

LOW VOLTAGE SWITCHGEAR PRODUCTS



Compact solutions in safety and security

LINE
IS







LOW VOLTAGE SWITCHGEAR PRODUCTS

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3.1. Technical Information

3.2. Product List





Reliable protection and compact products available in the Line S series

With its compact features, the Line S series is designed to provide exactly the safety you want. 4.5kA MCBs within Line S series saves space in the distribution boxes and makes room for more MCBs, 3kA DPN type MCBs stands out as an economic alternative to safety and security solutions.

WHY LINE S

Line S solution group is designed to provide the desired protection under accessible and economic conditions wherever life and property safety is needed, from homes to hospitals and schools. Line S solution group consisting of reliable compact design products under VIKO by Panasonic assurance and providing fast and wide service network, is always with you to meet the safety you need in all areas of life.



Compact design



Economic solution



High safety



Saving space in the distribution boxes



Easy stock availability

Protection you can trust is available
in the budget-friendly Line S series...



- In low voltage, it is the quality you can rely on for both your loved ones and yourself**
With the Line S series, Designed for you in a compact and economical structure, Line S does not compromise on efficiency.
- Safety from the first moment**
Safety and security come first in the assembly and installation of Line S series products. Line S series products offer convenience and comfort to the operators during the assembly phase.
- With its more compact structure, it provides savings in every aspect.**
Offering reliable quality, economic solution and features that meet needs, Line S series makes room for more protection in the MCB Boxes with compact design products. It offers alternative solutions in the low voltage group.





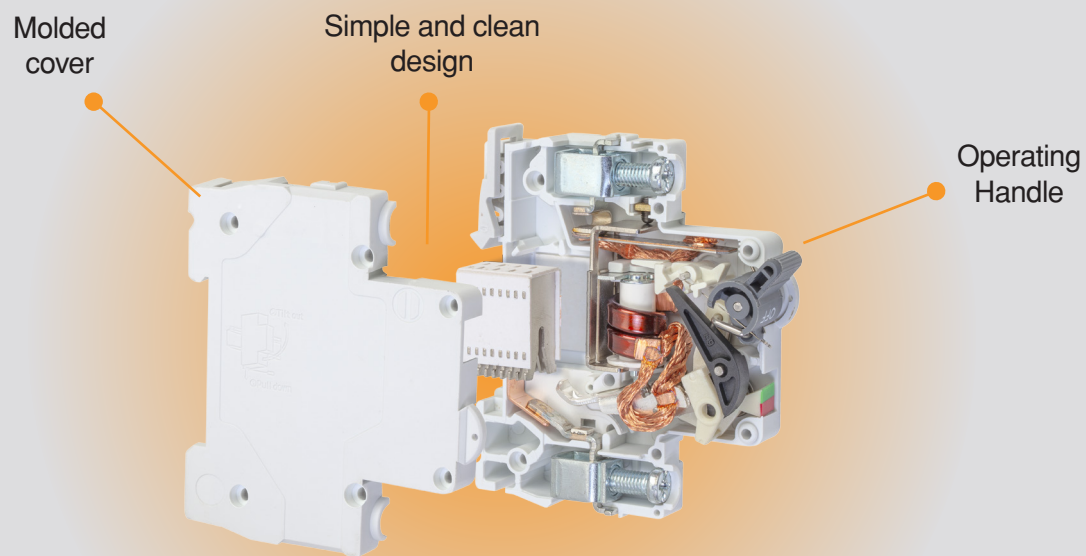


4.5kA Miniature Circuit Breakers

The desired protection meets
the reliable compact design



Smart design, reliable protection, value for money



- ☑ More compact
- ☑ Miniature
- ☑ The structure that offers the desired level of security
- ☑ Space-saving, easy stock opportunity
- ☑ 1-2-3-4 poled products
- ☑ Product range option between 6-63 Amperes in B-C Type

Line S solution group...

Compact designed, solutions for you to feel more comfortable and safer in life.

Line S solution group products

They are reliable economical solution products needed in homes, offices, hospitals and schools. Line S solutions protect your loved ones, living spaces, lighting, electronic devices, washing machines or dishwashers, refrigerators, against risks.

