630	35940.00	IHHCD03630		
800 A		IHFKTO4800	35480.00			IHFKTE4800	39535.00			
160 A		FP	Bolted Type			With 4 Fuses	IHFSFF4160	13670.00	IHFSFW4160	16465.00
200 A				IHFSFF4200	15910.00		IHFSFW4200	18530.00	IHHTSF0200	
250 A				IHFSFF4250	18235.00		IHFSFW4250	20750.00	IHHTSF0250	
320 A				IHFSFF4320	21275.00		IHFSFW4320	24160.00	IHHTSK0315	
400 A				IHFSFF4400	26120.00		IHFSFW4400	29485.00	IHHTSMF400	
630 A	IHFSFF4630			43650.00	IHFSFW4630		47075.00	IHHTLM0630		
800 A	IHFSFF4800			51075.00	IHFSFW4800		54428.00	IHHTLM0800		
160 A	DIN Type			Without Fuse	IHFKFF4160		13125.00	IHFKFW4160	15640.00	IHHCD01160
200 A			IHFKFF4200		16530.00	IHFKFW4200	19050.00	IHHCD01200		
250 A			IHFKFF4250		17525.00	IHFKFW4250	20965.00	IHHCD01250		
320 A			IHFKFF4320		21725.00	IHFKFW4320	25055.00	IHHCD02315		
400 A			IHFKFF4400		25845.00	IHFKFW4400	29150.00	IHHCD02400		
630 A			IHFKFF4630		43900.00	IHFKFW4630	46810.00	IHHCD03630		
160 A			Bolted Type		Without Fuse	IHFSFO4160	11990.00	IHFSFE4160	14785.00	IHHTSF0160
200 A						IHFSFO4200	14230.00	IHFSFE4200	16850.00	IHHTSF0200
250 A	IHFSFO4250			16415.00		IHFSFE4250	18930.00	IHHTSF0250		
320 A	IHFSFO4320			18895.00		IHFSFE4320	22275.00	IHHTSK0315		
400 A	IHFSFO4400			22425.00		IHFSFE4400	25790.00	IHHTSMF400		
630 A	IHFSFO4630			36140.00		IHFSFE4630	39565.00	IHHTLM0630		
800 A	IHFSFO4800			42705.00		IHFSFE4800	46060.00	IHHTLM0800		
160 A	DIN Type			Without Fuse		IHFKFO4160	10405.00	IHFKFE4160	12920.00	IHHCD01160
200 A			IHFKFO4200		13810.00	IHFKFE4200	16330.00	IHHCD01200		
250 A			IHFKFO4250		14995.00	IHFKFE4250	18440.00	IHHCD01250		
320 A			IHFKFO4320		18475.00	IHFKFE4320	21805.00	IHHCD02315		
400 A			IHFKFO4400		22345.00	IHFKFE4400	25650.00	IHHCD02400		
630 A			IHFKFO4630		37220.00	IHFKFE4630	40130.00	IHHCD03630		
800 A			IHFKFO4800		43085.00	IHFKFE4800	47100.00			

Busbar Chambers (Wall Mounted)

Current Rating (A)	No. of	Item Code	Per Unit LP (₹)
63 A	4 WAY	IHBC006304	9125.00
	6 WAY	IHBC006306	10645.00
	8 WAY	IHBC006308	12260.00
100 A	4 WAY	IHBC010004	10955.00
	6 WAY	IHBC010006	15170.00
	8 WAY	IHBC010008	15940.00
200 A	4 WAY	IHBC020004	13705.00
	6 WAY	IHBC020006	17740.00
	8 WAY	IHBC020008	19360.00
250 A	4 WAY	IHBC025004	22685.00
	6 WAY	IHBC025006	35700.00
	8 WAY	IHBC025008	44645.00
315 A	4 WAY	IHBC031504	23700.00
	6 WAY	IHBC031506	36730.00
	8 WAY	IHBC031508	46935.00
400 A	4 WAY	IHBC040004	25605.00
	6 WAY	IHBC040006	38625.00
	8 WAY	IHBC040008	48575.00
630 A	4 WAY	IHBC063004	39215.00
	6 WAY	IHBC063006	52025.00
	8 WAY	IHBC063008	62580.00
800 A	4 WAY	IHBC080004	41715.00
	6 WAY	IHBC080006	55595.00
	8 WAY	IHBC080008	70380.00



