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CATALOGUE

A Air Circuit Breaker Series (ACB)

B Moulded Case Circuit Breaker Series (MCCB)



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GYW1
Air Circuit Breaker Series (ACB)



■ Scope of application

GYW1-1600 series universal circuit breakers (hereinafter referred to as circuit breakers) are suitable for AC 50Hz distribution networks with rated voltage of AC400V/690V and below, and rated current ranging from 200A to 1600A. They are mainly used to distribute electrical energy, and protect circuits and power equipment from overload, undervoltage, short circuit, single-phase grounding and other faults. Under normal conditions, it can also be used for infrequent switching of lines. The circuit breaker has intelligent protection function, precise selective protection, can improve power supply reliability and avoid unnecessary power outages. At the same time, it has an open communication interface and can be used for "four remotes" to meet the requirements of the control center and automation system.

This circuit breaker has isolation function, represented by: —/ |×—

Compliant standards: GB/T14048.2, IEC60947-2.

■ Model meaning and classification

GY W 1 - 1600 □

- □ — Number of poles of circuit breaker, 3 poles can be omitted
- 1600 — Frame current of circuit breaker
- 1 — Design code
- W — Universal circuit breaker
- GY — Enterprise code

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■ Normal service and installation conditions

a. Environmental temperature

The ambient air temperature is -5℃~+40℃, and its average temperature value within 24 hours does not exceed +35℃. When the ambient temperature exceeds +40℃, it must be reduced according to Table 1-1 of P8, and the maximum allowable temperature is +65℃. Low temperature environments should be declared for customization at the time of ordering.

b. Altitude

The altitude of the installation site shall not exceed 2000m (If it exceeds 2000 meters, it is necessary to reduce the capacity for use, and the derating requirements refer to Table 1-2 of P8).

c. Humidity

Relative humidity of air: When the maximum temperature is 40℃, the relative humidity of the air does not exceed 50%. Higher relative humidity can be allowed at lower temperatures, such as 90% at 20℃. Special measures should be taken for condensation caused by temperature changes.

d. Pollution level: 3.

e. Selective category: B

f. Installation Category

The installation category of the circuit breaker is IV, when the rated operating voltage of the main circuit is ≤AC400V, for the installation category of the auxiliary circuit, besides that the coil of the undervoltage release and the transformer for the intelligent controller or the coil at the primary side of the power module are the same with that of the circuit breaker, when the rated operating voltage of the main circuit is>AC400V and ≤AC690V, the auxiliary circuit needs to be isolated from the main circuit by a transformer, with capacity of 22kVA and the maximum operating voltage of the control circuit is AC400V, and the installation category of auxiliary circuits is III.

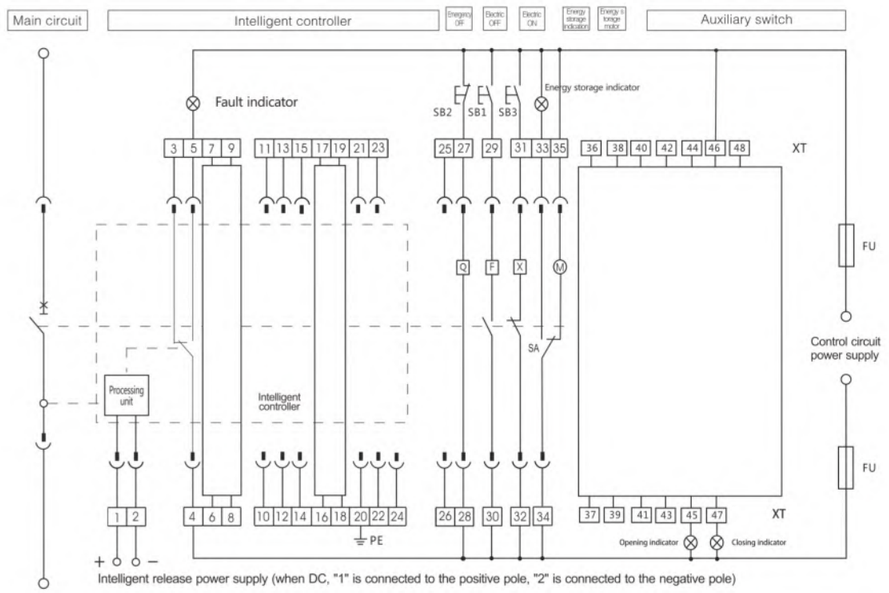
g. Installation conditions: The circuit breaker should be installed according to the requirements of this manual, and its vertical inclination should not exceed 5°.

