Nader

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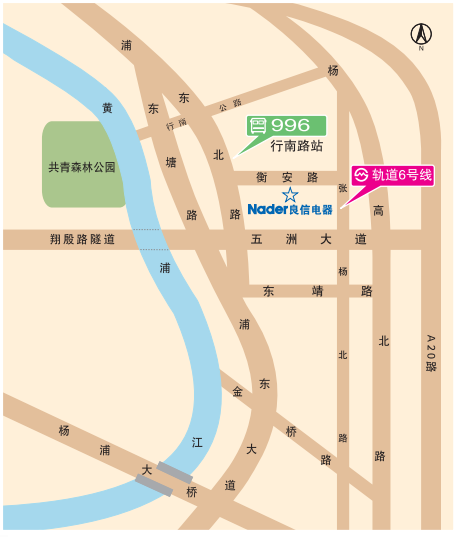

As standards, specifications and designs change from time to time, please ask for confirmation of the information given in this publication.

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Low Voltage Final Distribution Products

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Leading Low-voltage Electrical Component Manufacturer

Low Voltage Final Distribution Products

Contents

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Product Overview of Miniature Circuit Breakers

Product name	Standard MCB		SPN MCB	High Breaking Capacity MCB		SPN MCB
Product pange	NDM1-63		NDB1-32	NDB2-63		NDB2-63K
Product picture						
Standards	IEC 60898-1		IEC 60898-1	IEC 60898-1		IEC 60898-1
Number of pole	1	2, 3, 4	1P+N	1	2, 3, 4	1P+N
Electrical characteristics						
Rated current(A) In	1~63		6~32	1~63		6~63
Rated voltage(V) Ue	AC230V, DC60V	AC230V/400V, DC60V	AC230V	AC230V, DC60V	AC230V/400V, DC60V	AC230V
AC rated short-circuit capacity (kA)						
IEC60898 standard (Icn)	B/C Curve: 6 (In ≤40A), 4.5 (In > 40A) D Curve: 4.5		4.5	10		6
IEC60947-2 standard (Icu)						
DC rated short-circuit capacity (A)						
Tripping curve type	B/C/D (D curve is not for 50A, 63A)		C	B/C/D		C
Mech. Service life (times)	20000		10000	20000		20000
Connection capacity (mm^2)	25		10	35		35
Electrical auxiliaries	Auxiliary switches Alarm switches Shunt trip		——	Auxiliary switches Alarm switches Shunt trip		Auxiliary switches Alarm switches Shunt trip

Product Overview of Miniature Circuit Breakers

Product name	High Breaking Capacity MCB		High Breaking Capacity MCB		High Breaking Capacity MCB		DC MCB		Disconnect Switch
Product range	NDB2T-63		NDM1-125		NDB6-125		NDB2Z-63		NDG1-100
Product picture									
Standard	IEC 60947-2		IEC 60947-2		IEC 60947-2		IEC 60898-2		IEC 60947-3
Number of poles	1	2, 3, 4	1	2, 3, 4	1	2, 3, 4	1	2, 3, 4	1, 2, 3, 4
Electrical characteristics									
Rated current(A) In	1~63		50~125		50~125		1~63		32, 63, 100
Rated voltage(V) Ue	AC230V, DC60V	AC230V/400V, DC60V	AC230V, DC60V	AC230V/400V, DC60V	AC230V, DC60V	AC230V/400V, DC60V	DC125V, DC220V	DC250V, DC440V	AC 230/400V
AC rated short-circuit capacity (kA)									
IEC60898 standard (Icn)									
IEC60947-2 standard (Icu)	10		10		15				
DC rated short-circuit capacity (A)							10 (DC125V) 6 (DC220V)		
Tripping curve type	B/C/D		C/D (Only C Curve available for 125A)		C/D (Only C Curve available for 125A)		B/C		
Mech. Service life (times)	20000		10000		10000		20000		10000
Connection capacity (mm^2)	35		50		50		35		50
Electrical auxiliaries	Auxiliary switches Alarm switches Shunt trip		Auxiliary switches Alarm switches Shunt trip				Auxiliary switches Alarm switches Shunt trip		Auxiliary switches

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NDM1-63 Series Miniature Circuit Breaker

Application

> Curve B: Non-inductive or micro-inductive loads
> Curve C: Usual inductive loads
> Curve D: Highly inductive loads
> Overload and short circuit protection

Model and Implication

ND 1 M 2 1 3 - 63 4 □ 5 □ 6 / □ 7

No.	Implication	NDM1-63
1	Brand code	ND Nader
2	Product code	M Miniature Circuit Breaker
3	Design code	1
4	Frame rating (A)	63
5	Instantaneous tripping characteristic	B, C, D
6	Rated current (A)	1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40, 50, 63
7	Number of poles	1, 2, 3, 4

Standards and Certificates

> IEC 60898-1, GB 10963.1;
> TÜV, CE and CCC.

Working Condition

- Ambient temperature: -35℃ ~ +70℃
- Air humidity: ≤95%
- Altitude: ≤2000m
- Pollution degree: Ⅱ

Specifications

- Rated working voltage: AC230/400V, DC60V
- Rated working current: 1A - 63A
- Mechanical life: 10000 times
- Tripping characteristic: B: 3-5In; C: 5-10In; D: 10-14In
- Breaking capacity:

Rated current(A)	Voltage(V)	Breaking capacity(kA)
B、C: 1-40	AC230/400	6
50, 63	AC230/400	4.5
D : 1-40	AC230/400	4.5

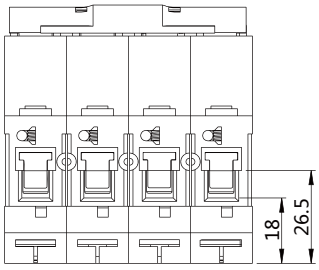
Product Features

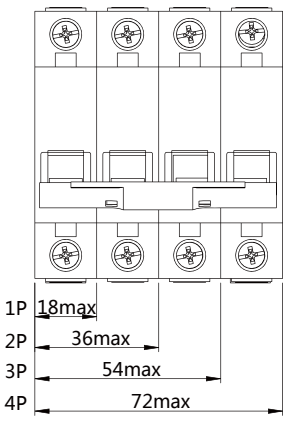
- Modularized
- Screw clamp, shock-proof wiring terminals
- Numerous accessories available
- Standard TH35mm DIN rail mounting
- RoHS complied

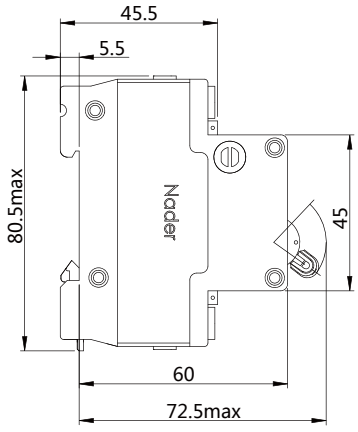
Wiring Capacity

- ≤25mm^2

Dimension







Nader

Number of Poles	Curve	Width (mm)	Rated Current(A)	Part No.
	B, C, D	18	1	NDM1-63 1/1
			2	NDM1-63 2/1
			3	NDM1-63 3/1
			4	NDM1-63 4/1
			5	NDM1-63 5/1
			6	NDM1-63 6/1
			10	NDM1-63 10/1
			16	NDM1-63 16/1
			20	NDM1-63 20/1
			25	NDM1-63 25/1
			32	NDM1-63 32/1
			40	NDM1-63 40/1
	B, C		50	NDM1-63 50/1
			63	NDM1-63 63/1
	B, C, D	36	1	NDM1-63 1/2
			2	NDM1-63 2/2
			3	NDM1-63 3/2
			4	NDM1-63 4/2
			5	NDM1-63 5/2
			6	NDM1-63 6/2
			10	NDM1-63 10/2
			16	NDM1-63 16/2
			20	NDM1-63 20/2
			25	NDM1-63 25/2
			32	NDM1-63 32/2
			40	NDM1-63 40/2
	B, C		50	NDM1-63 50/2
			63	NDM1-63 63/2
	B, C, D	54	1	NDM1-63 1/3
			2	NDM1-63 2/3
			3	NDM1-63 3/3
			4	NDM1-63 4/3
			5	NDM1-63 5/3
			6	NDM1-63 6/3
			10	NDM1-63 10/3
			16	NDM1-63 16/3
			20	NDM1-63 20/3
			25	NDM1-63 25/3
			32	NDM1-63 32/3
			40	NDM1-63 40/3
	B, C		50	NDM1-63 50/3
			63	NDM1-63 63/3
	B, C, D	72	1	NDM1-63 1/4
			2	NDM1-63 2/4
			3	NDM1-63 3/4
			4	NDM1-63 4/4
			5	NDM1-63 5/4
			6	NDM1-63 6/4
			10	NDM1-63 10/4
			16	NDM1-63 16/4
			20	NDM1-63 20/4
			25	NDM1-63 25/4
			32	NDM1-63 32/4
			40	NDM1-63 40/4
	B, C		50	NDM1-63 50/4
			63	NDM1-63 63/4

NDB1 Series Miniature Circuit Breaker (1P+N)

Application

> TT/TN-S grounding system

> Phase and neutral protection against short circuit and overload

Model and Implication

ND	B	1	-	32	C	□
1	2	3		4	5	6

No.	Implication	NDB1-32
1	Brand code	ND Nader
2	Product code	B Miniature Circuit Breaker
3	Design code	1
4	Frame rating (A)	32
5	Instantaneous tripping characteristic	C
6	Rated current (A)	6, 10, 16, 20, 25, 32

Standards and Certificates

> IEC 60898-1, GB 10963.1; CCC.

Working Condition

> Ambient temperature: -35℃ ~ +70℃

> Air humidity: ≤95%

> Altitude: ≤2000m

> Pollution degree: Ⅱ

Specifications

> Rated working voltage: AC230V

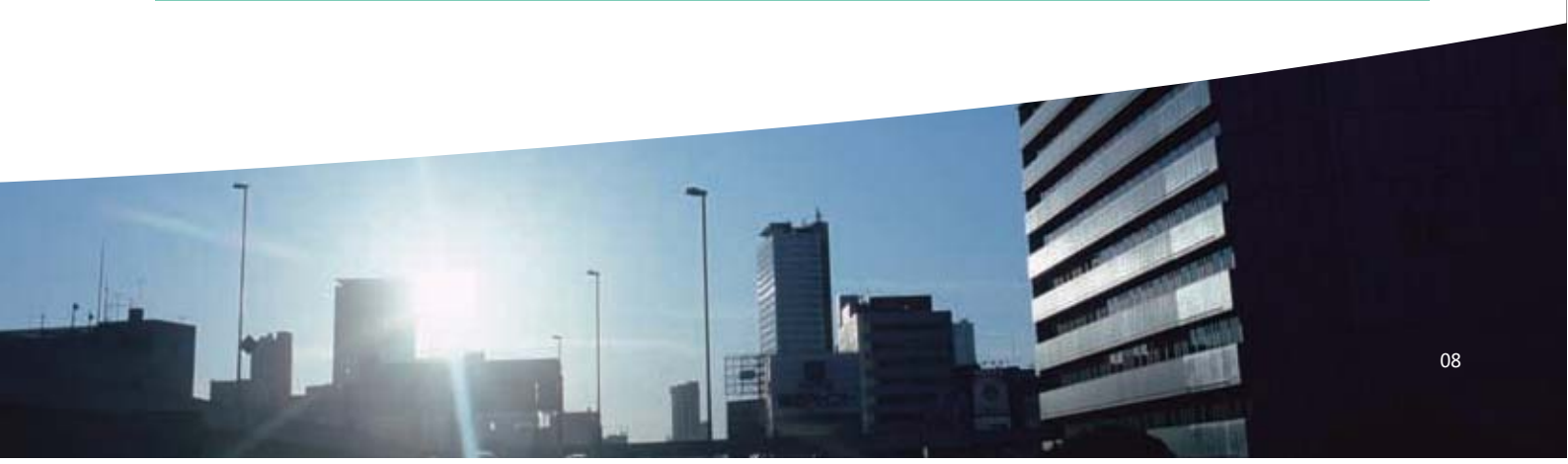
> Mechanical life: 10000 times

> Tripping characteristic: C: 5-10In

> Breaking capacity: 4.5kA

Wiring Capacity

> ≤10mm^2

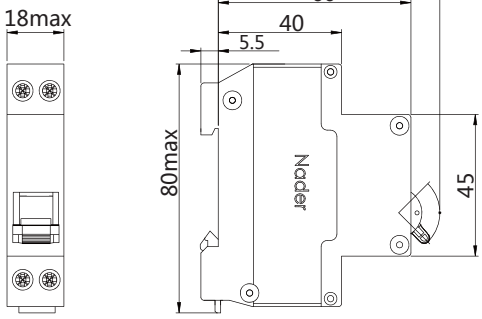


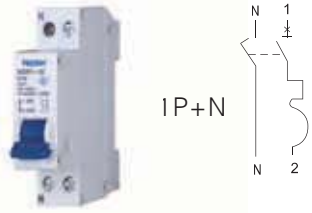
Nader

Product Features

- Phase and neutral are both switched when circuit opens or trips because of failure
- Neutral line connected early and disconnected late
- Screw clamp, shock-proof wiring terminals
- Standard TH35mm DIN rail mounting
- RoHS complied

Dimension



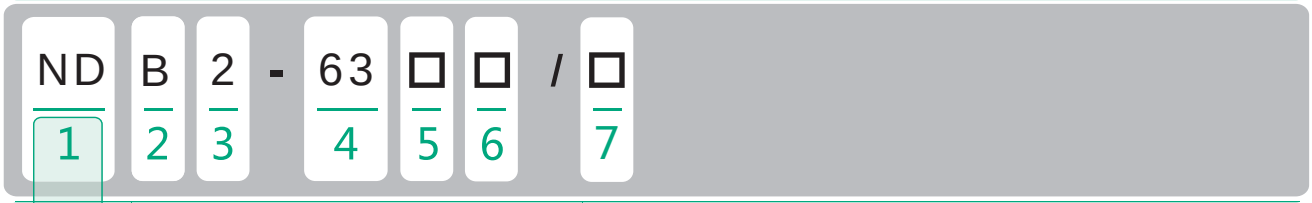
Number of Poles	Curve	Width (mm)	Rated Current (A)	Part No.
 1P+N	C	18	6	NDB1-32 6
			10	NDB1-32 10
			16	NDB1-32 16
			20	NDB1-32 20
			25	NDB1-32 25
			32	NDB1-32 32

NDB2-63 Series Miniature Circuit Breaker

Application

> Curve B: Non-inductive or micro-inductive loads
> Curve C: Usual inductive loads
> Curve D: Highly inductive loads
> Overload and short circuit protection

Model and Implication



No.	Implication	NDB2-63
1	Brand code	ND Nader
2	Product code	B Miniature Circuit Breaker
3	Design code	2
4	Frame rating (A)	63
5	Instantaneous tripping characteristic	B, C, D
6	Rated current (A)	1, 2, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63
7	Number of poles	1, 2, 3, 4

Standards and Certificates

> UL1077, IEC60898-1, GB 10963.1;
> UL1077, TÜV, CE, CCC.

