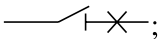
1 Applicable scope and purpose

The NDM5-400 series moulded case circuit breaker (hereinafter "breaker") is suitable for power distribution in 50/60Hz circuits with rated insulation voltage of 1000V, rated working voltage of AC400/415V,AC500V and AC660/690V, as well as the rated working current 250A, 320A, 400A. The circuit breakers are used for distributing power while protect the overload, short circuit and under-voltage (with a under-voltage release) of lines and power units.

The NDM5-630 series moulded case circuit breaker (hereinafter "breaker") is suitable for power distribution in 50/60Hz circuits with rated insulation voltage of 1000V, rated working voltage of AC400/415V,AC500V and AC660/690V, as well as the rated working current 400A,500A, 630A. The circuit breakers are used for distributing power while protect the overload, short circuit and under-voltage (with a under-voltage release) of lines and power units.

The circuit breaker has an isolating function with the corresponding symbol of  ;

Comply with standards: IEC60947-2, GB/T 14048.2.

Each voltage level and short-circuit section capacity of the circuit breaker can be connected with the lower incoming line.

2 Picture of the product（The pictures are for reference only, and the details shall be subject to the real object）

Fig .1

3 Specification and model description

ND	M	5	- □	□	□ / □ / □ / □	□	□	□	□
1	2	3	4	5	6 7 8 9	10	11	12	13

S.N	Serial number name	NDM5
1	Company code	ND：“Nader” low voltage electrical apparatus
2	Product code	M：Molded case circuit breaker (MCCB)
3	Design serial number	5
4	Shell frame grade：Inm(A)	400、630
5	Breaking ability level	L： Standard
		M：Relatively high score broken type
		H：High score broken type
		U：Very high score broken type
		R：Ultra high broken type
6	Rated current：In(A)	400：250、320、400
		630：400、500、630
7	Number of poles	3： 3 poles；
		4A: N-pole is always closed without overload release;
		4B: N-pole opens or closes together with other three poles and without overload release(N-pole closes first, opens last);
		4C: N-pole opens or closes together with other three poles and with overload release (N-pole closes first, opens last);
		4C: N-pole opens or closes together with other three poles and with overload release
		4D: N-pole is always closed with overload release.
8	Release code	TMF：Power distribution protection-thermal magnet-fixed [Ir=In, Im=10In]
		TMD：power distribution protection-thermo-magnetic adjustable Thermo-adjustable (0.8-0.9-1.0) In Magnet-adjustable (5-6-7-8-9-10) In, for the distribution
		TMM：AC thermal-magnetic motor protection release Thermo-adjustable（0.8-0.9-1.0）In Magnet-adjustable（9-10-11-12-13-14）In
		MA: Magnetic adjustable release (AC motor protection, only for U/R)

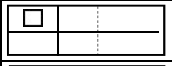
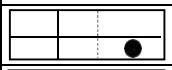
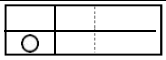
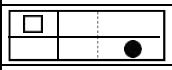
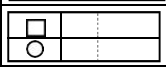
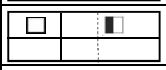
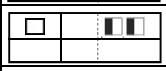
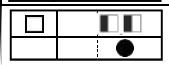
9	Installation code+ Wiring method	Null: Stationary connector + front panel wiring
		ES：Stationary connector+ front extension wiring board
		R1：Fixed type+ horizontal wiring behind terminal
		P0FH：plug-in without secondary connector +horizontal wiring in front of board
		P0RH：plug-in without secondary connector + horizontal wiring behind the board
		P1FH：plug-in with secondary connector + horizontal wiring in front of board
		P1RH：plug-in with secondary connector + horizontal wiring behind the board
		W0FH：withdrawable non secondary terminal horizontal wiring in front of board
		W0RH：withdrawable non secondary terminal + horizontal wiring behind the board
		W1FH：withdrawable type with terminal block +horizontal wiring in front of board
		W1RH：withdrawable type with terminal block + horizontal wiring behind the board
10	Operation mode	Null: directly handle operation
		Z1A150: Circular center hole rotary handle + shaft length 150mm
		Z1A200: Circular center hole rotary handle + shaft length 200mm
		Z1A300: Circular center hole rotary handle + shaft length 300mm
		Z1A350: Circular center hole rotary handle + shaft length 350mm
		Z1A650: Circular center hole rotary handle + shaft length 650mm
		Z1F150: Square center hole rotary handle + shaft length 150mm
		Z1F200: Square center hole rotary handle + shaft length 200mm
		Z1F300: Square center hole rotary handle + shaft length 300mm
		Z1F350: Square center hole rotary handle + shaft length 350mm
		Z1F650: Square center hole rotary handle + shaft length 650mm
		Z2A150: Circular eccentric hole rotary handle + shaft length 150mm
		Z2A200: Circular eccentric hole rotary handle + shaft length 200mm
		Z2A300: Circular eccentric hole rotary handle + shaft length 300mm
		Z2A350: Circular eccentric hole rotary handle + shaft length 350mm
		Z2A650: Circular eccentric hole rotary handle + shaft length 650mm
		Z2F150: Square eccentric hole rotary handle + shaft length 150mm
		Z2F200: Square eccentric hole rotary handle + shaft length 200mm
		Z2F300: Square eccentric hole rotary handle + shaft length 300mm
		Z2F350: Square eccentric hole rotary handle + shaft length 350mm
		Z2F650: Square eccentric hole rotary handle + shaft length 650mm

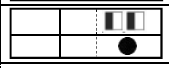
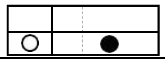
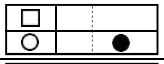
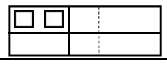
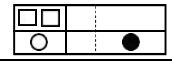
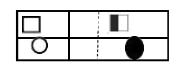
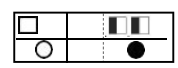
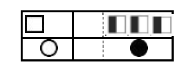
		M02:motor operation DC24V(except type U/R)
		M11:motor operation AC110V/DC110V(except type U/R)
		M22:motor operation AC230V/DC220V(except type U/R)
		M40:motor operation AC400V(except type U/R)
11	Accessory code	See Table 1
12	Other codes	MS2：MS2 lock
		CZ: Long terminal cover
13	Application code	EPT

Note：

1. NDM5-400U/R、NDM5-630U/R Installation code and wiring method only stationary connector + front panel wiring;
2. Breaking grade U/R type, if customer needs to order external accessories, please contact the sales staff.
3. If customer needs to order eccentric hole rotary handle, please contact the sales staff.

Table 1

Accessory code	Accessory name	Installation position
		3P/4P
00	None	———
08	Alarm contact	
10	Shunt release	
30	Under-voltage release	
21	Single auxiliary contact	
61	Two sets of single auxiliary contacts	
23	Three sets of single auxiliary contacts	
18	Shunt release, alarm contact	
38	Under-voltage release, alarm contact	
22	Single auxiliary contact, alarm contact	
88	Two sets of single auxiliary contacts, alarm contact	
26	Three sets of single auxiliary contacts, alarm contact	
42	Shunt release, single auxiliary contact, alarm contact	
44	Shunt release, two sets of single auxiliary contacts, alarm contact	

46	Shunt release, three sets of single auxiliary contacts, alarm contact	
75	Under-voltage release, single auxiliary contact, alarm contact	
77	Under-voltage release, two sets of single auxiliary contacts, alarm contact	
81	Under-voltage release, three sets of single auxiliary contacts, alarm contact	
41	Shunt release, single auxiliary contact	
11	Shunt release, two sets of single auxiliary contacts	
12	Shunt release, three sets of single auxiliary contacts	
71	Under-voltage release, single auxiliary contact	
72	Under-voltage release, two sets of single auxiliary contacts	
73	Under-voltage release, three sets of single auxiliary contacts	
50	Shunt release, Under-voltage release	
31	Alarm contact, Shunt release, Under-voltage release	
51	Shunt release, Under-voltage release, Single auxiliary contact	
52	Shunt release, Under-voltage release, two sets of single auxiliary contacts	
53	Shunt release, Under-voltage release, three sets of single auxiliary contacts	
98	Two sets of single alarm contact	
63	Two sets of single alarm contact, single auxiliary contact	
64	Two sets of single alarm contact, two sets of single auxiliary contacts	
65	Two sets of single alarm contact, three sets of single auxiliary contacts	
37	Two sets of single alarm contact, Shunt release, Under-voltage release	
39	Two sets of single alarm contact, Shunt release, Under-voltage release, single auxiliary contact	
55	Two sets of single alarm contact, Shunt release, Under-voltage release , two sets of single auxiliary contacts	
56	Two sets of single alarm contact, Shunt release, Under-voltage release , three sets of single auxiliary contacts	
32	Alarm contact, Shunt release, Under-voltage release, single auxiliary contact	
33	Alarm contact, Shunt release, Under-voltage release, two sets of single auxiliary contacts	
34	Alarm contact, Shunt release, Under-voltage release, three three sets of single auxiliary contacts	

Note: the shunt release and under-voltage release can be installed on the left and right. When only the shunt release or under-voltage release is selected, it is installed on the left by default.
Note: ◧ Single auxiliary contact; □ Alarm contact; ● Shunt release; ○ Under-voltage release.

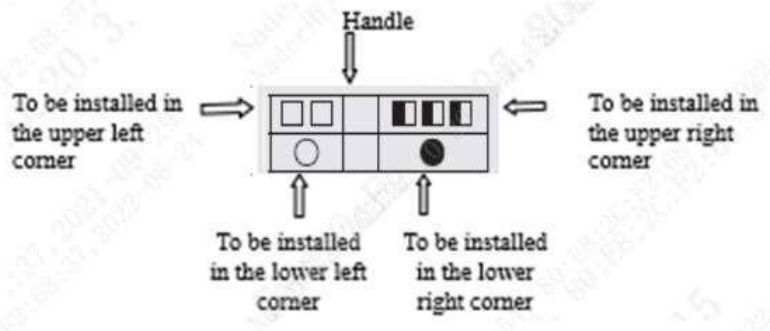
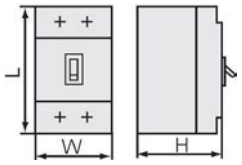


Fig.2 Attachment installation diagram

4、Main technical parameters

Table 2

Mode		NDM5-400				NDM5-630			
Frame current Inm(A)		400				630			
Rated current In (A)		250、320、400				400、500、630			
Rated voltage Ue (V)		380/400/415、500、660/690							
Rated insulation voltage Ui		1000							
Power frequency withstand voltage（1min）(V)		4000							
Rated impulse withstand voltage Uimp (kV)		8							
Usage category		A							
Number of poles		3					4		
Interrupting level code		L	M	H	U	R	L	M	H
Ultimate Short-circuit breaking capacity Icu/(kA)	AC400/415V	70	100	150	/	/	70	100	150
	AC500V	50	70	85	/	/	50	70	85
	AC660/690V	20	30	40	55	80	20	30	40
Service Short-circuit breaking capacity Ics(kA)	AC400/415V	70	100	150	/	/	70	100	150
	AC500V	50	70	85	/	/	50	70	85
	AC660/690V	20	30	40	55	80	20	30	40

Operational performance (times)	Electrical life	AC400/415V	7000		5000
		AC500V	5000		3000
		AC660/690V	3000		2000
	Mechanical life	Maintainable free life	20000	15000	20000
		Maintainable life	40000	30000	40000
Boundary dimension		L(mm)	250	250	250
		W(mm)	140	140	185
		H(mm)	110	130.5	110
Flashover distance(mm) Including terminal cover			≤100		
Flashover distance(mm)without terminal cover			0		

Note：The overall dimension does not include the dimension of terminal cover.