h. Transportation and storage conditions: between -25℃ and +55 ℃, up to+70 ℃ in a short period of time (24 hours)

■ Product parameters

Rated frame current		1600
Rated operating current In(A)		200/315/400/ 500/630/800/ 1000/1250/1600
Number of poles		3P/4P
Frequency (Hz)		50
Rated operating voltage Ue(V)		400/690
Rated insulation voltage Ui(V)		1000
Rated impulse withstand voltage Uimp (kV)		12
Breaking capacity level		Empty (conventional)
Rated ultimate breaking capacity Icu(kA)	AC400V	55
	AC690V	25
Rated service breaking capacity IcS(kA)	AC400V	42
	AC690V	20
Rated short time withstand current Icw/Is(kA)	AC400V	42
	AC690V	20
Service life	Mechanical	Maintenance-free 3000, with maintenance10000
	Electrical	Maintenance-free 1000
Arc distance (mm)		0
Installation mode		Fixed/draw-out type
Connection mode		Horizontal/Vertical
Controller type		M、H、2H、3M、3H

Secondary wiring diagram of 1600 frame M-type controller



#1 and #2: controller auxiliary power supply, with #1 as the positive pole when the power supply is DC
#3, #4, #5: fault trip contact output, #4 is a common point
#6~#9: normally blank (according to Figure 2 when customizing six sets of conversion contacts)
#10, #11: blank
#12, #13 : Load 1 alarm signal output
#14, #15: Load 2 alarm signal output
#16 ~#19: blank
#20: Protective ground wire
#21~#24 : blank
#25, #26: external transformer signal input terminal (blank if none)
#27, #28: undervoltage release power supply (Q)
#29, #30: shunt release power supply (F)
#31, #32: closing electromagnet power supply (X)
#33, #34: energy storage indicator
#34, #35: energy storage motor power supply
SB1 shunt button, SB2 emergency opening button, SB3 closing button, XT wiring terminal, SA travel switch, FU fuse (6A)

Note:
1. #33 must be connected in series with the indicator light before connecting to the power supply, otherwise it may cause a short circuit in the circuit.
2. A button can be connected in series between #35 and the power supply for manual pre-energy storage.
3. The buttons, indicator lights and fuses in the picture need to be provided by the user
4. The status of the wiring diagram refers to the circuit breaker opening, no energy storage, and the reset button not popping up.

Figure 1
Four sets of conversion contacts (default configuration)

