NDB2LM-63 Product Specifications

（IPD-SPT-T11 A0 2014-04-01）

Products Name：Residual current protection module

Products model：NDB2LM-63

Date：JAN 13th.，2015

Compile	Chen Yanru	Date	JAN 28th,2015
Audit	Dong Min	Date	JAN 28th,2015
Approve	Liu ShiSheng	Date	JAN 28th,2015

Revision record					
Version	Revised reasons/contents	Implementation date	Compile	Audit	Approve
A0	Initial issue	JAN 28th,2015	Chen Yanru	Dong Min	Liu ShiSheng
A1	change shape dimension images	JAN 29th,2016	Chen Yanru	Dong Min	Liu ShiSheng
A2	change Rated current	Feb 25th,2016	Chen Yanru	Dong Min	Liu ShiSheng
A3	changeWiring method(Wiring picture)	Feb 26th,2016	Chen Yanru	Dong Min	Liu ShiSheng

1、Applicable scope and purpose

Short circuit protection

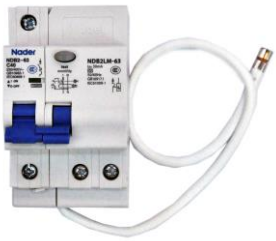
Overload protection

Isolation

Earth leakage

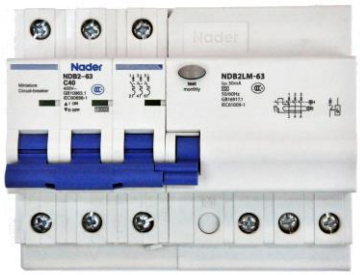
NDB2LM-63 series residual current protection module is used for protecting earth leakage, direct or indirect electric-shock on body and applied in low-voltage terminal distribution field, including Industry, Civil Building, Energy, Communication and Infrastructure etc.

2、Pictures



1P+N

2P



3P

3P+N

4P

3、Model and implication：

ND	B	2	L	M	-	63	□	□	/	□	/	□	/	□	/	□
1	2	3	4	5		6	7	8		9		10		11		12

No.	Implication	NDB2LM-63
1	Brand code	ND(Nader)
2	Product code	B

3	Design code	2
4	Earth leakage protection	L
5	Electromagnetic type	M
6	Frame rating(A)	63
7	Instantaneous tripping characteristic	B,C,D
8	Rated current(A)	1，2，3，4，5，6,10,16,20,25,32,40,50,63
9	Number of poles	1P+N,2P,3P,3P+N,4P
10	Rated residual operating current	30mA,100mA,300mA
11	Residual operating current type	A、AC
12	level of sensitivity	S

4、Main technical specifications

- electric parameter
- frequency:50/60Hz
- Rated working voltage: AC230/240V (1PN、2P)　AC400/415V (3P、3PN、4P)
- Rated impulse withstand voltage:6kV
- Rated insulation voltage:500V
- Residual operating current type: A、AC
- Instantaneous tripping characteristic: B、C、D
- Rated current: 1A，2A，3A，4A，5A，6A,10A,16A,20A,25A,32A,40A,50A,63A
- Rated breaking capacity: 10kA
- Rated residual operating current: 30mA,100mA,300mA(regular);100mA,300mA(with time-delay)
- level of sensitivity: Plain (not labeled), time delay (S)
- Isolation function
- Leakage is visible
- Wiring
- Tunnel type of wiring terminal
- Connection area:1mm^2～35mm^2
- Tighten screw torque: 3.5 N.M
- Protection requirements
- Protection grade:IP20
- Protection grade for device which is installed in distribution box:IP40

