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efficiency leads the Future!



NLDB1

Miniature Circuit Breaker (MCB)

NLD 北陆电气®



>> NLDB1-63 Series Miniature Circuit Breaker (MCB)

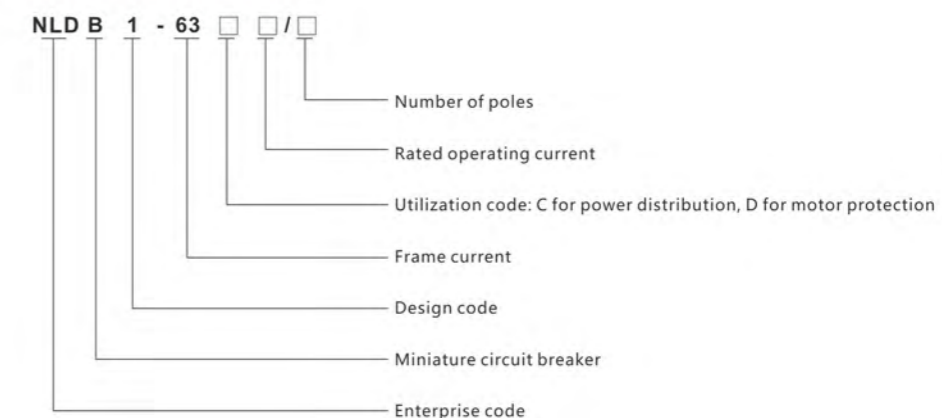


■ Scope of application

- NLDB1-63 high breaking miniature circuit breaker has the characteristics of advanced and reasonable structure, reliable performance, high breaking capacity, and beautiful and compact appearance. The shell and other components are made of impact resistant and high flame retardant materials. It's suitable for places with AC 50Hz or 60Hz, rated operating voltage below 400V, and rated current ranging from 3A to 63A, mainly used for lighting, distribution lines, and equipment overload and short circuit protection in office buildings, residential buildings, and similar buildings. It can also be used for infrequent circuit breaking and switching under normal circumstances.

This product complies with the standards of IEC60898 and Gb10963.

■ Model and meaning



■ Technical parameters

The number of poles	The number of poles	Rated current (A)	Rated short circuit breaking capacity
			Expected current of test line (A)
230/400	1	6,10,16,20, 25,32,40	6000
400	2,3,4		6000
230/400	1	50,63	6000
400	2,3,4		6000

Note:

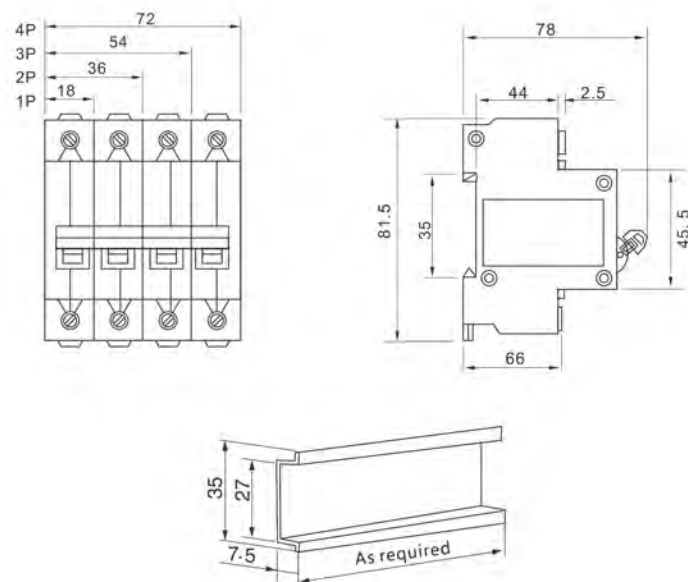
Mechanical life: 20000 times (off-on)

Electrical life: 4000 times

Damp heat resistance: Class 2 (temperature 55°C, relative humidity 95%)

The wiring adopts terminals with clamps, and the cable carrying capacity can reach 25mm²

