



MCB
ISOLATOR
RCCB
RCBO
MPCB

DYNAGEAR

Lakshmi Electrical Control Systems Limited

Miniature Circuit Breaker

Technical Data / Function & Features





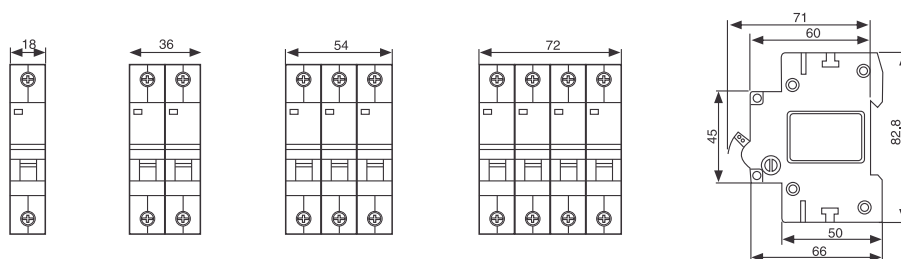
Function & Features

- Protection against both overload and short circuit, function of isolation
- High short circuit capacity
- Contact position indication
- Pin/fork type busbar terminal connection
- 35mm DIN rail mounting and screw mounting
- Handle can be locked with pad-lock to prevent unwanted operation for safety
- Full range accessories are available
- Add-on Auto Reset Motor Devices are available

Technical Data

Rated current (In)	1, 2, 3, 4, 6, 10, 13, 16, 20, 25, 32, 40, 45, 50, 63,
	80, 100, 125A
Rate voltage (Un)	230/240VAC, 400/415VAC
Breaking capacity (Icn = Ics)	6kA, 10kA
Rated frequency	50/60Hz
Tripping characteristics	B, C, D
Number of poles	1P, 1P+N, 2P, 3P, 3P+N, 4P
Rated impulse withstand voltage (Uimp)	4kV
Electrical endurance	4000 cycles
Mechanical endurance	20000 cycles
Terminal	Pillar type
Cable termination	25mm ²
Torque of screw	2.5Nm
IP degree	IP 20
Standards	IEC/EN 60898-1, IEC / EN 60947-2

Dimensions (mm)

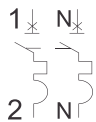


Miniature Circuit Breaker

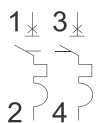
Selection - 6kA



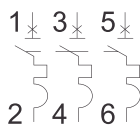
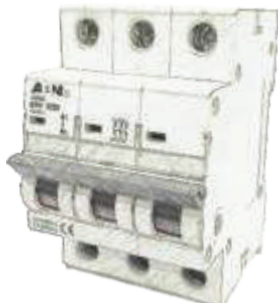
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	B Curve	C Curve	D Curve		
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2	ABN61B02	ABN61C02	ABN61D02	12	120
3	ABN61B03	ABN61C03	ABN61D03	12	120
4	ABN61B04	ABN61C04	ABN61D04	12	120
5	ABN61B05	ABN61C05	ABN61D05	12	120
6	ABN61B06	ABN61C06	ABN61D06	12	120
10	ABN61B10	ABN61C10	ABN61D10	12	120
16	ABN61B16	ABN61C16	ABN61D16	12	120
20	ABN61B20	ABN61C20	ABN61D20	12	120
25	ABN61B25	ABN61C25	ABN61D25	12	120
32	ABN61B32	ABN61C32	ABN61D32	12	120
40	ABN61B40	ABN61C40	ABN61D40	12	120
50	ABN61B50	ABN61C50	ABN61D50	12	120
63	ABN61B63	ABN61C63	ABN61D63	12	120



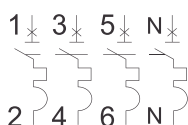
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	B Curve	C Curve	D Curve		
1	ABN61NB01	ABN61NC01	ABN61ND01	6	60
2	ABN61NB02	ABN61NC02	ABN61ND02	6	60
3	ABN61NB03	ABN61NC03	ABN61ND03	6	60
4	ABN61NB04	ABN61NC04	ABN61ND04	6	60
5	ABN61NB05	ABN61NC05	ABN61ND05	6	60
6	ABN61NB06	ABN61NC06	ABN61ND06	6	60
10	ABN61NB10	ABN61NC10	ABN61ND10	6	60
16	ABN61NB16	ABN61NC16	ABN61ND16	6	60
20	ABN61NB20	ABN61NC20	ABN61ND20	6	60
25	ABN61NB25	ABN61NC25	ABN61ND25	6	60
32	ABN61NB32	ABN61NC32	ABN61ND32	6	60
40	ABN61NB40	ABN61NC40	ABN61ND40	6	60
50	ABN61NB50	ABN61NC50	ABN61ND50	6	60
63	ABN61NB63	ABN61NC63	ABN61ND63	6	60



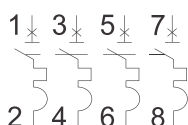
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2	ABN62B02	ABN62C02	ABN62D02	6	60
4	ABN62B04	ABN62C04	ABN62D04	6	60
5	ABN62B05	ABN62C05	ABN62D05	6	60
6	ABN62B06	ABN62C06	ABN62D06	6	60
10	ABN62B10	ABN62C10	ABN62D10	6	60
16	ABN62B16	ABN62C16	ABN62D16	6	60
20	ABN62B20	ABN62C20	ABN62D20	6	60
25	ABN62B25	ABN62C25	ABN62D25	6	60
32	ABN62B32	ABN62C32	ABN62D32	6	60
40	ABN62B40	ABN62C40	ABN62D40	6	60
50	ABN62B50	ABN62C50	ABN62D50	6	60
63	ABN62B63	ABN62C63	ABN62D63	6	60



In(A)		Model No.		Qty./Box	Qty/CTN
	B Curve	C Curve	D Curve		
1	ABN63B01	ABN63C01	ABN63D01	4	40
2	ABN63B02	ABN63C02	ABN63D02	4	40
3	ABN63B03	ABN63C03	ABN63D03	4	40
4	ABN63B04	ABN63C04	ABN63D04	4	40
5	ABN63B05	ABN63C05	ABN63D05	4	40
6	ABN63B06	ABN63C06	ABN63D06	4	40
10	ABN63B10	ABN63C10	ABN63D10	4	40
16	ABN63B16	ABN63C16	ABN63D16	4	40
20	ABN63B20	ABN63C20	ABN63D20	4	40
25	ABN63B25	ABN63C25	ABN63D25	4	40
32	ABN63B32	ABN63C32	ABN63D32	4	40
40	ABN63B40	ABN63C40	ABN63D40	4	40
50	ABN63B50	ABN63C50	ABN63D50	4	40
63	ABN63B63	ABN63C63	ABN63D63	4	40



In(A)		Model No.		Qty./Box	Qty/CTN
	B Curve	C Curve	D Curve		
1	ABN63NB01	ABN63NC01	ABN63ND01	3	30
2	ABN63NB02	ABN63NC02	ABN63ND02	3	30
3	ABN63NB03	ABN63NC03	ABN63ND03	3	30
4	ABN63NB04	ABN63NC04	ABN63ND04	3	30
5	ABN63NB05	ABN63NC05	ABN63ND05	3	30
6	ABN63NB06	ABN63NC06	ABN63ND06	3	30
10	ABN63NB10	ABN63NC10	ABN63ND10	3	30
16	ABN63NB16	ABN63NC16	ABN63ND16	3	30
20	ABN63NB20	ABN63NC20	ABN63ND20	3	30
25	ABN63NB25	ABN63NC25	ABN63ND25	3	30
32	ABN63NB32	ABN63NC32	ABN63ND32	3	30
40	ABN63NB40	ABN63NC40	ABN63ND40	3	30
50	ABN63NB50	ABN63NC50	ABN63ND50	3	30
63	ABN63NB63	ABN63NC63	ABN63ND63	3	30



In(A)		Model No.		Qty./Box	Qty/CTN
	B Curve	C Curve	D Curve		
1	ABN64B01	ABN64C01	ABN64D01	3	30
2	ABN64B02	ABN64C02	ABN64D02	3	30
3	ABN64B03	ABN64C03	ABN64D03	3	30
4	ABN64B04	ABN64C04	ABN64D04	3	30
5	ABN64B05	ABN64C05	ABN64D05	3	30
6	ABN64B06	ABN64C06	ABN64D06	3	30
10	ABN64B10	ABN64C10	ABN64D10	3	30
16	ABN64B16	ABN64C16	ABN64D16	3	30
20	ABN64B20	ABN64C20	ABN64D20	3	30
25	ABN64B25	ABN64C25	ABN64D25	3	30
32	ABN64B32	ABN64C32	ABN64D32	3	30
40	ABN64B40	ABN64C40	ABN64D40	3	30
50	ABN64B50	ABN64C50	ABN64D50	3	30
63	ABN64B63	ABN64C63	ABN64D63	3	30