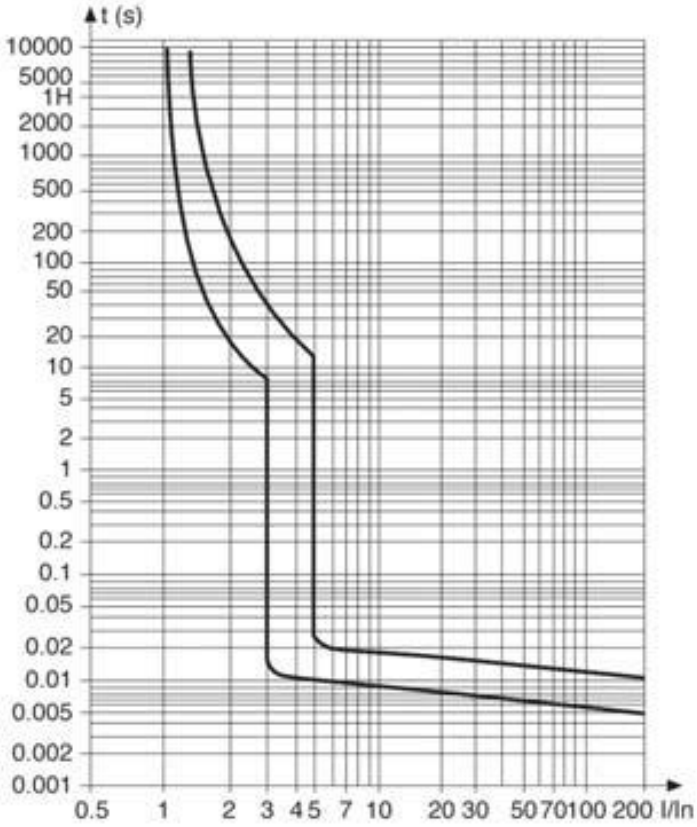
5、Normal working environment

- Height: ≤2000m, if you want to apply it more than 2000m, you must refer to Miniature Circuit Breaker's reduced capacity table. Also you can refer to GB/T20645 the technological requirement of the low-voltage electrical equipment when it is used on high altitude.
- pollution degree:3
- Ambient temperature:-25℃～+60℃

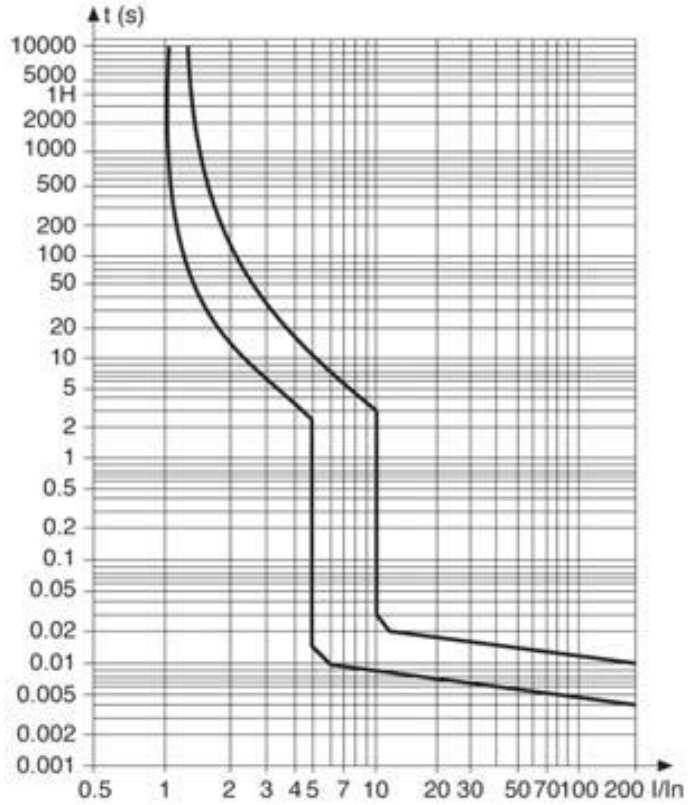
- Stored ambient temperature: -40℃～+80℃
- Humidity requirement: relative humidity under 40℃≤ 50%;
- Magnetic requirement: magnetic field should be 5 times less than geomagnetic field in any directions
- Sine wave distortion: less than 5%
- Tolerate the influence of salt mist and oil mist
- Used in the place without explosion danger and the medium can't have the corrosive action on metals and damage the insulation gas and conductive dust.
- Used in the place without rain and snow.