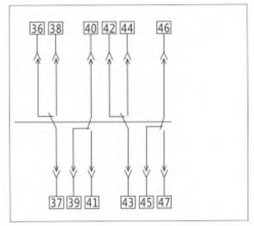
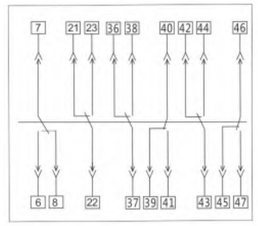
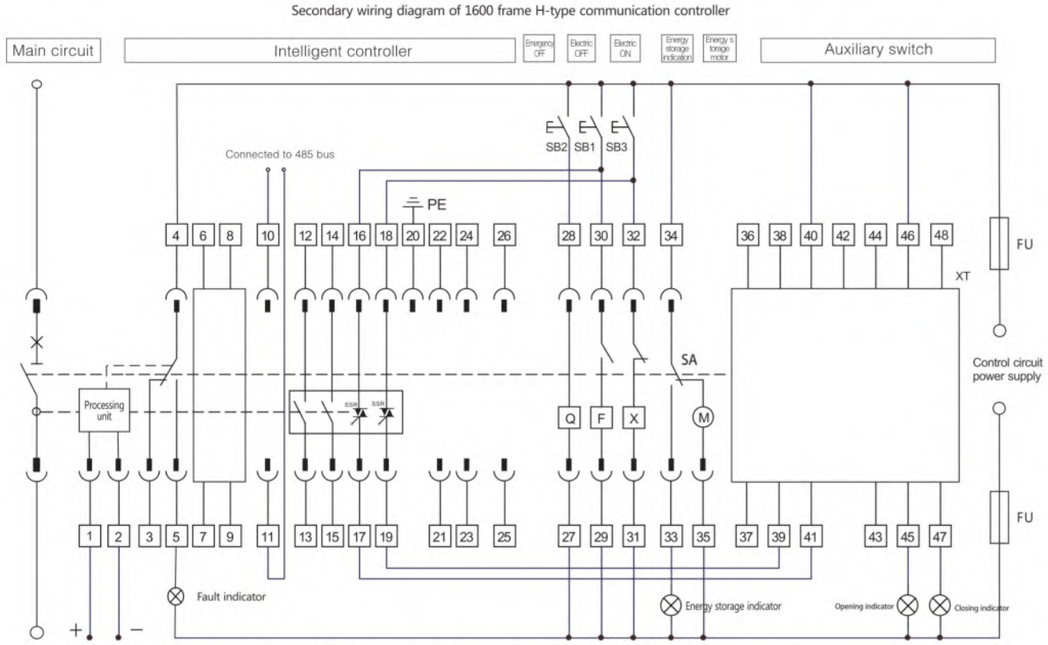


Figure 2
Six sets of conversion contacts (customized as needed)



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Secondary wiring diagram of 1600 frame H-type communication controller



Intelligent release power supply (when DC, "1" is connected to the positive pole, "2" is connected to the negative pole)

AC 230V DC 110V
AC 400V DC 220V

#1 and #2: controller auxiliary power supply, with #1 as the positive pole when the power supply is DC
#3, #4, #5: fault trip contact output, #4 is a common point
#6~#9: normally blank (according to Figure 2 when customizing five sets of conversion contacts)
#10, #11: RS485 communication interface A and B ends
#12, #13 : Load 1 alarm signal output
#14, #15: Load 2 alarm signal output
#16~#17: Remote opening control output (D03 bidirectional thyristor controlled pure electromagnetic coil)
#18~#19: Remote opening control output (D04 bidirectional thyristor controlled pure electromagnetic coil)
#20: Protective ground wire
#21: N-phase voltage signal input
#22: A-phase voltage signal input
#23: B-phase voltage signal input
#24: C-phase voltage signal input
} Voltage function required
#25, #26: external transformer signal input terminal (blank if none)
#27, #28: undervoltage release power supply (Q)
#29, #30: shunt release power supply (F)
#31, #32: closing electromagnet power supply (X)
#33, #34: energy storage indicator
#34, #35: energy storage motor power supply
SB1 shunt button, SB2 emergency opening button, SB3 closing button, XT wiring terminal,
SA travel switch, FU fuse (6A)

Note: 1、#33 must be connected in series with the indicator light before connecting to the power supply, otherwise it may cause a short circuit in the circuit.
2. A button can be connected in series between #35 and the power supply for manual pre-energy storage.
3. The buttons, indicator lights and fuses in the picture need to be provided by the user
4. The status of the wiring diagram refers to the circuit breaker opening, no energy storage, and the reset button not popping up.

Figure 1
Four sets of conversion contacts (default configuration)