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	120.00	20 N
6 A	IHHRH00006	120.00	
10 A	IHHRH00010	120.00	
16 A	IHHRH00016	120.00	
20 A	IHHRH00020	120.00	20 N
25 A	IHHRH00025	120.00	
32 A	IHHRH00032	120.00	
40 A	IHHRH00040	130.00	20 N
50 A	IHHRH00050	275.00	20 N
63 A	IHHRH00063	325.00	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	445.00	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	890.00	3 N
400 A	IHIC02O400	Open Type Fuse Base	CD-2	1425.00	3 N
630 A	IHIC03O630	Open Type Fuse Base	CD-3	1660.00	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	70.00	20 N
			4 A	IHHNS00004	70.00	
			6 A	IHHNS00006	70.00	
			10 A	IHHNS00010	70.00	
			16 A	IHHNS00016	70.00	
			20 A	IHHNS00020	85.00	
			25 A	IHHNS00025	85.00	
			32 A	IHHNS00032	85.00	
A-2	Offset	TIA	16 A	IHHTIA0016	105.00	10 N
			20 A	IHHTIA0020	105.00	
			25 A	IHHTIA0025	105.00	
			32 A	IHHTIA0032	105.00	
A-3	Offset	TSS	40 A	IHHTSS0040	130.00	10 N
			50 A	IHHTSS0050	130.00	
			63 A	IHHTSS0063	130.00	
A-4	Offset	TSD	80 A	IHHTSD0080	270.00	10 N
			100 A	IHHTSD0100	270.00	
			125 A	IHHTSD0125	270.00	
B-1	Central	TSDC	80 A	IHHTSDC080	275.00	10 N
			100 A	IHHTSDC100	275.00	
			125 A	IHHTSDC125	275.00	
B-2	Central	TSF	160 A	IHHTSF0160	420.00	10 N
			200 A	IHHTSF0200	420.00	
			250 A	IHHTSF0250	455.00	
B-3	Central	TSK	315 A	IHHTSK0315	595.00	3 N
B - 4	Central	TSMF	400 A	IHHTSMF400	1120.00	3 N
C - 1	Central	TSMS	400 A	IHHTSMS400	1120.00	3 N
C - 2	Central	TTS	400 A	IHHTTS0400	1280.00	1 N
C - 2	Central	TLM	630 A	IHHTLM0630	2275.00	1 N
C - 2	Central	TLM	800 A	IHHTLM0800	2535.00	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	355.00	3 N
	63 A	IHHCD11063	365.00	
	100 A	IHHCD11100	395.00	
00	6 A	IHHCD00006	405.00	3 N
	10 A	IHHCD00010	405.00	
	16 A	IHHCD00016	405.00	
	25 A	IHHCD00025	405.00	
	32 A	IHHCD00032	405.00	
	40 A	IHHCD00040	420.00	
	50 A	IHHCD00050	420.00	
	63 A	IHHCD00063	420.00	
	80 A	IHHCD00080	460.00	
	100 A	IHHCD00100	460.00	
	125 A	IHHCD00125	470.00	
01	160 A	IHHCD00160	495.00	3 N
	40 A	IHHCD01040	670.00	
	50 A	IHHCD01050	670.00	
	100 A	IHHCD01100	670.00	
	125 A	IHHCD01125	670.00	
	160 A	IHHCD01160	680.00	
02	200 A	IHHCD01200	680.00	3 N
	250 A	IHHCD01250	765.00	
	250 A	IHHCD02250	985.00	
	315 A	IHHCD02315	985.00	
03	350 A	IHHCD02350	1060.00	1 N
	400 A	IHHCD02400	1060.00	
	500 A	IHHCD03500	1635.00	
	630 A	IHHCD03630	1670.00	1 N

Comprehensive Power Solutions



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



IOT Based / GSM
IPFC RELAY



**LOAD FLOW &
HARMONICS ANALYSIS**



AHFX System
**ACTIVE HARMONIC
FILTER / SVG**



Contactor+
Thyristor Switching
APFC PANEL



High PIV
Thyristor Switch



High Linearity
HD DETUNED REACTOR



High Linearity
BROAD BAND FILTER

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

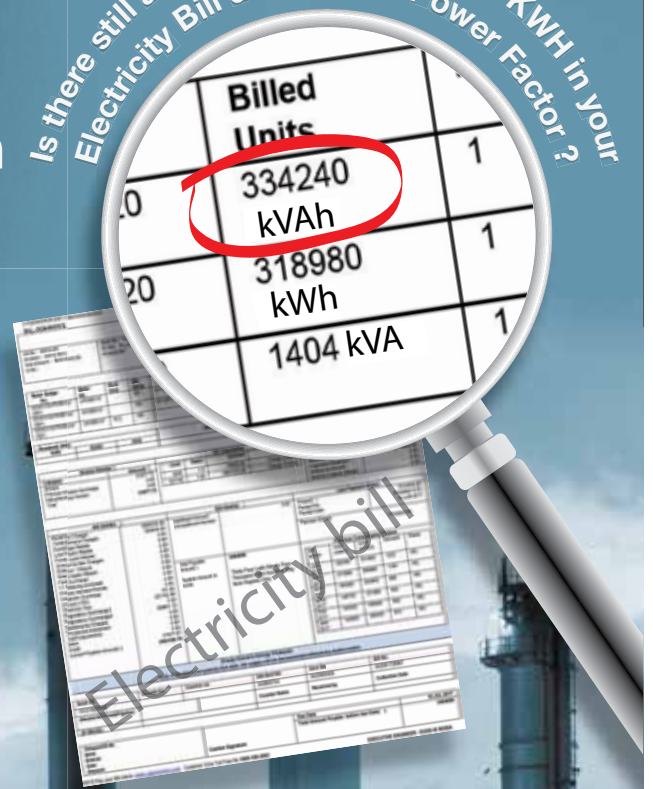


HAVELLS

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 ?