4.1 sectional area and applicable rated current adopted in wiring

Table 3 Wire parameters

Rated current (A)	cable		Copper bar	
	Conductor are（mm²）	Quantity	size（mm²）	Quantity
250	120	1	/	/
320	185	1	/	/
400	240	1	/	/
500	150	2	30×5	2
630	185	2	32×6	2

4.2 Tightening torque of the circuit breaker terminal and mounting screw

Table 4 Tightening torque of the circuit breaker terminal and mounting screw

Model	Screw application	Thread specification	Torsional moment (N·m)
NDM5-400/630	Wiring screw	M10	20
	Set screw	M5	2

4.3 Derating factor of temperature change for the circuit breaker

Table 5 Derating factor table of temperature change for the circuit breaker

Model	Derating factor of product temperature change							
	Temperature(℃)	40	45	50	55	60	65	70
NDM5-400L/M/H	Derating factor	1.0	0.97	0.94	0.91	0.87	0.83	0.78
NDM5-400U/R		1.0	1.0	1.0	0.95	0.91	0.86	0.80
NDM5-630L/M/H		1.0	0.96	0.92	0.88	0.84	0.80	0.75
NDM5-630U/R		1.0	1.0	1.0	0.94	0.90	0.85	0.80

Note: 1)When the operating ambient temperature is below + 40℃(NDM5-400U/R、NDM5-630U/R is 50℃)， the product can be used normally without derating capacity. and do not need to reduce capacity.

2)The above derating factors are measured under the rated current of the shell frame.

4.4 High altitude derating factor of circuit breaker

Table 6 Altitude drop correction factor

Altitude (m)	2000	2500	3000	3500	4000	4500	5000
Working current correction coefficient	1	1	0.98	0.97	0.95	0.94	0.93
Maximum operating voltage（V）	690	690	620	580	550	520	500
Power frequency withstand voltage (V)	4000	4000	3600	3400	3200	3000	2800
Average insulation class (V)	1000	1000	900	850	810	770	730

4.5 Power consumption of circuit breaker

Table 7 Product current specification single phase power consumption able

Model	Current specification	Single phase power consumption (W)		
		Front panel wiring rear panel wiring	Plug in front of plate、rear board wiring	Extended row wiring
NDM5-400L/M/H	400	19.8	28.8	21
NDM5-400U/R	400	19.8	/	21
NDM5-630L/M/H	630	39.5	49.5	41
NDM5-630U/R	630	39.5	/	41
Note：The above data are the single-phase loss measured under the rated current of the circuit breaker when the ring temperature is 40℃。				

5、Normal working environment of circuit breaker

1） The altitude of the installation site doesn't exceed 2,500m. See the "High-altitude Derating Factor Table of Circuit Breaker" for the derating factor at the altitude;

2） The ambient temperature is -35℃～+ 70℃; the average within 24h shall not be more than +35℃. If the ambient temperature is higher than +40℃ (NDM5-400U/R、NDM5-630U/R 为 50℃), the user needs to reduce the capacity. See the " Derating Factor Table of Temperature Change for the Circuit Breaker" for the derating factor;

3）Its relative humidity at an ambient temperature of +40℃ should not exceed 50%. A higher relative humidity is allowed at a lower temperature. For example, the relative humidity at 20℃ can reach 90%; for frost due to temperature change, the corresponding measures should be taken;

4）The product can withstand the effects of wet air, salt mist, oil mist and mould;

5） The installation category of the circuit breaker connected to the main loop is: Category III (power distribution and control level), The installation category of the circuit breaker not connected to the main loop is: Category II (load level);

6）The pollution level is Level 3;

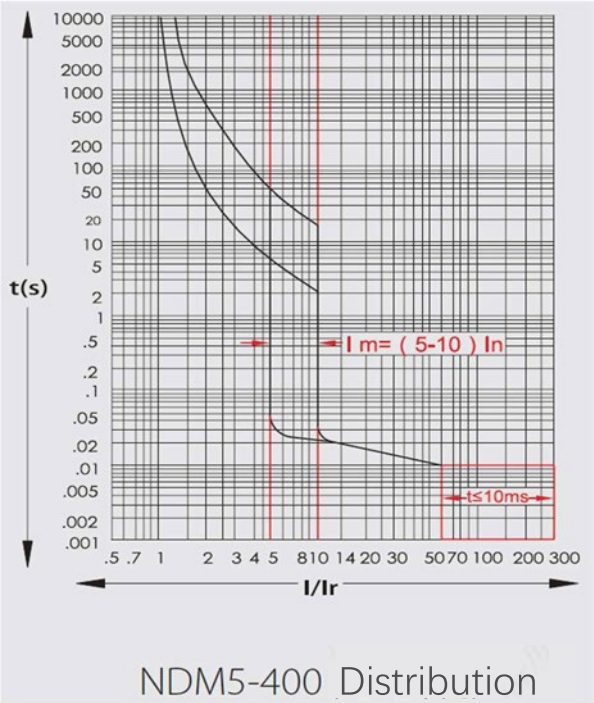
7）Degree of protection : IP 20;

8） The product should be installed in places that are free from explosive media, media corrosive to metal, insulation damaging gas, and conductive dust, which should be also avoided from snow and rain;

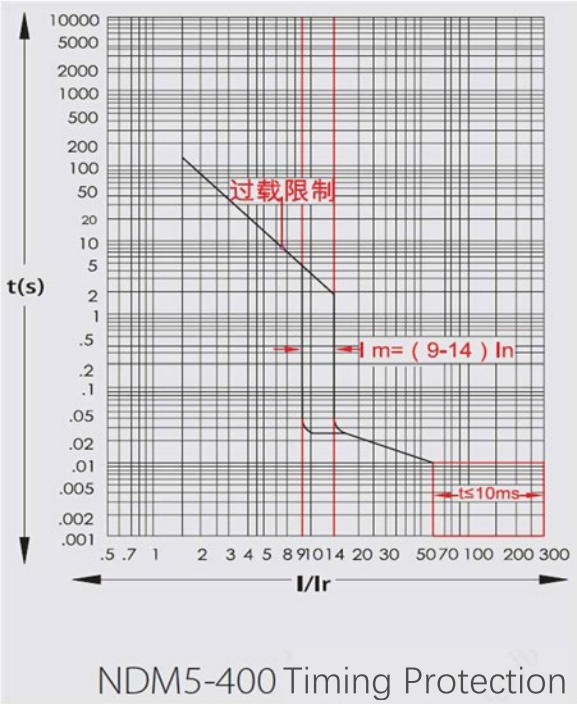
9）In case of stricter user conditions than the above description, negotiate with the manufacturer.

6、Tripping characteristics

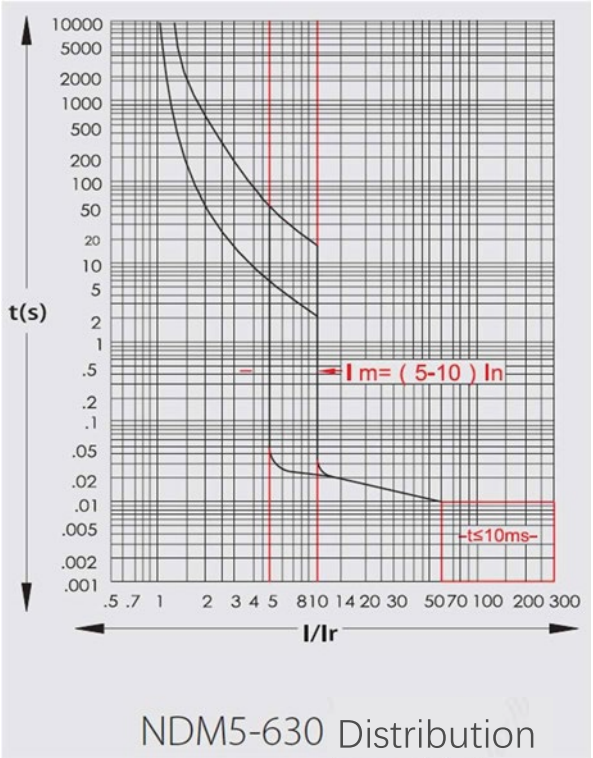
6.1 Tripping characteristics curve under normal environment (ambient air temperature: 40℃)，Fig2：