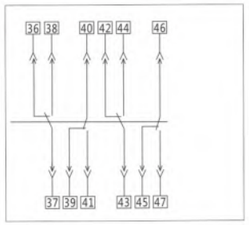
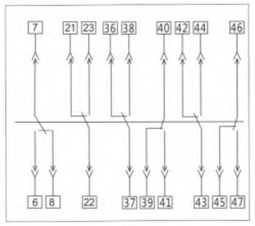
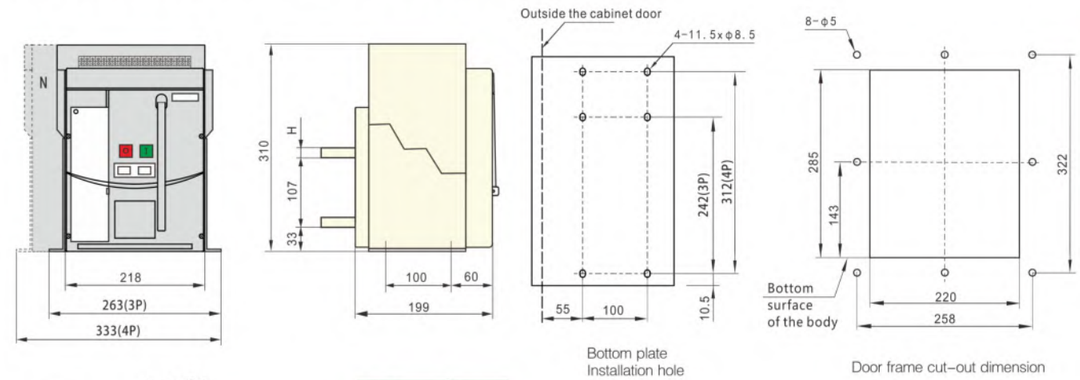


Figure 1
Five sets of conversion contacts (customized as needed)



■ Installation and overall dimensions

1. Overall and installation dimensions of fixed circuit breakers

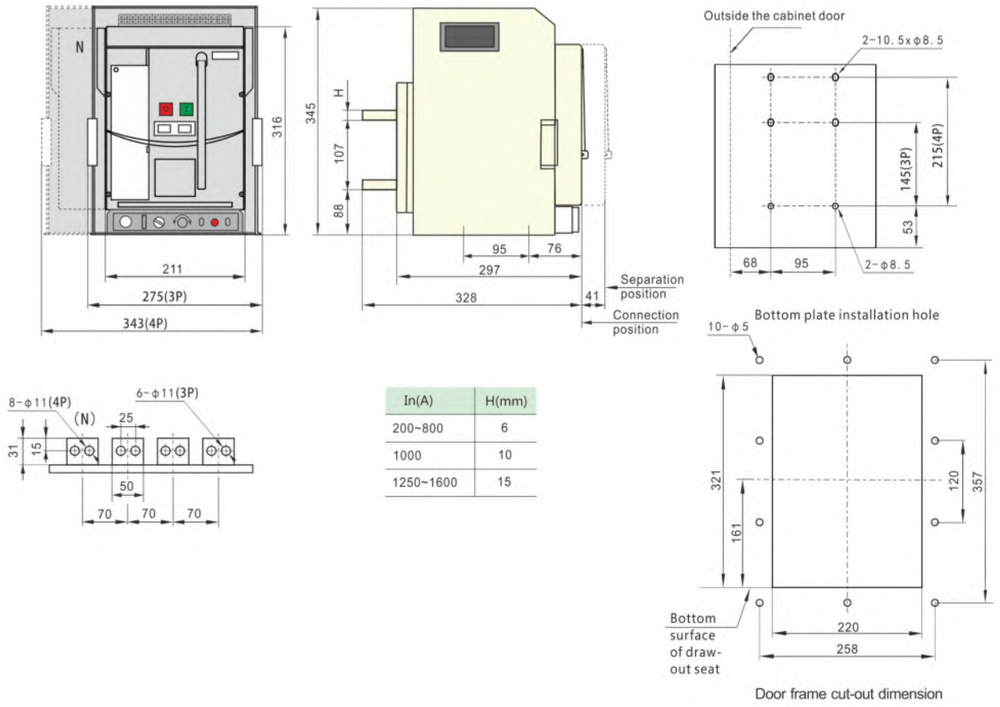


Bottom plate Installation hole

In(A)	H(mm)
200~800	6
1000	10
1250~1600	15

Door frame cut-out dimension

2. Overall and installation dimensions of draw-out circuit breakers



In(A)	H(mm)
200~800	6
1000	10
1250~1600	15

Door frame cut-out dimension

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■ Scope of application

GYW1-2000~6300 series intelligent universal circuit breakers (hereinafter referred to as circuit breakers) are suitable for AC 50Hz distribution networks with rated voltage of AC400V/690V and below, and rated current ranging from 200A to 1600A. They are mainly used to distribute electrical energy, and protect circuits and power equipment from overload, undervoltage, short circuit, single-phase grounding and other faults. Under normal conditions, it can also be used for infrequent switching of lines. The circuit breaker has intelligent protection function, precise selective protection, can improve power supply reliability and avoid unnecessary power outages. At the same time, it has an open communication interface and can be used for "four remotes" to meet the requirements of the control center and automation system.