4.5 kA Miniature Circuit Breakers

TECHNICAL INFORMATION

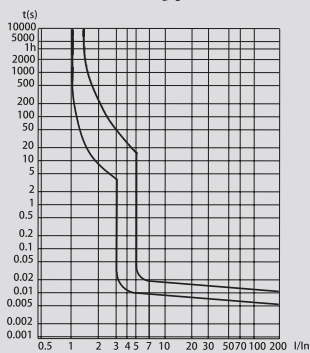
Model	4.5kA MCB series
Protection	Thermal and Magnetic
Standards	IEC/EN 60898 TS 5018-1 EN 60898-1
Number of Poles	1P 2P 3P 4P
Tripping Characteristics	B-C Type
Rated Operating Voltage	230/400, 400V AC
Rated Frequency	50/60 Hz
Short Circuit Breaking Capacity	4.5kA
Rated Impulse Withstanding Voltage (Uimp)	4kV
Rated Insulation Voltage (Ui)	500 V
Electrical Life	4000 Cycles
Mechanical Life	8000 Cycles
Contact Position Indicator	Yes
Operating Temperature (°C)	-5 ... +40
Storage Temperature (°C)	25 ~+70
Energy Limiting Class	3
Protection Class	IP20
Mounting Type	35mm DIN Rail
Connection Section	6-63A 16mm ²



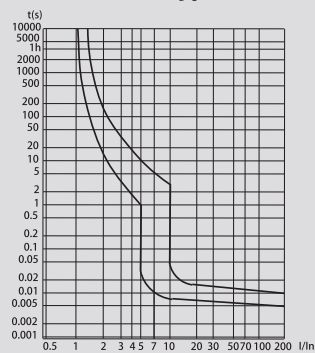
TRIPPING CHARACTERISTIC

IEC60898	Thermal Tripping			Magnetic Tripping		
	No Tripping Current	Tripping Current	Time Limits t	No Tripping Current	Tripping Current	Time Limits t
B Curve	1.13xI _n		≥1h	3xI _n		≥0.1s
		1.45xI _n	<1h		5xI _n	<0.1s
C Curve	1.13xI _n		≥1h	5xI _n		≥0.1s
		1.45xI _n	<1h		10xI _n	<0.1s

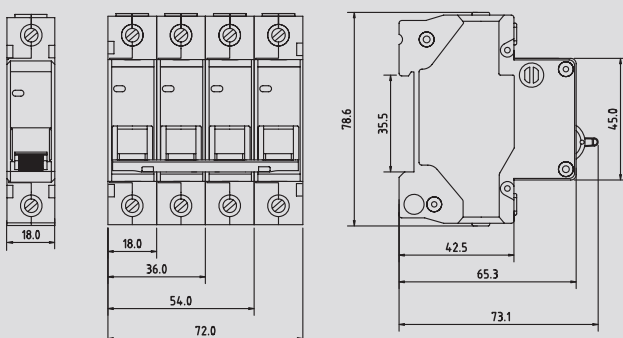
B Type



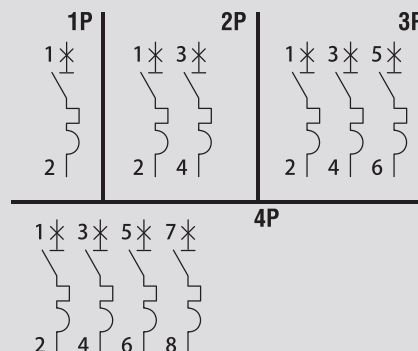
C Type



DIMENSIONS

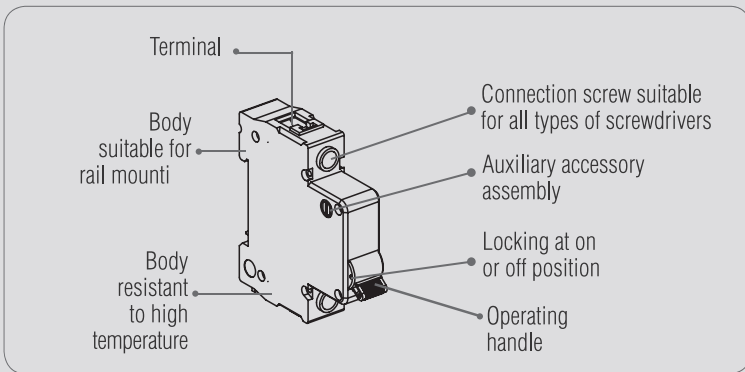
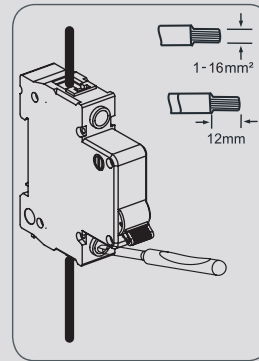
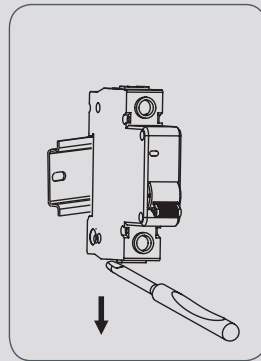
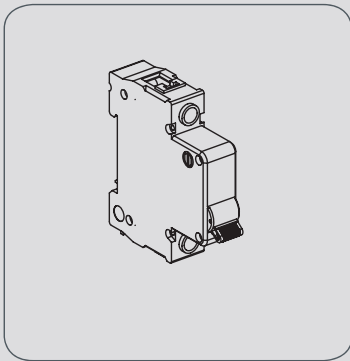


