



HAVELLS

Powering Lives...



LV Switchgear, Controlgear & Power Quality Products

Pricelist w.e.f. 11th March, 2024

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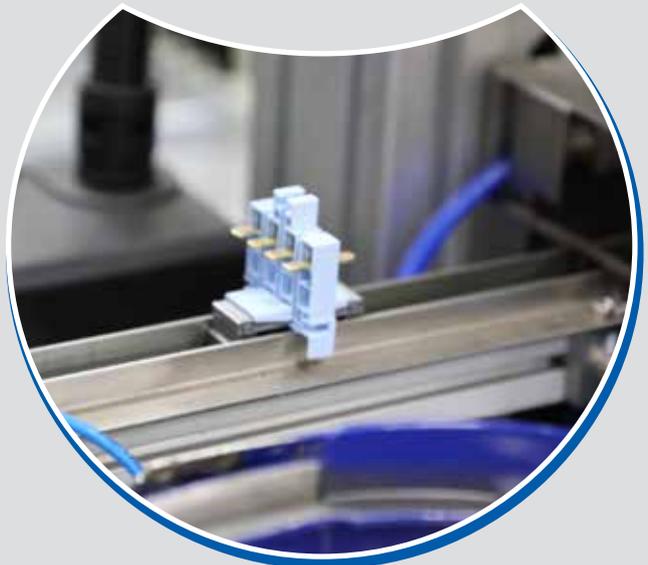
Powergear

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Fully Automated Plant



Industry 4.0

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



Havells Global Series Magnetic Contactors, Overload Relays & MPCBs

Designed for demanding applications & Tropical conditions



HGS - Trusted Global Range

Contactors, Overload Relays & MPCBs

Motor Control Solutions for higher Safety, Reliability & Performance



HGS - 3 Pole Contactor
Ratings - 9 A to 800 A (AC-3)



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



HGS - 2 Pole Contactor
Ratings - 9 A to 100 A (AC-3)



HGST - Thermal Overload Relay
Ratings - 0.12 A to 800 A



Capacitor Duty Contactor
Ratings - 3 kVAR to 66 kVAR



HGSCD - 3 Pole DC Contactor
Ratings - 9 A to 105 A (AC-3)



HGSDR - Thermal Overload Relay
Ratings - 0.28 A to 112 A



HGSCM -
3 Pole Mini Contactor
Ratings - 16 A (AC-1)



HGSMR -
Thermal Overload Relay
Ratings - 0.28 A to 17 A



Motor Protection
Circuit Breaker
Ratings - 0.1 A to 32 A



Motor Protection
Circuit Breaker
Ratings - 0.1 A to 63 A

Contactor HGS 9 - 800 AF

3 Pole Power Contactors

Wide band Operating Coils

Finger proof IP 20 terminals

Suitable for AC-4 (Inching & Plugging, e.g. crane Duty) and other critical application

CE Marking & Compliance to IS/IEC 60947-4-1

High Electrical and Mechanical Durability with Higher operating frequency (Operations / Hour)

Electrical Durability Curves available

Low VA Burden coils with Class H Insulation

Dust free covers

Terminal Barrier and Shrouds

In-built Auxiliary Contacts

DIN Channel Mounting upto 100 A, Fr-4

Contactor (HGS)



Overload Relay (HGST)



18 AF

40 AF

65 AF

100 AF

HGS
Rated Current

Rated Operational
Voltage

9 A, 12 A, 18 A, 22 A
690 V

25 A, 32 A, 40 A
690 V

50 A, 65 A
690 V

75 A, 85 A, 100 A
690 V

HGST
Setting Current

0.12 A - 18 A

7 A - 40 A

7 A - 65 A

17 A - 100 A

Thermal Overload Relays HGST 9 - 800 AF



Overload Relays

Trip Class - 10 A

Automatic Reset / Manual Reset

Test Button for emergency stop

Phase loss Protection

Accelerated tripping on single phasing condition

IP20 terminals

Sealable Protection Cover



150 AF

265 AF

500 AF

800 AF

115 A, 130 A, 150 A
1000 V

185 A, 225 A, 265 A
1000 V

300 A, 400 A, 500 A
1000 V

630 A, 800 A
1000 V

48 A - 150 A

48 A - 265 A

90 A - 500 A

378 A - 800 A

Magnetic Contactor

3 Pole Power Contactors



Features:

- AC Coil up to Frame-4 and AC/DC Universal coil with SMART ECM (Electronic Control Module) in-built for Frame-5 to Frame-8
- Conforms to IS / IEC 60947-4-1
- Finger proof IP20 terminals
- Low VA Burden Wide operating band coils with Class H Insulation

HSN Code: 85369090

| Frame Size | AC-3 Duty Rating at 415 V, 50 Hz | AC-1 Duty Rating at 415 V, 50 Hz | Power Poles | In-built Auxilliary Contacts | | Type | Item Code | Per Unit LP (₹) |
|------------|----------------------------------|----------------------------------|-------------|------------------------------|----|---------|--------------|-----------------|
| | I _e A | I _{th} A | | NO | NC | | | |
| 1 | 9 A | 25 A | 3 | 1 | 0 | HGS 9 | IHPHA009110* | 1116.00 |
| | 9 A | 25 A | 3 | 0 | 1 | HGS 9 | IHPHA009101* | 1116.00 |
| | 12 A | 30 A | 3 | 1 | 0 | HGS 12 | IHPHA012110* | 1300.00 |
| | 12 A | 30 A | 3 | 0 | 1 | HGS 12 | IHPHA012101* | 1300.00 |
| | 18 A | 40 A | 3 | 1 | 0 | HGS 18 | IHPHA018110* | 1504.00 |
| | 18 A | 40 A | 3 | 0 | 1 | HGS 18 | IHPHA018101* | 1504.00 |
| | 22 A | 40 A | 3 | 1 | 0 | HGS 22 | IHPHA022110* | 1620.00 |
| 2 | 25 A | 45 A | 3 | 1 | 0 | HGS 25 | IHPHA025210* | 1887.00 |
| | 25 A | 45 A | 3 | 0 | 1 | HGS 25 | IHPHA025201* | 1887.00 |
| | 32 A | 55 A | 3 | 1 | 0 | HGS 32 | IHPHA032210* | 3978.00 |
| | 32 A | 55 A | 3 | 0 | 1 | HGS 32 | IHPHA032201* | 3978.00 |
| | 40 A | 60 A | 3 | 1 | 0 | HGS 40 | IHPHA040210* | 5930.00 |
| | 40 A | 60 A | 3 | 0 | 1 | HGS 40 | IHPHA040201* | 5930.00 |
| 3 | 50 A | 70 A | 3 | 2 | 2 | HGS 50 | IHPHA050300* | 8013.00 |
| | 65 A | 85 A | 3 | 2 | 2 | HGS 65 | IHPHA065300* | 10032.00 |
| 4 | 75 A | 110 A | 3 | 2 | 2 | HGS 75 | IHPHA075400* | 12011.00 |
| | 85 A | 125 A | 3 | 2 | 2 | HGS 85 | IHPHA085400* | 14158.00 |
| | 100 A | 135 A | 3 | 2 | 2 | HGS 100 | IHPHA100400* | 20410.00 |
| 5 | 115 A | 160 A | 3 | 2 | 2 | HGS 115 | IHPHA115500* | 25645.00 |
| | 130 A | 180 A | 3 | 2 | 2 | HGS 130 | IHPHA130500* | 26401.00 |
| | 150 A | 210 A | 3 | 2 | 2 | HGS 150 | IHPHA150500* | 32180.00 |
| 6 | 185 A | 275 A | 3 | 2 | 2 | HGS 185 | IHPHA185600* | 37217.00 |
| | 225 A | 315 A | 3 | 2 | 2 | HGS 225 | IHPHA225600* | 40453.00 |
| | 265 A | 350 A | 3 | 2 | 2 | HGS 265 | IHPHA265600* | 45532.00 |
| 7 | 300 A | 400 A | 3 | 2 | 2 | HGS 300 | IHPHA300700* | 55917.00 |
| | 400 A | 500 A | 3 | 2 | 2 | HGS 400 | IHPHA400700* | 69920.00 |
| | 500 A | 550 A | 3 | 2 | 2 | HGS 500 | IHPHA500700* | 100726.00 |
| 8 | 630 A | 750 A | 3 | 2 | 2 | HGS 630 | IHPHA630800* | 157138.00 |
| | 800 A | 900 A | 3 | 2 | 2 | HGS 800 | IHPHA800800* | 253534.00 |

*To complete the Cat no. suffix the coil voltage from the coil voltage table
 Note: 1. For additional aux. contacts front/side mounted and mechanical interlock - refer accessories table on page no. 13
 2. Standard Spare coil are available on request on page no 13

ECM* - Electronic Control Module
 Note : For other coil voltages, Contact to nearest branch
 To avoid Coil burning due to Neutral Floaring conditions, either use Wide band Coils or make use of 415 V Coils

| Frame Size | AC Coil Codes for Nominal Voltage at 50/60 Hz | | | | | |
|------------|---|---|--|---|-----------------|-------------|
| | B | H | N | T | Wide Band Coils | |
| | | | | | S | W |
| 1 | 24 V | 110 V | 240 V | 415 V | 150 V-300 V | 260 V-440 V |
| 2 | 24 V | 110 V | 240 V | 415 V | 150 V-300 V | 260 V-440 V |
| 3 | 24 V | 110 V | 240 V | 415 V | | 260 V-440 V |
| 4 | 24 V | 110 V | 240 V | 415 V | | 260 V-440 V |
| | | | AC/DC Universal Coil with in-built ECM* Module 240 V N | AC Coil with in-built ECM* Module 415 V T | | |
| 5, 6, 7 | - | 100 V AC -240 V AC & 110 V DC -220 V DC | | 380 V AC - 450 V AC | - | - |
| 8 | - | 200 V AC -240 V AC & 200 V DC -220 V DC | | 380 V AC - 450 V AC | - | - |

Magnetic Contactor

4 Pole Power Contactors with AC Coil



Features:

- AC-1 Ratings up to 60 A
- Conforms to IS / IEC 60947-4-1
- Common Accessories with HGS Range
- Finger proof IP20 terminals
- Completely Shield for dusty atmosphere
- Low VA Burden Wide operating band coils with Class H Insulation

HSN Code: 85369090

| Frame Size | AC 1 Duty | Power Poles | Item Code | Per Unit LP (₹) | Power Poles | Item Code | Per Unit LP (₹) |
|------------|-----------|-------------|--------------|-----------------|-------------|--------------|-----------------|
| 1 | 16 | 4NO | IHPHC016100* | 1336.00 | 2NO + 2NC | IHPHC016122* | 1471.00 |
| | 20 | 4NO | IHPHC020100* | 1366.00 | 2NO + 2NC | IHPHC020122* | 1504.00 |
| | 25 | 4NO | IHPHC025100* | 1474.00 | 2NO + 2NC | IHPHC025122* | 1669.00 |
| | 32 | 4NO | IHPHC032100* | 1511.00 | 2NO + 2NC | IHPHC032122* | 1730.00 |
| | 40 | 4NO | IHPHC040100* | 2280.00 | 2NO + 2NC | IHPHC040122* | 2462.00 |
| 2 | 50 | 4NO | IHPHC050200* | 2977.00 | 2NO + 2NC | IHPHC050222* | 3336.00 |
| | 60 | 4NO | IHPHC060200* | 5677.00 | 2NO + 2NC | IHPHC060222* | 6364.00 |

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

Note: Coil S & W is not available for - 2 NO + 2 NC

Magnetic Contactor

Aux Contactor / Control Relay - HGS Series with AC Coil

Features:

- Common Accessories with HGS Range
- Suitable for use upto 690 V AC
- Compliance to IEC 60947-5-1
- High Thermal current of $I_{th} = 16$ A
- Finger proof IP20 terminals
- Low VA Burden Wide operating band coils with Class H Insulation



HSN Code: 85369090

| Frame size | I_{th} | Contact arrangement | | Type | Item Code | Per Unit LP (₹) with AC Coil |
|------------|----------|---------------------|----|--------|-----------|------------------------------|
| | | NO | NC | | | |
| 1 | 16 A | 2 | 2 | HGR 22 | IHHAC22* | 1075.00 |
| | | 3 | 1 | HGR 31 | IHHAC31* | |
| | | 4 | 0 | HGR 40 | IHHAC40* | |
| | | 0 | 4 | HGR 04 | IHHAC04* | |
| | | 1 | 3 | HGR 13 | IHHAC13* | |

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

Note: Control relay is not available in wide band

Magnetic Contactor

HGS 2 Pole Contactor with AC Coil



Features:

- Common Accessories with HGS Range
- Compliance to IEC 60947-4-1

HSN Code: 85369090

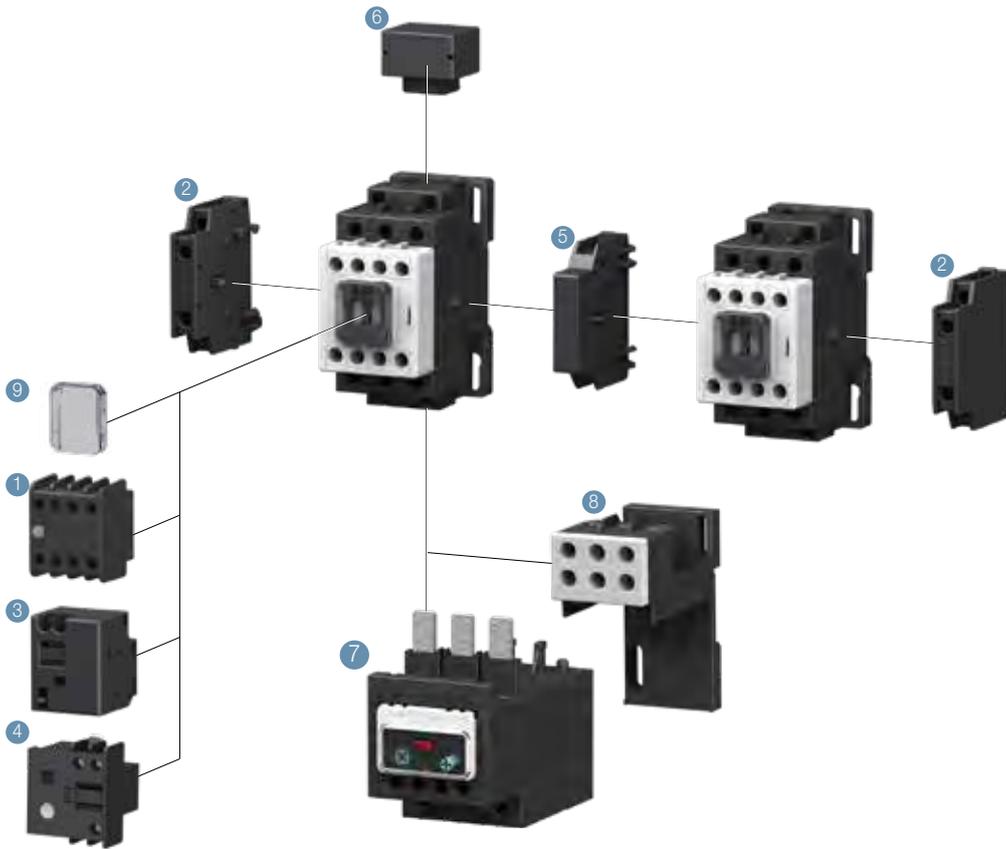
| Frame Size | AC-3 Duty Rating at 415 V, 50 Hz | | AC-1 Duty Rating at 415 V, 50 Hz | Power Poles | In-built Auxilliary Contacts | | Item Code | Per Unit LP (₹) |
|------------|----------------------------------|------------|----------------------------------|-------------|------------------------------|----|--------------|-----------------|
| | I_e A | I_{th} A | | | NO | NC | | |
| 1 | 9 A | 25 A | 25 A | 2 | 0 | 0 | IHPHF009100* | 837.00 |
| | 12 A | 30 A | 30 A | 2 | 0 | 0 | IHPHF012100* | 976.00 |
| | 18 A | 40 A | 40 A | 2 | 0 | 0 | IHPHF018100* | 1128.00 |
| | 22 A | 40 A | 40 A | 2 | 0 | 0 | IHPHF022100* | 1215.00 |
| 2 | 25 A | 45 A | 45 A | 2 | 0 | 0 | IHPHF025200* | 1321.00 |
| | 32 A | 55 A | 55 A | 2 | 0 | 0 | IHPHF032200* | 2786.00 |
| | 40 A | 60 A | 60 A | 2 | 0 | 0 | IHPHF040200* | 4151.00 |
| NEW 3 | 50 A | 70 A | 70 A | 2 | 0 | 0 | IHPHF050300* | 5209.00 |
| | 65 A | 85 A | 85 A | 2 | 0 | 0 | IHPHF065300* | 7550.00 |
| NEW 4 | 75 A | 110 A | 110 A | 2 | 0 | 0 | IHPHF075400* | 8650.00 |
| | 85 A | 125 A | 125 A | 2 | 0 | 0 | IHPHF085400* | 10500.00 |
| | 100 A | 135 A | 135 A | 2 | 0 | 0 | IHPHF100400* | 13500.00 |

Effective from 11th March, 2024

List Price (LP) are in Indian ₹ & as per Standard Terms & Conditions

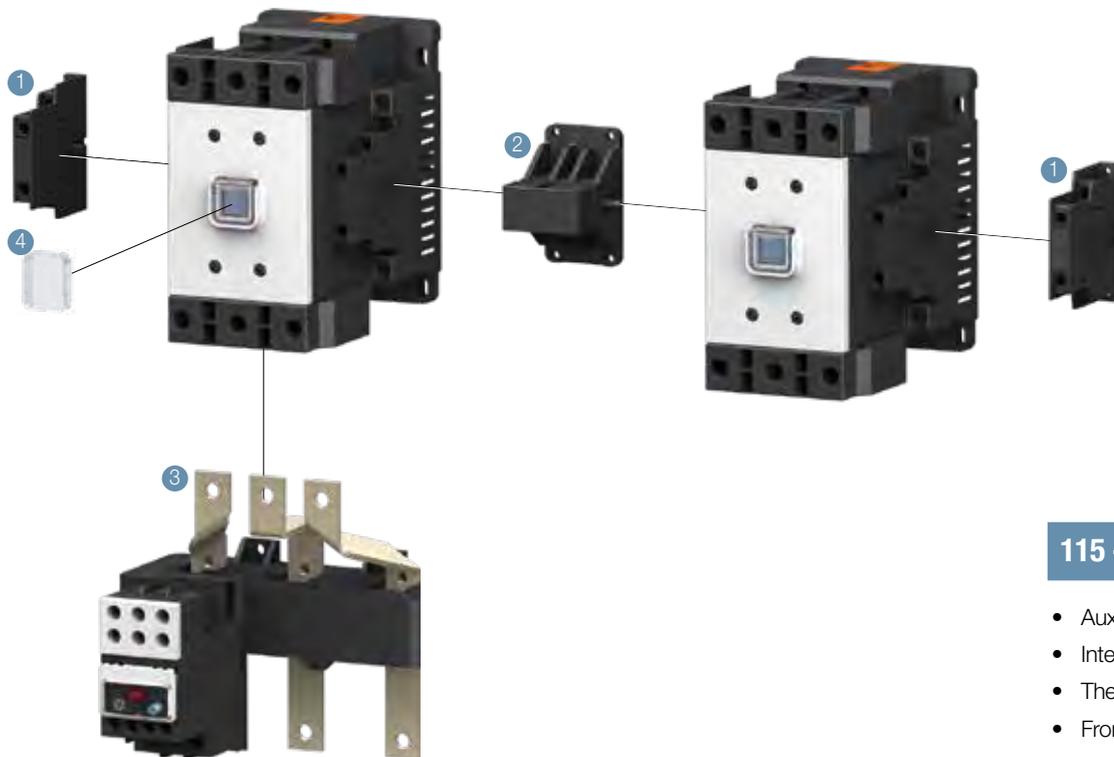
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Accessories



9 - 100 AF

- Auxiliary Contact Block (Front Side) HGS TB
- Auxiliary Contact Block (Left/Right Side) HGS SB
- Mechanical Latching Block HGS LB 100
- Timer HGS ET
- Interlock Unit HGS IU
- Surge Absorber HGS RC/CD
- Thermal Overload Relay HGST
- Separate Mounting Base HGSTMB
- Front Safety Cover



115 - 800 AF

- Auxiliary Contact Block HGS SB
- Interlock Unit HGS IU
- Thermal Overload Relay HGST
- Front Safety Cover

Accessories - HGS Series Contactors



HSN Code: 85389000

| Description | Configuraton | Suitable for | Item Code | Per Unit LP (₹) |
|--|------------------|--|------------|-----------------|
| Aux Contact Block (Side Mounting) | 1NO + 1NC | HGS 9-HGS 40 (For all contactors in Frame-1 and Frame-2) | ISSPCU1969 | 697.00 |
| | | HGS50-HGS 100 (For all contactors in Frame-3 and Frame-4) | ISSPCU1970 | |
| | | HGS115- HGS 800 | ISSPCU1971 | 825.00 |
| Aux Contact Block (Top Mounting) | 2NC | HGS9-HGS100 (For all contactors in Frame-1 to Frame-4) | ISSPCU1961 | 720.00 |
| | 1NO + 1NC | | ISSPCU1962 | |
| | 2NO | | ISSPCU1963 | |
| | 4NC | | ISSPCU1964 | |
| | 1NO + 3NC | | ISSPCU1965 | |
| | 2NO + 2NC | | ISSPCU1966 | |
| | 3NO + 1NC | | ISSPCU1967 | |
| | 4NO | ISSPCU1968 | | |
| Mechanical Interlock Unit | | HGS 9-HGS 40 # (For all contactos in Frame-1 and Frame-2) | ISSPCU1972 | 944.00 |
| | | HGS50-HGS 100 (For all contactors in Frame-3 and Frame-4) | ISSPCU1973 | 2218.00 |
| | | HGS115- HGS 265 | ISSPCU1974 | 3923.00 |
| | | HGS 300- HGS 800 | ISSPCU1975 | 4448.00 |
| Mechanical Latching Block (Top Mounting) | 220 V AC | HGS 9-HGS 100 (For all contactors in Frame-1 to Frame-4) | ISSPCU1976 | 2224.00 |
| Electronic Timer (Top Mounting) | | HGS 9-HGS 100 (For all contactors in Frame-1 to Frame-4) | ISSPCU1977 | 3006.00 |
| Surge Absorber* (Surge Suppressor Type RC) | 220 V - 240 V AC | HGS 9-HGS 100 (For all contactors in Frame-1 to Frame-4) | ISSPCU1984 | 1896.00 |

- One contactor of Frame-1 and another contactor of Frame-2 can also be interlocked using this Mechanical Interlock Unit.
*Contact to nearest branch - ● For other voltages in RC type surge suppressors ● For other type of surge suppressors

Spare Coils - HGS Contactors (Refer Frame Sizes in Respective Contactor Table)

HSN Code: 85389000

| Suitable for | Coil Type | Voltage | Item Code | Per Unit LP (₹) |
|---|----------------------|-------------------------------------|------------|-----------------|
| For all Frame-1 Contactors (HGS 9 to HGS 22) | AC | 24 V | ISSPCU1985 | 623.00 |
| | | 110 V | ISSPCU1987 | |
| | | 240 V | ISSPCU1989 | |
| | | 415 V | ISSPCU2050 | |
| | | 150 V-300 V | ISSPCU2215 | |
| | | 260 V-440 V | ISSPCU2134 | |
| For all Frame-2 Contactors (HGS 25-HGS 40) | AC | 24 V | ISSPCU1993 | 623.00 |
| | | 110 V | ISSPCU1995 | |
| | | 240 V | ISSPCU1997 | |
| | | 415 V | ISSPCU2053 | |
| | | 150 V-300 V | ISSPCU2216 | |
| | | 260 V-440 V | ISSPCU2135 | |
| For all Frame-3 Contactors (HGS 50-HGS 65) | AC | 24 V | ISSPCU2001 | 2030.00 |
| | | 110 V | ISSPCU2003 | |
| | | 240 V | ISSPCU2005 | |
| | | 415 V | ISSPCU2007 | |
| For all Frame-4 Contactors (HGS 75-HGS 100) | AC | 260 V-440 V | ISSPCU2136 | 2337.00 |
| | | 24 V | ISSPCU2009 | |
| | | 110 V | ISSPCU2011 | |
| | | 240 V | ISSPCU2013 | |
| For Frame-5 Contactors (HGS 115-HGS 150) | AC/DC Universal Coil | 415 V | ISSPCU2015 | 6325.00 |
| | | 260 V-440 V | ISSPCU2137 | |
| | | 100 Vac-240 Vac 110 Vdc -220 Vdc | ISSPCU1979 | |
| For Frame-6 Contactors (HGS 185-HGS 265) | AC | 380 Vac-450 Vac | ISSPCU2479 | 8957.00 |
| | | 100 Vac-240 Vac 110 Vdc -220 Vdc | ISSPCU1980 | |
| For Frame-7 Contactors (HGS 300-HGS 500) | AC/DC Universal Coil | 380 Vac-450 Vac | ISSPCU2312 | 11647.00 |
| | | 100 Vac-240 Vac 110 Vdc -220 Vdc | ISSPCU1981 | |
| For Frame-8 Contactors (HGS 630-HGS 800) | AC/DC Universal | 380 Vac-450 Vac | ISSPCU2103 | 23880.00 |
| | | 110 Vac-127 Vac 100 Vdc -110 Vdc | ISSPCU2480 | |
| | | 200 Vac-240 Vac 200 Vdc -220 Vdc | ISSPCU1982 | |
| | AC | 380 Vac-450 Vac | ISSPCU2104 | |

Thermal Over Load Relay (Auto/ Manual Reset) - HGST Series



Features:

- Range : 0.12 A – 800 A available in 8 Frames, Trip class - 10 A
- 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: 85364900

| Relay Fr. size | Relay Range (A) | Suitable for Contactor Frame size | Type | Item Code | Per Unit LP (₹) | |
|----------------|-----------------|-------------------------------------|---------|-----------|-----------------|---------|
| 1 | 0.12 A - 0.18 A | HGS 9 HGS 12 HGS 18 HGS 22 | HGST18 | IHHR13CA | 1901.00 | |
| | 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 | 1935.00 | | | | |
| 12 A - 18 A | IHHR13CT | 2124.00 | | | | |
| 2 | 7 A - 10.0 A | HGS 25 HGS 32 HGS 40 | HGST 40 | IHHR23CQ | 2124.00 | |
| | 8 A - 12.0 A | | | IHHR23CR | | |
| | 12 A - 18 A | | | IHHR23CT | | |
| | 15 A - 22 A | | | IHHR23CU | | |
| | 17 A - 25 A | | | IHHR23CV | | 2376.00 |
| | 22 A - 32 A | | | IHHR23CW | | 3001.00 |
| | 28 A - 40 A | | | IHHR23CX | | 3115.00 |
| 3 | 7 A - 10.0 A | HGS 50 HGS 65 | HGST 65 | IHHR33CQ | 3722.00 | |
| | 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 | | 4408.00 |
| | 34 A - 50 A | | | IHHR33CY | | |
| | 45 A - 65 A | | | IHHR33C1 | | 5248.00 |

| Relay Fr. size | Relay Range (A) | Suitable for Contactor Frame size | Type | Item Code | Per Unit LP (₹) | |
|----------------|-----------------|-----------------------------------|----------|-------------|-----------------|-------------------------------|
| 4 | 17 A - 25 A | HGS 75 HGS 85 HGS 100 | HGST 100 | IHHR43CV | 4320.00 | |
| | 22 A - 32 A | | | IHHR43CW | | |
| | 28 A - 40 A | | | IHHR43CX | | |
| | 34 A - 50 A | | | IHHR43CY | | |
| | 45 A - 65 A | | | IHHR43C1 | | |
| | 52 A - 75 A | | | IHHR43C2 | | |
| | 59 A - 85 A | | | IHHR43C3 | | |
| | 70 A - 100 A | | | IHHR43C4 | | 6092.00 |
| | 5 | | | 48 A - 80 A | | HGS 115 HGS 130 HGS 150 |
| 69 A - 115 A | | IHHR53C6 | | | | |
| 78 A - 130 A | | IHHR53C7 | | | | |
| 90 A - 150 A | | IHHR53C8 | | | | |
| 6 | 48 A - 80 A | HGS 185 HGS 225 HGS 265 | HGST 265 | IHHR63C5 | 9800.00 | |
| | 69 A - 115 A | | | IHHR63C6 | | |
| | 78 A - 130 A | | | IHHR63C7 | | |
| | 90 A - 150 A | | | IHHR63C8 | | |
| | 111 A - 185 A | | | IHHR63C9 | | |
| | 135 A - 225 A | | | IHHR63C11 | | 10811.00 |
| 159 A - 265 A | IHHR63C12 | 11896.00 | | | | |
| 7 | 90 A - 150 A | HGS 300 HGS 400 HGS 500 | HGST 500 | IHHR73C8 | 11906.00 | |
| | 111 A - 185 A | | | IHHR73C9 | | |
| | 135 A - 225 A | | | IHHR73C11 | | |
| | 159 A - 265 A | | | IHHR73C12 | | |
| | 180 A - 300 A | | | IHHR73C13 | | |
| | 240 A - 400 A | | | IHHR73C14 | | 13044.00 |
| | 300 A - 500 A | | | IHHR73C15 | | 15201.00 |
| 8 | 378 A - 630 A | HGS 630 HGS 800 | HGST 800 | IHHR83C16 | 32609.00 | |
| | 480 A - 800 A | | | IHHR83C17 | | |

Relay Adapter

HSN Code: 85389000

| Suitable for | Item code | Per Unit LP (₹) |
|--|------------|-----------------|
| For all Frame-1 Contactors (HGS 9 to HGS 22) | ISSPCU2681 | 350.00 |
| For all Frame-2 Contactors (HGS 25-HGS 40) | ISSPCU2682 | 470.00 |

Magnetic Contactor

Capacitor Duty Contactor

Features:

- Range : 3 kVAr to 66 kVAr
- De-latching Type design of Resistor Switching Block
- Low VA Burden Wide operating band coils with Class H Insulation
- Common accessories with HGS Range
- High Operating Frequency - 240 Operations per hour
- Handle high inrush current capability
- Utilization category AC-6b
- Finger proof IP20 terminals



HSN Code: 85369090

| Frame Size | kVAr Rating AC-6b | Inst. Aux. Contact | | Item Code | Per Unit LP (₹) |
|------------|-------------------|--------------------|----|--------------|-----------------|
| | 415 V / 440 V | NO | NC | | |
| 1 | 3 kVAr | 1 | 0 | IHPHE003110* | 2522.00 |
| | 3 kVAr | 0 | 1 | IHPHE003101* | 2522.00 |
| | 5 kVAr | 1 | 0 | IHPHE005110* | 2646.00 |
| | 5 kVAr | 0 | 1 | IHPHE005101* | 2646.00 |
| | 10 kVAr | 1 | 0 | IHPHE010110* | 3204.00 |
| | 10 kVAr | 0 | 1 | IHPHE010101* | 3204.00 |
| | 12.5 kVAr | 1 | 0 | IHPHE12X110* | 3619.00 |
| | 12.5 kVAr | 0 | 1 | IHPHE12X101* | 3619.00 |
| | 15 kVAr | 1 | 0 | IHPHE015110* | 4431.00 |
| | 15 kVAr | 0 | 1 | IHPHE015101* | 4431.00 |
| 2 | 20 kVAr | 1 | 0 | IHPHE020210* | 4871.00 |
| | 20 kVAr | 0 | 1 | IHPHE020201* | 4871.00 |
| | 25 kVAr | 1 | 0 | IHPHE025210* | 5556.00 |
| | 25 kVAr | 0 | 1 | IHPHE025201* | 5556.00 |
| | 33.3 kVAr | 1 | 0 | IHPHE33X210* | 8052.00 |
| | 33.3 kVAr | 0 | 1 | IHPHE33X201* | 8052.00 |
| 3 | 33.3 kVAr | 1 | 1 | IHPHE33X311* | 9711.00 |
| | 40 kVAr | 2 | 2 | IHPHE040322* | 14926.00 |
| 4 | 50 kVAr | 2 | 2 | IHPHE050422* | 15529.00 |
| | 66 kVAr | 2 | 2 | IHPHE066422* | 18223.00 |

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

33.3 kVAr contactor in Frame-3 can be used where higher terminal capacity is required.

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 Capacitor Duty Contactor (3 kVAr - 66 kVAr) | B | H | N | S* | W | T |

*upto 33.3 kVAr for AC - 6B

#For Capacitor & Reactor
kindly refer to page 96, 98, 99



Scan for
HGS
Catalogue



Scan for
Type-2
Co-ordination
Charts

HGSCD

- Compact size – Four (4) frames rating from 9 A to 105 A.
- IP20 guarded terminals prevent accidental contact with live parts.
- IEC & CE markig & Compliance to IS/IEC 60947-4-1
- 4 Terminal Coils on all DC Coil Contactors for control application flexibility.
- 50 A to 105 A DC operated devices feature electronic coil control.
- Thermal Overload Relays direct mount onto HGSCD Series 9 A - 25 A Contactors, reducing installation time and Space.
- 35mm DIN rail mounting for all the contactors from 9 A to 105 A.
- Combination head terminal screws on 50 A through 105 A contactors

DC Contactor (HGSCD)



Thermal Overload Relay (HGSDR)



1 AF

2 AF

HGSCD
Rated Current
Rated Operational
Voltage

9 A, 12 A, 18 A, 25 A
690 V

32 A, 40 A
690 V

HGSDR
Setting Current

0.28 A - 32 A

25 A - 40 A

HGSDR / MR



- 5 Frame sizes current rating up to 112 A suitable for DC / Mini Contactor.
- Overload Relays include integral connection to auxiliary and coil terminations for ease of wiring during installation, when installed on HGSCM Series.
- These Overload Relays share the same great features and benefits of the larger frame sizes.
- Trip Class 10 for reliable and accurate protection against overload conditions.
- Single phase sensitivity to protect motors against damaging phase loss conditions.
- Direct mounting to all contactors.
- IP20 guarded terminals prevent accidental contact with live parts.
- Stop button for convenient and economical control circuit wiring.



50 A / 65 A, 80 A
690 V / 1000 V

32 A - 70 A



95 A, 105 A
1000 V

63 A - 112 A

HGSCM

- Compact size – one frame size for devices rated up to 16 A.
- AC and DC operating coils for control circuit application flexibility – device is the same physical size with an AC or DC coil.
- Front Mounted auxiliary contacts and surge suppressors install directly on top of the single front mounted mechanical interlock.
- High visibility label for ease of troubleshooting and maintenance.
- Mini contactors compatible with directly mounted Thermal Overload Relays with current ratings from 0.28 A to 17 A.
- Over load relays are Class 10 with selectable manual or automatic reset, and provide phase loss sensitivity.
- IP20 guarded terminals.
- 35mm DIN rail mounting for fast and easy installation

Mini Contactor (HGSCM)



Thermal Overload Relay (HGSMR)



1 AF

HGSCM
Rated Current
Rated Operational
Voltage

7 A, 9 A, 12 A, 16 A,
690 V

HGSMR
Setting Current

0.28 A - 17 A

3 Pole DC Contactors - HGSCD

- Compact size – Four (4) frames rating from 9 A to 105 A.
- Finger proof IP 20 terminals
- IEC & CE marking & Compliance to IS/IEC 60947-4-1
- 4 Terminal Coils on all DC Coil Contactors for control application flexibility.
- 50 A to 105 A DC operated devices feature electronic coil control.



