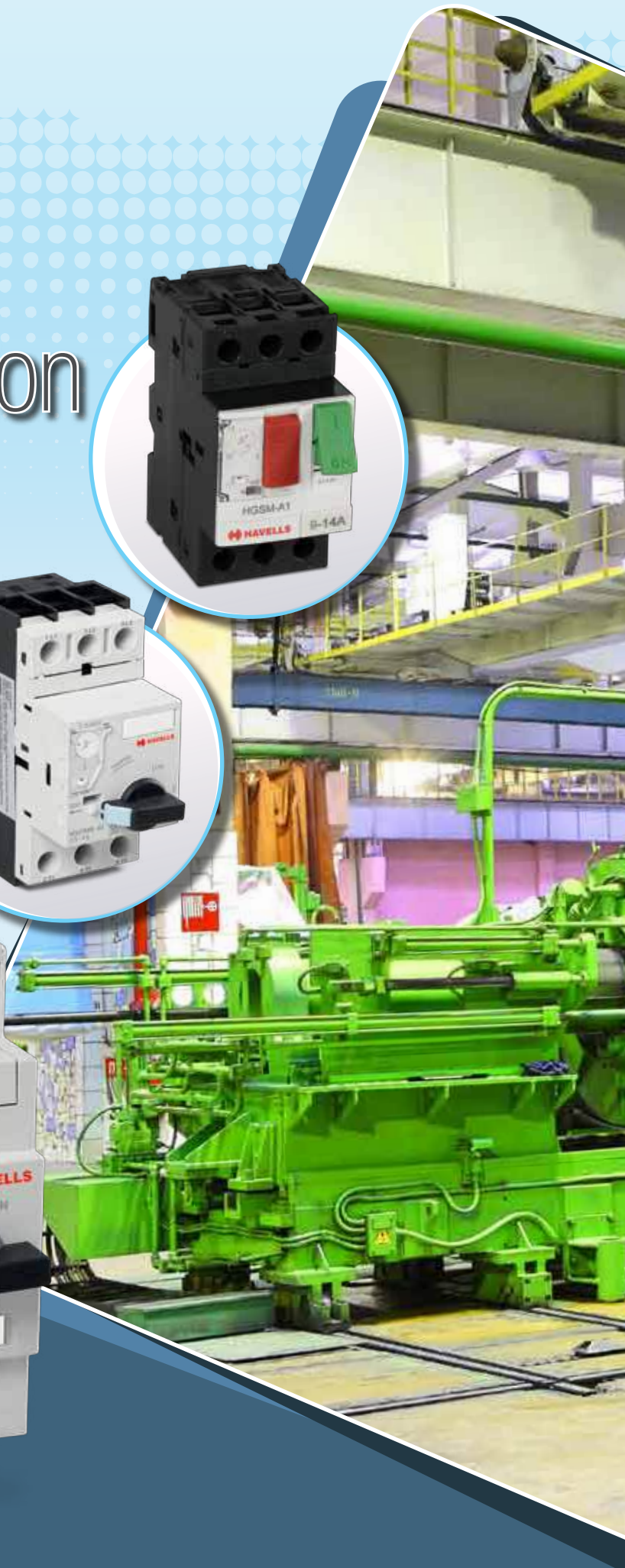




HAVELLS

Motor Protection Circuit Breaker



Introduction:

“Motor Protection Circuit Breaker” is dedicated protection device whose protection characteristics is matched with Motor protection requirements.

It is also known as MPSD – Motor Protective Switching Device

Manually operated motor starter (Switching + Overload Protection) additionally providing resettable short-circuit protection to the motor and the circuit

Applicable IEC Standards : IEC 60947-4-1, IEC 60947-2

Versatile Functionality of MPCB

All in one
Switching + Protection +
Disconnection + Isolation



Switching



Overload & Single
Phasing Protection



Short Circuit Protection,
Disconnection, Isolation



Motor Protection Circuit Breaker (MPCB) from Havells is a unique solution for all in one functions like Switching Motors ON and OFF, Overload Protection, Short Circuit Protection, Protection under Single Phasing Conditions, Under Voltage Protection when UVR is use.

This improves reliability and availability of applications leading to lower downtime and quick restart of process preventing motor damage, Installation damage and ensuring the human safety at the same time due to **in-built Type-2 Co-ordination**

Havells MPCB is thus a reliable, cost effective solution for all your motor protection needs, for typical application examples in:

- General engineering and plants
- Industries
- Conveyor systems
- Chemical industries including process engineering
- Pharmaceutical industries
- HVAC
- Environmental plants
- Power stations
- Water and Waste Water treatment plants
- Sewage plants
- Mining Industries, Metal Industries
- Machine tools

MPCB provides protection against:

- Overload
- Short circuit
- Phase failure
- Undervoltage

Fuseless protection not only saves costs but also provides for quick disconnection under short circuit condition by switching the motor off within less than 5 ms when in Current limiting Range.

It is easy to handle for Plant Maintenance teams when used in Motor Feeders which ensures availability, Safety and Reliability.

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
HGSTM	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	



Technical Specifications



Type		HGSM	
Standards / Approval			
Operating Method		Push Button (PB)	
Number of poles			
Tripping device		Thermal - Magnetic	
Frame size		32 A	
Rated insulation voltage (Ui)			
Rated operational voltage (Ue)			
Rated impulse withstand voltage (Uimp)		6 kV	
Rated frequency			
Trip Class		10 A	
Utilization category	IEC947-4-1		
	IEC60947-2		
Electrical Durability (AC-3) (No. of ON Load Operations)		100000	
Mechanical Durability (No. of OFF Load Operations)		100000	
Max. Operating Rate (No. of Operations / Hour)		25	
Ambient temperature compensation		-5 °C to + 40 °C	
Storage Temperature			
Overload withstand Capability			
Phase loss protection (Current based Single Phasing Protection)			
Trip indication		-	
Test trip function			
Instantaneous trip current			
Terminal type		Screw terminal, M4 slotted & Philips head n° 2	
Wire size	Solid	1...6 mm ² x 2	
	Stranded	1.5... 6 mm ² X 2	
Tightening Torque Nm		1.7 Nm	
Product weight (g)		35 g	
Dimensions (mm) W x H x D		(45 x 90 x 67) mm	
Standard Service Condition	Relative humidity		
	Operation altitude		



HGSTMR		HGSMR	
IEC 60947-1, IEC 60947 -2, IEC 60947-4-1			
Rotary			
3			
Thermal - Magnetic		Magnetic	
32 A	63 A	32 A	63 A
690 V			
230 V, 400 V / 415 V, 500 V & 690 V			
6 kV	8 kV	6 kV	8 kV
50 Hz / 60 Hz			
10 A			
AC-3			
Cat A			
100000	50000	100000	50000
100000	100000	100000	100000
25	40	25	40
-5 °C to + 55 °C			
-40 °C to 65 °C			
According to IEC60947 - 4 - 1, For given AC-3 Utilisation Category			
Yes			
Yes			
Yes			
13 x le max			
Screw terminal, M4 slotted & Philips head n° 2	Box terminal, M6 slotted & Philips head n° 2	Screw terminal, M4 slotted & Philips head n° 2	Box terminal, M6 slotted & Philips head n° 2
1...6 mm ² x 2	25...35 mm ² x 1	1...6 mm ² x 2	1...6 mm ² x 2
1.5... 6 mm ² X 2	25...35 mm ² x 1	1.5... 6 mm ² X 2	1.5... 6 mm ² X 2
2.5 Nm	5 Nm	2.5 Nm	5 Nm
33 g	1.05 kg	0.33 g	1.05 kg
(45 x 97 x 96) mm	(55 x 140 x 149) mm	(45 x 97 x 96) mm	(55 x 140 x 149) mm
15...95 % without condensation			
Upto 2000 m			



Push Button Version MPCB

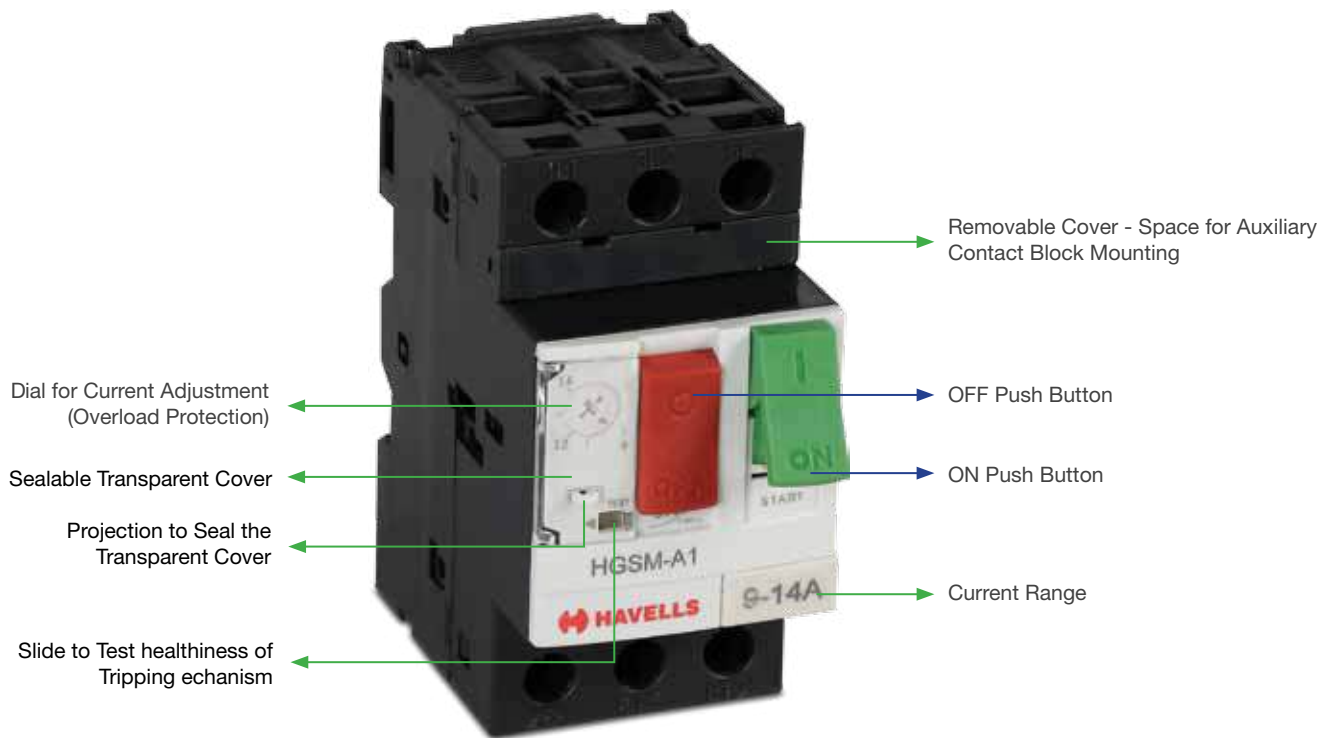
Salient Features:

- Push Button version - 1 Frame size – 45 mm Width
- Ratings from 0.1 A - 32 A, Trip Class 10 A
- Rated Operation Voltage $U_i = 690$ V
- **High Magnetic Setting - Makes it suitable for IE2, IE3 & IE4 Motors**
- Compliance to IEC 60947-2, IEC 60947-4-1
- In-built **“Type-2 Co-ordination”** even when used standalone
- Finger proof IP20 Terminals
- Lockable in OFF Position
- Suitable for DIN channel mounting
- CE Marking

Wide range of Accessories

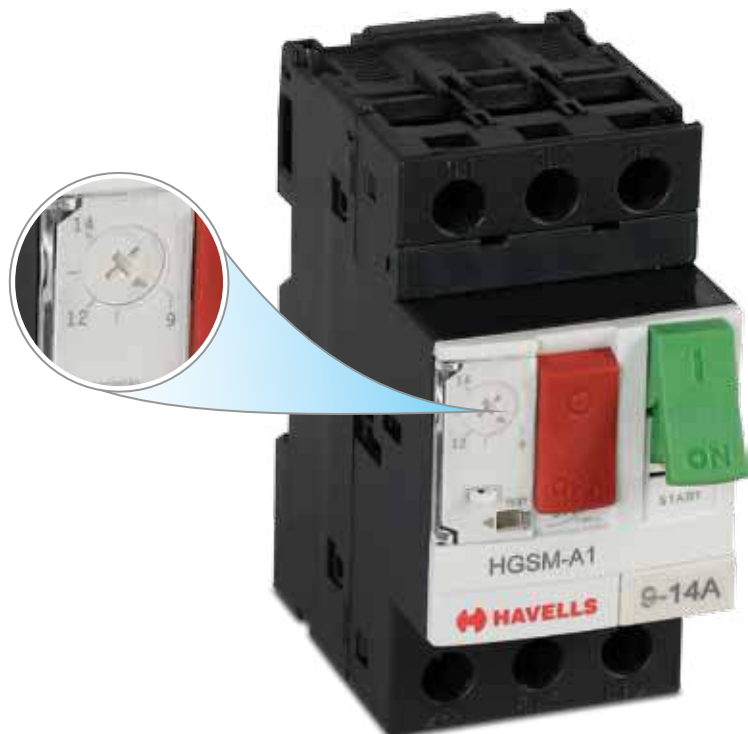
- UV Release
- Shunt Release
- Auxiliary Contact Blocks – Top Mounted
- Auxiliary Contact Blocks – Side Mounted
- **Fault Alarm Contacts (With additional Aux. Contact)**
- Box for IP55 – Enclosure
- Box for IP55 with Emergency PB - Enclosure

Front Interface : Push Button MPCB



Overload Protection - Adjustment Dial

- Stepless Adjustment
- Adjustment range : 9 A - 14 A
- Set the Current on Dial - Basis Motor Full Load Current
- Rated Current (In) A : 14 A
- Magnetic Protection - Fixed Basis 14 A (170 A - @ 13 In)

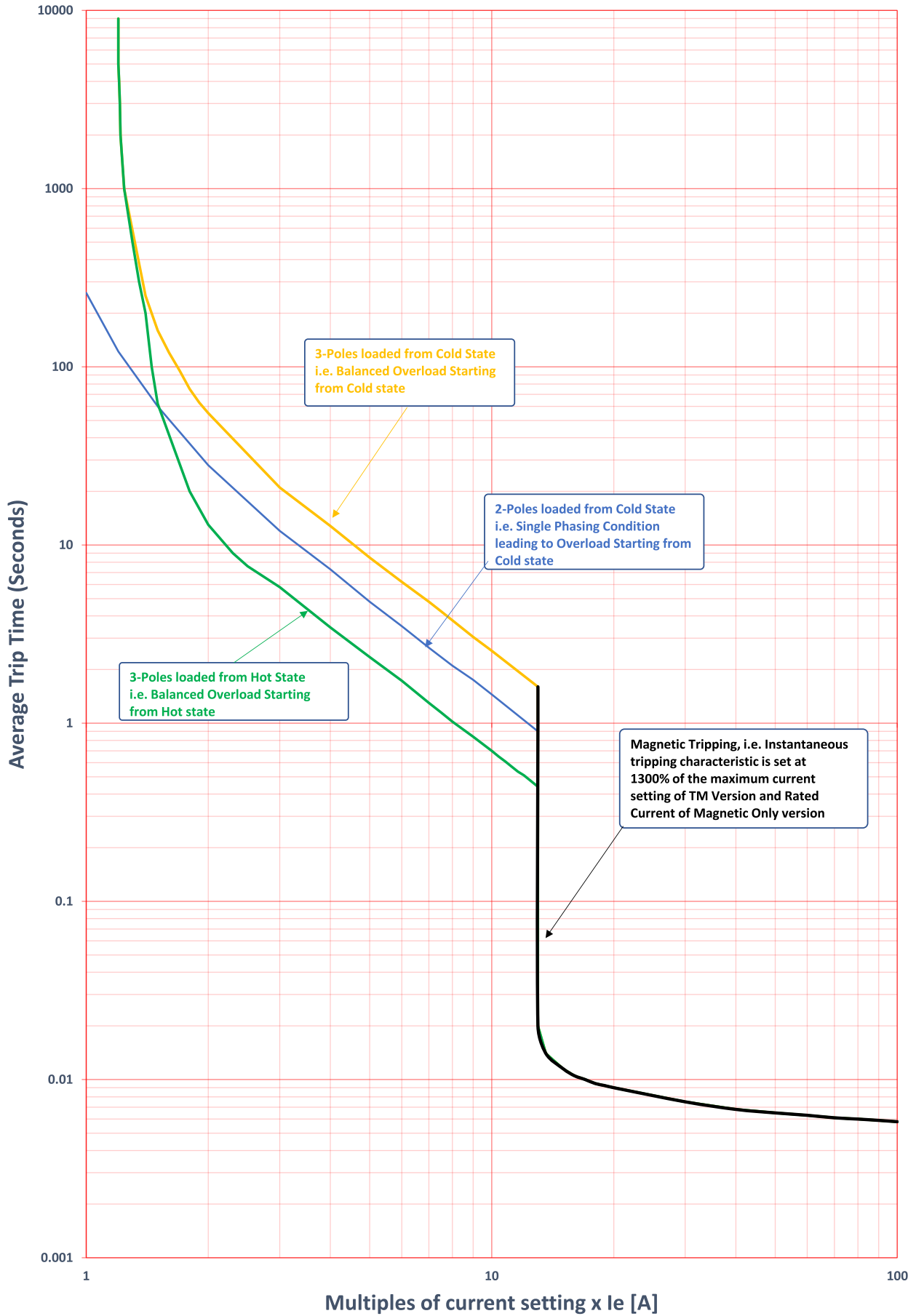


Short Circuit Breaking Capacity : Push Button MPCB

					Short Circuit Breaking Capacity kA					
					230/240 V		400/415 V		690 V	
Model	Rated Current	Thermal Protection adjustment Range	Suitable for Motor kW AC3	Instantaneous Trip Current (A)	Icu	Ics	Icu	Ics	Icu	Ics
HGSM- A1 32 A Frame	0.16	0.1 A - 0.16 A	0.02	1.5	100	100	100	100	100	100
	0.25	0.16 A - 0.25 A	0.06	2.4	100	100	100	100	100	100
	0.4	0.25 A - 0.4 A	0.09	5	100	100	100	100	100	100
	0.63	0.4 A - 0.63 A	0.18	8	100	100	100	100	100	100
	1	0.63 A - 1 A	0.37	13	100	100	100	100	100	100
	1.6	1 A - 1.6 A	0.55	22.5	100	100	100	100	100	100
	2.5	1.6 A - 2.5 A	0.75	33.5	100	100	100	100	3	2.25
	4	2.5 A - 4 A	1.1	51	100	100	100	100	3	2.25
	6.3	4 A - 6.3 A	2.2	78	100	100	100	100	3	2.25
	10	6.3 A - 10 A	3	138	100	100	100	100	3	2.25
	14	9 A - 14 A	5.5	170	100	100	15	7.5	3	2.25
	18	13 A - 18 A	7.5	223	100	100	15	7.5	3	2.25
	23	17 A - 23 A	9	327	50	50	15	6	3	2.25
	25	20 A - 25 A	11	327	50	50	15	6	3	2.25
32	24 A - 32 A	15	416	50	50	10	5	3	2.25	

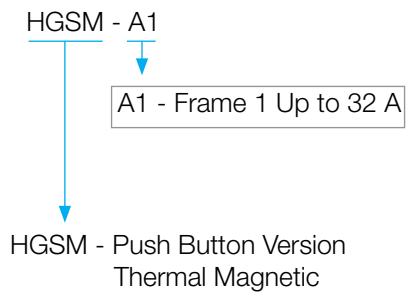
Trip Time Characteristics : Push Button MPCB