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

$$\text{Average PF} = \text{kW} / \text{kVA}$$

$$\text{Operating load kW} = \text{kVA Demand} \times \text{Average PF}$$

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

$$\text{kVAR} = \text{kW} \times \text{multiplying factor from table} = 500 \times 0.590 = 295 \text{ kVAR}$$

(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 $\% \text{ Non Linear Load} = (\text{Non Linear Load} / \text{Transformer Rating}) \times 100$ $= (100/1000) \times 100$ $= 10\%$				
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

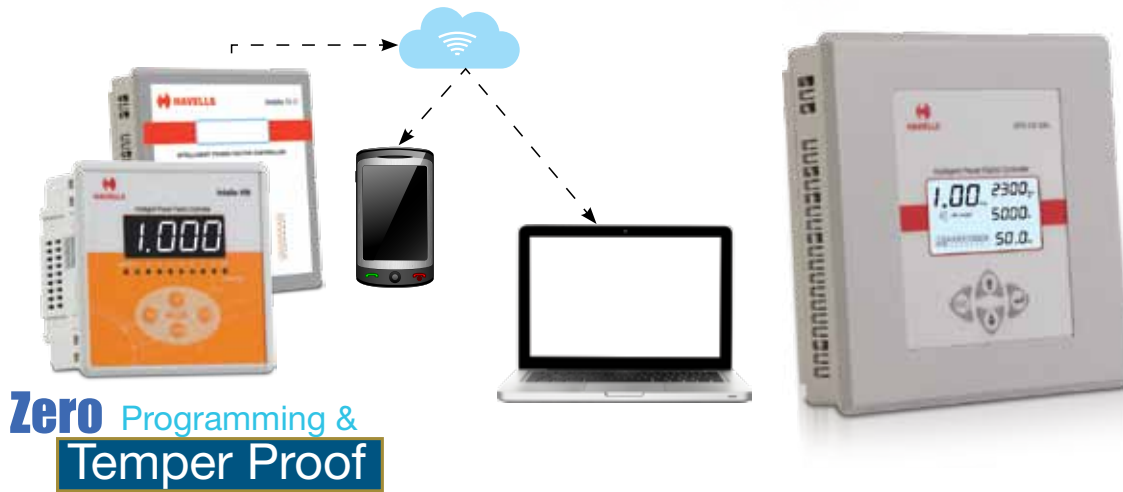
IPFC (Single CT Sensing)

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
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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
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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 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	QHUTCC5001X0	Torrent 440 V 50 Hz-1 kVAr 3 PH	1.31	3 X 5.5	1 N	16 N	207.00
2 kVAr	QHUTCC5002X0	Torrent 440 V 50 Hz-2 kVAr 3 PH	2.62	3 X 11.0	1 N	16 N	412.00
3 kVAr	QHUTCC5003X0	Torrent 440 V 50 Hz-3 kVAr 3 PH	3.94	3 X 16.4	1 N	16 N	622.00
4 kVAr	QHUTCC5004X0	Torrent 440 V 50 Hz-4 kVAr 3 PH	5.25	3 X 21.9	1 N	16 N	830.00
5 kVAr	QHUTCC5005X0	Torrent 440 V 50 Hz-5 kVAr 3 PH	6.56	3 X 27.4	1 N	16 N	1037.00
6 kVAr	QHUTCC5006X0	Torrent 440 V 50 Hz-6 kVAr 3 PH	7.87	3 X 32.9	1 N	8 N	1245.00
7.5 kVAr	QHUTCC5007X5	Torrent 440 V 50 Hz-7.5 kVAr 3P H	9.84	3 X 41.1	1 N	8 N	1556.00
10 kVAr	QHUTCC5010X0	Torrent 440 V 50 Hz-10 kVAr 3 PH	13.12	3 X 54.8	1 N	8 N	2075.00
12.5 kVAr	QHUTCC5012X5	Torrent 440 V 50 Hz-12.5 kVAr 3 PH	16.40	3 X 68.5	1 N	8 N	2593.00
15 kVAr	QHUTCC5015X0	Torrent 440 V 50 Hz-15 kVAr 3 PH	19.68	3 X 82.2	1 N	4 N	3112.00
20 kVAr	QHUTCC5020X0	Torrent 440 V 50 Hz-20 kVAr 3 PH	26.24	3 X 109.6	1 N	4 N	4149.00
25 kVAr	QHUTCC5025X0	Torrent 440 V 50 Hz-25 kVAr 3 PH	32.80	3 X 137.0	1 N	4 N	5187.00
30 kVAr	QHUTCC5030X0	Torrent 440 V 50 Hz-30 kVAr 3 PH	39.37	3 X 164.4	1 N	4 N	6224.00

Warrior - Super Heavy Duty Cylindrical Capacitors (NEW)