Working Condition

> Ambient temperature: -35℃ ~ +70℃
> Air humidity: ≤95%
> Altitude: ≤2000m
> Pollution degree: Ⅱ

Product Features

> High breaking capacity
> Modularized
> Visual indicator
> Screw clamp, shock-proof wiring terminals
> Numerous accessories available
> Standard TH35mm DIN rail mounting
> RoHS complied

Specifications

> Rated working voltage: AC230/400V, DC60V
> Rated working current: 1A - 63A
> Mechanical life: 20000 times
> Tripping characteristic: B: 3-5In; C: 5-10In; D: 10-14In
> Breaking capacity:

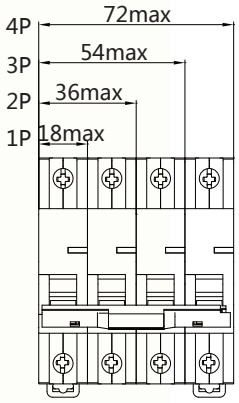
Rated current (A)	Voltage (V)	Breaking capacity(kA)
1~63	AC230/400	10

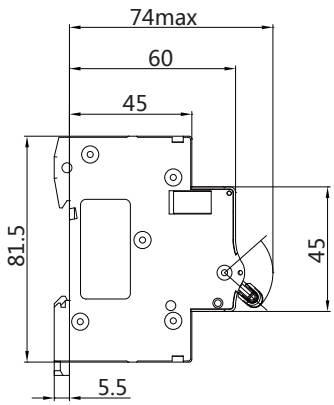
Wiring Capacity

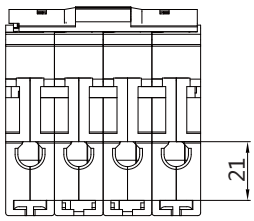
> ≤35mm^2

Nader

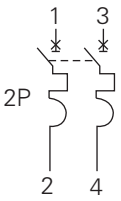
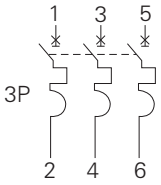
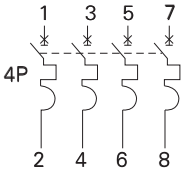
Dimension







Number of Poles	Curve	Width (mm)	Rated Current (A)	Part No.
 1P 	B, C, D	18	1	NDB2-63 1/1
			2	NDB2-63 2/1
			4	NDB2-63 4/1
			6	NDB2-63 6/1
			10	NDB2-63 10/1
			16	NDB2-63 16/1
			20	NDB2-63 20/1
			25	NDB2-63 25/1
			32	NDB2-63 32/1
			40	NDB2-63 40/1
			50	NDB2-63 50/1
			63	NDB2-63 63/1

	Number of Poles	Curve	Width (mm)	Rated Current (A)	Part No.
		B, C, D	36	1	NDB2-63 1/2
				2	NDB2-63 2/2
				4	NDB2-63 4/2
				6	NDB2-63 6/2
				10	NDB2-63 10/2
				16	NDB2-63 16/2
				20	NDB2-63 20/2
				25	NDB2-63 25/2
				32	NDB2-63 32/2
				40	NDB2-63 40/2
				50	NDB2-63 50/2
				63	NDB2-63 63/2
		B, C, D	54	1	NDB2-63 1/3
				2	NDB2-63 2/3
				4	NDB2-63 4/3
				6	NDB2-63 6/3
				10	NDB2-63 10/3
				16	NDB2-63 16/3
				20	NDB2-63 20/3
				25	NDB2-63 25/3
				32	NDB2-63 32/3
				40	NDB2-63 40/3
				50	NDB2-63 50/3
				63	NDB2-63 63/3
		B, C, D	72	1	NDB2-63 1/4
				2	NDB2-63 2/4
				4	NDB2-63 4/4
				6	NDB2-63 6/4
				10	NDB2-63 10/4
				16	NDB2-63 16/4
				20	NDB2-63 20/4
				25	NDB2-63 25/4
				32	NDB2-63 32/4
				40	NDB2-63 40/4
				50	NDB2-63 50/4
				63	NDB2-63 63/4

Nader

NDB2-63K Series Miniature Circuit Breaker

Application

> TT/TN-S grounding system

> Phase and neutral protection against short circuit and overload

Model and Implication

ND	B	2	-	63	K	C	□
1	2	3		4	5	6	7

No.	Implication	NDB2-63K
1	Brand code	ND Nader
2	Product code	B Miniature Circuit Breaker
3	Design code	2
4	Frame rating (A)	63
5	Phase line + Neutral line	K
6	Instantaneous tripping characteristic	C
7	Rated current (A)	6, 10, 16, 20, 25, 32, 40, 50, 63

Standards and Certificates

> IEC 60898-1, GB 10963.1; CCC

Specifications

- Rated working voltage: AC230V
- Mechanical life: 20000 times
- Tripping characteristic: C: 5-10In
- Breaking capacity: 6kA

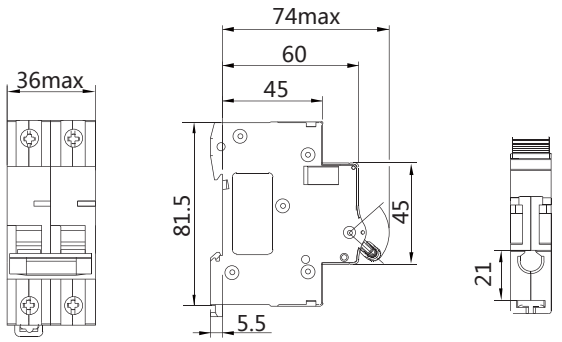
Working Condition

- Ambient temperature: -35℃ ~ +70℃
- Air humidity: ≤95%
- Altitude: ≤2000m
- Pollution degree: Ⅱ

Product Features

- Phase and neutral are both switched when circuit opens or trips because of failure
- Neutral line connected early and disconnected late
- Screw clamp, shock-proof wiring terminals
- Standard TH35mm DIN rail mounting

Dimension



Wiring Capacity

- ≤35mm^2

Number of Poles	Curve	Width (mm)	Rated Current (A)	Part No.
	C	36	6	NDB2-63K 6
			10	NDB2-63K 10
			16	NDB2-63K 16
			20	NDB2-63K 20
			25	NDB2-63K 25
			32	NDB2-63K 32
			40	NDB2-63K 40
			50	NDB2-63K 50
			63	NDB2-63K 63

Nader

NDB2T-63 Series Miniature Circuit Breaker

Application

> Curve B: Non-inductive or micro-inductive loads

> Curve C: Usual inductive loads

> Curve D: Highly inductive loads

> Overload and short circuit protection

Model and Implication

ND 1 | B 2 | 2T 3 - 63 4 | □ 5 | □ 6 / □ 7

No.	Implication	NDB2T-63
1	Brand code	ND Nader
2	Product code	B Miniature Circuit Breaker
3	Design code	2T
4	Frame rating (A)	63
5	Instantaneous tripping characteristic	B, C, D
6	Rated current (A)	1, 2, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63
7	Number of poles	1, 2, 3, 4

Standards and Certificates

> IEC60947-2, GB 14048.2; CB, CCC.

Working Condition

> Ambient temperature: -35℃ ~ +70℃
> Air humidity: ≤95%
> Altitude: ≤2000m
> Pollution degree: Ⅲ

Product Features

> High breaking capacity
> Modularized
> Visual indicator
> Screw clamp, shock-proof wiring terminals
> Numerous accessories available
> Standard TH35mm DIN rail mounting
> RoHS complied

Specifications

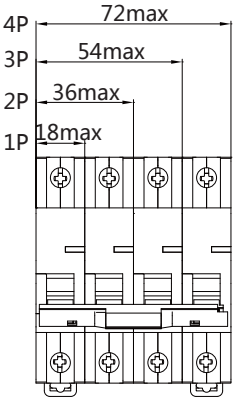
> Rated working voltage: AC230/400V, DC60V
> Rated working current: 1A - 63A
> Mechanical life: 20000 times
> Rated impulse withstand voltage: 6kV
> Tripping characteristic:
B: 4In±20%; C: 8In±20%; D: 12In±20%
> Breaking capacity

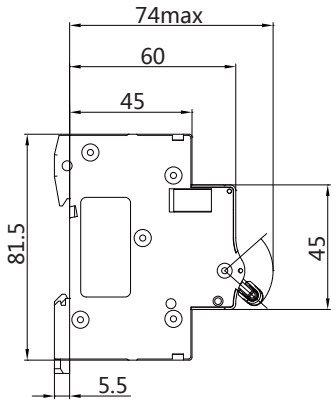
Rated current (A)	Voltage (V)	Breaking capacity(kA)
1~63	AC230/400	10

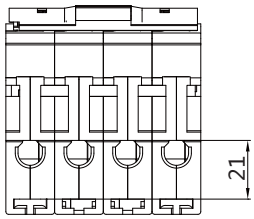
Wiring Capacity

> ≤35mm^2

Dimension

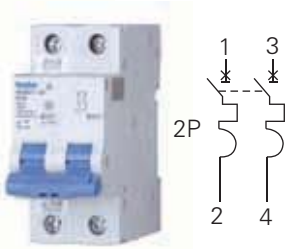
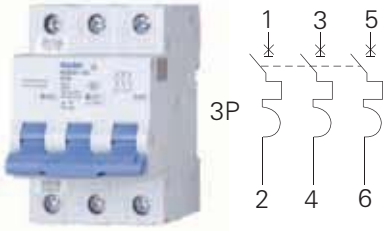
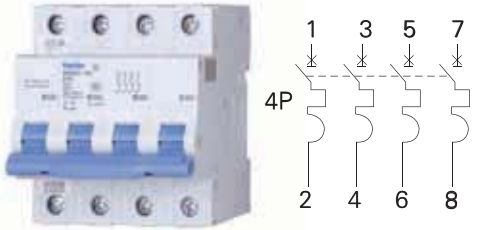






Number of Poles	Curve	Width (mm)	Rated Current (A)	Part No.
 1P 	B, C, D	18	1	NDB2T-63 1/1
			2	NDB2T-63 2/1
			4	NDB2T-63 4/1
			6	NDB2T-63 6/1
			10	NDB2T-63 10/1
			16	NDB2T-63 16/1
			20	NDB2T-63 20/1
			25	NDB2T-63 25/1
			32	NDB2T-63 32/1
			40	NDB2T-63 40/1
			50	NDB2T-63 50/1
			63	NDB2T-63 63/1

Nader

Number of Poles	Curve	Width (mm)	Rated Current (A)	Part No.
	B, C, D	36	1	NDB2T-63 1/2
			2	NDB2T-63 2/2
			4	NDB2T-63 4/2
			6	NDB2T-63 6/2
			10	NDB2T-63 10/2
			16	NDB2T-63 16/2
			20	NDB2T-63 20/2
			25	NDB2T-63 25/2
			32	NDB2T-63 32/2
			40	NDB2T-63 40/2
			50	NDB2T-63 50/2
			63	NDB2T-63 63/2
	B, C, D	54	1	NDB2T-63 1/3
			2	NDB2T-63 2/3
			4	NDB2T-63 4/3
			6	NDB2T-63 6/3
			10	NDB2T-63 10/3
			16	NDB2T-63 16/3
			20	NDB2T-63 20/3
			25	NDB2T-63 25/3
			32	NDB2T-63 32/3
			40	NDB2T-63 40/3
			50	NDB2T-63 50/3
			63	NDB2T-63 63/3
	B, C, D	72	1	NDB2T-63 1/4
			2	NDB2T-63 2/4
			4	NDB2T-63 4/4
			6	NDB2T-63 6/4
			10	NDB2T-63 10/4
			16	NDB2T-63 16/4
			20	NDB2T-63 20/4
			25	NDB2T-63 25/4
			32	NDB2T-63 32/4
			40	NDB2T-63 40/4
			50	NDB2T-63 50/4
			63	NDB2T-63 63/4

NDM1-125 Series Miniature Circuit Breaker

Application

> Curve C: Usual inductive loads
> Curve D: Highly inductive loads
> Overload and short circuit protection
> Only Curve C available for 125A

Model and Implication

ND 1 M 2 1 3 - 125 4 □ 5 □ 6 / □ 7

No.	Implication	NDM1-125
1	Brand code	ND Nader
2	Product code	M Miniature Circuit Breaker
3	Design code	1
4	Frame rating (A)	125
5	Instantaneous tripping characteristic	C, D
6	Rated current (A)	50, 63, 80, 100, 125
7	Number of poles	1, 2, 3, 4

Standards and Certificates

> UL1077, IEC 60947-2, GB 14048.2;
> UL, TÜV, CE, DIN, CCC.