Average Operating Times at 20 °C related to multiples of the setting current

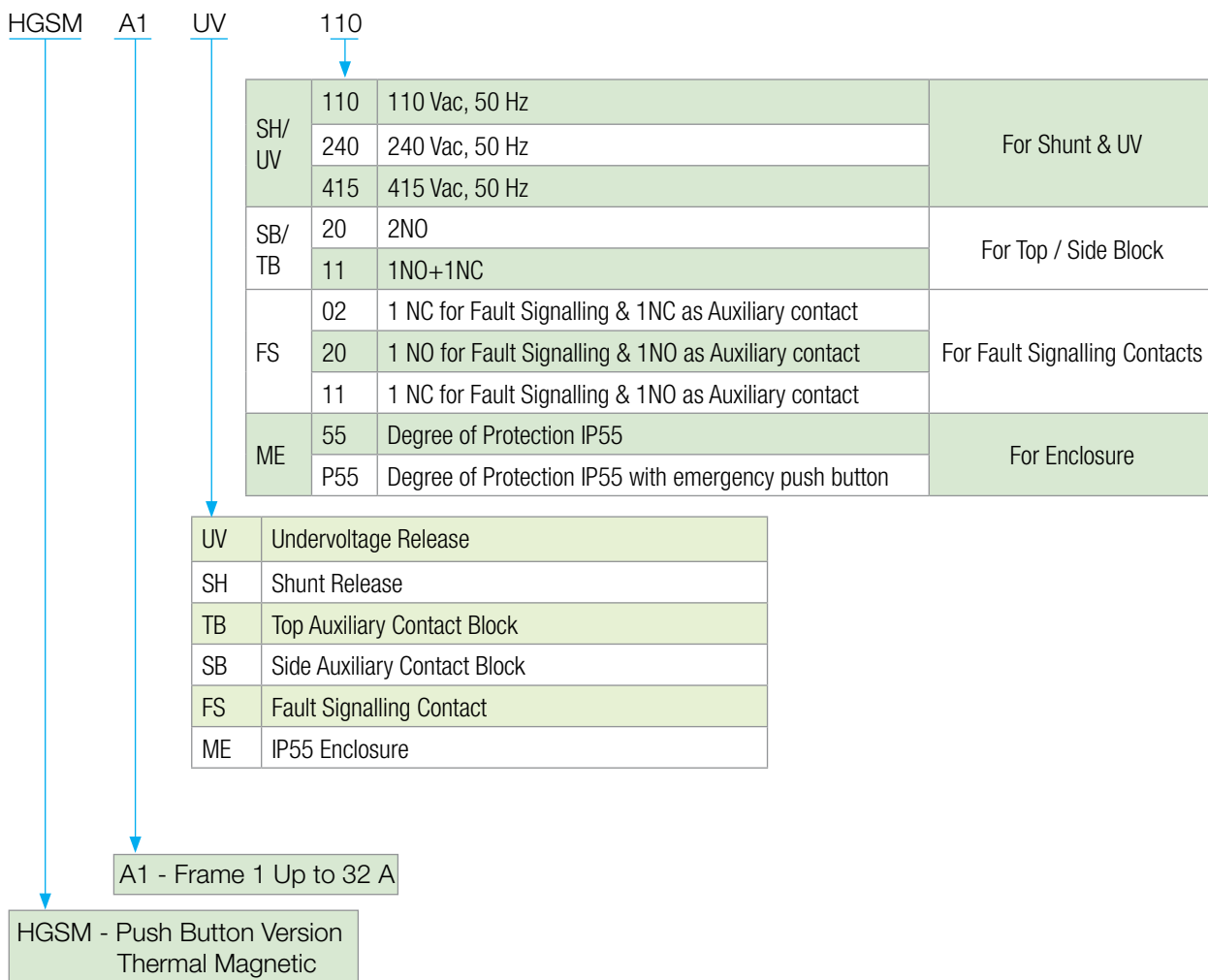


Model Logic : Push Button MPCB

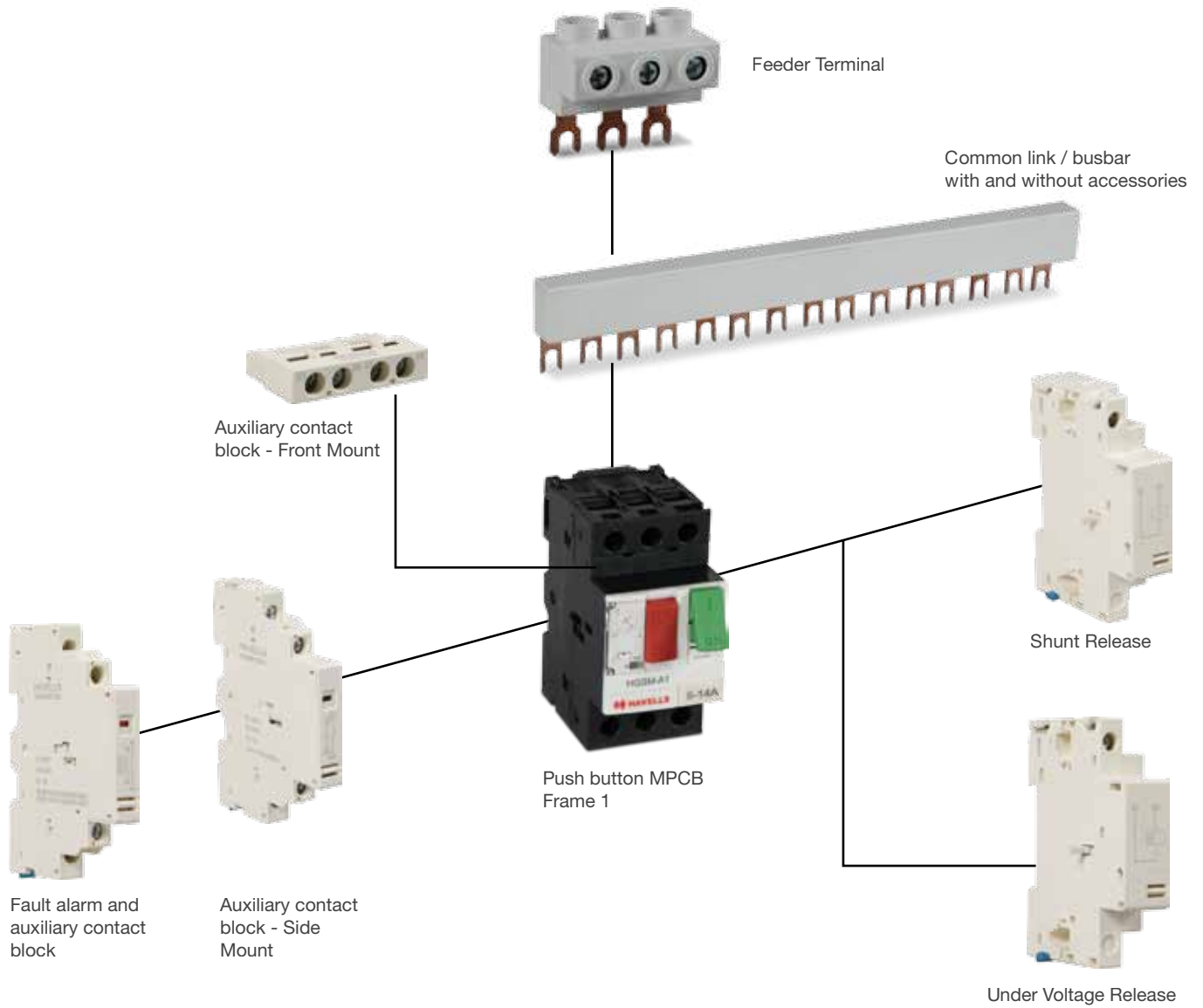
MPCB Logic



MPCB Accessories Logic



Accessories Overview : Push Button MPCB



Enclosure Details : Push Button MPCB

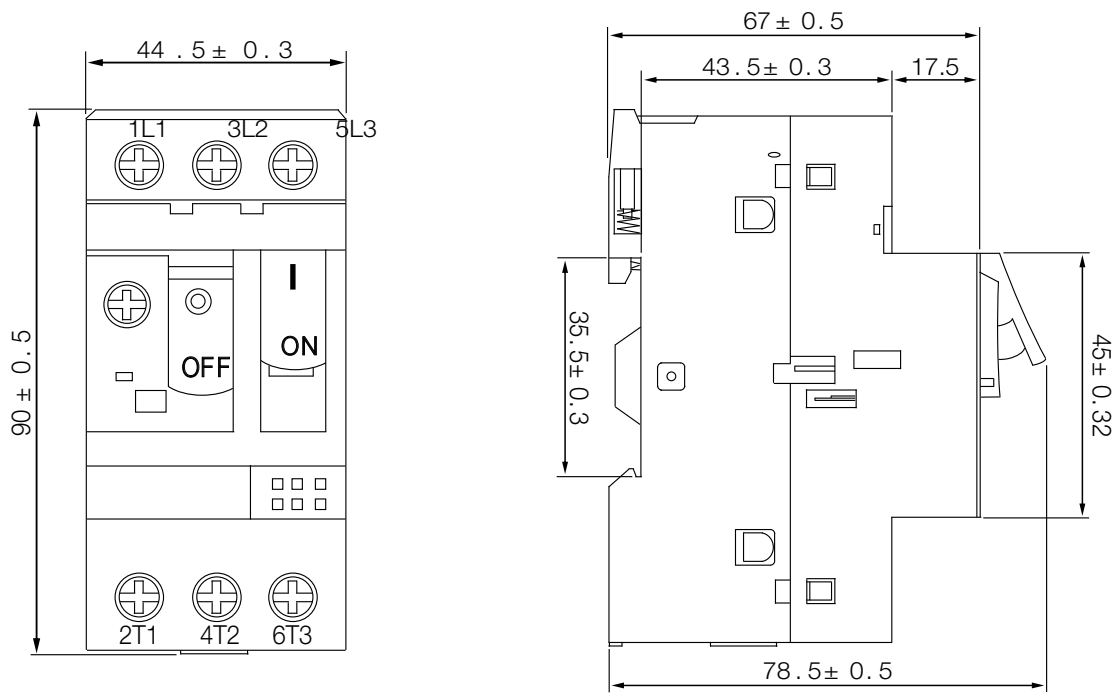


Accessories Details : Push Button MPCB

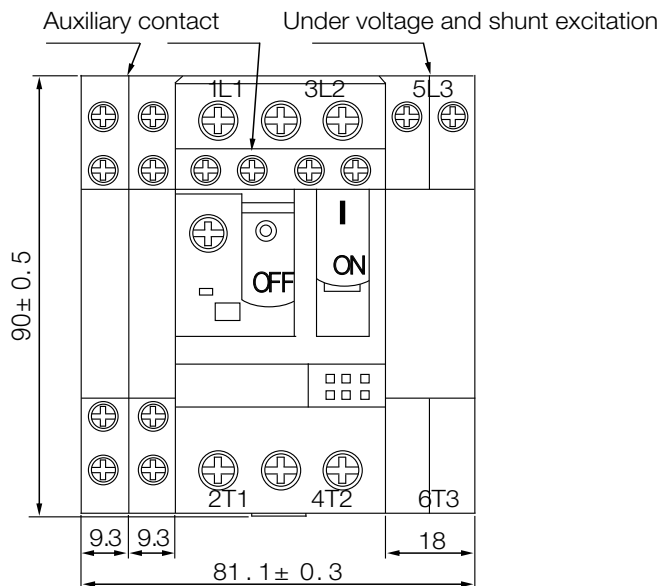
Accessory	Picture of Accessory	Description	SKU	Model Name
Under Voltage Release		UV RELEASE MPCB HGSM 110 VAC 50 Hz	ISSPCU2406	HGSMA1UV110
		UV RELEASE MPCB HGSM 240 VAC 50 Hz	ISSPCU2407	HGSMA1UV240
		UV RELEASE MPCB HGSM 415 VAC 50 Hz	ISSPCU2408	HGSMA1UV415
Shunt Release		SHUNT RELEASE MPCB HGSM 110 VAC 50 Hz	ISSPCU2409	HGSMA1SH110
		SHUNT RELEASE MPCB HGSM 240 VAC 50 Hz	ISSPCU2410	HGSMA1SH240
		SHUNT RELEASE MPCB HGSM 415 VAC 50 Hz	ISSPCU2411	HGSMA1SH415
Aux. Contact Block - Top Mount		AUX BLOCK TOP MOUNT 2NO MPCB HGSM	ISSPCU2412	HGSMA1TB20
		AUX BLOCK TOP MOUNT 1NO1NC MPCB HGSM	ISSPCU2413	HGSMA1TB11
Aux. Contact Block - Side Mount		AUX BLOCK SIDE MOUNT 2NO MPCB HGSM	ISSPCU2414	HGSMA1SB20
		AUX BLOCK SIDE MOUNT 1NO1NC MPCB HGSM	ISSPCU2415	HGSMA1SB11
Fault Alarm and Auxiliary Contact Block		FAULT ALARM AUX 1NC 1NO MPCB HGSM	ISSPCU2416	HGSMA1FS11
		FAULT ALARM AUX 1NC 1NC MPCB HGSM	ISSPCU2417	HGSMA1FS02
		FAULT ALARM AUX 1NO 1NO MPCB HGSM	ISSPCU2418	HGSMA1FS20
Enclosure		BOX WATERPROOF IP55 MPCB HGSM	ISSPCU2419	HGSMA1ME55
		EMERG-EN-CY BOX WATERPROOF IP55 MPCB HGSM	ISSPCU2420	HGSMA-1MEP55
Feeder terminal - Fr-1		HGSRFT-A1 3P Feeder terminals	ISSPDU0079	HGSRFT
Busbar, Fr-1, without Accessories		HGSRCL-A1 452 mm common link	ISSPDU0081	HGSRCL
		HGSRCL-A1 453 mm common link	ISSPDU0082	HGSRCL
		HGSRCL-A1 454 mm common link	ISSPDU0083	HGSRCL
		HGSRCL-A1 455 mm common link	ISSPDU0084	HGSRCL
Busbar, Fr-1, with Accessories		HGSRCL-A1 542 mm common link	ISSPDU0085	HGSRCL
		HGSRCL-A1 543 mm common link	ISSPDU0086	HGSRCL
		HGSRCL-A1 544 mm common link	ISSPDU0087	HGSRCL
		HGSRCL-A1 545 mm common link	ISSPDU0088	HGSRCL