Miniature Circuit Breaker

Selection - 10kA



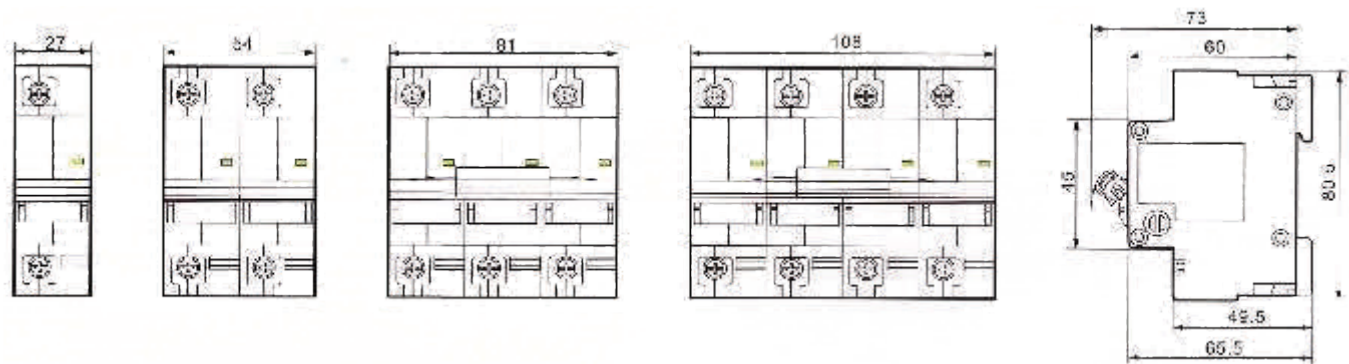
Function and Features

- Protect against both overload and short circuit
- High Short Circuit capacity
- Used as main switch in household and similar installation
- 35mm DIN rail mounting and screw mounting

Technical Data

Rated current (In)	63, 80, 100, 125A
Rated Operational voltage (Un)	230/240VAC, 400/415VAC
Breaking Capacity (Icu)	10kA
Rated Frequency	50/60Hz
Number of poles	1P, 2P, 3P, 4P, 1P+N, 3P+N
Rated impulse withstand voltage (Uimp)	4Kv
Electrical endurance	10000 cycles
Mechanical endurance	20000 cycles
Terminal pillar type	
Cable termination on	35mm ²
Torque of Screw	2.5Nm
IP degree	IP20
Standards	IEC/EN 60947-2

External Dimensions(mm) H(height)

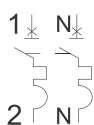


1P AC MCB - 10kA



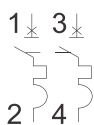
In(A)	Model No.	Qty./Box	Qty/CTN
63A	ABN101B0063	12	120
80A	ABN101B0080	12	120
100A	ABN101B0100	12	120
125A	ABN101B0125	12	120

1P+N AC MCB - 10kA



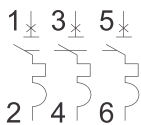
In(A)	Model No.	Qty./Box	Qty/CTN
63A	ABN101NB0063	6	60
80A	ABN101NB0080	6	60
100A	ABN101NB0100	6	60
125A	ABN101NB0125	6	60

2P AC MCB - 10kA



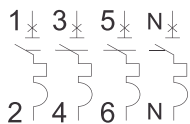
In(A)	Model No.	Qty./Box	Qty/CTN
63A	ABN102B0063	6	60
80A	ABN102B0080	6	60
100A	ABN102B0100	6	60
125A	ABN102B0125	6	60

3P AC MCB - 10kA



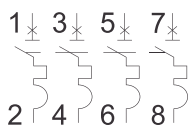
In(A)	Model No.	Qty./Box	Qty/CTN
63A	ABN103B0063	6	60
80A	ABN103B0080	6	60
100A	ABN103B0100	6	60
125A	ABN103B0125	6	60

3P+N AC MCB - 10kA



In(A)	Model No.	Qty./Box	Qty/CTN
63A	ABN103NB0063	3	30
80A	ABN103NB0080	3	30
100A	ABN103NB0100	3	30
125A	ABN103NB0125	3	30

4P AC MCB - 10kA



In(A)	Model No.	Qty./Box	Qty/CTN
63A	ABN104B0063	3	30
80A	ABN104B0080	3	30
100A	ABN104B0100	3	30
125A	ABN104B0125	3	30

Miniature Circuit Breaker

Technical Data / Selection - DC



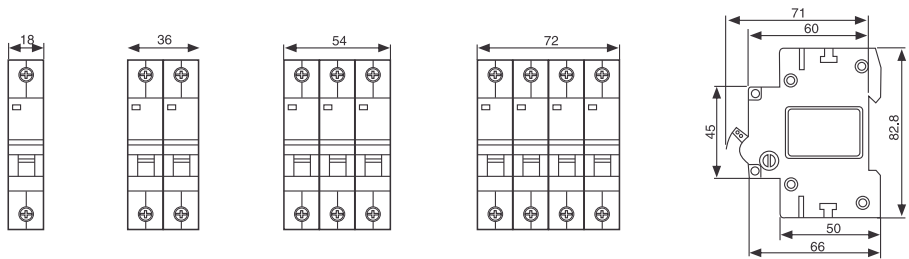
Function & Features

- Used to DC protection switchboard in PV system, comply with IEC 60947-2
- Support maximum system voltage up to 1000VDC
- Short circuit and overload and surge protection

Technical Data

Rated current (In)	6, 10, 16, 20, 25, 32, 40, 50, 63A			
Number of poles	1P	2P	3P	4P
Rated isolation voltage (Ui)	500V	500V	1000V	1000V
Rated operation voltage (Ue)	110V, 125V 220V, 250V	220V 250V 440V, 500V	600V, 750V	800V, 1000V
Rated short time making capacity (Icm): 10kA	110V, 220V	220V, 400V	750V	1000V
Tripping type	Thermal Magnetic Type			
Tripping characteristics	C		K	
Rated impulsed voltage (kV) Uimp	6kV		6kV	
Temperature	-20 ~ 70°C		-20 ~ 70°C	
Protection degree	IP 20		IP 20	
Electrical endurance	2500 cycles		2500 cycles	
Mechanical endurance	10000 cycles		10000 cycles	
Standards	IEC/EN 60898-1 IEC/EN 60947-2			

Dimensions (mm)



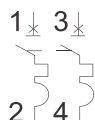
1P DC MCB - 6kA

In(A)	Model No.	Qty./Box	Qty/CTN
6A	ABN6DC106	12	120
10A	ABN6DC110	12	120
16A	ABN6DC116	12	120
20A	ABN6DC120	12	120
25A	ABN6DC125	12	120
32A	ABN6DC132	12	120
40A	ABN6DC140	12	120
50A	ABN6DC150	12	120
63A	ABN6DC163	12	120



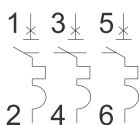
2P DC MCB - 6kA

In(A)	Model No.	Qty./Box	Qty/CTN
6A	ABN6DC206	6	60
10A	ABN6DC210	6	60
16A	ABN6DC216	6	60
20A	ABN6DC220	6	60
25A	ABN6DC225	6	60
32A	ABN6DC232	6	60
40A	ABN6DC240	6	60
50A	ABN6DC250	6	60
63A	ABN6DC263	6	60



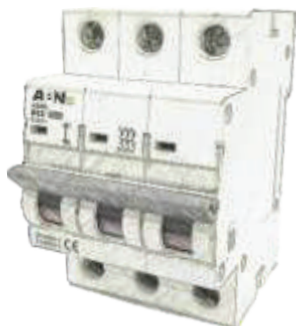
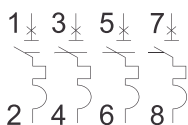
3P DC MCB - 6kA

In(A)	Model No.	Qty./Box	Qty/CTN
6A	ABN6DC306	4	40
10A	ABN6DC310	4	40
16A	ABN6DC316	4	40
20A	ABN6DC320	4	40
25A	ABN6DC325	4	40
32A	ABN6DC332	4	40
40A	ABN6DC340	4	40
50A	ABN6DC350	4	40
63A	ABN6DC363	4	40



4P DC MCB - 6kA

In(A)	Model No.	Qty./Box	Qty/CTN
6A	ABN6DC406	4	40
10A	ABN6DC410	4	40
16A	ABN6DC416	4	40
20A	ABN6DC420	4	40
25A	ABN6DC425	4	40
32A	ABN6DC432	4	40
40A	ABN6DC440	4	40
50A	ABN6DC450	4	40
63A	ABN6DC463	4	40