■ Overall and installation dimension



>> NLDB1L-63 Series Miniature Residual Current Circuit Breaker

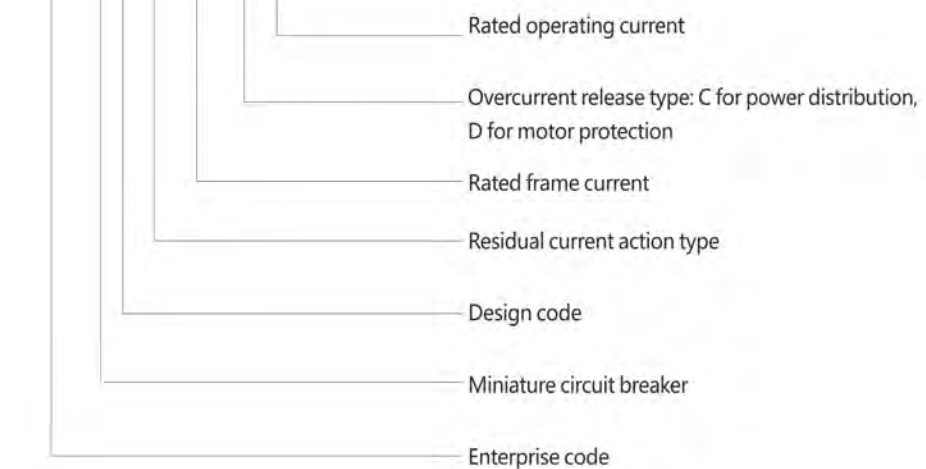
■ Scope of application

- NLDB1L-63 series residual current circuit breaker is suitable for AC 50Hz (or 60Hz) lines with rated voltage 400V(230V for single phase) and rated current from 3A to 63A. It has protective functions such as leakage and electric shock, overload, and short circuit. According to user requirements, overvoltage protection can be added to ensure personal safety and prevent equipment accidents caused by leakage current. It can also be used to protect lines from overload and short circuit. Under normal circumstances, it can be used as infrequent circuit breaker for breaking and switching, and leakage circuit breaker with rated residual operating current of 30mA can provide direct protection against personal electric shock.
- This product complies with the standards: GB/T16917.1, GB/T16917.2, IEC61009-1, IEC61009-2-2.



■ Model and meaning

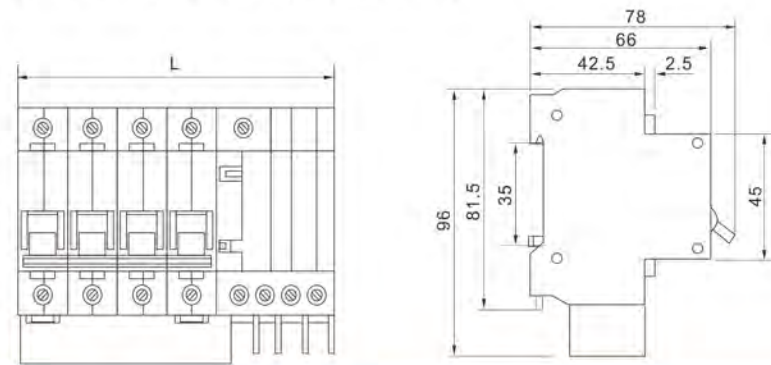
NLD B 1 LE - 63 / □ □



■ Main technical parameters

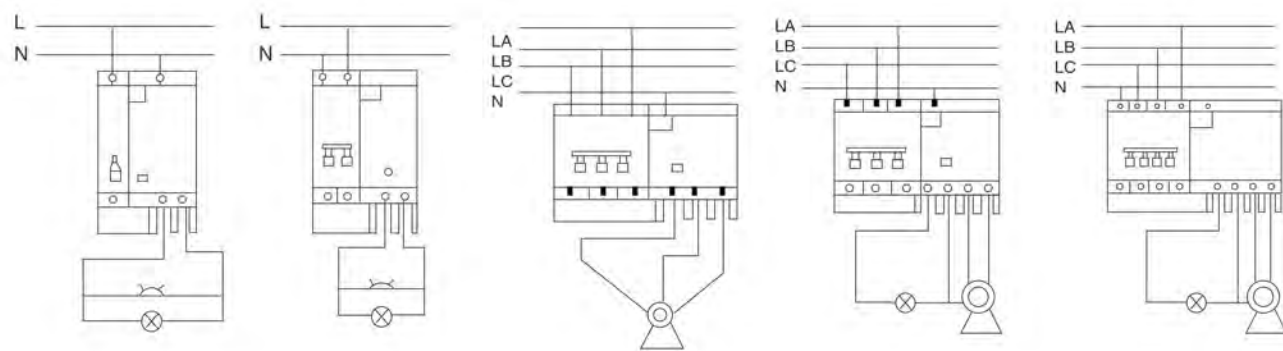
Voltage (V)	Rated frame current I _{nm} (A)	No. of poles	Neutral line	Rated current I _n (A)	Rated residual operating current I _{Δn} (mA)	Rated residual non-operating current I _{Δno} (mA)	Rated residual current operation time (s)	Overcurrent release
230	63	1	+N	3,6,10,16,20,35,32,40,50,63	30,(50), (100),(300)	15,(25),(50), (150)	<0.1	C is for power distribution (conventional) D is for motor protection
230/400	63	2						
230/400	63	3	+N					
230/400	63	3						
230/400	63	4						