Working Condition

> Ambient temperature: -35℃ ~ +70℃
> Air humidity: ≤95%
> Altitude: ≤2000m
> Pollution degree: Ⅲ

Product Features

> Modularized
> Screw clamp, shock-proof wiring terminals
> Numerous accessories available
> Standard TH35mm DIN rail mounting
> RoHS complied

Specifications

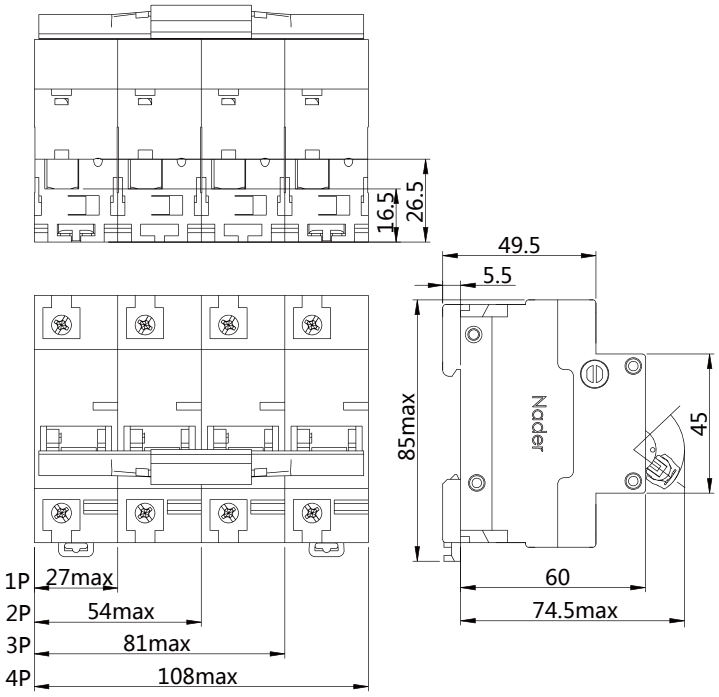
> Rated working voltage: AC230/400V, DC60V
> Rated working current: 50A - 125A
> Mechanical life: 10000 times
> Rated impulse withstand voltage: 6kV
> Tripping characteristic
C: 8In (±20%) ; D: 12In (±20%)
> Breaking capacity:

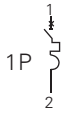
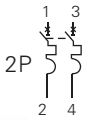
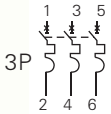
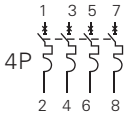
Rated current (A)	Pole number	Voltage (V)	Breaking capacity(kA)
50~125	1P	AC 230	10
50~125	2~4P	AC230/400	10

Wiring capacity

> ≤50mm^2

Dimension



Number of Poles		Curve	Width (mm)	Rated Current (A)	Part No.
	 1P	C, D	27	50	NDM1-125 50/1
				63	NDM1-125 63/1
				80	NDM1-125 80/1
				100	NDM1-125 100/1
		C		125	NDM1-125 125/1
	 2P	C, D	54	50	NDM1-125 50/2
				63	NDM1-125 63/2
				80	NDM1-125 80/2
				100	NDM1-125 100/2
		C		125	NDM1-125 125/2
	 3P	C, D	81	50	NDM1-125 50/3
				63	NDM1-125 63/3
				80	NDM1-125 80/3
				100	NDM1-125 100/3
		C		125	NDM1-125 125/3
	 4P	C, D	108	50	NDM1-125 50/4
				63	NDM1-125 63/4
				80	NDM1-125 80/4
				100	NDM1-125 100/4
		C		125	NDM1-125 125/4

NDB6-125 Series Miniature Circuit Breaker

Application

> Short circuit protection
> Overload protection
> Control
> Isolation
> DC system protection

NDB6-125 series Miniature Circuit Breaker is used in low-voltage terminal distribution for industry, civil building, energy, telecommunication, construction and so on.

Model and Implication

ND	B	6	-	125	□	□	/	□
1	2	3		4	5	6		7

No.	Implication	NDB6-125
1	Brand code	ND Nader
2	Product code	B Miniature Circuit Breaker
3	Design code	6
4	Frame rating (A)	125
5	Instantaneous tripping characteristic	C, D
6	Rated current (A)	63, 80, 100, 125*(Only Curve C is available for 125A)
7	Number of poles	1, 2, 3, 4

Standards and Certificates

> IEC 60947-2, GB 14048.2;
> TÜV, CE, DIN, CB and CCC.

Working Condition

> Ambient temperature : - 35℃~ + 75℃
> Air humidity: ≤95%
> Altitude: ≤2000m
> Pollution degree: Ⅲ

Product Features

> High breaking capacity
> Modularized
> Screw clamp, shock-proof wiring terminals
> Standard TH35mm DIN rail mounting, Ⅱ and Ⅲ installation type
> RoHS complied

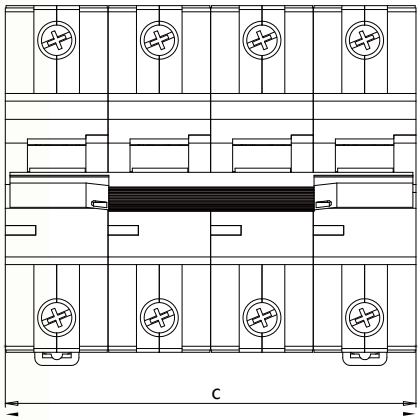
Specifications

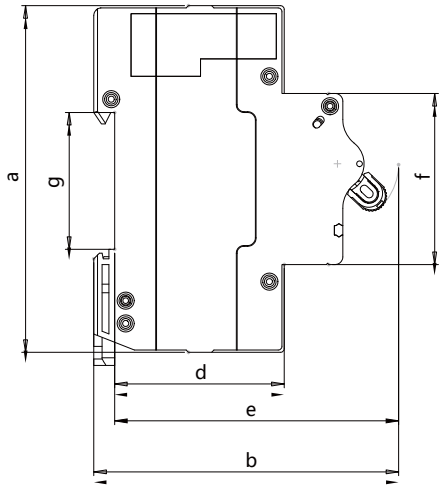
> Rated working voltage: AC230/400V , DC60V
> Rated current : 63A, 80A, 100A, 125A
> Mechanical life: 10000 times
> Impulse voltage withstand: 6kV
> Tripping characteristic: C: 8In(1±20%); D: 12In(1±20%)
> Breaking capacity: 15kA

Wiring Capacity

>Tunnel type terminal
>10mm^2-50mm^2 conducting wire

Dimension





	Dimension / Number of Poles	amax	bmax	cmax	d	e	f	g
	1P	94	85	27	46	75	45	35.5±0.5
	2P			54				
	3P			81				
	4P			108				

Package and Storage

> Max. packing quantity: 9/box for 1P MCB, 4/box for 2P MCB, 3/box for 3P MCB, 2/box for 4P MCB. 12 boxes in an overwrap carton.

> Please keep products away from snow and rain during transportation and storage. Products should be stored in the warehouse where there is ventilation and with normal temperature and humidity. In addition, there should not be significant shock or vibration.

DC Application of NDM1 Series MCB

Rated current of NDM1 series MCB is decided by the power of DC control circuit

According to DC rated voltage, there are several kinds of NDM1 series MCB cascade:

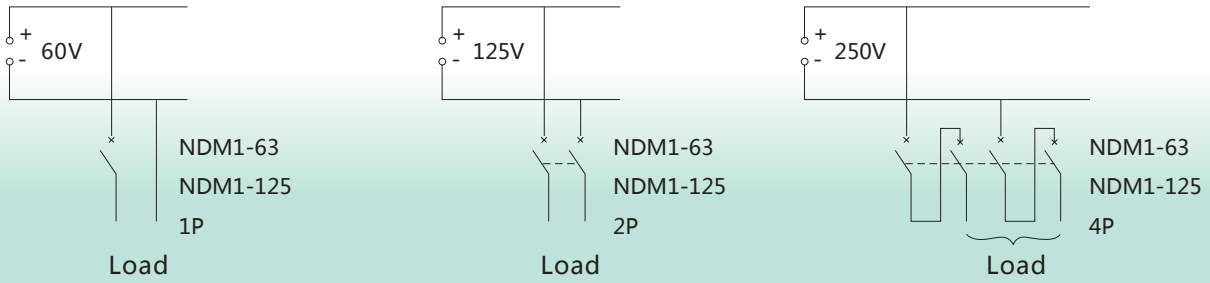
DC60V	One pole
DC125V	Two poles
DC250V	Four poles

Revised feeding of line power is permitted

The estimated short circuit current can not exceed rated service short-circuit breaking capacity

Specification	Rated Current (A)	DC rated service short-circuit breaking capacity (kA)		
		60V	125V	250V
NDM1-63	1A~63A	10 (1P)	20 (2P)	50 (4P)
NDM1-125	50A~125A	20 (1P)	20 (2P)	15 (4P)

Wiring Schematics



Nader

NDB2Z-63 Series DC Miniature Circuit Breaker

Application

> Curve B: DC non-inductive or micro-inductive loads
> Curve C: DC usual inductive loads
> Overload and short circuit protection

Model and Implication

ND	B	2	Z	-	63	□	□	/	□
1	2	3	4		5	6	7		8

No.	Implication	NDB2Z-63
1	Brand code	ND Nader
2	Product code	B Miniature Circuit Breaker
3	Design code	2
4	DC	Z
5	Frame rating (A)	63
6	Instantaneous tripping characteristic	B, C
7	Rated current (A)	1, 2, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63
8	Number of poles	1, 2

Standards and Certificates

> UL1077, IEC60898-2, GB 10963.2;
> UL1077, TÜV, CE and CCC.

Working Condition

> Ambient temperature: -35℃~+70℃
> Air humidity: ≤95%
> Altitude: ≤2000m
> Pollution degree: Ⅱ

Product Features

> High breaking capacity
> Modularized
> Visual indicator
> Screw clamp, shock-proof wiring terminals
> Numerous accessories available
> Standard TH35mm DIN rail mounting
> RoHS complied

Wiring Capacity

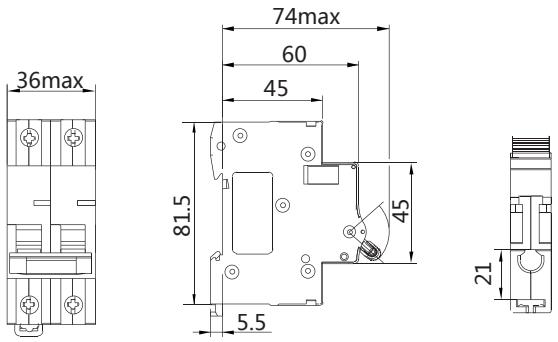
> ≤35mm^2

Specifications

Pole number	Rated current (A)	Voltage (V)	Breaking capacity (kA)
1P	1~63A	DC125V	10kA
2P, 3P, 4P		DC250V	
1P	1~63A	DC220V	6kA
2P, 3P, 4P		DC440V	

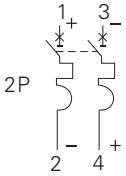
> Mechanical life: 20000 times
> Tripping characteristic: B: 4-7In; C: 7-15In