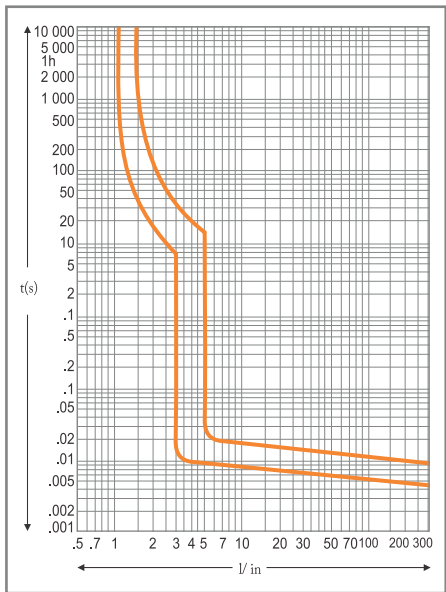


Miniature Circuit Breaker

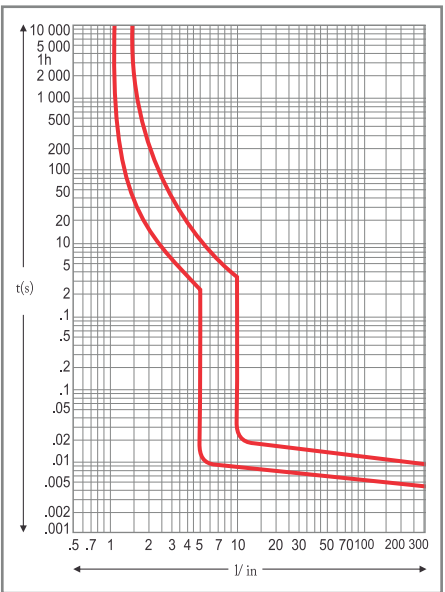
Tripping Curves / Accessories

Tripping curves - MCB

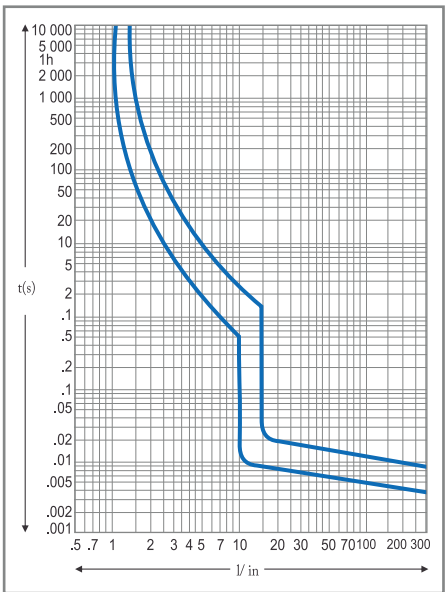
'B' characteristic



'C' characteristic



'D' characteristic



Type	Application	Thermal Test Current		Tripping Time $I_n \geq 63A$	Electro Magnetic Test Current		Tripping Time (t)
		Low	High				
B	Lighting & Distribution with no surge Current	$1.13 \times I_n$		>1hour	$3 \times I_n$		$\geq 0.1s$
			$1.45 \times I_n$	<1hour		$5 \times I_n$	<0.1s
C	Inductive Load with surge Current	$1.13 \times I_n$		>1hour	$5 \times I_n$		$\geq 0.1s$
			$1.45 \times I_n$	<1hour		$10 \times I_n$	<0.1s
D	High Inductive Load & High Inrush Current	$1.13 \times I_n$		>1hour	$10 \times I_n$		$\geq 0.1s$
			$1.45 \times I_n$	<1hour		$20 \times I_n$	<0.1s

Accessories - MCB

Function & Features

- Used to DC protection switchboard in PV system, comply with IEC 60947-2
- Support maximum system voltage up to 1000VDC
- Short circuit and overload and surge protection

Technical Data

SR6 / SR10 Shunt Releaser

Nominal Voltage : (Us): 110 ~ 415VAC

Max inrush current : $I_n = 3A$ (415VAC)

$I_n = 6A$ (230VAC)

$I_n = 9A$ (110VAC)

Width : 1.5 module (18mm/module)

Dielectric strength : 2000V/1min

Electro mechanical endurance : ≥ 4000 times

Release range : 110 ~ 415VAC

Rated Voltage (U_e) : 230VAC

Max Tripping Voltage : 280V

Width : 1.5 module (27mm)

Electro mechanical endurance : ≥ 4000 times

Rated Voltage (U_e) : 230VAC

Max Tripping Voltage : 170V

Width : 1.5 module (27mm)

Electro mechanical endurance : > 4000 times

OVR6 / OVR10 Over voltage Release

UVR6 / UVR10 Under voltage Release



Selection

Model	Description	Qty./Box	Qty./CTN
SR6	Release Range 110~415VAC	10	100
OVR6	Over Voltage Releaser	10	100
UVR6	Under Voltage Releaser	10	100
SR10	Release Range 110~415VAC	10	100
OVR10	Over Voltage Releaser	10	100
UVR10	Under Voltage Releaser	10	100

Auxiliary Contact

Rated current (I_n)

3A (400VAC)

6A (240VAC)

1A (110VDC)

Width

0.5 module (9mm)

Terminal

0.5-4mm²

Dielectric strength

2000V/1min

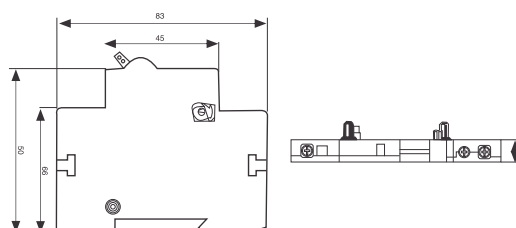
Electro-mechanical endurance

>5000 times

Selection

Model	Code	Qty./Box	Qty./CTN
ABNAUX1-11	Auxiliary Contact 1NO+1NC	10	100
ABNAUX2-11	Auxiliary Contact 1NO+1NC	10	100

Dimensions (mm)



Isolator

Technical Data / Selection

Approval / Markings

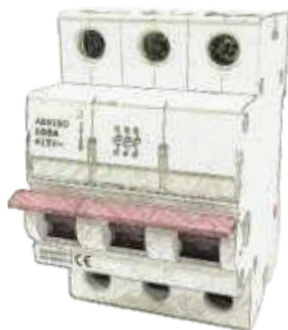
CE RoHS

Applications



Function & Features

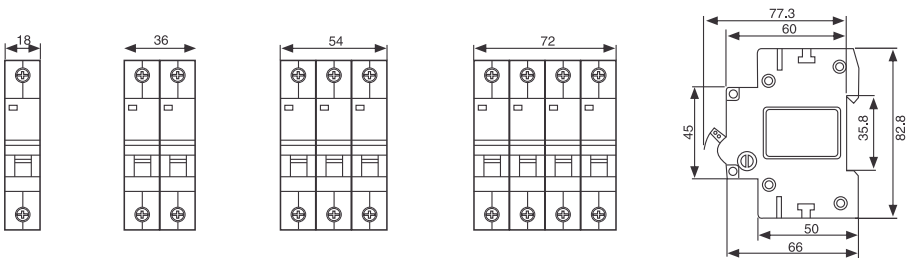
- Capable of switch electric circuit with load
- Adaptable to padlock device
- Contact position indication
- Capable of quickly releasing stored energy operation
- 35mm DIN rail mounting and screw mounting
- Highlighted of high making and breaking capacity
- Used as main switch for household and similar installation



Technical Data

Rated current (In)	20, 32, 63, 80, 100, 125A
Rate voltage (Un)	230/240VAC, 400/415VAC
Number of poles	1P, 2P, 3P, 4P
Electrical endurance	10000 cycles
Mechanical endurance	20000 cycles
Terminal	Pillar type
Cable termination	25mm ²
Torque of screw	2.5Nm
IP degree	IP 20
Standards	IEC/EN 60898-1

Dimensions (mm)



1P Isolator



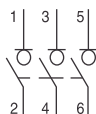
In(A)	Model No.	Qty./Box	Qty/CTN
20A	ABNISO1020	12	120
25A	ABNISO1025	12	120
32A	ABNISO1032	12	120
40A	ABNISO1040	12	120
50A	ABNISO1050	12	120
63A	ABNISO1063	12	120
80A	ABNISO1080	12	120
100A	ABNISO1100	12	120
125A	ABNISO1125	12	120

2P Isolator



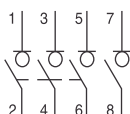
In(A)	Model No.	Qty./Box	Qty/CTN
20A	ABNISO2020	6	60
25A	ABNISO2025	6	60
32A	ABNISO2032	6	60
40A	ABNISO2040	6	60
50A	ABNISO2050	6	60
63A	ABNISO2063	6	60
80A	ABNISO2080	6	60
100A	ABNISO2100	6	60
125A	ABNISO2125	6	60

3P Isolator



In(A)	Model No.	Qty./Box	Qty/CTN
20A	ABNISO3020	4	40
25A	ABNISO3025	4	40
32A	ABNISO3032	4	40
40A	ABNISO3040	4	40
50A	ABNISO3050	4	40
63A	ABNISO3063	4	40
80A	ABNISO3080	4	40
100A	ABNISO3100	4	40
125A	ABNISO3125	4	40

4P Isolator



In(A)	Model No.	Qty./Box	Qty/CTN
20A	ABNISO4020	3	30
25A	ABNISO4025	3	30
32A	ABNISO4032	3	30
40A	ABNISO4040	3	30
50A	ABNISO4050	3	30
63A	ABNISO4063	3	30
80A	ABNISO4080	3	30
100A	ABNISO4100	3	30
125A	ABNISO4125	3	30