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 440 Vac, 3ϕ, 50 Hz, Delta Connection							
1 kVAr	QHBTCC5001X0	Warrior Super Heavy Duty 440 V 50 Hz 1 kVAr 3 PH	1.31	3 X 5.5	1 N	16 N	316.00
2 kVAr	QHBTCC5002X0	Warrior Super Heavy Duty 440 V 50 Hz 2 kVAr 3 PH	2.62	3 X 11.0	1 N	16 N	577.00
3 kVAr	QHBTCC5003X0	Warrior Super Heavy Duty 440 V 50 Hz 3 kVAr 3 PH	3.94	3 X 16.4	1 N	16 N	866.00
4 kVAr	QHBTCC5004X0	Warrior Super Heavy Duty 440 V 50 Hz 4 kVAr 3 PH	5.25	3 X 21.9	1 N	16 N	1154.00
5 kVAr	QHBTCC5005X0	Warrior Super Heavy Duty 440 V 50 Hz 5 kVAr 3 PH	6.56	3 X 27.4	1 N	16 N	1443.00
6 kVAr	QHBTCC5006X0	Warrior Super Heavy Duty 440 V 50 Hz 7.5 kVAr 3 PH	7.87	3 X 32.9	1 N	8 N	1731.00
7.5 kVAr	QHBTCC5007X5	Warrior Super Heavy Duty 440 V 50 Hz 6 kVAr 3 PH	9.84	3 X 41.1	1 N	8 N	2164.00
8 kVAr	QHBTCC5008X0	Warrior Super Heavy Duty 440 V 50 Hz 8 kVAr 3 PH	10.50	3 X 43.8	1 N	8 N	2308.00
10 kVAr	QHBTCC5010X0	Warrior Super Heavy Duty 440 V 50 Hz 10 kVAr 3 PH	13.12	3 X 54.8	1 N	4 N	2885.00
12.5 kVAr	QHBTCC5012X5	Warrior Super Heavy Duty 440 V 50 Hz 12.5 kVAr 3 PH	16.40	3 X 68.5	1 N	4 N	3606.00
15 kVAr	QHBTCC5015X0	Warrior Super Heavy Duty 440 V 50 Hz 15 kVAr 3 PH	19.68	3 X 82.2	1 N	4 N	4328.00
20 kVAr	QHBTCC5020X0	Warrior Super Heavy Duty 440 V 50 Hz 20 kVAr 3 PH	26.24	3 X 109.6	1 N	4 N	5770.00
25 kVAr	QHBTCC5025X0	Warrior Super Heavy Duty 440 V 50 Hz 25 kVAr 3 PH	32.80	3 X 137.0	1 N	4 N	7213.00
30 kVAr	QHBTCC5030X0	WARRIOR 440V 50Hz-30kVAr 3PH	39.37	3 X 164.4	1 N	4 N	8656.00
Rated Voltage 480 Vac, 3ϕ, 50 Hz, Delta Connection							
5 kVAr	QHBTCD5005X0	Warrior Super Heavy Duty 480 V 50 Hz 5 kVAr 3 PH	6.01	3 x 23.0	1 N	16 N	1488.00
7.5 kVAr	QHBTCD5007X5	Warrior Super Heavy Duty 480 V 50 Hz 7.5 kVAr 3 PH	9.02	3 x 34.5	1 N	8 N	2233.00
10 kVAr	QHBTCD5010X0	Warrior Super Heavy Duty 480 V 50 Hz 10 kVAr 3 PH	12.03	3 x 46.0	1 N	4 N	2977.00
12.5 kVAr	QHBTCD5012X5	Warrior Super Heavy Duty 480 V 50 Hz 12.5 kVAr 3 PH	15.04	3 x 57.6	1 N	4 N	3721.00
15 kVAr	QHBTCD5015X0	Warrior Super Heavy Duty 480 V 50 Hz 15 kVAr 3 PH	18.04	3 x 69.1	1 N	4 N	4465.00
20 kVAr	QHBTCD5020X0	Warrior Super Heavy Duty 480 V 50 Hz 20 kVAr 3 PH	24.06	3 x 92.1	1 N	4 N	5953.00
25 kVAr	QHBTCD5025X0	Warrior Super Heavy Duty 480 V 50 Hz 25 kVAr 3 PH	30.07	3 x 115.1	1 N	4 N	7442.00
30 kVAr	QHBTCD5030X0	WARRIOR 480V 50Hz-30kVAr 3PH	36.09	3 X 138.2	1 N	4 N	8930.00
Rated Voltage 525 Vac, 3ϕ, 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	1488.00
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	2233.00
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	2977.00
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	3721.00
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	4465.00
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	5953.00
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	7442.00
30 kVAr	QHBTCF5030X0	WARRIOR 525V 50Hz-30kVAr 3PH	32.99	3 X 115.4	1 N	4 N	8931.00

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, 3 ϕ , 50 Hz, Delta Connection			
0.5 kVAr to 50 kVAr		Super Heavy Duty Capacitor - MPP Gas Filled	Price on request



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

Mini / Master - Splendid Duty Square Capacitors

Rating kVAr	Item Code	Description	I A	C μ F	Standard Pack No of unit/s	Master Pack No of unit/s	Per Unit LP (₹)
Rated Voltage 440 Vac, 3 ϕ , 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	345.00
2 kVAr	QHNTMC5002X0	Mini Master 440 V 50 Hz-2 kVAr 3 PH	2.62	3 x 11.0	1 N	30 N	554.00
3 kVAr	QHNTMC5003X0	Mini Master 440 V 50 Hz-3 kVAr 3 PH	3.94	3 x 16.4	1 N	24 N	831.00
kVAr 4	QHNTMC5004X0	Mini Master 440 V 50 Hz-4 kVAr 3 PH	5.25	3 x 21.9	1 N	24 N	1107.00
kVAr 5	QHNTMC5005X0	Mini Master 440 V 50 Hz-5 kVAr 3 PH	6.56	3 x 27.4	1 N	24 N	1292.00
6 kVAr	QHNTMC5006X0	Master 440 V 50 Hz-6 kVAr 3 PH	7.87	3 x 32.9	1 N	1 N	1550.00
7.5 kVAr	QHNTMC5007X5	Master 440 V 50 Hz-7.5 kVAr 3 PH	9.84	3 x 41.1	1 N	1 N	1938.00
8 kVAr	QHNTMC5008X0	Master 440 V 50 Hz-8 kVAr 3 PH	10.5	3 x 43.8	1 N	1 N	2067.00
10 kVAr	QHNTMC5010X0	Master 440 V 50 Hz-10 kVAr 3 PH	13.12	3 x 54.8	1 N	1 N	2584.00
12.5 kVAr	QHNTMC5012X5	Master 440 V 50 Hz-12.5 kVAr 3 PH	16.40	3 x 68.5	1 N	1 N	3230.00
15 kVAr	QHNTMC5015X0	Master 440 V 50 Hz-15 kVAr 3 PH	19.68	3 x 82.2	1 N	1 N	3876.00
20 kVAr	QHNTMC5020X0	Master 440 V 50 Hz-20 kVAr 3 PH	26.24	6 x 54.8	1 N	1 N	5168.00
25 kVAr	QHNTMC5025X0	Master 440 V 50 Hz-25 kVAr 3 PH	32.80	6 x 68.5	1 N	1 N	6460.00
30 kVAr	QHNTMC5030X0	Master 440 V 50 Hz-30 kVAr 3 PH	39.37	6 x 82.2	1 N	1 N	7752.00
50 kVAr	QHNTMC5050X0	Master 440 V 50 Hz-50 kVAr 3 PH	65.61	12 x 68.5	1 N	1 N	12920.00