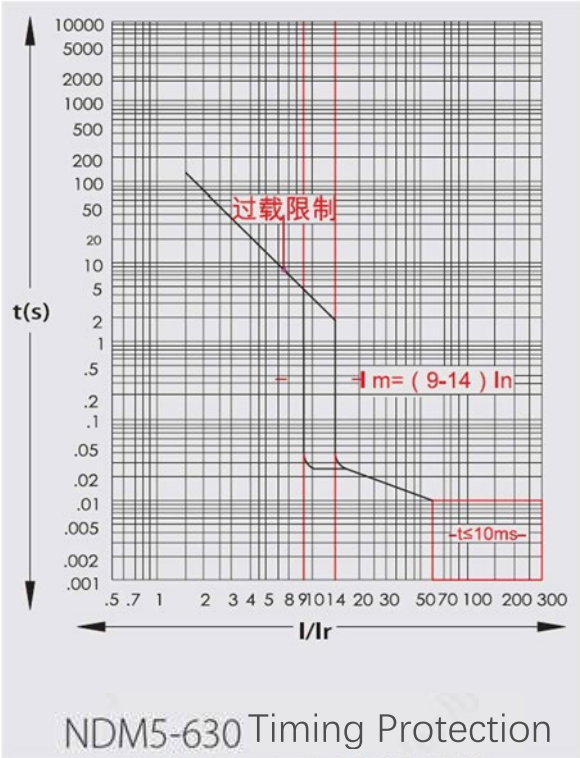
NDM5-400 Distribution



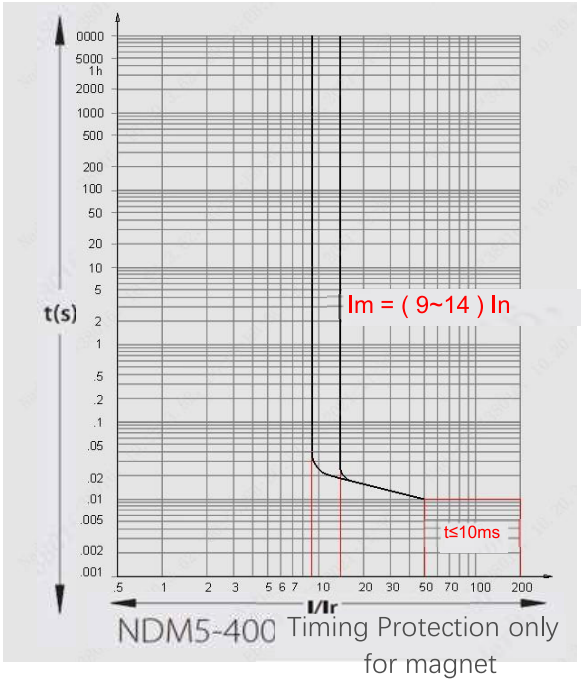
NDM5-400 Timing Protection



NDM5-630 Distribution



NDM5-630 Timing Protection



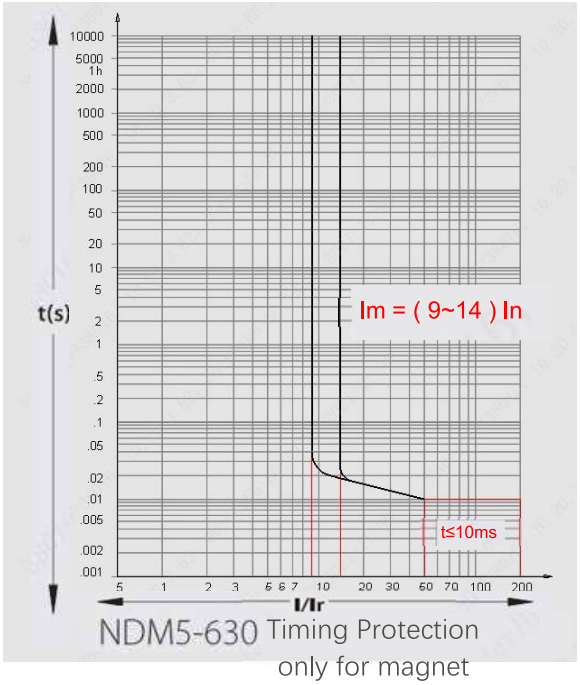


Fig 3

6.2 Current limiting and permissive characteristic curve

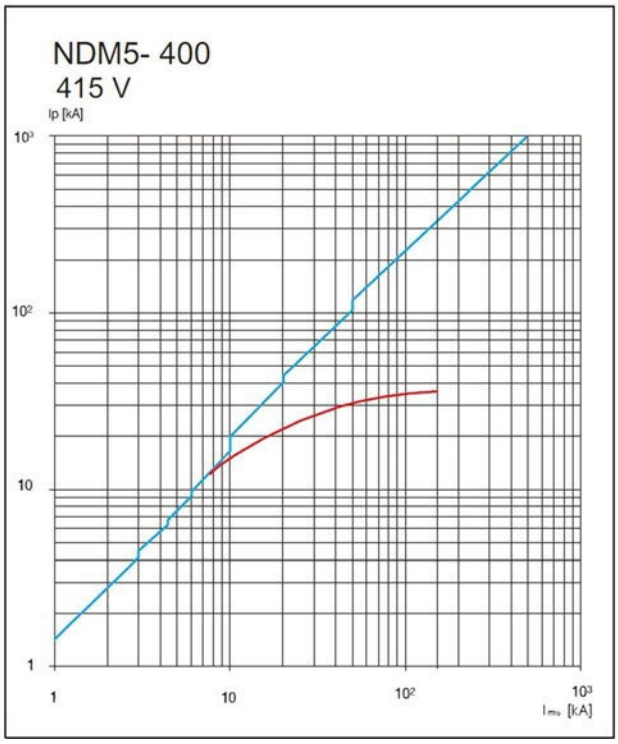


Fig.4 Current limiting characteristic curve chart

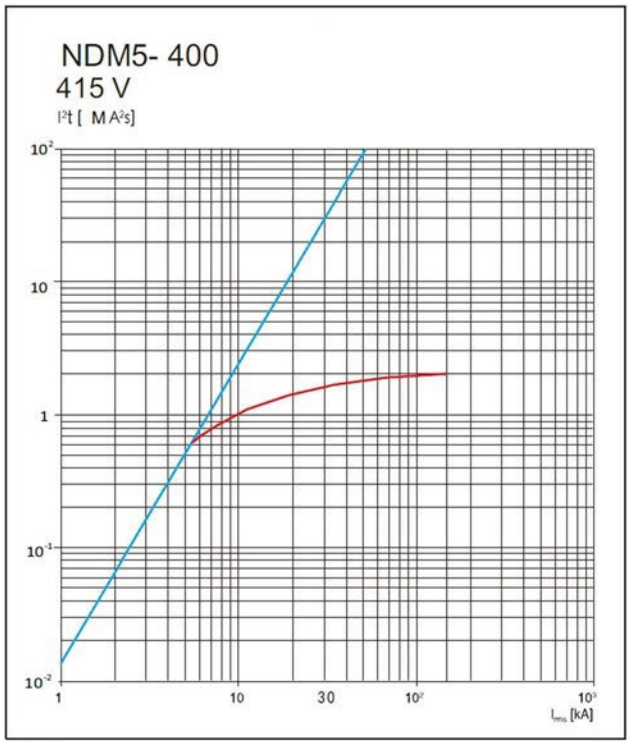


Fig.5 Permissive characteristic curve chart

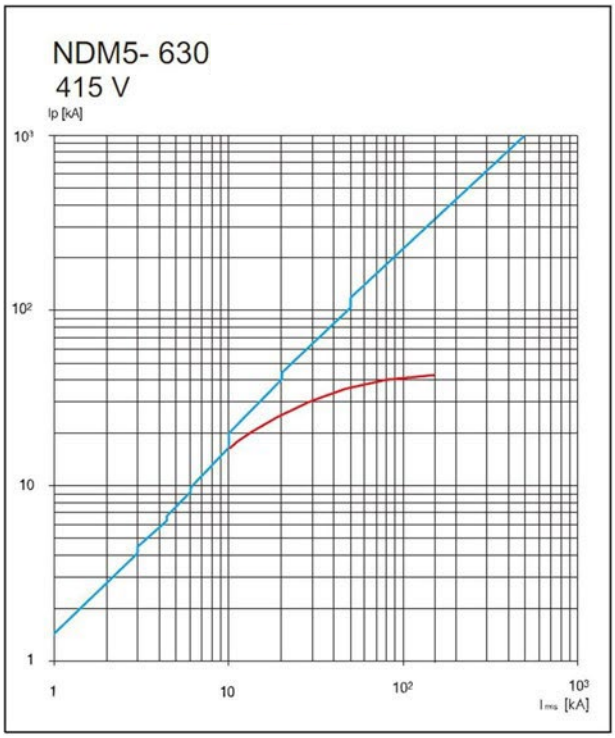


Fig.6 Current limiting characteristic curve chart

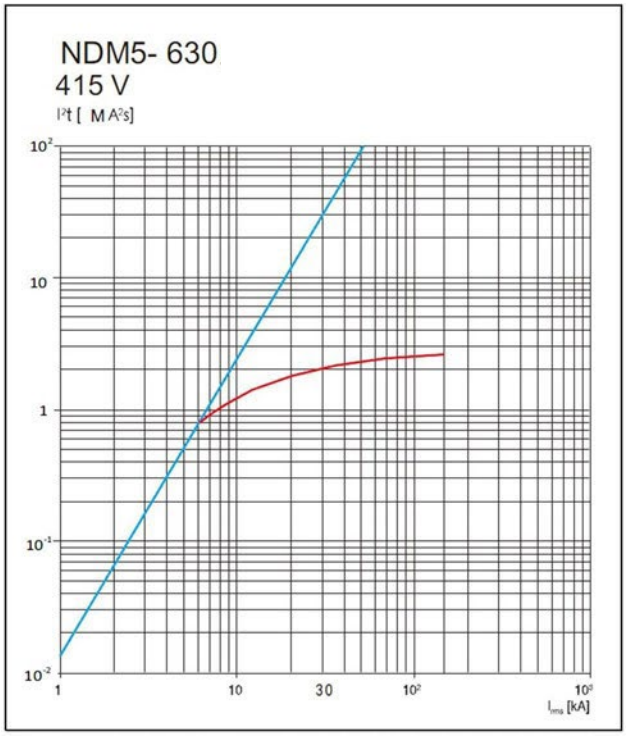
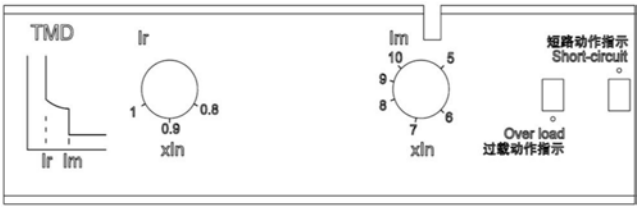
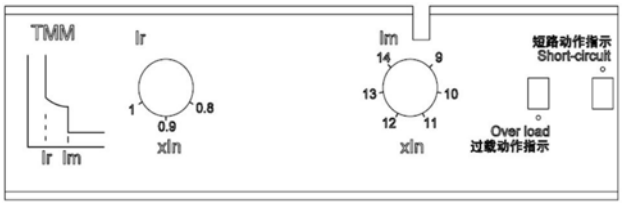


Fig.7 Permissive characteristic curve chart

7、Controller operation description and function introduction

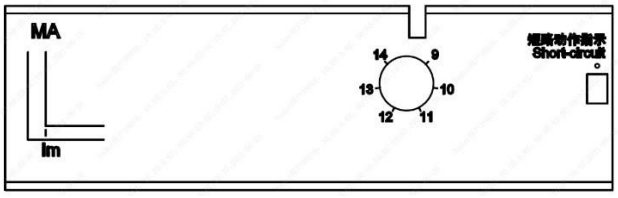


TMD



TMM

TMF



MA

8、Outline and installation dimensions

8.1 External dimensions of front-plate connection products

NDM5-400/630L/M/H：

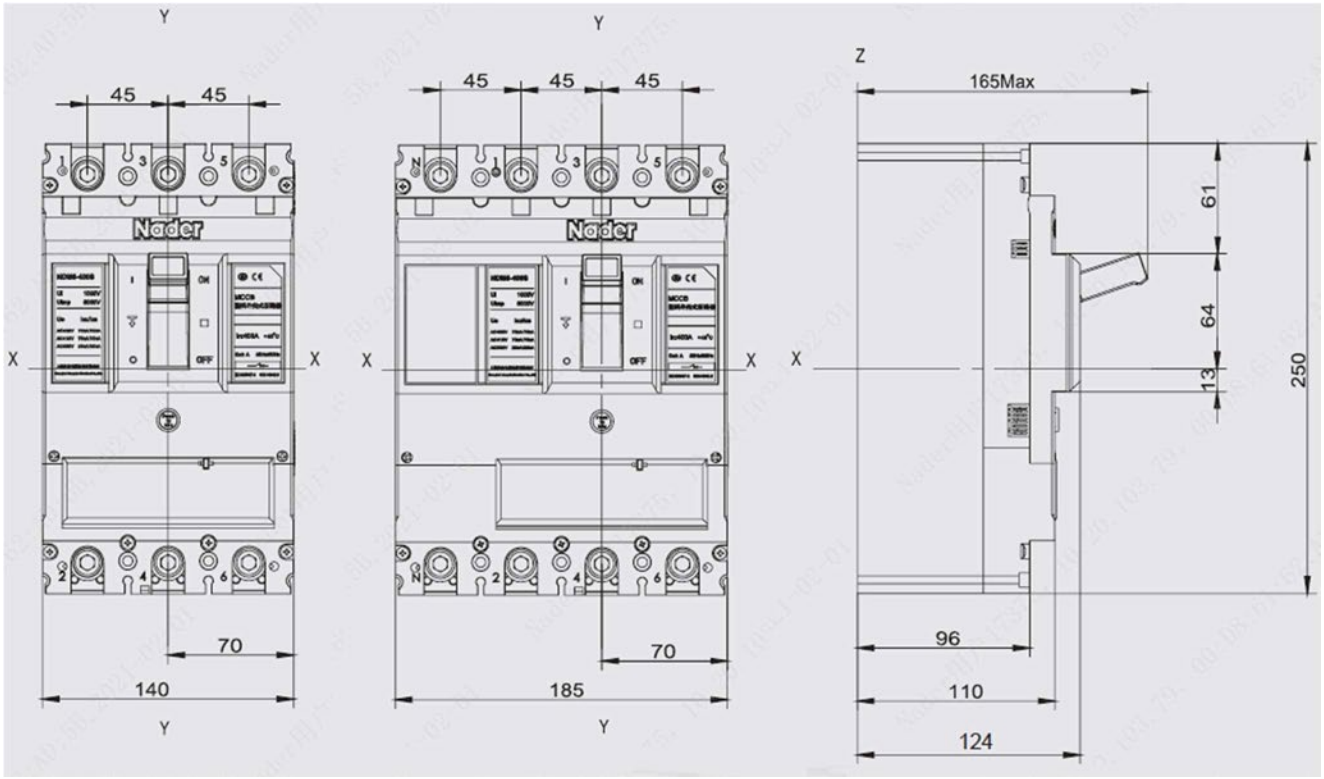


Fig.8 NDM5-250L/M/H 2P 3P 4P Outline dimension drawing of front board wiring products