Residual Current Circuit Breaker

Technical Data / Selection

Type AC 

Type A - Ai 

Approval / Markings

CE RoHS

Applications



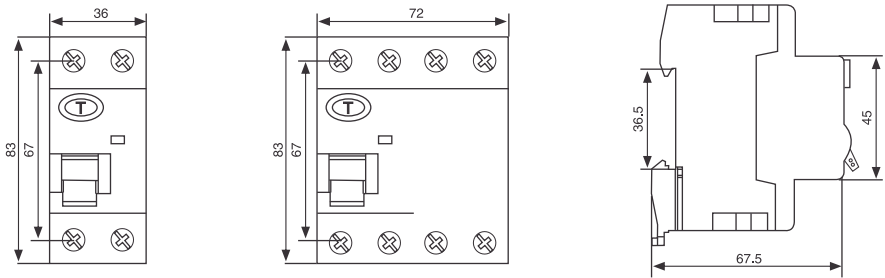
Function & Features

- Protection against earth fault/leakage current and residual current, function of isolation
- Protection against fire hazard caused by insulation faults
- Residual fault current indication
- 6kA high breaking capacity
- Pin / fork type busbar terminal connection
- Fire resistant plastic parts withstand abnormal heating and strong impact
- Automatically disconnect the circuit when earth fault/leakage current occurs or exceeds the rated sensitivity
- Independent of power supply and line voltage, and free from external interference, voltage fluctuation
- 35mm DIN rail mounting

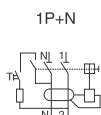
Technical Data

Rated current (In)	16, 20, 25, 32, 40, 63, 80A
Rate voltage (Un)	230/240VAC, 400/415VAC
Rated residual current	10mA, 30mA, 100mA, 300mA
Number of poles	1P+N (2P), 3P+N (4P)
Rated short circuit	6kA
Rated frequency	50/60Hz
Max. back-up fuse	In=16-63A 63AGg/gl; In=80A 80AGg/gl
Electrical endurance	10000 cycles
Mechanical endurance	20000 cycles
Terminal	Pillar type
Cable termination	25mm ²
Torque of screw	2.5Nm
IP degree	IP 20
Standards	IEC/EN 61008-1

Dimensions (mm)

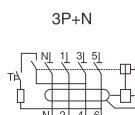


1P+N (2P) RCCB type ABN1 AC

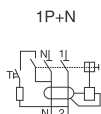


In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
16A	ABNR1-203016	ABNR1-210016	ABNR1-230016	1	60
25A	ABNR1-203025	ABNR1-210025	ABNR1-230025	1	60
32A	ABNR1-203032	ABNR1-210032	ABNR1-230032	1	60
40A	ABNR1-203040	ABNR1-210040	ABNR1-230040	1	60
63A	ABNR1-203063	ABNR1-210063	ABNR1-230063	1	60
80A	ABNR1-203080	ABNR1-210080	ABNR1-230080	1	60

3P+N (4P) RCCB type ABN1 AC



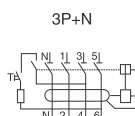
In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
16A	ABNR1-403016	ABNR1-410016	ABNR1-430016	1	30
25A	ABNR1-403025	ABNR1-410025	ABNR1-430025	1	30
32A	ABNR1-403032	ABNR1-410032	ABNR1-430032	1	30
40A	ABNR1-403040	ABNR1-410040	ABNR1-430040	1	30
63A	ABNR1-403063	ABNR1-410063	ABNR1-430063	1	30
80A	ABNR1-403080	ABNR1-410080	ABNR1-430080	1	30



1P+N (2P) RCCB type ABN1 A

In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
16A	ABNR1A-203016	ABNR1A-210016	ABNR1A-230016	1	60
25A	ABNR1A-203025	ABNR1A-210025	ABNR1A-230025	1	60
32A	ABNR1A-203032	ABNR1A-210032	ABNR1A-230032	1	60
40A	ABNR1A-203040	ABNR1A-210040	ABNR1A-230040	1	60
63A	ABNR1A-203063	ABNR1A-210063	ABNR1A-230063	1	60
80A	ABNR1A-203080	ABNR1A-210080	ABNR1A-230080	1	60

3P+N (4P) RCCB type ABN1 A



In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
16A	ABNR1A-403016	ABNR1A-410016	ABNR1A-430016	1	30
25A	ABNR1A-403025	ABNR1A-410025	ABNR1A-430025	1	30
32A	ABNR1A-403032	ABNR1A-410032	ABNR1A-430032	1	30
40A	ABNR1A-403040	ABNR1A-410040	ABNR1A-430040	1	30
63A	ABNR1A-403063	ABNR1A-410063	ABNR1A-430063	1	30
80A	ABNR1A-403080	ABNR1A-410080	ABNR1A-430080	1	30

Residual Current Circuit Breaker

Technical Data / Selection

Type AC 

Type A - Ai 

Approval / Markings

CE RoHS

Applications



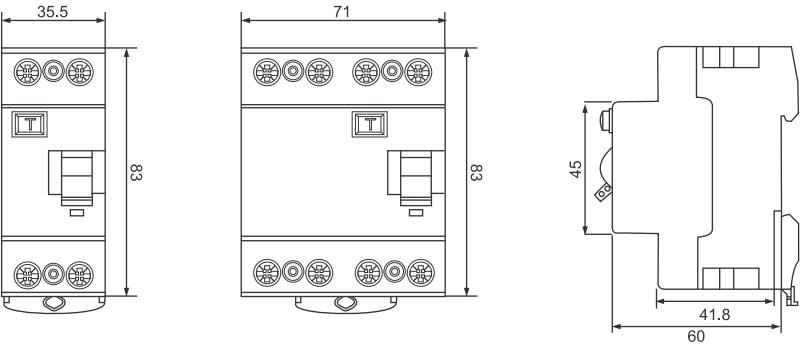
Function & Features

- Protection against earth fault/leakage current and residual current, function of isolation
- Protection against fire hazard caused by insulation faults
- Indicator to show residual current
- High breaking capacity up to 10kA
- Pin/fork type busbar terminal connection
- Fire resistant plastic parts withstand abnormal heating and strong impact
- Automatically disconnect the circuit when earth fault/leakage current occurs or exceeds the rated sensitivity
- Independent of power supply and line voltage, and free from external interference, voltage fluctuation
- 35mm DIN rail mounting
- Add-on Auto Reset Motor Devices are available

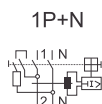
Technical Data

Rated current (In)	16, 20, 25, 32, 40, 63, 80A
Rate voltage (Un)	230/240VAC, 400/415VAC
Rated residual current	10mA, 30mA, 100mA, 300mA
Number of poles	1P+N (2P), 3P+N (4P)
Rated short circuit	10kA
Rated frequency	50/60Hz
Max. back-up fuse	In=16-63A 63AGg/gI; In=80A 80AGg/gI
Electrical endurance	10000 cycles
Mechanical endurance	20000 cycles
Terminal	Pillar type
Cable termination	25mm ²
Torque of screw	2.5Nm
IP degree	IP 20
Standards	IEC/EN 61008-1

Dimensions (mm)

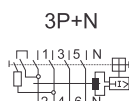


1P+N (2P) RCCB type ABN3 AC



In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
16A	ABNR3-203016	ABNR3-210016	ABNR3-230016	1	60
25A	ABNR3-203025	ABNR3-210025	ABNR3-230025	1	60
32A	ABNR3-203032	ABNR3-210032	ABNR3-230032	1	60
40A	ABNR3-203040	ABNR3-210040	ABNR3-230040	1	60
63A	ABNR3-203063	ABNR3-210063	ABNR3-230063	1	60
80A	ABNR3-203080	ABNR3-210080	ABNR3-230080	1	60

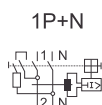
3P+N (4P) RCCB type ABN3 AC



In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
16A	ABNR3-403016	ABNR3-410016	ABNR3-430016	1	30
25A	ABNR3-403025	ABNR3-410025	ABNR3-430025	1	30
32A	ABNR3-403032	ABNR3-410032	ABNR3-430032	1	30
40A	ABNR3-403040	ABNR3-410040	ABNR3-430040	1	30
63A	ABNR3-403063	ABNR3-410063	ABNR3-430063	1	30
80A	ABNR3-403080	ABNR3-410080	ABNR3-430080	1	30

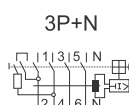


1P+N (2P) RCCB type ABN3 A



In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
16A	ABNR3A-203016	ABNR3A-210016	ABNR3A-230016	1	60
25A	ABNR3A-203025	ABNR3A-210025	ABNR3A-230025	1	60
32A	ABNR3A-203032	ABNR3A-210032	ABNR3A-230032	1	60
40A	ABNR3A-203040	ABNR3A-210040	ABNR3A-230040	1	60
63A	ABNR3A-203063	ABNR3A-210063	ABNR3A-230063	1	60
80A	ABNR3A-203080	ABNR3A-210080	ABNR3A-230080	1	60