Other Ratings on request

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

Champ - Heavy Duty Plus Square Capacitors

Rating kVAr	Item Code	Description	I _r A	C μ F	Standard Pack No of unit/s	Master Pack No of unit/s	Per Unit LP (₹)
Rated Voltage 440 Vac, 3 ϕ , 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	406.00
2 kVAr	QHBTMC5002X0	Champ 440 V 50 Hz-2 kVAr 3 PH	2.62	3 x 11.0	1 N	30 N	738.00
3 kVAr	QHBTMC5003X0	Champ 440 V 50 Hz-3 kVAr 3 PH	3.94	3 x 16.4	1 N	24 N	1107.00
4 kVAr	QHBTMC5004X0	Champ 440 V 50 Hz-4 kVAr 3 PH	5.25	3 x 21.9	1 N	24 N	1477.00
5 kVAr	QHBTMC5005X0	Champ 440 V 50 Hz-5 kVAr 3 PH	6.56	3 x 27.4	1 N	1 N	1784.00
6 kVAr	QHBTMC5006X0	Champ 440 V 50 Hz-6 kVAr 3 PH	7.87	3 x 32.9	1 N	1 N	2141.00
7.5 kVAr	QHBTMC5007X5	Champ 440 V 50 Hz-7.5 kVAr 3 PH	9.84	3 x 41.1	1 N	1 N	2676.00
8 kVAr	QHBTMC5008X0	Champ 440 V 50 Hz-8 kVAr 3 PH	10.50	3 x 43.8	1 N	1 N	2855.00
10 kVAr	QHBTMC5010X0	Champ 440 V 50 Hz-10 kVAr 3 PH	13.12	3 x 54.8	1 N	1 N	3568.00
12.5 kVAr	QHBTMC5012X5	Champ 440 V 50 Hz-12.5 kVAr 3 PH	16.40	3 x 68.5	1 N	1 N	4461.00
15 kVAr	QHBTMC5015X0	Champ 440 V 50 Hz-15 kVAr 3 PH	19.68	3 x 82.2	1 N	1 N	5353.00
20 kVAr	QHBTMC5020X0	Champ 440 V 50 Hz-20 kVAr 3 PH	26.24	6 x 54.8	1 N	1 N	7137.00
25 kVAr	QHBTMC5025X0	Champ 440 V 50 Hz-25 kVAr 3PH	32.80	6 x 68.5	1 N	1 N	8921.00
30 kVAr	QHBTMC5030X0	Champ 440 V 50 Hz-30 kVAr 3 PH	39.37	6 x 82.2	1 N	1 N	10705.00
50 kVAr	QHBTMC5050X0	Champ 440 V 50 Hz-50 kVAr 3 PH	65.61	12 x 68.5	1 N	1 N	18765.00
75 kVAr	QHBTMC5075X0	Champ 440 V 50 Hz-75 kVAr 3 PH	98.40	18 x 68.5	1 N	1 N	28148.00
100 kVAr	QHBTMC5100X0	Champ 440 V 50 Hz-100 kVAr 3 PH	131.22	24 x 68.5	1 N	1 N	37530.00