Dimension



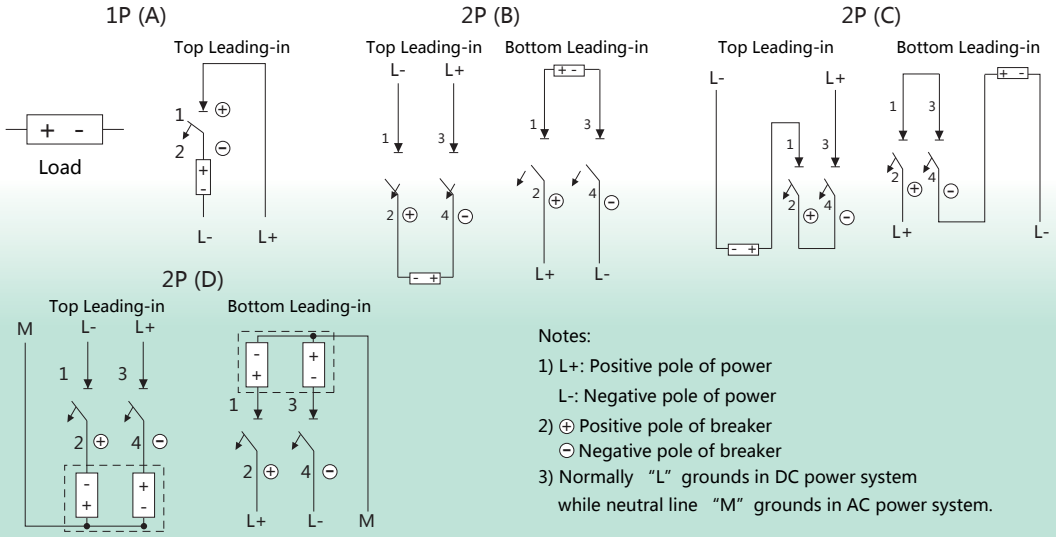
Number of Poles	Curve	Width (mm)	Rated Current (A)	Part No.
 1P 	B, C	18	1	NDB2Z-63 1/1
			2	NDB2Z-63 2/1
			4	NDB2Z-63 4/1
			6	NDB2Z-63 6/1
			10	NDB2Z-63 10/1
			16	NDB2Z-63 16/1
			20	NDB2Z-63 20/1
			25	NDB2Z-63 25/1
			32	NDB2Z-63 32/1
			40	NDB2Z-63 40/1
			50	NDB2Z-63 50/1
			63	NDB2Z-63 63/1

Nader

Number of Poles	Width (mm)	Rated Current (A)	Part No.
 	36	1	NDB2Z-63 1/2
		2	NDB2Z-63 2/2
		4	NDB2Z-63 4/2
		6	NDB2Z-63 6/2
		10	NDB2Z-63 10/2
		16	NDB2Z-63 16/2
		20	NDB2Z-63 20/2
		25	NDB2Z-63 25/2
		32	NDB2Z-63 32/2
		40	NDB2Z-63 40/2
		50	NDB2Z-63 50/2
		63	NDB2Z-63 63/2

> For 3-pole and 4-pole NDB2Z-63 series MCB can be ordered upon special request.

Wiring Schametics

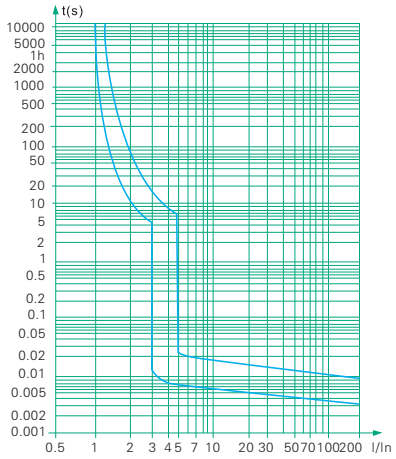


Notes:

1) L+: Positive pole of power
   L-: Negative pole of power
2) ⊕ Positive pole of breaker
   ⊖ Negative pole of breaker
3) Normally "L" grounds in DC power system
   while neutral line "M" grounds in AC power system.

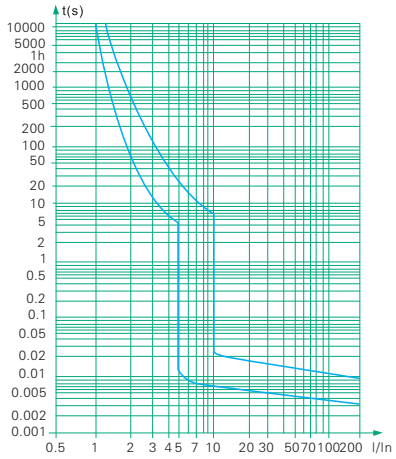
Tripping Curves

Curve B (3~5In)



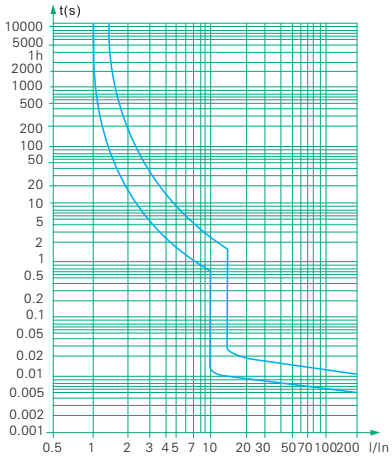
NDM1-63, NDB2-63, NDB2LE-63

Curve C (5~10In)



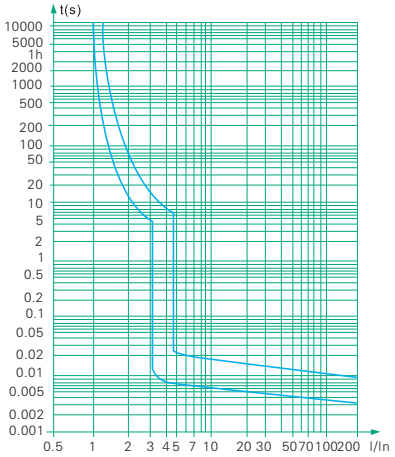
NDM1-63, NDB2-63, NDB2LE-63
NDB1-32, NDB1L (G) -32

Curve D (10~14In)



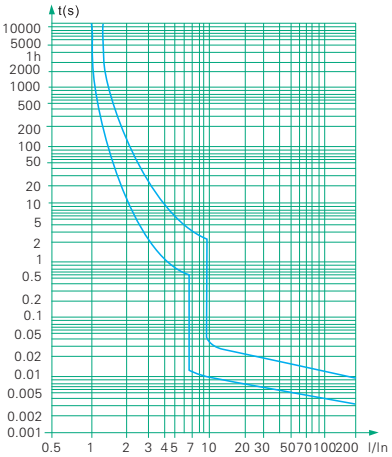
NDM1-63, NDB2-63, NDB2LE-63

Curve B 4In (1±20%)



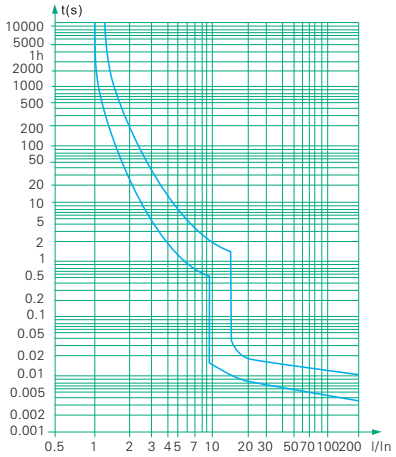
NDB2T-63

Curve C 8In (1±20%)



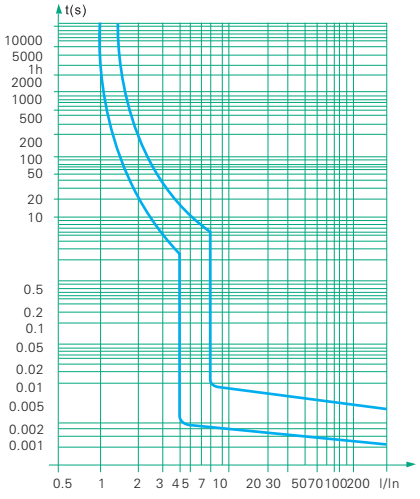
NDB2T-63, NDM1-125, NDB6-125

Curve D 12In (1±20%)



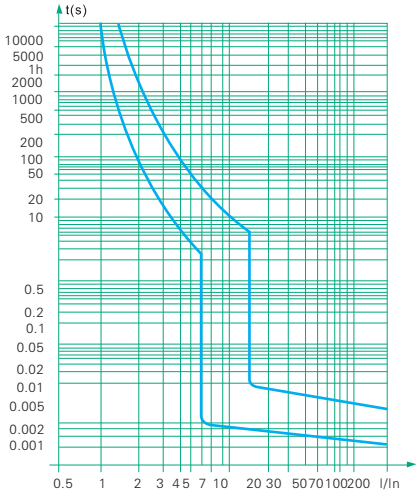
NDB2T-63, NDM1-125, NDB6-125

Curve B (4~7In)



NDB2Z-63

Curve C (7~15In)



NDB2Z-63

Nader

Temperature Derating

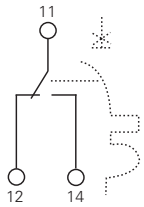
Rated current (A) \ Correcting current (A) \ Ambient temperature (°C)	-35	-30	-25	-20	-15	-10	-5	0	5	10	15
1	1.27	1.25	1.23	1.21	1.19	1.17	1.15	1.13	1.10	1.08	1.06
3	3.89	3.83	3.76	3.70	3.64	3.57	3.50	3.44	3.37	3.30	3.22
6	7.70	7.58	7.46	7.34	7.21	7.09	6.96	6.83	6.70	6.56	6.42
10	13.89	13.62	13.35	13.07	12.81	12.53	12.23	11.93	11.63	11.33	11.01
16	20.78	20.43	20.08	19.75	19.40	19.05	18.70	18.33	17.96	17.58	17.20
20	25.67	25.28	24.88	24.47	24.06	23.64	23.22	22.78	22.34	21.89	21.43
25	32.21	31.72	31.22	30.70	30.18	29.65	29.10	28.55	27.98	27.41	26.82
32	41.04	40.46	39.82	39.17	38.51	37.84	37.15	36.47	35.75	35.03	34.30
40	51.63	50.86	50.04	40.21	48.37	47.51	46.63	45.74	44.83	43.90	42.95
50	64.92	63.97	62.92	61.86	60.77	59.67	58.54	57.40	56.23	55.05	53.81
63	83.48	82.06	80.64	79.19	77.72	76.22	74.70	73.14	71.54	69.91	68.24
80	135	130	126	122	118	115	112	108	104	99	95
100	160	155	150	146	142	137	133	129	125	122	118
125	275	265	255	245	235	225	215	205	195	185	175

Rated current (A) \ Correcting current (A) \ Ambient temperature (°C)	20	25	30	35	40	45	50	55	60	65	70
1	1.05	1.02	1.00	0.97	0.94	0.91	0.89	0.86	0.83	0.80	0.77
3	3.14	3.06	3.00	2.92	2.84	2.76	2.67	2.58	2.49	2.38	2.27
6	6.27	6.14	6.00	5.84	5.68	5.52	5.36	5.19	5.01	4.83	4.64
10	10.67	10.34	10.00	9.63	9.24	8.85	8.45	8.01	7.55	7.06	6.55
16	16.80	16.40	16.00	15.55	15.11	14.66	14.20	13.71	13.21	12.70	12.75
20	20.96	20.47	20.00	19.47	18.95	18.42	17.87	17.30	16.71	16.10	15.47
25	26.22	25.61	25.00	24.33	23.67	23.00	22.28	21.56	20.80	20.02	19.21
32	33.54	32.77	32.00	31.17	30.34	29.48	28.60	27.69	26.75	25.78	24.77
40	41.98	40.99	40.00	38.93	37.85	36.75	35.61	34.43	33.21	31.95	30.63
50	52.56	51.28	50.00	47.82	46.24	44.81	43.33	41.81	40.23	38.58	35.77
63	66.53	64.78	63.00	60.11	58.19	56.21	54.16	52.03	49.81	47.50	43.05
80	91	88	85	82	80	75.5	72.5	68	64.5	58	52.5
100	114	111	108	103	100	94	88	82	75	68	58
125	165	155	145	135	125	115	105	95	85	75	65

> Note: Ambient temperature refers to the temperature inside the distribution board or switchgear where breakers are mounted. For breakers below 63A, the reference number is 30℃, while 40℃ for breakers from 80A to 125A.

Accessories for Miniature Circuit Breaker

OF Auxiliary Switch



Application

> Linked to the left side of NDM1 series MCB, to indicate the OPEN or CLOSED status of the associated breaker

Specifications

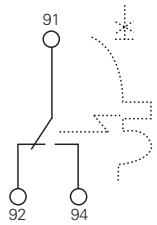
	Voltage	Current		Voltage	Current
AC	230V	6A	AC	400V	3A
DC	24V	6A	DC	48V	2A
DC	125V	1A	DC	250V	0.4A

> Width (mm): 9

> Notes:

After clipping on to NDM1 series MCB,
Point 11 and 14 are connected when circuit is closed;
Point 11 and 12 are connected when circuit is open.
May be used in conjunction with a SD alarm switch or another OF auxiliary switch.

SD Alarm Switch



Application

> Linked to the left side of NDM1 series MCB, to indicate the tripping status of the associated breaker

Specifications

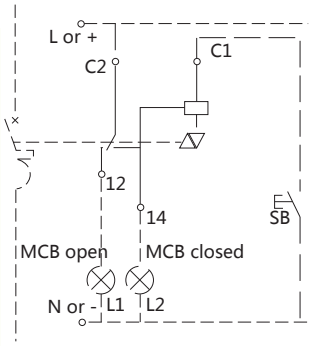
	Voltage	Current		Voltage	Current
AC	230V	6A	AC	400V	3A
DC	24V	6A	DC	48V	2A
DC	125V	1A	DC	250V	0.4A

> Width (mm): 9

> Notes:

After clipping on to NDM1 series MCB,
Point 91 and 92 are connected when circuit is closed;
Point 91 and 94 are connected when the breaker trips due to fault;
Point 91 and 92 are connected when the breaker trips by manual operation. Meanwhile, point 91 and 94 are disconnected.
May be used in conjunction with a OF auxiliary switch or another SD alarm switch.