CONNECTION DIAGRAM



PRODUCT INSTALLATION

- Product calibrating and programming are performed during manufacturing and each product is offered to sales after through quality control. There are no maintenance or programming tasks that the users can perform.



Cable sections

: 13 mm

Momentum power for electrical terminal connection

: 1.2 Nm max.

Tools required for product assembly (Allen key, screwdriver etc.): 3.6 – 4.1 (including 4.1)

Suitable panel and rail for product assembly

: 35 mm DIN rail

PRODUCT LIST

1P	Nominal Current Value	B Tripping Curve Product Code	C Tripping Curve Product Code
	6	4VMB-1B06	4VMB-1C06
	10	4VMB-1B10	4VMB-1C10
	16	4VMB-1B16	4VMB-1C16
	20	4VMB-1B20	4VMB-1C20
	25	4VMB-1B25	4VMB-1C25
	32	4VMB-1B32	4VMB-1C32
	40	4VMB-1B40	4VMB-1C40
	50	4VMB-1B50	4VMB-1C50
	63	4VMB-1B63	4VMB-1C63



2P	Nominal Current Value	B Tripping Curve Product Code	C Tripping Curve Product Code
	6	4VMB-2B06	4VMB-2C06
	10	4VMB-2B10	4VMB-2C10
	16	4VMB-2B16	4VMB-2C16
	20	4VMB-2B20	4VMB-2C20
	25	4VMB-2B25	4VMB-2C25
	32	4VMB-2B32	4VMB-2C32
	40	4VMB-2B40	4VMB-2C40
	50	4VMB-2B50	4VMB-2C50
	63	4VMB-2B63	4VMB-2C63



3P	Nominal Current Value	B Tripping Curve Product Code	C Tripping Curve Product Code
	6	4VMB-3B06	4VMB-3C06
	10	4VMB-3B10	4VMB-3C10
	16	4VMB-3B16	4VMB-3C16
	20	4VMB-3B20	4VMB-3C20
	25	4VMB-3B25	4VMB-3C25
	32	4VMB-3B32	4VMB-3C32
	40	4VMB-3B40	4VMB-3C40
	50	4VMB-3B50	4VMB-3C50
	63	4VMB-3B63	4VMB-3C63



4P	Nominal Current Value	B Tripping Curve Product Code	C Tripping Curve Product Code
	6	4VMB-4B06	4VMB-4C06
	10	4VMB-4B10	4VMB-4C10
	16	4VMB-4B16	4VMB-4C16
	20	4VMB-4B20	4VMB-4C20
	25	4VMB-4B25	4VMB-4C25
	32	4VMB-4B32	4VMB-4C32
	40	4VMB-4B40	4VMB-4C40
	50	4VMB-4B50	4VMB-4C50
	63	4VMB-4B63	4VMB-4C63