Champ - Heavy Duty Plus Square 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 480 Vac, 3ø, 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	1938.00
6 kVAr	QHBTMD5006X0	Champ 480 V 50 Hz-6 kVAr 3 PH	7.22	3 x 27.6	1 N	1 N	2326.00
7.5 kVAr	QHBTMD5007X5	Champ 480 V 50 Hz-7.5 kVAr 3 PH	9.02	3 x 34.5	1 N	1 N	2907.00
10 kVAr	QHBTMD5010X0	Champ 480 V 50 Hz-10 kVAr 3 PH	12.03	3 x 46.0	1 N	1 N	3876.00
12.5 kVAr	QHBTMD5012X5	Champ 480 V 50 Hz-12.5 kVAr 3 PH	15.04	3 x 57.6	1 N	1 N	4845.00
15 kVAr	QHBTMD5015X0	Champ 480 V 50 Hz-15 kVAr 3 PH	18.04	3 x 69.1	1 N	1 N	5814.00
20 kVAr	QHBTMD5020X0	Champ 480 V 50 Hz-20 kVAr 3 PH	24.06	6 X 46.0	1 N	1 N	7752.00
25 kVAr	QHBTMD5025X0	Champ 480 V 50 Hz-25 kVAr 3 PH	30.07	6 X 57.6	1 N	1 N	9690.00
30 kVAr	QHBTMD5030X0	Champ 480 V 50 Hz-30 kVAr 3 PH	36.09	6 X 69.1	1 N	1 N	11628.00
50 kVAr	QHBTMD5050X0	Champ 480 V 50 Hz-50 kVAr 3 PH	60.14	12 X 57.6	1 N	1 N	19380.00
60 kVAr	QHBTMD5060X0	Champ 480 V 50 Hz-60 kVAr 3 PH	72.18	12 X 69.1	1 N	1 N	23256.00
Rated Voltage 525 Vac, 3ø, 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	1938.00
6 kVAr	QHBTMF5006X0	Champ 525 V 50 Hz-6 kVAr 3 PH	6.60	3 X 23.1	1 N	1 N	2326.00
7.5 kVAr	QHBTMF5007X5	Champ 525 V 50 Hz-7.5 kVAr 3 PH	8.25	3 X 28.9	1 N	1 N	2907.00
10 kVAr	QHBTMF5010X0	Champ 525 V 50 Hz-10 kVAr 3 PH	11.00	3 X 38.5	1 N	1 N	3876.00
12.5 kVAr	QHBTMF5012X5	Champ 525 V 50 Hz-12.5 kVAr 3 PH	13.75	3 X 48.1	1 N	1 N	4845.00
15 kVAr	QHBTMF5015X0	Champ 525 V 50 Hz-15 kVAr 3 PH	16.50	3 X 57.7	1 N	1 N	5814.00
20 kVAr	QHBTMF5020X0	Champ 525 V 50 Hz-20 kVAr 3 PH	21.99	6 X 38.5	1 N	1 N	7752.00
25 kVAr	QHBTMF5025X0	Champ 525 V 50 Hz-25 kVAr 3 PH	27.49	6 X 48.1	1 N	1 N	9690.00
30 kVAr	QHBTMF5030X0	Champ 525 V 50 Hz-30 kVAr 3 PH	32.99	6 X 57.7	1 N	1 N	11628.00
50 kVAr	QHBTMF5050X0	Champ 525 V 50 Hz-50 kVAr 3 PH	54.99	12 X 48.1	1 N	1 N	19996.00
60 kVAr	QHBTMF5060X0	Champ 525 V 50 Hz-60 kVAr 3 PH	65.98	12 X 57.7	1 N	1 N	23995.00

Champion - Super Heavy Duty (Double Dielectric) Square Capacitors

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	QHSTMC5001X0	Champion 440 V 50 Hz-1 kVAr 3 PH	1.31	3 X 5.5	1 N	24 N	837.00
2 kVAr	QHSTMC5002X0	Champion 440 V 50 Hz-2 kVAr 3 PH	2.62	3 X 11.0	1 N	1 N	1673.00
3 kVAr	QHSTMC5003X0	Champion 440 V 50 Hz-3 kVAr 3 PH	3.94	3 X 16.4	1 N	1 N	2510.00
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	2937.00
6 kVAr	QHSTMC5006X0	Champion 440 V 50 Hz-6 kVAr 3 PH	7.87	3 X 32.9	1 N	1 N	3322.00
7.5 kVAr	QHSTMC5007X5	Champion 440 V 50 Hz-7.5 kVAr 3 PH	9.84	3 X 41.1	1 N	1 N	4153.00
8 kVAr	QHSTMC5008X0	Champion 440 V 50 Hz-8 kVAr 3 PH	10.5	3 X 43.8	1 N	1 N	4430.00
10 kVAr	QHSTMC5010X0	Champion 440 V 50 Hz-10 kVAr 3 PH	13.12	3 X 54.8	1 N	1 N	5537.00
12.5 kVAr	QHSTMC5012X5	Champion 440 V 50 Hz-12.5 kVAr 3 PH	16.40	3 X 68.5	1 N	1 N	6922.00
15 kVAr	QHSTMC5015X0	Champion 440 V 50 Hz-15 kVAr 3 PH	19.68	6 X 41.1	1 N	1 N	8306.00
20 kVAr	QHSTMC5020X0	Champion 440 V 50 Hz-20 kVAr 3 PH	26.24	6 X 54.8	1 N	1 N	11075.00
25 kVAr	QHSTMC5025X0	Champion 440 V 50 Hz-25 kVAr 3 PH	32.80	6 X 68.5	1 N	1 N	13843.00
30 kVAr	QHSTMC5030X0	Champion 440 V 50 Hz-30 kVAr 3 PH	39.37	12 X 41.1	1 N	1 N	17350.00
50 kVAr	QHSTMC5050X0	Champion 440 V 50 Hz-50 kVAr 3 PH	65.61	12 X 68.5	1 N	1 N	28917.00
75 kVAr	QHSTMC5075X0	Champion 440 V 50 Hz-75 kVAr 3 PH	98.41	18 X 68.5	1 N	1 N	43375.00
100 kVAr	QHSTMC5100X0	Champion 440 V 50 Hz-100 kVAr 3 PH	131.22	24 X 68.5	1 N	1 N	57834.00