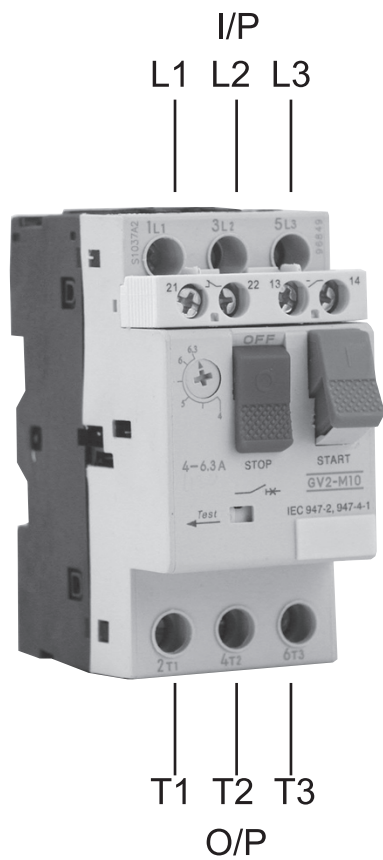
3P+N (4P) RCCB type ABN3 A



In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
16A	ABNR3A-403016	ABNR3A-410016	ABNR3A-430016	1	30
25A	ABNR3A-403025	ABNR3A-410025	ABNR3A-430025	1	30
32A	ABNR3A-403032	ABNR3A-410032	ABNR3A-430032	1	30
40A	ABNR3A-403040	ABNR3A-410040	ABNR3A-430040	1	30
63A	ABNR3A-403063	ABNR3A-410063	ABNR3A-430063	1	30
80A	ABNR3A-403080	ABNR3A-410080	ABNR3A-430080	1	30

Motor Protection Circuit Breakers

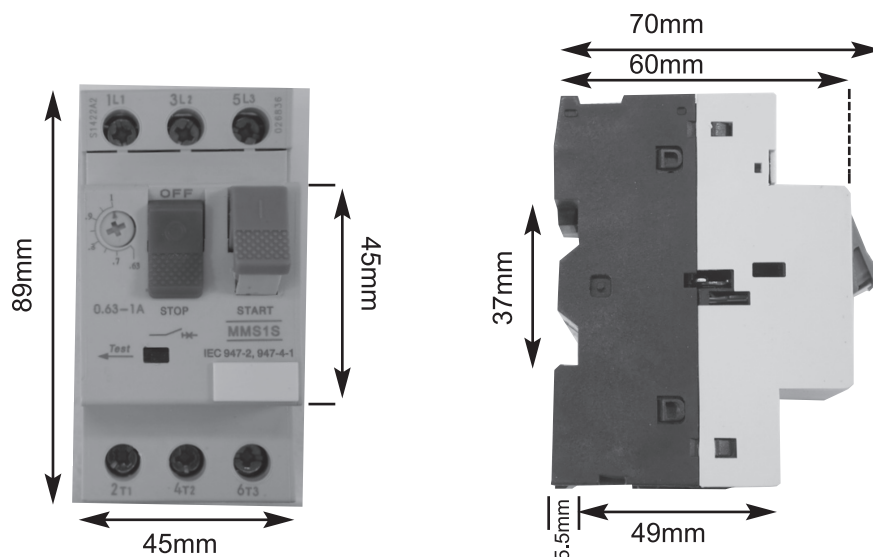
Specifications and dimensions



Main application:

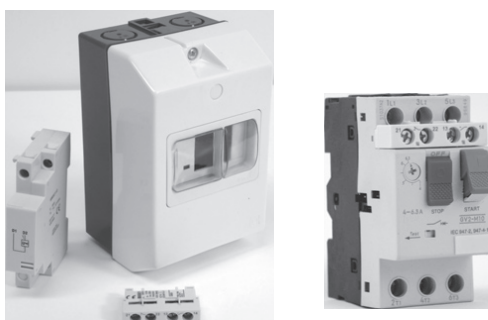
Thermal and short circuit protection of AC electric motors with power up to 15kW (380 / 440V) 32A; it can also be used as a main switch.

Simple snap fitting on 35mm mounting rail



Type	Setting Range (A)	Operating Current Of Short-circuit Release (A)	Rated Ultimate Short-Circuit Breaking Capacity (IEC 947-2, EN 60947-2) I_{cu} (KA)				Max. Back-Up Fuses (gl,aM) (A) If Short-Circuit Current Exceeds Breaking Capacity MS25			
			230V	400V	500V	690	230V	400V	500V	690V
MMS016S	0.1-0.16A	1.9								
MMS025S	0.16-0.25A	2.6	Switches Are Short-Circuit Proof For Any Value Of Prospective Short-Circuit Current I_{cc}				No Back-Up Fuses Required: Breaking Capacity > I_{cc}			
MMS04S	0.25-0.4A	4.4								
MMS063S	0.4-0.63A	8								
MMS1S	0.63-0.1A	11								
MMS1.6S	0.1-1.6A	19								
MMS2.5S	1.6-2.5A	30			3	2.5			25	20
MMS4S	2.5-4A	42			3	2.5			35	25
MMS6.3S	4-6.3A	69			3	2.5			50	35
MMS10S	6.3-10A	110		6	3	2.5		80	50	35
MMS14S	10-14A	210	6	4	2.5	2	80	80	63	35
MMS18S	14-18A	210	6	4	2.5	2	80	80	63	35
MMS23S	18-23A	220	6	4	2.5	2	80	80	63	50
MMS25S	20-25A	330	6	4	2.5	2	80	80	63	50
MMS32S	25-32A	330	6	4	2.5	2	80	80	63	50

Accessories	Description
MMSENC	IP55 enclosure for MMS 0.1 - 32A
MMSAUXAE11	Auxiliary contact 1N/C + 1N/O (top mount)
MMSAUXAE20	Auxiliary contact 2 N/O (top mount)
MMSAUX11SM	Auxiliary contact 1N/C + 1N/O (side mount)
MMSAUX20SM	Auxiliary contact 2 N/O (side mount)
MMSU24	Under voltage trip 24V
MMSU110	Under voltage trip 110V
MMSU240	Under voltage trip 220-240V
MMSU415	Under voltage trip 380-415V



RCBO Electro-magnetic

Technical Data / Selection

Type AC 

Type A - Ai 

Approval / Markings

CE RoHS

Applications



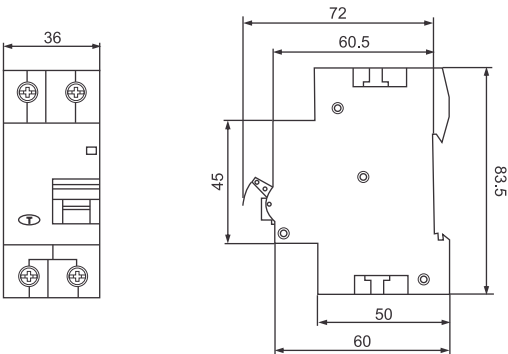
Function & Features

- Combined with RCCB / MCB in a compact design for personnel, fire and line protection
- Protection against earth fault/leakage current, residual current, short circuit, overload, and function of isolation
- Effectively protects electric equipment against insulating failure
- Handle can be locked with pad-lock to prevent unwanted operation for safety
- 35mm DIN rail mounting and screw mounting
- Contact position indication
- Electromagnetic type

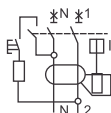
Technical Data

Rated current (In)	6, 10, 15, 16, 20, 25, 32, 40A
Rate voltage (Un)	230/240VAC
Breaking capacity (Icn)	6kA
Rated frequency	50/60Hz
Rated residual current	10mA, 30mA, 100mA, 300mA
Tripping characteristics	B, C
Number of poles	1P+N
Electrical endurance	4000 cycles
Mechanical endurance	10000 cycles
Terminal	Pillar type
Cable termination	25mm ²
Torque of screw	2.5Nm
IP degree	IP 20
Standards	IEC/EN 61009-1

Dimensions (mm)



1P+N RCBO type ABNEM - B Curve AC



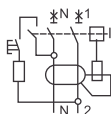
In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNREM1N030B06	ABNREM1N100B06	ABNREM1N300B06	6	60
10A	ABNREM1N030B10	ABNREM1N100B10	ABNREM1N300B10	6	60
15A	ABNREM1N030B15	ABNREM1N100B15	ABNREM1N300B15	6	60
16A	ABNREM1N030B16	ABNREM1N100B16	ABNREM1N300B16	6	60
20A	ABNREM1N030B20	ABNREM1N100B20	ABNREM1N300B20	6	60
25A	ABNREM1N030B25	ABNREM1N100B25	ABNREM1N300B25	6	60
32A	ABNREM1N030B32	ABNREM1N100B32	ABNREM1N300B32	6	60
40A	ABNREM1N030B40	ABNREM1N100B40	ABNREM1N300B40	6	60