HSN Code: 85369090

| Frame Size | AC-3 Duty Rating | AC-1 Duty Rating | Power Poles | In - built Aux contacts | | Type | Code | Description | Per Unit LP (₹) |
|------------|------------------|------------------|-------------|-------------------------|----|-----------|--------------|--------------------------------|-----------------|
| | le A | lth A | | NC | NO | | | | |
| 1 | 9 | 25 | 3 | 1 | 0 | HGSCD 9 | IHPDB009101* | Frame-1 9A 3P1NC DC Contactor | 2426.00 |
| | 9 | 25 | 3 | 0 | 1 | HGSCD 9 | IHPDB009110* | Frame-1 9A 3P1NO DC Contactor | 2426.00 |
| | 12 | 25 | 3 | 1 | 0 | HGSCD 12 | IHPDB012101* | Frame-1 12A 3P1NC DC Contactor | 2693.00 |
| | 12 | 25 | 3 | 0 | 1 | HGSCD 12 | IHPDB012110* | Frame-1 12A 3P1NO DC Contactor | 2693.00 |
| | 18 | 45 | 3 | 1 | 0 | HGSCD 18 | IHPDB018101* | Frame-1 18A 3P1NC DC Contactor | 3069.00 |
| | 18 | 45 | 3 | 0 | 1 | HGSCD 18 | IHPDB018110* | Frame-1 18A 3P1NO DC Contactor | 3069.00 |
| | 25 | 45 | 3 | 1 | 0 | HGSCD 25 | IHPDB025101* | Frame-1 25A 3P1NC DC Contactor | 4515.00 |
| | 25 | 45 | 3 | 0 | 1 | HGSCD 25 | IHPDB025110* | Frame-1 25A 3P1NO DC Contactor | 4515.00 |
| 2 | 32 | 60 | 3 | 0 | 0 | HGSCD 32 | IHPDB032200* | Frame-2 32A 3P DC Contactor | 8742.00 |
| | 40 | 60 | 3 | 0 | 0 | HGSCD 40 | IHPDB040200* | Frame-2 40A 3P DC Contactor | 12207.00 |
| 3 | 50 | 90 | 3 | 0 | 0 | HGSCD 50 | IHPDB050300* | Frame-3 50A 3P DC Contactor | 15425.00 |
| | 65 | 110 | 3 | 0 | 0 | HGSCD 65 | IHPDB065300* | Frame-3 65A 3P DC Contactor | 16514.00 |
| | 80 | 110 | 3 | 0 | 0 | HGSCD 80 | IHPDB080300* | Frame-3 80A 3P DC Contactor | 20642.00 |
| 4 | 95 | 140 | 3 | 0 | 0 | HGSCD 95 | IHPDB095400* | Frame-4 95A 3P DC Contactor | 26394.00 |
| | 105 | 140 | 3 | 0 | 0 | HGSCD 105 | IHPDB105400* | Frame-4 105A 3P DC Contactor | 31463.00 |

DC Coil Voltage Selection Table

| DC Coil Codes | | | | | | | |
|---------------|------|------|------|-------|-------|-------|--|
| Frame | I | B | E | H | M | L | |
| 1 | 12 V | 24 V | 48 V | 110 V | 220 V | 250 V | |
| 2 | 12 V | 24 V | 48 V | 110 V | 220 V | 250 V | |
| 3 | 12 V | 24 V | 48 V | 110 V | 220 V | 250 V | |
| 4 | 12 V | 24 V | 48 V | 110 V | 220 V | 250 V | |

3 Pole Mini Contactors with AC Coil - HGSCM

- Compact size – one frame size for devices rated up to 16 A.
- Same size for AC or DC coil contactor
- Directly mounted Thermal Overload Relays
- Over load relays Class 10 with selectable M/A reset & SPP
- IP20 guarded terminals



HSN Code: 85369090

| Frame Size | AC-3 Duty Rating | AC-1 Duty Rating | Power Poles | In - built Aux contacts | | Type | Code | Description | Per Unit LP (₹) |
|------------|------------------|------------------|-------------|-------------------------|----|-------|--------------|----------------------------|-----------------|
| | le A | lth A | | NC | NO | | | | |
| 1 | 7 | 18 | 3 | 1 | 0 | HGSCM | IHPNA007101* | F-1 7A 3P1NC Mini AC Cont | 1555.00 |
| | 7 | 18 | 3 | 0 | 1 | HGSCM | IHPNA007110* | F-1 7A 3P1NO Mini AC Cont | 1555.00 |
| | 9 | 20 | 3 | 1 | 0 | HGSCM | IHPNA009101* | F-1 9A 3P1NC Mini AC Cont | 1683.00 |
| | 9 | 20 | 3 | 0 | 1 | HGSCM | IHPNA009110* | F-1 9A 3P1NO Mini AC Cont | 1683.00 |
| | 12 | 22 | 3 | 1 | 0 | HGSCM | IHPNA012101* | F-1 12A 3P1NC Mini AC Cont | 1792.00 |
| | 12 | 22 | 3 | 0 | 1 | HGSCM | IHPNA012110* | F-1 12A 3P1NO Mini AC Cont | 1792.00 |
| | 16 | 22 | 3 | 1 | 0 | HGSCM | IHPNA016101* | F-1 16A 3P1NC Mini AC Cont | 2119.00 |
| | 16 | 22 | 3 | 0 | 1 | HGSCM | IHPNA016110* | F-1 16A 3P1NO Mini AC Cont | 2119.00 |

AC Coil Voltage Selection Table

| AC Coil Codes | | | | | | | | | |
|---------------|------|------|-------|-------|-------|-------|-------|-------|--|
| Frame | B | E | H | M | N | R | T | U | |
| 1 | 24 V | 48 V | 110 V | 220 V | 240 V | 380 V | 415 V | 440 V | |

Effective from 11th March, 2024

List Price (LP) are in Indian ₹ & as per Standard Terms & Conditions **HAVELLS 19**

3 Pole Mini Contactors with DC Coil - HGSCM



- Compact size – one frame size for devices rated up to 16 A.
- Same size for AC or DC coil contactor
- Directly mounted Thermal Overload Relays
- Over load relays Class 10 with selectable M/A reset & SPP
- IP20 guarded terminals

HSN Code: 85369090

| Frame Size | AC-3 Duty Rating | AC-1 Duty Rating | Power Poles | In - built Aux contacts | | Type | Code | Description | Per Unit LP (₹) |
|------------|------------------|------------------|-------------|-------------------------|----|-------|--------------|----------------------------|-----------------|
| | le A | lth A | | NC | NO | | | | |
| 1 | 7 | 18 | 3 | 1 | 0 | HGSCM | IHPNB007101* | F-1 7A 3P1NC Mini DC Cont | 2268.00 |
| 1 | 7 | 18 | 3 | 0 | 1 | HGSCM | IHPNB007110* | F-1 7A 3P1NO Mini DC Cont | 2268.00 |
| 1 | 9 | 20 | 3 | 1 | 0 | HGSCM | IHPNB009101* | F-1 9A 3P1NC Mini DC Cont | 2367.00 |
| 1 | 9 | 20 | 3 | 0 | 1 | HGSCM | IHPNB009110* | F-1 9A 3P1NO Mini DC Cont | 2367.00 |
| 1 | 12 | 22 | 3 | 1 | 0 | HGSCM | IHPNB012101* | F-1 12A 3P1NC Mini DC Cont | 2594.00 |
| 1 | 12 | 22 | 3 | 0 | 1 | HGSCM | IHPNB012110* | F-1 12A 3P1NO Mini DC Cont | 2594.00 |
| 1 | 16 | 22 | 3 | 1 | 0 | HGSCM | IHPNB016101* | F-1 16A 3P1NC Mini DC Cont | 2862.00 |
| 1 | 16 | 22 | 3 | 0 | 1 | HGSCM | IHPNB016110* | F-1 16A 3P1NO Mini DC Cont | 2862.00 |

DC Coil Voltage Selection Table

| DC Coil Codes | | | | | | |
|---------------|------|------|------|-------|-------|-------|
| Frame | I | B | E | H | M | L |
| 1 | 12 V | 24 V | 48 V | 110 V | 220 V | 250 V |

3 Pole Mini Control Relay with AC Coil - HGSCR

- Compact size – one frame size for devices rated up to 16 A.
- Same size with an AC or DC coil contactor.

HSN Code: 85364900

| Frame Size | AC-1 Duty Rating | In - built Aux contacts | | Type | Code | Description | Per Unit LP (₹) |
|------------|------------------|-------------------------|----|-------|----------|------------------------------------|-----------------|
| | lth A | NC | NO | | | | |
| 1 | 16 | 2 | 2 | HGSCR | IHMCR22* | Mini Cont. 2NO2NC Control Relay AC | 1802.00 |
| 1 | 16 | 3 | 1 | HGSCR | IHMCR31* | Mini Cont. 3NO1NC Control Relay AC | 1802.00 |
| 1 | 16 | 4 | 0 | HGSCR | IHMCR40* | Mini Cont. 4NO Control Relay AC | 1802.00 |
| 1 | 16 | 0 | 4 | HGSCR | IHMCR04* | Mini Cont. 4NC Control Relay AC | 1802.00 |
| 1 | 16 | 1 | 3 | HGSCR | IHMCR13* | Mini Cont. 1NO3NC Control Relay AC | 1802.00 |

AC Coil Voltage Selection Table

| AC Coil Codes | | | | | | | |
|---------------|------|------|-------|-------|-------|-------|-------|
| Frame | B | E | H | M | N | T | V |
| 1 | 24 V | 48 V | 110 V | 220 V | 240 V | 415 V | 480 V |

3 Pole Mini Control Relay with DC Coil - HGSCR

- Compact size – one frame size for devices rated up to 16 A.
- Same size with an AC or DC coil contactor.

HSN Code: 85364900

| Frame Size | AC-1 Duty Rating | In - built Aux contacts | | Type | Code | Description | Per Unit LP (₹) |
|------------|------------------|-------------------------|----|-------|----------|------------------------------------|-----------------|
| | lth A | NC | NO | | | | |
| 1 | 16 | 2 | 2 | HGSCR | IHMDR22* | Mini Cont. 2NO2NC Control Relay DC | 2406.00 |
| 1 | 16 | 3 | 1 | HGSCR | IHMDR31* | Mini Cont. 3NO1NC Control Relay DC | 2406.00 |
| 1 | 16 | 4 | 0 | HGSCR | IHMDR40* | Mini Cont. 4NO Control Relay DC | 2406.00 |
| 1 | 16 | 0 | 4 | HGSCR | IHMDR04* | Mini Cont. 4NC Control Relay DC | 2406.00 |
| 1 | 16 | 1 | 3 | HGSCR | IHMDR13* | Mini Cont. 1NO3NC Control Relay DC | 2406.00 |

DC Coil Voltage Selection Table

| DC Coil Codes | | | | | |
|---------------|------|------|-------|-------|-------|
| Frame | I | B | H | J | P |
| 1 | 12 V | 24 V | 110 V | 120 V | 250 V |

3 Pole DC, Mini Contactor Accessories

Accessories - HGSCD Series Contactors

HSN Code: 85389000

| Description | Configuraton | Suitable for | Item Code | Per Unit LP (₹) |
|--|------------------|-------------------|------------|-----------------|
| Aux Contact Block (Side Mounting) | 1NO | HGSCD 9-HGSCD 105 | ISSPEN0005 | 434.00 |
| | 1NC | | ISSPEN0006 | 434.00 |
| | 1NO + 1NC | | ISSPEN0007 | 765.00 |
| | 2NO | | ISSPEN0008 | 765.00 |
| Aux Contact Block (Front Mounting) | 1NO | | ISSPEN0001 | 255.00 |
| | 1NC | | ISSPEN0002 | 255.00 |
| | 1NO (EM) | | ISSPEN0003 | 561.00 |
| | 1NC (DB) | | ISSPEN0004 | 561.00 |
| Mechanical Interlock Unit | | | ISSPEN0077 | 776.00 |
| Mechanical + Electrical Interlock Unit | | ISSPEN0009 | 1530.00 | |
| Surge Suppressor Type RC | 24 V - 48 V AC | HGSCD 40 | ISSPEN0010 | 663.00 |
| | 50 V - 127 V AC | | ISSPEN0011 | 663.00 |
| | 130 V - 250 V AC | | ISSPEN0012 | 663.00 |
| | 24 V - 48 V AC | HGSCD 105 | ISSPEN0013 | 663.00 |
| | 50 V - 127 V AC | | ISSPEN0014 | 663.00 |
| | 130 V - 250 V AC | | ISSPEN0015 | 663.00 |

Spare Coils - HGSCD Contactors (Refer Frame Sizes in Respective Contactor Table)

HSN Code: 85389000

| Suitable for | Coil Type | Voltage | Item Code | Per Unit LP (₹) |
|--|-----------|------------|------------|-----------------|
| For all Frame-1 Contactors (HGSCD 9 to HGSCD 25) | DC | 12 V | ISSPEN0016 | 1785.00 |
| | | 24 V | ISSPEN0078 | 1785.00 |
| | | 48 V | ISSPEN0017 | 1785.00 |
| | | 110 V | ISSPEN0018 | 1785.00 |
| | | 220 V | ISSPEN0019 | 1785.00 |
| For all Frame-2 Contactors (HGSCD 32-HGSCD 40) | | 12 V | ISSPEN0020 | 1887.00 |
| | | 24 V | ISSPEN0021 | 1887.00 |
| | | 48 V | ISSPEN0022 | 1887.00 |
| | | 110 V | ISSPEN0023 | 1887.00 |
| For Frame -3 Contactors HGSCD 50 | | 24-28 V | ISSPEN0024 | 4845.00 |
| | | 48 V | ISSPEN0025 | 4845.00 |
| | | 110 V | ISSPEN0026 | 4845.00 |
| For Frame -3 Contactors HGSCD 65 | | 24 V | ISSPEN0027 | 4845.00 |
| | | 48 V | ISSPEN0028 | 4845.00 |
| | | 110 V | ISSPEN0029 | 4845.00 |
| For Frame -4 Contactors HGSCD 80 | 24 V | ISSPEN0030 | 8293.00 | |
| | 48 V | ISSPEN0031 | 8293.00 | |
| | 110 V | ISSPEN0032 | 8293.00 | |
| For Frame -4 Contactors HGSCD 105 | 24 V | ISSPEN0033 | 8293.00 | |
| | 48 V | ISSPEN0034 | 8293.00 | |
| | 110 V | ISSPEN0035 | 8293.00 | |

3 Pole DC, Mini Contactor Accessories

Accessories - HGSCM Series Contactors & HGSCR Control Relay

HSN Code: 85389000

| Description | Configuraton | Suitable for | Item Code | Per Unit LP (₹) |
|------------------------------------|--|--------------|------------|-----------------|
| Aux Contact Block (Front Mounting) | 2NO | HGSCM | ISSPEN0037 | 480.00 |
| | 1NO + 1NC | | ISSPEN0038 | 480.00 |
| | 2NC | | ISSPEN0039 | 480.00 |
| | 4NO | | ISSPEN0040 | 781.00 |
| | 2NO + 2NC | | ISSPEN0041 | 781.00 |
| | 4NC | | ISSPEN0042 | 781.00 |
| | 3NO + 1NC | | ISSPEN0043 | 781.00 |
| | 1NO + 3NC | | ISSPEN0044 | 781.00 |
| Surge Suppressor Type RC | 12 V - 24 V AC | | ISSPEN0054 | 765.00 |
| | 24 V - 48 V AC | | ISSPEN0055 | 765.00 |
| | 50 V - 127 V AC | | ISSPEN0056 | 765.00 |
| | 130 V - 250 V AC | | ISSPEN0057 | 765.00 |
| | 275 V - 380 V AC | | ISSPEN0058 | 765.00 |
| | 400 V - 510 V AC | | ISSPEN0059 | 765.00 |
| Surge Suppressor Type Varistor | 12 V - 48 V AC / 12 V - 60 V DC | ISSPEN0060 | 765.00 | |
| | 275 V - 380 V AC | ISSPEN0061 | 765.00 | |
| | 400 V - 510 V AC | ISSPEN0062 | 765.00 | |
| | 50 V - 127 V AC / 60 V - 180 V DC | ISSPEN0063 | 765.00 | |
| | 130 V - 250 V AC / 180 V - 300 V DC | ISSPEN0064 | 765.00 | |
| | 277 V - 380 V AC / 380 V - 510 V DC | ISSPEN0065 | 765.00 | |
| Mechanical Interlock Unit | | ISSPEN0053 | 725.00 | |
| Aux Contact Block (Front Mounting) | 2NO | HGSCR | ISSPEN0045 | 480.00 |
| | 1NO + 1NC | | ISSPEN0046 | 480.00 |
| | 2NC | | ISSPEN0047 | 480.00 |
| | 4NO | | ISSPEN0048 | 781.00 |
| | 2NO + 2NC | | ISSPEN0049 | 781.00 |
| | 4NC | | ISSPEN0050 | 781.00 |
| | 3NO + 1NC | | ISSPEN0051 | 781.00 |
| | 1NO + 3NC | | ISSPEN0052 | 781.00 |

Spare Coils - HGSCM Series Contactors (Refer Frame Sizes in Respective Contactor Table)

HSN Code: 85389000

| Suitable for | Coil Type | Voltage | Item Code | Per Unit LP (₹) |
|--------------------------|-----------|---------------|------------|-----------------|
| For all HGSCM Contactors | AC | 24 V | ISSPEN0066 | 602.00 |
| | | 48 V | ISSPEN0067 | 602.00 |
| | | 110 V / 120 V | ISSPEN0068 | 602.00 |
| | | 230 V | ISSPEN0069 | 602.00 |
| | | 400 V | ISSPEN0070 | 602.00 |
| | | 12 V | ISSPEN0071 | 1005.00 |
| | DC | 24 V | ISSPEN0072 | 1005.00 |
| | | 110 V | ISSPEN0073 | 1005.00 |
| | | 125 V | ISSPEN0074 | 1005.00 |
| | | 250 V | ISSPEN0075 | 1005.00 |

Thermal Over Load Relay (Auto/ Manual Reset) - HGSCD Series

- 4 Frame sizes current rating
- Trip Class 10 A and Built in SPP
- Direct mounting to all contactors.
- IP20 guarded terminals prevent accidental contact with live parts.



HSN Code: 85364900

| Frame Size | Relay Range A | Suitable for Contactor Frame Size | Type | Code | Per Unit LP (₹) |
|------------|---------------|--|---------|-----------|-----------------|
| 2 | 0.28 A-0.4 A | HGSCD009 HGSCD012 HGSCD018 HGSCD025 HGSCD032 HGSCD040 | HGSDR | IHDR23C18 | 1961.00 |
| | 0.4 A-0.63 A | | HGSDR | IHDR23C19 | 1961.00 |
| | 0.56 A-0.8 A | | HGSDR | IHDR23C20 | 1961.00 |
| | 0.8 A-1.2 A | | HGSDR | IHDR23C21 | 1961.00 |
| | 1.2 A-1.8 A | | HGSDR | IHDR23C22 | 1961.00 |
| | 1.8 A-2.8 A | | HGSDR | IHDR23C23 | 1961.00 |
| | 2.8 A-4 A | | HGSDR | IHDR23C24 | 1961.00 |
| | 4 A-6.3 A | | HGSDR | IHDR23C25 | 1961.00 |
| | 5.6 A-8 A | | HGSDR | IHDR23C26 | 1961.00 |
| | 7 A-10 A | | HGSDR | IHDR23C27 | 1961.00 |
| | 8 A-12.5 A | | HGSDR | IHDR23C28 | 1961.00 |
| | 10 A-15 A | | HGSDR | IHDR23C29 | 1961.00 |
| | 11 A-17 A | | HGSDR | IHDR23C30 | 2367.00 |
| | 15 A-23 A | | HGSDR | IHDR23C31 | 2367.00 |
| 22 A-32 A | HGSDR | IHDR23C32 | 3673.00 | | |
| 3 | 25 A-40 A | HGSCD032 HGSCD040 | HGSDR | IHDR33C33 | 3673.00 |
| 4 | 32 A-50 A | HGSCD050 HGSCD065 HGSCD080 | HGSDR | IHDR43C34 | 4733.00 |
| | 40 A-57 A | | HGSDR | IHDR43C35 | 5017.00 |
| | 50 A-63 A | | HGSDR | IHDR43C36 | 6079.00 |
| | 57 A-70 A | | HGSDR | IHDR43C37 | 6079.00 |
| 5 | 63 A-80 A | HGSCD095 HGSCD105 | HGSDR | IHDR53C38 | 6713.00 |
| | 78 A-97 A | | HGSDR | IHDR53C39 | 6772.00 |
| | 90 A-112 A | | HGSDR | IHDR53C40 | 9217.00 |

Thermal Over Load Relay (Auto/ Manual Reset) - HGSCM Series

- 1 Frame sizes current rating
- Trip Class 10 A and Built in SPP
- Direct mounting to all contactors.
- IP20 guarded terminals prevent accidental contact with live parts.



HSN Code: 85364900

| Frame Size | Relay Range A | Suitable for Contactor Frame Size | Type | Code | Per Unit LP (₹) |
|------------|---------------|--|-------|-----------|-----------------|
| 1 | 0.28 A-0.4 A | HGSCM007 HGSCM009 HGSCM012 HGSCM016 | HGSMR | IHMR13C18 | 2014.00 |
| | 0.4 A-0.63 A | | | IHMR13C19 | 2014.00 |
| | 0.56 A-0.8 A | | | IHMR13C20 | 2014.00 |
| | 0.8 A-1.2 A | | | IHMR13C21 | 2014.00 |
| | 1.2 A-1.8 A | | | IHMR13C22 | 2014.00 |
| | 1.8 A-2.8 A | | | IHMR13C23 | 2014.00 |
| | 2.8 A-4 A | | | IHMR13C24 | 2035.00 |
| | 4 A-6.3 A | | | IHMR13C25 | 2035.00 |
| | 5.6 A-8 A | | | IHMR13C26 | 2035.00 |
| | 7 A-10 A | | | IHMR13C27 | 2035.00 |
| | 8 A-12.5 A | | | IHMR13C28 | 2056.00 |
| | 10 A-15 A | | | IHMR13C29 | 2056.00 |
| | 11 A-17 A | | | IHMR13C30 | 2056.00 |

Motor Protection Circuit Breakers

MPCB Push button version

- HGSM : Thermal Magnetic, 0.1 A - 32 A
- Short Circuit + Overload Protection
- Icu= 100 kA upto 10 A, Icu=15 kA for 9 A - 25 A & Icu= 10 kA for 24 A - 32 A

Rotary MPCB Fr 1

- HGSTMR : Thermal Magnetic
- Short Circuit Protection + Overload Protection
- Fr 1 - Icu= 100 kA upto 6.3 A & Icu= 50 kA from 6.3 A - 32 A
- Fr 2 - Icu= 50 kA from 11 A - 63 A

Rotary MPCB Fr 2

- HGSMR : Magnetic
- Short Circuit Protection
- Fr 1 - Icu= 100 kA from 0.16 A - 6.3 A & Icu= 50 kA from 10 A - 32 A
- Fr 2 - Icu= 50 kA from 16 A - 63 A

Range & Switching Capabilities

| Type | Operating Method | Version | Protections Offered | Frame & Size | Ratings and Braking Capacity | | |
|--------|------------------|------------------|------------------------|---------------|------------------------------|-----------------------|----------------------|
| | | | | | | | |
| HGSM | Push-Button | Thermal Magnetic | OL, SC, Single Phasing | Fr-1 45 mm | 0.1 A - 10 A 100 kA | 9 A - 25 A 15 kA | 24 A - 32 A 10 kA |
| HGSTMR | Rotary | Thermal Magnetic | OL, SC, Single Phasing | Fr-1 45 mm | 0.1 A - 6.3 A 100 kA | 6.3 A - 32 A 50 kA | |
| | | | | Fr-2 55 mm | 11 A - 63 A 50 kA | | |
| HGSMR | Rotary | Magnetic | SC | Fr-1 45 mm | 0.16 A - 6.3 A 100 kA | 10 A - 32 A 50 kA | |
| | | | | Fr-2 55 mm | 16 A - 63 A 50 kA | | |

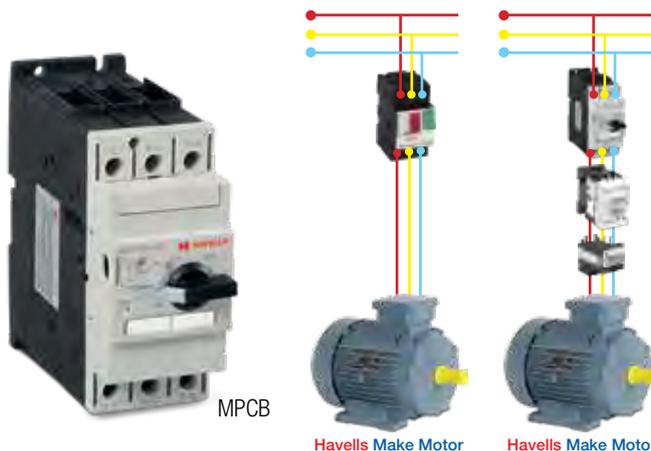


- Short circuit protection
- Over current protection
- Overload protection
- Phase loss protection
- Wide range of current adjustment dial

- Compact
- High breaking capacity
- Short circuit protective coordination
- Reduction in wiring work
- High switching durability
- Padlocking feature available
- Stand alone motor protection
- Common accessories

Circuit Breaker

Circuit Breaker

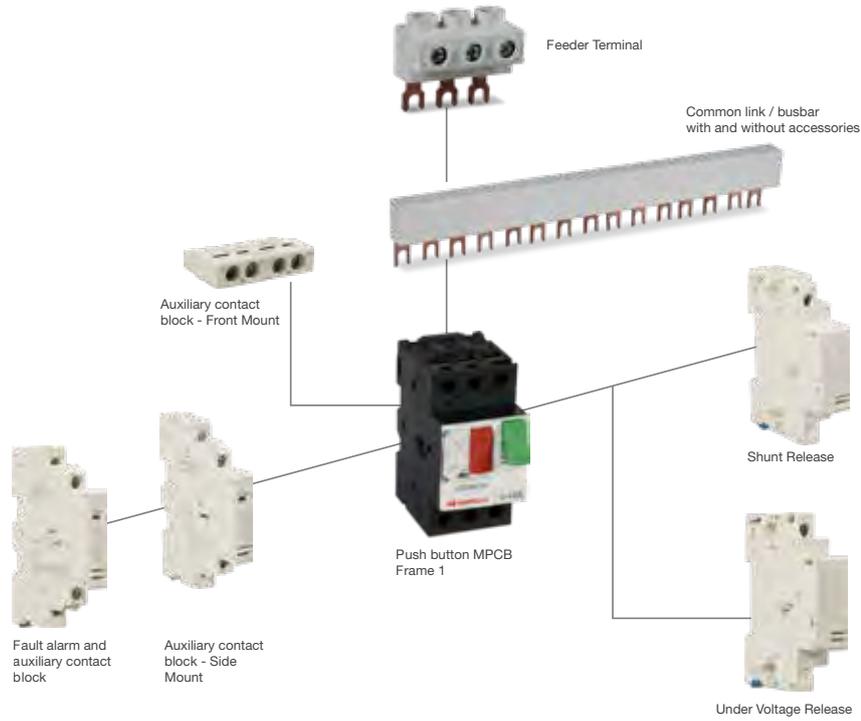


MPCB

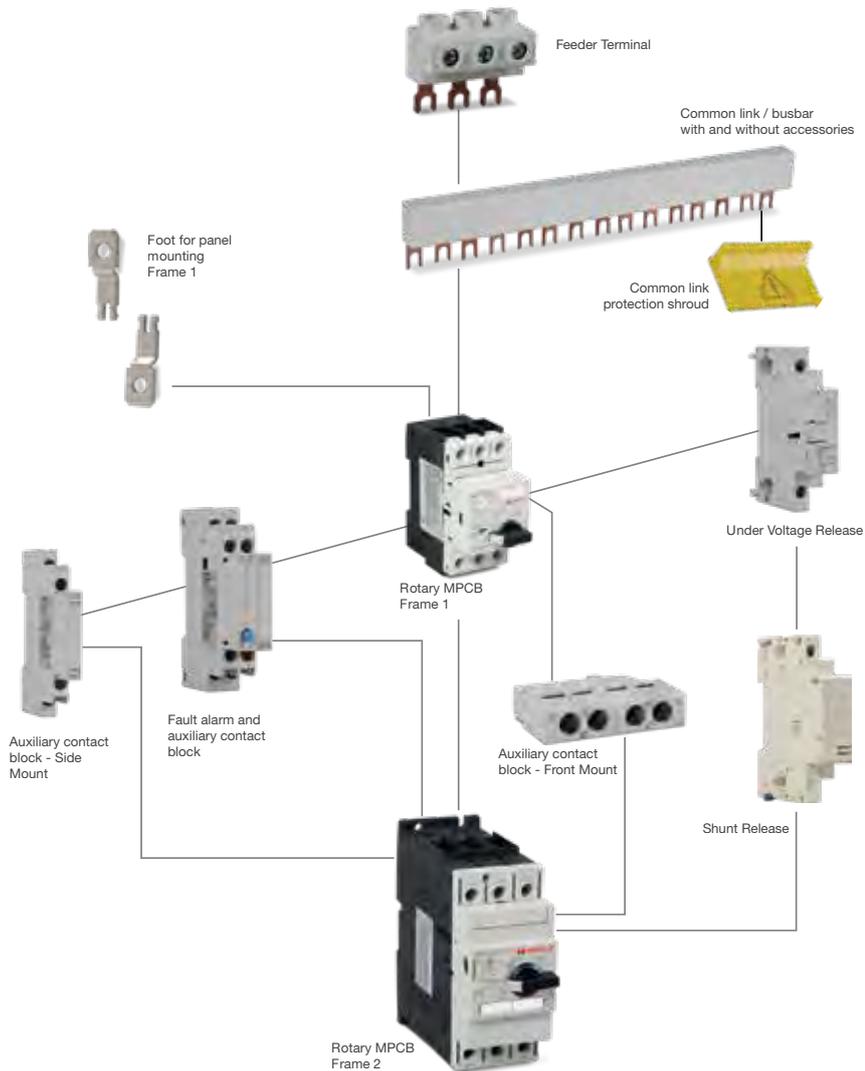
Havells Make Motor

Havells Make Motor

Accessories Overview : Push Button MPCB



Accessories Overview : Rotary MPCB



MPCB - Motor Protection Circuit Breaker - HGSM Series

MPCB specially coordinated for IE2, IE3 & IE4 Motors

Push Button Version*

Features:

- 1 Frame size - 45 mm width
- High Magnetic Setting - Makes it suitable for IE2, IE3 and IE4 Motors
- Tripping class: 10 A
- Mechanical Life: 100000 cycles
- Electrical Life: 100000 cycles
- Compliance to IEC 60947-2, IEC 60947-4-1
- Finger proof IP20 Terminals
- Lockable in OFF Position



HGSM - Thermal Magnetic Series

HSN Code: 85362090

| Frame | Model | Breaking Capacity kA 415 V, 50 Hz | Current Rating | Item Code | Per Unit LP (₹) | |
|-------|-------|-----------------------------------|-----------------|-------------|-----------------|---------|
| 1 | HGSM | 100 | 0.1 A - 0.16 A | IHHMPBA2A0 | 2847.00 | |
| | | | 0.16 A - 0.25 A | IHHMPBB2B0 | | |
| | | | 0.25 A - 0.4 A | IHHMPBC2D0 | | |
| | | | 0.4 A - 0.63 A | IHHMPBD2E0 | | |
| | | | 0.63 A - 1 A | IHHMPBE2F0 | | |
| | | | 1 A - 1.6 A | IHHMPBF2G0 | | |
| | | | 1.6 A - 2.5 A | IHHMPBG2R0 | | |
| | | | 2.5 A - 4 A | IHHMPBH2I0 | | |
| | | 15 | 4 A - 6.3 A | IHHMPBJ2J0 | 3370.00 | |
| | | | 6.3 A - 10 A | IHHMPBK2K0 | 3603.00 | |
| | | | 9 A - 14 A | IHHMPBL2L0 | 4056.00 | |
| | | | 13 A - 18 A | IHHMPBN2M0 | 4620.00 | |
| | | 10 | | 17 A - 23 A | IHHMPBQ2T0 | 4860.00 |
| | | | | 20 A - 25 A | IHHMPBS2N0 | |
| | | 24 A - 32 A | IHHMPBT2P0 | 8480.00 | | |

Motor Protection Circuit Breaker - HGSM Series Accessories

HSN Code: 85389000

| Description | Configuraton | Suitable for | Item Code | Per Unit LP (₹) |
|-----------------------------------|--------------|--------------|------------|-----------------|
| Aux Contact Block (Side Mounting) | 2NO | HGSM MPCB | ISSPCU2414 | 763.00 |
| | 1NO + 1NC | | ISSPCU2415 | |
| Aux Contact Block (Top Mounting) | 2NO | | ISSPCU2412 | 763.00 |
| | 1NO + 1NC | | ISSPCU2413 | |
| UV Release | 110V AC | | ISSPCU2406 | 2120.00 |
| | 240V AC | | ISSPCU2407 | |
| | 415V AC | | ISSPCU2408 | |
| Shunt Release | 110V AC | | ISSPCU2409 | 2120.00 |
| | 240V AC | | ISSPCU2410 | |
| | 415V AC | | ISSPCU2411 | |
| Fault Alarm | 1NC + 1NO | | ISSPCU2416 | 1052.00 |
| | 1NC + 1NC | | ISSPCU2417 | |
| | 1NO + 1NO | | ISSPCU2418 | |
| Water proof Box IP55 | | | ISSPCU2419 | 1532.00 |
| Emergency Water proof Box IP55 | | ISSPCU2420 | 1589.00 | |



MPCB Motor Protection Circuit Breaker - HGSTMR / HGSMR Series

MPCB specially coordinated for IE2, IE3 & IE4 Motors

Features:

- Rotary Version - 2 Frame Sizes, 45 mm and 55 mm width
- Thermal magnetic version - Range from 0.1 -63 A, Trip class 10
- Magnetic Only version - Range from 0.16 A - 63 A
- Rated Operational Voltage U_i : 690 V
- High Magnetic Setting - Makes it suitable for IE2, IE3 and IE4 Motors
- Compliance to IEC 60947-2 and IEC 60947-4-1
- Finger proof IP20 Terminals
- Lockable in OFF Position
- Suitable for DIN channel and Base Mounting both
- CE Marking