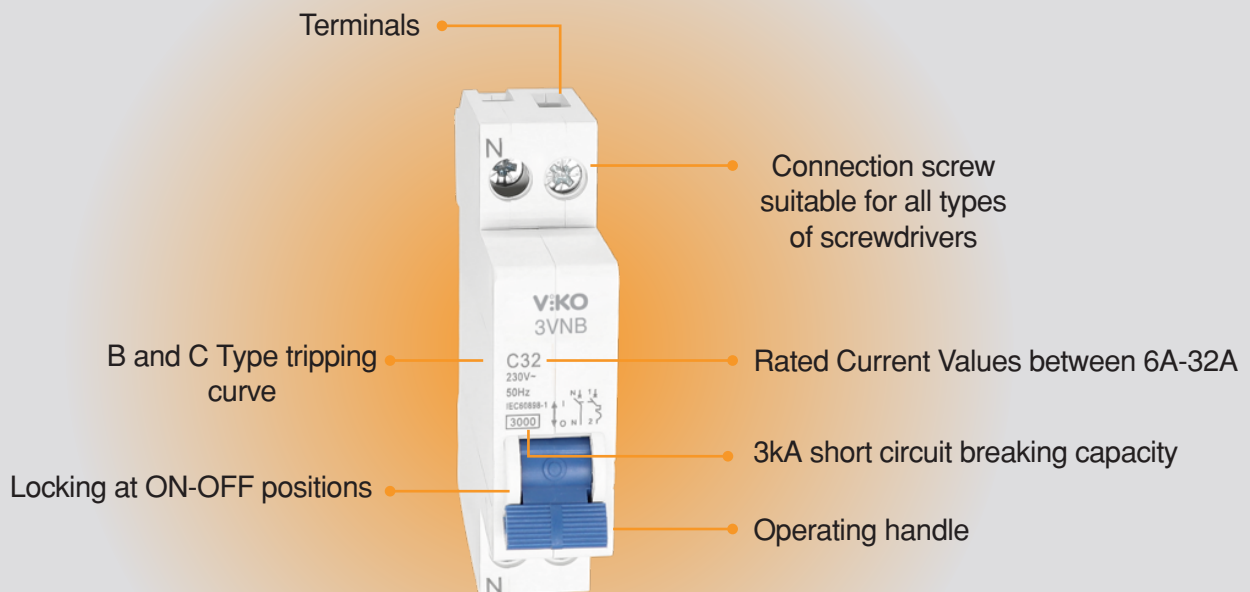


3kA DPN Type Miniature Circuit Breakers

Featured and more compact design for safety



Superior thermal and magnetic protection for overload and short circuit conditions



- ☑ More compact
- ☑ The structure that offers the desired level of security
- ☑ Space-saving, easy stock opportunity
- ☑ 1P + N (DPN Type)
- ☑ 3 kA short-circuit breaking capacity
- ☑ Product range option between 6-32 Amperes in Type B and C

3kA DPN Type MCB Series

TECHNICAL INFORMATION

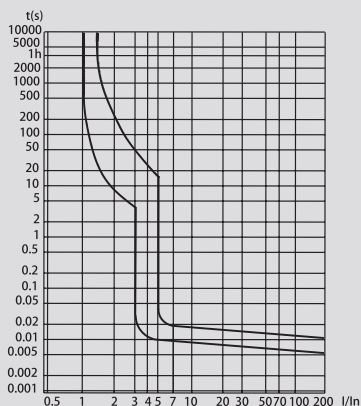
Model	3kA DPN Type MCBs
Protection	Thermal and Magnetic
Standards	IEC/EN 60898 TS 5018-1 EN 60898-1
Number of Poles	1P
Tripping Characteristics	B-C Type
Rated Voltage (Ue)	230/400, 400V AC
Rated Frequency	50/60 Hz
Short Circuit Breaking Capacity	3kA
Rated Impulse Withstanding Voltage (Uimp)	4kV
Rated Insulation Voltage	500V
Electrical Life	4000 Cycles
Mechanical Life	10000 Cycles
Protection Class	IP20
Mounting Type	35mm DIN Rail
Max. clamping torque	1.2Nm max
Tools required for product assembly	3.6-4.1 (including 4.1)



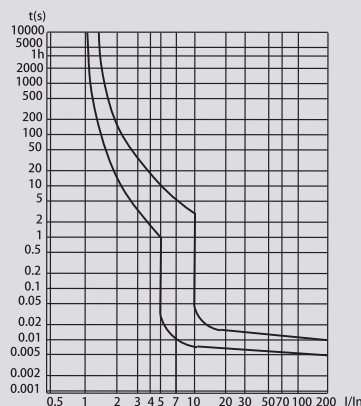
TRIPPING CHARACTERISTIC

IEC60898	Thermal Tripping			Magnetic Tripping		
	No Tripping Current	Tripping Current	Time Limits t	No Tripping Current	Tripping Current	Time Limits t
B Curve	1.13xIn		≥1h	3xIn		≥0.1s
		1.45xIn	<1h		5xIn	<0.1s
C Curve	1.13xIn		≥1h	5xIn		≥0.1s
		1.45xIn	<1h		10xIn	<0.1s