1P+N RCBO type ABNEM - C Curve AC



In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNREM1N030C06	ABNREM1N100C06	ABNREM1N300C06	6	60
10A	ABNREM1N030C10	ABNREM1N100C10	ABNREM1N300C10	6	60
15A	ABNREM1N030C15	ABNREM1N100C15	ABNREM1N300C15	6	60
16A	ABNREM1N030C16	ABNREM1N100C16	ABNREM1N300C16	6	60
20A	ABNREM1N030C20	ABNREM1N100C20	ABNREM1N300C20	6	60
25A	ABNREM1N030C25	ABNREM1N100C25	ABNREM1N300C25	6	60
32A	ABNREM1N030C32	ABNREM1N100C32	ABNREM1N300C32	6	60
40A	ABNREM1N030C40	ABNREM1N100C40	ABNREM1N300C40	6	60

1P+N RCBO type ABNEM - B Curve A



In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNREMA1N030B06	ABNREMA1N100B06	ABNREMA1N300B06	6	60
10A	ABNREMA1N030B10	ABNREMA1N100B10	ABNREMA1N300B10	6	60
15A	ABNREMA1N030B15	ABNREMA1N100B15	ABNREMA1N300B15	6	60
16A	ABNREMA1N030B16	ABNREMA1N100B16	ABNREMA1N300B16	6	60
20A	ABNREMA1N030B20	ABNREMA1N100B20	ABNREMA1N300B20	6	60
25A	ABNREMA1N030B25	ABNREMA1N100B25	ABNREMA1N300B25	6	60
32A	ABNREMA1N030B32	ABNREMA1N100B32	ABNREMA1N300B32	6	60
40A	ABNREMA1N030B40	ABNREMA1N100B40	ABNREMA1N300B40	6	60

1P+N RCBO type ABNEM - C Curve A

In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNREMA1N030C06	ABNREMA1N100C06	ABNREMA1N300C06	6	60
10A	ABNREMA1N030C10	ABNREMA1N100C10	ABNREMA1N300C10	6	60
15A	ABNREMA1N030C15	ABNREMA1N100C15	ABNREMA1N300C15	6	60
16A	ABNREMA1N030C16	ABNREMA1N100C16	ABNREMA1N300C16	6	60
20A	ABNREMA1N030C20	ABNREMA1N100C20	ABNREMA1N300C20	6	60
25A	ABNREMA1N030C25	ABNREMA1N100C25	ABNREMA1N300C25	6	60
32A	ABNREMA1N030C32	ABNREMA1N100C32	ABNREMA1N300C32	6	60
40A	ABNREMA1N030C40	ABNREMA1N100C40	ABNREMA1N300C40	6	60

RCBO Electronic

Technical Data / Selection

Type AC



Function & Features

- Provides protection against earth fault/leakage current, short circuit, overload, function of isolation
- Provides complementary protection against direct contact by human body
- Effectively protects electric equipment against insulating failure
- Provides comprehensive protection for household and commercial distribution systems
- Handle can be locked with pad-lock to prevent unwanted operation for safety

Approval / Markings

CE RoHS

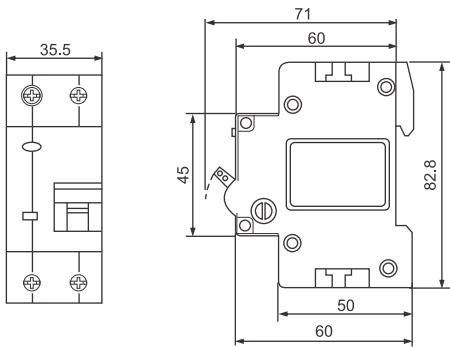
Applications



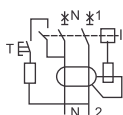
Technical Data

Rated current (In)	6, 10, 16, 20, 25, 32, 40A
Rate voltage (Un)	230/240VAC
Breaking capacity (Icn)	6kA
Rated frequency	50/60Hz
Rated residual current	10mA, 30mA, 100mA, 300mA
Tripping characteristics	B, C
Number of poles	1P+N
Electrical endurance	4000 cycles
Mechanical endurance	10000 cycles
Terminal	Pillar type
Cable termination	25mm ²
Torque of screw	2.5Nm
IP degree	IP 20
Standards	IEC/EN 61009-1

Dimensions (mm)

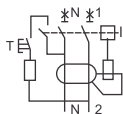


1P+N RCBO type ABNE - B Curve AC



In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNRE1N030B06	ABNRE1N100B06	ABNRE1N300B06	6	60
10A	ABNRE1N030B10	ABNRE1N100B10	ABNRE1N300B10	6	60
16A	ABNRE1N030B16	ABNRE1N100B16	ABNRE1N300B16	6	60
20A	ABNRE1N030B20	ABNRE1N100B20	ABNRE1N300B20	6	60
25A	ABNRE1N030B25	ABNRE1N100B25	ABNRE1N300B25	6	60
32A	ABNRE1N030B32	ABNRE1N100B32	ABNRE1N300B32	6	60
40A	ABNRE1N030B40	ABNRE1N100B40	ABNRE1N300B40	6	60

1P+N RCBO type ABNE - C Curve AC



In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNRE1N030C06	ABNRE1N100C06	ABNRE1N300C06	6	60
10A	ABNRE1N030C10	ABNRE1N100C10	ABNRE1N300C10	6	60
16A	ABNRE1N030C16	ABNRE1N100C16	ABNRE1N300C16	6	60
20A	ABNRE1N030C20	ABNRE1N100C20	ABNRE1N300C20	6	60
25A	ABNRE1N030C25	ABNRE1N100C25	ABNRE1N300C25	6	60
32A	ABNRE1N030C32	ABNRE1N100C32	ABNRE1N300C32	6	60
40A	ABNRE1N030C40	ABNRE1N100C40	ABNRE1N300C40	6	60

RCBO Electronic

Technical Data / Selection

Type AC



Function & Features

- Earth leakage protection with over voltage and surge voltage protection
- Overload protection, switch LINE and NEUTRAL for increased SAFETY
- Short circuit protection, will replace existing DIN rail mounted MCB's or Earth Leakage Devices
- Handle can be locked with pad-lock to prevent unwanted operation for safety

Approval / Markings

CE RoHS

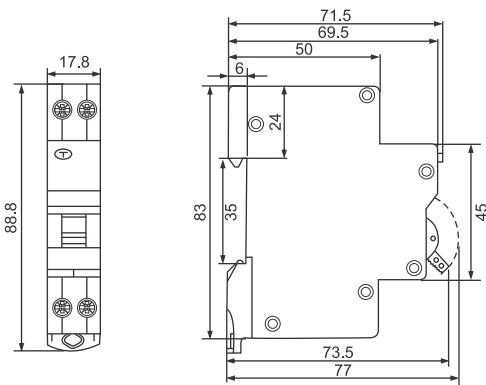
Applications



Technical Data

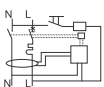
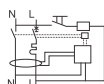
Rated current (In)	6, 10, 16, 20, 25, 32, 40A
Rate voltage (Un)	230/240VAC
Breaking capacity (Icn)	4.5kA
Rated frequency	50/60Hz
Rated residual current	10mA, 30mA, 100mA, 300mA
Tripping characteristics	B, C
Number of poles	1P+N (1Mod.)
Electrical endurance	4000 cycles
Mechanical endurance	10000 cycles
Terminal	Pillar type
Cable termination	10mm ²
Torque of screw	1.2Nm
IP degree	IP 20
Standards	IEC/EN 61009-1

Dimensions (mm)



1P+N RCBO type ABNER - B Curve AC

In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNER1N030B06	ABNER1N100B06	ABNER1N300B06	1	120
10A	ABNER1N030B10	ABNER1N100B10	ABNER1N300B10	1	120
16A	ABNER1N030B16	ABNER1N100B16	ABNER1N300B16	1	120
20A	ABNER1N030B20	ABNER1N100B20	ABNER1N300B20	1	120
25A	ABNER1N030B25	ABNER1N100B25	ABNER1N300B25	1	120
32A	ABNER1N030B32	ABNER1N100B32	ABNER1N300B32	1	120
40A	ABNER1N030B40	ABNER1N100B40	ABNER1N300B40	1	120



1P+N RCBO type ABNER - C Curve AC

In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNER1N030C06	ABNER1N100C06	ABNER1N300C06	1	120
10A	ABNER1N030C10	ABNER1N100C10	ABNER1N300C10	1	120
16A	ABNER1N030C16	ABNER1N100C16	ABNER1N300C16	1	120
20A	ABNER1N030C20	ABNER1N100C20	ABNER1N300C20	1	120
25A	ABNER1N030C25	ABNER1N100C25	ABNER1N300C25	1	120
32A	ABNER1N030C32	ABNER1N100C32	ABNER1N300C32	1	120
40A	ABNER1N030C40	ABNER1N100C40	ABNER1N300C40	1	120