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 μF	Standard Pack No of unit/s	Master Pack No of unit/s	Per Unit LP (₹)
Rated Voltage 480 Vac, 3ø, 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	2769.00
6 kVAr	QHSTMD5006X0	Champion 480 V 50 Hz-6 kVAr 3 PH	7.22	3 X 27.6	1 N	1 N	3322.00
7.5 kVAr	QHSTMD5007X5	Champion 480 V 50 Hz-7.5 kVAr 3 PH	9.02	3 X 34.5	1 N	1 N	4153.00
10 kVAr	QHSTMD5010X0	Champion 480 V 50 Hz-10 kVAr 3 PH	12.03	3 X 46.0	1 N	1 N	5537.00
12.5 kVAr	QHSTMD5012X5	Champion 480 V 50 Hz-12.5 kVAr 3 PH	15.04	3 X 57.6	1 N	1 N	6922.00
15 kVAr	QHSTMD5015X0	Champion 480 V 50 Hz-15 kVAr 3 PH	18.04	6 X 34.5	1 N	1 N	8306.00
20 kVAr	QHSTMD5020X0	Champion 480 V 50 Hz-20 kVAr 3 PH	24.06	6 X 46.0	1 N	1 N	11075.00
25 kVAr	QHSTMD5025X0	Champion 480 V 50 Hz-25 kVAr 3 PH	30.07	6 X 57.6	1 N	1 N	13843.00
30 kVAr	QHSTMD5030X0	Champion 480 V 50 Hz-30 kVAr 3 PH	36.09	12 X 34.5	1 N	1 N	16981.00
50 kVAr	QHSTMD5050X0	Champion 480 V 50 Hz-50 kVAr 3 PH	60.14	12 X 57.6	1 N	1 N	28302.00
60 kVAr	QHSTMD5060X0	Champion 480 V 50 Hz-60 kVAr 3 PH	72.18	18 X 46.0	1 N	1 N	33962.00
Rated Voltage 525 Vac, 3ø, 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	2861.00
6 kVAr	QHSTMF5006X0	Champion 525 V 50 Hz-6 kVAr 3 PH	6.60	3 X 23.1	1 N	1 N	3433.00
7.5 kVAr	QHSTMF5007X5	Champion 525 V 50 Hz-7.5 kVAr 3 PH	8.25	3 X 28.9	1 N	1 N	4291.00
10 kVAr	QHSTMF5010X0	Champion 525 V 50 Hz-10 kVAr 3 PH	11.00	3 X 38.5	1 N	1 N	5722.00
12.5 kVAr	QHSTMF5012X5	Champion 525 V 50 Hz-12.5 kVAr 3 PH	13.75	3 X 48.1	1 N	1 N	7152.00
15 kVAr	QHSTMF5015X0	Champion 525 V 50 Hz-15 kVAr 3 PH	16.50	6 X 28.9	1 N	1 N	8583.00
20 kVAr	QHSTMF5020X0	Champion 525 V 50 Hz-20 kVAr 3 PH	21.99	6 X 38.5	1 N	1 N	11444.00
25 kVAr	QHSTMF5025X0	Champion 525 V 50 Hz-25 kVAr 3 PH	27.49	6 X 48.1	1 N	1 N	14305.00
30 kVAr	QHSTMF5030X0	Champion 525 V 50 Hz-30 kVAr 3 PH	33.00	12 X 28.9	1 N	1 N	17608.00
50 kVAr	QHSTMF5050X0	Champion 525 V 50 Hz-50 kVAr 3 PH	54.99	12 X 48.1	1 N	1 N	29347.00
60 kVAr	QHSTMF5060X0	Champion 525 V 50 Hz-60 kVAr 3 PH	66.00	18 X 38.5	1 N	1 N	35217.00

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, 3ø, 50 Hz, Delta Connection			
5 kVAr to 15 kVAr	QHQAMC*	Ultra Heavy Duty Cap - APP - 440 V UHDXL	540.00
20 kVAr to 50 kVAr			615.00
5 kVAr to 15 kVAr	QHQAMD*	Ultra Heavy Duty Cap - APP - 480 V UHDXL	670.00
20 kVAr to 50 kVAr			650.00
5 kVAr to 15 kVAr	QHQAMF*	Ultra Heavy Duty Cap - APP - 525 V UHDXL	680.00
20 kVAr to 50 kVAr			660.00