Dimensions : Push Button MPCB

MPCB

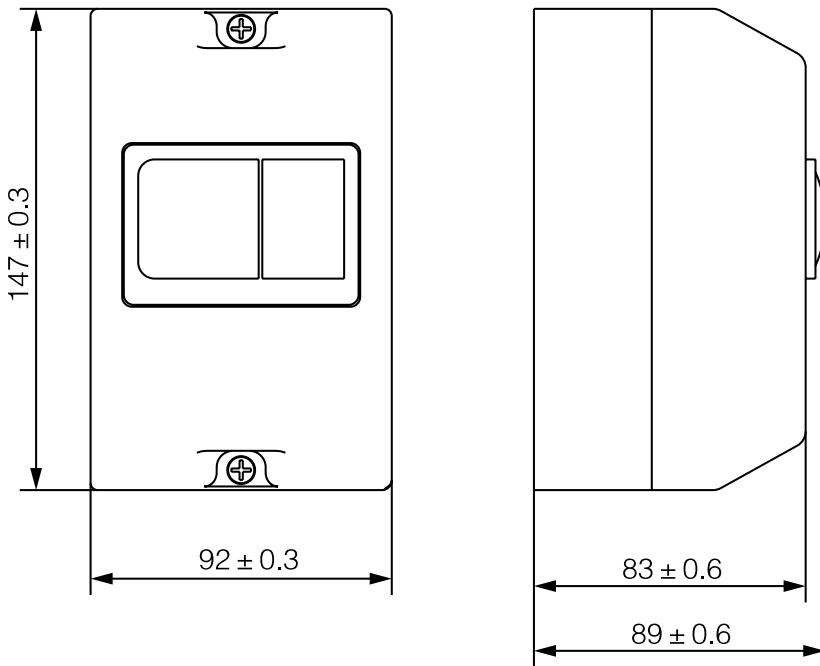


MPCB with Accessories

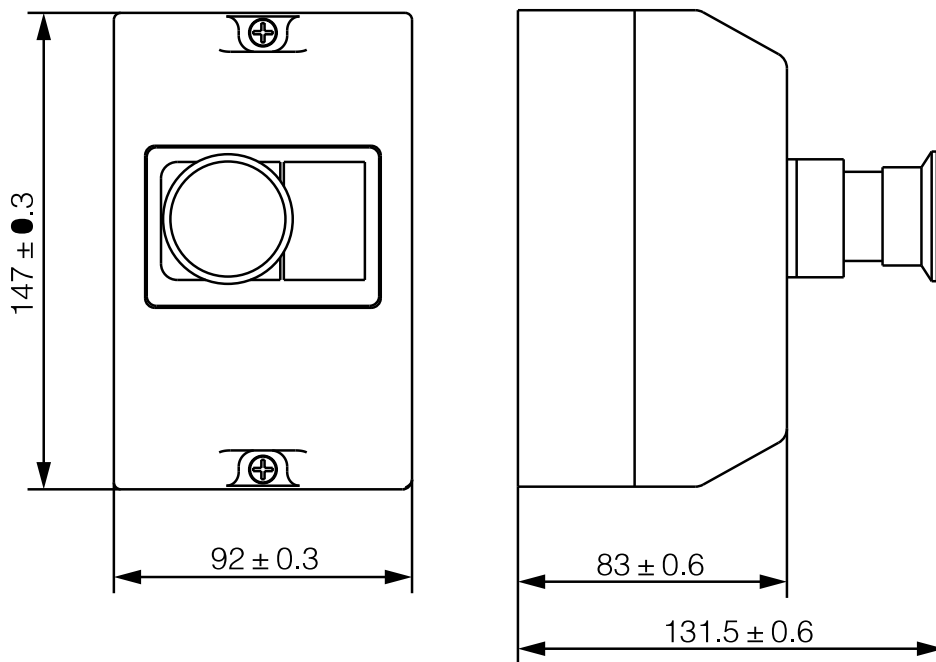


Dimensions Enclosures : Push Button MPCB

IP 55 Enclosure for Push Button MPCB



IP 55 Enclosure with Emergency Push Button for Push button MPCB



Ordering Codes : Push Button MPCB and Accessories

SKU	Range	Description
IHHMPBA2A0	0.1 A - 0.16 A	MPCB HGSM 0.1 A - 0.16 A
IHHMPBB2B0	0.16 A - 0.25 A	MPCB HGSM 0.16 A - 0.25 A
IHHMPBC2D0	0.25 A - 0.4 A	MPCB HGSM 0.25 A - 0.4 A
IHHMPBD2E0	0.4 A - 0.63 A	MPCB HGSM 0.4 A - 0.63 A
IHHMPBE2F0	0.63 A - 1 A	MPCB HGSM 0.63 A - 1 A
IHHMPBF2G0	1 A - 1.6 A	MPCB HGSM 1 A - 1.6 A
IHHMPBG2R0	1.6 A - 2.5 A	MPCB HGSM 1.6 A - 2.5 A
IHHMPBH2I0	2.5 A - 4 A	MPCB HGSM 2.5 A - 4 A
IHHMPBJ2J0	4 A - 6.3 A	MPCB HGSM 4 A - 6.3 A
IHHMPBK2K0	6.3 A - 10 A	MPCB HGSM 6.3 A - 10 A
IHHMPBL2L0	9 A - 14 A	MPCB HGSM 9 A - 14 A
IHHMPBN2M0	13 A - 18 A	MPCB HGSM 13 A - 18 A
IHHMPBQ2T0	17 A - 23 A	MPCB HGSM 17 A - 23 A
IHHMPBS2N0	20 A - 25 A	MPCB HGSM 20 A - 25 A
IHHMPBT2P0	24 A - 32 A	MPCB HGSM 24 A - 32 A

SKU	Product	Description
ISSPCU2406	Under voltage Release	UV RELEASE MPCB HGSM 110 V AC 50 Hz
ISSPCU2407		UV RELEASE MPCB HGSM 240 V AC 50 Hz
ISSPCU2408		UV RELEASE MPCB HGSM 415 V AC 50 Hz
ISSPCU2409	Shunt Release	SHUNT RELEASE MPCB HGSM 110 V AC 50 Hz
ISSPCU2410		SHUNT RELEASE MPCB HGSM 240 V AC 50 Hz
ISSPCU2411		SHUNT RELEASE MPCB HGSM 415 V AC 50 Hz
ISSPCU2412	Aux. Contact Block - Top Mount	AUX BLOCK TOP MOUNT 2NO MPCB HGSM
ISSPCU2413		AUX BLOCK TOP MOUNT 1NO1NC MPCB HGSM
ISSPCU2414	Aux. Contact Block - Side Mount	AUX BLOCK SIDE MOUNT 2NO MPCB HGSM
ISSPCU2415		AUX BLOCK SIDE MOUNT 1NO1NC MPCB HGSM
ISSPCU2416	Fault Alarm and Auxiliary Contact Block	FAULT ALARM AUX 1NC 1NO MPCB HGSM
ISSPCU2417		FAULT ALARM AUX 1NC 1NC MPCB HGSM
ISSPCU2418		FAULT ALARM AUX 1NO 1NO MPCB HGSM
ISSPCU2419	Enclosure	BOX WATERPROOF IP55 MPCB HGSM
ISSPCU2420		EMERGENCY BOX WATERPROOF IP55 MPCB HGSM



Rotary Version MPCB

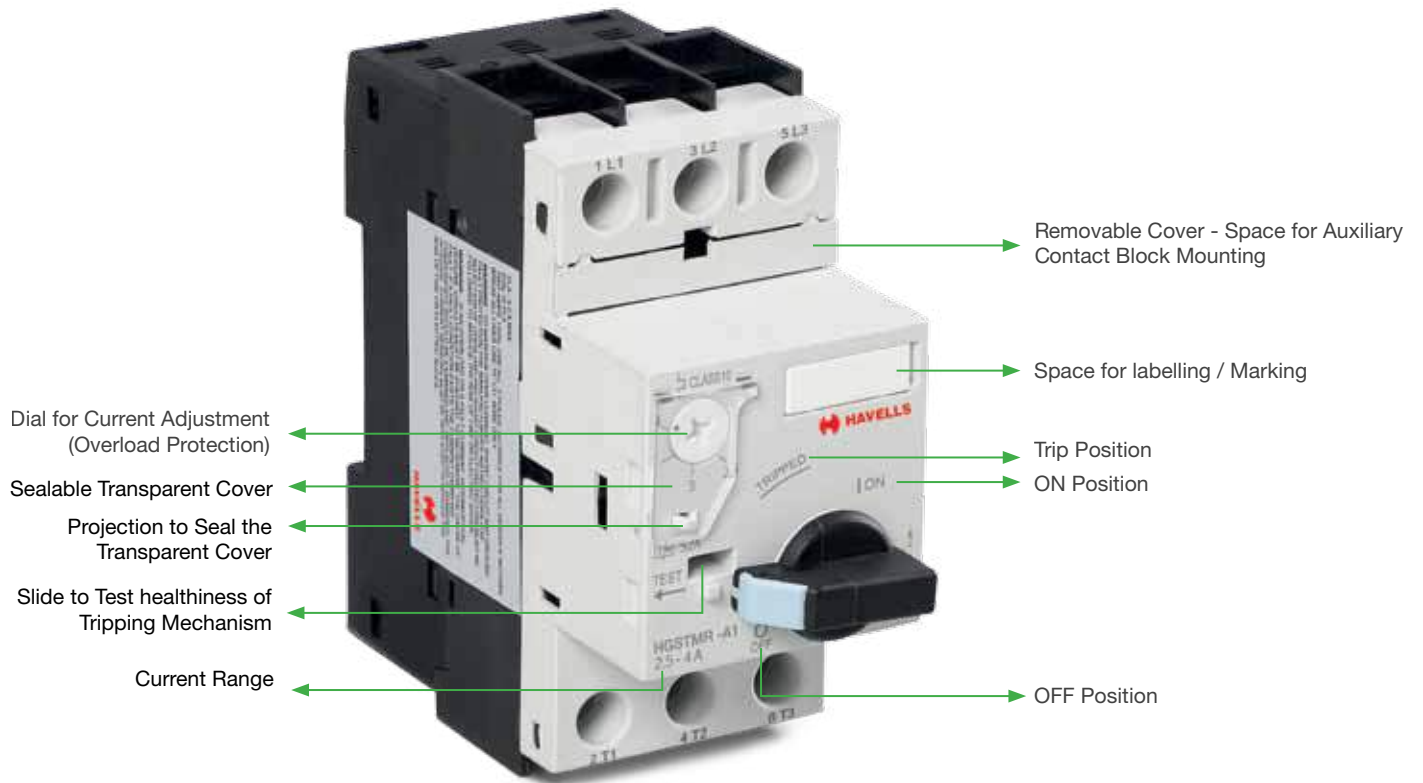
Salient Features:

- 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
- In-built Type-2 Co-ordination even when used standalone (Applicable for Thermal Magnetic Version)
- Finger proof IP20 Terminals
- Lockable in OFF Position
- Suitable for DIN channel and Base Mounting both
- CE Marking

Wide range of Accessories

- UV Release
- Shunt Release
- Auxiliary contact blocks - Top Mounted
- Auxiliary contact blocks - Side Mounted
- Fault Alarm Contacts (1NO+1NC for Fault alarm and 1NO+1NC as Auxiliary Contacts)
- Enclosures suitable for mounting only MPCB and MCPB with Accessories
- Rotary Operating handles (Choice of Colour Red+Yellow or Black+Grey)

Front Interface : Rotary MPCB



Overload Protection - Adjustment Dial

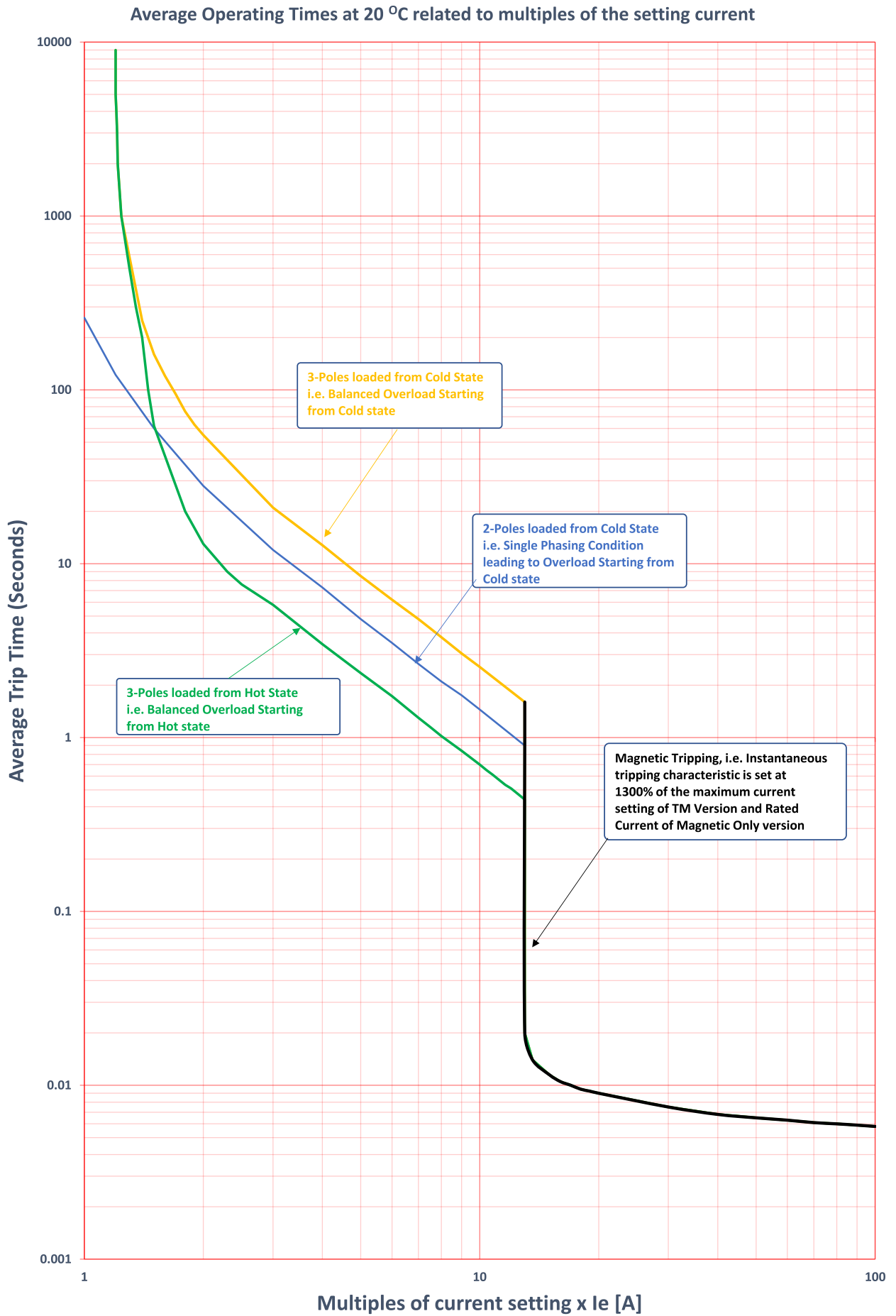
- Stepless Adjustment
- Adjustment range : 2.5 A - 4 A
- Set the Current on Dial - Basis Motor Full Load Current
- Rated Current (In) A : 4 A
- Magnetic Protection - Fixed Basis 4 A (54 A - @ 13 In)



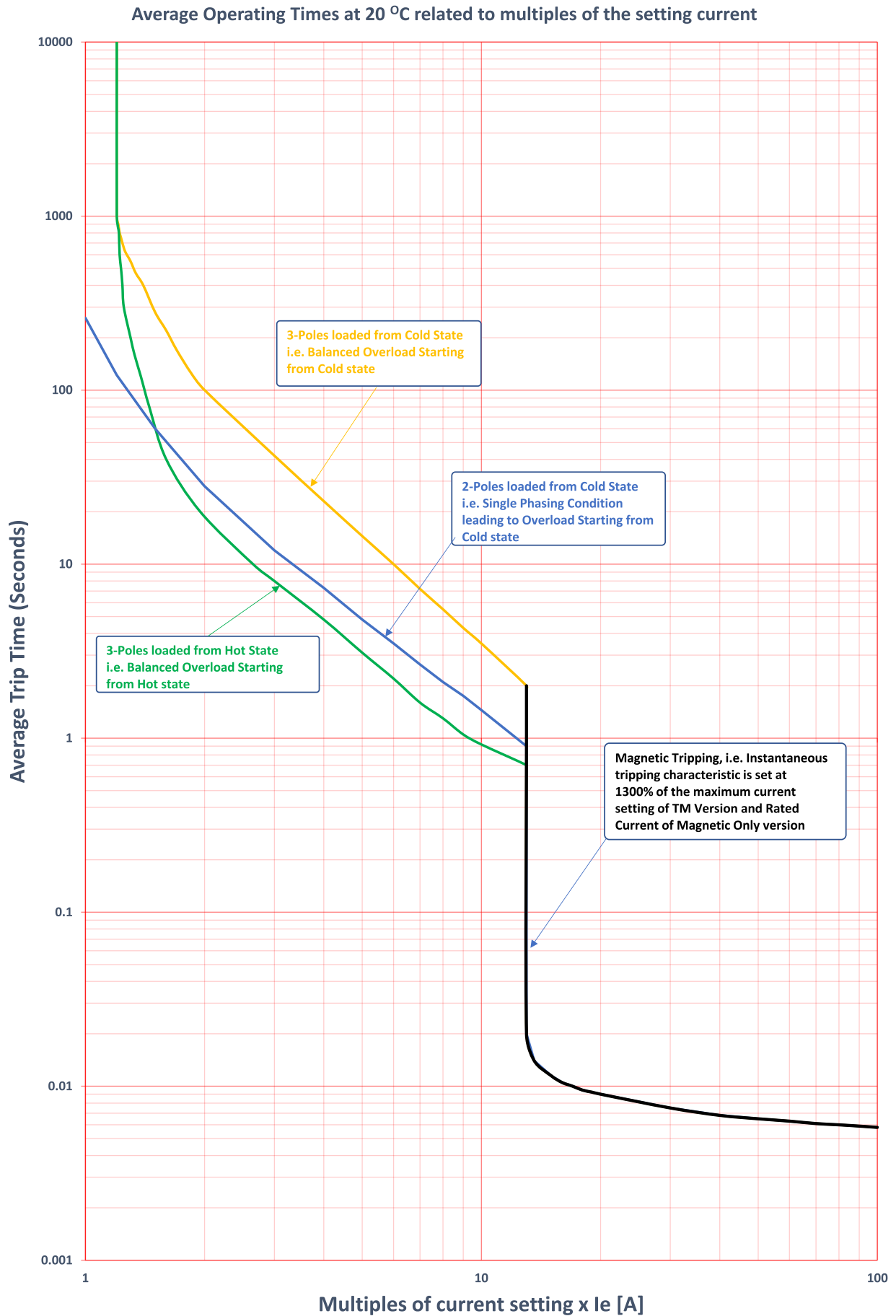
Short Circuit Breaking Capacity : Rotary MPCB

					Short Circuit Breaking Capacity kA							
					230 V / 240 V		400 V / 415 V		440 V / 460 V		500 V	
Model	Rated Current	Thermal Protection Adjustment Range	Suitable for Motor kW AC3	Instantaneous Trip Current	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics
HGSTMR-A1 for Thermal- Magnetic	0.16	0.1 A - 0.16 A	0.02	2.08	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA
	0.25	0.16 A - 0.25 A	0.06	3.25	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA
	0.4	0.25 A - 0.4 A	0.09	5.2	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA
	0.63	0.4 A - 0.63 A	0.18	8.19	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA
	1	0.63 A - 1 A	0.37	13	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA
	1.6	1.0 A - 1.6 A	0.55	20.8	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA
	2.5	1.6 A - 2.5 A	0.75	32.5	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA
	4	2.5 A - 4 A	1.1	52	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA
	6.3	4.0 A - 6.3 A	2.2	81.9	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA
	10	6.3 A - 10 A	3	130	100 kA	100 kA	100 kA	100 kA	50 kA	38 kA	50 kA	38 kA
	16	10.0 A - 16 A	7.5	208	100 kA	100 kA	50 kA	38 kA	35 kA	25 kA	10 kA	8 kA
	20	16 A - 20 A	9	260	100 kA	100 kA	50 kA	38 kA	35 kA	25 kA	10 kA	8 kA
25	20 A - 25 A	11	325	100 kA	100 kA	50 kA	38 kA	35 kA	25 kA	10 kA	8 kA	
32	25 A - 32 A	15	416	100 kA	100 kA	50 kA	38 kA	35 kA	25 kA	10 kA	8 kA	
HGSTMR-A2 for Thermal- Magnetic HGSMR-A2 for Magnetic 63 A Frame	16	11.0 A - 16 A	7.5	208	100 kA	100 kA	50 kA	38 kA	35 kA	27 kA	10 kA	8 kA
	20	14 A - 20 A	9	260	100 kA	100 kA	50 kA	38 kA	35 kA	27 kA	10 kA	8 kA
	25	18 A - 25 A	11	325	100 kA	100 kA	50 kA	38 kA	35 kA	27 kA	10 kA	8 kA
	32	22 A - 32 A	15	416	100 kA	100 kA	50 kA	38 kA	35 kA	27 kA	10 kA	8 kA
	40	28 A - 40 A	18.5	520	100 kA	100 kA	50 kA	38 kA	35 kA	27 kA	10 kA	8 kA
	45	36 A - 45 A	22	585	100 kA	100 kA	50 kA	38 kA	35 kA	27 kA	10 kA	8 kA
	50	40 A - 50 A	22	650	100 kA	100 kA	50 kA	38 kA	35 kA	27 kA	10 kA	8 kA
	63	52 A - 63 A	30	819	100 kA	100 kA	50 kA	38 kA	35 kA	27 kA	10 kA	8 kA