RCBO Electronic

Technical Data / Selection

Type AC 

Type A - Ai 

Function & Features

- Provides protection against earth fault/leakage current, short circuit, overload
- Provides complementary protection against direct contact by human body
- Effectively protects electric equipment against insulating failure
- Handle can be locked with pad-lock to prevent unwanted operation for safety

Approval / Markings

CE RoHS

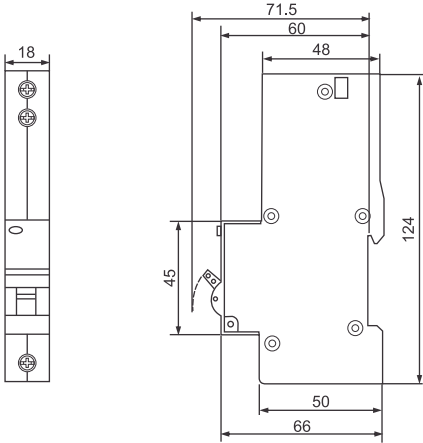
Applications



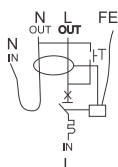
Technical Data

Rated current (In)	6, 10, 16, 20, 25, 32, 40A
Rate voltage (Un)	230/240VAC
Breaking capacity (Icn)	6kA
Rated frequency	50/60Hz
Rated residual current	10mA, 30mA, 100mA, 300mA
Tripping characteristics	B, C
Number of poles	1P+N
Electrical endurance	4000 cycles
Mechanical endurance	10000 cycles
Terminal	Pillar type
Cable termination	25mm ²
Torque of screw	2.5Nm
IP degree	IP 20
Standards	IEC/EN 61009-1

Dimensions (mm)

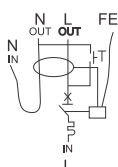


1P+N RCBO type ABNE1 - B Curve AC



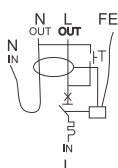
In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNE11N030B06	ABNE11N100B06	ABNE11N300B06	1	40
10A	ABNE11N030B10	ABNE11N100B10	ABNE11N300B10	1	40
16A	ABNE11N030B16	ABNE11N100B16	ABNE11N300B16	1	40
20A	ABNE11N030B20	ABNE11N100B20	ABNE11N300B20	1	40
25A	ABNE11N030B25	ABNE11N100B25	ABNE11N300B25	1	40
32A	ABNE11N030B32	ABNE11N100B32	ABNE11N300B32	1	40
40A	ABNE11N030B40	ABNE11N100B40	ABNE11N300B40	1	40

1P+N RCBO type ABNE1 - C Curve AC



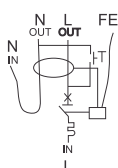
In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNE11N030C06	ABNE11N100C06	ABNE11N300C06	1	40
10A	ABNE11N030C10	ABNE11N100C10	ABNE11N300C10	1	40
16A	ABNE11N030C16	ABNE11N100C16	ABNE11N300C16	1	40
20A	ABNE11N030C20	ABNE11N100C20	ABNE11N300C20	1	40
25A	ABNE11N030C25	ABNE11N100C25	ABNE11N300C25	1	40
32A	ABNE11N030C32	ABNE11N100C32	ABNE11N300C32	1	40
40A	ABNE11N030C40	ABNE11N100C40	ABNE11N300C40	1	40

1P+N RCBO type ABNE1A - B Curve A



In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNE1A1N030B06	ABNE1A1N100B06	ABNE1A1N300B06	1	40
10A	ABNE1A1N030B10	ABNE1A1N100B10	ABNE1A1N300B10	1	40
16A	ABNE1A1N030B16	ABNE1A1N100B16	ABNE1A1N300B16	1	40
20A	ABNE1A1N030B20	ABNE1A1N100B20	ABNE1A1N300B20	1	40
25A	ABNE1A1N030B25	ABNE1A1N100B25	ABNE1A1N300B25	1	40
32A	ABNE1A1N030B32	ABNE1A1N100B32	ABNE1A1N300B32	1	40
40A	ABNE1A1N030B40	ABNE1A1N100B40	ABNE1A1N300B40	1	40

1P+N RCBO type ABNE1A - C Curve A



In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNE1A1N030C06	ABNE1A1N100C06	ABNE1A1N300C06	1	40
10A	ABNE1A1N030C10	ABNE1A1N100C10	ABNE1A1N300C10	1	40
16A	ABNE1A1N030C16	ABNE1A1N100C16	ABNE1A1N300C16	1	40
20A	ABNE1A1N030C20	ABNE1A1N100C20	ABNE1A1N300C20	1	40
25A	ABNE1A1N030C25	ABNE1A1N100C25	ABNE1A1N300C25	1	40
32A	ABNE1A1N030C32	ABNE1A1N100C32	ABNE1A1N300C32	1	40
40A	ABNE1A1N030C40	ABNE1A1N100C40	ABNE1A1N300C40	1	40

RCBO Electronic

Technical Data / Selection

Type AC 

Type A - Ai 

Function & Features

- Provides protection against earth fault/leakage current, short circuit, overload
- Provides complementary protection against direct contact by human body
- Effectively protects electric equipment against insulating failure
- Handle can be locked with pad-lock to prevent unwanted operation for safety

Approval / Markings

CE RoHS

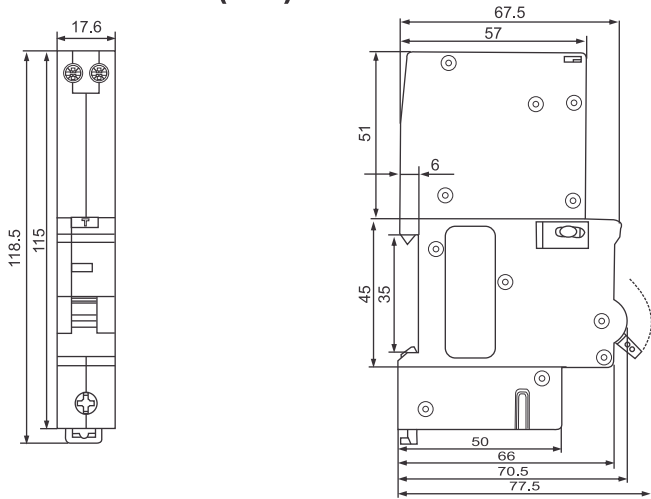
Applications



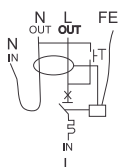
Technical Data

Rated current (In)	6, 10, 16, 20, 25, 32, 40A
Rate voltage (Un)	230/240VAC
Breaking capacity (Icn)	10kA
Rated frequency	50/60Hz
Rated residual current	10mA, 30mA, 100mA, 300mA
Tripping characteristics	B, C
Number of poles	1P+N
Electrical endurance	10000 cycles
Mechanical endurance	20000 cycles
Terminal	Pillar type
Cable termination	25mm²
Torque of screw	2.5Nm
IP degree	IP 20
Standards	IEC/EN 61009-1

Dimensions (mm)

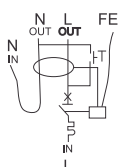


1P+N RCBO type ABNE7 - B Curve AC



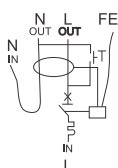
In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNE71N030B06	ABNE71N100B06	ABNE71N300B06	1	40
10A	ABNE71N030B10	ABNE71N100B10	ABNE71N300B10	1	40
16A	ABNE71N030B16	ABNE71N100B16	ABNE71N300B16	1	40
20A	ABNE71N030B20	ABNE71N100B20	ABNE71N300B20	1	40
25A	ABNE71N030B25	ABNE71N100B25	ABNE71N300B25	1	40
32A	ABNE71N030B32	ABNE71N100B32	ABNE71N300B32	1	40
40A	ABNE71N030B40	ABNE71N100B40	ABNE71N300B40	1	40

1P+N RCBO type ABNE7 - C Curve AC



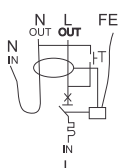
In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNE71N030C06	ABNE71N100C06	ABNE71N300C06	1	40
10A	ABNE71N030C10	ABNE71N100C10	ABNE71N300C10	1	40
16A	ABNE71N030C16	ABNE71N100C16	ABNE71N300C16	1	40
20A	ABNE71N030C20	ABNE71N100C20	ABNE71N300C20	1	40
25A	ABNE71N030C25	ABNE71N100C25	ABNE71N300C25	1	40
32A	ABNE71N030C32	ABNE71N100C32	ABNE71N300C32	1	40
40A	ABNE71N030C40	ABNE71N100C40	ABNE71N300C40	1	40

1P+N RCBO type ABNE7A - B Curve A



In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNE7A1N030B06	ABNE7A1N100B06	ABNE7A1N300B06	1	40
10A	ABNE7A1N030B10	ABNE7A1N100B10	ABNE7A1N300B10	1	40
16A	ABNE7A1N030B16	ABNE7A1N100B16	ABNE7A1N300B16	1	40
20A	ABNE7A1N030B20	ABNE7A1N100B20	ABNE7A1N300B20	1	40
25A	ABNE7A1N030B25	ABNE7A1N100B25	ABNE7A1N300B25	1	40
32A	ABNE7A1N030B32	ABNE7A1N100B32	ABNE7A1N300B32	1	40
40A	ABNE7A1N030B40	ABNE7A1N100B40	ABNE7A1N300B40	1	40