6、 Tripping characteristic

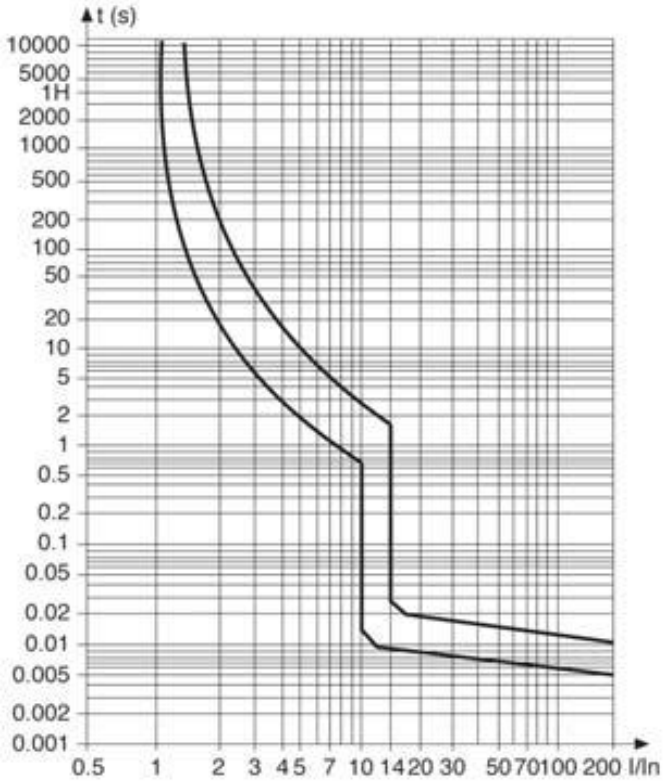
- B type curve
- protect the non-inductive or micro-sense circuit
- rated current: 1A～63A
- tripping characteristic: instantaneous tripping range is 3In～5In



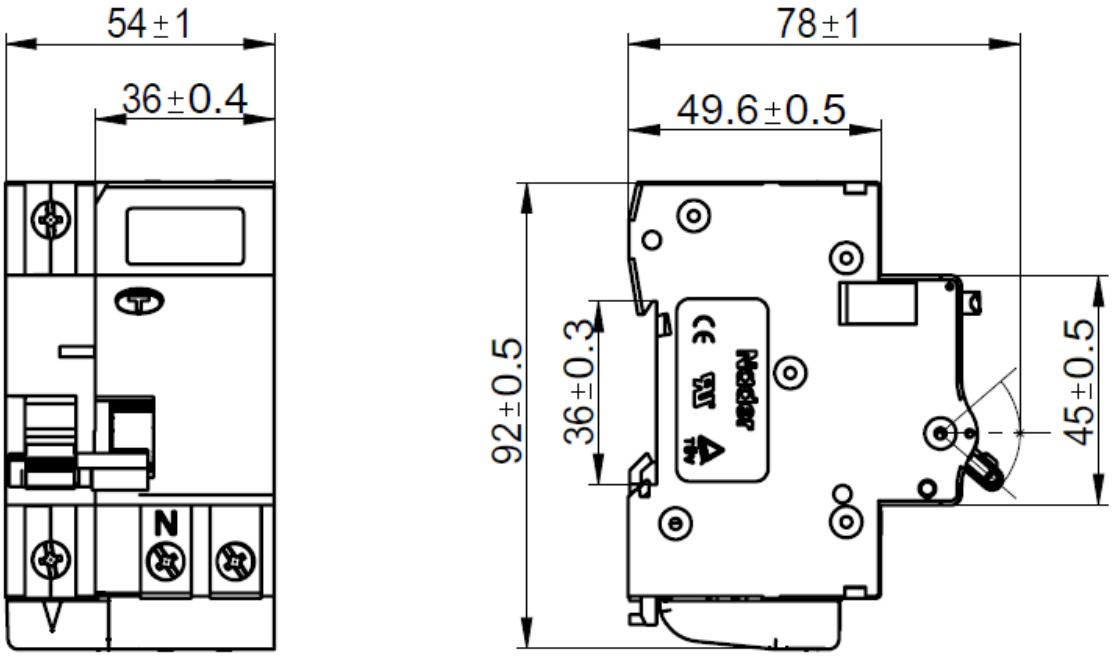
- C type curve
- protect normal load and distribution wire cable
- rated current: 1A～63A
- tripping characteristic: instantaneous tripping range is 5In～10In



