

Havells - A Partner You Can Bank Upon



Know your partner

- Fast Moving Electrical Goods Company with Global Foot-print
- Firm believer of Make in India
- Two out of fourteen manufacturing plants dedicated for Low Voltage Components
- Certified for ISO-9001, 14001, 18001 & 50001
- Technical collaboration with M/s Hyundai Electric, South Korea
- Nine R&D Centres with in-house short-circuit test lab
- Serving industry for over four decades

Products / Solutions offered

- Low Voltage Switchgear, Controlgear & Power Quality Solutions complying with all IEC Standards

Write to us on enquiry.ip@Havells.com

Or visit us on www.havells.com



Range of Industrial Circuit Protection



Technical Collaboration



Havells India has signed an Memorandum of Understanding (MoU) with Hyundai Electric & Energy Systems Co. Ltd., South Korea to mutually explore and supply power and transmission devices.

- Hyundai Electric has transferred the technology to Havells for manufacturing Magnetic Contactors and Moulded Case Circuit Breakers in India.
- Memorandum of Understanding includes the buy back arrangement of Magnetic Contactors, Moulded Case Circuit Breakers & Miniature Circuit Breakers under Hyundai brand for their global market manufactured by Havells in India.



Air Circuit Breaker



Range : 400 A to 6300 A, 3P& 4P, EDO, MDO, MF & EF

Conforms to IEC 60947-1&2

Breaking Capacity : 50 kA-150 kA

Salient Benefits:

- Protection against Overload, Short-Circuit, Instantaneous & Ground Fault
- Advance protections, Power metering & Harmonics
- Modbus / RS 485 Communication for IoT/DCS
- Zone Selective Interlocking to achieve discrimination
- Time-current characteristic (i^2t) curve to achieve precise coordination in short-circuit zone
- Ready To Close(RTC) / Making Current Release(MCR) / Temperature sensor to ensure safety & reliability for equipment and operator
- LCD Display / Bar Graphs / Fault History / Contact Erosion Status... for better man machine interface

Moulded Case Circuit Breaker



Range : 16A to 1600A, SP/DP/TP/FP(wSN)

Breaking Capacity : 10 kA – 150 kA

Confirms to IEC 60947-1&2

Salient Benefits:

- Double Break / Single Break –Encapsulated Pole Design
- Thermal Magnetic & Microprocessor based releases for precise accuracy / wide selection
- Operational safety with High Insulation Voltage (1000V) & Impulse withstand Voltage (8kV)
- Operating Voltage of 690V AC for varied application
- High breaking capacity upto 150 kA for protection against high short-circuit levels with Cascading Tables
- Compact & elegant design to optimize panel size
- High mechanical and electrical endurance for better 'return on investment'
- Wide range of accessories including Motor mechanism for local / remote operation

Contactors & Overload Relays



Range : Power Contactors - 9A to 800 A

Capacitor Duty Contactors : 10 kVAr - 100 kVAr

Thermal Overload Relays – 0.18 A to 800 A

Confirms to IEC 60947-4&5

Salient Benefits :

- Time tested Global design thru technology transfer from Hyundai Electric, South Korea
- Compact construction for space / cost saving
- Built-in Front Protection cover (Foreign particle proof)
- Enhanced safety with Removable Terminal Shrouds
- Cassette type coil & snap fit accessories for easy maintenance
- Universal Coil for AC/DC control voltage
- In-built 'Phase Failure Protection' in over load relays

Automatic Transfer Switch



Range : 40A - 630A TP/FP

Conforms to IEC 60947-6-1

Salient Benefits :

- Additional Start/Stop command for DG Set
- Protection against
 - Under/Over Voltage
 - Under/Over Frequency
 - Phase failure
- Modbus Communication for third party integration
- Primary Source Selection to optimize on cost
- Auto / Manual control for ease of operation
- No external Power Supply Required
- Mimic Diagram & LCD display for real time monitoring
- Compact & Light weight design



Power Capacitors



Range : 0.5 kVAR to 100 kVAR

MPP/APP/Mixed Dielectric in cylindrical & box construction

Available in Splendid/Heavy/Super Heavy/Ultra Heavy Duty

Conforms to IEC 60831 / 60931

Salient Benefits :

- High Overcurrent with-stand capacity to with stand harmonic current
- Vacuum Technology
- Triple safety protection (Self healing, internal notch mechanism & over pressure disconnecter)
- Explosion proof & Low losses
- Soft sticky resin to withstand high temperature

Intelligent Power Factor Controller



Range: 6, 8, 12 & 16 Steps (144mm x 144mm & 96mm x 96mm), Single CT and Three CT sensing
Conforms to IEC 61010-1

Salient Benefits :

- Zero Programming and Tempered proof
- Contactor Switching & Thyristor Switching
- IOT (GSM, RS- 485) Enabled
- Inbuilt Electrical parameter display
- Wide Band Auxiliary supply 90-550V
- Fault/Alarm Indication for Protection against
 - Over/Under Voltage
 - Current, Frequency
 - CT Polarity
 - Temperature

Harmonic Reactors & Thyristor Switches



Detuned Reactors : 1 kVAR to 100 kVAR, Cu / Al
5.67% , 7% and 14%
Conforms to IEC 61558

Salient Benefits :

- High linearity 185% to 225%
- High harmonic loading capability
- Temperature protection-NC contact (UL approved)

Thyristor Switch : 1 kVAR - 100 kVAR, 200 Vac -1000 Vac

Salient Benefits :

- High peak inverse voltage for reliable function
- Integral Protection to Thyristors facilities-non usage of costly semiconductor fuses
- Continuous display of capacitor current and any annunciation
- Total Harmonic Distortion monitoring and protection

APFC Panel & Active Harmonic Filter



APFC Panel : 10 kVAr to 1000 kVAr

Contactor & Thyristor Switching

Conforms to IEC 61921

Salient Benefits :

- Designed with fully copper conductor
- 11 tank process for corrosion proof powder coating
- Heavy duty power capacitor for long life
- IOT Enabled APFC Controller
- Compact and robust design

Active Harmonic Filter: 10 A to 1000 A

Conforms to IEEE 519

Salient Benefits :

- IGBT based Ultrafast Stepless compensation
- Common Solution for Harmonic Mitigation, Load balancing, Stepless Power factor Correction, Neutral compensation
- Doorstep service

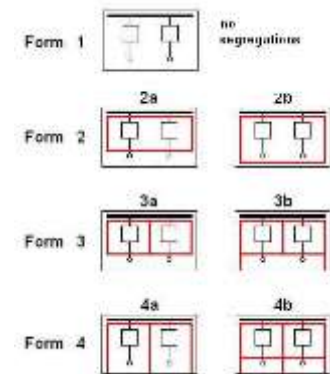
TTA - Total Type tested Assemblies



Total Type Tested Panel : Upto 4000 Amp / 50 kA for 1 sec
Conforms to IEC 61439

Salient Benefits :

- Designed Ambient Temp : 50 Degree C
- Form 4b Construction
- Designed with “Aluminum “ conductor
- Bolted Construction
- 7 tank process for corrosion proof powder coating
- Suitable for “Internal Arc Containment”
- Ingress Protection : IP 54
- Design Verified
 - By Testing
 - By Calculation & Design Rules



Test Reports Available



केन्द्रीय विद्युत अनुसंधान संस्थान
(विद्युत शक्ति एवं उष्ण शक्ति के क्षेत्र में अनुसंधान संस्थान)
Central Power Research Institute
(An autonomous society under Ministry of Power, Govt. of India)



Customer References