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, 3ø, 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% AL, 01 kVAr 440 Vac	3532.00
2 kVAr	QHLTLCV002X0	H. D.- REACTOR, 7% AL, 02 kVAr 440 Vac	4406.00
3 kVAr	QHLTLCV003X0	H. D.- REACTOR, 7% AL, 03 kVAr 440 Vac	5280.00
4 kVAr	QHLTLCV004X0	H. D.- REACTOR, 7% AL, 04 kVAr 440 Vac	5609.00
5 kVAr	QHLTLCV005X0	H. D.- REACTOR, 7% AL, 05 kVAr 440 Vac	6030.00
10 kVAr	QHLTLCV010X0	H. D.- REACTOR, 7% AL, 10 kVAr 440 Vac	8560.00
12.5 kVAr	QHLTLCV012X5	H. D.- REACTOR, 7% AL, 12.5 kVAr 440 Vac	9391.00
15 kVAr	QHLTLCV015X0	H. D.- REACTOR, 7% AL, 15 kVAr 440 Vac	10046.00
20 kVAr	QHLTLCV020X0	H. D.- REACTOR, 7% AL, 20 kVAr 440 Vac	11970.00
25 kVAr	QHLTLCV025X0	H. D.- REACTOR, 7% AL, 25 kVAr 440 Vac	12667.00
50 kVAr	QHLTLCV050X0	H. D.- REACTOR, 7% AL, 50 kVAr 440 Vac	22211.00
75 kVAr	QHLTLCV075X0	H. D.- REACTOR, 7% AL, 75 kVAr 440 Vac	29724.00
100 kVAr	QHLTLCV100X0	H. D.- REACTOR, 7% AL, 100 kVAr 440 Vac	38124.00
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% CU, 01 kVAr 440 Vac	4488.00
2 kVAr	QHCTLCV002X0	H. D.- REACTOR, 7% CU, 02 kVAr 440 Vac	5065.00
3 kVAr	QHCTLCV003X0	H. D.- REACTOR, 7% CU, 03 kVAr 440 Vac	5795.00
4 kVAr	QHCTLCV004X0	H. D.- REACTOR, 7% CU, 04 kVAr 440 Vac	6841.00
5 kVAr	QHCTLCV005X0	H. D.- REACTOR, 7% CU, 05 kVAr 440 Vac	7523.00
10 kVAr	QHCTLCV010X0	H. D.- REACTOR, 7% CU, 10 kVAr 440 Vac	11828.00
12.5 kVAr	QHCTLCV012X5	H. D.- REACTOR, 7% CU, 12.5 kVAr 440 Vac	13110.00
15 kVAr	QHCTLCV015X0	H. D.- REACTOR, 7% CU, 15 kVAr 440 Vac	14520.00
20 kVAr	QHCTLCV020X0	H. D.- REACTOR, 7% CU, 20 kVAr 440 Vac	17196.00
25 kVAr	QHCTLCV025X0	H. D.- REACTOR, 7% CU, 25 kVAr 440 Vac	18281.00
50 kVAr	QHCTLCV050X0	H. D.- REACTOR, 7% CU, 50 kVAr 440 Vac	30045.00
75 kVAr	QHCTLCV075X0	H. D.- REACTOR, 7% CU, 75 kVAr 440 Vac	43749.00
100 kVAr	QHCTLCV100X0	H. D.- REACTOR, 7% CU, 100 kVAr 440 Vac	61693.00

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	



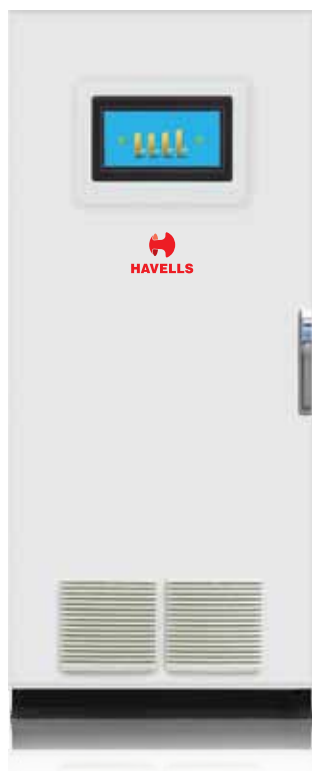
Consulting, Optimizing & Delivering Performance

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	254.00
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	297.00
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	446.00
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	594.00
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	743.00
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	891.00
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	1114.00
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	1188.00
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	1485.00
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	1857.00
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	2228.00

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	310.00
2 kVAr	QHNSCS5002X0	HERCULES 250 V 50 Hz-2 kVAr 1 PH	8.00 A	101.84	1 N	16 N	510.00
3 kVAr	QHNSCS5003X0	HERCULES 250 V 50 Hz-3 kVAr 1 PH	12.00 A	152.76	1 N	16 N	769.00
4 kVAr	QHNSCS5004X0	HERCULES 250 V 50 Hz-4 kVAr 1 PH	16.00 A	203.68	1 N	16 N	1027.00
5 kVAr	QHNSCS5005X0	HERCULES 250 V 50 Hz-5 kVAr 1 PH	16.00 A	254.61	1 N	16 N	1286.00
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	310.00
2 kVAr	QHNSCB5002X0	HERCULES 415 V 50 Hz-2 kVAr 1 PH	4.62 A	36.96	1 N	16 N	510.00
3 kVAr	QHNSCB5003X0	HERCULES 415 V 50 Hz-3 kVAr 1 PH	7.23 A	55.44	1 N	16 N	769.00
4 kVAr	QHNSCB5004X0	HERCULES 415 V 50 Hz-4 kVAr 1 PH	9.64 A	73.92	1 N	16 N	1027.00
5 kVAr	QHNSCB5005X0	HERCULES 415 V 50 Hz-5 kVAr 1 PH	12.05 A	92.40	1 N	16 N	1286.00
7.5 kVAr	QHNSCB5007X5	HERCULES 415 V 50 Hz-7.5 kVAr 1 PH	18.08 A	138.60	1 N	8 N	1925.00
10 kVAr	QHNSCB5010X0	HERCULES 415 V 50 Hz-10 kVAr 1 PH	24.10 A	184.80	1 N	8 N	2565.00

Other Products

ACB



Loadline & HIM MCCB Series



STV-Dx
SMART TECHNOLOGY SERIES



Instaprime & Instaline ATS



APFC Panel



Power Capacitor



Active Harmonic Filter



Load Bank



HGS Controlgear



Submersible & Motor Starter



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