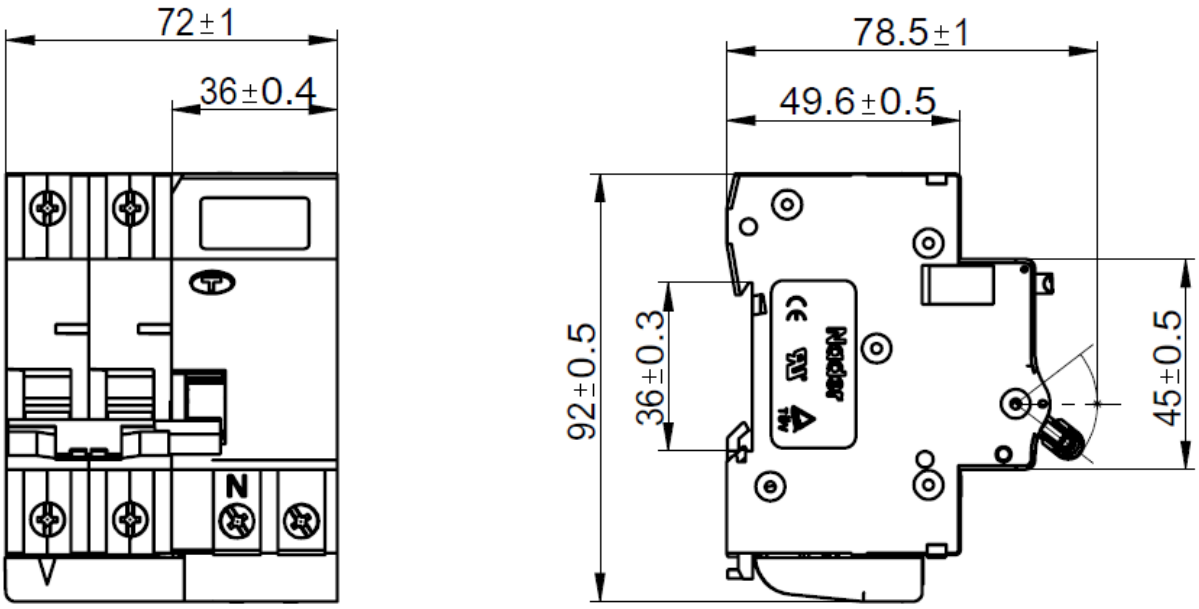
- D type curve
- protect industrial distribution system
- rated current: 1A～63A
- tripping characteristic: instantaneous tripping range is 10In～14In