HGSTMR - Thermal Magnetic Series

HSN Code: 85362090

| Fr. | Model | Breaking Capacity kA 415 V, 50 Hz | Current Rating | Item Code | Per Unit LP (₹) | | |
|-----|----------------|---|----------------|------------|-----------------|------------|----------|
| 1 | HGSTMR - A1 | 100 | 0.1 - 0.16 A | IHHMROA1AT | 3745.00 | | |
| | | 100 | 0.16 - 0.25 A | IHHMROB1BT | 3745.00 | | |
| | | 100 | 0.25 - 0.4 A | IHHMROC1DT | 3745.00 | | |
| | | 100 | 0.4 - 0.63 A | IHHMROD1ET | 3745.00 | | |
| | | 100 | 0.63 - 1 A | IHHMROE1FT | 3745.00 | | |
| | | 100 | 1 - 1.6 A | IHHMROF1GT | 4280.00 | | |
| | | 100 | 1.6 - 2.5 A | IHHMROG1RT | 4280.00 | | |
| | | 100 | 2.5 - 4 A | IHHMROH1IT | 4280.00 | | |
| | | 100 | 4 - 6.3 A | IHHMROJ1JT | 4280.00 | | |
| | | 50 | 6.3 - 10 A | IHHMROK1KT | 4815.00 | | |
| | | 50 | 10 - 16 A | IHHMROM1MT | 4815.00 | | |
| | | 50 | 16 - 20 A | IHHMROP1TT | 5885.00 | | |
| | | 50 | 20 - 25 A | IHHMROS1NT | 5885.00 | | |
| | | 50 | 25 - 32 A | IHHMROT1PT | 10700.00 | | |
| | | 2 | HGSTMR - A2 | 50 | 11 - 16 A | IHHMROM3MT | 12840.00 |
| | | | | 50 | 14 - 20 A | IHHMROP3TT | 12840.00 |
| 50 | 18 - 25 A | | | IHHMROS3NT | 12840.00 | | |
| 50 | 22 - 32 A | | | IHHMROT3PT | 17120.00 | | |
| 50 | 28 - 40 A | | | IHHMROU3QT | 17120.00 | | |
| 50 | 36 - 45 A | | | IHHMROV3ST | 17120.00 | | |
| 50 | 40 - 50 A | | | IHHMROW3ST | 17120.00 | | |
| 50 | 52 - 63 A | | | IHHMROX3XT | 17120.00 | | |

HGSMR - Only Magnetic Series

HSN Code: 85362090

| Fr. | Model | Breaking Capacity kA 415 V, 50 Hz | Current Rating | Item Code | Per Unit LP (₹) | | |
|-----|---------------|---|----------------|------------|-----------------|------------|----------|
| 1 | HGSMR - A1 | 100 | 0.16 A | IHHMROA1AM | 3371.00 | | |
| | | 100 | 0.25 A | IHHMROB1BM | 3371.00 | | |
| | | 100 | 0.4 A | IHHMROC1DM | 3371.00 | | |
| | | 100 | 0.63 A | IHHMROD1EM | 3371.00 | | |
| | | 100 | 1.0 A | IHHMROE1FM | 3371.00 | | |
| | | 100 | 0.6 A | IHHMROF1GM | 3852.00 | | |
| | | 100 | 0.5 A | IHHMROG1RM | 3852.00 | | |
| | | 100 | 4.0 A | IHHMROH1IM | 3852.00 | | |
| | | 100 | 6.3 A | IHHMROJ1JM | 3852.00 | | |
| | | 50 | 10 A | IHHMROK1KM | 4334.00 | | |
| | | 50 | 6 A | IHHMROM1MM | 4334.00 | | |
| | | 50 | 20 A | IHHMROP1TM | 5297.00 | | |
| | | 50 | 25 A | IHHMROS1NM | 5297.00 | | |
| | | 50 | 32 A | IHHMROT1PM | 9630.00 | | |
| | | 2 | HGSMR - A2 | 50 | 16 A | IHHMROM3MM | 11556.00 |
| | | | | 50 | 20 A | IHHMROP3TM | 11556.00 |
| 50 | 25 A | | | IHHMROS3NM | 11556.00 | | |
| 50 | 32 A | | | IHHMROT3PM | 15408.00 | | |
| 50 | 40 A | | | IHHMROU3QM | 15408.00 | | |
| 50 | 45 A | | | IHHMROV3SM | 15408.00 | | |
| 50 | 50 A | | | IHHMROW3SM | 15408.00 | | |
| 50 | 63 A | | | IHHMROX3XM | 15408.00 | | |

MPCB specially coordinated for IE2, IE3 & IE4 Motors

Motor Protection Circuit Breaker - HGSTMR / HGSMR Series Accessories

HSN Code: 85389000

| Description | Configurator | Suitable for | Item Code | Per Unit LP (₹) |
|---|---------------------------------|---------------------|------------|-----------------|
| Aux Contact Block (Side Mounting) | 2NO | HGSTMR / HGSMR MPCB | ISSPDU0062 | 1284.00 |
| | 2NC | | ISSPDU0061 | 1284.00 |
| | 1NO + 1NC | | ISSPDU0063 | 1284.00 |
| Fault Alarm + Aux Contact Block (Side Mounting) | 2 NO + 2NC | | ISSPDU0073 | 2675.00 |
| Aux Contact Block (Top Mounting) | 1NO + 1NC | | ISSPDU0060 | 1070.00 |
| UV Release | 24 V /28 V | | ISSPDU0069 | 2568.00 |
| | 180 V AC | | ISSPDU0066 | 2568.00 |
| | 208 V AC | | ISSPDU0067 | 2568.00 |
| | 240 V AC | | ISSPDU0064 | 2568.00 |
| Shunt Release | 100 V - 127 V AC | | ISSPDU0071 | 2568.00 |
| | 20 V - 24 V AC | ISSPDU0070 | 2568.00 | |
| | 200 V - 240 V AC | ISSPDU0072 | 2568.00 | |
| Operating Handle | HGSRHBG-A1 OPERATING HANDLE-ROT | ISSPDU0089 | 1391.00 | |
| | HGSRHBG-A2 OPERATING HANDLE-ROT | ISSPDU0091 | 1712.00 | |
| | HGSRHRY-A1 OPERATING HANDLE-ROT | ISSPDU0090 | 1391.00 | |
| | HGSRHRY-A2 OPERATING HANDLE-ROT | ISSPDU0092 | 1712.00 | |
| Enclosure | HGSREBG-A1 IP65/L ENCLOSURE-ROT | ISSPDU0076 | 3959.00 | |
| | HGSREBG-A1 IP65/S ENCLOSURE-ROT | ISSPDU0074 | 3424.00 | |
| | HGSRERY-A1 IP65/L ENCLOSURE-ROT | ISSPDU0077 | 3959.00 | |
| | HGSRERY-A1 IP65/S ENCLOSURE-ROT | ISSPDU0075 | 3424.00 | |
| Feeder Terminal | HGSRFT-A1 3P FEEDER TERMINALS | ISSPDU0079 | 856.00 | |
| Terminal Barrier | HGSRBT-A1 3P TERMINAL BARRIER | ISSPDU0080 | 107.00 | |
| Common Link | HGSRCL-A1 452MM COMMON LINK | ISSPDU0081 | 749.00 | |
| | HGSRCL-A1 453MM COMMON LINK | ISSPDU0082 | 856.00 | |
| | HGSRCL-A1 454MM COMMON LINK | ISSPDU0083 | 1017.00 | |
| | HGSRCL-A1 455MM COMMON LINK | ISSPDU0084 | 1177.00 | |
| | HGSRCL-A1 542MM COMMON LINK | ISSPDU0085 | 910.00 | |
| | HGSRCL-A1 543MM COMMON LINK | ISSPDU0086 | 1017.00 | |
| | HGSRCL-A1 544MM COMMON LINK | ISSPDU0087 | 1177.00 | |
| | HGSRCL-A1 545MM COMMON LINK | ISSPDU0088 | 1338.00 | |



HGS Motor Starter

HGS
Global Series



HGS - Trusted Global Range

Motor Starters

Motor Control Solutions for higher Safety, Reliability & Performance



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 3 ϕ Submersible Starters
Ratings - 22 kW to 37 kW
(30 HP to 50 HP)



ASD 3 ϕ Submersible Starters DLX
(with Short-circuit Protection)
Ratings - 22 kW to 37 kW
(30 HP to 50 HP)

Direct Online Starter - HGS Series

Features:

- Range : 0.55 kW to 37 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



HSN Code: 85369010

| HP | kW | Contacteur Rating | Overload Relay Range (A) | Item Code | Per Unit LP (₹) |
|---------|---------|-------------------|--------------------------|-----------|-----------------|
| 0.75 HP | 0.55 kW | 12 | 1.5 A - 2.1 A | IHHDLFA*E | 3583.00 |
| 1 HP | 0.75 kW | 12 | 2 A - 3 A | IHHDLGA*E | |
| 2 HP | 1.5 kW | 12 | 2.8 A - 4.2 A | IHHDLHA*E | |
| 3 HP | 2.2 kW | 12 | 4.0 A - 6.0 A | IHHDLJA*E | |
| 5 HP | 3.7 kW | 12 | 6 A - 9 A | IHHDLA*E | |
| 7.5 HP | 5.5 kW | 18 | 12 A - 18 A | IHHDLMA*E | |
| 10 HP | 7.5 kW | 22 | 12 A - 18 A | IHHDLNA*E | 4301.00 |
| 15 HP | 11 kW | 32 | 17 A - 25 A | IHHDLPB*E | 6945.00 |
| 20 HP | 15 kW | 32 | 22 A - 32 A | IHHDLWB* | 11175.00 |
| 25 HP | 18.5 kW | 40 | 28 A - 40 A | IHHDLXB* | 13550.00 |
| 30 HP | 22 kW | 50 | 34 A - 50 A | IHHDLYC* | 17550.00 |
| 40 HP | 30 kW | 65 | 45 A - 65 A | IHHDL1C* | 21675.00 |
| 50 HP | 37 kW | 85 | 59 A - 85 A | IHHDL3D* | 25135.00 |

AC Coil

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

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

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



HSN Code: 85369010

| HP | k W | Contacteur Size | Overload Relay Range (A) | Item Code | Per Unit LP (₹) |
|---------|---------|-----------------|--------------------------|------------|-----------------|
| 10 HP | 7.5 kW | 18 | 8.0 A - 12 A | IHHASDRA* | 13615.00 |
| 12.5 HP | 9.3 kW | 18 | 8.0 A - 12 A | IHHASDTA* | 13801.00 |
| 15 HP | 11 kW | 22 | 12 A - 18.0 A | IHHASDTB* | 13863.00 |
| 20 HP | 15 kW | 25 | 15 A - 22 A | IHHASDUB* | 15601.00 |
| 25 HP | 18.5 kW | 32 | 17 A - 25 A | IHHASDVB* | 17560.00 |
| 30 HP | 22 kW | 32 | 22 A - 32 A | IHHASDWB* | 19159.00 |
| 35 HP | 26 kW | 32 | 28 A - 40 A | IHHASDXB* | 28439.00 |
| 50 HP | 37 kW | 50 | 34 A - 50 A | IHHASDYC* | 48558.00 |
| 60 HP | 45 kW | 50 | 45 A - 65 A | IHHASD1C*A | 71256.00 |
| 75 HP | 55 kW | 65 | 45 A - 65 A | IHHASD1C*B | 78382.00 |
| 90 HP | 67.5 kW | 85 | 59 A - 85 A | IHHASD3D* | 91740.00 |
| 100 HP | 75 kW | 100 | 70 A - 100 A | IHHASD4D* | 96254.00 |
| 125 HP | 90 kW | 115 | 78 A - 130 A | IHHASD7E* | 132599.00 |
| 150 HP | 110 kW | 150 | 90 A - 150 A | IHHASD8E* | 134506.00 |

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)

Reversing Starter - HGS Starter

Features:

- Range : 1.5 kW to 15 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



HSN Code: 85369010

| HP | kW | Contactor Size | Overload Relay Range (A) | Item Code | Per Unit LP (₹) |
|--------|--------|----------------|--------------------------|-----------|-----------------|
| 2 HP | 1.5 kW | 18 | 2.8 A - 4.2 A | IHHREVKA* | 12363.00 |
| 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 | 5.5 kW | 18 | 8.0 A - 12 A | IHHREVRA* | |
| 10 HP | 7.5 kW | 18 | 12 A - 18.0 A | IHHREVTA* | |
| 15 HP | 11 kW | 32 | 17 A - 25 A | IHHREVVB* | 16710.00 |
| 20 HP | 15 kW | 32 | 28 A - 40 A | IHHREVXB* | 25064.00 |

AC Coil

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

Automatic Star Delta Submersible Starter (STD) - HGS Series

Features:

- Range : 22 kW to 37 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: 85369010

| HP | kW | Full load Line Current | Full Load phase current | Contactor Size | Overload Relay Range (A) | Item Code | Per Unit LP (₹) |
|-------|---------|------------------------|-------------------------|----------------|--------------------------|------------|-----------------|
| 30 HP | 22 kW | 43.5 | 25.12 | 50 | 28 A - 40 A | IHHSSDXC* | 37842.00 |
| 35 HP | 26 kW | 50.75 | 29.30 | 50 | 34 A - 50 A | IHHSSDYC*A | 40098.00 |
| 40 HP | 30 kW | 58 | 33.49 | 65 | 34 A - 50 A | IHHSSDYC*B | 44103.00 |
| 45 HP | 33.6 kW | 65.25 | 37.67 | 75 | 45 A - 65 A | IHHSSD1D* | 55132.00 |
| 50 HP | 37 kW | 72.5 | 41.86 | 85 | 52 A - 75 A | IHHSSD2D* | 60138.00 |

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

Features:

- Range : 22 kW to 37 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: 85369010

| HP | kW | Full load Line Current | Full Load phase current | Contactor Size | Overload Relay Range (A) | TP MCB Rating (A) | Item Code | Per Unit LP (₹) |
|-------|---------|------------------------|-------------------------|----------------|--------------------------|-------------------|-----------|-----------------|
| 30 HP | 22 kW | 43.5 | 25.12 | 50 | 28 A - 40 A | 100 A | IHHSDXC* | 38930.00 |
| 35 HP | 26 kW | 50.75 | 29.30 | 50 | 34 A - 50 A | 100 A | IHHSDYC*A | 41229.00 |
| 40 HP | 30 kW | 58 | 33.49 | 65 | 34 A - 50 A | 100 A | IHHSDYC*B | 45309.00 |
| 45 HP | 33.6 kW | 65.25 | 37.67 | 75 | 45 A - 65 A | 125 A | IHHSD1D* | 56548.00 |
| 50 HP | 37 kW | 72.5 | 41.86 | 85 | 52 A - 75 A | 125 A | IHHSD2D* | 61650.00 |

AC Coil

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

HSN Code: 85389000

| Type | Item Code | Per Unit LP (₹) | |
|------------------------------------|--------------|-----------------|---|
| Start Push Button - Green | ICELL00002 | 201.00 |  Start Push Button |
| Stop Push Button - Red | ICELL00003 | |  Stop Push Button |
| Motor ON Indicating Light-Green | ICELKL00015 | 326.00 |  Motor ON Indicating |
| Motor Trip Indicating Light-Yellow | ICELKL00013 | |  Motor Trip Indicating |
| SPP | ISCELXL00063 | 3432.00 |  SPP |
| Combined Voltmeter & Ammeter | ISCEMLX0007 | 1340.00 |  AV Meter |
| Terminal Block 6 way | ICELPSMX001 | 501.00 |  TB 6 Way |
| Terminal Block 3 way | ICELPSMX002 | 302.00 |  TB 3 Way |
| VOLT.SEL SW. C/G | ICELQL00021 | 467.00 |  Volt Sel Switch |
| Timer | ICELRPSL005 | 2957.00 |  Timer |
| Mini Rocker Switch - SPP By Pass | ISCELEL00218 | 50.00 |  Mini Rocker Switch |

Agricultural Motor Starter



3 ϕ DOL Starters
Ratings - 0.19 kW to 7.5 kW
(0.25 HP to 10 HP)



1 ϕ DOL Starters
Ratings - 0.37 kW to 2.2 kW
(0.5 HP to 3 HP)



3 ϕ DOL Starters
Ratings - 0.55 kW to 11 kW
(0.75 HP to 15 HP)



1 ϕ Submersible Starters with Start & Run Capacitor
Ratings - 0.37 kW to 2.2 kW
(0.5 HP to 3 HP)



3 ϕ DOL Submersible Starters
Ratings - 0.75 kW to 11 kW
(1 HP to 15 HP)



3 ϕ ASD Submersible Starters
Ratings - 3.7 kW to 15 kW
(5 HP to 20 HP)



1 ϕ Submersible Pump Controller
Ratings - 0.37 kW to 2.2 kW
(0.5 HP to 3 HP)

Motor Starter

urja Urja Lite DOL Starters



Features:

- Range upto 10 HP DOL
- Wide Band Coil 380 V (250 V - 440 V)
- Enclosure Dust, Vermin & Mpoisture Proof
- Quick Fit Technology
- Hight Electrical & Mechanical Life

HSN Code: 85369010

| HP | kW | Contactor | O/L Relay | Motor Starter | |
|------|------|-----------|---------------|---------------|--------------------------|
| | | (A) | (A) | Cat. No. | List Price in ₹ Per Unit |
| 0.25 | 0.19 | 12 | 0.6 A - 1 A | IHADOB1LH | 2720.00 |
| 0.5 | 0.37 | 12 | 1 A - 1.6 A | IHADOB1LH | 2720.00 |
| 1 | 0.75 | 12 | 1.5 A - 2.5 A | IHADOB1LH | 2720.00 |
| 2 | 1.5 | 12 | 2.5 A - 4 A | IHADOB1LH | 2720.00 |
| 3 | 2.2 | 12 | 4 A - 6.5 A | IHADOB1LH | 2720.00 |
| 5 | 3.7 | 12 | 6 A - 10 A | IHADOB1LH | 2720.00 |
| 7.5 | 5.6 | 16 | 9 A - 14 A | IHADOB1LH | 2720.00 |
| 10 | 7.5 | 25 | 13 A - 21 A | IHADOB1LH | 3250.00 |

Note: Other coil voltages are available on request.

urja DOL Starters 3 Phase - Agri Series

Features:

- Range : 0.55 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: 85369010

| HP | kW | Contactor | O/L Relay | Motor Starter | |
|---------|---------|-----------|----------------|---------------|--------------------------|
| | | (A) | (A) | Cat. No. | List Price in ₹ Per Unit |
| 0.75 HP | 0.55 kW | 16 A | 1.07 A - 1.7 A | IHAD0AE1* | 3330.00 |
| 1 HP | 0.75 kW | 16 A | 1.58 A - 2.5 A | IHAD0AF1* | |
| 2 HP | 1.5 kW | 16 A | 2.4 A - 3.8 A | IHAD0AG1* | |
| 3 HP | 2.2 kW | 16 A | 3.8 A - 6.0 A | IHAD0AH1* | |
| 5 HP | 3.7 kW | 16 A | 6.0 A - 9.3 A | IHAD0AJ1* | |
| 7.5 HP | 5.5 kW | 20 A | 8.9 A - 13.5 A | IHAD0AK1* | |
| | | 20 A | 13.2 A - 20 A | IHAD0AK1*A | |
| | | 20 A | 17.4 A - 24 A | IHAD0AK1*B | |
| 10 HP | 7.5 kW | 20 A | 13.2 A - 20 A | IHAD0AL1* | 4000.00 |
| 15 HP | 11 kW | 25 A | 17.4 A - 24 A | IHAD0AM1* | 4709.00 |

AC Coil

| Code* | K |
|------------|---------------|
| AC Voltage | 260 V - 440 V |

*Coil code included in the item code.

urja DOL Starters Single Phase - Agri Series

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

HSN Code: 85369010

| HP | kW | FLC (A) | Contactor (A) | O/L Relay (A) | Item Code | Per Unit LP (₹) |
|--------|---------|---------|---------------|----------------|------------|-----------------|
| 0.5 HP | 0.37 kW | 3.12 A | 20 A | 3.8 A - 6.0 A | IHUDOLG1F1 | 2163.00 |
| 1 HP | 0.75 kW | 6.24 A | 20 A | 6 A - 9.3 A | IHUDOLH1F1 | |
| 1.5 HP | 1.1 kW | 9.15 A | 20 A | 8.9 A - 13.5 A | IHUDOLK1F1 | |
| 2 HP | 1.5 kW | 12.47 A | 20 A | 13.2 A - 20 A | IHUDOLK1FA | 2222.00 |
| 3 HP | 2.2 kW | 18.71 A | 25 A | 17.4 A - 24 A | IHUDOLL1F1 | |

Effective from 11th March, 2024

List Price (LP) are in Indian ₹ & as per Standard Terms & Conditions **HAVELLS 35**

urja Direct Online Starter Submersible Pump Controller (Standard) 3 Phase - Agri Series



Features:

- Range : 0.75 kW to 11 kW (1 HP to 15 HP)
- Conforms to IS/IEC 60947-4-1
- Provided with Protection Degree IP 54
- SPP with automanual switch
- FRLS (Fire retardant low smoke) Internal wiring
- Combined V / A meter, Voltmeter selector switch
- ON OFF indication

HSN Code: 85369010

| 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 | 9606.00 |
| 2 HP | 1.5 kW | 3.81 A | 20 A | 3.8 A - 6.0 A | IHSDOAH1*A | |
| 3 HP | 2.2 kW | 5.71 A | 20 A | 3.8 A - 6.0 A | IHSDOAH1*B | |
| 5 HP | 3.7 kW | 9.52 A | 20 A | 8.9 A - 13.5 A | IHSDOAK1*A | |
| 7.5 HP | 5.5 kW | 14.27 A | 20 A | 13.2 A - 20 A | IHSDOAL1*A | |
| 10 HP | 7.5 kW | 19.03 A | 25 A | 13.2 A - 20 A | IHSDOAL1*B | 10105.00 |
| 12.5 HP | 9.3 kW | 23.79 A | 32 A | 17.4 A - 24 A | IHSDOAM1*A | 10610.00 |
| 15 HP | 11 kW | 28.55 A | 32 A | 22 A - 30 A | IHSDOAN1*A | 11779.00 |

urja Automatic Star Delta Submersible Pump Controller (Standard) 3 Phase - Agri Series



Features:

- Range : 0.75 kW to 11 kW (1 HP to 15 HP)
- Conforms to IS/IEC 60947-4-1
- Provided with Protection Degree IP 54
- SPP with automanual switch
- FRLS (Fire retardant low smoke) Internal wiring
- Combined V / A meter, Voltmeter selector switch
- ON OFF indication
- Star Delta Timer

HSN Code: 85369010

| 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 | 16873.00 |
| 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 | |
| 12.5 HP | 25.31 A | 14.61 A | 13.2 A - 20 A | 20 A | IHSASAL1*A | 18339.00 |
| 15 HP | 30.38 A | 17.54 A | 13.2 A - 20 A | 20 A | IHSASAL1*B | 18739.00 |
| 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 | 21472.00 |

AC Coil

| Code* | K |
|------------|---------------|
| AC Voltage | 260 V - 440 V |

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

POWER GUARD Submersible Controllers (Standard)

NEW



Features:

- Water Filled / Oil Filled Submersible motor Configuration
- Digital Smart display for clear identification of current and voltage
- OLP, MCB & contactor combination for better efficiency & performance against product safety
- Applicable for 75 mm / 100 mm borewell Submersible Pump application
- Suitable for wide voltage operation
- High quality rubber gasket to prevent dust entry
- Five-way connector for easy connection

HSN Code: 85369010

| Item Code | kW | HP | Type | Descriptions | OLP | MCB | Contactor | Run | Start | Per Unit LP (₹) |
|------------|------|-----|--------------|---|------|------|-----------|---------|-----------|-----------------|
| IHQMFDM1F1 | 0.37 | 0.5 | water Filled | 0.5 HP SP STR WATER FILLED R6A | 6 A | 10 A | 20 A | 36 | 120 - 150 | 3410.00 |
| IHRMFDM1F1 | 0.37 | 0.5 | Oil Filled | 0.5 HP SP STR OIL FILLED R6A | 6 A | 10 A | 20 A | 36 | 0 | 3190.00 |
| IHQMFQ1F1 | 0.75 | 1 | water Filled | 1 HP SP STR WATER FILLED R 10A | 10 A | 16 A | 20 A | 50 | 120 - 150 | 3482.00 |
| IHRMFQ1F1 | 0.75 | 1 | Oil Filled | 1 HP SP STR OIL FILLED R10A | 10 A | 16 A | 20 A | 36 | 0 | 3372.00 |
| IHSMFQ1F1 | 0.75 | 1 | Oil Filled | 1 HP SP STR OIL FILLED WC R10A | 10 A | 16 A | 0 A | 36 | 0 | 1909.00 |
| IHQMFDR1F1 | 1.1 | 1.5 | water Filled | 1.5 HP SP STR WATER FILLED R 12A | 16 A | 20 A | 25 A | 72 | 150 - 200 | 3768.00 |
| IHRMFDR1F1 | 1.1 | 1.5 | Oil Filled | 1.5 HP SP STR OIL FILLED R12A | 16 A | 20 A | 25 A | 50 | 0 | 3575.00 |
| IHSMFDR1F1 | 1.1 | 1.5 | Oil Filled | 1.5 HP SP STR OIL FILLED WC R12A | 12 A | 20 A | 0 A | 50 | 0 | 2019.00 |
| IHQMFD1FA | 1.1 | 1.5 | Water Filled | 1.5 HP SP STR WATER FILLED R14A | 16 A | 20 A | 25 A | 50+50 | 150 - 200 | 3850.00 |
| IHQMFU1F1 | 1.5 | 2 | Water Filled | 2 HP SP STR WATER FILLED R 16A | 16 A | 20 A | 25 A | 72 | 150 - 200 | 3933.00 |
| IHQMFU1FA | 1.5 | 2 | Water Filled | 2 HP SP STR WATER FILLED R16A CAP 50+50 | 16 A | 20 A | 25 A | 50+50 | 150 - 200 | 4015.00 |
| IHRMFU1F1 | 1.5 | 2 | Oil Filled | 2 HP SP STR OIL FILLED R16A | 16 A | 20 A | 25 A | 72 | 0 | 3762.00 |
| IHQMFV1F1 | 2.2 | 3 | water Filled | 3 HP SP STR WATER FILLED R 25A | 25 A | 32 A | 32 A | 50 + 50 | 200 - 250 | 4538.00 |

POWER GUARD Submersible Controllers (Deluxe)



Features:

- Inbuilt start run capacitor
- Suitable for wide voltage operation
- High quality rubber gasket to prevent dust entry
- Five-way connector for easy connection
- OLR with Single Phasing Protection

HSN Code: 85369010

| HP Rating | kW | Overload Relay (A) | Contactor (A) | Start Capacitor μF (MFD) | Run Capacitor μF (MFD) | Cat No. | List Price in ₹ Per Unit |
|-----------|---------|--------------------|---------------|---------------------------------------|-----------------------------------|------------|--------------------------|
| 0.5 HP | 0.37 kW | 3.8 A - 6.0 A | 20 A | 80 μF - 100 μF | 25 μF | IHADOAH1F1 | 5329.00 |
| 0.5 HP | 0.37 kW | 3.8 A - 6.0 A | 20 A | 80 μF - 100 μF | 36 μF | IHADOAJ1FA | |
| 1 HP | 0.75 kW | 6 A - 9.3 A | 20 A | 100 μF - 120 μF | 36 μF | IHADOAJ1FB | |
| 1 HP | 0.75 kW | 6 A - 9.3 A | 20 A | 100 μF - 120 μF | 50 μF | IHADOAJ1FC | |
| 1 HP | 0.75 kW | 6 A - 9.3 A | 20 A | 120 μF - 150 μF | 50 μF | IHADOAJ1FD | 5880.00 |
| 1.5 HP | 1.1 kW | 8.9 A - 13.5 A | 20 A | 120 μF - 150 μF | 50 μF | IHADOAK1FA | |
| 1.5 HP | 1.1 kW | 8.9 A - 13.5 A | 20 A | 150 μF - 200 μF | 36+36 μF | IHADOAK1FB | |
| 2 HP | 1.5 kW | 13.2 A - 20 A | 20 A | 150 μF - 200 μF | 36+36 μF | IHADOAL1FA | 6287.00 |
| 2 HP | 1.5 kW | 13.2 A - 20 A | 20 A | 150 μF - 200 μF | 50+50 μF | IHADOAL1FB | |
| 2 HP | 1.5 kW | 13.2 A - 20 A | 20 A | 200 μF - 250 μF | 50+36 μF | IHADOAL1FC | |
| 3 HP | 2.2 kW | 17.4 A - 24 A | 25 A | 200 μF - 250 μF | 50+50 μF | IHADOAM1FA | 7457.00 |
| 3 HP | 2.2 kW | 17.4 A - 24 A | 25 A | 200 μF - 250 μF | 50+36+36 μF | IHADOAM1FB | |

AC Coil

| Code* | F |
|------------|---------------|
| AC Voltage | 140 V - 270 V |

*Coil code included in the item code

Effective from 11th March, 2024

List Price (LP) are in Indian ₹ & as per Standard Terms & Conditions **HAVELLS 37**

urja Contactor 4 Pole (16 A to 40 A)



Features:

- Rugged Contactors with heavy duty Contacts with anti-welding silver alloys
- High Mechanical and Electrical Life
- High Terminal Capacity
- Suitable for Wide voltage Fluctuations including sudden DIP in voltage

HSN Code: 85369010

| AC-3 Duty Rating at 415 V, 50 Hz I _e (A) | AC-1 Duty Rating at 415 V, 50 Hz I _{th} (A) | Power Poles | Type | Item Code | Item Description | Per Unit LP (₹) |
|---|--|-------------|----------|--------------|-------------------|-----------------|
| 16 A | 20 A | 4 | UC1 16 F | IHPBC016100* | 16 A 4P Contactor | 2950.00 |
| 20 A | 25 A | | UC1 20 F | IHPBC020100* | 20 A 4P Contactor | 3600.00 |
| 25 A | 40 A | | UC1 25 F | IHPBC025100* | 25 A 4P Contactor | 4500.00 |
| 32 A | 45 A | | UC1 32 F | IHPBC032100* | 32 A 4P Contactor | 4800.00 |
| 40 A | 63 A | | UC1 40 F | IHPBC040100* | 40 A 4P Contactor | 7000.00 |

urja Contactor 2 Pole (16 A to 40 A)



Features:

- Rugged Contactors with heavy duty Contacts with anti-welding silver alloys
- High Mechanical and Electrical Life
- High Terminal Capacity
- Suitable for Wide voltage Fluctuations including sudden DIP in voltage

HSN Code: 85369010

| AC-3 Duty Rating at 415 V, 50 Hz I _e (A) | AC-1 Duty Rating at 415 V, 50 Hz I _{th} (A) | Power Poles | Type | Item Code | Item Description | Per Unit LP (₹) |
|---|--|-------------|----------|--------------|-------------------|-----------------|
| 20 A | 32 A | 2 | UC1 20 D | IHPBF020100* | 20 A 2P Contactor | 1368.00 |
| 25 A | 40 A | | UC1 25 D | IHPBF025100* | 25 A 2P Contactor | 1950.00 |
| 40 A | 63 A | | UC1 40 D | IHPBF040100* | 40 A 2P Contactor | 2673.00 |

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

AC Coil for 4 Pole

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

AC Coil for 2 Pole

| Code* | F |
|------------|---------------|
| AC Voltage | 140 V - 270 V |



urja Thermal Overload Relay 3 Pole

HSN Code: 85364900

| Relay Range (A) | Suitable for | Poles | Type | Item Code | Item Description | Per Unit LP (₹) |
|-----------------|-------------------|-------|-------|-----------|--------------------------|-----------------|
| 1.07 A - 1.7 A | 4 Pole Contactors | 3 | UR1 E | IHAR13CE | 3P Thermal O/L Relay A/M | 1793.00 |
| 1.58 A - 2.5 A | | | UR1 F | IHAR13CF | 3P Thermal O/L Relay A/M | |
| 2.4 A - 3.8 A | | | UR1 G | IHAR13CG | 3P Thermal O/L Relay A/M | |
| 3.8 A - 6.0 A | | | UR1 H | IHAR13CH | 3P Thermal O/L Relay A/M | |
| 6 A - 9.3 A | | | UR1 J | IHAR13CJ | 3P Thermal O/L Relay A/M | |
| 8.9 A - 13.5 A | | | UR1 K | IHAR13CK | 3P Thermal O/L Relay A/M | |
| 13.2 A - 20 A | | | UR1 L | IHAR13CL | 3P Thermal O/L Relay A/M | |
| 17.4 A - 24 A | | | UR1 M | IHAR13CM | 3P Thermal O/L Relay A/M | |
| 22 A - 30 A | | | UR1 N | IHAR13CN | 3P Thermal O/L Relay A/M | |

urja Thermal Overload Relay 2 Pole



HSN Code: 85364900

| Relay Range (A) | Suitable for | Poles | Type | Item Code | Item Description | Per Unit LP (₹) |
|-----------------|-------------------|-------|-------|-----------|--------------------------|-----------------|
| 3.8 A - 6 A | 2 Pole Contactors | 2 | UR1 H | IHAR12CH | 2P Thermal O/L Relay A/M | 927.00 |
| 6 A - 9.3 A | | | UR1 J | IHAR12CJ | 2P Thermal O/L Relay A/M | |
| 8.9 A - 13.5 A | | | UR1 K | IHAR12CK | 2P Thermal O/L Relay A/M | |
| 13.2 A - 20 A | | | UR1 L | IHAR12CL | 2P Thermal O/L Relay A/M | 1012.00 |
| 17.4 A - 24 A | | | UR1 M | IHAR12CM | 2P Thermal O/L Relay A/M | |
| 22 A - 30 A | | | UR1 N | IHAR12CN | 2P Thermal O/L Relay A/M | |

Spare Agri Contactor 2P / 4P

HSN Code: 85389000

| Type | Rating | Item Code | Per Unit LP (₹) |
|-------------------------------|-----------------------|--------------|-----------------|
| Housing 2P | | ISCPMPXCX016 | 326.00 |
| Housing 4P | | ISCPMPXCX014 | 526.00 |
| Carrier Assembly 2P | | ISSPEX0447 | 94.00 |
| Carrier Assembly 4P | | ISSPEX0446 | 136.00 |
| 2P Contactor Coil | 140 V - 270 V | ISSPEP0008 | 701.00 |
| 4P Contactor Coil | 200 V - 400 V | ISSPEP0007 | 801.00 |
| | 415 V (260 V - 440 V) | ISSPEP0009 | |
| | 240 V (140 V - 270 V) | ISSPEP0011 | |
| Single Fixed Contact 2P / 4P | 20 A | ISSPEX0428 | 110.00 |
| | 25 A | ISSPEX0429 | 149.00 |
| | 32 A | ISSPEX0430 | 159.00 |
| | 40 A | ISSPEX0439 | 191.00 |
| Single Moving Contact 2P / 4P | 20 A | ISSPEX0431 | 166.00 |
| | 25 A | ISSPEX0432 | 235.00 |
| | 32 A | ISSPEX0433 | 267.00 |
| | 40 A | ISSPEX0440 | 326.00 |
| Contact Kit 2P Contactor | 20 A | ISSPEX0441 | 751.00 |
| | 25 A | ISSPEX0442 | 1056.00 |
| | 40 A | ISSPEX0444 | 1391.00 |
| Contact Kit 4P Contactor | 20 A | ISSPEX0434 | 1364.00 |
| | 25 A | ISSPEX0435 | 2123.00 |
| | 32 A | ISSPEX0436 | 2282.00 |
| | 40 A | ISSPEX0445 | 2274.00 |