■ Overall and installation dimension



NLDB1LE-63	1P+N	2P	3P	3P+N	4P
L (mm) 6A-32A	45	63	90	99	117
L (mm) 40A-63A	54	72	103.5	117	135

■ Installation wiring diagram

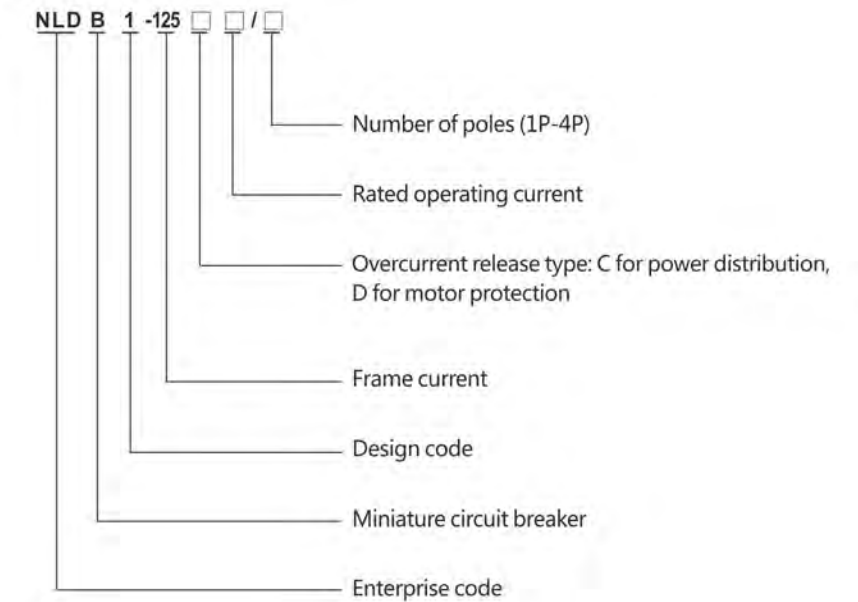


■ Scope of application

- NLDB1-125 series high breaking miniature circuit breakers are suitable for AC 50/60Hz lines with rated voltage of 400V(230V for single phase) and rated current 125A and below. They are used for short circuit and overload protection of buildings and electrical equipment, and can also be used for infrequent conversion of lines under normal circumstances. They are also suitable for isolating switches, line undervoltage protection, and remote disconnection. The product has beautiful appearance, small size and light weight, accurate current tripping setting, reliable action, high breaking capacity, rapid tripping, guide rail installation, composite pattern design, and can be combined with auxiliary contacts, alarm indication contacts, undervoltage releases, shunt releases and other accessories to meet the needs of different users. The shell and components are made of high flame retardant and impact resistant plastic, with long service life.
- This product complies with the standard: GB/T10963.1 and IEC60898-1 or GB/T14048.2 and IEC60947-2.



■ Model and meaning



■ Main technical parameters

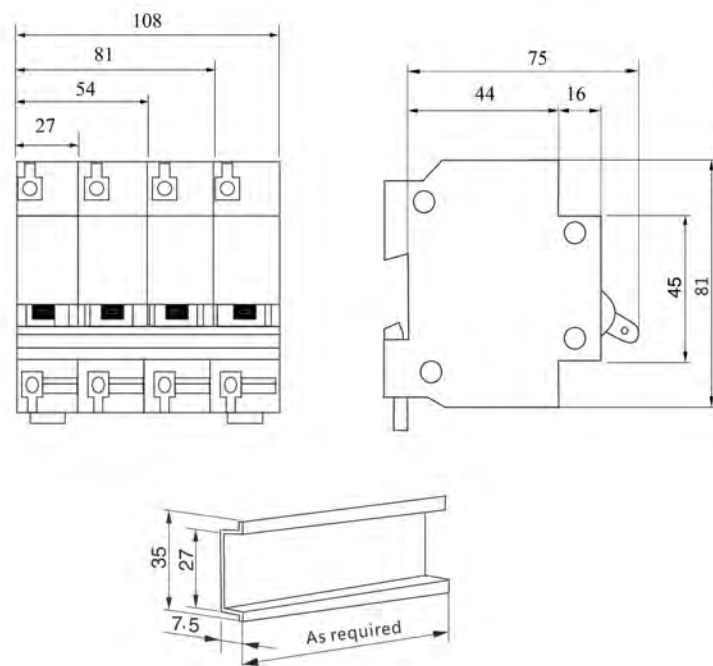
- Main types
- The rated current of the circuit breaker is 63A, 80A, 100A, 125A
- The number of poles of circuit breakers is classified into: 1P, 2P, 3P and 4P
- This circuit breaker is installed with 35x7.5 standard mounting rail