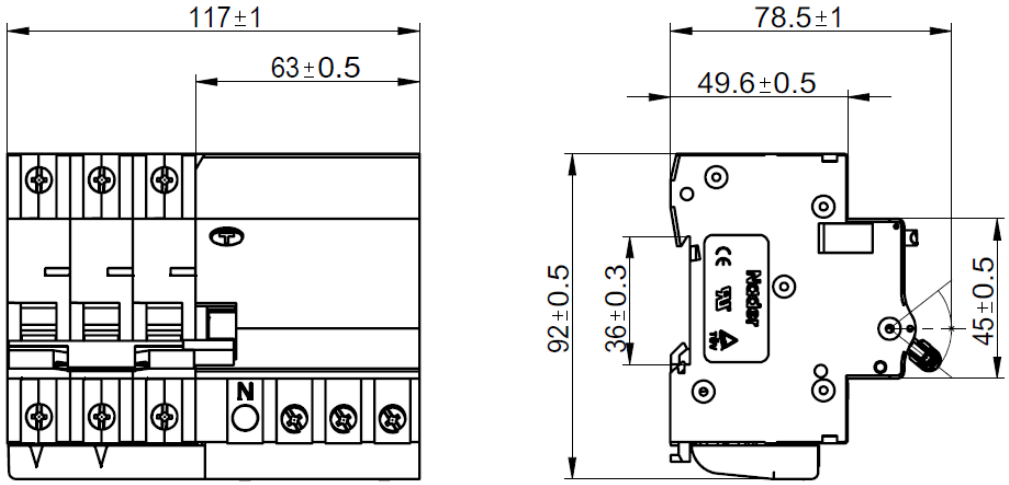
7、Outline and installation dimensions



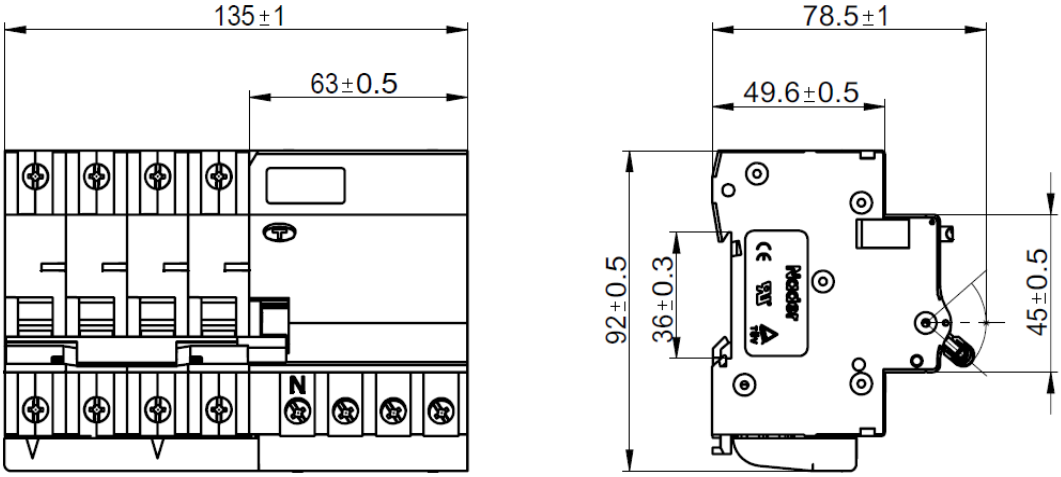
1P+N



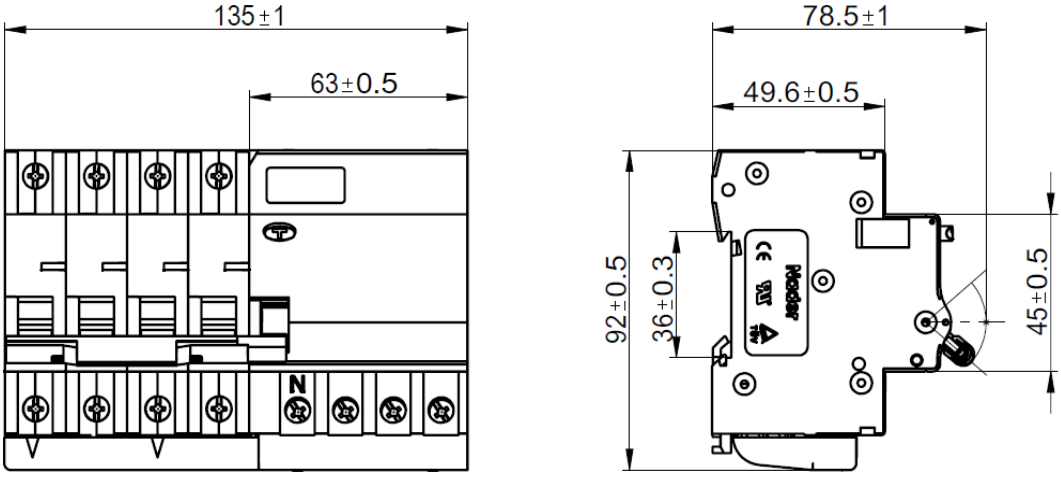
2P



3P



3P+N



4P

8、Installation Method

Installed in TH35mm x 7.5 standard guide rail and wired in tunnel type.

9、Packaging and storage

1P+N: 4pcs per box; 2P:3 pcs per box, 3P: 2pcs per box, 3P+N or 4P:1 pcs per box. Packing cartons should be stored where air circulation and relative humidity is not more than 50% and the temperature is not higher than + 80℃ and not less than - 40℃, and also without acidic、alkaline and other corrosive gas. In the above conditions, the storage period since the production date is not more than three years.

10、Accessories list and installation

- OF2 auxiliary contact: mount on the left side of MCB to indicate the tripping status of the associated MCB.
- SD2 alarm contact: mount on the left side of MCB to indicate the fault tripping status of the associated MCB
- MX+OF2 shunt tripping device: mount on the left side of MCB to remotely control MCB
- NGQ2（A）Undervoltage tripping device: mount on the left side of MCB, realize single-phase overvoltage, undervoltage, under-voltage protection function
- Tm2 electric operating mechanism：mount on the left side of MCB to breaker on-off control
- Tm2GQ Since multiple undervoltage: mount on the left side of MCB ,when in the light over-voltage or under-voltage, on line protection

11、Environmental protection requirement

Conform to RoHS directive

12、Notice

- No responsibility for problems caused by disassembling privately;
- RCD can’t provide protection in the cases that touch two phase line synchronously;
- Please don’t perform insulating resistance test or voltage-withstand test on the product directly or indirectly by megohmmeter or similar test devices. If you need, we can offer validated proof regarding this item;
- When testing insulating resistance of the engineering circuit, the RCD should not be connected to avoid misunderstanding on the products’ quality or damage its PCB;
- Please make sure reliable connection to avoid fault tripping or damage of terminals caused by exceptional heat;
- Simulating test should be made once a month by pressing the test button to check whether the circuit breaker works normally. If RCD is abnormal, it should be replaced.
- If the RCD trip automatically, you must timely analyze the fault reason of the line or the device.