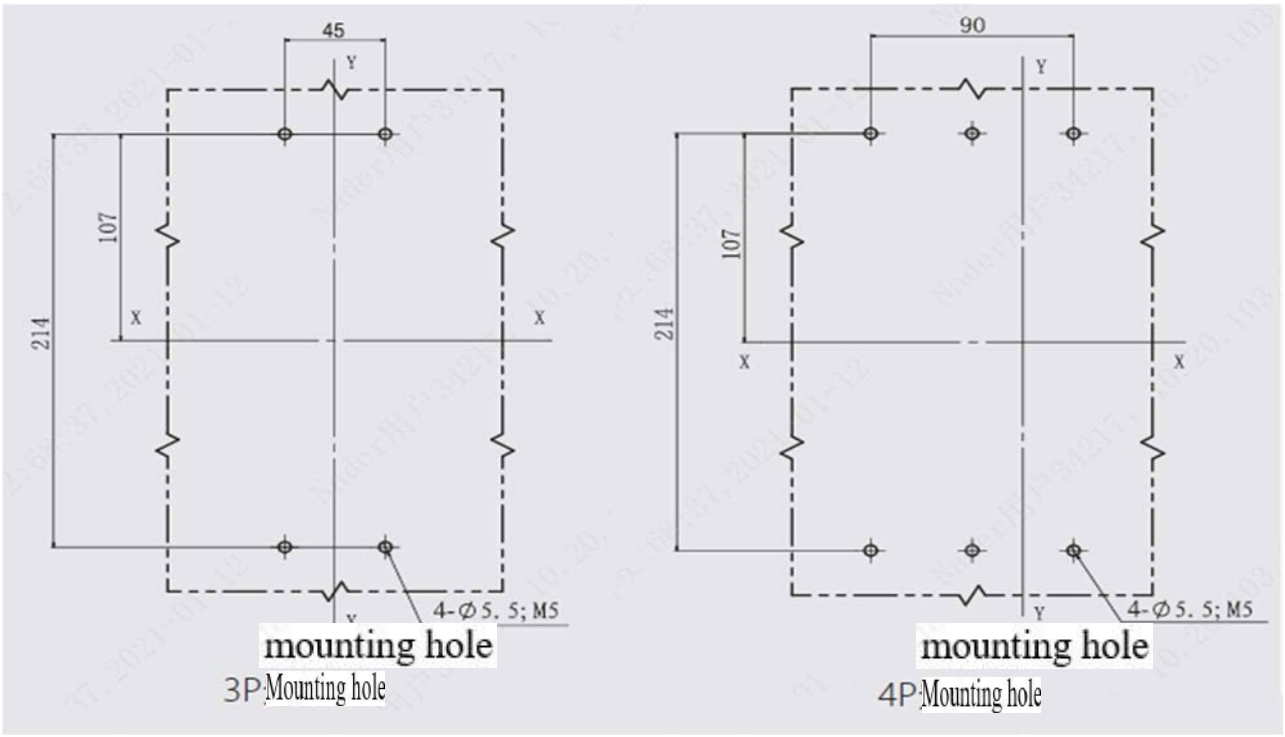


Fig.9 NDM5-250L/M/H 2P 3P 4P Lnstallation dimension drawing of front board wiring products

Note: Unmarked tolerance level should follow GB/T 1804-c.

8.2 Outline and installation dimensions of products with terminal cover in front of grade 3P and 4P

NDM5-400/630L/M/H:

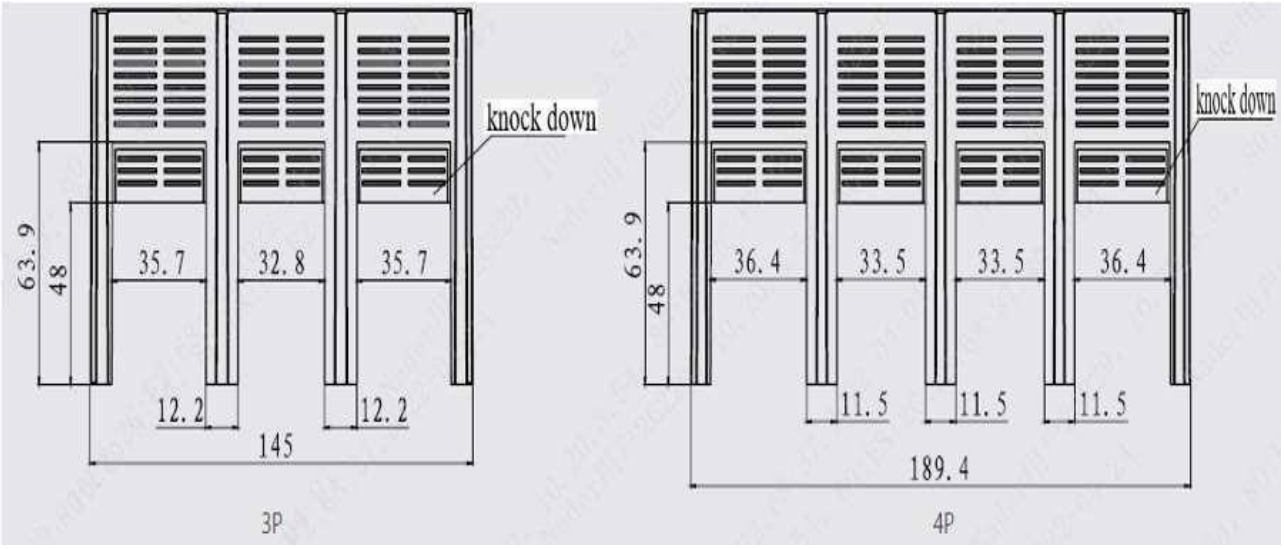


Fig.10 Size of terminal cover

NDM5-400/630U/R:

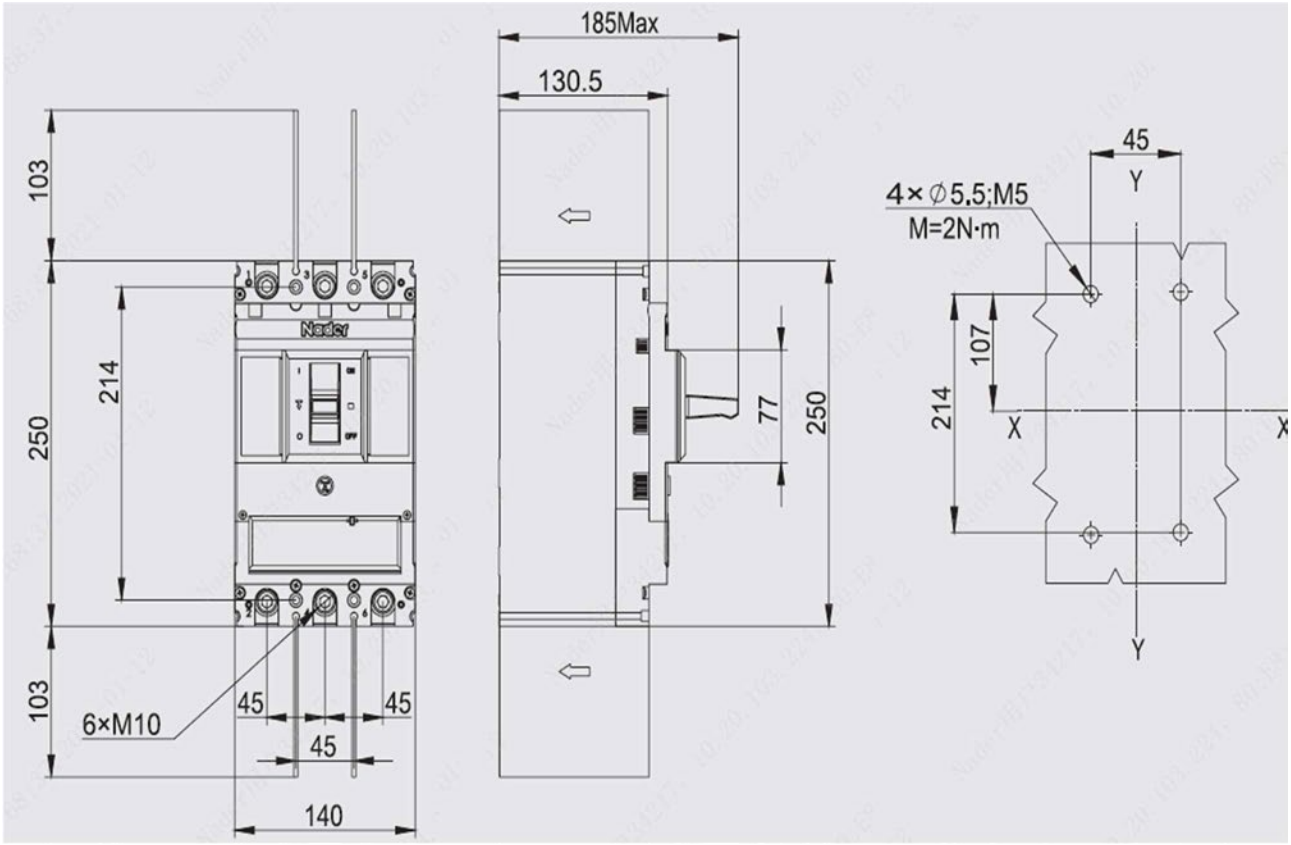


Fig.11 NDM5-400/630U/R 3P 4P Installation dimension drawing of front board wiring products

Note: 1) Unmarked tolerance level should follow GB/T 1804-c.

2) Four mouning hols for grade 4 products can be selected from the size

8.3 NDM5-400L/M/H 、 NDM5-630L/M/H3P 4P External dimensions of extended front-plate connection products

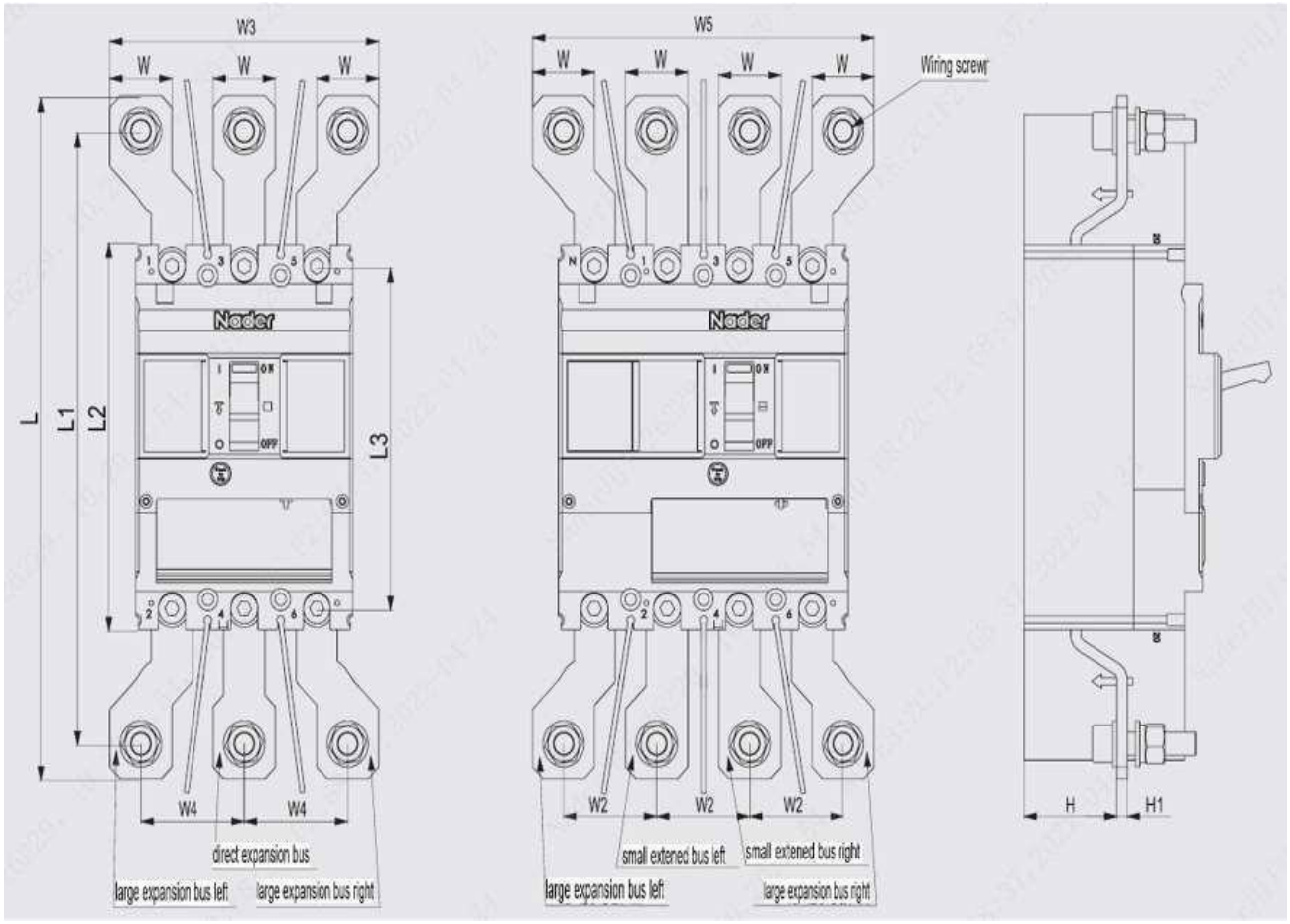


Fig.12 2P、3P、4POutline and installation dimensions of expansion wiring in front of the board

Table 8 The overall dimensions of the front wiring expansion bar and the circuit breaker after combined installation are shown in the figure below

Extended bus	L	L1	L2	L3	W	W2	W3	W4	W5	H	H1	Wiring screw
NDM5-400L/M/H	376	336	250	216	40	55	160	60	205	42	6	M12×50
NDM5-630L/M/H										40	10	M12×50

Note 1：2p Extended bus combination mode：small expansion bus（2 pieces on the left、 right）;

2：3p Extended bus combination mode：large expansion bus（2 pieces on the left、 right）+2 –piece direct expansion busbar;

3：4p Extended bus combination mode：small expansion bus（2 pieces on the left、 right）large expansion bus（2 pieces on the left、 right）;

4: Unmarked tolerance level should follow GB/T 1804-c.