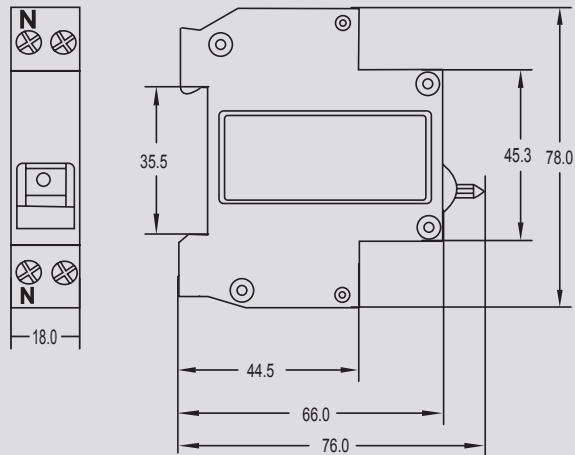
B Type



C Type



DIMENSIONS



CONNECTION DIAGRAM

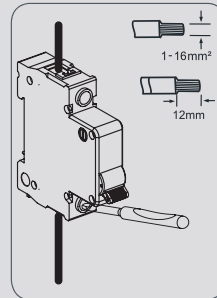
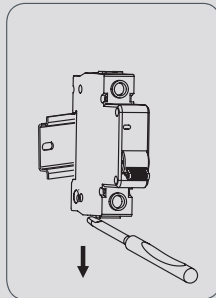
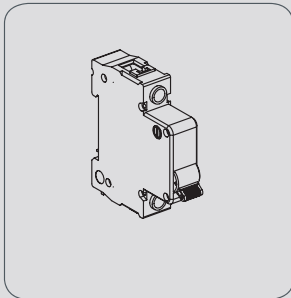


Influence of Ambient Temperature on Load Carrying Capacity

Rated current In A	Ambient temperature / °C									
	-40	-30	-20	-10	0	10	20	30	40	50
1	1,35	1,35	1,35	1,35	1,35	1,35	1,35	1,35	1,35	1,35
2	2,70	2,70	2,70	2,70	2,70	2,70	2,70	2,70	2,70	2,70
3	4,05	4,05	4,05	4,05	4,05	4,05	4,05	4,05	4,05	4,05
4	5,40	5,40	5,40	5,40	5,40	5,40	5,40	5,40	5,40	5,40
5	6,75	6,75	6,75	6,75	6,75	6,75	6,75	6,75	6,75	6,75
6	8,10	8,10	8,10	8,10	8,10	8,10	8,10	8,10	8,10	8,10
8	11,20	11,20	11,20	11,20	11,20	11,20	11,20	11,20	11,20	11,20
10	13,50	13,50	13,50	13,50	13,50	13,50	13,50	13,50	13,50	13,50
13	17,70	17,70	17,70	17,70	17,70	17,70	17,70	17,70	17,70	17,70
16	21,60	21,60	21,60	21,60	21,60	21,60	21,60	21,60	21,60	21,60
20	27,00	27,00	27,00	27,00	27,00	27,00	27,00	27,00	27,00	27,00
25	33,90	33,90	33,90	33,90	33,90	33,90	33,90	33,90	33,90	33,90
32	43,20	43,20	43,20	43,20	43,20	43,20	43,20	43,20	43,20	43,20
40	54,00	54,00	54,00	54,00	54,00	54,00	54,00	54,00	54,00	54,00
50	67,50	67,50	67,50	67,50	67,50	67,50	67,50	67,50	67,50	67,50
63	85,00	85,00	85,00	85,00	85,00	85,00	85,00	85,00	85,00	85,00

PRODUCT INSTALLATION

- Product calibrating and programming are performed during manufacturing and each product is offered to sales after through quality control. There are no maintenance or programming tasks that the users can perform.



PRODUCT LIST

1P

Nominal Current Value	B Tripping Curve Product Code	C Tripping Curve Product Code
6	3VNB-1B06	3VNB-1C06
10	3VNB-1B10	3VNB-1C10
16	3VNB-1B16	3VNB-1C16
20	3VNB-1B20	3VNB-1C20
25	3VNB-1B25	3VNB-1C25
32	3VNB-1B32	3VNB-1C32