DOL Starter - Spares

HSN Code: 85389000

| Type | Item Code | Per Unit LP (₹) |
|------------------------------------|------------|-----------------|
| NO Switch URJA | ISSPEX0437 | 159.00 |
| ON / OFF Push Button Assembly URJA | ISSPEX0438 | |



NO Switch



ON / OFF PB

urja Single Phase Sub. Starter - Spares

HSN Code: 85389000

| Type | Item Code | Per Unit LP (₹) | |
|--|--|-----------------|---------|
| PB Red for SPSS with 1NC Element | ISCELXLX0001 | 235.00 | |
| 5+16 Element (1.5-2 HP) 1.12 kW - 1.50 kW | ISCELXLX0002 | 443.00 | |
| | 5+25 Element (3-5 HP) 2.24 kW - 3.73 kW | ISCELXLX0003 | 509.00 |
| Neon Light Indicator Red | ISCELKLX0006 | 94.00 | |
| Front Add-on Aux.Cont.Blck | 2NO ISSPEX0427 | 501.00 | |
| Combined AV Meter | 30 A - 300 V | ISCELMLX0006 | 1334.00 |
| | 25 A - 500 V | ISCELMLX0007 | 1340.00 |
| | 50 A - 500 V | ISCELMLX0008 | 1475.00 |
| Terminal Block | 2 Way SPSS | ISCPMPSX032 | 50.00 |
| | 5 Way | ISCELXPX0003 | 184.00 |



PB Red



PB Green



Neon Light



Front Add-on



AV Meter



TB 2Way



TB 5Way

| Type | Item Code | Per Unit LP (₹) | | |
|------------------------------------|--------------|-----------------|---|-----------------------|
| Start Push Button - Green | ICELL00002 | 201.00 |  | Start Push Button |
| Stop Push Button - Red | ICELL00003 | |  | Stop Push Button |
| Motor ON Indicating Light-Green | ICELKL00015 | 326.00 |  | Motor ON Indicating |
| Motor Trip Indicating Light-Yellow | ICELKL00013 | |  | Motor Trip Indicating |
| SPP | ISCELXL00063 | 3432.00 |  | SPP |
| Combined Voltmeter & Ammeter | ISCELMLX0007 | 1340.00 |  | AV Meter |
| Terminal Block 6 way | ICELPSMX001 | 501.00 |  | TB 6 Way |
| Terminal Block 3 way | ICELPSMX002 | 302.00 |  | TB 3 Way |
| VOLT.SEL SW. C/G | ICELQL00021 | 467.00 |  | Volt Sel Switch |
| Timer | ICELRPSL005 | 2957.00 |  | Timer |
| Front Block 1NO 1NC | ISPNAFM711 | 526.00 |  | Front Block |
| Mini Rocker Switch - SPP By Pass | ISCELEL00218 | 50.00 |  | Mini Rocker Switch |

Street Light Panel



HGS Smarty Series

Features:

- Range : 6 kW to 12 kW
- Conforms to IS/IEC 61439 & 60529
- Provided with Protection Degree IP 54
- Extended wide band coil
- FRLS (Fire retardant low smoke) Internal wiring
- In-built Short-Circuit Protection
- Class H Insulation

HSN Code: 85365090

| | | | | Digital 24 Hour Switch | | Astronomical Switch | |
|-------|----------------|----------------------|------------|------------------------|----------|---------------------|-----------------|
| Phase | Max. Load (kW) | Contactor Rating (A) | MCB Rating | Item Code | Per Unit | Item Code | Per Unit LP (₹) |
| 3 | 6 kW | 32 A TP | 40 A TPN | IHXTS03060 | 32860 | IHXTS0306A | 33860.00 |
| | 12 kW | 65 A TP | 63 A TPN | IHXTS09120 | 50704 | IHXTS0912A | 51704.00 |
| 1 | 6 kW | 32 A TP | 40 A SPN | IHXSS01060 | 24639 | IHXSS0106A | 25639.00 |
| | 12 kW | 65 A TP | 63 A SPN | IHXSS03120 | 37023 | IHXSS0312A | 38023.00 |

HSN Code: 85389000

| Description | Item Code | Per Unit LP (₹) |
|----------------------------------|--------------|-----------------|
| PROGRAMMABLE TIME SWITCH FOR SLP | ISCELMLX0012 | 3569.00 |
| ASTRONOMICAL TIME SWITCH FOR SLP | ISCELMLX0013 | 3858.00 |

For customised Street Lighting Panels, contact to nearest branch

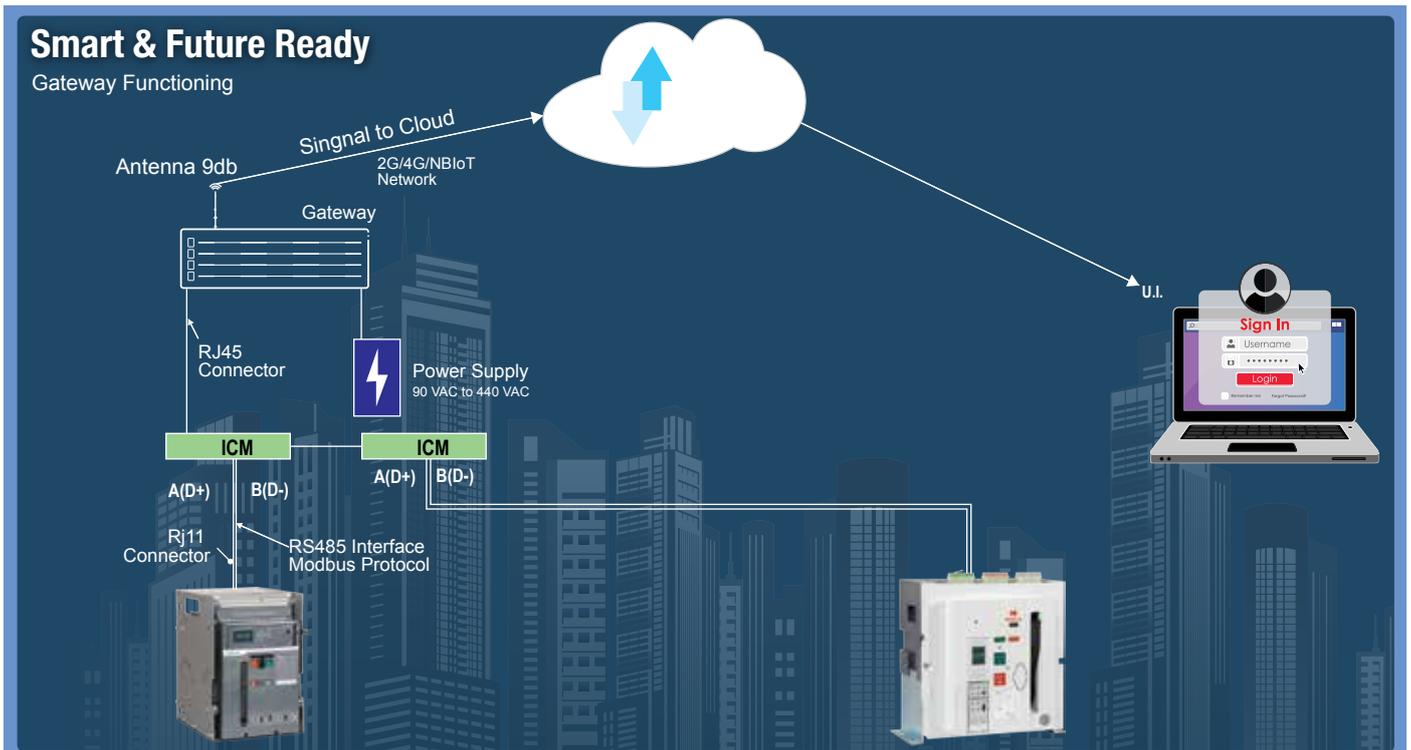


Powergear



ACB Ordering Code Logic

| 1, 2, 3 | 4 | 5 | 6 | 7 | 8, 9 | 10 | | 11, 12 | | 13 |
|---------|------|-------------------|------------------------|-----------------|------------|-------------------------------|--------------|---------------|---------------|---------------------------------------|
| Product | Pole | Breaking Capacity | Mounting Type | IPR | Rating | Closing Coil & Charging Motor | | SHT & UVT | | Current Transformer |
| | | | | | | CC (voltage) | CM (voltage) | UVT (Voltage) | SHT (Voltage) | |
| IHA | T | E | Manual Fixed = 1 | Bus Coupler = 0 | 400A = 04 | 24 | 220 = A | 415 | 24 = 01 | If rating same as ACB rating then = 0 |
| | TP | 50KA | Manual Drawout = 2 | IPR 1 = 1 | 630A = 06 | 110 | 220 = B | 415 | 110 = 02 | 400A = A |
| | F | S | Electrical Fixed = 4 | IPR 3 = 3 | 800A = 08 | 220 | 220 = C | 415 | 220 = 03 | 630A = B |
| | FP | 65KA | Electrical Drawout = 5 | IPR 5 = 5 | 1000A = 10 | 415 | 220 = D | 415 | 415 = 04 | 800A = C |
| | | H | | IPR E = E | 1250A = 12 | 24 | 110 = E | 415 | 0 = 05 | 1000A = D |
| | | 75KA | | | 1600A = 16 | 110 | 110 = F | 220 | 24 = 06 | 1250A = E |
| | | | | | 2000A = 20 | 220 | 110 = G | 220 | 110 = 07 | 1600A = F |
| | | | | | 2500A = 25 | 415 | 110 = H | 220 | 220 = 08 | 2000A = G |
| | | | | | | Not req. | Not req. = 0 | 220 | 415 = 09 | 2500A = H |
| | | | | | | | | 220 | 0 = 10 | 3200A = I |
| | | | | | | | | 110 | 24 = 11 | 4000A = J |
| | | | | | | | | 110 | 110 = 12 | 5000A = K |
| | | | | | | | | 110 | 220 = 13 | 6300A = L |
| | | | | | | | | 110 | 415 = 14 | |
| | | | | | | | | 110 | 0 = 15 | |
| | | | | | | | | 24 | 24 = 16 | |
| | | | | | | | | 24 | 110 = 17 | |
| | | | | | | | | 24 | 220 = 18 | |
| | | | | | | | | 24 | 415 = 19 | |
| | | | | | | | | 24 | 0 = 20 | |
| | | | | | | | | 0 | 24 = 21 | |
| | | | | | | | | 0 | 110 = 22 | |
| | | | | | | | | 0 | 220 = 23 | |
| | | | | | | | | 0 | 415 = 24 | |





Titania

Air Circuit Breaker

400 A – 2500 A



| Breaking Capacity @ 415 V | E Frame | S Frame | H Frame |
|---------------------------|-----------------------|-----------------------|---------------|
| | 400 A - 2000 A | 400 A - 2000 A | 2500 A |
| Ics=100% Icu | 50 kA | 65kA | 75kA |
| Icw for 1 s | 50kA | 50kA | 65kA |





Titania+

Air Circuit Breaker

630 A – 6300 A



NEW

| Breaking Capacity @ 415 V | A Frame | AA Frame | B Frame | C Frame | D Frame |
|---------------------------|-----------------------|------------------------|------------------------|---------------|---------------|
| | 630 A - 1600 A | 2000 A - 2500 A | 3200 A - 4000 A | 5000 A | 6300 A |
| Ics=100% Icu | 65 kA | 85 kA | 100 kA | 100 kA | 150 kA |
| Icw for 1 s | 50 kA | 70 kA | 85 kA | 85 kA | 100 kA |



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**# | 141390.00 | IHATE21060**# | 183810.00 | IHATE4106\$**# | IHATE5106\$**# |
| 800 A | 50 kA | IHATE11080**# | 141390.00 | IHATE21080**# | 183810.00 | IHATE4108\$**# | IHATE5108\$**# |
| 1000 A | 50 kA | IHATE11100**# | 144140.00 | IHATE21100**# | 187380.00 | IHATE4110\$**# | IHATE5110\$**# |
| 1250 A | 50 kA | IHATE11120**# | 160990.00 | IHATE21120**# | 202725.00 | IHATE4112\$**# | IHATE5112\$**# |
| 1600 A | 50 kA | IHATE11160**# | 175575.00 | IHATE21160**# | 220615.00 | IHATE4116\$**# | IHATE5116\$**# |
| 2000 A | 50 kA | IHATE11200**# | 202725.00 | IHATE21200**# | 266220.00 | 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**# | 153910.00 | IHATS21060**# | 236970.00 | IHATS4106\$**# | IHATS5106\$**# |
| 800 A | 65 kA | IHATS11080**# | 153910.00 | IHATS21080**# | 236970.00 | IHATS4108\$**# | IHATS5108\$**# |
| 1000 A | 65 kA | IHATS11100**# | 161060.00 | IHATS21100**# | 256085.00 | IHATS4110\$**# | IHATS5110\$**# |
| 1250 A | 65 kA | IHATS11120**# | 199350.00 | IHATS21120**# | 289060.00 | IHATS4112\$**# | IHATS5112\$**# |
| 1600 A | 65 kA | IHATS11160**# | 210975.00 | IHATS21160**# | 314355.00 | IHATS4116\$**# | IHATS5116\$**# |
| 2000 A | 65 kA | IHATS11200**# | 226575.00 | IHATS21200**# | 333900.00 | IHATS4120\$**# | IHATS5120\$**# |
| 2500 A | 75 kA | IHATH11250**# | 262845.00 | IHATH21250**# | 391640.00 | IHATH4125\$**# | IHATH5125\$**# |

* Please refer table A to Product price list
 To replace \$ Please refer table 1 at page-51
 To replace ** Please refer table 2 at page-51
 To replace # Please refer table 3 at page-51
 Door Flange (Escutcheon Frame) is supplied alongwith ACB

Titania Air Circuit Breaker

(Conforms to IS/IEC:60947-2)



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 | IHAFE11060**# | 179010.00 | IHAFE21060**# | 227370.00 | IHAFE4106\$**# | IHAFE5106\$**# |
| 800 A | 50 kA | IHAFE11080**# | 179010.00 | IHAFE21080**# | 227370.00 | IHAFE4108\$**# | IHAFE5108\$**# |
| 1000 A | 50 kA | IHAFE11100**# | 186955.00 | IHAFE21100**# | 243040.00 | IHAFE4110\$**# | IHAFE5110\$**# |
| 1250 A | 50 kA | IHAFE11120**# | 197755.00 | IHAFE21120**# | 257075.00 | IHAFE4112\$**# | IHAFE5112\$**# |
| 1600 A | 50 kA | IHAFE11160**# | 219245.00 | IHAFE21160**# | 282395.00 | IHAFE4116\$**# | IHAFE5116\$**# |
| 2000 A | 50 kA | IHAFE11200**# | 259480.00 | IHAFE21200**# | 336285.00 | IHAFE4120\$**# | IHAFE5120\$**# |

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**# | 193945.00 | IHAFS21060**# | 334780.00 | IHAFS4106\$**# | IHAFS5106\$**# |
| 800 A | 65 kA | IHAFS11080**# | 193945.00 | IHAFS21080**# | 334780.00 | IHAFS4108\$**# | IHAFS5108\$**# |
| 1000 A | 65 kA | IHAFS11100**# | 224490.00 | IHAFS21100**# | 343470.00 | IHAFS4110\$**# | IHAFS5110\$**# |
| 1250 A | 65 kA | IHAFS11120**# | 257160.00 | IHAFS21120**# | 393450.00 | IHAFS4112\$**# | IHAFS5112\$**# |
| 1600 A | 65 kA | IHAFS11160**# | 301050.00 | IHAFS21160**# | 460610.00 | IHAFS4116\$**# | IHAFS5116\$**# |
| 2000 A | 65 kA | IHAFS11200**# | 321975.00 | IHAFS21200**# | 470110.00 | IHAFS4120\$**# | IHAFS5120\$**# |
| 2500 A | 75 kA | IHAFH11250**# | 345825.00 | IHAFH21250**# | 480765.00 | IHAFH4125\$**# | IHAFH5125\$**# |

Titania +

| Rating | Pole | MANUAL | | ELECTRICAL | |
|-----------------|-----------------|------------------|---------|------------|---------|
| | | Fixed | Drawout | Fixed | Drawout |
| 400 A - 1600 A | 4 Pole | | POR | | POR |
| 2000 A - 2500 A | | | | | |
| 3200 A | 3 Pole / 4 Pole | Price on Request | | | |
| 4000 A | | | | | |
| 5000 A | | | | | |
| 6300 A | | | | | |



* Please refer table A to Product price list
 To replace \$ Please refer table 1 at page-51
 To replace ** Please refer table 2 at page-51
 To replace # Please refer table 3 at page-51

Table - A

| List prices Charges for product different version wrt IPR1+ ACB List Price | | Per Unit LP (₹) |
|--|--------|-----------------|
| Bus Coupler w/o Protection | Reduce | 20710.00 |
| Micro processor release IPRE+ (LI) | Reduce | 8975.00 |
| Micro processor release IPR3+ (LSI+ LCD Display+Thermal Memory+ Zone selectivity+ Current & Voltage Mesurment+ Advance protection +Over Tempeture Protection) | Add | 29090.00 |
| Micro processor release IPR5+(LCD Display+Thermal Memory+ Zone selectivity+ Advance protection+ Advance Mesurment Over Tempeture Protection+ Maximum Demand + Comunication) | Add | 40495.00 |
| To Convert Electrical version from Manual version (includes Motor, Shunt trip & Closing Coil) | Add | 45925.00 |

1. Communication Software

HSN Code: 85389000

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

2. Spring Charging Motor

HSN Code: 85389000

| S.No. | SAP Code | Description | Per Unit LP (₹) |
|-------|-----------|----------------------|-----------------|
| 1 | ISACX0358 | Charging Motor 110 V | 38845.00 |
| 2 | ISACX0147 | Charging Motor 230 V | 38845.00 |

3. Main CT's

HSN Code: 85389000

| S.No. | SAP Code | Description | Per Unit LP (₹) |
|-------|-------------|-------------|-----------------|
| 1 | ICELFACL018 | CT 400 A | 3355.00 |
| 2 | ICELFACL001 | CT 630 A | 3355.00 |
| 3 | ICELFACL002 | CT 800 A | 3355.00 |
| 4 | ICELFACL003 | CT 1000A | 3535.00 |
| 5 | ICELFACL004 | CT 1250 A | 3535.00 |
| 6 | ICELFACL005 | CT 1600 A | 3535.00 |
| 7 | ICELFACL006 | CT 2000 A | 4745.00 |
| 8 | ICELFACL007 | CT 2500A | 4745.00 |

4. Neutral CTs

HSN Code: 85389000

| S.No. | SAP Code | Description | Per Unit LP (₹) |
|-------|-------------|-------------|-----------------|
| 1 | ICELFACL019 | NCT 400 A | 3355.00 |
| 2 | ICELFACL012 | NCT 630 A | 3355.00 |
| 3 | ICELFACL013 | NCT 800 A | 3355.00 |
| 4 | ICELFACL014 | NCT 1000A | 3535.00 |
| 5 | ICELFACL015 | NCT 1250 A | 3535.00 |
| 6 | ICELFACL016 | NCT 1600 A | 3535.00 |
| 7 | ICELFACL017 | NCT 2000 A | 4745.00 |
| 8 | ICELFACL021 | NCT 2500A | 4745.00 |



Undervoltage release

5. Under Voltage Trip Device (UVT)

HSN Code: 85389000

| S.No. | SAP Code | Description | Per Unit LP (₹) |
|-------|-----------|-------------|-----------------|
| 1 | ISACX0196 | 220 VAC | 4975.00 |
| 2 | ISACX0197 | 415 VAC | 4975.00 |



Shunt Trip Coil / Closing Coil

6. Shunt Trip / Closing Coil

HSN Code: 85389000

| S.No. | SAP Code | Description | Per Unit LP (₹) |
|-------|-----------|-------------|-----------------|
| 1 | ISACX0170 | 24 VDC | 3540.00 |
| 2 | ISACX0168 | 110 VAC/DC | 3540.00 |
| 3 | ISACX0167 | 220 VAC/DC | 3540.00 |
| 4 | ISACX0212 | 415 VAC | 3540.00 |

Titania Air Circuit Breaker

(Conforms to IS/IEC:60947-2)



ON/OFF push button cover



Door Interlock



Drawout position lock



Adaptor terminals for Cradle

7. Key Lock / Key Interlock

HSN Code: 85389000

| S.No. | SAP Code | Description | Per Unit LP (₹) |
|-------|-----------|--------------------------------|-----------------|
| 1 | ISACX0301 | On/Off Button cover | 450.00 |
| 2 | ISACX0353 | Key lock (1 lock+1 key) | 1820.00 |
| 3 | ISACX0181 | Key interlock (2 locks+1 keys) | 2545.00 |
| 4 | ISACX0210 | Key interlock (3 locks+2 keys) | 5365.00 |
| 5 | ISACX0341 | Drawout position Lock | 2210.00 |

8. Adaptor Type Terminals (additional price)

(6 nos. reqd. for 3 pole & 8 nos. for 4 pole ACB)

HSN Code: 85389000

| S.No. | SAP Code | Description | Per Unit LP (₹) |
|-------|------------|-------------|-----------------|
| 1 | ISSACX0174 | 630/800 A | 4795.00 |
| 2 | ISSACX0164 | 1000/1250 A | 5270.00 |
| 3 | ISSACP0434 | 1600 A | 7455.00 |

9. Other Accessories

HSN Code: 85389000

| S.No. | SAP Code | Description | Per Unit LP (₹) |
|-------|-----------|--------------------------|-----------------|
| 1 | ISACX0208 | Door Interlock | 3240.00 |
| 2 | ISACX0028 | Close open cycle counter | 3190.00 |



Position Indication Switch



Auxiliary Contacts

*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.

10. Other Accessories

HSN Code: 85389000

| S.No. | SAP Code | Description | Per Unit LP (₹) |
|-------|-----------|---------------------------------|-----------------|
| 1 | ISACX0207 | Spring charge indication switch | 2115.00 |
| 2 | ISACX0349 | Trip indication Switch | 1335.00 |
| 3 | ISACX0139 | Aux. switch (5 c/o additional) | 3250.00 |
| 4 | ISACX0182 | Position indication switch | 2325.00 |
| 5 | ISACX0302 | Field test unit | 3120.00 |

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) |

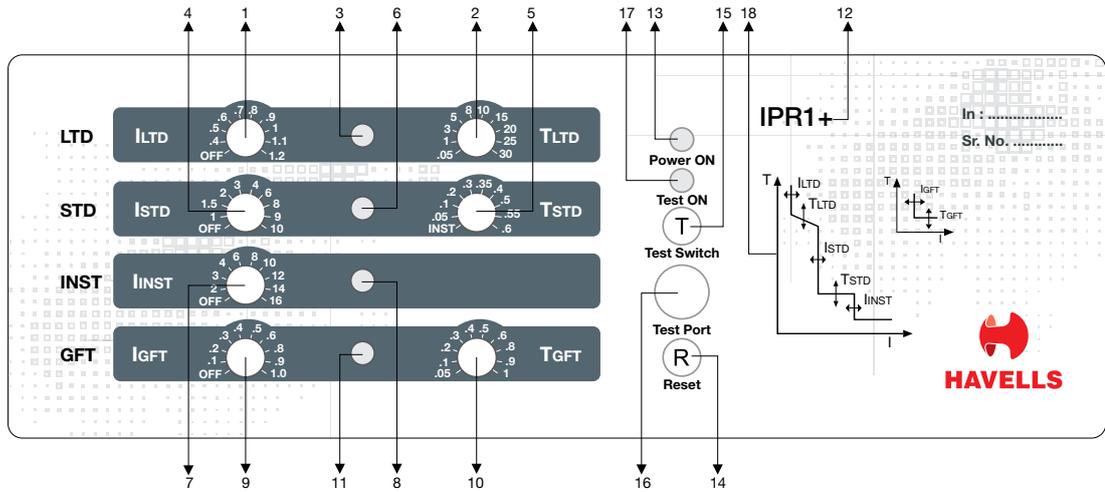
Table 3

| 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 |

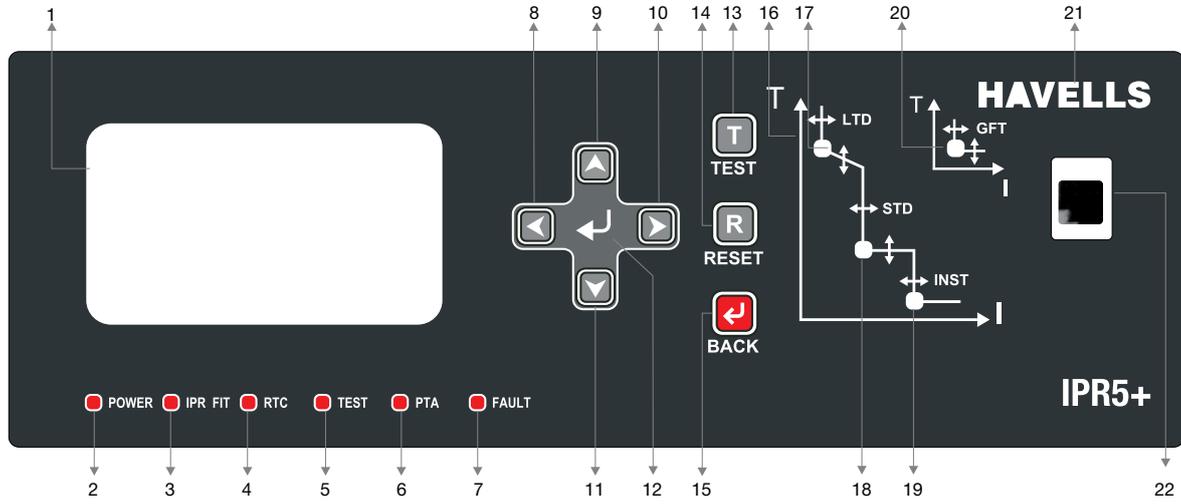
Titania Air Circuit Breaker

(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)+ (400 A - 2500 A)



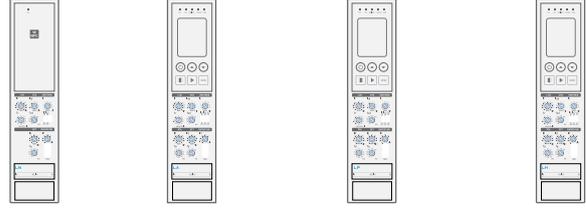
| S. No. | Features | IPR E+ | IPR 1+ | IPR 3+ | IPR 5+ |
|--------|-------------------------------------|-----------------|--------|--------|--------|
| | Release settings: | ● | ● | ● | ● |
| 1 | LTD | Current Setting | ● | ● | ● |
| | | Time Setting | ● | ● | ● |
| 2 | STD | Current Setting | ● | ● | ● |
| | | 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 | I2t 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 | | | ● | ● |
| 34 | Temperature (°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.

**Protection Release for Titania+
(3200 A - 6300 A)**



| Model Name | N Type | A Type | P Type | H Type |
|---|-----------------|----------------|----------------|----------------|
| | LN | LA | LP | LH |
| Frequency | | | | |
| 50 Hz | 50 Hz | 50 Hz | 50 Hz | 50 Hz |
| 60 Hz | 60 Hz | 60 Hz | 60 Hz | 60 Hz |
| Control Power | | | | |
| External Power | - | ● | ● | ● |
| Self-Power | ● | ● | ● | ● |
| Protection Function | | | | |
| LTD (Long Time) | ● | ● | ● | ● |
| STD (Short Time) | ● | ● | ● | ● |
| INST (Instantaneous) | ● | ● | ● | ● |
| Pre-Trip Alarm | - | ● | ● | ● |
| Ground Fault Trip | ● | ● | ● | ● |
| Thermal Function | ● | ● | ● | ● |
| Field Test | - | ● | ● | ● |
| Fail Safe | ● | ● | ● | ● |
| Indication | | | | |
| True RMS Detection Method | ● | ● | ● | ● |
| LED Indication per Trip Type | - | ● | ● | ● |
| Fault LED | L ¹⁾ | PTA, L, S/I, G | PTA, L, S/I, G | PTA, L, S/I, G |
| Real-Time LCD Indication of Load Rate per Phase | - | ● | ● | ● |
| Measurement LCD | - | ● | ● | ● |
| 3 Phase current | - | ● | ● | ● |
| Voltage | - | - | ● | ● |
| Power | - | - | ● | ● |
| Power factor & power quantity | - | - | ● | ● |
| Demand | - | - | ● | ● |
| Zone selective interlocking | - | ● | ● | ● |
| Voltage / current harmonics (1st ~ 63 th) | - | - | - | ● |
| 3 Phase wave form | - | - | - | ● |
| TDH, TDD | - | - | - | ● |
| Output Contact | | | | |
| Integrated Instantaneous Contact (1a) | ● | - | - | - |
| Individual Continuous Contact (4a) | - | ● | ● | ● |
| Operation | | | | |
| MCR | - | ○ | ○ | ○ |
| Communication | NFC | Modbus-RTU | Modbus-RTU | Modbus-RTU |
| Event/Fault Recording | ● | ● | ● | ● |

● Standard ○: Option

1) Indicates reserve before operation during long time delay.

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

Note :

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

Compact, Reliable & Robust

HIM - Moulded Case Circuit Breakers



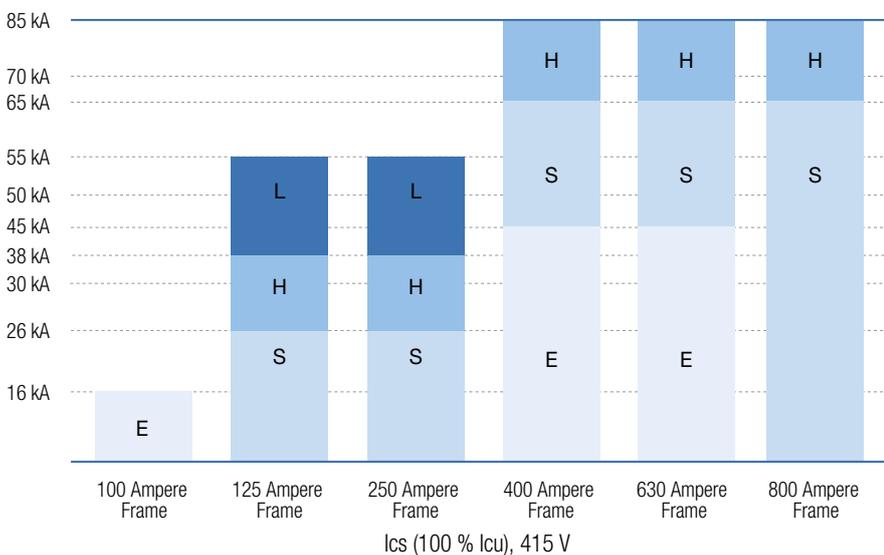
Wide range of Circuit Breakers catering all kind of electrical applications

- 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



HSN Code: 85362020

| 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 in series)-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 | 3630.00 | IHDA3BBT0016 | 4995.00 | IHDA3BBF0016 | 6415.00 | |
| | | 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 | 5960.00 | IHDA6OBT0016 | 8145.00 | IHDA6OBF0016 | 11230.00 | |
| | | 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 | 13560.00 | | | | |
| | | 150 | HIM 250 | | IHD2HOBT0150 | | IHD2HOBT0150 | 16230.00 | IHD2HOBF0150 | 19290.00 |
| | | 160 | | | IHD2HOBT0160 | | IHD2HOBF0160 | | | |
| | | 200 | | | IHD2HOBT0200 | | IHD2HOBF0200 | | 27450.00 | |
| | | 225 | | | IHD2HOBT0225 | | IHD2HOBF0225 | | 31230.00 | |
| | | 250 | | | IHD2HOBT0250 | | IHD2HOBF0250 | | | |
| | | | | | | | | | | |
| 38 | 20 | 16 | HIM 125 | IHDA6TBD0016 | 8215.00 | IHDA6TBT0016 | 11310.00 | IHDA6TBF0016 | 13990.00 | |
| | | 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 | IHDA6TBT0125 | IHDA6TBF0125 | 15710.00 | | | | |
| | | 150 | HIM 250 | | IHD2HTBT0150 | | IHD2HTBT0150 | 19405.00 | IHD2HTBF0150 | 22935.00 |
| | | 160 | | | IHD2HTBT0160 | | IHD2HTBF0160 | | | |
| | | 200 | | | IHD2HTBT0200 | | IHD2HTBF0200 | | 27985.00 | |
| | | 225 | | | IHD2HTBT0225 | | IHD2HTBF0225 | | 31030.00 | |
| | | 250 | | | IHD2HTBT0250 | | IHD2HTBF0250 | | | |
| | | | | | | | | | | |
| 45 | 20 | 300 | HIM 400 | IHDA9UBT0300 | | IHDA9UBT0300 | 31750.00 | IHDA9UBF0300 | 38350.00 | |
| | | 350 | | IHDA9UBT0350 | | IHDA9UBF0350 | | | | |
| | | 400 | | IHDA9UBT0400 | | IHDA9UBF0400 | | | | |
| | | 500 | HIM 630 | | IHD3HUBT0500 | | IHD3HUBT0500 | 45845.00 | IHD3HUBF0500 | 55455.00 |
| | | 630 | | | IHD3HUBT0630 | | IHD3HUBF0630 | | | |

Note : Adjustable thermal (80% -100%) - In TP & FP upto HIM 250. #FP 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



HSN Code: 85362020

| 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 in series)-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 | 10330.00 | IHDA6VBT0016 | 14325.00 | IHDA6VBF0016 | 17460.00 |
| | | 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 | |
| | | 150 | HIM 250 | IHD2HVBT0150 | 24015.00 | IHD2HVBF0150 | 28630.00 | | |
| | | 160 | | IHD2HVBT0160 | | IHD2HVBF0160 | | | |
| | | 200 | | IHD2HVBT0200 | 24770.00 | IHD2HVBF0200 | 31600.00 | | |
| | | 225 | | IHD2HVBT0225 | | IHD2HVBF0225 | 33685.00 | | |
| | | 250 | | IHD2HVBT0250 | | IHD2HVBF0250 | | | |
| 65 | 25 | 300 | HIM 400 | IHDA9LBT0300 | | IHDA9LBF0300 | 38140.00 | | |
| | | 350 | | IHDA9LBT0350 | | 32235.00 | | IHDA9LBF0350 | |
| | | 400 | | IHDA9LBT0400 | | | | IHDA9LBF0400 | |
| | | 500 | HIM 630 | IHD3HLBT0500 | 46245.00 | IHD3HLBF0500 | 56845.00 | | |
| | | 630 | | IHD3HLBT0630 | | IHD3HLBF0630 | | | |
| | | 700 | HIM 800 | IHD4HLBT0700 | 52250.00 | IHD4HLBF0700 | 67405.00 | | |
| | | 800 | | IHD4HLBT0800 | | IHD4HLBF0800 | | | |
| 85 | 40 | 300 | HIM 400 | IHDA9MBT0300 | 39910.00 | IHDA9MBF0300 | 45955.00 | | |
| | | 350 | | IHDA9MBT0350 | | | | IHDA9MBF0350 | |
| | | 400 | HIM 630 | IHDA9MBT0400 | 54320.00 | IHDA9MBF0400 | 66785.00 | | |
| | | 500 | | IHD3HMBT0500 | | IHD3HMBF0500 | | | |
| | | 630 | | IHD3HMBT0630 | | IHD3HMBF0630 | | | |
| | | 700 | | IHD4HMBT0700 | | IHD4HMBF0700 | | | |
| | | 800 | HIM 800 | IHD4HMBT0800 | 62470.00 | IHD4HMBF0800 | 80360.00 | | |