1P+N RCBO type ABNE7A - C Curve A



In(A)	Model No.			Qty./Box	Qty/CTN
	30mA	100mA	300mA		
6A	ABNE7A1N030C06	ABNE7A1N100C06	ABNE7A1N300C06	1	40
10A	ABNE7A1N030C10	ABNE7A1N100C10	ABNE7A1N300C10	1	40
16A	ABNE7A1N030C16	ABNE7A1N100C16	ABNE7A1N300C16	1	40
20A	ABNE7A1N030C20	ABNE7A1N100C20	ABNE7A1N300C20	1	40
25A	ABNE7A1N030C25	ABNE7A1N100C25	ABNE7A1N300C25	1	40
32A	ABNE7A1N030C32	ABNE7A1N100C32	ABNE7A1N300C32	1	40
40A	ABNE7A1N030C40	ABNE7A1N100C40	ABNE7A1N300C40	1	40

Plug-in Miniature Circuit Breaker

Technical Data / Selection

Type AC 

Type A - Ai 

Function & Features

- Plug-in mounting
- Protection against both overload and short circuit, function on isolation
- High short circuit capacity: Icn = 10kA, Ics = 7.5kA, Icu = 10kA, with energy limiting class 3
- Contact position indicator
- Handle can be locked with pad-lock to prevent unwanted operation for safety.

Approval / Markings

CE RoHS

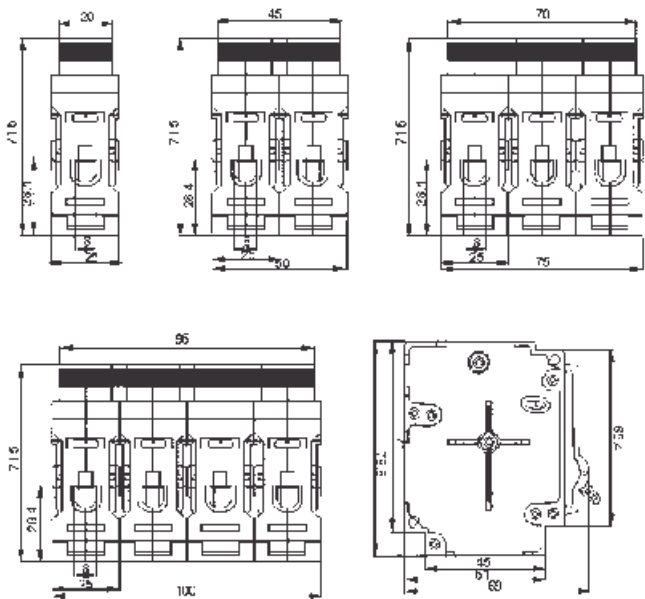
Applications



Technical Data

Rated current (In)	1, 2, 3, 4, 6, 10, 13, 16, 20, 25, 32, 40, 45, 50, 63A
Rate voltage (Un)	230/240VAC, 400/415 VAC
Breaking capacity (Icn)	10kA
Rated frequency	50/60Hz
Tripping characteristics	B, C, D
Number of poles	1P, 2P, 3P, 4P, 1P+N, 3P+N
Rated impulse withstand voltage (Uimp)	4kV
Electrical endurance	10000 cycles
Mechanical endurance	20000 cycles
Cable termination	25mm ²
Torque of screw	2.5Nm
Standards	IEC/EN 60898-1

Dimensions (mm)



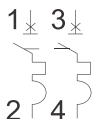
1P MCB

In(A)	Model No.			Qty./Box	Qty/CTN
	B Curve	C Curve	D Curve		
1A	ABN121B01	ABN121C01	ABN121D01	12	120
2A	ABN121B02	ABN121C02	ABN121D02	12	120
3A	ABN121B03	ABN121C03	ABN121D03	12	120
4A	ABN121B04	ABN121C04	ABN121D04	12	120
6A	ABN121B06	ABN121C06	ABN121D06	12	120
10A	ABN121B10	ABN121C10	ABN121D10	12	120
13A	ABN121B13	ABN121C13	ABN121D13	12	120
16A	ABN121B16	ABN121C16	ABN121D16	12	120
20A	ABN121B20	ABN121C20	ABN121D20	12	120
25A	ABN121B25	ABN121C25	ABN121D25	12	120
32A	ABN121B32	ABN121C32	ABN121D32	12	120
40A	ABN121B40	ABN121C40	ABN121D40	12	120
45A	ABN121B45	ABN121C45	ABN121D45	12	120
50A	ABN121B50	ABN121C50	ABN121D50	12	120
63A	ABN121B63	ABN121C63	ABN121D63	12	120



2P MCB

In(A)	Model No.			Qty./Box	Qty/CTN
	B Curve	C Curve	D Curve		
1A	ABN122B01	ABN122C01	ABN122D01	6	60
2A	ABN122B02	ABN122C02	ABN122D02	6	60
3A	ABN122B03	ABN122C03	ABN122D03	6	60
4A	ABN122B04	ABN122C04	ABN122D04	6	60
6A	ABN122B06	ABN122C06	ABN122D06	6	60
10A	ABN122B10	ABN122C10	ABN122D10	6	60
13A	ABN122B13	ABN122C13	ABN122D13	6	60
16A	ABN122B16	ABN122C16	ABN122D16	6	60
20A	ABN122B20	ABN122C20	ABN122D20	6	60
25A	ABN122B25	ABN122C25	ABN122D25	6	60
32A	ABN122B32	ABN122C32	ABN122D32	6	60
40A	ABN122B40	ABN122C40	ABN122D40	6	60
45A	ABN122B45	ABN122C45	ABN122D45	6	60
50A	ABN122B50	ABN122C50	ABN122D50	6	60
63A	ABN122B63	ABN122C63	ABN122D63	6	60

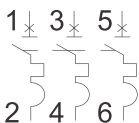


Plug-in Miniature Circuit Breaker

Selection

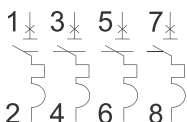
3P MCB

In(A)	Model No.			Qty./Box	Qty/CTN
	B Curve	C Curve	D Curve		
1A	ABN123B01	ABN123C01	ABN123D01	4	40
2A	ABN123B02	ABN123C02	ABN123D02	4	40
3A	ABN123B03	ABN123C03	ABN123D03	4	40
4A	ABN123B04	ABN123C04	ABN123D04	4	40
6A	ABN123B06	ABN123C06	ABN123D06	4	40
10A	ABN123B10	ABN123C10	ABN123D10	4	40
13A	ABN123B13	ABN123C13	ABN123D13	4	40
16A	ABN123B16	ABN123C16	ABN123D16	4	40
20A	ABN123B20	ABN123C20	ABN123D20	4	40
25A	ABN123B25	ABN123C25	ABN123D25	4	40
32A	ABN123B32	ABN123C32	ABN123D32	4	40
40A	ABN123B40	ABN123C40	ABN123D40	4	40
45A	ABN123B45	ABN123C45	ABN123D45	4	40
50A	ABN123B50	ABN123C50	ABN123D50	4	40
63A	ABN123B63	ABN123C63	ABN123D63	4	40



4P MCB

In(A)	Model No.			Qty./Box	Qty/CTN
	B Curve	C Curve	D Curve		
1A	ABN124B01	ABN124C01	ABN124D01	3	30
2A	ABN124B02	ABN124C02	ABN124D02	3	30
3A	ABN124B03	ABN124C03	ABN124D03	3	30
4A	ABN124B04	ABN124C04	ABN124D04	3	30
6A	ABN124B06	ABN124C06	ABN124D06	3	30
10A	ABN124B10	ABN124C10	ABN124D10	3	30
13A	ABN124B13	ABN124C13	ABN124D13	3	30
16A	ABN124B16	ABN124C16	ABN124D16	3	30
20A	ABN124B20	ABN124C20	ABN124D20	3	30
25A	ABN124B25	ABN124C25	ABN124D25	3	30
32A	ABN124B32	ABN124C32	ABN124D32	3	30
40A	ABN124B40	ABN124C40	ABN124D40	3	30
45A	ABN124B45	ABN124C45	ABN124D45	3	30
50A	ABN124B50	ABN124C50	ABN124D50	3	30
63A	ABN124B63	ABN124C63	ABN124D63	3	30



NOTE

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NOTE

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SYNAGEAR

Lakshmi Electrical Control Systems Limited (LECS) is one of the leading manufacturer of switchgear products from 1982.

LECS manufactures custom-engineered control panel for Textile Machinery, Machine Tools, APFC, Energy Saver – Lighting, Compressor and many other applications conforming to International Standards.

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SYNAGEAR

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