MX+OF Shunt Release



Application

> Linked to the right side of NDM1 series MCB.

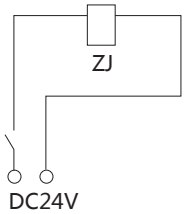
> Remote control

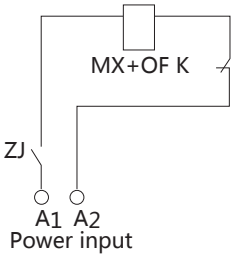
Specifications

> Control voltage AC 230V/400V DC 24V/48V

> Width (mm): 18

Active transfer contact





Note: At DC24V, above design of shunt control circuit is recommended
ZJ: DC24V intermediate relay

Standards and Certificates

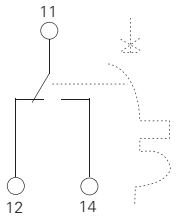
> IEC 60947-5, GB 14048.5;

> TÜV, CE, CCC.

Wiring Capacity

> Single line: 2.5mm^2 Double line: 1.5mm^2

OF2 Auxiliary Switch



Application

> Linked to the left side of NDB2 series MCB, to indicate the OPEN or CLOSED status of the associated breaker

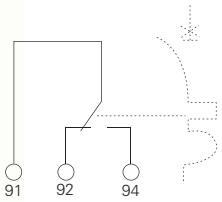
Specifications

	Voltage	Current		Voltage	Current
AC	415V	3A	AC	240V	6A
DC	130V	1A	DC	48V	2A
DC	24V	6A			

> Width (mm): 9

> Notes: After clipping on to NDB2 series MCB,
Point 11 and 14 are connected when circuit is closed;
Point 11 and 12 are connected when circuit is open.
May be used in conjunction with a SD2 alarm switch or another OF2 auxiliary switch.

SD2 Alarm Switch



Application

> Linked to the left side of NDB2 series MCB, to indicate the tripping status of the associated breaker

Specifications

	Voltage	Current		Voltage	Current
AC	415V	3A	AC	240V	6A
DC	130V	1A	DC	48V	2A
DC	24V	6A			

> Width (mm): 9

> Notes: After clipping on to NDM1 series MCB,
Point 91 and 92 are connected when circuit is closed;
Point 91 and 94 are connected when the breaker trips due to fault;
Point 91 and 92 are connected when the breaker trips by manual operation. Meanwhile, point 91 and 94 are disconnected.
May be used in conjunction with a OF2 auxiliary switch or another SD2 alarm switch.

Standards and Certificates

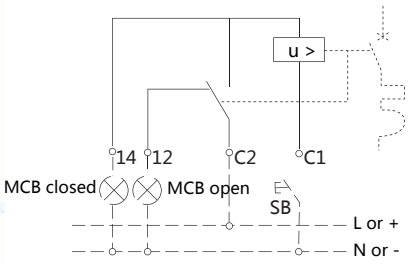
> IEC 60947-5, GB 14048.5;

> TÜV, CE, CCC.

Wiring Capacity

> Single line: 2.5mm^2 Double line: 1.5mm^2

MX+OF2 Shunt Release



Application

> Linked to the left side of NDB2 series MCB for remote tripping of the breaker.

> Indicating tripping status of the associated breaker

Specifications

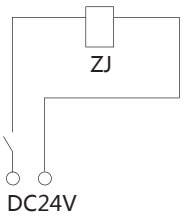
> Control voltage AC 230V/400V DC 24V/48V

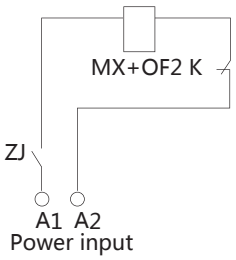
> Width (mm): 18

Note: At DC24V, above design of shunt control circuit is recommended

ZJ: DC24V intermediate relay

Active transfer contact





Wiring Capacity

> Single line: 2.5mm² Double line: 1.5mm²

NDH1 Series Busbar

Application

> NDH1 series busbar is accessory of NDM1-63, NDB2-63, NDG1 products. It is used to link product line terminals of the same phase. It can also be used to link terminal apparatus in the same way.

Model and Implication

ND	H	1	-	□	□	□
1	2	3		4	5	6

No.	Implication	NDH1
1	Brand code	ND Nader
2	Product code	H Busbar
3	Design code	1
4	Frame rating (A)	63, 100
5	Number of p ooles	1P, 2P, 3P
6	Width (mm)	

Nader

Product Features

> Consist of comb copper bar and insulated cover.

> Use T2 pure copper plate for copper bar and enhanced flame retardant PVC for insulated cover.

> Compact and simple usage.

> IP20 Protection degree

Product Type

> By pole number: 1-Pole, 2-Pole, 3-Pole

> By length: Multiple of 18mm, also can be customized, and 60 kits at most (1080 mm).

> By kit number: the poles that are linked.

Specification

> Rated insulation voltage: 500V

> Rated current: up to 100A

> Conventional thermal current: 100A

> Impulse voltage withstand: 6kV

> Short-time withstand current: 25kA/0.5s

> Power frequency voltage withstand: 2500V (AC 50Hz); No breakdown and flashover within 1 minutes.

NDH2 Series Busbar

Application

> NDH2-63 series busbar is accessory of NDM1-63 and NDB2-63 series MCB. It is used to link MCB line terminals of the same phase. It can also be used to link terminal apparatus in the same way.

Model and Implication

ND 1 H 2 2 3 - 63 4 □ 5 □ 6

No.	Implication	NDH2
1	Brand code	ND Nader
2	Product code	H Busbar
3	Design code	2
4	Frame rating (A)	63
5	Number of poles	1P, 3P
6	Width (mm)	

Product Features

> Consist of comb copper bar and insulated cover.
> Use T2 pure copper plate for copper bar and enhanced flame retardant PVC for insulated cover.
> Compact and simple usage.
> IP20 Protection degree

Product Type

> By pole number: 1-Pole, 3-Pole
> By length: Multiple of 18mm, also can be customized, and 60 kits at most (1080 mm).
> By kit number: the poles that are linked.

Specification

> Rated insulation voltage: 500V
> Rated current: up to 63A
> Conventional thermal current: 63A
> Impulse voltage withstand: 6kV
> Short-time withstand current: 25kA/0.5s
> Power frequency voltage withstand: 2500V (AC 50Hz); No breakdown and flashover within 1 minutes

Nader

NDG1 Series Disconnect Swtich

Application

> Close, open or disconnect the circuit

Model and Implication

ND G 1 - 100 □ / □

1 2 3 4 5 6

No.	Implication	NDG1-100
1	Brand code	ND Nader
2	Product code	G Disconnect Switch
3	Design code	1
4	Frame rating (A)	100
5	Rated current (A)	32, 63, 100
6	Number of poles	1, 2, 3, 4

Standards and Certificates

> IEC 60947-3, GB 14048.3; TÜV, CE, CCC.

Working Condition

> Ambient temperature: -35℃ ~ +70℃

> Air humidity: ≤95%

> Altitude: ≤2000m

> Pollution degree: Ⅱ

Wiring Capacity

> > $4mm^2$, ≤50 mm^2 (Minimum $4mm^2$ for BV)

Specifications

> Rated working voltage: AC230/400V

> Mechanical life: 10000 times

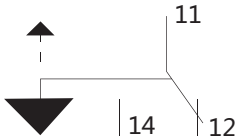
> Switching capacity:
3InA
(400V, cos=0.65)

> Rated short current making capacity:
2000A
(400V, cos=0.9)

> Rated short-time withstand current
2000A
(400V, 1s)

Number of Poles	Width (mm)	Rated Current (A)	Part No.
 1P 	18	32	NDG1-100 32/1
	18	63	NDG1-100 63/1
	18	100	NDG1-100 100/1
 2P 	36	32	NDG1-100 32/2
	36	63	NDG1-100 63/2
	36	100	NDG1-100 100/2
 3P 	54	32	NDG1-100 32/3
	54	63	NDG1-100 63/3
	54	100	NDG1-100 100/3
 4P 	72	32	NDG1-100 32/4
	72	63	NDG1-100 63/4
	72	100	NDG1-100 100/4

OF3 Auxiliary Switch



Application

> Linked to the left side of NDG1-100 series disconnect switch to indicate the OPEN or CLOSED status

Specification

> AC 250V 6A
AC 415V 3A

> Width (mm): 18
Note: Clip onto NDG1-100 series disconnect switch.
Point 11 and 14 is connected when circuit is closed;
Point 11 and 12 is connected when circuit is opened.

Wiring Capacity

> ≤10mm^2

Standards and Certificates

> IEC 60947-5, GB 14048.5;
> TÜV, CE, CCC.

Nader

Product Overview of Residual Current Protective Devices

Product name	Residual Current Unit				Residual Current Unit
Product range	NDM1L-32, NDM1L-50		NDM1L-100		NDM1LG-32, NDM1LG-50
Product picture					
Standard	IEC 61009-1		IEC 60947-2		IEC 61009-1
Number of poles	1P+N, 2P	3P, 3P+N, 4P	1P+N, 2P	3P, 3P+N, 4P	1P+N, 2P
Electrical characteristics					
Rated current(A) In					
Rated voltage(V) Ue	AC230V, AC400V	AC400V	AC230V, AC400V	AC400V	AC230V/400V
Rated residual current(mA)	30 (6, 10, 100 can be customized)		30, 100 (6, 10 can be customized)		30 (6, 10, 100 can be customized)
Breaking capacity (kA)	——		——		——
Overvoltage protection function	Without		Without		With
Tripping curve					
Residual current operating characteristic	AC		AC		AC
Residual current protection mode	Electronic		Electronic		Electronic
Connection capacity (mm^2)	NDM1LG-32: 10; NDM1LG-50: 25.		50		NDM1LG-32: 10; NDM1LG-50: 25.

Product Overview of Residual Current Protective Devices

Product name	RCBO	RCBO	RCBO		RCBO	RCCB	
Product range	NDB1L-32	NDB1LG-32	NDB2LE-63		NDB6LM-40	NDL6M-100	
Product picture							
Standard	IEC 61009-1	IEC 61009-1	IEC 61009-1		IEC 61009-1	IEC 61008-1	
Number of poles	1P+N	1P+N	1P+N, 2P	3P, 3P+N, 4P	1P+N	2	4
Electrical characteristics							
Rated current(A) In	6~32	6~32	1~63		6~40	16~100	
Rated voltage(V) Ue	AC230V	AC230V	AC230V	AC400V	AC230V	AC230V	AC230V, AC400V
Rated residual current(mA)	30 (6, 10, 100 can be customized)	30 (6, 10, 100 can be customized)	30 (6, 10, 100 can be customized)		30, 100, 300	30, 100, 300	
Breaking capacity (kA)	4.5	4.5	6		10	10	
Overvoltage protection function	Without	With	Without		Without	Without	
Tripping curve	C	C	B, C, D		B, C	——	
Residual current operating characteristic	AC	AC	AC		A, AC	A, AC	
Residual current protection mode	Electronic	Electronic	Electronic		Electromagnetic	Electromagnetic	
Connection capacity (mm^2)	10	10	35		35	35	

Nader

NDM1L Series Residual Current Unit

Application

> Clip onto the right side of NDM1 series MCB
> Protection against earth leakage faults

Model and Implication

ND 1 M 2 1 3 L 4 - □ 5 / □ 6 □ 7

No.	Implication	NDM1L
1	Brand code	ND Nader
2	Product code	M Miniature Circuit Breaker
3	Design code	1
4	Residual current protection	L
5	Frame rating (A)	32, 50, 100
6	Number of poles	1PN, 2P, 3P, 3PN, 4P
7	Rated residual operating current (mA)	30, 100

Standards and Certificates

> NDM1L-32, NDM1L-50: IEC 61009-1, GB 16917.1; CCC.
> NDM1L-100: IEC60947-2, GB14048.2; CCC.