Trip Time Characteristic : Rotary MPCB- Fr 1

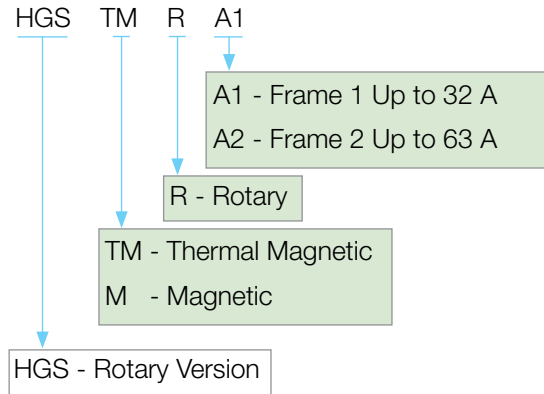


Trip Time Characteristic : Rotary MPCB- Fr 2



Model Logic : Rotary MPCB

MPCB Logic



MPCB Accessories Logic

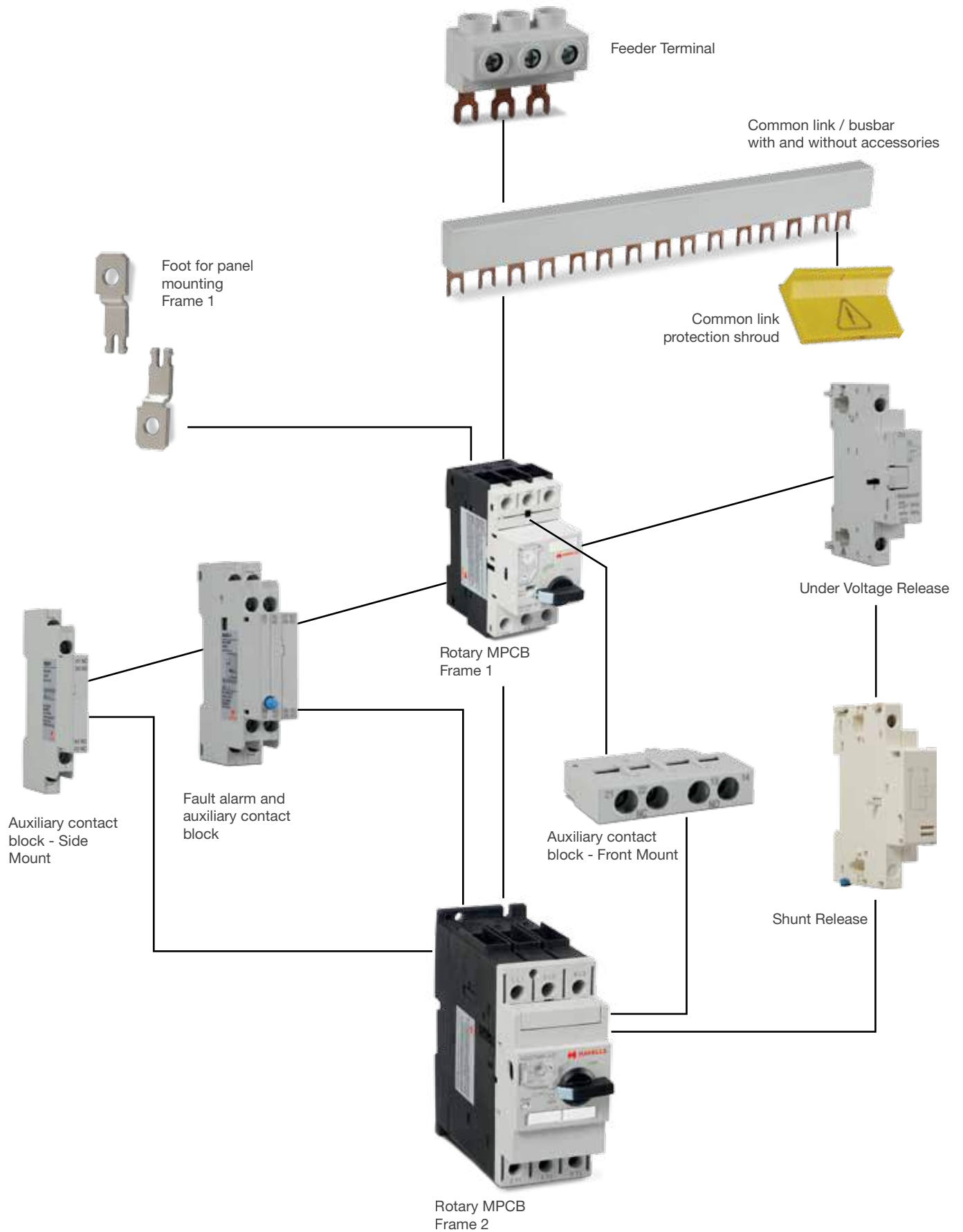
HGSR UVR 115

FB	11	1NO+1NC	For Top / Side Block
	02	2NC	
SB	20	2NO	Aux. Contact Block - Side Mount
	11	1NO+1NC	
UVR	240F	240 V, 50 Hz / 277 V, 60 Hz	Under Voltage Release
	110F	110 V, 50 Hz / 120 V, 60 Hz	
	180F	180 V, 50 Hz / 208 V, 60 Hz	
	208F	208 V, 50 Hz / 240 V, 60 Hz	
	415F	415 V, 50 Hz / 480 V, 60 Hz	
SR	024B	24/28 V, 50 Hz / 60 Hz	Shunt Release
	127B	100-127 V, 50 Hz / 60 Hz	
	240B	200-240 V, 50 Hz / 60 Hz	
ST	11	1NO+1NC for Fault Alarm and 1NO+1NC for Auxiliary	Trip Signalling Contact
E	BGA1	Enclosure with Black and Grey Rotary Handle	Enclosure for Fr-1, Black and Grey - Only for MPCB
	RYA1	Enclosure with Red and Yellow Rotary Handle	Enclosure for Fr-1, Red and Yellow - Only for MPCB
	BGA1A	Enclosure with Black and Grey Rotary Handle	Enclosure for Fr-1, Black and Grey - With Accessories
	RYA1A	Enclosure with Red and Yellow Rotary Handle	Enclosure for Fr-1, Red and Yellow - With Accessories
CL	CLA1 452	Busbar, Fr-1, without Accessories	Busbar for 2 MPCBs
	CLA1 453		Busbar for 3 MPCBs
	CLA1 454		Busbar for 4 MPCBs
	CLA1 455		Busbar for 5 MPCBs
	CLA1 542	Busbar, Fr-1, with Accessories	Busbar for 2 MPCBs
	CLA1 543		Busbar for 3 MPCBs
	CLA1 544		Busbar for 4 MPCBs
H	CLA1 545	Busbar for 5 MPCBs	
	HBGA1	Rotary Operating Handle in Black and Grey	For Fr-1
	HRYA1	Rotary Operating Handle in Red and Yellow	
	HBGA2	Rotary Operating Handle in Black and Grey	For Fr-2
	HRYA2	Rotary Operating Handle in Red and Yellow	

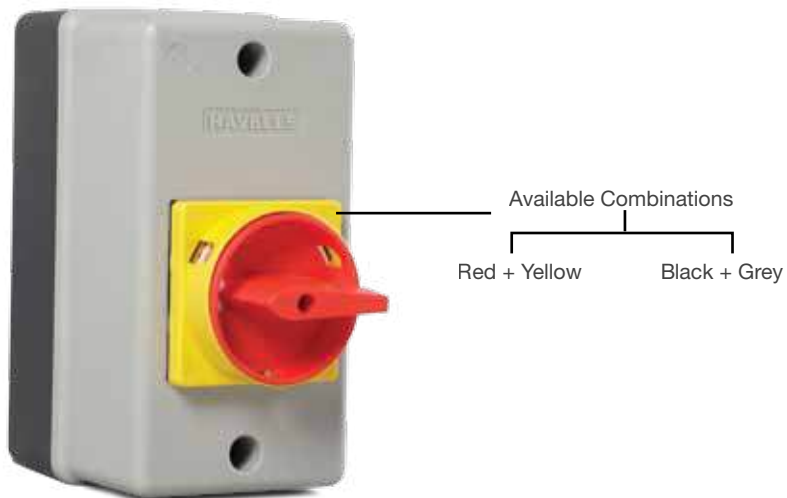
UVR	Undervoltage Release
SR	Shunt Release
FB	Top Auxiliary Contact Block
SB	Side Auxiliary Contact Block
ST	Trip Signalling Contact
E	IP65 Enclosure
FT	Feeder Terminal
TB	Terminal Barrier
CL	Common Link
H	Handle Rotary