Accessories for HIM Series Moulded Case Circuit Breakers HSN Code: 85389000

| Description | HIM 100 / 125 / 250 / Frame | HIM 400 / 630 / 800 Frame | |
|------------------------------|-----------------------------|---------------------------|------------|
| Shunt Trip | | | |
| 24 Vdc | ISSLEU0800 | 1850.00 | |
| 48 Vdc | ISSLEU0801 | | |
| 60 Vdc | ISSLEU0802 | | |
| 100 Vdc -120 Vdc | ISSLEU1634 | | |
| 125 Vdc | ISSLEU0803 | | |
| 100 Vdc -125 Vdc | | ISSLEU0907 | |
| 100 Vac -120 Vac | ISSLEU0905 | 1850.00 | |
| 200 Vac -250 Vac | ISSLEU0906 | | ISSLEU0908 |
| 380 Vac - 415 Vac | ISLEU0888 | | ISSLEU0890 |
| | | | On Request |
| Under Voltage Release | | | |
| 24 Vdc | ISSLEU0804 | 2975.00 | |
| 48 Vdc | ISSLEU0805 | | |
| 100 Vdc - 110 Vdc | ISSLEU0909 | | |
| 100 Vac - 120 Vac | ISSLEU0910 | | ISSLEU0914 |
| 200 Vac - 230 Vac | ISSLEU0893 | | ISSLEU0895 |
| 380 Vac - 415 Vac | ISSLEU0894 | ISSLEU0896 | 3645.00 |



SHT



UVT

Note : Adjustable thermal (80% -100%) - In TP & FP upto HIM 250. #FP 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

HSN Code: 85389000

| Description | HIM 100 / 125 / 250 / Frame | | HIM 400 / 630 / 800 Frame | |
|---|-----------------------------|---------|---------------------------|---------|
| Auxiliary Contact (250 Vac / 250 Vdc) (450 Vac / 250 Vdc) | | | | |
| 1-Changeover | ISSLEU0791 | 990.00 | ISSLEU0793 | 1090.00 |
| 2-Changeover | ISSLEU0792 | 1760.00 | | |
| Alarm Switch (Left side only) | ISSLEU0794 | 990.00 | ISSLEU0796 | 1090.00 |
| Alarm Switch (Right side only) | ISSLEU0795 | | | |
| Auxiliary + Alarm Switch | | | | |
| Left side only | ISSLEU0799 | 1710.00 | | |
| Right side only | ISSLEU0797 | | | |
| Pad Lock Device | ISSLEU0844 | 1215.00 | ISSLEU0845 | 1490.00 |
| DIN Rail | ISSLEU0887 | 870.00 | | |
| Auxiliary Handle | | | ISSLEU0846 | 1490.00 |



HSN Code: 85389000

| Description | HIM 100 Frame | | HIM 125 Frame | | HIM 250 Frame | | HIM 400 Frame | | HIM 630 / 800 Frame | |
|----------------------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------------|----------|
| Rotary Handle | | | | | | | | | | |
| Direct mounting | ISSLEU0806 | 1410.00 | ISSLEU0809 | 1410.00 | ISSLEU0812 | 1410.00 | ISSLEU0815 | 2050.00 | ISSLEU0916 | 3190.00 |
| Door Mounting | ISSLEU0820 | 1870.00 | ISSLEU0821 | 1980.00 | ISSLEU0822 | 2170.00 | ISSLEU0823 | 3365.00 | ISSLEU0824 | 4165.00 |
| Mechanical Interlock | | | | | | | | | | |
| 2 Pole | ISSLEU0825 | 1365.00 | ISSLEU0829 | 1365.00 | | | | | | |
| 3 Pole | ISSLEU0826 | 2545.00 | ISSLEU0830 | 2545.00 | ISSLEU0833 | 3085.00 | ISSLEU0836 | 4940.00 | ISSLEU0838 | 5730.00 |
| 4 Pole (N-R-S-T) | ISSLEU0828 | 3035.00 | ISSLEU0832 | 3035.00 | ISSLEU0835 | 3750.00 | ISSLEU0837 | 5790.00 | ISSLEU0843 | 6795.00 |
| Motor Operator | | | | | | | | | | |
| 24 Vdc | ISSLEU0917 | | ISSLEU0897 | | ISSLEU0899 | | ISSLEU0901 | | ISSLEU0903 | |
| 110 Vac / Vdc | ISSLEU0918 | 31295.00 | ISSLEU0920 | 31295.00 | ISSLEU0921 | 31295.00 | ISSLEU0922 | 44405.00 | ISSLEU0923 | 49475.00 |
| 240 Vac / Vdc | ISSLEU0919 | | ISSLEU0898 | | ISSLEU0900 | | ISSLEU0902 | | ISSLEU0904 | |

HSN Code: 85389000

| 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 | 195.00 | ISSLEX1160 | 250.00 | ISSLEX1162 | 685.00 | ISSLEX1164 | 1770.00 | ISSLEX1168 | 1870.00 | ISSLEX1166 | 3845.00 |
| 4 Pole (Set of 4) | ISSLEX1159 | 305.00 | ISSLEX1161 | 360.00 | ISSLEX1163 | 1050.00 | ISSLEX1165 | 2310.00 | ISSLEX1169 | 2505.00 | ISSLEX1167 | 4730.00 |
| Terminal Cover - Long Type | | | | | | | | | | | | |
| 2 Pole | ISSLEU0858 | 525.00 | ISSLEU0864 | 525.00 | | | | | | | | |
| 3 Pole | ISSLEU0859 | 790.00 | ISSLEU0865 | 790.00 | ISSLEU0869 | 1090.00 | ISSLEU0873 | 2240.00 | ISSLEU0877 | 2240.00 | | |
| 4 Pole | ISSLEU0860 | 895.00 | ISSLEU0866 | 895.00 | ISSLEU0870 | 1275.00 | ISSLEU0874 | 3130.00 | ISSLEU0878 | 3130.00 | | |
| Phase Barrier | | | | | | | | | | | | |
| 2 Pole (Set of 1) | ISSLEU0924 | 65.00 | ISSLEU0924 | 65.00 | ISSLEU0882 | 85.00 | | | | | | |
| 3 Pole (Set of 2) | ISSLEU0880 | 120.00 | ISSLEU0880 | 120.00 | ISSLEU0883 | 175.00 | ISSLEU0885 | 695.00 | ISSLEU0885 | 695.00 | ISSLEU0885 | 695.00 |
| 4 Pole (Set of 3) | ISSLEU0881 | 185.00 | ISSLEU0881 | 185.00 | ISSLEU0884 | 250.00 | ISSLEU0886 | 1040.00 | ISSLEU0886 | 1040.00 | ISSLEU0886 | 1040.00 |
| Enclosure | | | | | | | | | | | | |
| 3 Pole | ISSBOU1189 | 1945.00 | ISSBOU1191 | 2050.00 | ISSBOU1193 | 2665.00 | ISSBOU1195 | 9810.00 | ISSBOU1197 | 10190.00 | ISSBOU1199 | 10190.00 |
| 4 Pole | ISSBOU1190 | | ISSBOU1192 | | ISSBOU1194 | | ISSBOU1196 | | ISSBOU1198 | | ISSBOU1200 | |

HSN Code: 85371000

| Description | HIM 100 Frame | | HIM 125 Frame | | HIM 250 Frame | | HIM 400 Frame | | HIM 630 Frame | | HIM 800 Frame | |
|-------------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|----------|---------------|----------|
| Enclosure | | | | | | | | | | | | |
| 3 Pole | ISSBOU1189 | 1945.00 | ISSBOU1191 | 2050.00 | ISSBOU1193 | 2665.00 | ISSBOU1195 | 9810.00 | ISSBOU1197 | 10190.00 | ISSBOU1199 | 10190.00 |
| 4 Pole | ISSBOU1190 | | ISSBOU1192 | | ISSBOU1194 | | ISSBOU1196 | | ISSBOU1198 | | ISSBOU1200 | |

The Compact Reliable Performer

Loadline MCCB Range

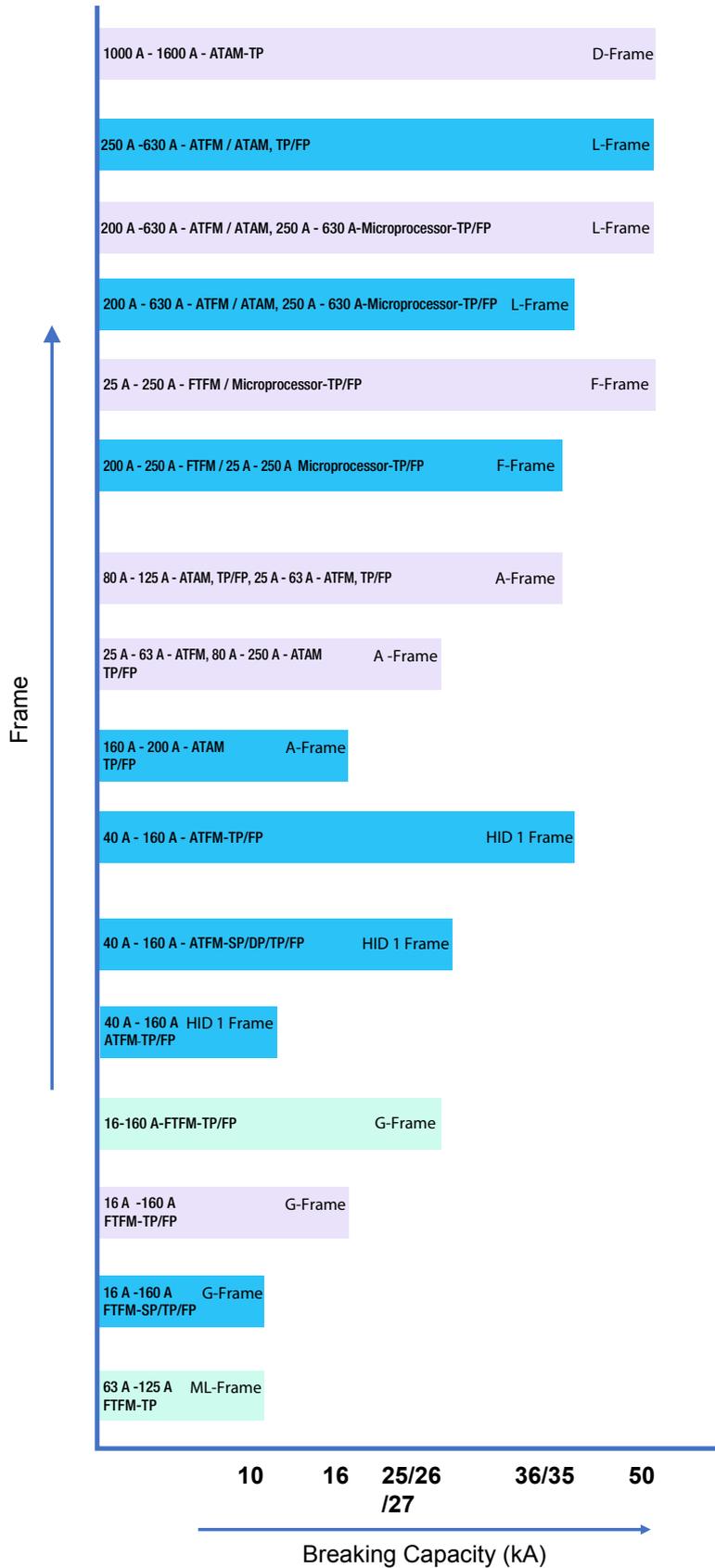


- Current Rating: 15 A to 1600 A ● Execution: 1P, 2P, 3P & 4P ● Breaking Capacity: 10 kA to 50 kA
- Compact □ Thermal Magnetic & Microprocessor release □ Precise and reliable protection

Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

MCCB Selection Chart - Loadline (TM / Microprocessor)



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

Ics=100% Icu Ics=75% Icu Ics=50% Icu

Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

Fixed Thermal & Fixed Magnetic

HSN Code: 85362020

| 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 | 2070.00 | | | | |
| | | 80 A | | IHLM1AAT0080# | 2120.00 | | | | |
| | | 100 A | | IHLM1AAT0100# | 2215.00 | | | | |
| | | 125 A | | IHLM1AAT0125# | 2905.00 | | | | |
| | 100% | 25 A | GS | IHLGST0025 | 2345.00 | IHLGSF0025 | 3060.00 | | |
| | | 32 A | | IHLGST0032 | | IHLGSF0032 | | | |
| | | 40 A | | IHLGST0040 | | IHLGSF0040 | | | |
| | | 50 A | | IHLGST0050 | | IHLGSF0050 | | | |
| | | 63 A | | IHLGST0063 | | 2345.00 | | IHLGSF0063 | 3090.00 |
| | | 80 A | | IHLGSAA30080 | | 2345.00 | | IHLGSAA40080 | 3090.00 |
| | | | | IHLGST0080# | | 2440.00 | | IHLGSF0080# | 3685.00 |
| | | | | IHLGS30100 | | 2345.00 | | IHLGS40100 | 3090.00 |
| | | | | IHLGST0100# | | 2440.00 | | IHLGSF0100# | 3685.00 |
| | | | | IHLGST0125# | | 3575.00 | | IHLGSF0125# | 4230.00 |
| | 150 A | 4610.00 | IHLGST0150# | IHLGSF0150# | 6105.00 | | | | |
| | 160 A | | IHLGST0160# | IHLGSF0160# | | | | | |
| 16 | 75% | 25 A | GN (Suitable for DC application 5 kA at 250 V DC, 2P in series) | IHLGNT0025 | 4575.00 | IHLGNF0025 | 5400.00 | | |
| | | 32 A | | IHLGNT0032 | | IHLGNF0032 | | | |
| | | 40 A | | IHLGNT0040 | | IHLGNF0040 | | | |
| | | 50 A | | IHLGNT0050 | | IHLGNF0050 | | | |
| | | 63 A | | IHLGNT0063 | | 4575.00 | | IHLGNF0063 | 5400.00 |
| | | 80 A | | IHLGNT0080# | | 4665.00 | | IHLGNF0080# | 5700.00 |
| | | 100 A | | IHLGNT0100# | | 5125.00 | | IHLGNF0100# | 5955.00 |
| | | 125 A | | IHLGNT0125# | | | | IHLGNF0125# | |
| | | 150 A | | IHLGNT0150# | | 5985.00 | | IHLGNBAF0150# | 6920.00 |
| | | 160 A | | IHLGNT0160# | | IHLGNF0160# | | | |
| 25 | 50% | 25 A | GH | IHLGHT0025 | 5185.00 | IHLGHF0025 | 6530.00 | | |
| | | 32 A | | IHLGHT0032 | | IHLGHF0032 | | | |
| | | 40 A | | IHLGHT0040 | | IHLGHF0040 | | | |
| | | 50 A | | IHLGHT0050 | | IHLGHF0050 | | | |
| | | 63 A | | IHLGHT0063 | | 5210.00 | | IHLGHF0063 | 6560.00 |
| | | 80 A | | IHLGHT0080# | | 5325.00 | | IHLGHF0080# | 6560.00 |
| | | 100 A | | IHLGHT0100# | | | | IHLGHF0100# | |
| | | 125 A | | IHLGHT0125# | | 6195.00 | | IHLGHF0125# | 8155.00 |
| | | 150 A | | IHLGHT0150# | | 8820.00 | | IHLGHF0150# | 10290.00 |
| | | 160 A | | IHLGHT0160# | | | | IHLGHF0160# | |
| 35 | 100% | 200 A | FN | IHLFN30200 | 21045.00 | IHLFN40200 | 26360.00 | | |
| | | 250 A | | IHLFN30250 | 23640.00 | IHLFN40250 | 28820.00 | | |
| 50 | 75% | 25 A | FH | IHLFHT0025 | 12565.00 | IHLFHF0025 | 13330.00 | | |
| | | 32 A | | IHLFHT0032 | | IHLFHF0032 | | | |
| | | 40 A | | IHLFHT0040 | | IHLFHF0040 | | | |
| | | 50 A | | IHLFHT0050 | | IHLFHF0050 | | | |
| | | 63 A | | IHLFHT0063 | | IHLFHF0063 | | | |
| | | 80 A | | IHLFHFA30080 | | 13425.00 | | IHLFHFA40080 | 14905.00 |
| | | 100 A | | IHLFH30100 | | | | IHLFH40100 | |
| | | 125 A | | IHLFH30125 | | 15580.00 | | IHLFH40125 | 18660.00 |
| | | 160 A | | IHLFH30160 | | 19325.00 | | IHLFH40160 | 22575.00 |
| | | 200 A | | IHLFH30200 | | 22465.00 | | IHLFH40200 | 28340.00 |
| 250 A | IHLFH30250 | 24820.00 | IHLFH40250 | 30930.00 | | | | | |

Phase barriers are supplied along with MCCBs
 Spreader terminals are available as an accessories, refer page no. 66
 # Both side terminal are included
 ##FP with Switched Neutral.

Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

Adjustable Thermal & Fixed Magnetic

HSN Code: 85362020

| 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 | 4535.00 | IHLE1ABF0040 | 5290.00 |
| | | 50 A | | IHLE1ABT0050 | | IHLE1ABF0050 | |
| | | 63 A | | IHLE1ABT0063 | | IHLE1ABF0063 | |
| | | 80 A | | IHLE1AB30080 | 4730.00 | IHLE1AB40080 | 5485.00 |
| | | 100 A | | IHLE1AB30100 | | IHLE1AB40100 | |
| | | 125 A | | IHLE1AB30125 | | IHLE1AB40125 | |
| | | 160 A | | IHLE1AB30160 | | IHLE1AB40160 | |
| 25 | 75% | 25 A | AS (Suitable for DC application 10 kA at 250 V DC, 2P in series) | IHLAST0025 | 7455.00 | IHLASF0025 | 8795.00 |
| | | 32 A | | IHLAST0032 | | IHLASF0032 | |
| | | 40 A | | IHLAST0040 | | IHLASF0040 | |
| | | 50 A | | IHLAST0050 | | IHLASF0050 | |
| | | 63 A | | IHLAST0063 | | IHLASF0063 | |
| 27 | 100% | 40 A | HID 1 | IHA13DBT0040 | 7085.00 | IHA13DBF0040 | 8250.00 |
| | | 50 A | | IHA13DBT0050 | | IHA13DBF0050 | |
| | | 63 A | | IHA13DBT0063 | | IHA13DBF0063 | |
| | | 80 A | | IHA13DB30080 | 8510.00 | IHA13DB40080 | 10150.00 |
| | | 100 A | | IHA13DB30100 | | IHA13DB40100 | |
| | | 125 A | | IHA13DB30125 | | IHA13DB40125 | |
| | | 160 A | | IHA13DB30160 | | IHA13DB40160 | |
| 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 | 9830.00 | IHA13EBF0040 | 11710.00 |
| | | 50 A | | IHA13EBT0050 | | IHA13EBF0050 | |
| | | 63 A | | IHA13EBT0063 | | IHA13EBF0063 | |
| | | 80 A | | IHA13EB30080 | 11255.00 | IHA13EB40080 | 13275.00 |
| | | 100 A | | IHA13EB30100 | | IHA13EB40100 | |
| | | 125 A | | IHA13EB30125 | | IHA13EB40125 | |
| | | 160 A | IHA13EB30160 | 11950.00 | IHA13EB40160 | 13975.00 | |
| | | 200 A | LS | IHLLSEB30200 | 22130.00 | IHLLSEB40200 | 26415.00 |
| | | 250 A | | IHLLSEB30250 | 24830.00 | IHLLSEB40250 | 29660.00 |
| | | 320 A | | IHLLSEB30320 | 26700.00 | IHLLSEB40320 | 32805.00 |
| | | 400 A | | IHLLSEB30400 | | IHLLSEB40400 | |
| | | 500 A | | IHLLSEB30500 | 39130.00 | IHLLSEB40500 | 48470.00 |
| | | 630 A | | IHLLSEB30630 | | IHLLSEB40630 | |
| 50 | 75% | 200 A | | LN | IHLLNFB30200 | 24530.00 | IHLLNFB40200 |
| | | 250 A | IHLLNFB30250 | | 26535.00 | IHLLNFB40250 | 31390.00 |
| | | 320 A | IHLLNFB30320 | | 28670.00 | IHLLNFB40320 | 34690.00 |
| | | 400 A | | | | IHLLNFB40400 | |
| | | 500 A | IHLLNFB30500 | | 41795.00 | IHLLNFB40500 | 51310.00 |
| | | 630 A | | | | IHLLNFB30630 | |



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. 66
 # Both side terminal are included
 ##FP with Switched Neutral.

Effective from 11th March, 2024

List Price (LP) are in Indian ₹ & as per Standard Terms & Conditions **HAVELLS 62**

Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

Adjustable Thermal & Adjustable Magnetic

HSN Code: 85362020

| 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 | 8465.00 | IHLASBC40160 | 11625.00 | |
| | | 200 A | | IHLASBC30200 | 10030.00 | IHLASBC40200 | 12695.00 | |
| 25 | 75% | 80 A | AS (Suitable for DC application 10 kA at 250 V DC 2P in series) | IHLASDC30080 | 7585.00 | IHLASDC40080 | 9180.00 | |
| | | 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 | 10415.00 | IHLANDC40160 | 12465.00 | |
| | | 200 A | | IHLANDC30200 | 10560.00 | IHLANDC40200 | 12990.00 | |
| | | 250 A | | IHLANDC30250 | 11400.00 | IHLANDC40250 | 14410.00 | |
| 35 | 75% | 80 A | AN | IHLANEC30080 | 10370.00 | IHLANEC40080 | 12365.00 | |
| | | 100 A | | IHLANEC30100 | | IHLANEC40100 | | |
| | | 125 A | | IHLANEC30125 | | IHLANEC40125 | | |
| 36 | 100% | 200 A | LS | IHLLSEC30200 | 23115.00 | IHLLSEC40200 | 27115.00 | |
| | | 250 A | | IHLLSEC30250 | | IHLLSEC40250 | | |
| | | 320 A | | IHLLSEC30320 | | IHLLSEC40320 | | |
| | | 400 A | | IHLLSEC30400 | | IHLLSEC40400 | | |
| | | 500 A | | 39880.00 | | IHLLSEC40500 | | 49490.00 |
| | | 630 A | | | | IHLLSEC30630 | | |
| 50 | 75% | 200 A | LN | IHLLNFC30200 | 27545.00 | IHLLNFC40200 | 32440.00 | |
| | | 250 A | | IHLLNFC30250 | | IHLLNFC40250 | | |
| | | 320 A | | IHLLNFC30320 | | IHLLNFC40320 | | |
| | | 400 A | | IHLLNFC30400 | | IHLLNFC40400 | | |
| | | 500 A | | 43090.00 | | IHLLNFC40500 | | 52730.00 |
| | | 630 A | | | | IHLLNFC30630 | | |
| | 100% | 250 A | L | IHLLSFC30250 | 30385.00 | IHLLSFC40250 | 36155.00 | |
| | | 320 A | | IHLLSFC30320 | | IHLLSFC40320 | | |
| | | 400 A | | IHLLSFC30400 | | IHLLSFC40400 | | |
| | | 500 A | | 44625.00 | | IHLLSFC40500 | | 53340.00 |
| | | 630 A | | | | IHLLSFC30630 | | |
| | 75% | 1000 A | DN | IHLDNT1000 | 150890.00 | | | |
| | | 1250 A | | IHLDNT1250 | 173000.00 | | | |
| | | 1600 A | | IHLDNT1600 | 186460.00 | | | |

Single Pole And Double Pole MCCB

HSN Code: 85362020

| 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 | 1080.00 | 36 | 100% | | | |
| | | 32 A | | IHLGSS0032 | | | | | | |
| | | 40 A | | IHLGSS0040 | | | | | | |
| | | 50 A | | IHLGSS0050 | | | | | | |
| | | 63 A | | IHLGSS0063 | 1080.00 | | | | | |
| | | 80 A | | IHLGSS0080# | | | | | | |
| | | 100 A | | IHLGSS0100# | 1290.00 | | | | | |
| | | 125 A | | IHLGSS0125# | | | | | | |
| | | 150 A | | IHLGSS0150# | 1390.00 | | | | | |
| | | 160 A | | IHLGSS0160# | | | | | | |
| 27 | 100% | 40 A | HID 1 | IHA13DBS0040 | 3725.00 | 36 | 100% | IHA13DBD0040 | 5445.00 | |
| | | 50 A | | IHA13DBS0050 | | | | IHA13DBD0050 | | |
| | | 63 A | | IHA13DBS0063 | | | | IHA13DBD0063 | | |
| | | 80 A | | IHA13DB10080 | | | | IHA13DB20080 | | |
| | | 100 A | | IHA13DB10100 | | | | IHA13DB20100 | | |
| | | 125 A | | IHA13DB10125 | | | | 4475.00 | | IHA13DB20125 |
| | | 160 A | | IHA13DB10160 | 5105.00 | | | IHA13DB20160 | | 7465.00 |

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. 66
 # Both side terminal are included
 ##FP 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)

HSN Code: 85362020

| 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 | 16310.00 | IHLFENF0025 | 21115.00 | | |
| | | 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 | | 20645.00 | 26085.00 |
| | | 200 A | | IHLFEN30200 | | IHLFEN40200 | | 28495.00 | 33535.00 |
| | | 250 A | | IHLFEN30250 | | IHLFEN40250 | | | |
| 36 | 100% | 250 A | LES | IHLLSEE30250 | 38095.00 | IHLLSEE40250 | 46110.00 | | |
| | | 320 A | | IHLLSEE30320 | | IHLLSEE40320 | | | |
| | | 400 A | | IHLLSEE30400 | | IHLLSEE40400 | | | |
| | | 500 A | | IHLLSEE30500 | | IHLLSEE40500 | | 42665.00 | 56960.00 |
| | | 630 A | | IHLLSEE30630 | | IHLLSEE40630 | | | |
| 50 | 75% | 25 A | FEH | IHLFEHT0025 | 19435.00 | IHLFEHF0025 | 24895.00 | | |
| | | 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 | | 25430.00 | 31465.00 |
| | | 200 A | | IHLFEH30200 | | IHLFEH40200 | | 32600.00 | 37875.00 |
| | | 250 A | | IHLFEH30250 | | IHLFEH40250 | | | |
| | | 250 A | LEN | IHLLNFE30250 | IHLLNFE40250 | 41505.00 | 51975.00 | | |
| | | 320 A | | IHLLNFE30320 | IHLLNFE40320 | | | | |
| | | 400 A | | IHLLNFE30400 | IHLLNFE40400 | | | | |
| | | 500 A | | IHLLNFE30500 | IHLLNFE40500 | | | 44360.00 | 58180.00 |
| | | 630 A | | IHLLNFE30630 | IHLLNFE40630 | | | | |

Phase barriers are supplied along with MCCBs
 Spreader terminals are available as an accessories, refer page no. 66
 Only one internal accessories can be fitted in microprocessor MCCB
 # Both side terminal are included
 ##FP with Switched Neutral
 For Communication enabled MCCB please contact with nearest branch



Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

Spreader Terminal kit (1 side)

HSN Code: 85389000

| Frame Size | RATING | POLE | FG CODES | Per Unit LP (₹) |
|------------|--------------|------|------------|-----------------|
| GS, GN, GH | 80 A - 100 A | 1P | ISSLGX0153 | 70.00 |
| | | 3P | ISSLGX0154 | 195.00 |
| | | 4P | ISSLGX0155 | 305.00 |
| | 125 A | 1P | ISSLGX0156 | 85.00 |
| | | 3P | ISSLGX0157 | 250.00 |
| | | 4P | ISSLGX0158 | 360.00 |
| | 160 A | 1P | ISSLGX0159 | 110.00 |
| | | 3P | ISSLGX0160 | 335.00 |
| | | 4P | ISSLGX0161 | 445.00 |
| AS, AN, AH | 80 A~100 A | 3P | ISSLAX0121 | 290.00 |
| | | 4P | ISSLAX0122 | 400.00 |
| | 125 A~200 A | 3P | ISSLAX0124 | 425.00 |
| | | 4P | ISSLAX0125 | 580.00 |
| | 250 A | 3P | ISSLAX0127 | 725.00 |
| | | 4P | ISSLAX0128 | 1050.00 |
| LS, LN | 200 A~400 A | 3P | ISSLLX0065 | 1770.00 |
| | | 4P | ISSLLX0066 | 2310.00 |
| | 500 A~630 A | 3P | ISSLLX0067 | 1870.00 |
| | | 4P | ISSLLX0068 | 2505.00 |
| FN, FH | 80 A~100 A | 3P | ISSLFX0074 | 290.00 |
| | | 4P | ISSLFX0075 | 400.00 |
| | 125 A~160 A | 3P | ISSLFX0076 | 425.00 |
| | | 4P | ISSLFX0077 | 580.00 |
| | 200 A~250 A | 3P | ISSLFX0078 | 725.00 |
| | | 4P | ISSLFX0079 | 1050.00 |
| HID 1 | 80 A~100 A | 1P | ISSLHX4273 | 85.00 |
| | 125 A~160 A | 1P | ISSLHX4274 | 110.00 |
| | 80 A~100 A | 2P | ISSLHX4275 | 170.00 |
| | 125 A~160 A | 2P | ISSLHX4276 | 220.00 |
| | 80 A~100 A | 3P | ISSLHX4277 | 250.00 |
| | 125 A~160 A | 3P | ISSLHX4278 | 335.00 |
| | 80 A~100 A | 4P | ISSLHX4279 | 360.00 |
| | 125 A~160 A | 4P | ISSLHX4280 | 480.00 |

Enclosures for MCCBs

HSN Code: 85371000

| Sl.No. | Description | Item Code | Per Unit LP (₹) |
|--------|----------------|------------|-----------------|
| 1. | 'ML' Frame TP | IHEMTP | 2155.00 |
| 2. | 'G' Frame TP | IHEGTP | |
| 3. | 'G' Frame FP | IHEGFP | |
| 4. | 'A' Frame TP | IHEATP | 2475.00 |
| 5. | 'A' Frame FP | IHEAFP | |
| 6. | 'F' Frame TP | IHEFTP | 2605.00 |
| 7. | 'F' Frame FP | IHEFFP | |
| 8. | 'L' Frame TP | IHELTP | 9785.00 |
| 9. | 'L' Frame FP | IHELFP | |
| 10. | HID 1 Frame TP | ISSBOU1117 | 2320.00 |
| 11. | HID 1 Frame FP | ISSBOU1118 | |



Loadline Moulded Case Circuit Breakers

(Conforms to IS/IEC:60947-2)

Loadline Moulded Case Circuit Breakers Accessories

HSN Code: 85389000

| Description | 'G' / 'ML' 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 | 1225.00 | IHLAS240 | 1785.00 | ISSLEU0439 | 1785.00 | IHLLS240 | 2500.00 | IHLLSTF240 | 1785.00 |
| 380 Vac - 415 Vac | IHLGS415 | | IHLAS415 | | ISSLEU0440 | | IHLLS415 | | IHLLSTF415 | |
| Under Voltage Release | | | | | | | | | | |
| 110 Vac - 120 Vac | IHLGU110 | | IHLAU110 | | - | - | IHLLU110 | | IHLVURF110 | |
| 220 Vac - 240Vac | IHLGU240 | 1855.00 | IHLAU240 | 2740.00 | - | - | IHLLU240 | 3405.00 | IHLVURF240 | 2740.00 |
| 380 Vac - 440 Vac | IHLGU440 | | IHLAU440 | | - | - | IHLLU415 | | IHLVURF440 | |
| Auxiliary Contact (250Vac/250Vdc) (450Vac/250Vdc) | | | | | | | | | | |
| 1-Changeover | IHLLASG1CO | 830.00 | IHLAA1CO | 910.00 | ISSLEU0444 | 910.00 | IHLLA1CO | 1050.00 | IHLLASF1CO | 990.00 |
| 2-Changeover | IHLLASG2CO | 1325.00 | IHLAA2CO | 1515.00 | ISSLEU0445 | 1515.00 | IHLLA2CO | 1820.00 | IHLLASF2CO | 1515.00 |
| Rotary Handle | | | | | | | | | | |
| Direct mounting | IHLGD000 | 1255.00 | IHLAD000 | 1655.00 | | | | | | |
| Door Mounting | IHLGRN30 | 1565.00 | IHLARN30 | 2155.00 | ISSLEU0494 | 1895.00 | IHLLRN30 | 3185.00 | IHLRRHF30 | 2155.00 |
| Padl Lock Device | | | | | | | | | | |
| | IHLDPG125 | 125.00 | IHLDPA250 | 190.00 | ISSLEU0448 | 375.00 | IHLPP000 | 435.00 | IHLDPF250 | 265.00 |
| Trip Alarm Contact (Factory Fitted) | IHLLALG1CO | 830.00 | IHLLALA1CO | 910.00 | ISSLEU0447 | 910.00 | IHLLB000 | 1050.00 | IHLLALF1CO | 990.00 |
| Auxiliary Contact + Alram Switch (Factory fitted) | | | | | | | | | | |
| | | | | | | | ISSLEU1772 | 1820.00 | | |

Earth Fault Relay for MCCBs

HSN Code: 85389000

| Sl. No. | MCCBs Current Range (A) | Item Code** | Per Unit LP (₹) |
|---------|-------------------------|-------------|-----------------|
| 1 | 25 A- 100 A | IHEF1100 | 7675.00 |
| 2 | 125 A- 200 A | IHEF2200 | 8710.00 |
| 3 | 250 A- 400 A | IHEF3400 | 10165.00 |
| 4 | 500 A- 800 A | IHEF4800 | 12675.00 |



- The above prices are inclusive of CBCT.