Working Condition

- Ambient temperature: -5℃ ~+40℃
- Air humidity: ≤95%
- Altitude: ≤2000m
- Pollution degree: Ⅱ

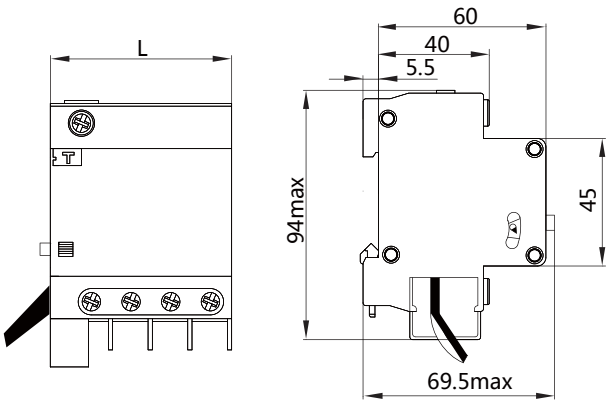
Specifications

- Rated working voltage: AC230/400V (1PN, 2P)
  AC400V (3P, 3PN, 4P)
- Rated residual operating current: 30mA, 100mA
- Release type: AC, electronic

Wiring Capacity

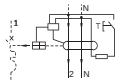
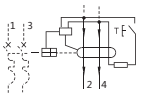
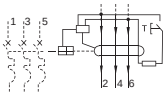
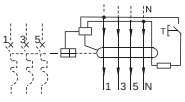
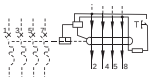
- NDM1L-32: ≤ 10mm^2
- NDM1L-50: ≤ 25mm^2
- NDM1L-100: ≤ 50mm^2

Dimension



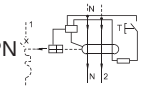
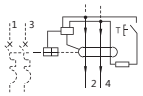
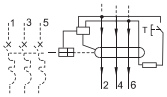
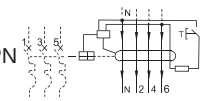
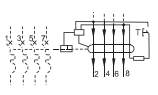
NDM1L-32, 50 NDM1L-100

NDM1L-32 (50) Residual Current Unit

Number of Poles	Width (mm)	Rated Residual Operating Current (mA)	Frame Rating (A)	Part No.
 1PN 	27	30	32	NDM1L-32/1PN
	37	30	50	NDM1L-50/1PN
 2P 	27	30	32	NDM1L-32/2
	37	30	50	NDM1L-50/2
 3P 	36	30	32	NDM1L-32/3
	51	30	50	NDM1L-50/3
 3PN 	45	30	32	NDM1L-32/3PN
	64	30	50	NDM1L-50/3PN
 4P 	45	30	32	NDM1L-32/4
	64	30	50	NDM1L-50/4

Nader

NDM1L-100 Series Residual Current Unit

Number of Poles	Width (mm)	Rated Residual Operating Current (mA)	Frame Rating (A)	Part No.
 1PN 	54	30, 100	100	NDM1L-100/1PN
 2P 	54	30, 100	100	NDM1L-100/2
 3P 	73	30, 100	100	NDM1L-100/3
 3PN 	90	30, 100	100	NDM1L-100/3PN
 4P 	90	30, 100	100	NDM1L-100/4

> Rated residual operating current can be customized upon request, such as 6mA, 10mA, 100mA, etc.

> Release should be released before MCB dielectric test.

> Release should be used and ordered together with Nader MCB.

NDM1LG Series Overvoltage Protection Residual Current Unit

Application

> Clip onto the right side of NDM1-63 series MCB

> Protection against earth leakage faults and overvoltage

Model and Implication

ND	M	1	L	G	-	□	/	□	□
1	2	3	4	5		6		7	8

No.	Implication	NDM1LG
1	Brand code	ND Nader
2	Product code	M Miniature Circuit Breaker
3	Design code	1
4	Residual current protection	L
5	Over voltage protection	G
6	Frame rating (A)	32, 50
7	Number of poles	1PN, 2P
8	Rated residual operating current (mA)	30

Standards and Certificates

> IEC 61009-1, GB 16917.1; CCC

Working Condition

> Ambient temperature: -5℃ ~+40℃

> Air humidity: ≤95%

> Altitude: ≤2000m

> Pollution degree: Ⅱ

Specifications

> Rated working voltage: AC230/400V(1PN, 2P)

> Over voltage limits: AC280V±5%

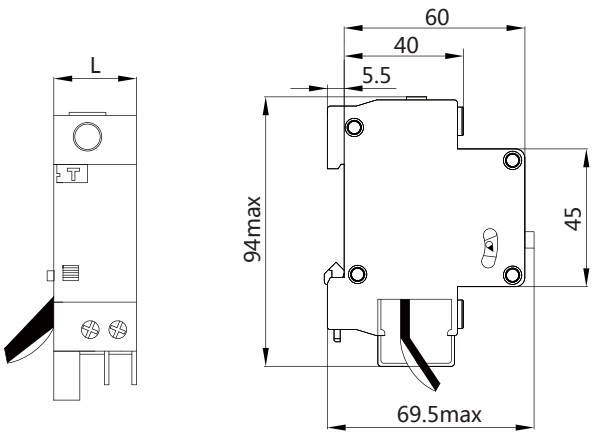
> Release type: AC, electronic

Wiring Capacity

> NDM1LG-32: ≤10mm^2

> NDM1LG-50: ≤25mm^2

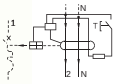
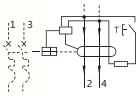
Dimension



NDM1LG-32, 50

Nader

NDM1LG-32 (50) Series Overvoltage Protection Residual Current Unit

Number of Poles	Width (mm)	Rated Residual Operating Current (mA)	Frame Rating (A)	Part No.
 1PN 	27	30	32	NDM1LG-32/1PN
	37	30	50	NDM1LG-50/1PN
 2P 	27	30	32	NDM1LG-32/2
	37	30	50	NDM1LG-50/2

> Rated residual operating current can be customized upon request, such as 6mA, 10mA, 100mA, etc.
> Release should be released before MCB dielectric test
> Release should be used and ordered together with Nader MCB.

Match Principle

	NDM1 Series MCB	NDM1L Series Residual Current Unit
Number of poles	1P	1PN
	2P	2P
	3P	3P, 3PN
	4P	4P
Frame rating	NDM1-63	NDM1L (G)-32 (1A-32A) NDM1L (G)-50 (40A, 50A)
	NDM1-125	NDM1L-100 (50A, 63A, 80A, 100A)

NDB1L Series RCBO (1P+N)

Application

> TT/TN-S grounding system

> Phase and neutral protection against short circuit, overload and earth leakage

Model and Implication

ND	B	1	L	-	32	C	□
1	2	3	4		5	6	7

No.	Implication	NDB1L-32
1	Brand code	ND Nader
2	Product code	B Miniature Circuit Breaker
3	Design code	1
4	Residual current protection	L
5	Frame rating	32
6	Instantaneous tripping characteristic	C
7	Rated current (A)	6, 10, 16, 20, 25, 32

Standards and Certificates

> UL1053, IEC61009-1, GB16917.1;

> UL1053, TÜV, CE and CCC.

Working Condition

> Ambient temperature: -5℃ ~ +40℃

> Air humidity: ≤95%

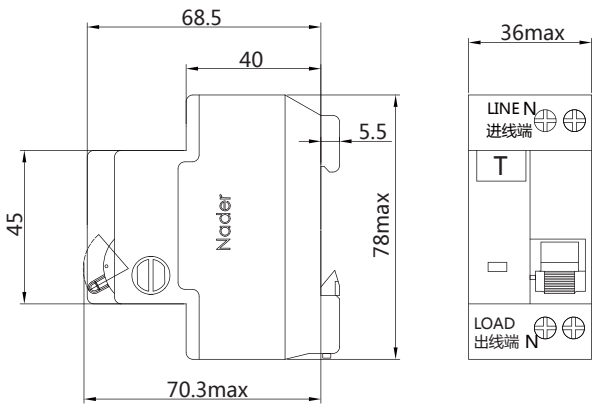
> Altitude: ≤2000m

> Pollution degree: Ⅱ

Wiring Capacity

> ≤10mm^2

Dimension



Product Features

> Phase and neutral are both switched when circuit opens or trips because of failure

> Neutral line connected early and disconnected late

> Screw clamp, shock-proof wiring terminals

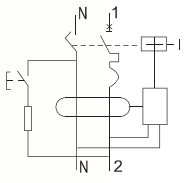
> Standard TH35mm DIN rail mounting

> RoHS complied

Nader

Specifications

> Rated working voltage: AC230
> Mechanical life: 10000 times
> Tripping characteristic: C: 5-10In
> Rated residual operating current: 30mA
> Breaking capacity: 4.5kA
> Release type: AC, electronic type

Number of Poles	Curve	Width (mm)	Rated Current (A)	Rated Residual Operating Current (mA)	Part No.
 1P+N 	C	36	6	30	NDB1L-32 6
			10		NDB1L-32 10
			16		NDB1L-32 16
			20		NDB1L-32 20
			25		NDB1L-32 25
			32		NDB1L-32 32

> Rated residual operating current can be customized upon request, such as 6mA, 10mA, 100mA, etc.

NDB1LG Series RCBO with Overvoltage Protection (1P+N)

Application

> TT/TN-S grounding system

> Phase and neutral protection against short circuit, overload, earth leakage and overvoltage

Model and Implication

ND	B	1	L	G	-	32	C	□
1	2	3	4	5		6	7	8

No.	Implication	NDB1LG-32
1	Brand code	ND Nader
2	Product code	B Miniature Circuit Breaker
3	Design code	1
4	Residual current protection	L
5	Overvoltage protection	G
6	Frame rating (A)	32
7	Instantaneous tripping characteristic	C
8	Rated current (A)	6, 10, 16, 20, 25, 32

Standards and Certificates

> IEC 61009-1, GB 16917.1; CCC.

Working Condition

> Ambient temperature: -5℃ ~ +40℃

> Air humidity: ≤95%

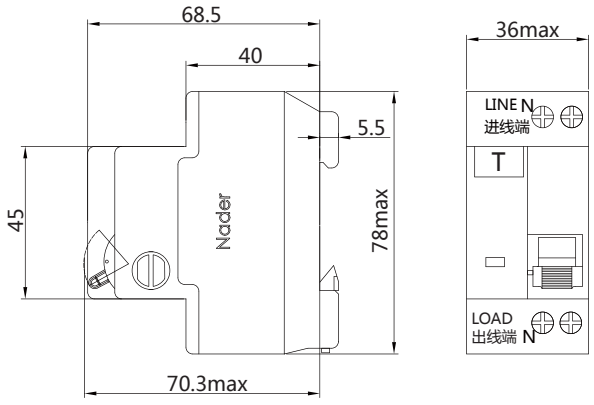
> Altitude: ≤2000m

> Pollution degree: Ⅱ

Wiring Capacity

> ≤10mm^2

Dimension



Product Features

> Phase and neutral are both switched when circuit opens or trips because of failure

> Neutral line connected early and disconnected late

> Screw clamp, shock-proof wiring terminals

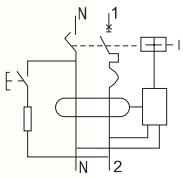
> Standard TH35mm DIN rail mounting

> RoHS complied

Nader

Specifications

> Rated working voltage: AC230
> Mechanical life: 10000 times
> Tripping characteristic: C: 5-10In
> Rated residual operating current: 30mA
> Breaking capacity: 4.5kA
> Overvoltage: AC280V±5%
> Release type: AC, electronic type

Number of Poles	Curve	Width (mm)	Rated Current (A)	Rated Residual Operating Current (A)	Part No.
 1P+N 	C	36	6	30	NDB1LG-32 6
			10		NDB1LG-32 10
			16		NDB1LG-32 16
			20		NDB1LG-32 20
			25		NDB1LG-32 25
			32		NDB1LG-32 32

> Rated residual operating current can be customized upon request, such as 6mA, 10mA, 100mA, etc.

NDB2LE Series Residual Current Circuit Breaker with Overload Protection

Application

> Protection against short circuit, overload and earth leakage

Model and Implication

ND	B	2	L	E	-	63	□	□	/	□
1	2	3	4	5		6	7	8		9

No.	Implication	NDB2LE
1	Brand code	ND Nader
2	Product code	B Miniature Circuit Breaker
3	Design code	2
4	Residual current release	L
5	Electronic type	E
6	Frame rating (A)	63
7	Instantaneous tripping characteristic	B, C, D
8	Rated current (A)	1, 2, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63
9	Number of poles	1PN, 2P, 3P, 3PN, 4P

Standards and Certificates

> IEC 61009-1, GB 16917.1;
> TÜV, CE, CCC.

Working Condition

> Ambient temperature: -5℃ ~ +40℃
> Air humidity: ≤95%
> Altitude: ≤2000m
> Pollution degree: Ⅱ
> RoHS complied

Specifications

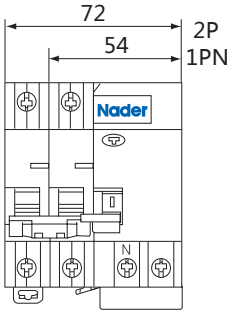
> Rated working voltage: AC230V (1PN, 2P)
AC400V (3P, 3PN, 4P)
> Rated residual operating current: 30mA
(6mA, 10mA, 100mA, 300mA can be customized)
> Release type: AC, electronic

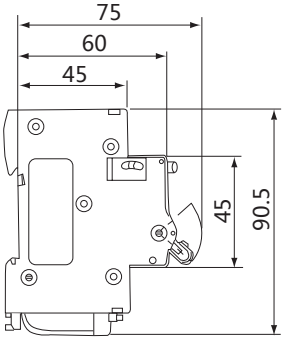
Wiring Capacity

> ≤35mm^2

Dimension

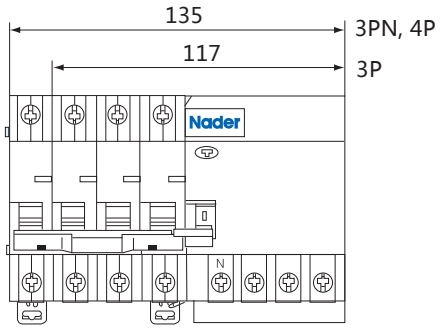
1PN, 2P

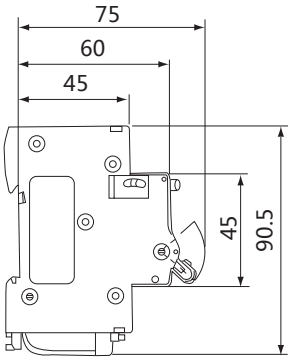


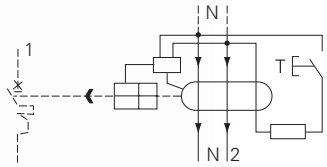
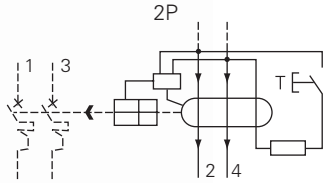