8.4 NDM5-400L/M/H、NDM5-630L/M/H 3P、4P Outline and installation dimension of rear wiring board

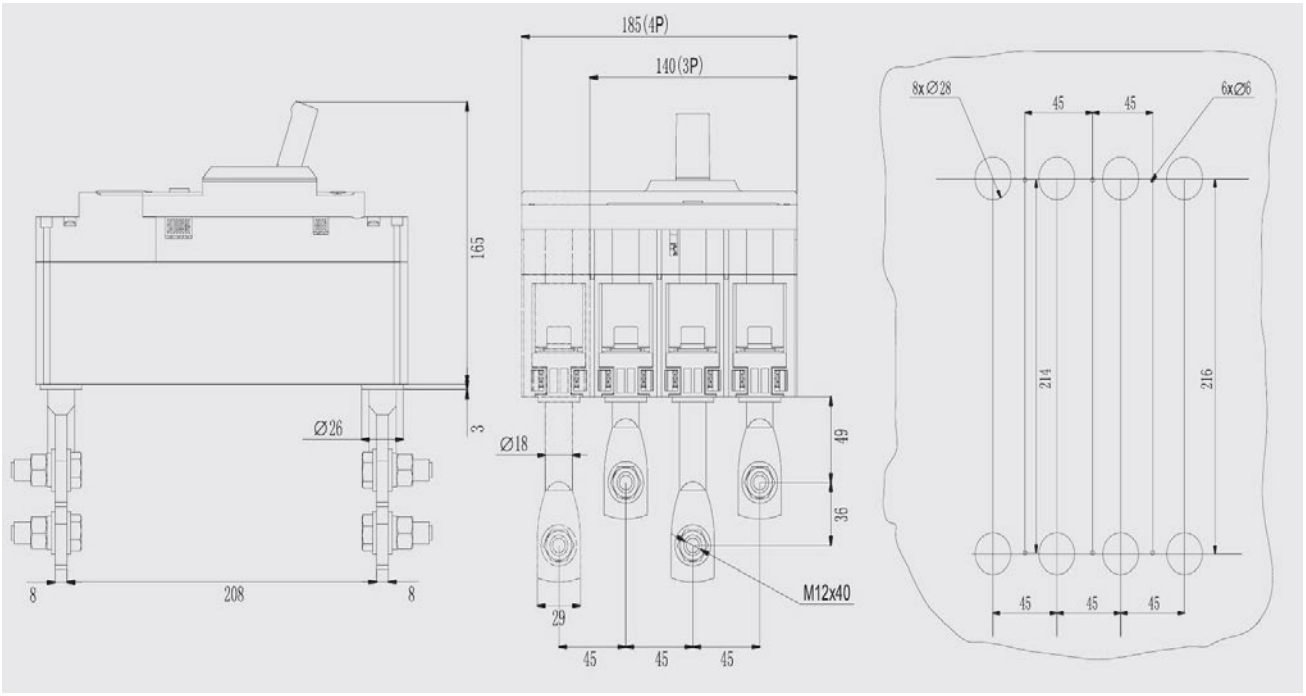


Fig.13 3P、4P outline dimension drawing of rear wiring board

Note: Unmarked tolerance level should follow GB/T 1804-c.

8.5 NDM5-400L/M/H、NDM5-630L/M/H 3P、4POutline and installation dimensions of plug-in board front wiring

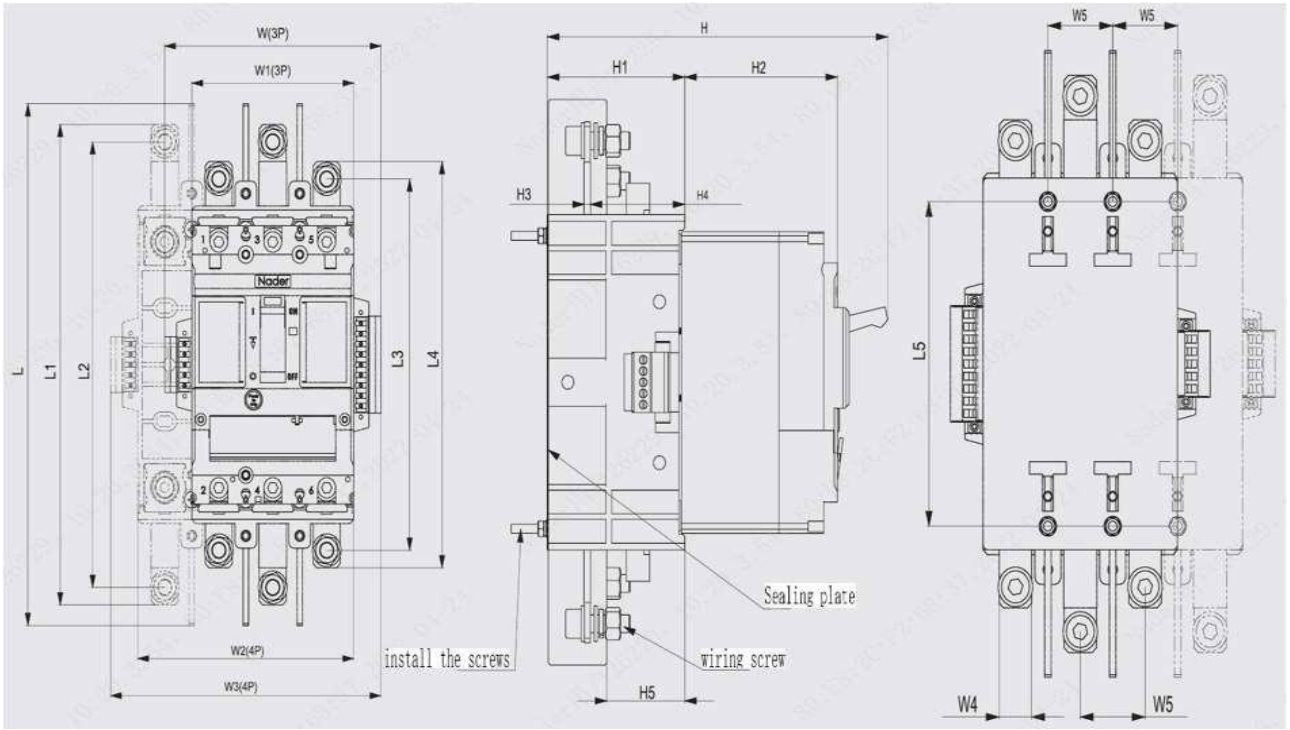


Fig.14 External dimensions of plug-in front-panel connection

Table 9 The overall dimensions of plug-in board front wiring (horizontal) and circuit breaker after installation are shown in the figure below

Modle	W	W1	W2	W3	W4	W5	L	L1	L2	Wiring screw
NDM5-400/630L/M/H	166	140	185	211	30	45	398	330	302	M10×40
	L3	L4	L5	H	H1	H2	H3	H4	H5	Wiring screw
	/	/	240	267	104	107	8	66	50	M5×90

Note: Unmarked tolerance level should follow GB/T 1804-c.

8.6 NDM5-400L/M/H、NDM5-630L/M/H 3P、4P Mounting hole dimensions of plug-in connections

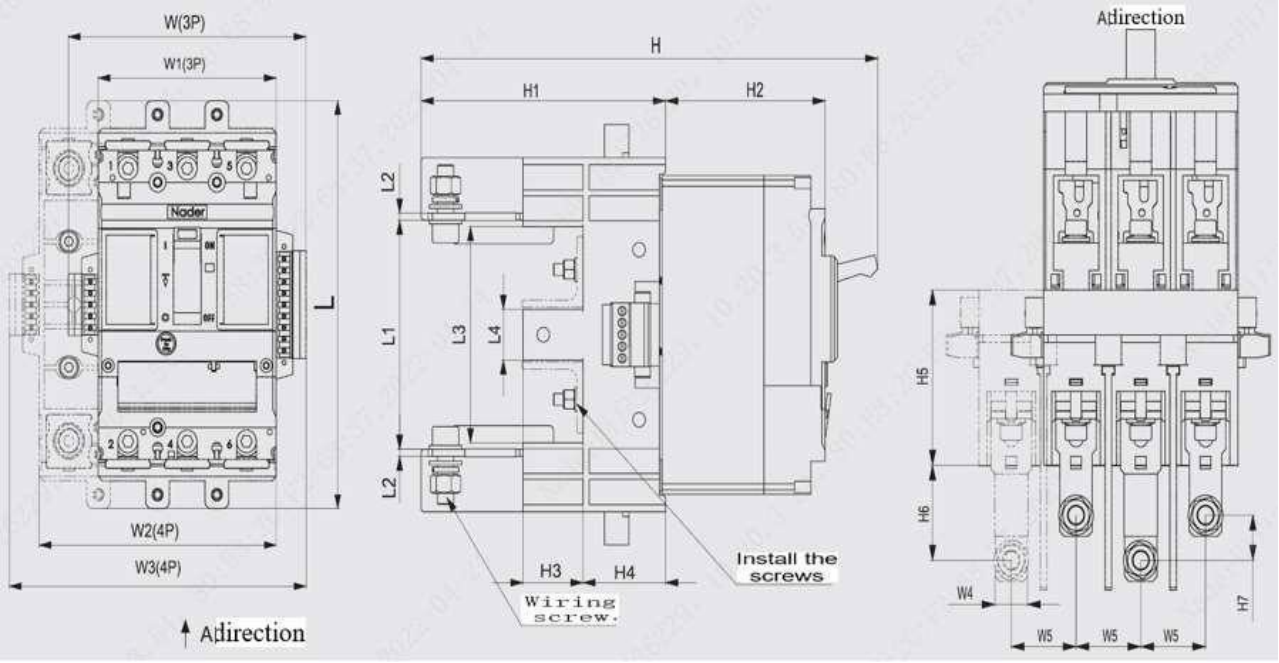


Fig.15 3P、4P Mounting hole dimensions of plug-in connections

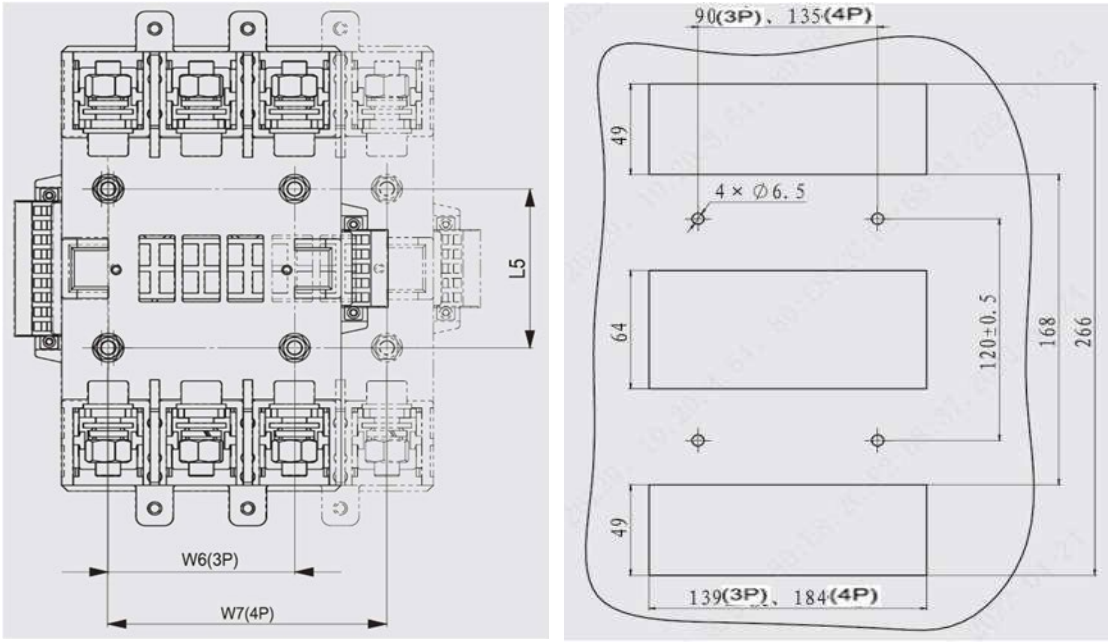


Fig.16 Mounting hole dimensions of plug-in connections

Table 10 The overall dimensions of plug-in device(horizontal wiring behind the board)and circuit breaker after installation are shown in the table below