HGSR - Rotary Version MPCB

Accessories Overview : Rotary MPCB



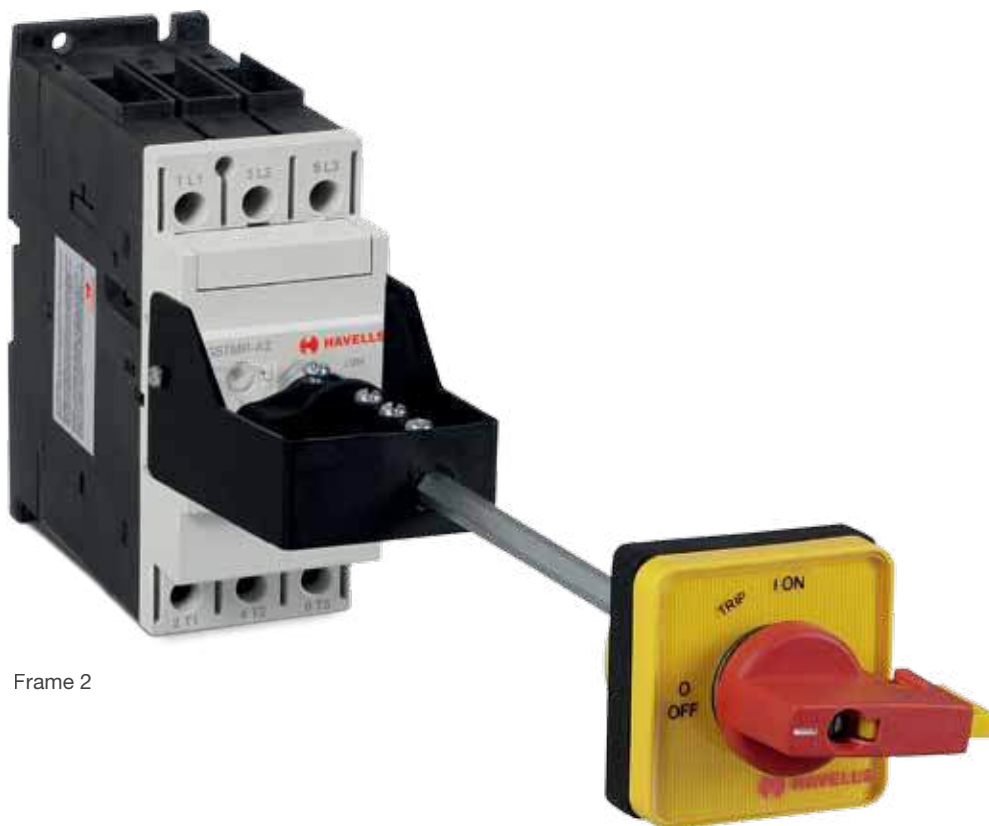
Enclosures : Rotary MPCB



Rotary Operating Handle : Rotary MPCB

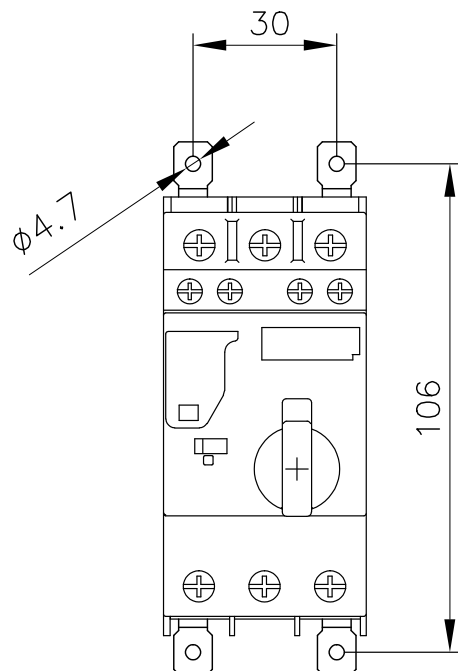
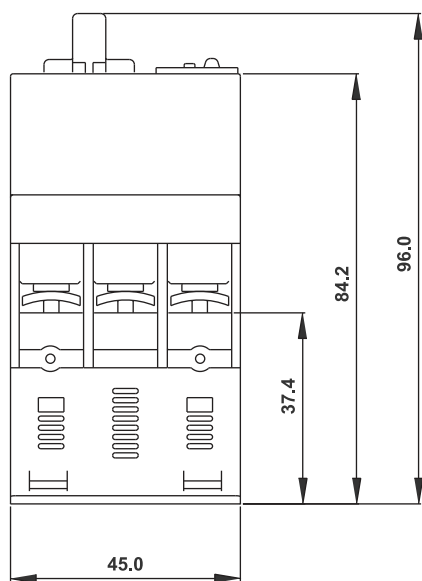
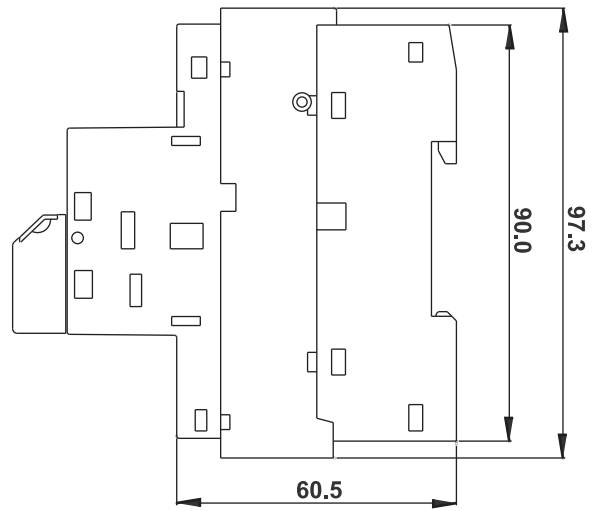
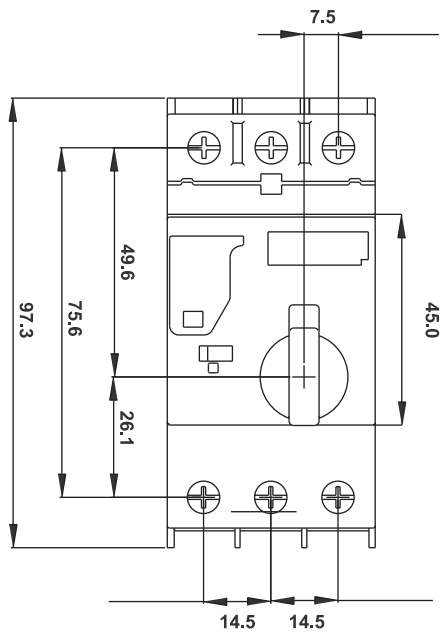


Frame 1

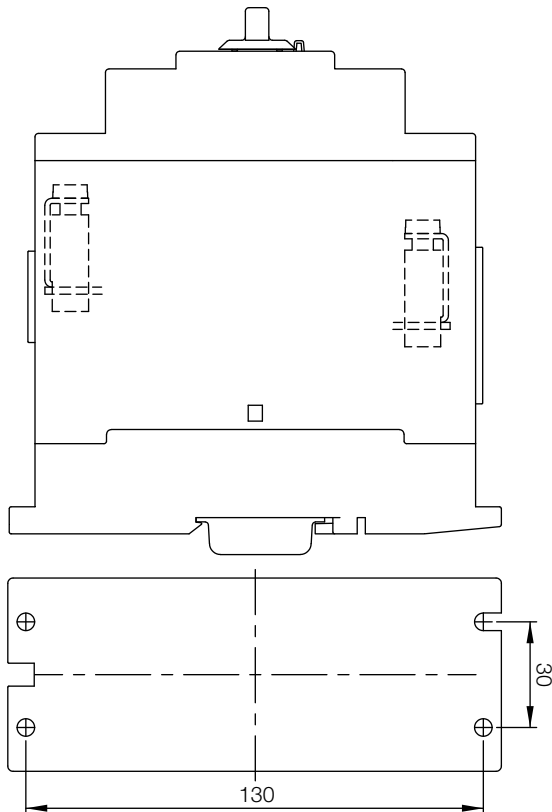
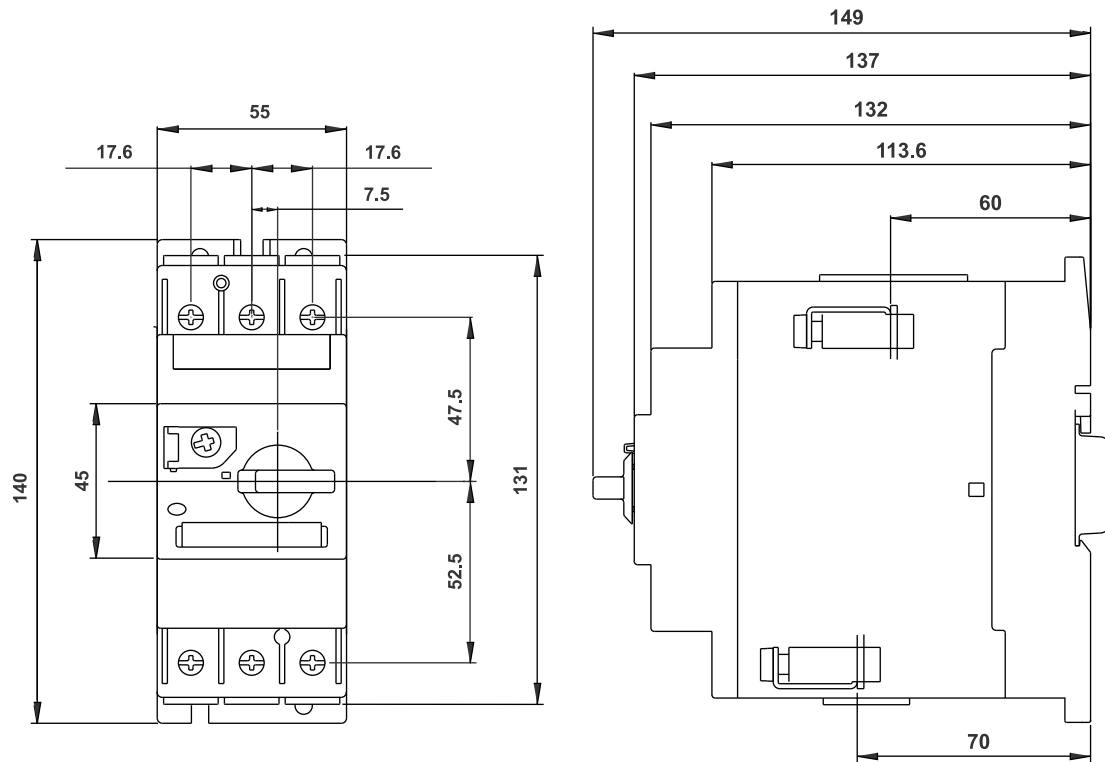