** For operating the Earth Fault Relay a Shunt trip or an UVR 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.

‘G’ Frame Panel Boards, O/G TP MCCBs G-Frame

HSN Code: 85371000



| 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 | 41245.00 | IHVG02500200 | 45060.00 |
| | 4 | IHVG025004 | 51815.00 | IHVG02500400 | 55580.00 |
| | 6 | IHVG025006 | 59300.00 | IHVG02500600 | 63090.00 |
| | 8 | IHVG025008 | 64210.00 | IHVG02500800 | 68000.00 |
| | 12 | IHVG025012 | 79290.00 | IHVG02501200 | 83020.00 |
| | 16 | IHVG025016 | 93290.00 | IHVG02501600 | 97080.00 |
| 400 A "LS" Frame MCCB | 2 | IHLG040002 | 48180.00 | IHLG04000200 | 52650.00 |
| | 4 | IHLG040004 | 57535.00 | IHLG04000400 | 61720.00 |
| | 6 | IHLG040006 | 61245.00 | IHLG04000600 | 65165.00 |
| | 8 | IHLG040008 | 65425.00 | IHLG04000800 | 69290.00 |
| | 12 | IHLG040012 | 84280.00 | IHLG04001200 | 88230.00 |
| | 16 | IHLG040016 | 100080.00 | IHLG04001600 | 104155.00 |

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: 85371000



| 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 | 44395.00 | IHVGF2500200 | 48130.00 |
| | 4 | IHVGF25004 | 55215.00 | IHVGF2500400 | 58990.00 |
| | 6 | IHVGF25006 | 65015.00 | IHVGF2500600 | 68745.00 |
| | 8 | IHVGF25008 | 70165.00 | IHVGF2500800 | 73940.00 |
| | 12 | IHVGF25012 | 101785.00 | IHVGF2501200 | 105550.00 |
| 400 A "LS" Frame MCCB | 2 | IHLGF40002 | 51860.00 | IHLGF4000200 | 56235.00 |
| | 4 | IHLGF40004 | 61315.00 | IHLGF4000400 | 65490.00 |
| | 6 | IHLGF40006 | 67140.00 | IHLGF4000600 | 71000.00 |
| | 8 | IHLGF40008 | 71490.00 | IHLGF4000800 | 75350.00 |
| | 12 | IHLGF40012 | 108175.00 | IHLGF4001200 | 112180.00 |

* 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. **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: 85389000

| 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 | 15995.00 | ISSBOU0690 | 17150.00 |
| 2 | Cable Alley I/C 250 A,O/G 3P GF 6WAY & 4P 2/4Way | ISSBOU0675 | 21475.00 | ISSBOU0691 | 22640.00 |
| 3 | Cable Alley I/C 250 A,O/G 3P GF 8WAY & 4P 6Way | ISSBOU0676 | 21770.00 | ISSBOU0692 | 23745.00 |
| 4 | Cable Alley I/C 250 A,O/G 3P GF 12Way | ISSBOU0677 | 24695.00 | ISSBOU0693 | 25380.00 |
| 5 | Cable Alley I/C 250 A,O/G 4P GF 8Way | ISSBOU0678 | 24695.00 | ISSBOU0694 | 25380.00 |
| 6 | Cable Alley I/C 250 A,O/G 3P GF 16Way & 4P 12Way | ISSBOU0679 | 29090.00 | ISSBOU0696 | 30190.00 |
| 7 | Cable Alley I/C 400 A,O/G 3P GF 2/4Way | ISSBOU0680 | 18935.00 | ISSBOU0697 | 19620.00 |
| 8 | Cable Alley I/C 400 A,O/G 3P GF 6WAY & 4P 2/4Way | ISSBOU0681 | 18935.00 | ISSBOU0698 | 19620.00 |
| 9 | Cable Alley I/C 400 A/630 A, O/G 3P GF 8Way, 4P 6Way & A/F 6Way | ISSBOU0682 | 25460.00 | ISSBOU0699 | 26695.00 |
| 10 | Cable Alley I/C 400 A,O/G 3P GF 12Way | ISSBOU0683 | 29380.00 | ISSBOU0700 | 30190.00 |
| 11 | Cable Alley I/C 400 A/630 A, O/G 4P GF 8Way & TP A/F 8Way | ISSBOU0684 | 30880.00 | ISSBOU0701 | 31560.00 |
| 12 | Cable Alley I/C 400 A/630, O/G 4P GF 12Way, TP GF 16Way & TP A/F 12Way | ISSBOU0685 | 32250.00 | ISSBOU0702 | 32935.00 |

* 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: 85371000

| 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 | 83090.00 | IHLA04000600 | 86115.00 |
| | 8 | IHLA040008 | 88755.00 | IHLA04000800 | 91860.00 |
| | 12 | IHLA040012 | 114320.00 | IHLA04001200 | 117285.00 |
| 630 A “L” Frame MCCB | 6 | IHLA063006 | 91340.00 | IHLA06300600 | 96370.00 |
| | 8 | IHLA063008 | 97340.00 | IHLA06300800 | 100955.00 |
| | 12 | IHLA063012 | 115650.00 | IHLA06301200 | 130520.00 |

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

HSN Code: 85389000

| S. No. | Description | Item Code | Per Unit LP (₹) |
|--------|--|--------------|-----------------|
| 1 | Terminal for G Frame Outgoing (Per Pole) | ISCCUPBOP151 | 115.00 |
| 2 | Terminal for A Frame Outgoing (Per Pole) | ISCCUPBOP167 | 295.00 |

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

HSN Code: 85389000

| S. No. | Description | Single Door Item Code | Per Unit LP (₹) | Double Door Item Code | Per Unit LP (₹) |
|--------|-------------------------------|-----------------------|-----------------|-----------------------|-----------------|
| 1 | Prewire Meter Module - Analog | ISSBOU0689 | 18525.00 | ISSBOU0706 | 19225.00 |
| 2 | Meter Module - Digital | ISSBOU0711 | 22780.00 | ISSBOU0707 | 24020.00 |

Bare Meter Module / MCB Module / Add on Module

HSN Code: 85389000

| 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 | 7135.00 | ISSBOU0703 | 8230.00 |
| 2 | MCB Module | ISSBOU0687 | 7135.00 | ISSBOU0704 | |
| 3 | Add on Module | ISSBOU0688 | 7135.00 | ISSBOU0705 | |

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

Add on Incoming Changeover Switch Enclosure only**

HSN Code: 85389000

| S. No. | Description | Item Code | Per Unit LP (₹) |
|--------|--|------------|-----------------|
| 1 | 250 A Incoming change Over switch-F1 | ISSBOU0708 | 13550.00 |
| 2 | 400 A & 630 A Incoming change Over switch - F2 | ISSBOU0709 | 19915.00 |

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

Add on Incoming Changeover Switch with Enclosure

HSN Code: 85389000

| S. No. | Description | Item Code | Per Unit LP (₹) |
|--------|--|------------|-----------------|
| 1 | 250 A Incoming change Over switch-F1 | ISSBOU0712 | 53955.00 |
| 2 | 400 A Incoming change Over switch - F2 | ISSBOU0713 | 71500.00 |
| 3 | 630 A Incoming change Over switch - F3 | ISSBOU0714 | 79950.00 |

Add on Incoming Automatic Changeover Switch with Enclosure

HSN Code: 85371000

| S. No. | Description | Item Code | Per Unit LP (₹) |
|--------|-----------------------------|------------|-----------------|
| 1 | 100 A ATS FITT. ENCL P.SAFE | ISSBOU1128 | 143195.00 |
| 2 | 125 A ATS FITT. ENCL P.SAFE | ISSBOU1129 | 149895.00 |
| 3 | 250 A ATS FITT. ENCL P.SAFE | ISSBOU1126 | 208635.00 |



Busbar Chambers - (Wall Mounted)

Busbar made of ETP Grade Copper

HSN Code: 85369030

| Current Rating (A) | No. of | Item Code | Per Unit LP (₹) |
|--------------------|--------|------------|-----------------|
| 63 A | 4 WAY | IHBC006304 | 9675.00 |
| | 6 WAY | IHBC006306 | 11285.00 |
| | 8 WAY | IHBC006308 | 12995.00 |
| 100 A | 4 WAY | IHBC010004 | 11610.00 |
| | 6 WAY | IHBC010006 | 16080.00 |
| | 8 WAY | IHBC010008 | 16895.00 |
| 200 A | 4 WAY | IHBC020004 | 14525.00 |
| | 6 WAY | IHBC020006 | 18805.00 |
| | 8 WAY | IHBC020008 | 20520.00 |
| 250 A | 4 WAY | IHBC025004 | 24045.00 |
| | 6 WAY | IHBC025006 | 37840.00 |
| | 8 WAY | IHBC025008 | 47325.00 |
| 315 A | 4 WAY | IHBC031504 | 25120.00 |
| | 6 WAY | IHBC031506 | 38935.00 |
| | 8 WAY | IHBC031508 | 49750.00 |
| 400 A | 4 WAY | IHBC040004 | 27140.00 |
| | 6 WAY | IHBC040006 | 40945.00 |
| | 8 WAY | IHBC040008 | 51490.00 |
| 630 A | 4 WAY | IHBC063004 | 41570.00 |
| | 6 WAY | IHBC063006 | 55145.00 |
| | 8 WAY | IHBC063008 | 66335.00 |
| 800 A | 4 WAY | IHBC080004 | 44220.00 |
| | 6 WAY | IHBC080006 | 58930.00 |





HSN Code: 85365090

| Open Enclosure | | | |
|----------------|------------|----------------|-----------------|
| Frame | Rating (A) | Catalogue Code | Per Unit LP (₹) |
| IS00 | 40 | IHCCFO0040 | 5625.00 |
| | 63 | IHCCFO0063 | 5910.00 |
| | 100 | IHCCFO0100 | 7920.00 |
| | 125* | IHCPFO0125 | 10115.00 |
| IS02 | 125 | IHCCFO0125 | 11835.00 |
| | 160 | IHCCFO0160 | 12680.00 |
| | 200 | IHCCFO0200 | 15205.00 |
| | 250* | IHCPFO0250 | 16725.00 |
| IS04 | 250 | IHCCFO0250 | 22000.00 |
| | 315 | IHCCFO0315 | 23240.00 |
| | 400* | IHCPFO0400 | 25570.00 |
| IS06 | 400 | IHCCFO0400 | 33585.00 |
| | 630 | IHCCFO0630 | 39905.00 |
| | 800* | IHCPFO0800 | 45890.00 |

| SS Enclosure Version | | | |
|----------------------|------------|----------------|-----------------|
| Frame | Rating (A) | Catalogue Code | Per Unit LP (₹) |
| IS00 | 40 | IHCCFE0040 | 9405.00 |
| | 63 | IHCCFE0063 | 9690.00 |
| | 100 | IHCCFE0100 | 11700.00 |
| | 125* | IHCPFE0125 | 13895.00 |
| IS02 | 125 | IHCCFE0125 | 17135.00 |
| | 160 | IHCCFE0160 | 17980.00 |
| | 200 | IHCCFE0200 | 20505.00 |
| | 250* | IHCPFE0250 | 22030.00 |
| IS04 | 250 | IHCCFE0250 | 28510.00 |
| | 315 | IHCCFE0315 | 29750.00 |
| | 400* | IHCPFE0400 | 32080.00 |
| IS06 | 400 | IHCCFE0400 | 44610.00 |
| | 630 | IHCCFE0630 | 50930.00 |
| | 800* | IHCPFE0800 | 56915.00 |

*Compact Design

Accessories



Castell Lock



Auxiliary Switch



Direct Handle Conversion Kit

HSN Code: 85389000

| Code | Item Description | Per Unit LP (₹) |
|--------------|---|-----------------|
| ISSCNX0218 | Castell Lock Frame IS00 | 2795.00 |
| ISSCNX0217 | Castell Lock Frame IS02 / IS04 / IS06 | 2795.00 |
| ISCELQOX0074 | Auxiliary Switch Assembly 2NO 2NC Frame IS00 | 685.00 |
| ISCELQOX0076 | Auxiliary Switch Assembly 2NO 2NC Frame IS02, IS04 & IS06 | 895.00 |
| ISSCNX0235 | Direct Handle IS00 | 550.00 |
| ISSCNX0221 | Direct Handle IS02-IS04-IS06 | 1605.00 |



HSN Code: 85371000

| Open Enclosure | | | |
|----------------|------------|----------------|-----------------|
| Frame | Rating (A) | Catalogue Code | Per Unit LP (₹) |
| IS02 | 125 | IHLFNAO125 | 45435.00 |
| | 160 | IHLFNAO160 | 46280.00 |
| | 200 | IHLFNAO200 | 48805.00 |
| | 250* | IHLFNAO25D | 50325.00 |
| IS04 | 250 | IHLFNAO250 | 66100.00 |
| | 315 | IHLFNAO315 | 67340.00 |
| | 400* | IHLFNAO40D | 69670.00 |
| IS06 | 400 | IHLFNAO400 | 83985.00 |
| | 630 | IHLFNAO630 | 90305.00 |
| | 800* | IHLFNAO80D | 96290.00 |

| SS Enclosure Version | | | |
|----------------------|------------|----------------|-----------------|
| Frame | Rating (A) | Catalogue Code | Per Unit LP (₹) |
| IS02 | 125 | IHLFNAE125 | 53275.00 |
| | 160 | IHLFNAE160 | 54120.00 |
| | 200 | IHLFNAE200 | 56650.00 |
| | 250* | IHLFNAE25D | 58170.00 |
| IS04 | 250 | IHLFNAE250 | 75050.00 |
| | 315 | IHLFNAE315 | 76295.00 |
| | 400* | IHLFNAE40D | 78620.00 |
| IS06 | 400 | IHLFNAE400 | 98025.00 |
| | 630 | IHLFNAE630 | 104345.00 |
| | 800* | IHLFNAE80D | 110330.00 |

*Compact Design

Accessories



**MTSE to RTSE
Conversion Kit**



**RTSE Enclosure
(with IP 32)**



**RTSE Enclosure
(with IP 43)***

HSN Code: 85389000

| Item Description | Code | Item Description | Per Unit LP (₹) |
|-----------------------------|------------|----------------------------|-----------------|
| MTSE to RTSE Conversion Kit | ISSCNX0211 | MOTOR MODULE 125A-400A CD | POR |
| | ISSCNX0212 | MOTOR MODULE 400A-800 A CD | |
| RTSE Enclosure (with IP 32) | ISSCNX0204 | Enclosure Frame IS02 | POR |
| | ISSCNX0205 | Enclosure Frame IS04 | |
| | ISSCNX0206 | Enclosure Frame IS06 | |
| RTSE Enclosure (with IP 43) | ISSCNX0256 | Enclosure Frame IS02 | POR |
| | ISSCNX0257 | Enclosure Frame IS04 | |
| | ISSCNX0258 | Enclosure Frame IS06 | |

*Available on request

Insta^{prime} Automatic Transfer Switch

Four Pole, AC-32B / AC - 33B*, 50 Hz, 415 V
Automatic/Manual Range

HSN Code: 85371000

| Rating (A) | Open Execution Item Code | Per Unit LP (₹) | Cat. no. 4 pole (Close Execution) | Per Unit LP (₹) |
|------------|--------------------------|-----------------|-----------------------------------|-----------------|
| 40 A | IHRFBAO040 | 25345.00 | IHRFBAE040 | 27470.00 |
| 63 A | IHRFBAO063 | 26495.00 | IHRFBAE063 | 28625.00 |
| 80 A | IHRFBAO080 | 27810.00 | IHRFBAE080 | 29930.00 |
| 100 A | IHRFBAO100 | 28750.00 | IHRFBAE100 | 30875.00 |
| 125 A | IHRFBAO125 | 32565.00 | IHRFBAE125 | 34685.00 |



* Up to 80 A

Insta^{line} Automatic Transfer Switch

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

HSN Code: 85371000

| Rating A | Item Code 4P | Per Unit LP (₹) | Item Code 4P | Per Unit LP (₹) |
|----------|----------------|-----------------|----------------|-----------------|
| | Open Execution | | With Enclosure | |
| 100 A | IHYFCDO100 | 56630.00 | IHYFCDE100 | 69200.00 |
| 125 A | IHYFCDO125 | 60750.00 | IHYFCDE125 | 72730.00 |
| 160 A | IHYFCDO160 | 67050.00 | IHYFCDE160 | 79985.00 |
| 200 A | IHYFCDO200 | 81010.00 | IHYFCDE200 | 93335.00 |
| 250 A | IHYFCDO250 | 90855.00 | IHYFCDE250 | 103540.00 |
| 315 A | IHYFCDO315 | 94980.00 | IHYFCDE315 | 107300.00 |
| 400 A | IHYFCDO400 | 108730.00 | IHYFCDE400 | 130185.00 |
| 500 A | IHYFCDO500 | 126580.00 | IHYFCDE500 | 147605.00 |
| 630 A | IHYFCDO630 | 139520.00 | IHYFCDE630 | 160550.00 |



ATS Wire Harness

HSN Code: 85389000

| Item Code | Per Unit LP (₹) |
|------------|-----------------|
| ISSYAX0201 | 3560.00 |

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

(Conforms to IS/IEC:60947-3)

HSN Code: 85365090

| Frame Size | Rating (A) | Open Execution Item Code | Per Unit LP (₹) | SS Enclosure Item Code | Per Unit LP (₹) |
|------------|------------|--------------------------|-----------------|------------------------|-----------------|
| 00 | 040 A | IHCNFO0040 | 5785.00 | IHCNFE0040 | 8265.00 |
| 00 | 063 A | IHCNFO0063 | 6080.00 | IHCNFE0063 | 8805.00 |
| 00 | 100 A | IHCNFO0100 | 8150.00 | IHCNFE0100 | 11095.00 |
| 0 | 125 A | IHCNFO0125 | 12170.00 | IHCNFE0125 | 16635.00 |
| 0 | 160 A | IHCNFO0160 | 13040.00 | IHCNFE0160 | 17720.00 |
| 0 | 200 A | IHCNFO0200 | 15640.00 | IHCNFE0200 | 20410.00 |
| 1 | 250 A | IHCNFO0250 | 22625.00 | IHCNFE0250 | 28230.00 |
| 1 | 320 A | IHCNFO0320 | 23905.00 | IHCNFE0320 | 29525.00 |
| 2 | 400 A | IHCNFO0400 | 34545.00 | IHCNFE0400 | 43445.00 |
| 2 | 630 A | IHCNFO0630 | 41045.00 | IHCNFE0630 | 50275.00 |
| 3 | 800 A | IHCNFO0800 | 59730.00 | IHCNFE0800 | 75875.00 |
| 4 | 1000 A | IHCNFO1000 | 101730.00 | IHCNFE1000 | 138290.00 |
| 4 | 1250 A | IHCNFO1250 | 135060.00 | IHCNFE1250 | 185135.00 |
| 4 | 1600 A | IHCNFO1600 | 160845.00 | IHCNFE1600 | 248615.00 |
| 5 | 2000 A | IHCNFO2000 | 249200.00 | IHCNFE2000 | 327575.00 |
| 5 | 2500 A | IHCNFO2500 | 330520.00 | IHCNFE2500 | 418215.00 |
| 5 | 3150 A | IHCNFO3150 | 452500.00 | IHCNFE3150 | 566570.00 |



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.
 For motorised changeover please contact with nearest branch.

Euroload By Pass Switch

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

Four Pole, 415 V

HSN Code: 85365090

| Frame Size | Current Rating (A) | Open Execution Item Code | Per Unit LP (₹) |
|------------|--------------------|--------------------------|-----------------|
| 00 | 063 A | IHCBFO0063 | 10910.00 |
| 00 | 100 A | IHCBFO0100 | 12865.00 |
| 0 | 125 A | IHCBFO0125 | 16390.00 |
| 0 | 160 A | IHCBFO0160 | 19525.00 |
| 0 | 200 A | IHCBFO0200 | 20995.00 |
| 1 | 250 A | IHCBFO0250 | 30375.00 |
| 1 | 320 A | IHCBFO0320 | 32095.00 |
| 2 | 400 A | IHCBFO0400 | 46385.00 |
| 2 | 630 A | IHCBFO0630 | 55110.00 |
| 3 | 800 A | IHCBFO0800 | 82490.00 |
| 3 | 1000 A | IHCBFO1000 | 140480.00 |
| 3 | 1600 A | IHCBFO1600 | 222130.00 |

Accessories

HSN Code: 85389000

| Aux. Contact | Item Code | Per Unit LP (₹) |
|--------------|------------|-----------------|
| 1 NO. 1 NC. | IHCNFAC1CO | 410.00 |
| 2 NO. 2 NC. | IHCNFAC2CO | 550.00 |



Euroload Switch Disconnecter

(Conforms to IS/IEC:60947-3)

Three Pole, 415 V

HSN Code: 85365090

| Frame Size | Current Rating A | Open Execution Item Code | Per Unit LP (₹) | SS Enclosure Item Code | Per Unit LP (₹) |
|------------|------------------|--------------------------|-----------------|------------------------|-----------------|
| 0 | 80 A | IHCSTO0080 | 2060.00 | IHCSTE0080 | 3205.00 |
| 0 | 100 A | IHCSTO0100 | 3120.00 | IHCSTE0100 | 4435.00 |
| 0 | 125 A | IHCSTO0125 | 4155.00 | IHCSTE0125 | 5395.00 |
| 0 | 160 A | IHCSTO0160 | 4945.00 | IHCSTE0160 | 6820.00 |
| 0 | 200 A | IHCSTO0200 | 5620.00 | IHCSTE0200 | 6960.00 |
| 1 | 250 A | IHCSTO0250 | 7020.00 | IHCSTE0250 | 8940.00 |
| 1 | 320 A | IHCSTO0320 | 7705.00 | IHCSTE0320 | 9800.00 |
| 1 | 400 A | IHCSTO0400 | 11100.00 | IHCSTE0400 | 13370.00 |



Euroload Switch Disconnecter

Four Pole, 415 V

HSN Code: 85365090

| Frame Size | Current Rating A | Open Execution Item Code | Per Unit LP (₹) | SS Enclosure Item Code | Per Unit LP (₹) |
|------------|------------------|--------------------------|-----------------|------------------------|-----------------|
| 00 | 40 A | IHCSFO0040 | 1505.00 | IHCSFE0040 | 2470.00 |
| 00 | 63 A | IHCSFO0063 | 1700.00 | IHCSFE0063 | 2695.00 |
| 00 | 80 A | IHCSFO0080 | 2520.00 | IHCSFE0080 | 3420.00 |
| 00 | 100 A | IHCSFO0100 | 4065.00 | IHCSFE0100 | 4970.00 |
| 0 | 125 A | IHCSFO0125 | 4330.00 | IHCSFE0125 | 5480.00 |
| 0 | 160 A | IHCSFO0160 | 5185.00 | IHCSFE0160 | 6330.00 |
| 0 | 200 A | IHCSFO0200 | 6260.00 | IHCSFE0200 | 7560.00 |
| 1 | 250 A | IHCSFO0250 | 7845.00 | IHCSFE0250 | 10170.00 |
| 1 | 320 A | IHCSFO0320 | 8600.00 | IHCSFE0320 | 10800.00 |
| 2 | 400 A | IHCSFO0400 | 11930.00 | IHCSFE0400 | 14910.00 |
| 2 | 630 A | IHCSFO0630 | 13660.00 | IHCSFE0630 | 16835.00 |
| 3 | 800 A | IHCSFO0800 | 20365.00 | IHCSFE0800 | 24025.00 |
| 4 | 1000 A | IHCSFO1000 | 30805.00 | IHCSFE1000 | 43645.00 |
| 4 | 1250 A | IHCSFO1250 | 46270.00 | IHCSFE1250 | 52500.00 |
| 4 | 1600 A | IHCSFO1600 | 63670.00 | IHCSFE1600 | 70595.00 |
| 5 | 2000 A | IHCSFO2000 | 72965.00 | IHCSFE2000 | 92950.00 |
| 5 | 2500 A | IHCSFO2500 | 94685.00 | IHCSFE2500 | 121665.00 |
| 5 | 3150 A | IHCSFO3150 | 133570.00 | IHCSFE3150 | 172915.00 |



Kompact *plus* Switch Disconnecter Fuse

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

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



HSN Code: 85371000

| 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 | 2790.00 | IHKDTW4032 | 4495.00 | IHHTIA0032 |
| 63 A | | | | IHKDTF4063 | 3840.00 | IHKDTW4063 | 5560.00 | IHHTSS0063 |
| 100 A | | | | IHKDTF4100 | 7775.00 | IHKDTW4100 | 9385.00 | IHHTSD0100 |
| 125 A | | | | IHKDTF4125 | 9945.00 | IHKDTW4125 | 11645.00 | IHHTSD0125 |
| 32 A | | Bolted Type | Without Fuse | IHKDTO4032 | 2430.00 | IHKDTE4032 | 4135.00 | IHHTIA0032 |
| 63 A | | | | IHKDTO4063 | 3395.00 | IHKDTE4063 | 5120.00 | IHHTSS0063 |
| 100 A | | | | IHKDTO4100 | 6855.00 | IHKDTE4100 | 8475.00 | IHHTSD0100 |
| 125 A | | | | IHKDTO4125 | 9025.00 | IHKDTE4125 | 10725.00 | IHHTSD0125 |
| 32 A | FP | Bolted Type | With 4 Fuses | IHKDF4032 | 3810.00 | IHKDFW4032 | 5630.00 | IHHTIA0032 |
| 63 A | | | | IHKDF4063 | 4865.00 | IHKDFW4063 | 6690.00 | IHHTSS0063 |
| 100 A | | | | IHKDF4100 | 9750.00 | IHKDFW4100 | 11580.00 | IHHTSD0100 |
| 125 A | | | | IHKDF4125 | 11865.00 | IHKDFW4125 | 13790.00 | IHHTSD0125 |
| 32 A | | Bolted Type | Without Fuse | IHKDFO4032 | 3335.00 | IHKDFE4032 | 5155.00 | IHHTIA0032 |
| 63 A | | | | IHKDFO4063 | 4275.00 | IHKDFE4063 | 6100.00 | IHHTSS0063 |
| 100 A | | | | IHKDFO4100 | 8520.00 | IHKDFE4100 | 10360.00 | IHHTSD0100 |
| 125 A | | | | IHKDFO4125 | 10640.00 | IHKDFE4125 | 12565.00 | IHHTSD0125 |
| 32 A | TPN | DIN Type | With 3 Fuses | IHKFTF4032 | 3975.00 | IHKFTW4032 | 5315.00 | IHHCD00032 |
| 63 A | | | | IHKFTF4063 | 5055.00 | IHKFTW4063 | 6540.00 | IHHCD00063 |
| 100 A | | | | IHKFTF4100 | 8645.00 | IHKFTW4100 | 10315.00 | IHHCD00100 |
| 125 A | | | | IHKFTF4125 | 11050.00 | IHKFTW4125 | 12745.00 | IHHCD00125 |
| 32 A | | DIN Type | Without Fuse | IHKFTO4032 | 2625.00 | IHKFTE4032 | 3965.00 | IHHCD00032 |
| 63 A | | | | IHKFTO4063 | 3655.00 | IHKFTE4063 | 5140.00 | IHHCD00063 |
| 100 A | | | | IHKFTO4100 | 7110.00 | IHKFTE4100 | 8780.00 | IHHCD00100 |
| 125 A | | | | IHKFTO4125 | 9480.00 | IHKFTE4125 | 11180.00 | IHHCD00125 |
| 32 A | FP | DIN Type | With 4 Fuses | IHKFFF4032 | 5410.00 | IHKFFW4032 | 6840.00 | IHHCD00032 |
| 63 A | | | | IHKFFF4063 | 6530.00 | IHKFFW4063 | 8095.00 | IHHCD00063 |
| 100 A | | | | IHKFFF4100 | 11185.00 | IHKFFW4100 | 12950.00 | IHHCD00100 |
| 125 A | | | | IHKFFF4125 | 12370.00 | IHKFFW4125 | 14120.00 | IHHCD00125 |
| 32 A | | DIN Type | Without Fuse | IHKFFO4032 | 3605.00 | IHKFFE4032 | 5035.00 | IHHCD00032 |
| 63 A | | | | IHKFFO4063 | 4660.00 | IHKFFE4063 | 6230.00 | IHHCD00063 |
| 100 A | | | | IHKFFO4100 | 9135.00 | IHKFFE4100 | 10910.00 | IHHCD00100 |
| 125 A | | | | IHKFFO4125 | 10280.00 | IHKFFE4125 | 12030.00 | IHHCD00125 |

Kompact *plus* Switch Disconnecter Fuse Unit

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

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



TPN

HSN Code: 85371000

| 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 | 11200.00 | IHFSTW4160 | 14455.00 | IHHTSF0160 | | |
| 200 A | | | | IHFSTF4200 | 14570.00 | IHFSTW4200 | 17750.00 | IHHTSF0200 | | |
| 250 A | | | | IHFSTF4250 | 17150.00 | IHFSTW4250 | 20225.00 | IHHTSF0250 | | |
| 320 A | | | | IHFSTF4320 | 20920.00 | IHFSTW4320 | 24515.00 | IHHTSK0315 | | |
| 400 A | | | | IHFSTF4400 | 26415.00 | IHFSTW4400 | 29820.00 | IHHTSMF400 | | |
| 630 A | | | | IHFSTF4630 | 44140.00 | IHFSTW4630 | 47605.00 | IHHTLM0630 | | |
| 800 A | | | | IHFSTF4800 | 51650.00 | IHFSTW4800 | 55045.00 | IHHTLM0800 | | |
| 160 A | | | | Bolted Type | Without Fuse | IHFSTO4160 | 9780.00 | IHFSTE4160 | 13040.00 | IHHTSF0160 |
| 200 A | | IHFSTO4200 | 13135.00 | | | IHFSTE4200 | 16320.00 | IHHTSF0200 | | |
| 250 A | | IHFSTO4250 | 15605.00 | | | IHFSTE4250 | 18680.00 | IHHTSF0250 | | |
| 320 A | | IHFSTO4320 | 18930.00 | | | IHFSTE4320 | 22525.00 | IHHTSK0315 | | |
| 400 A | | IHFSTO4400 | 22675.00 | | | IHFSTE4400 | 26080.00 | IHHTSMF400 | | |
| 630 A | | IHFSTO4630 | 36550.00 | | | IHFSTE4630 | 40015.00 | IHHTLM0630 | | |
| 800 A | | IHFSTO4800 | 43190.00 | | | IHFSTE4800 | 46580.00 | IHHTLM0800 | | |
| 160 A | | DIN Type | With 3 Fuses | | | IHFKTF4160 | 12380.00 | IHFKTW4160 | 15380.00 | IHHCD01160 |
| 200 A | | | | IHFKTF4200 | 15115.00 | IHFKTW4200 | 18800.00 | IHHCD01200 | | |
| 250 A | | | | IHFKTF4250 | 17720.00 | IHFKTW4250 | 21205.00 | IHHCD01250 | | |
| 320 A | | | | IHFKTF4320 | 21970.00 | IHFKTW4320 | 25335.00 | IHHCD02315 | | |
| 400 A | | | | IHFKTF4400 | 26135.00 | IHFKTW4400 | 29480.00 | IHHCD02400 | | |
| 630 A | | | | IHFKTF4630 | 41960.00 | IHFKTW4630 | 45550.00 | IHHCD03630 | | |
| 160 A | | | | DIN Type | Without Fuse | IHFKTO4160 | 10110.00 | IHFKTE4160 | 13110.00 | IHHCD01160 |
| 200 A | | | | | | IHFKTO4200 | 12850.00 | IHFKTE4200 | 16530.00 | IHHCD01200 |
| 250 A | | IHFKTO4250 | 15165.00 | | | IHFKTE4250 | 18650.00 | IHHCD01250 | | |
| 320 A | | IHFKTO4320 | 18685.00 | | | IHFKTE4320 | 22045.00 | IHHCD02315 | | |
| 400 A | | IHFKTO4400 | 22600.00 | | | IHFKTE4400 | 25940.00 | IHHCD02400 | | |
| 630 A | | IHFKTO4630 | 36385.00 | | | IHFKTE4630 | 39980.00 | IHHCD03630 | | |
| 800 A | | IHFKTO4800 | 39470.00 | | | IHFKTE4800 | 43980.00 | IHHCD03800 | | |

Kompact *plus* Switch Disconnecter Fuse

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

Four Pole

HSN Code: 85371000

| 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 | FP | Bolted Type | With 4 Fuses | IHFSFF4160 | 15355.00 | IHFSFW4160 | 18490.00 | IHHTSF0160 |
| 200 A | | | | IHFSFF4200 | 18045.00 | IHFSFW4200 | 21010.00 | IHHTSF0200 |
| 250 A | | | | IHFSFF4250 | 20680.00 | IHFSFW4250 | 23530.00 | IHHTSF0250 |
| 320 A | | | | IHFSFF4320 | 23665.00 | IHFSFW4320 | 26880.00 | IHHTSK0315 |
| 400 A | | | | IHFSFF4400 | 29055.00 | IHFSFW4400 | 32800.00 | IHHTSMF400 |
| 630 A | | | | IHFSFF4630 | 48555.00 | IHFSFW4630 | 52365.00 | IHHTLM0630 |
| 800 A | | | | IHFSFF4800 | 56815.00 | IHFSFW4800 | 60545.00 | IHHTLM0800 |
| 160 A | | Bolted Type | Without Fuse | IHFSFO4160 | 13470.00 | IHFSFE4160 | 16610.00 | IHHTSF0160 |
| 200 A | | | | IHFSFO4200 | 16140.00 | IHFSFE4200 | 19110.00 | IHHTSF0200 |
| 250 A | | | | IHFSFO4250 | 18615.00 | IHFSFE4250 | 21465.00 | IHHTSF0250 |
| 320 A | | | | IHFSFO4320 | 21015.00 | IHFSFE4320 | 24775.00 | IHHTSK0315 |
| 400 A | | | | IHFSFO4400 | 24945.00 | IHFSFE4400 | 28690.00 | IHHTSMF400 |
| 630 A | | | | IHFSFO4630 | 40200.00 | IHFSFE4630 | 44010.00 | IHHTLM0630 |
| 800 A | | | | IHFSFO4800 | 47505.00 | IHFSFE4800 | 51235.00 | IHHTLM0800 |
| 160 A | | DIN Type | With 4 Fuses | IHFKFF4160 | 14600.00 | IHFKFW4160 | 17395.00 | IHHCD01160 |
| 200 A | | | | IHFKFF4200 | 18385.00 | IHFKFW4200 | 21190.00 | IHHCD01200 |
| 250 A | | | | IHFKFF4250 | 19495.00 | IHFKFW4250 | 23320.00 | IHHCD01250 |
| 320 A | | | | IHFKFF4320 | 24170.00 | IHFKFW4320 | 27870.00 | IHHCD02315 |
| 400 A | | | | IHFKFF4400 | 28750.00 | IHFKFW4400 | 32425.00 | IHHCD02400 |
| 630 A | | | | IHFKFF4630 | 48830.00 | IHFKFW4630 | 52070.00 | IHHCD03630 |
| 800 A | | | | IHFKFF4800 | 56815.00 | IHFKFW4800 | 60545.00 | IHHCD03800 |
| 160 A | | DIN Type | Without Fuse | IHFKFO4160 | 11570.00 | IHFKFE4160 | 14375.00 | IHHCD01160 |
| 200 A | | | | IHFKFO4200 | 15360.00 | IHFKFE4200 | 18165.00 | IHHCD01200 |
| 250 A | | | | IHFKFO4250 | 16680.00 | IHFKFE4250 | 20510.00 | IHHCD01250 |
| 320 A | IHFKFO4320 | | | 20555.00 | IHFKFE4320 | 24255.00 | IHHCD02315 | |
| 400 A | IHFKFO4400 | | | 24860.00 | IHFKFE4400 | 28530.00 | IHHCD02400 | |
| 630 A | IHFKFO4630 | | | 41405.00 | IHFKFE4630 | 44640.00 | IHHCD03630 | |
| 800 A | IHFKFO4800 | | | 47925.00 | IHFKFE4800 | 52395.00 | IHHCD03800 | |