This circuit breaker has isolation function, represented by: —/|×—

Compliant standards: GB/T14048.2, IEC60947-2.

■ Model meaning and classification

GY W 1 - □ / □

- Number of poles (4 for four poles, three poles not marked)
- Rated frame current Inm(A)
- Design code
- Universal circuit breaker
- Enterprise code

□ Classification:

Classified by installation mode

a. Fixed type

b. Draw-out type

Classified by number of poles: three poles, four poles

Classified by operation mode

a. Electrical operation

b. Manual operation (for maintenance and repair)

□ Release type:

Intelligent controller, undervoltage instantaneous (or delay) release, shunt release.

□ Intelligent controller performance:

a. Intelligent controllers are classified into: M-type, 3M type, H-type, 2H type and 3H type;

b. It is equipped with overload long delay inverse time limit, short delay inverse time limit, definite time limit, instantaneous function, which can be set by the user to form the required protection characteristics;

c. Single phase grounding protection function;

d. Display function: setting current display, action current display, and voltage display of each phase (voltage display should be proposed when ordering);

e. Alarm function: overload alarm;

f. Self-inspection function: overheating self-inspection, microcomputer self diagnosis;

g. Test function: it tests the action characteristics of the intelligent controller.

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■ Normal service and installation conditions

☐Environmental temperature

The ambient air temperature is -5℃~+40℃, and its average temperature value within 24 hours does not exceed +35℃. When the ambient temperature exceeds +40℃, it must be reduced according to Table 1-1, and the maximum allowable temperature is +65℃. Low temperature environments should be declared for customization at the time of ordering.

☐Altitude

The altitude of the installation site shall not exceed 2000m (If it exceeds 2000 meters, it is necessary to reduce the capacity for use, and the derating requirements refer to Table 1-2).

☐Humidity

Relative humidity of air: When the maximum temperature is 40℃, the relative humidity of the air does not exceed 50%. Higher relative humidity can be allowed at lower temperatures, such as 90% at 20℃. Special measures should be taken for condensation caused by temperature changes.

☐Pollution level: 3.

☐Selective category: B

☐Installation Category

The installation category of the circuit breaker is IV, when the rated operating voltage of the main circuit is ≤AC400V, for the installation category of the auxiliary circuit, besides that the coil of the undervoltage release and the transformer for the intelligent controller or the coil at the primary side of the power module are the same with that of the circuit breaker, when the rated operating voltage of the main circuit is>AC400V and ≤ AC690V, the auxiliary circuit needs to be isolated from the main circuit by a transformer, with a capacity of 22kVA and the maximum operating voltage of the control circuit is AC400V, and the installation category of auxiliary circuits is III.

☐Installation conditions: The circuit breaker should be installed according to the requirements of this manual, and its vertical inclination should not exceed 5°。

☐Transportation and storage conditions: between -25℃ and +55 ℃, up to+70 ℃ in a short period of time (24 hours).

