NAR ELECTRICAL GROUP LTD
SWITCH ON YOUR POTENTIAL

RCBO - RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERLOAD & SHORT CIRCUIT PROTECTION

Havells New RCBO is a single composite device which provides protection against over currents, short circuit and earth leakage faults. It comes in the same width and profile as that of a standard MCB. It is designed for use in domestic, commercial and industrial distribution systems at the most downstream circuit for ensuring high degree of protection to the user for a particular circuit. In normal use, it is safe to use and free of threat to user as well as to environment.

Features (Electromechanical RCBO)

- Proper cable termination with 25 mm^2 slot and safety shutter
- Dual termination on the outgoing terminal
- Field fittable auxiliary contact
- Inscription window with On and Off Indication

Features (Electronic RCBO)

- Pulsating DC protection - Type A
- Discrimination using time delay - Type S RCBO
- Controlled response VD RCBO (Electronic)
- Short-circuit breaking capacity 10 kA Protection in case of N-E faults Higher stacking density in distribution boards
- Enhanced immunity to nuisance tripping
- ISI and CE marking. RoHS Complaint, 'Green Product'

Execution
Electromechanical RCBO (SPN & 2P RCBOs)
Electromechanical RCBO (TPN & FP RCBOs)
Electronic RCBO - A Type (SPN - 2M)
Electronic RCBO - A Type (TPN - 4M)

Specification
IS 12640 : Part 2/IEC 61009-1/EN : 61009-1

Range
32 A, 40 A & 63 A

6 A to 40 A

Sensitivity
30 mA, 100 mA & 300 mA

Test Button
Test button for regular inspection/testing

Inscription Window
Inscription window with ON & OFF indication

Proper Cable Termination
Proper cable termination with 25 mm^2 slot and safety shutter

Technical Information	Electromechanical 2P RCBOs used as (SPN & 2P RCBOs)
Specification Reference	IS 12640 (Part 2) & IEC 61009-1
Rated Current (In)	32 A, 40 A & 63 A
Rated Residual Operating Current (I∆n)	30 mA, 100 mA, 300 mA
Instantaneous Tripping Current	'C' curve
Rated Voltage (Un)	240 V~
Rated Insulation Voltage (Ui)	660 V
Rated impulse withstand voltage	4 kV
Rated Frequency	50 Hz
No. of Pole	2 Pole
Rated Short Circuit Capacity (Icn)	10 kA
Rated Service Short Circuit Capacity (Ics)	7.5 kA
Rated Residual Making Breaking Capacity (I∆m)	630 A for 63 A (500 A-32 A to 40 A)
Operating Characteristics in case of Residual Currents	'A' & 'AC' Type
Nature of Supply	Pulsating DC
Method of Mounting	Panel Board Type (DIN Rail)
Degree of Protection	IP 20
Terminals for External Conductors	25 mm^2
Net Weight	0.424 kg
Ambient Working Temperature	-5 °C to +55 °C
Electrical & Mechanical Endurance	4000 (No. of Operations)
Trip Time	<40 ms
Shock Resistance	40 mm free fall
Vibration Resistance	3 G

Electromechanical 4P RCBOs usedas (TPN & FP RCBOs)	Electronic RCBO - A Type (SPN - 2M)	Electronic RCBO - A Type (TPN - 4M)
IS 12640 (Part 2) & IEC 61009-1	IS 12640 (Part 2) & IEC 61009-1	IS 12640 (Part 2) & IEC 61009-1
32 A, 40 A & 63 A	6 A, 10 A, 16 A, 20 A, 25 A, 32 A, 40 A	6 A, 10 A, 16 A, 20 A, 25 A, 32 A, 40 A
30 mA, 100 mA, 300 mA	30 mA, 100 mA, 300 mA	30 mA, 100 mA, 300 mA
'C' curve	'C 'curve	'C 'curve
415 V~	240 V~	415 V~
660 V	660 V	660 V
4 kV		
50 Hz	50 Hz	50 Hz
4 Pole	1P+N	3P+N
10 kA	10 kA	10 kA
7.5 kA		
630 A for 63 A (500 A–32 A to 40 A)	500 A	500 A
'A' & 'AC' Type	'A' Type	'A' Type
Pulsating DC		
Panel Board Type (DIN Rail)	Panel Board Type (DIN Rail)	Panel Board Type (DIN Rail)
IP 20	IP 20	IP 20
25 mm^2	35 mm^2	35 mm^2
0.740 kg	0.420 kg	0.84 kg
-5 °C to +55 °C	-5 °C to +55 °C	-5 °C to +55 °C
4000 (No. of Operations)	4000 (No. of Operations)	4000 (No. of Operations)
<40 ms	<40 ms	<40 ms
40 mm free fall	40 mm free fall	40 mm free fall
	3 g	3 g