Accessories NEW

HSN Code: 85389000

| Cat Code | Description | Per Unit LP (₹) |
|------------|------------------------------------|-----------------|
| ISSCBX0001 | 1 NO-NC SWITCH FOR SDF (32A-125A) | 590.00 |
| ISSCBX0002 | 1 NO-NC SWITCH FOR SDF (160A-800A) | 705.00 |
| ISSCBX0003 | 2 NO-NC SWITCH FOR SDF (32A-125A) | 1060.00 |
| ISSCBX0004 | 2 NO-NC SWITCH FOR SDF (160A-800A) | 1175.00 |

HiBreak HBC Fuse Link

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

RH Type HRC Fuse- 80 kA, 415 V

| Rating (A) | Item Code | Per Unit LP (₹) | STD Packing No. of unit/s | HSN Code |
|------------|------------|-----------------|---------------------------|----------|
| 2 A | IHHRH00002 | 140.00 | 20 N | 85361010 |
| 6 A | IHHRH00006 | | | |
| 10 A | IHHRH00010 | | | |
| 16 A | IHHRH00016 | | | 85361020 |
| 20 A | IHHRH00020 | | | |
| 25 A | IHHRH00025 | | | |
| 32 A | IHHRH00032 | | | |
| 40 A | IHHRH00040 | 150.00 | 20 N | |
| 50 A | IHHRH00050 | 320.00 | 20 N | |
| 63 A | IHHRH00063 | 380.00 | 20 N | |

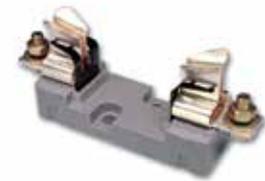


DIN Fuse Bases (Fixed Type)

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

HSN Code: 85361020

| Rated A | Item Code | Type | Fuse Type | Per Unit LP (₹) | STD Packing No. of unit/s |
|---------|------------|---------------------|-----------|-----------------|---------------------------|
| 160 A | IHUC000160 | Open Type Fuse Base | CD-00 | 480.00 | 6 N |



i Base - DIN Fuse Bases (Fixed Type)

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

HSN Code: 85361020

| 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 | 960.00 | 3 N |
| 400 A | IHIC02O400 | Open Type Fuse Base | CD-2 | 1540.00 | 3 N |
| 630 A | IHIC03O630 | Open Type Fuse Base | CD-3 | 1795.00 | 3 N |
| 800 A | IHIC03O800 | Open Type Fuse Base | CD-3 | 1795.00 | 3 N |



HiBreak HBC Fuse Link

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



Bolted Type HRC Fuse - 80 kA, 415 V

| IS Size | Tag Type | BS Type | Rating (A) | Item Code | Per Unit LP (₹) | STD Packing No. of unit/s |
|---------------------------|----------|---------|------------|------------|-----------------|---------------------------|
| HSN Code: 85361010 | | | | | | |
| F-1 | Offset | NS | 2 A | IHHNS00002 | 80.00 | 20 N |
| | | | 4 A | IHHNS00004 | | |
| | | | 6 A | IHHNS00006 | | |
| | | | 10 A | IHHNS00010 | | |
| HSN Code: 85361020 | | | | | | |
| F-1 | Offset | NS | 16 A | IHHNS00016 | 80.00 | 20 N |
| | | | 20 A | IHHNS00020 | 90.00 | |
| | | | 25 A | IHHNS00025 | | |
| | | | 32 A | IHHNS00032 | | |
| A-2 | Offset | TIA | 16 A | IHHTIA0016 | 115.00 | 10 N |
| | | | 20 A | IHHTIA0020 | | |
| | | | 25 A | IHHTIA0025 | | |
| | | | 32 A | IHHTIA0032 | | |
| A-3 | Offset | TSS | 40 A | IHHTSS0040 | 140.00 | 10 N |
| | | | 50 A | IHHTSS0050 | | |
| | | | 63 A | IHHTSS0063 | | |
| A-4 | Offset | TSD | 80 A | IHHTSD0080 | 305.00 | 10 N |
| | | | 100 A | IHHTSD0100 | | |
| | | | 125 A | IHHTSD0125 | | |
| B-1 | Central | TSDC | 80 A | IHHTSDC080 | 310.00 | 10 N |
| | | | 100 A | IHHTSDC100 | | |
| | | | 125 A | IHHTSDC125 | | |
| B-2 | Central | TSF | 160 A | IHHTSF0160 | 455.00 | 10 N |
| | | | 200 A | IHHTSF0200 | 490.00 | |
| | | | 250 A | IHHTSF0250 | | |
| B-3 | Central | TSK | 315 A | IHHTSK0315 | 645.00 | 3 N |
| B - 4 | Central | TSMF | 400 A | IHHTSMF400 | 1210.00 | 3 N |
| C - 1 | Central | TSMS | 400 A | IHHTSMS400 | | 3 N |
| C - 2 | Central | TTS | 400 A | IHHTTS0400 | 1380.00 | 1 N |
| C - 2 | Central | TLM | 630 A | IHHTLM0630 | 2455.00 | 1 N |
| C - 2 | Central | TLM | 800 A | IHHTLM0800 | 2740.00 | 1 N |



DIN Type HRC Fuse - 80 kA, 415 V

| IS Size | Rating (A) | Item Code | Per Unit LP (₹) | STD Packing No. of unit/s |
|---------------------------|------------|------------|-----------------|---------------------------|
| HSN Code: 85361020 | | | | |
| 000 | 32 A | IHHCD11032 | 385.00 | 3 N |
| | 63 A | IHHCD11063 | 395.00 | |
| | 100 A | IHHCD11100 | 425.00 | |
| HSN Code: 85361010 | | | | |
| 00 | 6 A | IHHCD00006 | 435.00 | 3 N |
| | 10 A | IHHCD00010 | | |
| HSN Code: 85361020 | | | | |
| 00 | 16 A | IHHCD00016 | 435.00 | 3 N |
| | 25 A | IHHCD00025 | | |
| | 32 A | IHHCD00032 | | |
| | 40 A | IHHCD00040 | | |
| | 50 A | IHHCD00050 | | |
| | 63 A | IHHCD00063 | | |
| | 80 A | IHHCD00080 | | |
| | 100 A | IHHCD00100 | | |
| | 125 A | IHHCD00125 | | |
| | 160 A | IHHCD00160 | | |
| 01 | 40 A | IHHCD01040 | 725.00 | 3 N |
| | 50 A | IHHCD01050 | | |
| | 100 A | IHHCD01100 | | |
| | 125 A | IHHCD01125 | | |
| | 160 A | IHHCD01160 | | |
| | 200 A | IHHCD01200 | | |
| 02 | 250 A | IHHCD01250 | 825.00 | 1 N |
| | 250 A | IHHCD02250 | 1065.00 | |
| | 315 A | IHHCD02315 | 1145.00 | |
| 350 A | IHHCD02350 | | | |
| 03 | 400 A | IHHCD02400 | 1145.00 | 1 N |
| | 500 A | IHHCD03500 | 1765.00 | |
| | 630 A | IHHCD03630 | 1805.00 | |
| | 800 A | IHHCD03800 | 2230.00 | |

Power Quality Solutions



AHF System
Active Harmonic Filter / SVG



Contactor / Thyristor
Switching APFC Panel



Harmonic Duty (MPP)
Power Capacitor



IOT Based / GSM
IPFC RELAY



Capacitor Duty
Contactor



High Linearity
Detuned Reactor



High PIV
Thyristor Switch

Power Quality Solutions

MPP Power Capacitor



Power Capacitors

| Parameters | Splendid Duty | Heavy Duty Plus / Heavy Duty | Super Heavy Duty |
|---|----------------|------------------------------|-----------------------|
| Type | MPP | MPP | MPP |
| Over Current withstand capacity upto | 1.6 X Ir | 2.4 X Ir / 2.2 Ir | 3.2 X Ir / 3.0 X Ir |
| Peak Inrush Current Withstand Capacity upto | 250 times | 350 times / 350 times | 500 times / 500 times |
| Total Losses | ≤0.45 W / kVAr | ≤0.45 W / kVAr | ≤0.45 W / kVAr |
| No of switching per year | 35000 | 50000 / 52500 | 65000 / 80000 |
| Max Ambient Temp (°C) | 55 °C | 55 °C | 55 °C |
| Operating life in hours | 120000 | 200000 / 215000 | 250000 / 300000 |
| Notch Shield | Yes | Yes | Yes |
| Over pressure Disconnecter | Yes | Yes | Yes |
| Triple Safety | Yes | Yes | Yes |

Selection of Capacitor

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 / UHDXL- Warrior and Champion (Double 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 UHDXL | 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% THD I. Do not use normal duty capacitors for the application of Heavy Duty and Super Heavy Duty capacitors. | <15% THD I. Commercial building with CFL lamps, SMPS, UPS etc. Garment industries (Sewing Industry) Bakeries Flour mills Oil mills Glass industries Rice mills Cold storage | <20% THD I. Heavy Chemical Industries Pharmaceutical Industries Automobile plants Paper Industries Food processing plants IT Industries Fabrication shops Welding shops Machine and tool shop | <25% THD I. Steel plant Cement Industries Stone crushing Textiles (Production of Yarn/cloth) Forging Industries Power frequency induction furnaces Sugar plants Rolling mills |
| Example for Calculating Non Linear Load Installed Transformer Rating = 1000 kVA Non Linear Loads = 100 kVA % Non Linear Load = (Non Linear Load / Transformer Rating) X 100 = (100/1000) X 100 = 10% | | | | |
| Example of Non Linear Loads: UPS, Arc / Induction furnace, Rectifiers, AC / DC Drives, Computer, CFL, CNC Machines. | | | | |

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

Calculation of Required kVAR

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

Average PF = kW / kVA Operating load kW = kVA Demand x Average PF

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

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

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

Hercules - Normal Duty Single Phase Cylindrical Capacitors

- Design in Cylindrical Aluminium case.
- Output range 1 kVAr to 5 kVAr.
- Compact volume, low weight
- Easy connection and installation



HSN Code: 85321000

| Rating kVAr | Item Code | Description | 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 | 1 N | 16 N | 487.00 |
| 2 kVAr | QHNSCS5002X0 | HERCULES 250 V 50 Hz-2 kVAr 1 PH | 1 N | 16 N | 675.00 |
| 3 kVAr | QHNSCS5003X0 | HERCULES 250 V 50 Hz-3 kVAr 1 PH | 1 N | 16 N | 1024.00 |
| 4 kVAr | QHNSCS5004X0 | HERCULES 250 V 50 Hz-4 kVAr 1 PH | 1 N | 16 N | 1345.00 |
| 5 kVAr | QHNSCS5005X0 | HERCULES 250 V 50 Hz-5 kVAr 1 PH | 1 N | 8 N | 1664.00 |

Torrent - Splendid Duty Cylindrical Capacitors

- Design in Cylindrical Aluminium case.
- Output range 1 kVAr to 30 kVAr.
- Long life expectancy upto 120000 Hours
- Compact volume, low weight
- Easy connection and installation



HSN Code: 85321000

| Rating kVAr | Item Code | Description | 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 N | 16 N | 375.00 |
| 2 kVAr | QHUTCC5002X0 | Torrent 440 V 50 Hz-2 kVAr 3 PH | 1 N | 16 N | 575.00 |
| 3 kVAr | QHUTCC5003X0 | Torrent 440 V 50 Hz-3 kVAr 3 PH | 1 N | 16 N | 900.00 |
| 4 kVAr | QHUTCC5004X0 | Torrent 440 V 50 Hz-4 kVAr 3 PH | 1 N | 16 N | 1000.00 |
| 5 kVAr | QHUTCC5005X0 | Torrent 440 V 50 Hz-5 kVAr 3 PH | 1 N | 16 N | 1144.00 |
| 6 kVAr | QHUTCC5006X0 | Torrent 440 V 50 Hz-6 kVAr 3 PH | 1 N | 16 N | 1372.00 |
| 7.5 kVAr | QHUTCC5007X5 | Torrent 440 V 50 Hz-7.5 kVAr 3P H | 1 N | 16 N | 1715.00 |
| 10 kVAr | QHUTCC5010X0 | Torrent 440 V 50 Hz-10 kVAr 3 PH | 1 N | 8 N | 2287.00 |
| 12.5 kVAr | QHUTCC5012X5 | Torrent 440 V 50 Hz-12.5 kVAr 3 PH | 1 N | 8 N | 2859.00 |
| 15 kVAr | QHUTCC5015X0 | Torrent 440 V 50 Hz-15 kVAr 3 PH | 1 N | 4 N | 3430.00 |
| 20 kVAr | QHUTCC5020X0 | Torrent 440 V 50 Hz-20 kVAr 3 PH | 1 N | 4 N | 4573.00 |
| 25 kVAr | QHUTCC5025X0 | Torrent 440 V 50 Hz-25 kVAr 3 PH | 1 N | 4 N | 5717.00 |
| 30 kVAr | QHUTCC5030X0 | Torrent 440 V 50 Hz-30 kVAr 3 PH | 1 N | 4 N | 6860.00 |

(IS: 13340 / IEC: 60831)

Warrior - Super Heavy Duty Cylindrical Capacitors

- High inrush current withstand capability.
- Output range 1 kVAr to 30 kVAr.
- Soft sticky resin to withstand high temperature and current stress.
- Penta safety protection.
- Explosion proof, low losses & high over current withstand capabilities.



HSN Code: 85321000

| Rating kVAr | Item Code | Description | 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 | QHBTC5001X0 | Warrior Super Heavy Duty 440 V 50 Hz 1 kVAr 3 PH | 1 N | 16 N | 495.00 |
| 2 kVAr | QHBTC5002X0 | Warrior Super Heavy Duty 440 V 50 Hz 2 kVAr 3 PH | 1 N | 16 N | 750.00 |
| 3 kVAr | QHBTC5003X0 | Warrior Super Heavy Duty 440 V 50 Hz 3 kVAr 3 PH | 1 N | 16 N | 936.00 |
| 4 kVAr | QHBTC5004X0 | Warrior Super Heavy Duty 440 V 50 Hz 4 kVAr 3 PH | 1 N | 16 N | 1248.00 |
| 5 kVAr | QHBTC5005X0 | Warrior Super Heavy Duty 440 V 50 Hz 5 kVAr 3 PH | 1 N | 16 N | 1622.00 |
| 6 kVAr | QHBTC5006X0 | Warrior Super Heavy Duty 440 V 50 Hz 7.5 kVAr 3 PH | 1 N | 8 N | 1946.00 |
| 7.5 kVAr | QHBTC5007X5 | Warrior Super Heavy Duty 440 V 50 Hz 6 kVAr 3 PH | 1 N | 8 N | 2432.00 |
| 8 kVAr | QHBTC5008X0 | Warrior Super Heavy Duty 440 V 50 Hz 8 kVAr 3 PH | 1 N | 8 N | 2593.00 |
| 10 kVAr | QHBTC5010X0 | Warrior Super Heavy Duty 440 V 50 Hz 10 kVAr 3 PH | 1 N | 8 N | 3242.00 |
| 12.5 kVAr | QHBTC5012X5 | Warrior Super Heavy Duty 440 V 50 Hz 12.5 kVAr 3 PH | 1 N | 4 N | 4052.00 |
| 15 kVAr | QHBTC5015X0 | Warrior Super Heavy Duty 440 V 50 Hz 15 kVAr 3 PH | 1 N | 4 N | 4863.00 |
| 20 kVAr | QHBTC5020X0 | Warrior Super Heavy Duty 440 V 50 Hz 20 kVAr 3 PH | 1 N | 4 N | 6484.00 |
| 25 kVAr | QHBTC5025X0 | Warrior Super Heavy Duty 440 V 50 Hz 25 kVAr 3 PH | 1 N | 4 N | 8105.00 |
| 30 kVAr | QHBTC5030X0 | Warrior Super Heavy Duty 440 V 50 Hz 30 kVAr 3 PH | 1 N | 4 N | 9726.00 |
| Rated Voltage 480 Vac, 3ϕ, 50 Hz, Delta Connection | | | | | |
| 5 kVAr | QHBTC5005X0 | Warrior Super Heavy Duty 480 V 50 Hz 5 kVAr 3 PH | 1 N | 16 N | 1672.00 |
| 7.5 kVAr | QHBTC5007X5 | Warrior Super Heavy Duty 480 V 50 Hz 7.5 kVAr 3 PH | 1 N | 8 N | 2510.00 |
| 10 kVAr | QHBTC5010X0 | Warrior Super Heavy Duty 480 V 50 Hz 10 kVAr 3 PH | 1 N | 8 N | 3345.00 |
| 12.5 kVAr | QHBTC5012X5 | Warrior Super Heavy Duty 480 V 50 Hz 12.5 kVAr 3 PH | 1 N | 4 N | 4181.00 |
| 15 kVAr | QHBTC5015X0 | Warrior Super Heavy Duty 480 V 50 Hz 15 kVAr 3 PH | 1 N | 4 N | 5017.00 |
| 20 kVAr | QHBTC5020X0 | Warrior Super Heavy Duty 480 V 50 Hz 20 kVAr 3 PH | 1 N | 4 N | 6689.00 |
| 25 kVAr | QHBTC5025X0 | Warrior Super Heavy Duty 480 V 50 Hz 25 kVAr 3 PH | 1 N | 4 N | 8361.00 |
| 30 kVAr | QHBTC5030X0 | Warrior Super Heavy Duty 480 V 50 Hz 30 kVAr 3 PH | 1 N | 4 N | 10034.00 |
| Rated Voltage 525 Vac, 3ϕ, 50 Hz, Delta Connection | | | | | |
| 5 kVAr | QHBTC5005X0 | Warrior Super Heavy Duty 525 V 50 Hz 5 kVAr 3 PH | 1 N | 16 N | 1672.00 |
| 7.5 kVAr | QHBTC5007X5 | Warrior Super Heavy Duty 525 V 50 Hz 7.5 kVAr 3 PH | 1 N | 8 N | 2510.00 |
| 10 kVAr | QHBTC5010X0 | Warrior Super Heavy Duty 525 V 50 Hz 10 kVAr 3 PH | 1 N | 8 N | 3345.00 |
| 12.5 kVAr | QHBTC5012X5 | Warrior Super Heavy Duty 525 V 50 Hz 12.5 kVAr 3 PH | 1 N | 4 N | 4181.00 |
| 15 kVAr | QHBTC5015X0 | Warrior Super Heavy Duty 525 V 50 Hz 15 kVAr 3 PH | 1 N | 4 N | 5017.00 |
| 20 kVAr | QHBTC5020X0 | Warrior Super Heavy Duty 525 V 50 Hz 20 kVAr 3 PH | 1 N | 4 N | 6689.00 |
| 25 kVAr | QHBTC5025X0 | Warrior Super Heavy Duty 525 V 50 Hz 25 kVAr 3 PH | 1 N | 4 N | 8361.00 |
| 30 kVAr | QHBTC5030X0 | Warrior Super Heavy Duty 525 V 50 Hz 30 kVAr 3 PH | 1 N | 4 N | 10034.00 |

(IS: 13340 / IEC: 60831)

Mini / Master - Splendid Duty Square Capacitors

- High inrush current withstand capability.
- Output range 1 kVAr to 50 kVAr.
- Soft sticky resin to withstand high temperature and current stress.
- Penta safety protection.
- Explosion proof, low losses & high over current withstand capabilities.



HSN Code: 85321000

| Rating kVAr | Item Code | Description | Standard Pack No of unit/s | Master Pack No of unit/s | Per Unit LP (₹) |
|-------------|--------------|-------------------------------------|----------------------------|--------------------------|-----------------|
| 1 kVAr | QHNTMC5001X0 | Mini Master 440 V 50 Hz-1 kVAr 3 PH | 1 N | 30 N | 450.00 |
| 2 kVAr | QHNTMC5002X0 | Mini Master 440 V 50 Hz-2 kVAr 3 PH | 1 N | 30 N | 612.00 |
| 3 kVAr | QHNTMC5003X0 | Mini Master 440 V 50 Hz-3 kVAr 3 PH | 1 N | 24 N | 917.00 |
| 4 kVAr | QHNTMC5004X0 | Mini Master 440 V 50 Hz-4 kVAr 3 PH | 1 N | 24 N | 1221.00 |
| 5 kVAr | QHNTMC5005X0 | Mini Master 440 V 50 Hz-5 kVAr 3 PH | 1 N | 24 N | 1425.00 |
| 6 kVAr | QHNTMC5006X0 | Master 440 V 50 Hz-6 kVAr 3 PH | 1 N | 1 N | 1710.00 |
| 7.5 kVAr | QHNTMC5007X5 | Master 440 V 50 Hz-7.5 kVAr 3 PH | 1 N | 1 N | 2137.00 |
| 8 kVAr | QHNTMC5008X0 | Master 440 V 50 Hz-8 kVAr 3 PH | 1 N | 1 N | 2279.00 |
| 10 kVAr | QHNTMC5010X0 | Master 440 V 50 Hz-10 kVAr 3 PH | 1 N | 1 N | 2849.00 |
| 12.5 kVAr | QHNTMC5012X5 | Master 440 V 50 Hz-12.5 kVAr 3 PH | 1 N | 1 N | 3562.00 |
| 15 kVAr | QHNTMC5015X0 | Master 440 V 50 Hz-15 kVAr 3 PH | 1 N | 1 N | 4274.00 |
| 20 kVAr | QHNTMC5020X0 | Master 440 V 50 Hz-20 kVAr 3 PH | 1 N | 1 N | 5698.00 |
| 25 kVAr | QHNTMC5025X0 | Master 440 V 50 Hz-25 kVAr 3 PH | 1 N | 1 N | 7123.00 |
| 30 kVAr | QHNTMC5030X0 | Master 440 V 50 Hz-30 kVAr 3 PH | 1 N | 1 N | 8547.00 |
| 50 kVAr | QHNTMC5050X0 | Master 440 V 50 Hz-50 kVAr 3 PH | 1 N | 1 N | 14245.00 |



Other Ratings on request

Effective from 11th March, 2024

(IS: 13340 / IEC: 60831)

List Price (LP) are in Indian ₹ & as per Standard Terms & Conditions

HAVELLS 84

Champ - Heavy Duty Plus Square Capacitors

- High inrush current withstand capability.
- Output range 1 kVAr to 100 kVAr.
- Soft sticky resin to withstand high temperature and current stress.
- Penta safety protection.
- Explosion proof, low losses & high over current withstand capabilities.



HSN Code: 85321000

| Rating kVAr | Item Code | Description | 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 | QHBTMC5001X0 | Champ 440 V 50 Hz-1 kVAr 3 PH | 1 N | 30 N | 500.00 |
| 2 kVAr | QHBTMC5002X0 | Champ 440 V 50 Hz-2 kVAr 3 PH | 1 N | 30 N | 822.00 |
| 3 kVAr | QHBTMC5003X0 | Champ 440 V 50 Hz-3 kVAr 3 PH | 1 N | 24 N | 1232.00 |
| 4 kVAr | QHBTMC5004X0 | Champ 440 V 50 Hz-4 kVAr 3 PH | 1 N | 24 N | 1645.00 |
| 5 kVAr | QHBTMC5005X0 | Champ 440 V 50 Hz-5 kVAr 3 PH | 1 N | 1 N | 1986.00 |
| 6 kVAr | QHBTMC5006X0 | Champ 440 V 50 Hz-6 kVAr 3 PH | 1 N | 1 N | 2383.00 |
| 7.5 kVAr | QHBTMC5007X5 | Champ 440 V 50 Hz-7.5 kVAr 3 PH | 1 N | 1 N | 2979.00 |
| 8 kVAr | QHBTMC5008X0 | Champ 440 V 50 Hz-8 kVAr 3 PH | 1 N | 1 N | 3178.00 |
| 10 kVAr | QHBTMC5010X0 | Champ 440 V 50 Hz-10 kVAr 3 PH | 1 N | 1 N | 3971.00 |
| 12.5 kVAr | QHBTMC5012X5 | Champ 440 V 50 Hz-12.5 kVAr 3 PH | 1 N | 1 N | 4966.00 |
| 15 kVAr | QHBTMC5015X0 | Champ 440 V 50 Hz-15 kVAr 3 PH | 1 N | 1 N | 5959.00 |
| 20 kVAr | QHBTMC5020X0 | Champ 440 V 50 Hz-20 kVAr 3 PH | 1 N | 1 N | 7944.00 |
| 25 kVAr | QHBTMC5025X0 | Champ 440 V 50 Hz-25 kVAr 3PH | 1 N | 1 N | 9930.00 |
| 30 kVAr | QHBTMC5030X0 | Champ 440 V 50 Hz-30 kVAr 3 PH | 1 N | 1 N | 11915.00 |
| 50 kVAr | QHBTMC5050X0 | Champ 440 V 50 Hz-50 kVAr 3 PH | 1 N | 1 N | 20886.00 |
| 75 kVAr | QHBTMC5075X0 | Champ 440 V 50 Hz-75 kVAr 3 PH | 1 N | 1 N | 31329.00 |
| 100 kVAr | QHBTMC5100X0 | Champ 440 V 50 Hz-100 kVAr 3 PH | 1 N | 1 N | 41772.00 |
| Rated Voltage 480 Vac, 3ϕ, 50 Hz, Delta Connection | | | | | |
| 5 kVAr | QHBTMD5005X0 | Champ 480 V 50 Hz-5 kVAr 3 PH | 1 N | 1 N | 2137.00 |
| 6 kVAr | QHBTMD5006X0 | Champ 480 V 50 Hz-6 kVAr 3 PH | 1 N | 1 N | 2565.00 |
| 7.5 kVAr | QHBTMD5007X5 | Champ 480 V 50 Hz-7.5 kVAr 3 PH | 1 N | 1 N | 3205.00 |
| 10 kVAr | QHBTMD5010X0 | Champ 480 V 50 Hz-10 kVAr 3 PH | 1 N | 1 N | 4274.00 |
| 12.5 kVAr | QHBTMD5012X5 | Champ 480 V 50 Hz-12.5 kVAr 3 PH | 1 N | 1 N | 5342.00 |
| 15 kVAr | QHBTMD5015X0 | Champ 480 V 50 Hz-15 kVAr 3 PH | 1 N | 1 N | 6411.00 |
| 20 kVAr | QHBTMD5020X0 | Champ 480 V 50 Hz-20 kVAr 3 PH | 1 N | 1 N | 8547.00 |
| 25 kVAr | QHBTMD5025X0 | Champ 480 V 50 Hz-25 kVAr 3 PH | 1 N | 1 N | 10684.00 |
| 30 kVAr | QHBTMD5030X0 | Champ 480 V 50 Hz-30 kVAr 3 PH | 1 N | 1 N | 12820.00 |
| 50 kVAr | QHBTMD5050X0 | Champ 480 V 50 Hz-50 kVAr 3 PH | 1 N | 1 N | 21367.00 |
| 60 kVAr | QHBTMD5060X0 | Champ 480 V 50 Hz-60 kVAr 3 PH | 1 N | 1 N | 25640.00 |
| Rated Voltage 525 Vac, 3ϕ, 50 Hz, Delta Connection | | | | | |
| 5 kVAr | QHBTMF5005X0 | Champ 525 V 50 Hz-5 kVAr 3 PH | 1 N | 1 N | 2137.00 |
| 6 kVAr | QHBTMF5006X0 | Champ 525 V 50 Hz-6 kVAr 3 PH | 1 N | 1 N | 2565.00 |
| 7.5 kVAr | QHBTMF5007X5 | Champ 525 V 50 Hz-7.5 kVAr 3 PH | 1 N | 1 N | 3205.00 |
| 10 kVAr | QHBTMF5010X0 | Champ 525 V 50 Hz-10 kVAr 3 PH | 1 N | 1 N | 4274.00 |
| 12.5 kVAr | QHBTMF5012X5 | Champ 525 V 50 Hz-12.5 kVAr 3 PH | 1 N | 1 N | 5342.00 |
| 15 kVAr | QHBTMF5015X0 | Champ 525 V 50 Hz-15 kVAr 3 PH | 1 N | 1 N | 6411.00 |
| 20 kVAr | QHBTMF5020X0 | Champ 525 V 50 Hz-20 kVAr 3 PH | 1 N | 1 N | 8547.00 |
| 25 kVAr | QHBTMF5025X0 | Champ 525 V 50 Hz-25 kVAr 3 PH | 1 N | 1 N | 10684.00 |
| 30 kVAr | QHBTMF5030X0 | Champ 525 V 50 Hz-30 kVAr 3 PH | 1 N | 1 N | 12820.00 |
| 50 kVAr | QHBTMF5050X0 | Champ 525 V 50 Hz-50 kVAr 3 PH | 1 N | 1 N | 22046.00 |
| 60 kVAr | QHBTMF5060X0 | Champ 525 V 50 Hz-60 kVAr 3 PH | 1 N | 1 N | 26455.00 |

(IS: 13340 / IEC: 60831)

Champion - SHD Square Capacitors

- High inrush current withstand capability.
- Output range 1 kVAr to 100 kVAr.
- Soft sticky resin to withstand high temperature and current stress.
- Penta safety protection.
- Explosion proof, low losses & high over current withstand capabilities.



HSN Code: 85321000

| Rating kVAr | Item Code | Description | Standard Pack No of unit/s | Master Pack No of unit/s | Per Unit LP (₹) |
|---|--------------|-------------------------------------|----------------------------|--------------------------|-----------------|
| Rated Voltage 440 Vac, 3ϕ, 50 Hz, Delta Connection | | | | | |
| 1 kVAr | QHSTMC5001X0 | Champion 440 V 50 Hz-1 kVAr 3 PH | 1 N | 16 N | 1143.00 |
| 2 kVAr | QHSTMC5002X0 | Champion 440 V 50 Hz-2 kVAr 3 PH | 1 N | 1 N | 2285.00 |
| 3 kVAr | QHSTMC5003X0 | Champion 440 V 50 Hz-3 kVAr 3 PH | 1 N | 1 N | 3427.00 |
| 4 kVAr | QHSTMC5004X0 | Champion 440 V 50 Hz-4 kVAr 3 PH | 1 N | 1 N | 3973.00 |
| 5 kVAr | QHSTMC5005X0 | Champion 440 V 50 Hz-5 kVAr 3 PH | 1 N | 1 N | 4010.00 |
| 6 kVAr | QHSTMC5006X0 | Champion 440 V 50 Hz-6 kVAr 3 PH | 1 N | 1 N | 4535.00 |
| 7.5 kVAr | QHSTMC5007X5 | Champion 440 V 50 Hz-7.5 kVAr 3 PH | 1 N | 1 N | 5670.00 |
| 8 kVAr | QHSTMC5008X0 | Champion 440 V 50 Hz-8 kVAr 3 PH | 1 N | 1 N | 6048.00 |
| 10 kVAr | QHSTMC5010X0 | Champion 440 V 50 Hz-10 kVAr 3 PH | 1 N | 1 N | 7559.00 |
| 12.5 kVAr | QHSTMC5012X5 | Champion 440 V 50 Hz-12.5 kVAr 3 PH | 1 N | 1 N | 9449.00 |
| 15 kVAr | QHSTMC5015X0 | Champion 440 V 50 Hz-15 kVAr 3 PH | 1 N | 1 N | 11338.00 |
| 20 kVAr | QHSTMC5020X0 | Champion 440 V 50 Hz-20 kVAr 3 PH | 1 N | 1 N | 15118.00 |
| 25 kVAr | QHSTMC5025X0 | Champion 440 V 50 Hz-25 kVAr 3 PH | 1 N | 1 N | 18896.00 |
| 30 kVAr | QHSTMC5030X0 | Champion 440 V 50 Hz-30 kVAr 3 PH | 1 N | 1 N | 23684.00 |
| 50 kVAr | QHSTMC5050X0 | Champion 440 V 50 Hz-50 kVAr 3 PH | 1 N | 1 N | 39472.00 |
| 75 kVAr | QHSTMC5075X0 | Champion 440 V 50 Hz-75 kVAr 3 PH | 1 N | 1 N | 59208.00 |
| 100 kVAr | QHSTMC5100X0 | Champion 440 V 50 Hz-100 kVAr 3 PH | 1 N | 1 N | 78944.00 |
| Rated Voltage 480 Vac, 3ϕ, 50 Hz, Delta Connection | | | | | |
| 5 kVAr | QHSTMD5005X0 | Champion 480 V 50 Hz-5 kVAr 3 PH | 1 N | 1 N | 4051.00 |
| 6 kVAr | QHSTMD5006X0 | Champion 480 V 50 Hz-6 kVAr 3 PH | 1 N | 1 N | 4581.00 |
| 7.5 kVAr | QHSTMD5007X5 | Champion 480 V 50 Hz-7.5 kVAr 3 PH | 1 N | 1 N | 5727.00 |
| 10 kVAr | QHSTMD5010X0 | Champion 480 V 50 Hz-10 kVAr 3 PH | 1 N | 1 N | 7635.00 |
| 12.5 kVAr | QHSTMD5012X5 | Champion 480 V 50 Hz-12.5 kVAr 3 PH | 1 N | 1 N | 9544.00 |
| 15 kVAr | QHSTMD5015X0 | Champion 480 V 50 Hz-15 kVAr 3 PH | 1 N | 1 N | 11453.00 |
| 20 kVAr | QHSTMD5020X0 | Champion 480 V 50 Hz-20 kVAr 3 PH | 1 N | 1 N | 15271.00 |
| 25 kVAr | QHSTMD5025X0 | Champion 480 V 50 Hz-25 kVAr 3 PH | 1 N | 1 N | 19087.00 |
| 30 kVAr | QHSTMD5030X0 | Champion 480 V 50 Hz-30 kVAr 3 PH | 1 N | 1 N | 23923.00 |
| 50 kVAr | QHSTMD5050X0 | Champion 480 V 50 Hz-50 kVAr 3 PH | 1 N | 1 N | 39871.00 |
| 60 kVAr | QHSTMD5060X0 | Champion 480 V 50 Hz-60 kVAr 3 PH | 1 N | 1 N | 47843.00 |
| Rated Voltage 525 Vac, 3ϕ, 50 Hz, Delta Connection | | | | | |
| 5 kVAr | QHSTMF5005X0 | Champion 525 V 50 Hz-5 kVAr 3 PH | 1 N | 1 N | 4091.00 |
| 6 kVAr | QHSTMF5006X0 | Champion 525 V 50 Hz-6 kVAr 3 PH | 1 N | 1 N | 4627.00 |
| 7.5 kVAr | QHSTMF5007X5 | Champion 525 V 50 Hz-7.5 kVAr 3 PH | 1 N | 1 N | 5785.00 |
| 10 kVAr | QHSTMF5010X0 | Champion 525 V 50 Hz-10 kVAr 3 PH | 1 N | 1 N | 7712.00 |
| 12.5 kVAr | QHSTMF5012X5 | Champion 525 V 50 Hz-12.5 kVAr 3 PH | 1 N | 1 N | 9641.00 |
| 15 kVAr | QHSTMF5015X0 | Champion 525 V 50 Hz-15 kVAr 3 PH | 1 N | 1 N | 11568.00 |
| 20 kVAr | QHSTMF5020X0 | Champion 525 V 50 Hz-20 kVAr 3 PH | 1 N | 1 N | 15425.00 |
| 25 kVAr | QHSTMF5025X0 | Champion 525 V 50 Hz-25 kVAr 3 PH | 1 N | 1 N | 19280.00 |
| 30 kVAr | QHSTMF5030X0 | Champion 525 V 50 Hz-30 kVAr 3 PH | 1 N | 1 N | 24165.00 |
| 50 kVAr | QHSTMF5050X0 | Champion 525 V 50 Hz-50 kVAr 3 PH | 1 N | 1 N | 40273.00 |
| 60 kVAr | QHSTMF5060X0 | Champion 525 V 50 Hz-60 kVAr 3 PH | 1 N | 1 N | 48327.00 |