- See Table 1 for the rated value of main circuit of circuit breaker

Table 1

Rated current (A)	Number of poles	Rated voltage (V)	Rated short circuit breaking capacity	
			Prospective current of test circuit (A)	Power factor
63,80,100,125	1,2,3,4	230/400	4000	0.45~0.50

■ Overall and installation dimension



Note: It is installed with TH35-7.5 (DIN35mm) standard guide rail

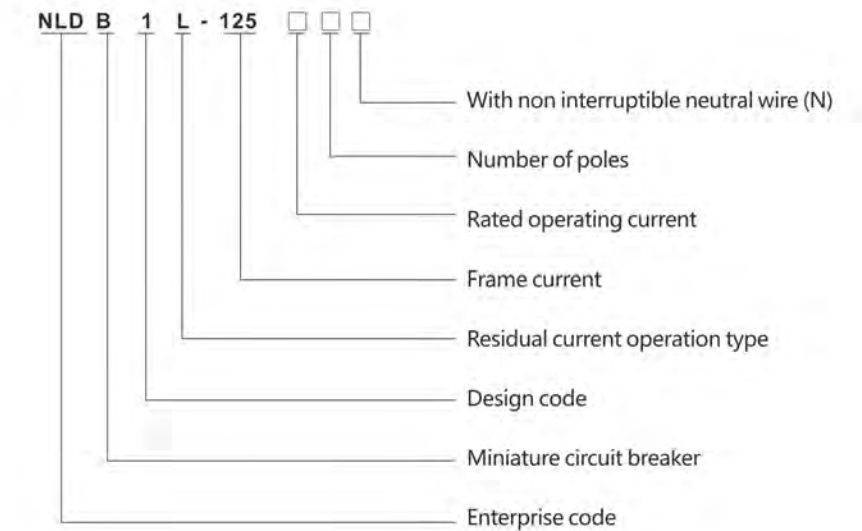


■ Scope of application

- NLDB1L-125 series residual current circuit breaker is suitable for AC 50/60Hz lines with rated voltage of 400V(230V for single phase) and rated current below 100A, and is used for personal indirect electric shock protection and equipment electric leakage protection. It has protection functions such as leakage, overload, short circuit, and is used for infrequent line switching under normal circumstances. Overvoltage protection function can also be added according to user needs.
- This product is mainly used for the protection of building lighting and distribution systems, and has isolation function.
- This product complies with the standards of IEC60947-2 and GB14048.2.



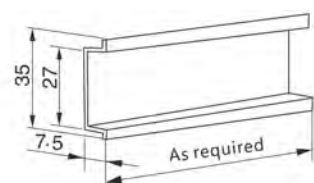
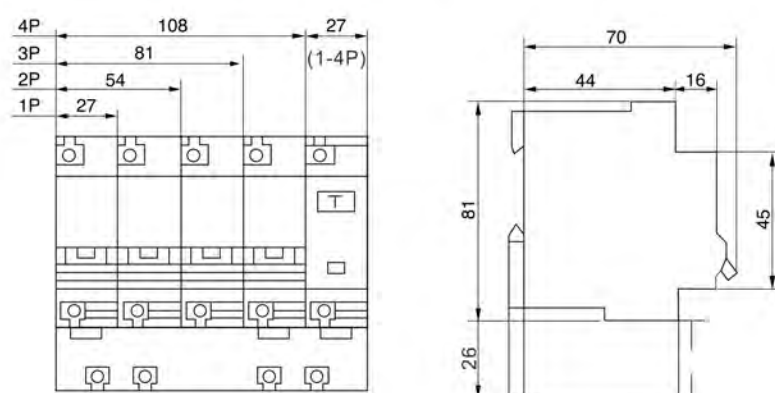
■ Model and meaning