Frame 2

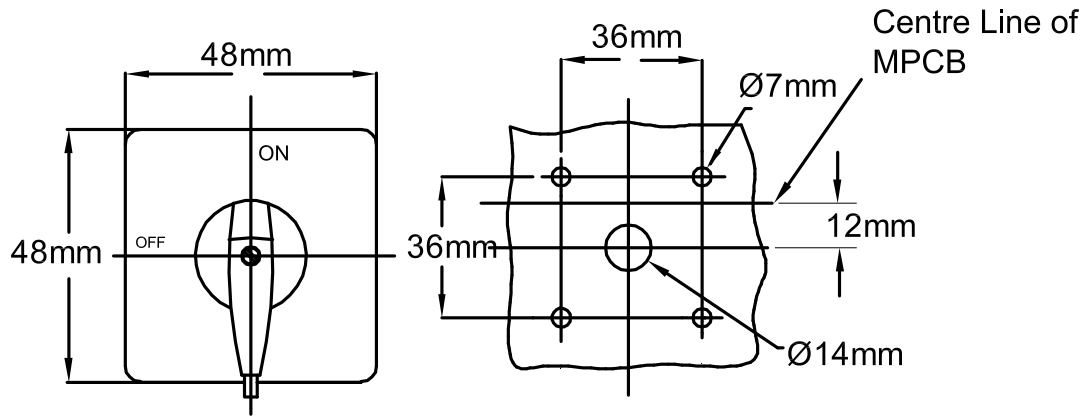
Dimensions - Rotary MPCB Frame-1



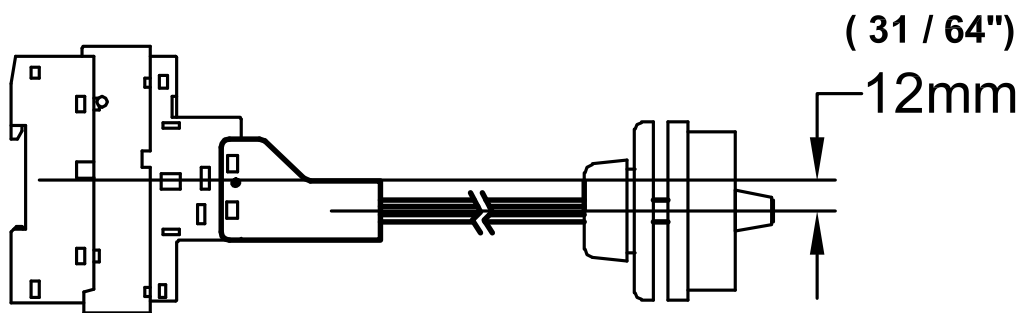
Dimensions - Rotary MPCB Frame-2



Door Cut-out : Rotary Handle



Door Cutout



Refer Instruction Manual for step by step guide

Accessories Details : Rotary MPCB

Accessory	Picture of Accessory	Description	SKU	Model Name
Aux. Contact Block - Top Mount		HGSRFB11-Top Aux block 1NO1NC-ROT	ISSPDU0060	HGSRFB11
Aux. Contact Block - Side Mount		HGSRSB02-LHS Aux Block 2NC-ROT	ISSPDU0061	HGSRSB02
		HGSRSB20-LHS Aux Block 2NO-ROT	ISSPDU0062	HGSRSB20
		HGSRSB11-LHS Aux Block 1NO1NC-ROT	ISSPDU0063	HGSRSB11
Under Voltage Release		HGSRUVR-RHS-UVR-240V,50Hz/277V,60Hz-ROT	ISSPDU0064	HGSRUVR240F
		HGSRUVR-RHS-UVR-110V,50Hz/120V,60Hz-ROT	ISSPDU0065	HGSRUVR110F
		HGSRUVR-RHS-UVR-180V,50Hz/208V,60Hz-ROT	ISSPDU0066	HGSRUVR180F
		HGSRUVR-RHS-UVR-208V,50Hz/240V,60Hz-ROT	ISSPDU0067	HGSRUVR208F
		HGSRUVR-RHS-UVR-415V,50Hz/480V,60Hz-ROT	ISSPDU0068	HGSRUVR415F
		HGSRUVR-RHS-UVR-24/28V,50/60Hz-ROT	ISSPDU0069	HGSRUVR024B
Shunt Release		HGSRSR-RHS-SHUNT-20-24V,50/60Hz-ROT	ISSPDU0070	HGSRSR024B
		HGSRSR-RHS-SHUNT-100-127V,50/60Hz-ROT	ISSPDU0071	HGSRSR127B
		HGSRSR-RHS-SHUNT-200-240V,50/60Hz-ROT	ISSPDU0072	HGSRSR240B
Fault Alarm and Auxiliary Contact Block		HGSRST-LHS-Trip ind Aux Cont 2NC+2NO-RTO	ISSPDU0073	HGSRST11
Enclosure for Fr-1, Black and Grey - Only for MPCB		HGSREBG-A1 IP65/S Enclosure-ROT	ISSPDU0074	HGSREBG
Enclosure for Fr-1, Red and Yellow - Only for MPCB		HGSRERY-A1 IP65/S Enclosure-ROT	ISSPDU0075	HGSRERY
Enclosure for Fr-1, Black and Grey - With Accessories		HGSREBG-A1 IP65/L Enclosure-ROT	ISSPDU0076	HGSREBG

Accessories Details : Rotary MPCB

Enclosure for Fr-1, Red and Yellow - With Accessories		HGSRERY-A1 IP65/L Enclosure-ROT	ISSPDU0077	HGSRERY
Feeder terminal - Fr-1		HGSRFT-A1 3P Feeder terminals	ISSPDU0079	HGSRFT
Busbar, Fr-1, without Accessories		HGSRCL-A1 452mm common link	ISSPDU0081	HGSRCL
		HGSRCL-A1 453mm common link	ISSPDU0082	HGSRCL
		HGSRCL-A1 454mm common link	ISSPDU0083	HGSRCL
		HGSRCL-A1 455mm common link	ISSPDU0084	HGSRCL
Busbar, Fr-1, with Accessories		HGSRCL-A1 542mm common link	ISSPDU0085	HGSRCL
		HGSRCL-A1 543mm common link	ISSPDU0086	HGSRCL
		HGSRCL-A1 544mm common link	ISSPDU0087	HGSRCL
		HGSRCL-A1 545mm common link	ISSPDU0088	HGSRCL
Rotary Operating Handle -Fr-1 in Black and Grey		HGSRHBG-A1 operating handle-ROT	ISSPDU0089	HGSRHBG
Rotary Operating Handle -Fr-1 in Red and Yellow		HGSRHRY-A1 operating handle-ROT	ISSPDU0090	HGSRHRY
Rotary Operating Handle -Fr-2 in Black and Grey		HGSRHBG-A2 operating handle-ROT	ISSPDU0091	HGSRHBG
Rotary Operating Handle -Fr-2 in Red and Yellow		HGSRHRY-A2 operating handle-ROT	ISSPDU0092	HGSRHRY

Ordering Codes : Rotary MPCB and Accessories

Model Name	SKU	Thermal Protection Adjustment Range	Item Description
HGSTMR-A1	IHHMROA1AT	0.1 A - 0.16 A	MPCB HGS ROT A1 100 kA TM (0.1 - 0.16 A)
	IHHMROB1BT	0.16 A - 0.25 A	MPCB HGS ROT A1 100 kA TM (0.16 - 0.25 A)
	IHHMROC1DT	0.25 A - 0.4 A	MPCB HGS ROT A1 100 kA TM (0.25 - 0.4 A)
	IHHMROD1ET	0.4 A - 0.63 A	MPCB HGS ROT A1 100 kA TM (0.4 - 0.63 A)
	IHHMROE1FT	0.63 A - 1 A	MPCB HGS ROT A1 100 kA TM (0.63 - 1 A)
	IHHMROF1GT	1.0 A - 1.6 A	MPCB HGS ROT A1 100 kA TM (1 - 1.6 A)
	IHHMROG1RT	1.6 A - 2.5 A	MPCB HGS ROT A1 100 kA TM (1.6 - 2.5 A)
	IHHMROH1IT	2.5 A - 4 A	MPCB HGS ROT A1 100 kA TM (2.5 - 4 A)
	IHHMROJ1JT	4.0 A - 6.3 A	MPCB HGS ROT A1 100 kA TM (4 - 6.3 A)
	IHHMROK1KT	6.3 A - 10 A	MPCB HGS ROT A1 50 kA TM (6.3 - 10 A)
	IHHMROM1MT	10.0 A - 16 A	MPCB HGS ROT A1 50 kA TM (10 - 16 A)
	IHHMROP1TT	16 A - 20 A	MPCB HGS ROT A1 50 kA TM (16 - 20 A)
	IHHMROS1NT	20 A - 25 A	MPCB HGS ROT A1 50 kA TM (20 - 25 A)
	IHHMROT1PT	25 A - 32 A	MPCB HGS ROT A1 50 kA TM (25 - 32 A)
HGSTMR-A2	IHHMROM3MT	11.0 A - 16 A	MPCB HGS ROT A2 50 kA TM (11 - 16 A)
	IHHMROP3TT	14 A - 20 A	MPCB HGS ROT A2 50 kA TM (14 - 20 A)
	IHHMROS3NT	18 A - 25 A	MPCB HGS ROT A2 50 kA TM (18 - 25 A)
	IHHMROT3PT	22 A - 32 A	MPCB HGS ROT A2 50 kA TM (22 - 32 A)
	IHHMROU3QT	28 A - 40 A	MPCB HGS ROT A2 50 kA TM (28 - 40 A)
	IHHMROV3ST	36 A - 45 A	MPCB HGS ROT A2 50 kA TM (36 - 45 A)
	IHHMROW3ST	40 A - 50 A	MPCB HGS ROT A2 50 kA TM (40 - 50 A)
	IHHMROX3XT	52 A - 63 A	MPCB HGS ROT A2 50 kA TM (45 - 63 A)

Model Name	Item Code	Rated Current	Item Description
HGSMR-A1	IHHMROA1AM	0.16 A	MPCB HGS ROT A1 100 kA M 0.16 A
	IHHMROB1BM	0.25 A	MPCB HGS ROT A1 100 kA M 0.25 A
	IHHMROC1DM	0.4 A	MPCB HGS ROT A1 100 kA M 0.4 A
	IHHMROD1EM	0.63 A	MPCB HGS ROT A1 100 kA M 0.63 A
	IHHMROE1FM	1 A	MPCB HGS ROT A1 100 kA M 1.0 A
	IHHMROF1GM	1.6 A	MPCB HGS ROT A1 100 kA M 1.6 A
	IHHMROG1MR	2.5 A	MPCB HGS ROT A1 100 kA M 2.5 A
	IHHMROH1IM	4 A	MPCB HGS ROT A1 100 kA M 4.0 A
	IHHMROJ1JM	6.3 A	MPCB HGS ROT A1 100 kA M 6.3 A
	IHHMROK1KM	10 A	MPCB HGS ROT A1 50 kA M 10 A
	IHHMROM1MM	16 A	MPCB HGS ROT A1 50 kA M 16 A
	IHHMROP1TM	20 A	MPCB HGS ROT A1 50 kA M 20 A
	IHHMROS1NM	25 A	MPCB HGS ROT A1 50 kA M 25 A
	IHHMROT1PM	32 A	MPCB HGS ROT A1 50 kA M 32 A
HGSMR-A2	IHHMROM3MM	16 A	MPCB HGS ROT A2 50 kA M 16 A
	IHHMROP3TM	20 A	MPCB HGS ROT A2 50 kA M 20 A
	IHHMROS3NM	25 A	MPCB HGS ROT A2 50 kA M 25 A
	IHHMROT3PM	32 A	MPCB HGS ROT A2 50 kA M 32 A
	IHHMROU3QM	40 A	MPCB HGS ROT A2 50 kA M 40 A
	IHHMROV3SM	45 A	MPCB HGS ROT A2 50 kA M 45 A
	IHHMROW3SM	50 A	MPCB HGS ROT A2 50 kA M 50 A
IHHMROX3XM	63 A	MPCB HGS ROT A2 50 kA M 63 A	

REGIONAL & BRANCH OFFICES:

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

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

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

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

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

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

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

Scan the QR Code
to download
Havells mCatalogue



Havells India Ltd.

Corp Office: QRG Towers, 2D, Sector-126, Expressway, Noida-201304 (U.P.)

Ph. +91-120-3331000, Email: marketing@havells.com, www.havells.com

Customer Care No.: 08045 77 1313

Join us on Facebook at www.facebook.com/havells and share your ways to save planet!

CIN - L31900DL1983PLC016304



HAVELLS