Table 1-1 Derating at different temperatures

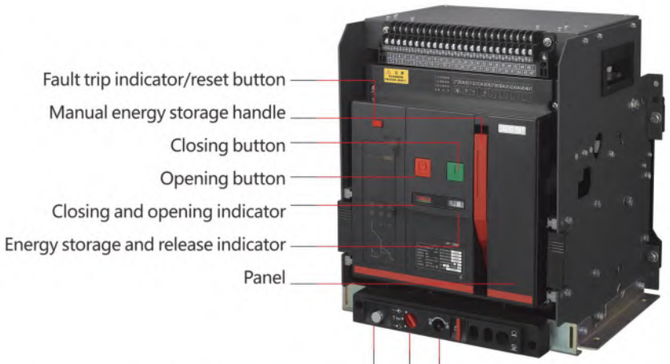
Ambient temperature	Permissible continuous operating current
+40℃	1In
+45℃	0.95In
+50℃	0.9In
+55℃	0.85In
+60℃	0.8In
+65℃	0.78In

Table 1-2. Derating at different altitudes

Altitude (m)	Rated operating current (A)	Power frequency withstand voltage (V)	Insulation voltage (V)	Rated operating voltage (V)
2000	1Ie	2200	1000	690
2500	0.93 Ie	2070	900	635
3000	0.88 Ie	1950	800	580
3500	0.83 Ie	1850	750	540
4000	0.78 Ie	1760	700	500
4500	0.73 Ie	1680	650	450
5000	Please contact us	1600	600	400

■ Brief introduction of structure

☐ Circuit breaker front indication



■ Technical data and performance

☐ The rated current of the circuit breaker is shown in the table below

Table 1

Rated frame current Inm(A)	Rated current In(A)
2000	400、500、630、800、1000、1250、1600、2000
3200	2000、2500、2900、3200
4000	3200、3600、4000
6300	4000、5000、6300

☐ The rated short-circuit breaking capacity and short-term withstand current of the circuit breaker are shown in the table below

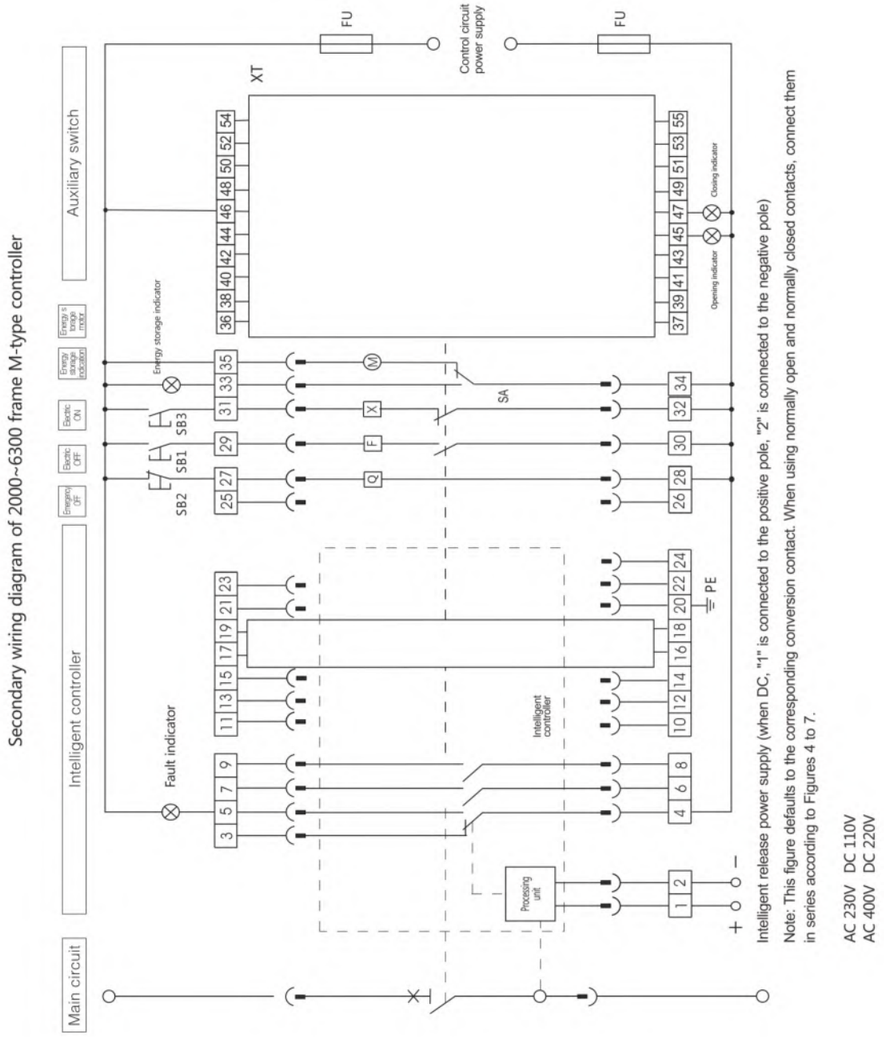
The arc distance of the circuit breaker is "zero" (i.e. there is no flashover outside the circuit breaker)