■ Technical parameters

Voltage (V)	Rated frame current Inm (A)	No. of poles	Neutral line	Rated current In(A)	Rated residual operating current I _{Δn} (mA)	Rated residual non-operating current I _{Δno} (mA)	Rated short circuit breaking capacity I _{cu} (A)	Overtoltage protection setting value (V)	Residual current operation time (s)	Release type
230	100	1	N	63,80	30,50,	15,25,50,	10000	280±5%	≤0.1	C、D
230		2	/	100,	100,200,	100,150				
400		3	/	125	300					
230/400		3	N							

■ Overall and installation dimension



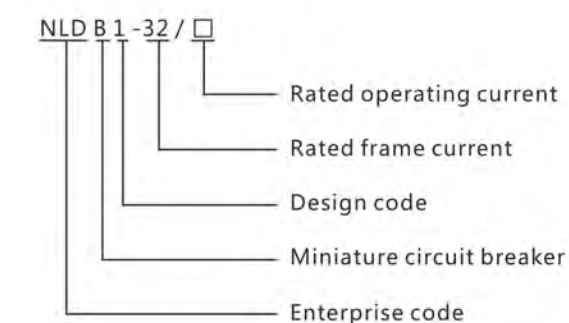
Note: It is installed with TH35-7.5 (DIN35mm) standard guide rail



■ Scope of application

- NLD B1-32 series high breaking miniature circuit breakers are suitable for single-phase residential AC 50Hz lines with rated voltage of 230V and below, mainly used to protect electrical lines from overload and short circuit. This product has high breaking capacity and small volume with width of only 18mm. Simultaneous cutting off of the zero and live wires eliminates the risk of personal injury and fire caused by the reverse connection of the zero and live wires or the potential between the zero wire and the ground. It is currently the most ideal distribution protection switch used in the residential field.
- This product complies with the standards of GB/T10963.1 and IEC60898.

■ Model and meaning



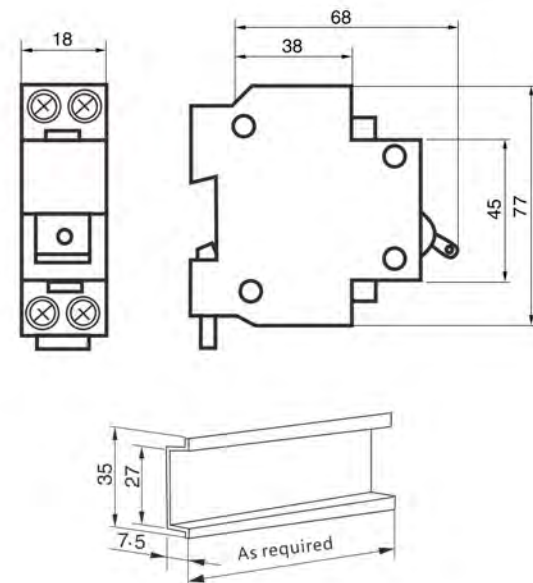
■ Main technical parameters

Rated current In (A)	Number of poles	Rated voltage (V)	Rated frame current Inm(A)	Rated ultimate short circuit breaking capacity I _{cu} (A)	Power factory	Mechanical life (time)
6,10,16 20,25,32	1	230	32	4500	0.65-0.70	20000

Note:

- Damp heat resistance: Class 2 (temperature 55°C, relative humidity 95%).
- Wiring: it adopts terminals with clamps, and the fixed cable cross section can reach 10mm².

Overall and installation dimension



Note: It is installed with TH35-7.5 (DIN35mm) standard guide rail

Installation: it can be installed in all distribution boxes suitable for multi 9 components.



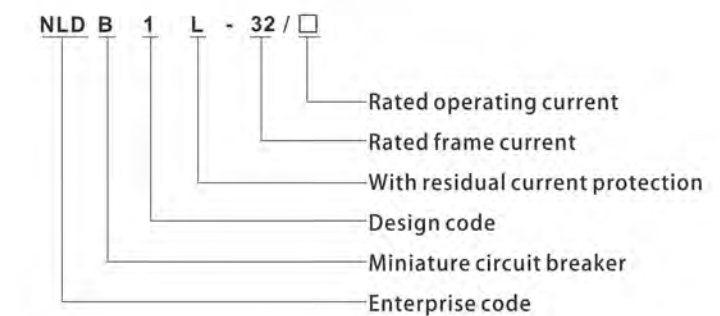
Scope of application

- NLD B1L-32 series high breaking miniature residual current circuit breaker is suitable for AC 50Hz or 60Hz single-phase residential lines with rated voltage up to 230V. It is used for personal electric shock protection and for overload and short circuit protection of civil electrical lines. This product has a small volume and high breaking capacity; both zero and live wires are cut off simultaneously, and even if the live wire is reversed, it can still protect individuals from electric shock.