Other Ratings on request

Effective from 11th March, 2024

(IS: 13340)

List Price (LP) are in Indian ₹ & as per Standard Terms & Conditions

HAVELLS 86

Harmonic Detuned Reactor

Range:

- 1 kVAr to 100 kVAr
- Available in: Copper & Aluminium
- Detuning Factor: 5.67%, 7% and 14% corresponding to tuning Frequencies of 210 Hz, 190 Hz and 135 Hz for the base of 50 Hz
- Rated Voltage: 380 V to 690 V
- linearity : 185% to 225% of In

Features:

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



Selection Chart: Capacitor voltage and kVAr selection for 5.67%, 7% and 14% reactors

| Effective kVAr output | With 5.67% detuned reactor | | With 7% detuned reactor | | With 14% detuned reactor | |
|-----------------------|----------------------------|--------------------|-------------------------|--------------------|--------------------------|--------------------|
| | Reactor (440V) | Capacitor (480V)** | Reactor (440V) | Capacitor (480V)** | Reactor (440V) | Capacitor (525V)** |
| 5 kVAr | 5 kVAr | 6 kVAr/480V | 5 kVAr | 6 kVAr/480V | 5 kVAr | 6 kVAr/525V |
| 10 kVAr | 10 kVAr | 12.5 kVAr/480V | 10 kVAr | 12.5 kVAr/480V | 10 kVAr | 12.5 kVAr/525V |
| 12.5 kVAr | 12.5 kVAr | 15 kVAr/480V | 12.5 kVAr | 15 kVAr/480V | 12.5 kVAr | 15 kVAr/525V |
| 15 kVAr | 15 kVAr | 20 kVAr/480V | 15 kVAr | 20 kVAr/480V | 15 kVAr | 20 kVAr/525V |
| 20 kVAr | 20 kVAr | 25 kVAr/480V | 20 kVAr | 25 kVAr/480V | 20 kVAr | 25 kVAr/525V |
| 25 kVAr | 25 kVAr | 30 kVAr/480V | 25 kVAr | 30 kVAr/480V | 25 kVAr | 30 kVAr/525V |
| 50 kVAr | 50 kVAr | 60 kVAr/480V | 50 kVAr | 60 kVAr/480V | 50 kVAr | 60 kVAr/525V |
| 75 kVAr | 75 kVAr | 90 kVAr/480V | 75 kVAr | 90 kVAr/480V | 75 kVAr | 90 kVAr/525V |
| 100 kVAr | 100 kVAr | 120 kVAr/480V | 100 kVAr | 120 kVAr/480V | 100 kVAr | 120 kVAr/525V |



Harmonic Detuned Reactor Aluminium

HSN Code: 85049090

| 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 | QHLLTCV001X0 | H. D.- REACTOR, 7% AL, 01 kVAr 440 Vac | 5665.00 |
| 2 kVAr | QHLLTCV002X0 | H. D.- REACTOR, 7% AL, 02 kVAr 440 Vac | 6179.00 |
| 3 kVAr | QHLLTCV003X0 | H. D.- REACTOR, 7% AL, 03 kVAr 440 Vac | 6999.00 |
| 4 kVAr | QHLLTCV004X0 | H. D.- REACTOR, 7% AL, 04 kVAr 440 Vac | 7441.00 |
| 5 kVAr | QHLLTCV005X0 | H. D.- REACTOR, 7% AL, 05 kVAr 440 Vac | 9176.00 |
| 10 kVAr | QHLLTCV010X0 | H. D.- REACTOR, 7% AL, 10 kVAr 440 Vac | 11161.00 |
| 12.5 kVAr | QHLLTCV012X5 | H. D.- REACTOR, 7% AL, 12.5 kVAr 440 Vac | 11409.00 |
| 15 kVAr | QHLLTCV015X0 | H. D.- REACTOR, 7% AL, 15 kVAr 440 Vac | 16244.00 |
| 20 kVAr | QHLLTCV020X0 | H. D.- REACTOR, 7% AL, 20 kVAr 440 Vac | 17858.00 |
| 25 kVAr | QHLLTCV025X0 | H. D.- REACTOR, 7% AL, 25 kVAr 440 Vac | 18476.00 |
| 50 kVAr | QHLLTCV050X0 | H. D.- REACTOR, 7% AL, 50 kVAr 440 Vac | 29500.00 |
| 75 kVAr | QHLLTCV075X0 | H. D.- REACTOR, 7% AL, 75 kVAr 440 Vac | 48858.00 |
| 100 kVAr | QHLLTCV100X0 | H. D.- REACTOR, 7% AL, 100 kVAr 440 Vac | 55803.00 |
| Rated Voltage 440 Vac, F = 50 Hz, P = 14% (Fr = 189 Hz) / Linearity: L > 0.95 Lr for current up to 1.85 . I1 (Aluminium) | | | |
| 5 kVAr | QHLLTCW005X0 | H. D.- REACTOR, 14% AL, 05 kVAr 440 Vac | Price on Request |
| 10 kVAr | QHLLTCW010X0 | H. D.- REACTOR, 14% AL, 10 kVAr 440 Vac | |
| 12.5 kVAr | QHLLTCW012X5 | H. D.- REACTOR, 14% AL, 12.5 kVAr 440 Vac | |
| 15 kVAr | QHLLTCW015X0 | H. D.- REACTOR, 14% AL, 15 kVAr 440 Vac | |
| 20 kVAr | QHLLTCW020X0 | H. D.- REACTOR, 14% AL, 20 kVAr 440 Vac | |
| 25 kVAr | QHLLTCW025X0 | H. D.- REACTOR, 14% AL, 25 kVAr 440 Vac | |
| 50 kVAr | QHLLTCW050X0 | H. D.- REACTOR, 14% AL, 50 kVAr 440 Vac | |
| 75 kVAr | QHLLTCW075X0 | H. D.- REACTOR, 14% AL, 75 kVAr 440 Vac | |
| 100 kVAr | QHLLTCW100X0 | H. D.- REACTOR, 14% AL, 100 kVAr 440 Vac | |

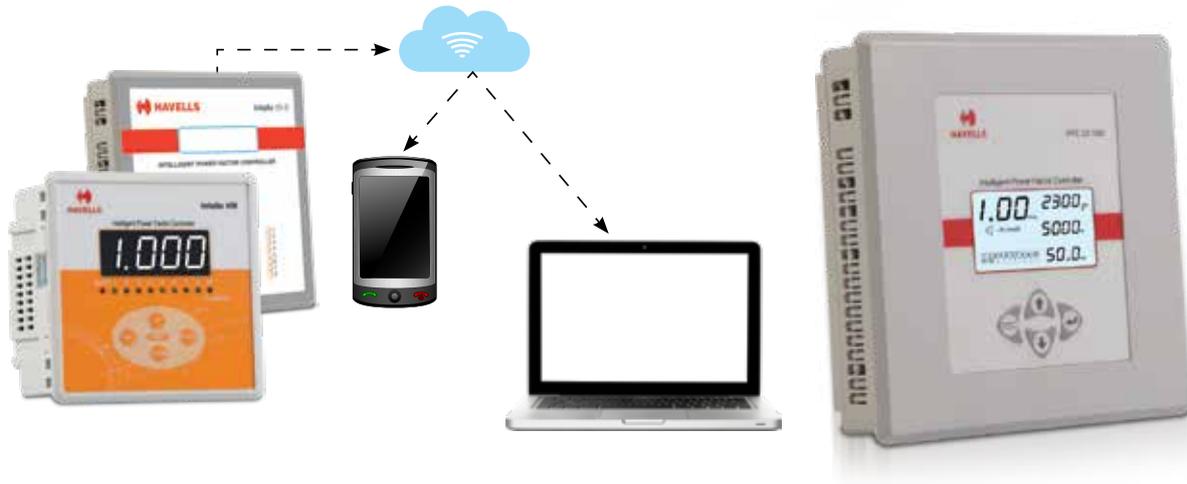
Harmonic Detuned Reactor Copper

HSN Code: 85049090

| Rating kVAr | Cat. Code | Description | Per Unit LP (₹) |
|--|--------------|---|------------------|
| Rated Voltage 440 Vac, F = 50 Hz, P = 7% (Fr = 133 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 | 7807.00 |
| 2 kVAr | QHCTLCV002X0 | H. D.- REACTOR, 7% CU, 02 kVAr 440 Vac | 8525.00 |
| 3 kVAr | QHCTLCV003X0 | H. D.- REACTOR, 7% CU, 03 kVAr 440 Vac | 9664.00 |
| 4 kVAr | QHCTLCV004X0 | H. D.- REACTOR, 7% CU, 04 kVAr 440 Vac | 10272.00 |
| 5 kVAr | QHCTLCV005X0 | H. D.- REACTOR, 7% CU, 05 kVAr 440 Vac | 11973.00 |
| 10 kVAr | QHCTLCV010X0 | H. D.- REACTOR, 7% CU, 10 kVAr 440 Vac | 16737.00 |
| 12.5 kVAr | QHCTLCV012X5 | H. D.- REACTOR, 7% CU, 12.5 kVAr 440 Vac | 17215.00 |
| 15 kVAr | QHCTLCV015X0 | H. D.- REACTOR, 7% CU, 15 kVAr 440 Vac | 24675.00 |
| 20 kVAr | QHCTLCV020X0 | H. D.- REACTOR, 7% CU, 20 kVAr 440 Vac | 25539.00 |
| 25 kVAr | QHCTLCV025X0 | H. D.- REACTOR, 7% CU, 25 kVAr 440 Vac | 26023.00 |
| 50 kVAr | QHCTLCV050X0 | H. D.- REACTOR, 7% CU, 50 kVAr 440 Vac | 39251.00 |
| 75 kVAr | QHCTLCV075X0 | H. D.- REACTOR, 7% CU, 75 kVAr 440 Vac | 64735.00 |
| 100 kVAr | QHCTLCV100X0 | H. D.- REACTOR, 7% CU, 100 kVAr 440 Vac | 83199.00 |
| Rated Voltage 440 Vac, F = 50 Hz, P = 14% (Fr = 189 Hz) / Linearity: L > 0.95 Lr for current up to 1.85 . I1 (Copper) | | | |
| 5 kVAr | QHCTLCW005X0 | H. D.- REACTOR, 14% CU, 05 kVAr 440 Vac | Price on Request |
| 10 kVAr | QHCTLCW010X0 | H. D.- REACTOR, 14% CU, 10 kVAr 440 Vac | |
| 12.5 kVAr | QHCTLCW012X5 | H. D.- REACTOR, 14% CU, 12.5 kVAr 440 Vac | |
| 15 kVAr | QHCTLCW015X0 | H. D.- REACTOR, 14% CU, 15 kVAr 440 Vac | |
| 20 kVAr | QHCTLCW020X0 | H. D.- REACTOR, 14% CU, 20 kVAr 440 Vac | |
| 25 kVAr | QHCTLCW025X0 | H. D.- REACTOR, 14% CU, 25 kVAr 440 Vac | |
| 50 kVAr | QHCTLCW050X0 | H. D.- REACTOR, 14% CU, 50 kVAr 440 Vac | |
| 75 kVAr | QHCTLCW075X0 | H. D.- REACTOR, 14% CU, 75 kVAr 440 Vac | |
| 100 kVAr | QHCTLCW100X0 | H. D.- REACTOR, 14% CU, 100 kVAr 440 Vac | |

Intelligent Power Factor Controller

IEC: 61010-1



Range:

- 08 and 12 Steps
- 7 segment LED display
- Size: 144 mm x 144 mm

Features:

- 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
- Advance Micro-Controller based logic
- Data logging facility (optional)

HSN Code: 85364900

| 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 | QHOSBS5D0008 | IPFC CS 96 x 96 | 1 N | 5 N | 7,084.00 |
| 8 | QHOSBS5N0008 | IPFC CS 144 x 144 | 1 N | 5 N | 11701.00 |
| 12 | QHOSBS5N0012 | IPFC CS 1001-112-90 V / 550 Vac 144 x 144 | 1 N | 5 N | 13585.00 |
| Intelligent Power Factor Controller (IPFC CS- 1003) 3 CT | | | | | |
| 8 | QHOTBS5H0008 | IPFC CS 1001-112-90 V / 550 Vac 144 x 144 | 1 N | 5 N | 18760.00 |
| 12 | QHOTBS5H0012 | IPFC CS 1003-312-90 V / 550 Vac 144 x 144 | 1 N | 5 N | 23402.00 |

Capacitor Switching Solutions

- Fast Switching Speed
- High power handling capacity
- Low losses
- Reliability and longevity
- Real time power factor correction



Thyristor Switch

HSN Code: 85371000

| Cat. Code | Description | Per Unit LP (₹) |
|------------|---------------------------|-----------------|
| QHZCF00111 | Thyristor Switch 15 kVAr | 31,725.00 |
| QHZCF00121 | Thyristor Switch 25 kVAr | 36,200.00 |
| QHZCF00131 | Thyristor Switch 50 kVAr | 43,525.00 |
| QHZCF00141 | Thyristor Switch 100 kVAr | 65,500.00 |

Note: For fast Switching Load

Other Ratings on request

89 HAVELLS Effective from 11th March, 2024

List Price (LP) are in Indian ₹ & as per Standard Terms & Conditions

Magnetic Contactor

Capacitor Duty Contactor

Features:

- Range : 3 kVAr to 66 kVAr
- De-latching Type design of Resistor Switching Block
- Low VA Burden Wide operating band coils with Class H Insulation
- Common accessories with HGS Range
- High Operating Frequency - 240 Operations per hour
- Handle high inrush current capability
- Utilization category AC-6b
- Finger proof IP20 terminals



HSN Code: 85369090

| Frame Size | kVAr Rating AC-6b | Inst. Aux. Contact | | Item Code | Per Unit LP (₹) |
|------------|-------------------|--------------------|----|--------------|-----------------|
| | 415 V / 440 V | NO | NC | | |
| 1 | 3 kVAr | 1 | 0 | IHPHE003110* | 2522.00 |
| | 3 kVAr | 0 | 1 | IHPHE003101* | 2522.00 |
| | 5 kVAr | 1 | 0 | IHPHE005110* | 2646.00 |
| | 5 kVAr | 0 | 1 | IHPHE005101* | 2646.00 |
| | 10 kVAr | 1 | 0 | IHPHE010110* | 3204.00 |
| | 10 kVAr | 0 | 1 | IHPHE010101* | 3204.00 |
| | 12.5 kVAr | 1 | 0 | IHPHE12X110* | 3619.00 |
| | 12.5 kVAr | 0 | 1 | IHPHE12X101* | 3619.00 |
| | 15 kVAr | 1 | 0 | IHPHE015110* | 4431.00 |
| | 15 kVAr | 0 | 1 | IHPHE015101* | 4431.00 |
| 2 | 20 kVAr | 1 | 0 | IHPHE020210* | 4871.00 |
| | 20 kVAr | 0 | 1 | IHPHE020201* | 4871.00 |
| | 25 kVAr | 1 | 0 | IHPHE025210* | 5556.00 |
| | 25 kVAr | 0 | 1 | IHPHE025201* | 5556.00 |
| | 33.3 kVAr | 1 | 0 | IHPHE33X210* | 8052.00 |
| | 33.3 kVAr | 0 | 1 | IHPHE33X201* | 8052.00 |
| 3 | 33.3 kVAr | 1 | 1 | IHPHE33X311* | 9711.00 |
| | 40 kVAr | 2 | 2 | IHPHE040322* | 14926.00 |
| 4 | 50 kVAr | 2 | 2 | IHPHE050422* | 15529.00 |
| | 66 kVAr | 2 | 2 | IHPHE066422* | 18223.00 |

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

33.3 kVAr contactor in Frame-3 can be used where higher terminal capacity is required.

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 Capacitor Duty Contactor (3 kVAr - 66 kVArA) | B | H | N | S* | W | T |

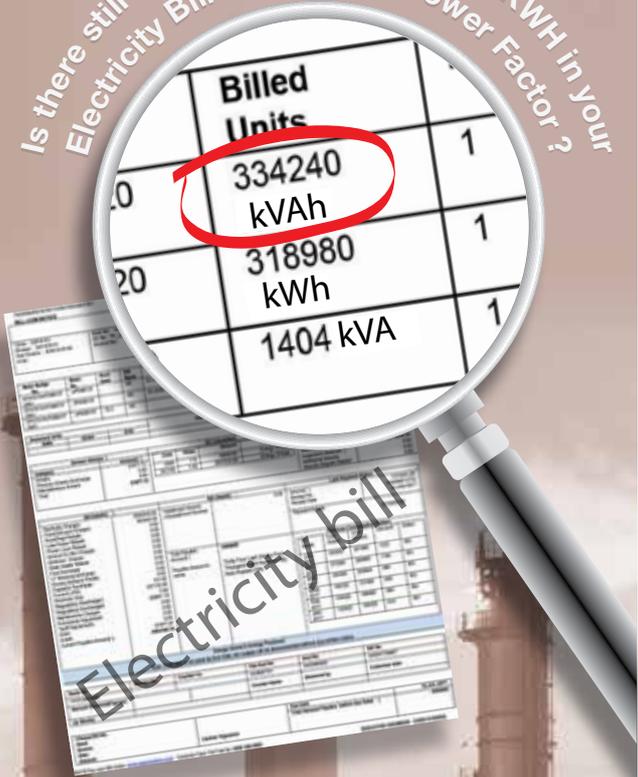
*upto 33.3 kVAr for AC - 6B



Why pay more
due to low Power Factor

Install Havells APFC Panel
&
SAVE Money by reducing kVAh

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

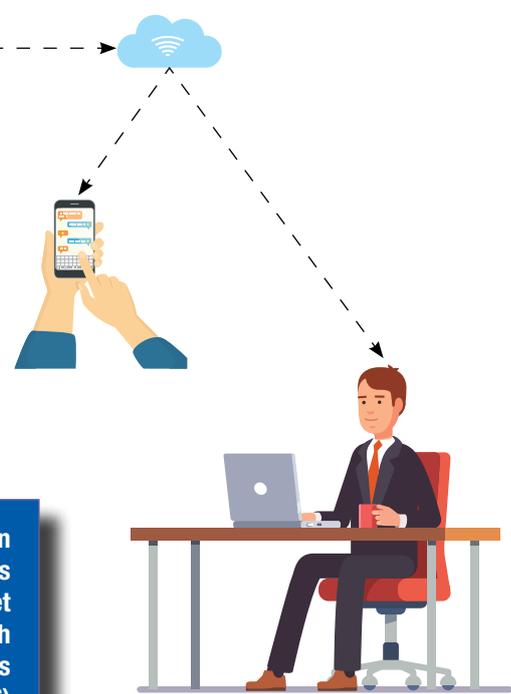


Smarty - Automatic Power Factor Correction Panel



Fully encapsulated, shielded, dust & vermin proof copper busbar design, ensuring optimal safety for users with minimal losses and a compact foot print

Welcome to the world of digitalization and Industry 4.0. Industry 4.0, comprises of Data exchange, Automation, Internet of the things and Cloud computing which prepares manufacturing technologies more efficient and smart. Havells (HGS) Contactors and starters are manufactured through Industry 4.0.



Range

- ▶ Output Rating: 10 kVAR - 350 kVAR as a standard SKU
- ▶ Other ratings 350 kVAR above on request
- ▶ Switching: Contactor / Thyristorised (Ultra Fast)
- ▶ APFC with Thyristor available on request

Features

- ▶ Ergonomic, compact and robust design
- ▶ Designed with Fully copper conductor
- ▶ Super Heavy Duty Capacitor power capacitor for long life
- ▶ Advance C-MOS technology based micro processor relay for intelligent power factor control
- ▶ Air core reactor for extra safety from inrush current (High currents)
- ▶ Automatic temp. control through fans and louvers in panel

Construction

- ▶ Manufactured with highly precise modern Amada CNC machine
- ▶ 11 tank process for corrosion proof powder coating
- ▶ Provision of top and bottom cable entry
- ▶ Double side earthing connection
- ▶ IP 30 & above as per customer demand
- ▶ Ref. Standard: 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.

Smarty - Automatic Power Factor Correction Panel

IEC: 61921 / IS: 16636

APFC Panel without Reactor

HSN Code: 85371000

| Rating kVAr | Cat. Code | Description | Main Incomer | Per Unit LP (₹) |
|---|--------------|-----------------------------------|-------------------|-----------------|
| Rated Voltage 415 Vac, 3ø, 50 Hz, Delta Connection, Super Heavy Duty Cylindrical Capacitor | | | | |
| 10 kVAr | QHXTCB5010X0 | 10 kVAr / 415 V APFC Panel CYCAP | MCB 40A / 10 KA | 65,000.00 |
| 15 kVAr | QHXTCB5015X0 | 15 kVAr / 415 V APFC Panel CYCAP | MCB 40A / 10 KA | 75,000.00 |
| 20 kVAr | QHXTCB5020X0 | 20 kVAr / 415 V APFC Panel CYCAP | MCB 40A / 10 KA | 81,000.00 |
| 25 kVAr | QHXTCB5025X0 | 25 kVAr / 415 V APFC Panel CYCAP | MCB 63A / 10 KA | 90,500.00 |
| 30 kVAr | QHXTCB5030X0 | 30 kVAr / 415 V APFC Panel CYCAP | MCB 63A / 10 KA | 1,08,000.00 |
| 40 kVAr | QHXTCB5040X0 | 40 kVAr / 415 V APFC Panel CYCAP | MCCB 100A / 25 KA | 1,47,188.00 |
| 50 kVAr | QHXTCB5050X0 | 50 kVAr / 415 V APFC Panel CYCAP | MCCB 100A / 25 KA | 1,65,800.00 |
| 75 kVAr | QHXTCB5075X0 | 75 kVAr / 415 V APFC Panel CYCAP | MCCB 160A / 25 KA | 2,45,000.00 |
| 80 kVAr | QHXTCB5080X0 | 80 kVAr / 415 V APFC Panel CYCAP | MCCB 160A / 25 KA | 2,60,500.00 |
| 100 kVAr | QHXTCB5100X0 | 100 kVAr / 415 V APFC Panel CYCAP | MCCB 160A / 25 KA | 2,85,500.00 |
| 125 kVAr | QHXTCB5125X0 | 125 kVAr / 415 V APFC Panel CYCAP | MCCB 250A / 25 KA | 3,95,000.00 |
| 150 kVAr | QHXTCB5150X0 | 150 kVAr / 415 V APFC Panel CYCAP | MCCB 320A / 35 KA | 4,49,500.00 |
| 175 kVAr | QHXTCB5175X0 | 175 kVAr / 415 V APFC Panel CYCAP | MCCB 320A / 35 KA | 4,97,000.00 |
| 200 kVAr | QHXTCB5200X0 | 200 kVAr / 415 V APFC Panel CYCAP | MCCB 400A / 35 KA | 5,69,700.00 |
| 225 kVAr | QHXTCB5225X0 | 225 kVAr / 415 V APFC Panel CYCAP | MCCB 400A / 35 KA | 6,40,912.00 |
| 250 kVAr | QHXTCB5250X0 | 250 kVAr / 415 V APFC Panel CYCAP | MCCB 500A / 35 KA | 7,05,700.00 |
| 275 kVAr | QHXTCB5275X0 | 275 kVAr / 415 V APFC Panel CYCAP | MCCB 500A / 50 KA | 7,75,890.00 |
| 300 kVAr | QHXTCB5300X0 | 300 kVAr / 415 V APFC Panel CYCAP | MCCB 630A / 50 KA | 8,15,000.00 |
| 325 kVAr | QHXTCB5325X0 | 325 kVAr / 415 V APFC Panel CYCAP | MCCB 630A / 50 KA | 8,82,916.00 |
| 350 kVAr | QHXTCB5350X0 | 350 kVAr / 415 V APFC Panel CYCAP | MCCB 630A / 50 KA | 9,17,500.00 |

* for Higher rating please contact our branch office

APFC Technical Details

| Rating kVAr | Stages | Dimensions HeightXWidthXDepth (mm) |
|---|--|---------------------------------------|
| Rated Voltage 415 Vac, 3ø, 50 Hz, Delta Connection, Super Heavy Duty Cylindrical Capacitor | | |
| 10 kVAr | 2x1 kVAr + 4x2 kVAr | 650x600x200 |
| 15 kVAr | 2x4 kVAr + 3x2 kVAr + 1x1 kVAr | 650x600x200 |
| 20 kVAr | 2x5 kVAr + 2x3 kVAr + 2x2 kVAr | 650x600x200 |
| 25 kVAr | 4x5 kVAr + 1x3 kVAr + 1x2 kVAr | 650x600x200 |
| 30 kVAr | 1x10 kVAr + 3x5 kVAr + 1x3 kVAr + 1x2 kVAr | 900x600x200 |
| 40 kVAr | 2x12.5 kVAr + 2x5 kVAr + 1x3 kVAr + 1x2 kVAr | 900x600x200 |
| 50 kVAr | 3x12.5 kVAr + 1x7.5 kVAr + 1x3 kVAr + 1x2 kVAr | 900x600x200 |
| 75 kVAr | 2x20 kVAr + 2x10 kVAr + 2x5 kVAr + 1x3 kVAr + 1x2 kVAr | 1100x700x250 |
| 80 kVAr | 2x20 kVAr + 2x12.5 kVAr + 2x5 kVAr + 1x3 kVAr + 1x2 kVAr | 1100x700x250 |
| 100 kVAr | 4x20 kVAr + 1x10 kVAr + 1x5 kVAr + 1x3 kVAr + 1x2 kVAr | 1100x700x250 |
| 125 kVAr | 1x50 kVAr + 2x25 kVAr + 1x10 kVAr + 2x5 kVAr + 1x3 kVAr + 1x2 kVAr | 1175x800x540 |
| 150 kVAr | 2x50 kVAr + 1x25 kVAr + 1x10 kVAr + 2x5 kVAr + 1x3 kVAr + 1x2 kVAr | 1175x800x540 |
| 175 kVAr | 2x50 kVAr + 2x25 kVAr + 1x10 kVAr + 3x5 kVAr | 1175x800x540 |
| 200 kVAr | 3x50 kVAr + 1x25 kVAr + 1x10 kVAr + 3x5 kVAr | 1175x800x540 |
| 225 kVAr | 3x50 kVAr + 2x25 kVAr + 2x10 kVAr + 1x5 kVAr | 1175x800x540 |
| 250 kVAr | 4x50 kVAr + 1x25 kVAr + 2x10 kVAr + 1x5 kVAr | 1175x800x540 |
| 275 kVAr | 1x100 kVAr + 2x50 kVAr + 2x25 kVAr + 2x10 kVAr + 1x5 kVAr | 1675x1200x700 |
| 300 kVAr | 1x100 kVAr + 3x50 kVAr + 1x25 kVAr + 2x10 kVAr + 1x5 kVAr | 1675x1200x700 |
| 325 kVAr | 2x100 kVAr + 1x50 kVAr + 2x25 kVAr + 2x10 kVAr + 1x5 kVAr | 1675x1200x700 |
| 350 kVAr | 2x100 kVAr + 2x50 kVAr + 1x25 kVAr + 2x10 kVAr + 1x5 kVAr | 1675x1200x700 |

APFC Panel with Detuned Reactor / Thyristor Switching

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

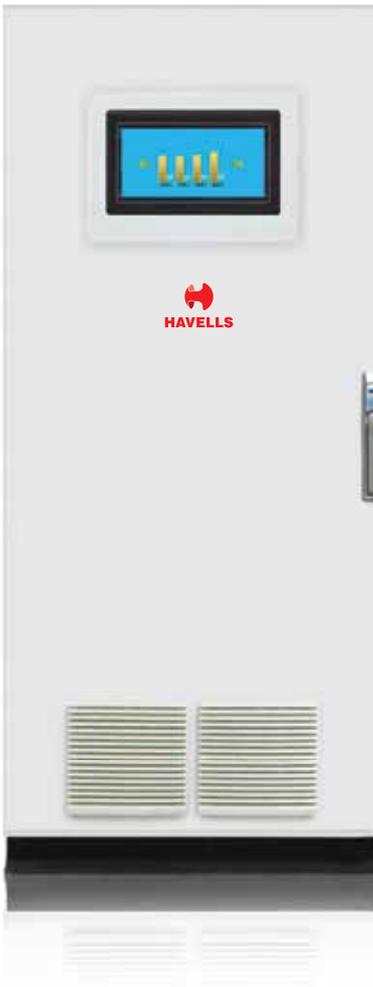
Active Harmonic Filter



| Rating in Ampere | Cat No. | Description | Per Unit MRP (₹) |
|------------------|------------|-----------------------|------------------|
| 50 A | On Request | 50 A / 415 AHF Panel | On Request |
| 75 A | | 75 A / 415 AHF Panel | |
| 100 A | | 100 A / 415 AHF Panel | |
| 125 A | | 125 A / 415 AHF Panel | |
| 150 A | | 150 A / 415 AHF Panel | |
| 200 A | | 200 A / 415 AHF Panel | |
| 250 A | | 250 A / 415 AHF Panel | |
| 300 A | | 300 A / 415 AHF Panel | |
| 400 A | | 400 A / 415 AHF Panel | |
| 500 A | | 500 A / 415 AHF Panel | |

SVG (Static Var Generator)

| Rating kVAr | Cat. Code | Description | Per Unit LP (₹) |
|---------------------|-----------|-------------------------------|------------------|
| 50 kVAr - 1000 kVAr | | 50 kVAr - 1000 kVAr SVG Panel | Price on Request |



IEEE 519-2014 Guidelines for 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 |

AHF Technical

| | |
|----------------------------------|--|
| System Connection | 3 P / 4 W or 3 P / 4 W |
| Input Voltage | 415 V (+/-10%) and 50 Hz (+/-)5% other rating on request |
| Phase compensation current range | 15 A - 1000 A (other ratings on request) |
| Technology | Two Level Topology / Three Level Topology |
| Harmonic filtration range | 2nd to 51st order |
| Individual harmonic selection | Available |
| Power factor compensation | 100% (Lead / Lag) |
| Load Balancing | Negative Sequence Compensation (Zero Sequence compensation in 3 P / 4 W range) |
| Neutral Current Compensation | Available |
| Reaction time | <0.3 ms |
| Interface (Communication) | GSM, MODBUS RTU, USB, Ethernet, Profibus Compatible |
| IP Protection Class | IP-30 and higher on request |
| System Cooling | Forced air colling |
| Overheating Protection | Yes |
| Relative Humidity | 96% (Non condensing) |
| Ambient Temperature | No deration upto 50 °C |



Active Harmonic Filter & SVG (Static Var Generator)

Range:

- Rating: 50 A - 500 A

AHF Technology & Innovation

- Heavy Duty IGBT used for Switching Technology
- Advanced LCD display with intelligent 32 bit microprocessor.
- User friendly programs and customization as per customer requirement for data display.
- Modular design enclosure fabricated by latest Amada CNC Machines & painted through fully automatic powder coating plant after 11 tank process.

AHF Features:

- The Havells make AHF is a unique innovation solution for Power Quality that address all power quality issues effectively. Major features are:
- Ultra- fast response
- No deration up-to 50 °C ambient temperature
- Havells unique Quad Pro feature- These features enables user to program AHF as per its priority for following compensation :
 - Current harmonics
 - Reactive compensation
 - Load balancing
 - Neutral compensation
- Priority selection feature for maximum capacity utilization as per the system requirement.



Compliance
IEEE-519



Printing Press



Pharmaceutical



Data Center



IT Park



Automobiles



Textiles



Hospitals



Airports

Consulting, Optimizing & Delivering Performance

Power Quality Audit Scope

- Capturing load profile of all relevant sections (with non linear loads) starting with the PCC.
- Checking effectiveness of installed Reactive power compensation system
- Identify zones of failures harmonic.
- Study electricity bills and identify scope of optimization in energy consumption pattern.

Final Deliverables

- A summary of various electrical parameters & recorded trends.
- Analysis of above data mentioning Key high lights
- Recommended Solution address the various power quality issues identified
- Estimate Potential Saving - Estimate the direct savings and provide ROI calculation (wherever applicable).



Agriculture Duty Capacitor



- Range : 1 kVAr to 15 kVAr
- Voltage 415 V
- MPP SH, Resin Vielled
- Low Watt loss

Agri Boost Cylindrical Capacitors for Agriculture Applications

HSN Code: 85321000

| Rating kVAr | Item Code | Description | 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 [™] 415 V 50 Hz-1 kVAr 3 PH | 1 N | 16 N | 350.00 |
| 2 kVAr | QHATCB5002X0 | AGRI BOOST [™] 415 V 50 Hz-2 kVAr 3 PH | 1 N | 16 N | 395.00 |
| 3 kVAr | QHATCB5003X0 | AGRI BOOST [™] 415 V 50 Hz-3 kVAr 3 PH | 1 N | 16 N | 575.00 |
| 4 kVAr | QHATCB5004X0 | AGRI BOOST [™] 415 V 50 Hz-4 kVAr 3 PH | 1 N | 16 N | 710.00 |
| 5 kVAr | QHATCB5005X0 | AGRI BOOST [™] 415 V 50 Hz-5 kVAr 3 PH | 1 N | 16 N | 858.00 |
| 6 kVAr | QHATCB5006X0 | AGRI BOOST [™] 415 V 50 Hz-6 kVAr 3 PH | 1 N | 16 N | 1030.00 |
| 7.5 kVAr | QHATCB5007X5 | AGRI BOOST [™] 415 V 50 Hz-7.5 kVAr 3 PH | 1 N | 16 N | 1287.00 |
| 8 kVAr | QHATCB5008X0 | AGRI BOOST [™] 415 V 50 Hz-8 kVAr 3 PH | 1 N | 16 N | 1372.00 |
| 10 kVAr | QHATCB5010X0 | AGRI BOOST [™] 415 V 50 Hz-10 kVAr 3 PH | 1 N | 16 N | 1715.00 |
| 12.5 kVAr | QHATCB5012X5 | AGRI BOOST [™] 415 V 50 Hz-12.5 kVAr 3 PH | 1 N | 8 N | 2145.00 |
| 15 kVAr | QHATCB5015X0 | AGRI BOOST [™] 415 V 50 Hz-15 kVAr 3 PH | 1 N | 8 N | 2573.00 |

(IS: 13340)

Range of Products



Air Circuit Breaker



Moulded Case Circuit Breaker



InstaShift Changeover Switch



Switch Disconnecter Fuse



HRC Fuse



Panel Board



HGS Contactors



HGS Motor Starters



Street Light Panel



Power Capacitors



IPFC Relay



Smarty APFC & Active Harmonic Filter Panel

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Warranty Policy:

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

*Proof of purchase to be retained to avail warranty.

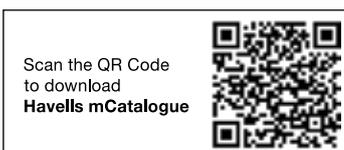
Terms & Conditions

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

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