Table2

Rated frame current Inm (A)		2000	3200	4000	6300
Rated ultimate short circuit breaking capacity Icu (kA) O-CO	400V	80	100	100	120
	690V	50	80	80	80
Rated service short circuit breaking capacity Ics(kA) O-CO-CO	400V	65	80	80	100
	690V	40	65	65	70
Rated short time withstand current Icw(kA)/1s O-CO	400V	65	80	80	100
	690V	40	65	65	70

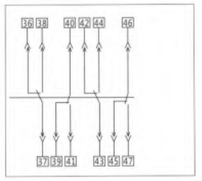
Note: The breaking capacity in the table is the same for the upper and lower incoming lines

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#1 and #2: controller auxiliary power supply, with #1 as the positive pole when the power supply is DC
#3, #4, #5: fault trip contact output, #4 is a common point
#6~#9: Normally, there are two sets of auxiliary contacts(according to Figure 3 when customizing six sets of conversion contacts, and according to Figure 7 when customizing six normally open and six normally closed contacts)
#10, #11: blank
#12, #13 : Load 1 alarm signal output
#14, #15: Load 2 alarm signal output
#16 ~#19: blank
#20: Protective ground wire
#21~#24 : blank
#25, #26: external transformer signal input terminal (blank if none)
#27, #28: undervoltage release power supply (Q)
#29, #30: shunt release power supply (F)
#31, #32: closing electromagnet power supply (X)
#33, #34: energy storage indicator
#34, #35: energy storage motor power supply
SB1 shunt button, SB2 emergency opening button, SB3 closing button, XT wiring terminal, SA travel switch, FU fuse (6A)

Figure 1
Four sets of conversion contacts (default configuration)



Note:
1.#33 must be connected in series with the indicator light before connecting to the power supply, otherwise it may cause a short circuit in the circuit.
2. A button can be connected in series between #35 and the power supply for manual pre-energy storage.
3. The buttons, indicator lights and fuses in the picture need to be provided by the user .
4. The status of the wiring diagram refers to the circuit breaker opening, no energy storage, and the reset button not popping up.

Figure 1
Five sets of conversion contacts (customized as needed)

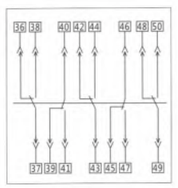


Figure 2
Six sets of conversion contacts (customized as needed)