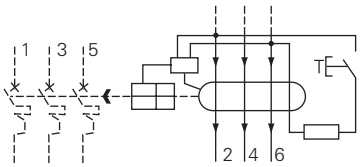
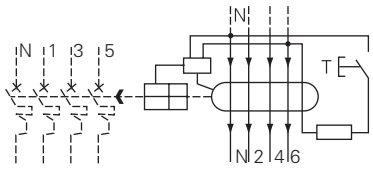
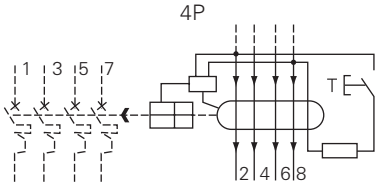
Dimension

3P, 3PN, 4P





Number of Poles	Curve	Width (mm)	Rated Current (A)	Part No.
 1PN 	B, C, D	54	1	NDB2LE-63 1/1PN
			2	NDB2LE-63 2/1PN
			4	NDB2LE-63 4/1PN
			6	NDB2LE-63 6/1PN
			10	NDB2LE-63 10/1PN
			16	NDB2LE-63 16/1PN
			20	NDB2LE-63 20/1PN
			25	NDB2LE-63 25/1PN
			32	NDB2LE-63 32/1PN
			40	NDB2LE-63 40/1PN
			50	NDB2LE-63 50/1PN
			63	NDB2LE-63 63/1PN
 2P 	B, C, D	72	1	NDB2LE-63 1/2
			2	NDB2LE-63 2/2
			4	NDB2LE-63 4/2
			6	NDB2LE-63 6/2
			10	NDB2LE-63 10/2
			16	NDB2LE-63 16/2
			20	NDB2LE-63 20/2
			25	NDB2LE-63 25/2
			32	NDB2LE-63 32/2
			40	NDB2LE-63 40/2
			50	NDB2LE-63 50/2
			63	NDB2LE-63 63/2

Number of Poles	Curve	Width (mm)	Rated Current (A)	Part No.
 3P 	B, C, D	117	1	NDB2LE-63 1/3
			2	NDB2LE-63 2/3
			4	NDB2LE-63 4/3
			6	NDB2LE-63 6/3
			10	NDB2LE-63 10/3
			16	NDB2LE-63 16/3
			20	NDB2LE-63 20/3
			25	NDB2LE-63 25/3
			32	NDB2LE-63 32/3
			40	NDB2LE-63 40/3
			50	NDB2LE-63 50/3
			63	NDB2LE-63 63/3
 3PN ※ 	B, C, D	135	1	NDB2LE-63 1/3PN
			2	NDB2LE-63 2/3PN
			4	NDB2LE-63 4/3PN
			6	NDB2LE-63 6/3PN
			10	NDB2LE-63 10/3PN
			16	NDB2LE-63 16/3PN
			20	NDB2LE-63 20/3PN
			25	NDB2LE-63 25/3PN
			32	NDB2LE-63 32/3PN
			40	NDB2LE-63 40/3PN
			50	NDB2LE-63 50/3PN
			63	NDB2LE-63 63/3PN
 4P 	B, C, D	135	1	NDB2LE-63 1/4
			2	NDB2LE-63 2/4
			4	NDB2LE-63 4/4
			6	NDB2LE-63 6/4
			10	NDB2LE-63 10/4
			16	NDB2LE-63 16/4
			20	NDB2LE-63 20/4
			25	NDB2LE-63 25/4
			32	NDB2LE-63 32/4
			40	NDB2LE-63 40/4
			50	NDB2LE-63 50/4
			63	NDB2LE-63 63/4

> Release should be released first during MCB dielectric test

> ※ NDB2LE-63 3PN can be ordered upon special request

Nader

NDB6LM Series RCBO

Application

> TT/TN-S grounding system

> Protection against overload, short circuit and earth leakage

Model and Implication

ND	B	6	L	M	-	40	□	□	/	□	/	□	/	□
1	2	3	4	5		6	7	8		9		10		11

No.	Implication	NDB6LM-40
1	Brand code	ND Nader Brand
2	Product code	B Breaker
3	Design code	6
4	Protection against residual current (earth leakage protection)	L
5	Electromagnetic type	M
6	Frame rating (A)	40
7	Instantaneous tripping characteristic	B, C
8	Rated current (A)	6, 10, 16, 20, 25, 32, 40
9	Number of poles	1P+N
10	Rated residual operating current (A)	0.030, 0.100, 0.300
11	Residual current operating characteristic	A, AC

Standards and Certificates

> GB16917.1, IEC 61009-1
> TÜV , CE, CCC.

Working Condition

> Ambient temperature: -25℃ ~ +40℃
> Relative air humidity: ≤95%
> Altitude: ≤2000m
> Pollution Degree: II
> External magnetic field should be 5 times smaller than geomagnetic field.

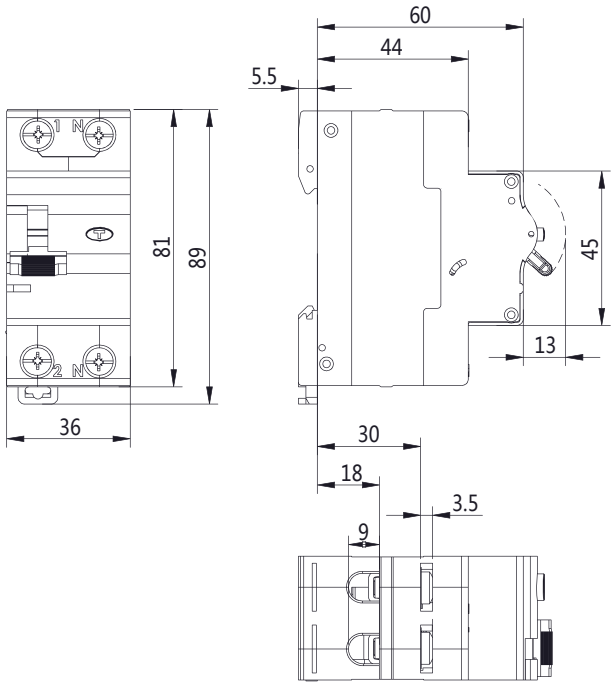
Product Features

> Residual current operating function is independent of main circuit voltage, more reliable.
> When the breaker is in the position OFF for failure protection or by normal operation, both phase line and neutral line are in the state OFF avoiding injured by neutral connected.
> During the operations, the neutral line makes first and then breaking lags.
> Terminal with double function, connection easily and reliability.
> Standard TH35mm DIN rail mounting.
> RoHS complied.

Wiring capacity

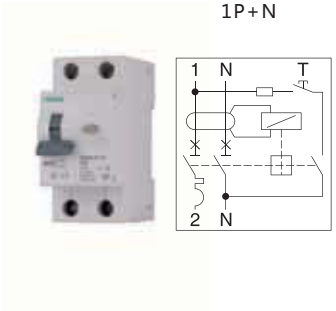
> Conducting wire: 1~25mm^2
> Thickness of busbar: 0.8~2mm

Dimension

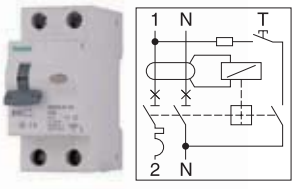


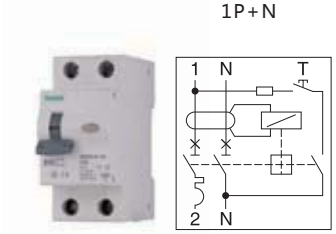
Specifications

> Rated working voltage: AC230V
> Tripping characteristics: B: 3-5 In C: 5-10 In
> Mechanical life: 20000 times
> Rated residual operating current: 0.030A, 0.100A, 0.300A
> Breaking capacity: 10kA
> Residual current operating characteristic: A, AC

Number of Poles	Curve	Width (mm)	Rated Current (A)	Rated Residual Operating Current (A)	Residual Current Operating Characteristics	Part No.
1P+N 	B, C	36	6	0.030 0.100 0.300	A AC	NDB6LM-40 B6/1P+N/0.030/A
						NDB6LM-40 B6/1P+N/0.100/A
						NDB6LM-40 B6/1P+N/0.300/A
						NDB6LM-40 B6/1P+N/0.030/AC
						NDB6LM-40 B6/1P+N/0.100/AC
						NDB6LM-40 B6/1P+N/0.300/AC
						NDB6LM-40 C6/1P+N/0.030/A
						NDB6LM-40 C6/1P+N/0.100/A
						NDB6LM-40 C6/1P+N/0.300/A
						NDB6LM-40 C6/1P+N/0.030/AC
						NDB6LM-40 C6/1P+N/0.100/AC
						NDB6LM-40 C6/1P+N/0.300/AC

Nader

Number of Poles	Curve	Width (mm)	Rated Current (A)	Rated Residual Operating Current (A)	Residual Current Operating Characteristics	Part No.
1P+N 	B, C	36	10	0.030	A	NDB6LM-40 B10/1P+N/0.030/A
						NDB6LM-40 B10/1P+N/0.100/A
				0.100		NDB6LM-40 B10/1P+N/0.300/A
				0.300		NDB6LM-40 B10/1P+N/0.030/AC
					AC	NDB6LM-40 B10/1P+N/0.100/AC
						NDB6LM-40 B10/1P+N/0.300/AC
						NDB6LM-40 C10/1P+N/0.030/A
						NDB6LM-40 C10/1P+N/0.100/A
						NDB6LM-40 C10/1P+N/0.300/A
						NDB6LM-40 C10/1P+N/0.030/AC
						NDB6LM-40 C10/1P+N/0.100/AC
						NDB6LM-40 C10/1P+N/0.300/AC
			16			NDB6LM-40 B16/1P+N/0.030/A
						NDB6LM-40 B16/1P+N/0.100/A
						NDB6LM-40 B16/1P+N/0.300/A
						NDB6LM-40 B16/1P+N/0.030/AC
						NDB6LM-40 B16/1P+N/0.100/AC
						NDB6LM-40 B16/1P+N/0.300/AC
						NDB6LM-40 C16/1P+N/0.030/A
						NDB6LM-40 C16/1P+N/0.100/A
						NDB6LM-40 C16/1P+N/0.300/A
						NDB6LM-40 C16/1P+N/0.030/AC
						NDB6LM-40 C16/1P+N/0.100/AC
						NDB6LM-40 C16/1P+N/0.300/AC

Number of Poles	Curve	Width (mm)	Rated Current (A)	Rated Residual Operating Current (A)	Residual Current Operating Characteristics	Part No.
1P+N 	B, C	36	20	0.030 0.100 0.300	A AC	NDB6LM-40 B20/1P+N/0.030/A
						NDB6LM-40 B20/1P+N/0.100/A
						NDB6LM-40 B20/1P+N/0.300/A
						NDB6LM-40 B20/1P+N/0.030/AC
						NDB6LM-40 B20/1P+N/0.100/AC
						NDB6LM-40 B20/1P+N/0.300/AC
						NDB6LM-40 C20/1P+N/0.030/A
						NDB6LM-40 C20/1P+N/0.100/A
						NDB6LM-40 C20/1P+N/0.300/A
						NDB6LM-40 C20/1P+N/0.030/AC
						NDB6LM-40 C20/1P+N/0.100/AC
						NDB6LM-40 C20/1P+N/0.300/AC
			25			NDB6LM-40 B25/1P+N/0.030/A
						NDB6LM-40 B25/1P+N/0.100/A
						NDB6LM-40 B25/1P+N/0.300/A
						NDB6LM-40 B25/1P+N/0.030/AC
						NDB6LM-40 B25/1P+N/0.100/AC
						NDB6LM-40 B25/1P+N/0.300/AC
						NDB6LM-40 C25/1P+N/0.030/A
						NDB6LM-40 C25/1P+N/0.100/A
						NDB6LM-40 C25/1P+N/0.300/A
						NDB6LM-40 C25/1P+N/0.030/AC
						NDB6LM-40 C25/1P+N/0.100/AC
						NDB6LM-40 C25/1P+N/0.300/AC
			32			NDB6LM-40 B32/1P+N/0.030/A
						NDB6LM-40 B32/1P+N/0.100/A
						NDB6LM-40 B32/1P+N/0.300/A
						NDB6LM-40 B32/1P+N/0.030/AC
						NDB6LM-40 B32/1P+N/0.100/AC
						NDB6LM-40 B32/1P+N/0.300/AC
						NDB6LM-40 C32/1P+N/0.030/A
						NDB6LM-40 C32/1P+N/0.100/A
						NDB6LM-40 C32/1P+N/0.300/A
						NDB6LM-40 C32/1P+N/0.030/AC
						NDB6LM-40 C32/1P+N/0.100/AC
						NDB6LM-40 C32/1P+N/0.300/AC
			40			NDB6LM-40 B40/1P+N/0.030/A
						NDB6LM-40 B40/1P+N/0.100/A
						NDB6LM-40 B40/1P+N/0.300/A
						NDB6LM-40 B40/1P+N/0.030/AC
						NDB6LM-40 B40/1P+N/0.100/AC
						NDB6LM-40 B40/1P+N/0.300/AC
						NDB6LM-40 C40/1P+N/0.030/A
						NDB6LM-40 C40/1P+N/0.100/A
						NDB6LM-40 C40/1P+N/0.300/A
						NDB6LM-40 C40/1P+N/0.030/AC
						NDB6LM-40 C40/1P+N/0.100/AC
						NDB6LM-40 C40/1P+N/0.300/AC

Nader

NDL6M-100 Series RCCB

Application

> TT/TN-S grounding system

> Protection against residual current

Model and Implication

ND	L	6	M	-	100	□	/	□	/	□	/	□
1	2	3	4		5	6		7		8		9

No.	Implication	NDL6M
1	Brand code	ND Nader Brand
2	Protection against residual current (earth leakage protection)	L
3	Design code	6
4	Electromagnetic type	M
5	Frame rating (A)	100
6	Rated current (A)	16, 25, 40, 63, 80, 100
7	Number of poles	2, 4
8	Rated residual operating current (mA)	30, 100, 300
9	Residual current operating characteristic	A, AC

Standards and Certificates

> GB16916.1, IEC 61008-1
> TÜV , CE and CCC certificates.