Modle	W	W1	W2	W3	W4	W5	W6	W7	L	L1	L2	Wiring screw
NDM5-400/630L/M/H	166	140	185	211	30	45	90	135	291	182	8	M10×40
	L3	L4	L5	H	H1	H2	H3	H4	H5	H6	H7	Install the screws
	172	60	120	311	148	108	52	52	102	23	0	M6×40

Note: Unmarked tolerance level should follow GB/T 1804-c.

8.7 NDM5-400L/M/H、NDM5-630L/M/H 3P、4P Outline dimensions of withdrawable front panel wiring products

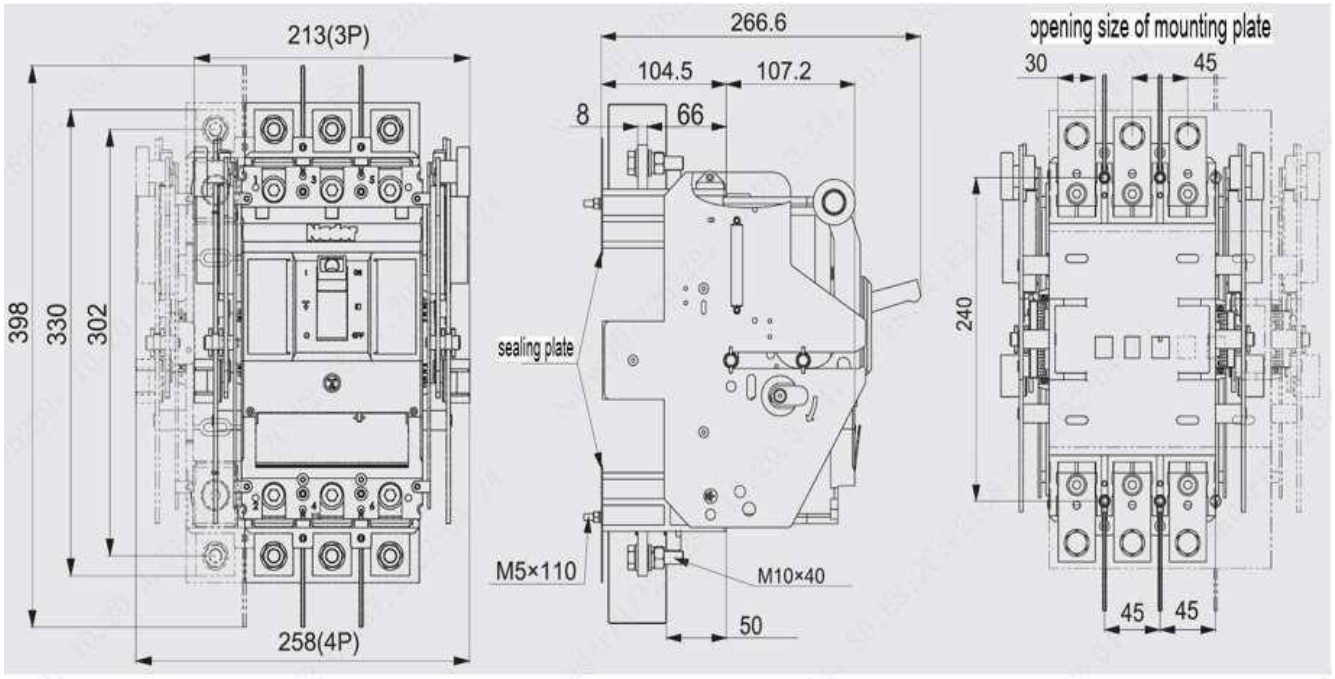


Fig.17 3P、4P Outline dimensions drawing of withdrawable front panel board wiring products

Note: Unmarked tolerance level should follow GB/T 1804-c.

8.8 3P、4P Outline dimensions of withdrawable board rear wiring products

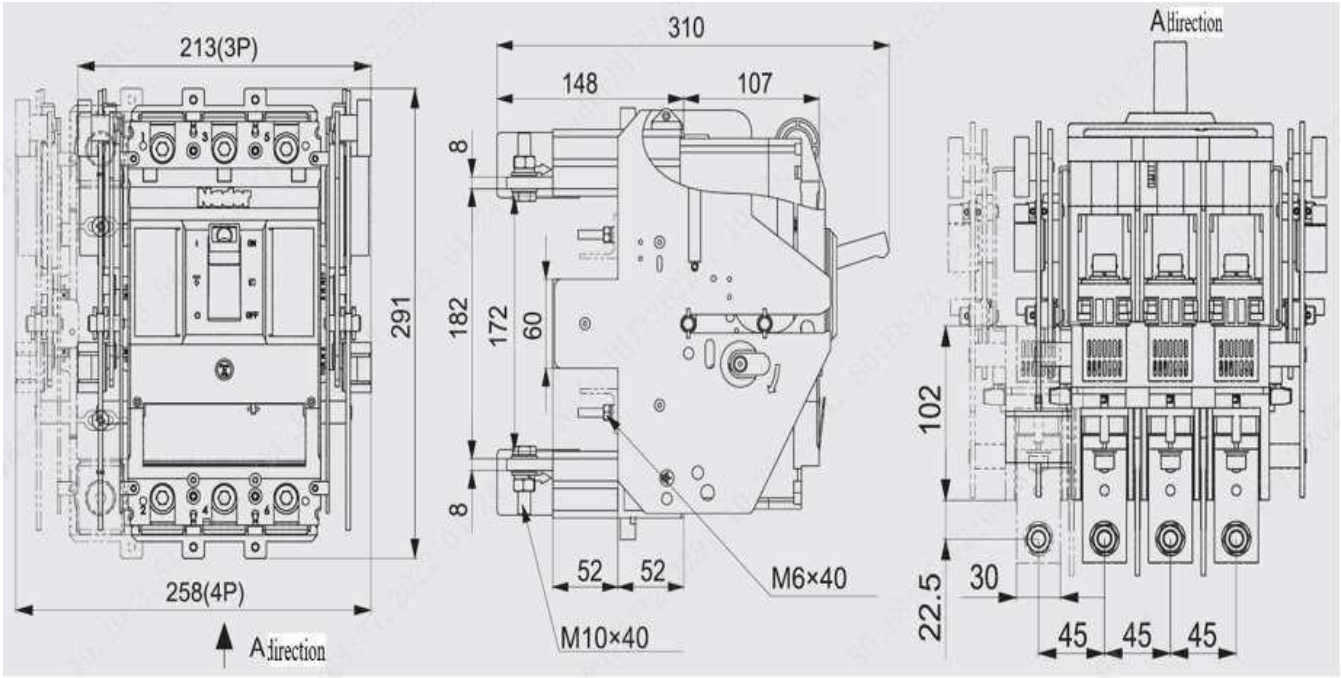


Fig. 18 3P、4P Outline dimension drawing of withdrawable board rear wiring products

Note: Unmarked tolerance level should follow GB/T 1804-c.

The opening size of the mounting plate of the withdrawable board rear socket (horizontal is shown in the figure below) ：

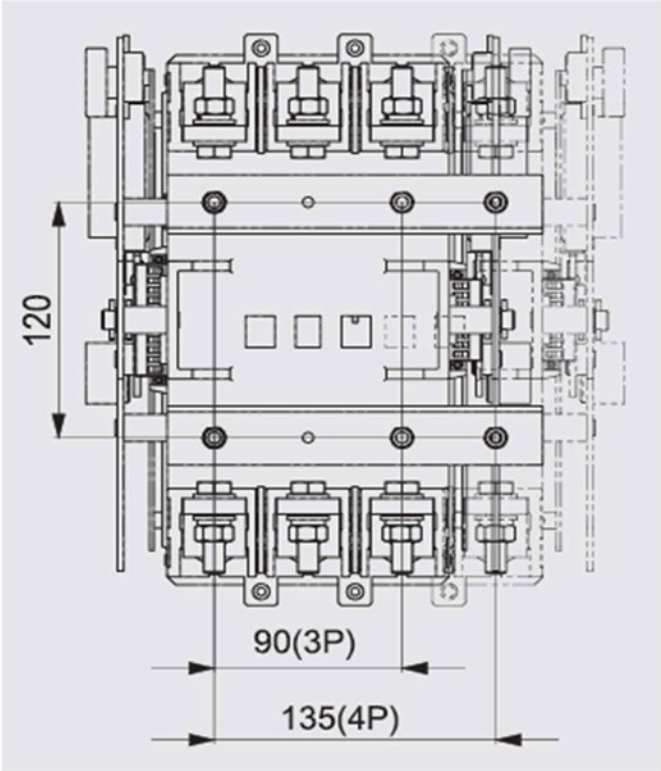


Fig. 19

Note: Unmarked tolerance level should follow GB/T 1804-c.