This product can also add overvoltage protection function according to user requirements.

- This product complies with the standards of GB/T16917.1 and IEC61009-1.

Model and meaning

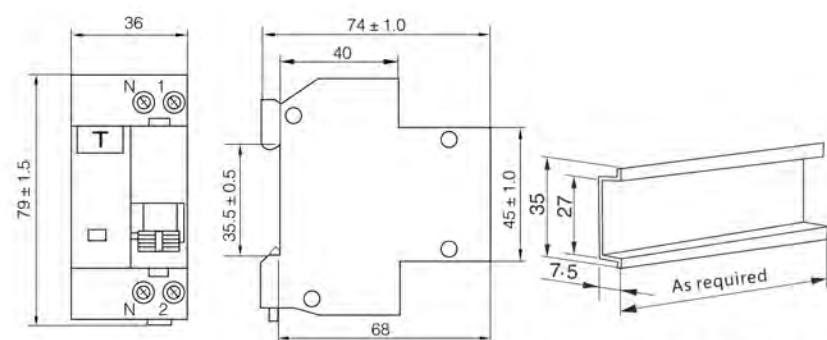


Main technical parameters

Rated current I_n (A)	No. of poles	Rated voltage (V)	Rated frame current I_{nm} (A)	Rated residual operating current $I_{\Delta n}$ (mA)	Rated residual non-operating current $I_{\Delta n}$ (mA)	Residual current operation time (s)	Rated ultimate short circuit breaking capacity I_{cu} (A)
6,10,16 20,25,32	1+N	230	32	30	15	$\leq 0.1s$	3000

Note: The wiring adopts terminals with clamps, with hard wires of 10mm² or less.

Overall and installation dimension



Note: It is installed with TH35-7.5 (DIN35mm) standard guide rail

Application guide

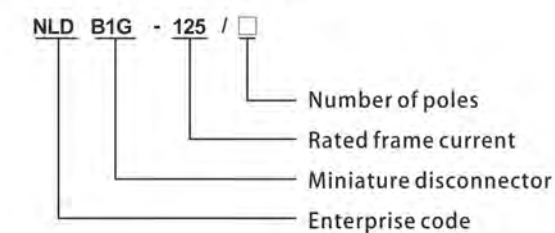
- Press the test button once a month to check the operation of the leakage protection device.
- When the leakage protection device operates, there is a red mechanical indicator in the front of the device.
- When the circuit breaker is reclosed, the protection device automatically resets.



Scope of application

- NLDB1G-125 miniature disconnector has high dynamic and thermal stability and is mainly used as the main switch in terminal combination apparatus. It is suitable for AC 50Hz or 60Hz distribution and control circuits with rated voltage 400V and below. It can also be used to control motors, low-power electrical appliances and lighting, and is widely used in industrial and mining enterprises, high-rise buildings, commercial and household places.
- This product complies with the standards of IEC60947-3 and GB/T14048.3.

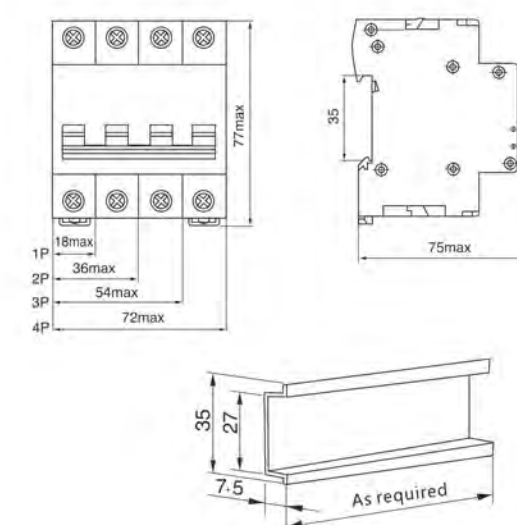
Model and meaning



Technical parameter

- It complies with IEC60947-3, GB/T14048.3
- Rated voltage: AC230/400V
- Rated current: 16, 20, 25, 32, 40, 50, 63, 80, 100, 125A
- Short-circuit current carrying capacity: 20In/1s

Overall and installation dimension



Note: It is installed with TH35-7.5 (DIN35mm) standard guide rail