Product Features

> AC type: protection against the effects of residual sinusoidal alternating currents, whether suddenly applied or slowly rising.
> A type: protection against the effects of residual sinusoidal alternating currents and residual pulsating direct currents, whether suddenly applied or slowly rising.
> Residual current operating function is independent of main circuit voltage, more reliable.
> When the breaker is in the position OFF for failure protection or by normal operation, both phase line and neutral line are in the state OFF avoiding injured by neutral connected.
> During the operations, neutral line makes first and then breaking lags.
> Besides detecting residual current, the product can make, break or isolate the whole circuit without overload or short-circuit protection, so it should be used together with circuit breaker upstream.
> With isolation function.
> High anti-interference ability.
> Standard Th35mm DIN rail mounting.
> RoHS complied.

Wiring Capacity

> Tunnel terminal
> Cables up to 35mm^2. Can be connected using busbar and 35mm^2 cable at the same time.

Working Condition

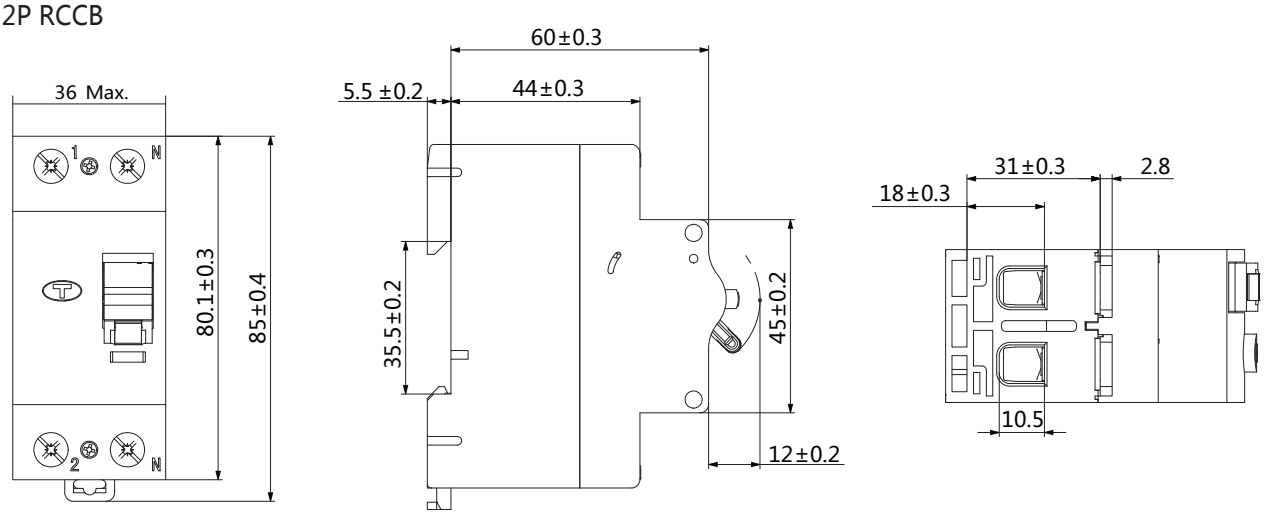
> Ambient temperature: -25℃ ~ +55℃
> Relative air humidity: ≤95%
> Altitude: ≤2000m
> Pollution Degree: II
> External magnetic field should be 5 times smaller than geomagnetic field.

Specifications

> Rated working voltage: AC230V (2P), AC230/400V (4P)
> Rated frequency: 50Hz
> Mechanical life: 20000 times
> Rated residual operating cureent: 30mA, 100mA, 300mA
> Rated conditional short-circuit current Inc: 10kA
> Residual current operating characteristic: A, AC

Dimension

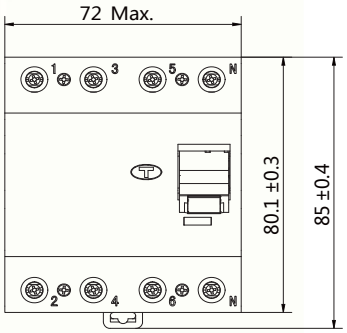
2P RCCB

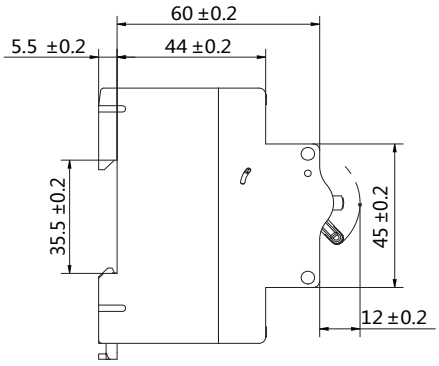


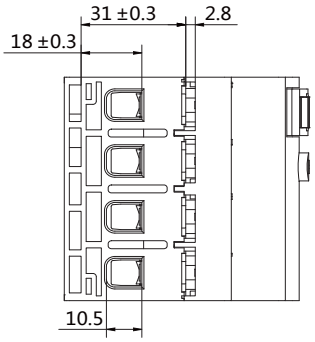
Nader

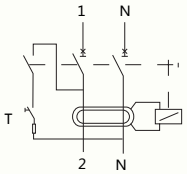
Dimension

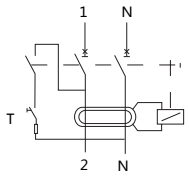
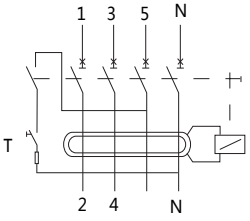
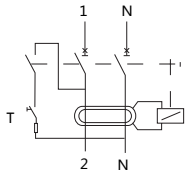
4P RCCB



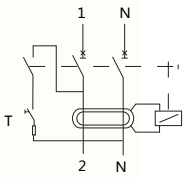
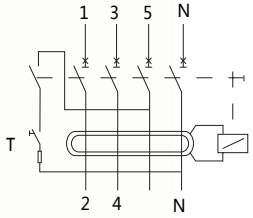




Number of Poles	Residual Current Operating Characteristics	Width (mm)	Rated Current (A)	Rated Residual Operating Current (mA)	Part No.
2P  	AC type	36	16	30	NDL6M-100 16/2/30/AC
				100	NDL6M-100 16/2/100/AC
				300	NDL6M-100 16/2/300/AC
			25	30	NDL6M-100 25/2/30/AC
				100	NDL6M-100 25/2/100/AC
				300	NDL6M-100 25/2/300/AC
			40	30	NDL6M-100 40/2/30/AC
				100	NDL6M-100 40/2/100/AC
				300	NDL6M-100 40/2/300/AC

Number of Poles	Residual Current Operating Characteristics	Width (mm)	Rated Current (A)	Rated Residual Operating Current (mA)	Part No.
2P  	AC type	36	63	30	NDL6M-100 63/2/30/AC
				100	NDL6M-100 63/2/100/AC
				300	NDL6M-100 63/2/300/AC
			80	30	NDL6M-100 80/2/30/AC
				100	NDL6M-100 80/2/100/AC
				300	NDL6M-100 80/2/300/AC
			100	30	NDL6M-100 100/2/30/AC
				100	NDL6M-100 100/2/100/AC
				300	NDL6M-100 100/2/300/AC
4P  	AC type	70	16	30	NDL6M-100 16/4/30/AC
				100	NDL6M-100 16/4/100/AC
				300	NDL6M-100 16/4/300/AC
			25	30	NDL6M-100 25/4/30/AC
				100	NDL6M-100 25/4/100/AC
				300	NDL6M-100 25/4/300/AC
			40	30	NDL6M-100 40/4/30/AC
				100	NDL6M-100 40/4/100/AC
				300	NDL6M-100 40/4/300/AC
			63	30	NDL6M-100 63/4/30/AC
				100	NDL6M-100 63/4/100/AC
				300	NDL6M-100 63/4/300/AC
			80	30	NDL6M-100 80/4/30/AC
				100	NDL6M-100 80/4/100/AC
				300	NDL6M-100 80/4/300/AC
			100	30	NDL6M-100 100/4/30/AC
				100	NDL6M-100 100/4/100/AC
				300	NDL6M-100 100/4/300/AC
2P  	A type	36	16	30	NDL6M-100 16/2/30/A
				100	NDL6M-100 16/2/100/A
				300	NDL6M-100 16/2/300/A
			25	30	NDL6M-100 25/2/30/A
				100	NDL6M-100 25/2/100/A
				300	NDL6M-100 25/2/300/A
			40	30	NDL6M-100 40/2/30/A
				100	NDL6M-100 40/2/100/A
				300	NDL6M-100 40/2/300/A

Nader

Number of Poles	Residual Current Operating Characteristics	Width (mm)	Rated Current (A)	Rated Residual Operating Current (mA)	Part No.
2P  	A type	36	63	30	NDL6M-100 63/2/30/A
				100	NDL6M-100 63/2/100/A
				300	NDL6M-100 63/2/300/A
			80	30	NDL6M-100 80/2/30/A
				100	NDL6M-100 80/2/100/A
				300	NDL6M-100 80/2/300/A
			100	30	NDL6M-100 100/2/30/A
				100	NDL6M-100 100/2/100/A
				300	NDL6M-100 100/2/300/A
4P  	A type	70	16	30	NDL6M-100 16/4/30/A
				100	NDL6M-100 16/4/100/A
				300	NDL6M-100 16/4/300/A
			25	30	NDL6M-100 25/4/30/A
				100	NDL6M-100 25/4/100/A
				300	NDL6M-100 25/4/300/A
			40	30	NDL6M-100 40/4/30/A
				100	NDL6M-100 40/4/100/A
				300	NDL6M-100 40/4/300/A
			63	30	NDL6M-100 63/4/30/A
				100	NDL6M-100 63/4/100/A
				300	NDL6M-100 63/4/300/A
			80	30	NDL6M-100 80/4/30/A
				100	NDL6M-100 80/4/100/A
				300	NDL6M-100 80/4/300/A
			100	30	NDL6M-100 100/4/30/A
				100	NDL6M-100 100/4/100/A
				300	NDL6M-100 100/4/300/A

NDA1 Series Modular Socket

Model and Implication

ND A 1 - □ / □ □

1 2 3 4 5 6

No.	Implication	NDA1
1	Brand code	ND Nader
2	Product code	A Modular Socket
3	Design code	1
4	Rated current (A)	10, 16, 25
5	Number of holes	2, 3, 4
6	Width modular	2, 4, 6, 8

Rated current	10A	16A		25A	
Number of Holes	2	3	4	4	2: Single phase, two holes 3: Single phase, three holes 4: Three phase, four holes
Width modular	2	4	6	8	One modular width: 9mm

Product Features

> Connect electric equipment
> Modularization
> Standard TH35mm DIN rail mounting
> RoHS complied

Standards and Certificates

> IEC 60884-1, GB 2099.1; CCC.

	Schematic	Width (mm)	Rated Current (A)	Rated Working Voltage (V)	Specification	Part No.
		18	10	250	Single phase, two holes	NDA1-10/22
		36	16	250	Single phase, three holes	NDA1-16/34
		54	16	440	Three phase, four holes	NDA1-16/46
		72	25	440	Three phase, four holes	NDA1-25/48

Nader

NDA3 Series Modular Socket

Model and Implication

ND A 3 - □ / □ □

1 2 3 4 5 6

No.	Implication	NDA3
1	Brand code	ND Nader
2	Product code	A Modular Socket
3	Design code	3
4	Rated current (A)	10, 16
5	Number of holes	3
6	Modular width	4

Note: One modular width is 9mm.

Rated current	10A	16A	
Number of Holes	3	3	3: Single phase, three holes
Width modular	4	4	One modular width: 9mm

Working Condition

> Rated operational voltage: AC 250V

> Ambient temperature: -5℃ ~ 40℃

> Air humidity: ≤95%

> Altitude: ≤2000m

> Pollution degree: Ⅱ

> Service place without explosive media, gas and dust which are corrosive and conductive

> Be mounted free from rain and snow

Product Features

> Connect electric equipment

> Modularization

> Standard TH35mm DIN rail mounting

> RoHS complied

	Schematic	Width (mm)	Rated Current (A)	Rated Working Voltage (V)	Specification	Part No.
		36	10	250	Single phase, three holes	NDA3-10/34
		36	16	250	Single phase, three holes	NDA3-16/34