8.9 Rotary handle operating mechanism

Manual operation-the schematic diagram of handle installation and opening and the outline dimension diagram of manual operation are shown below respectively：

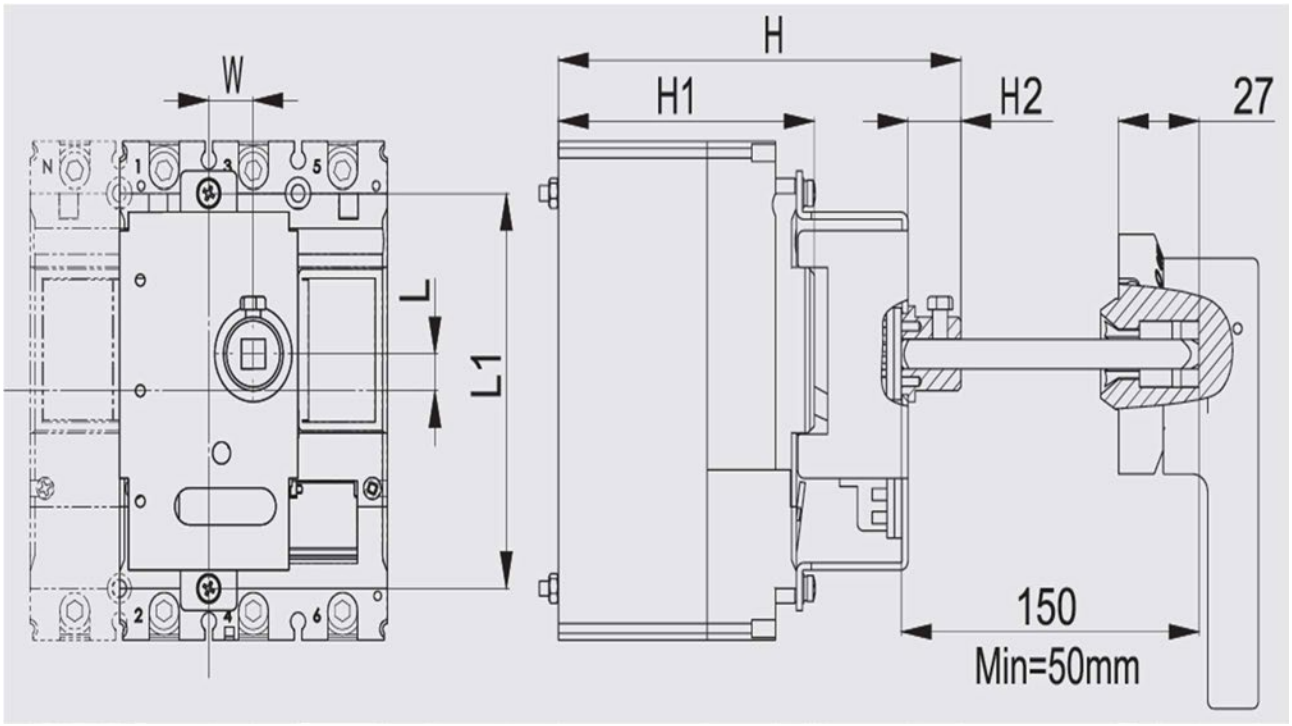
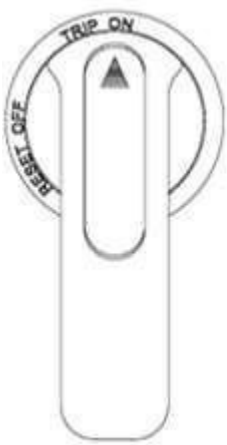
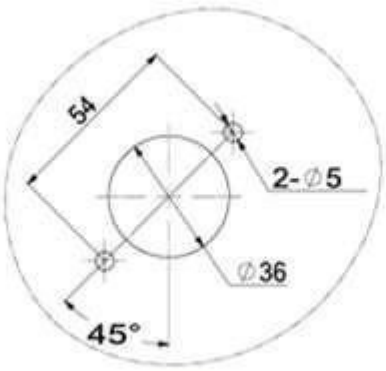


Fig.20 Installation drawing of rotary handle operating mechanism

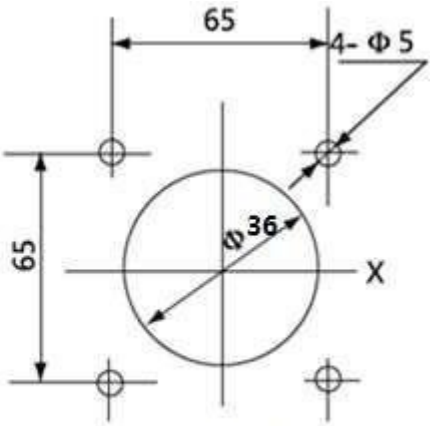
Table 11 Installation drawing of rotary handle operating mechanism

Model	W	L	L1	H	H1	H2	Square shaft specification
NDM5-400L/M/H NDM5-630L/M/H	22.5	19	214	203	124	18	10×10
NDM5-400U/R NDM5-630U/R	22.5	19	214	223.5	144.5	18	10×10





Y tapy



F tapy

Fig.21 Installation opening diagram of rotary handle

Note:1)During manual operation, it shall rotate 180°clockwise，and counterclockwise operation is prohibited.

2） Unmarked tolerance level should follow GB/T 1804-c.

8.10 Electric operation

Electric operation-overall dimension of circuit breaker and its electric operating mechanism after installation：

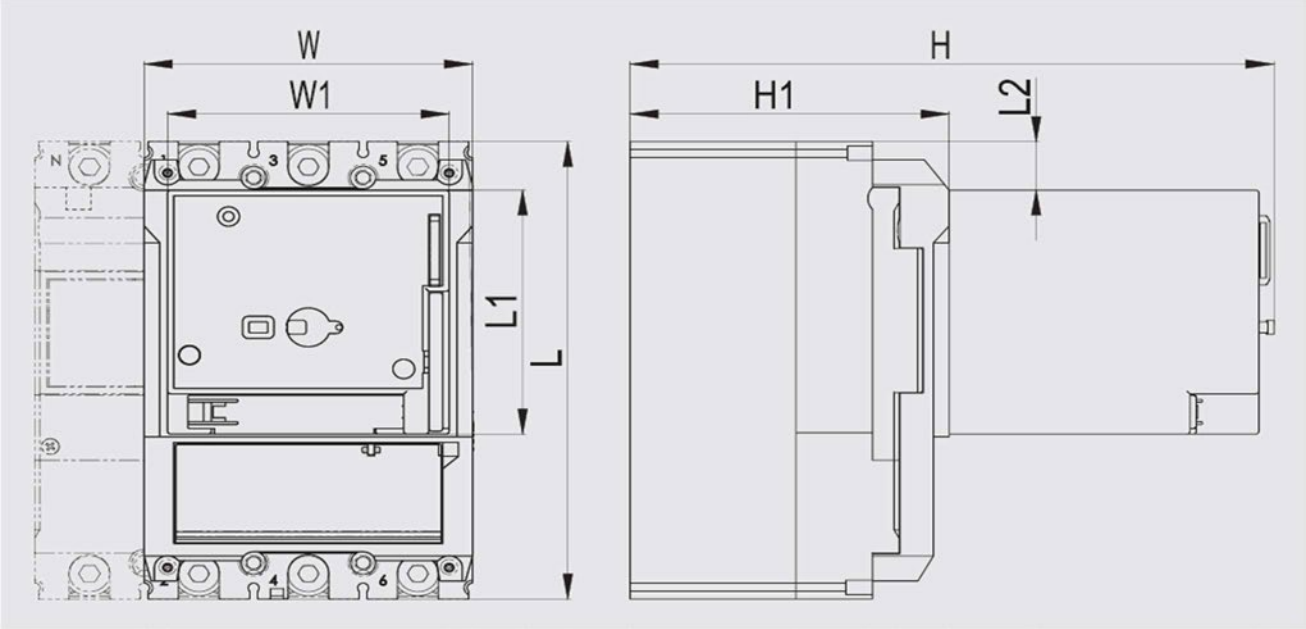


Fig.22 External dimension diagram of electric operation

Table 12 External dimension diagram of electric operation

Modle	W	W1	L	L1	L2	H	H1
NDM5-400L/M/H NDM5-630L/M/H	140	118	250	140	30	265	124
NDM5-400U/R NDM5-630U/R	140	118	250	140	30	285.5	144.5

Table 13 Voltage specification and power of electric operation

Attachment Name	Electric operation			
Voltage specification	DC24V	AC110V/DC110V	AC230V/DC220V	AC400V
power (W)	160	300	300	300

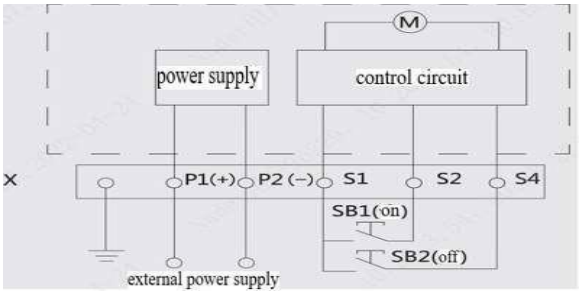


Fig.23 Electric operation wiring diagram

Note： 1）During manual operation,180°shall be operated clockwise ,and counterclockwise operation is prohibited

2）P1 and P2 shall not be connected with S1 and S2 and S4 during electric operation wiring

3）Unmarked tolerance level should follow GB/T 1804-c.

8.11 Copper bar in front of board or copper cable with wiring terminal

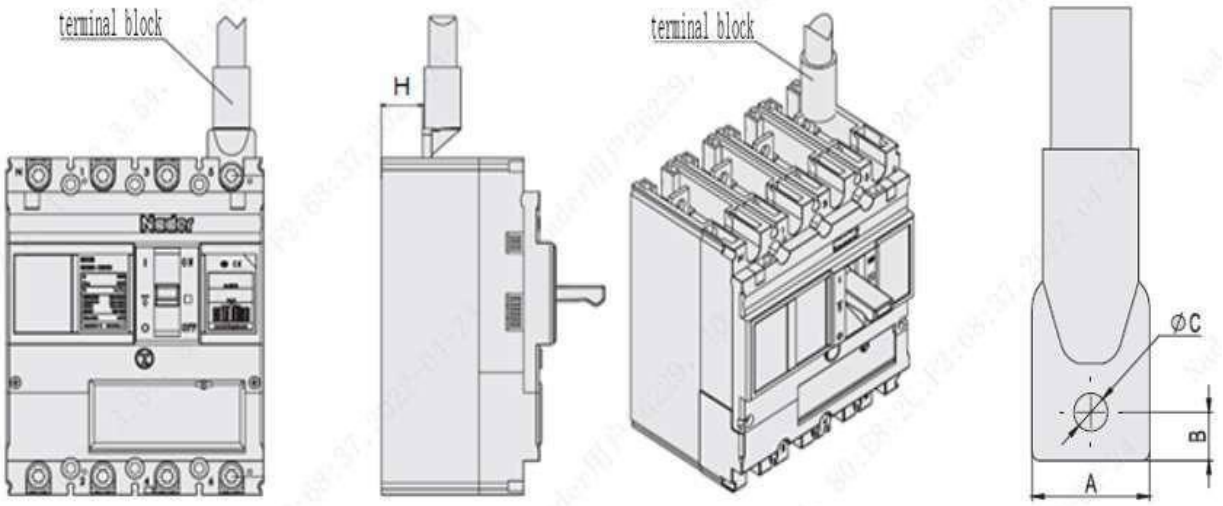


Fig.24 Connection diagram of copper bar in front of board or copper cable with wiring terminal

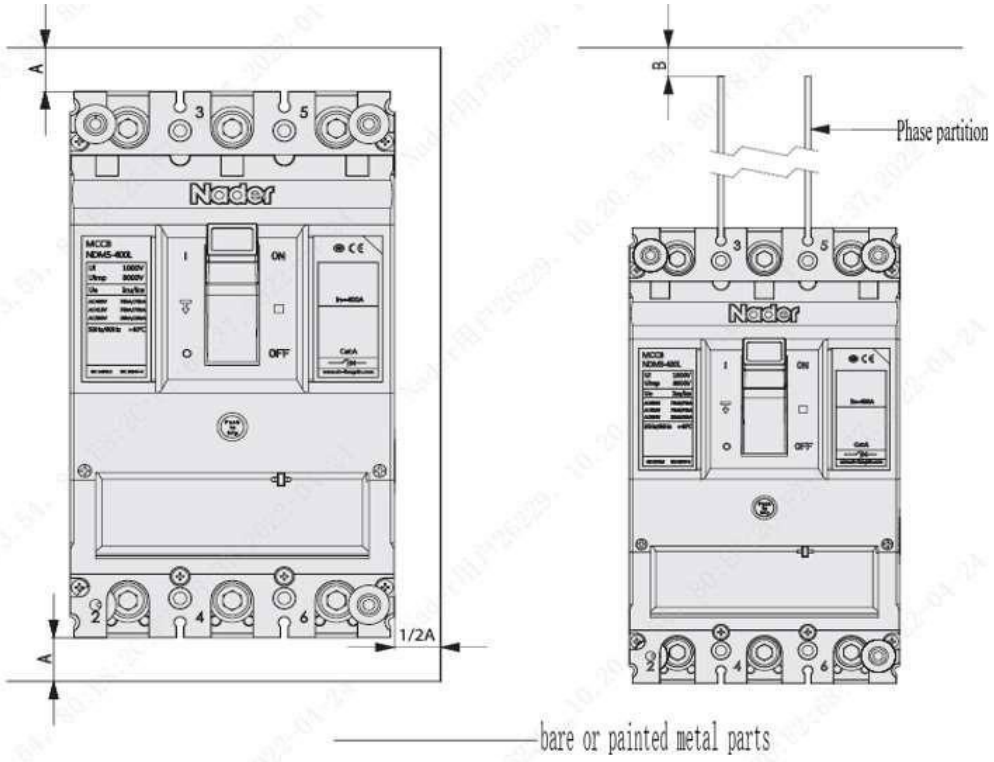
Table 14 Connection size of copper bar in front of board or copper cable with wiring terminal

Model	A(mm)	B(mm)	ΦC(mm)	H(mm)
NDM5-400	≤36	≤14	11	26(L/M/H)，26.6(U/R)
NDM5-630	≤36	≤14	11	28(L/M/H)，28.6(U/R)

Note: Unmarked tolerance level should follow GB/T 1804-c.

8.12 Safety distance

The minimum safety distance between the top, bottom, side and front panel when installing the circuit breaker, see the figure below:



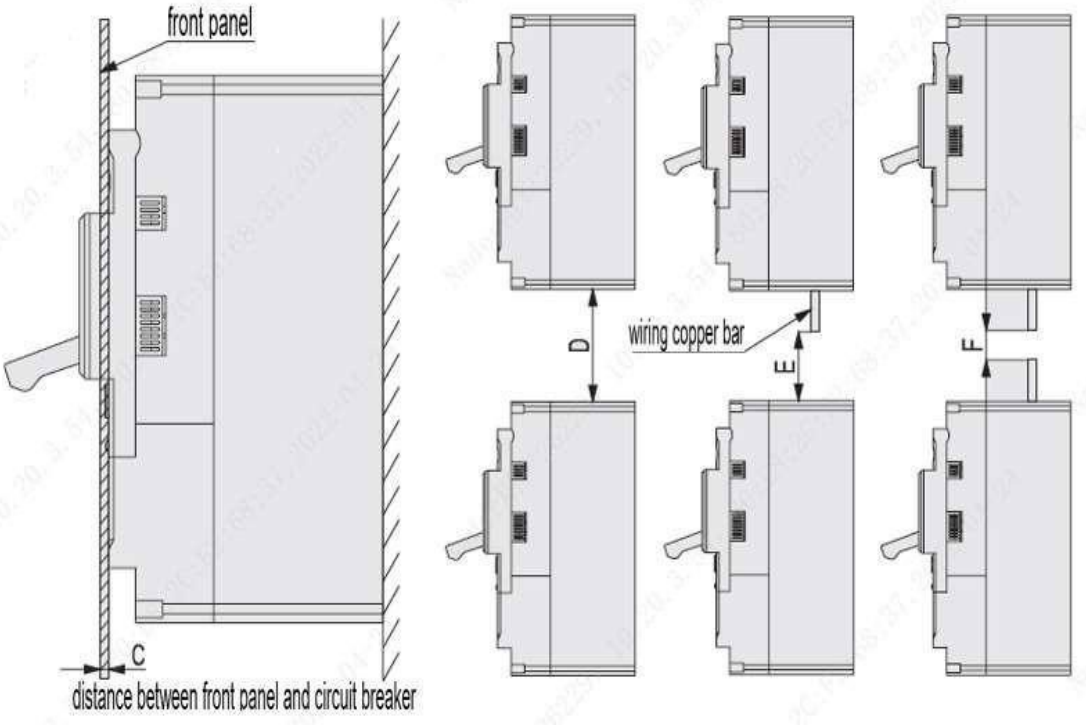


Fig.25 Insulation distance mounted in the metal cabinet

Table 15 Insulation distance mounted in the metal cabinet (unit: mm)

Model	Spacing A	Spacing B	Spacing C	Spacing D	Spacing E	Spacing F
NDM5-400/630	≥100	≥0	≥0	≥160	≥120	≥80

Note: Unmarked tolerance level should follow GB/T 1804-c.

8.13 Wiring diagrams of the product main circuit

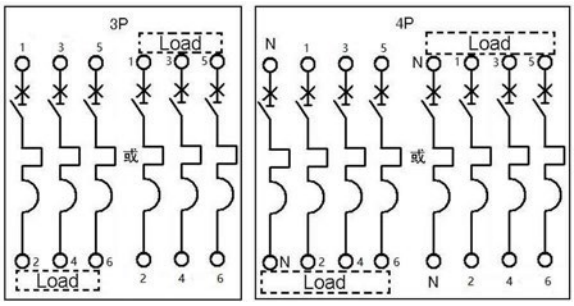


Fig.26 Main circuit wiring mode of AC products

9、Attachment function description

9.1 Under-voltage release

When the power voltage drops to the range (35%~70%) of the under-voltage release,the release can break the circuit breaker reliably; when the power voltage is 35% lower than the rated working voltage of the under-voltage release, the release can prevent closing of the circuit breaker; when the power voltage is 85% higher than the rated working voltage of the under-voltage release, the release can guarantee reliable closing of the circuit breaker.

Table 16 Rated Parameters of the Under-voltage Release

Accessory name	voltage release			Tightening torque value of wiring screw
Voltage specifications (V)	AC110/DC110	AC230/DC250	AC400	
Maintain power consumption (W)	0.5	1.0	2.2	
Code name	Q11	Q22	Q40	1.2N.m

Fig.27 Working diagram of under-voltage release

9.2 Under-shunt release

When the external voltage of the shunt release is between 70% and 110% of the rated control power voltage, the release can break the circuit breaker reliably.

Table 17 Rated Parameters of the Shunt Release

Accessory name	Shunt release				Tightening torque value of wiring screw
Voltage specifications	AC/DC24	AC/DC48	AC/DC110	AC230/DC250	
Power waste(W)	20	9.5	8	20	1.2N.m
Code name	FT02	FT04	FT11	FT22	

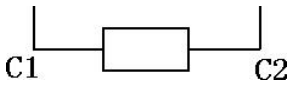


Fig.28 Working diagram of shunt release

Note：shunt tripper is working principle：it is a single pulse action。If it needs to act again, the shunt release must be power on before it can act again.

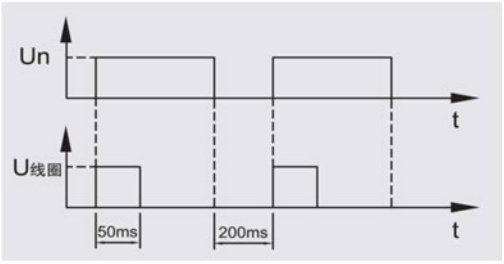
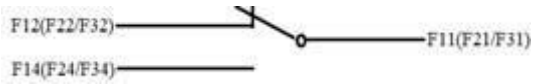
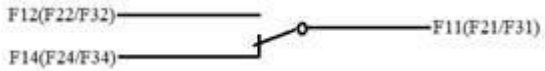


Fig.29 Working principle diagram of shunt tripper

If long-term power supply is required so that the circuit breaker cannot be closed normally, one auxiliary contact can be connected in series as shown in the figure below.

9.3 Rated parameters of the auxiliary contact

Table 18 Rated parameters of the auxiliary contact

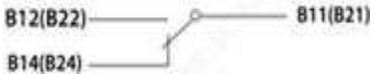
Accessory name		Auxiliary contact (normally)	Auxiliary contact (low-power dissipation)
Voltage specifications (V)/conventional (Ith)		AC250V/10A 、AC400V/3A 、DC220V/0.2A	DC30V/0.1A
Wiring diagram	On, off		
	Free tripping		
Internal resistance		＜30mΩ	＜50mΩ

Note1：If need DC30V/0.1A Auxiliary contact，please explain when ordering。

2: The first auxiliary harness is identified as F11 (red), F12 (white), F14 (yellow), and the second auxiliary harness is identified as F21 (red), F22 (white), F24 (yellow), and so on. At most three groups of auxiliary harness are installed.

9.4 Rated parameters of the alarm contact

Table 19 Rated parameters of the alarm contact

Accessory name		Auxiliary contact (normally)	Auxiliary contact (low-power dissipation)
Voltage specifications (V)/conventional (Ith)		AC250V/10A、AC400V/3A、DC220V/0.2A	DC30V/0.1A
Wiring diagram	On, off		
	Free tripping		
Internal resistance		＜30mΩ	＜50mΩ

Note1：If need DC30V/0.1A Auxiliary contact，please explain when ordering。

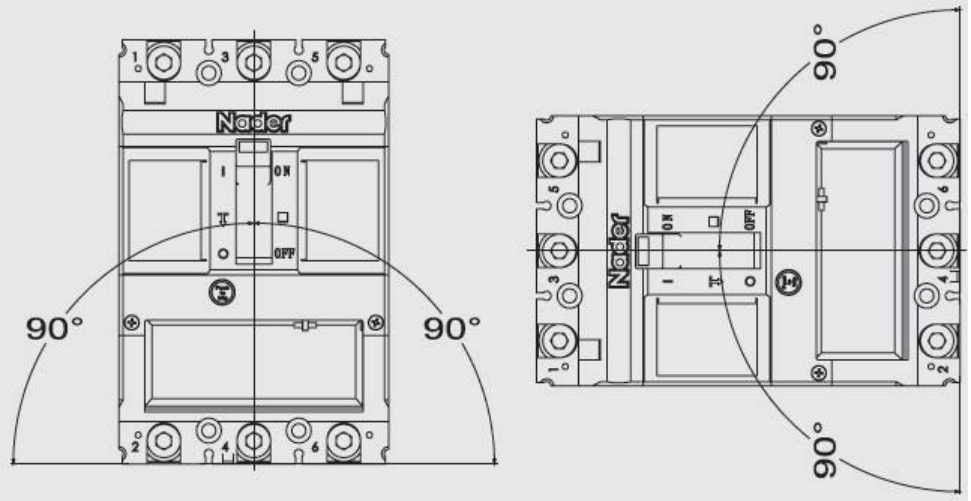
2: The first alarm harness is identified as B11 (red), B12 (white), B14 (yellow), and the second auxiliary harness is identified as B21 (red), B22 (white), B24 (yellow), and so on. At most two groups of alarms are installed.

Under-voltage release、Shunt Release、Auxiliary contact、Alarm contact ， thestandard wiring line is 0.7m long ， 1m、2m、4m can be customized according to requirements.

10、Installation direction of circuit breaker

For vertical installation of the product, the gradient between the installation surface and the vertical plane is no more than ±22.5°.

Horizontal installation of the product.



Vertical Installation Horizontal Installation

Fig.30 Installation direction diagram

11、Packaging and Storage

Minimum packaging quantity: 1 piece/box. The packaged products should be stored in a warehouse with the ambient temperature of -40℃~75℃ and relative humidity below 80% without acidic, alkali or other corrosive gas in the surrounding air. Under the conditions above, the storage period shall be no more than 36 months since the manufacturing date.

12、Environment

The environment that comply with RoHS instruction.

13、List of accessories and installation

Table 20 Accessories list form (NDM5-400/630L/M/H)

SN	Name	Specification	3P Quantity/Set	4P Quantity/Set
1	Cross small pan-head screw	M5×110	4	4
2	Hexagon nut	M5	4	4
3	Spring washer	5	4	4
4	Plain washer	5	4	4
5	Interphase partition	——	4	6
6	Terminal screw	M10×30	6	8

Table 21 Accessories list form (NDM5-400/630U/R)

SN	Name	Specification	3P Quantity/Set
1	Cross small pan-head screw	M5×130	4
2	Hexagon nut	M5	4
3	Spring washer	5	4
4	Plain washer	5	4
5	Interphase partition	——	4
6	Terminal screw	M10×30	6

14、Circuit breaker notes

1) Various characteristics and accessories of the circuit breaker are set in the factory. The circuit breaker, tripping unit or other accessories can only be adjusted, installed and maintained by the trained or qualified professionals according to the parameter requirements of the line design;

2) Ensure that the power supply is off before installing or removing any device;

3) The circuit breaker handle can be located in three positions, indicating three states: on, off and free tripping. When the handle is in the free tripping position, pull the handle in the off direction when the circuit breaker is connected and on.