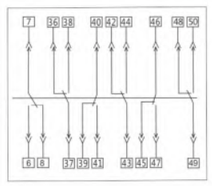


Figure 3
3NO 3NC contacts

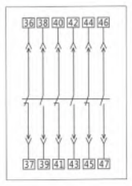


Figure 4
4NO 4NC contacts

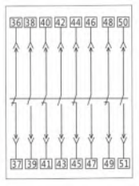


Figure 5
5NO 5NC contacts

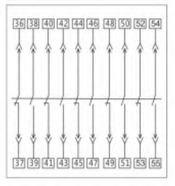
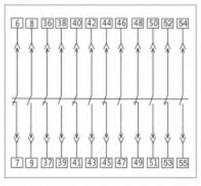
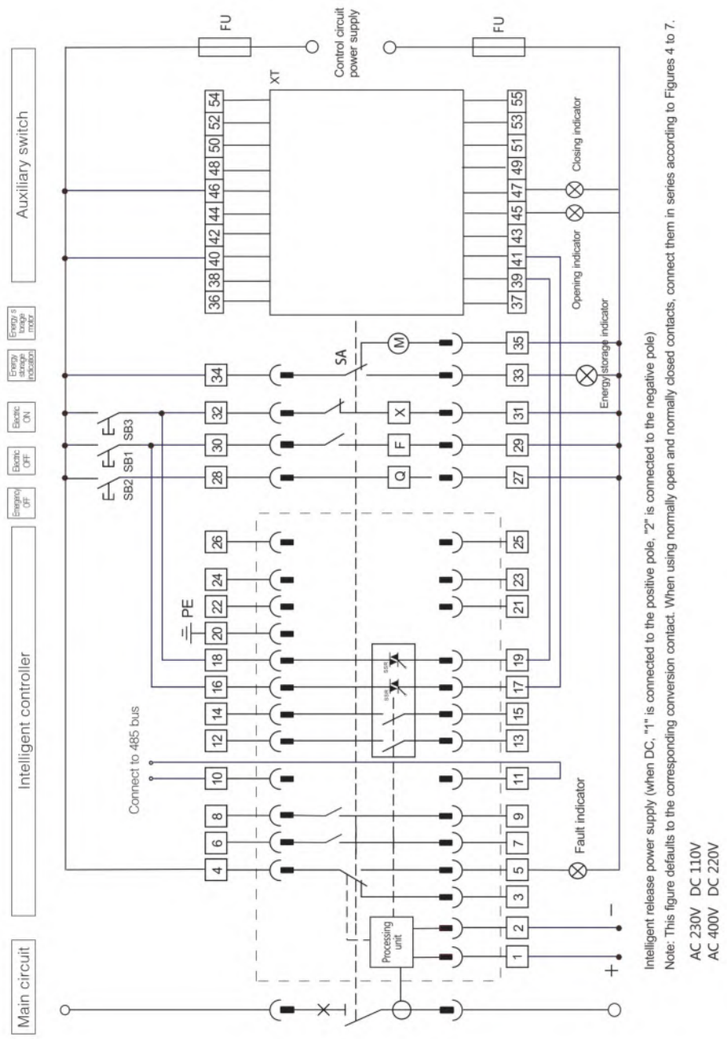


Figure 6
6NO 6NC contacts



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Secondary wiring diagram of 2000~6300 frame H-type communication controller



#1 and #2: controller auxiliary power supply, with #1 as the positive pole when the power supply is DC
#3, #4, #5: fault trip contact output, #4 is a common point
#6~#9: normally blank (according to Figure 2 when customizing five sets of conversion contacts)
#10, #11: RS485 communication interface A and B ends
#12, #13 : Load 1 alarm signal output
#14, #15: Load 2 alarm signal output
#16~#17: Remote opening control output (D03 bidirectional thyristor controlled pure electromagnetic coil)
#18~#19: Remote opening control output (D04 bidirectional thyristor controlled pure electromagnetic coil)
#20: Protective ground wire
#21: N-phase voltage signal input
#22: A-phase voltage signal input
#23: B-phase voltage signal input
#24: C-phase voltage signal input
} Voltage function required
#25, #26: external transformer signal input terminal (blank if none)
#27, #28: undervoltage release power supply (Q)
#29, #30: shunt release power supply (F)
#31, #32: closing electromagnet power supply (X)
#33, #34: energy storage indicator
#34, #35: energy storage motor power supply

SB1 shunt button, SB2 emergency opening button, SB3 closing button, XT wiring terminal, SA travel switch, FU fuse (6A)

Note:
1.#33 must be connected in series with the indicator light before connecting to the power supply, otherwise it may cause a short circuit in the circuit.
2. A button can be connected in series between #35 and the power supply for manual pre-energy storage.
3. The buttons, indicator lights and fuses in the picture need to be provided by the user
4. The status of the wiring diagram refers to the circuit breaker opening, no energy storage, and the reset button not popping up.

Figure 1
Four sets of conversion contacts (default configuration)

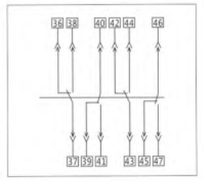


Figure 2
Five sets of conversion contacts (customized as needed)

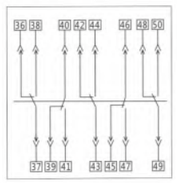


Figure 3
Six sets of conversion contacts (customized as needed)

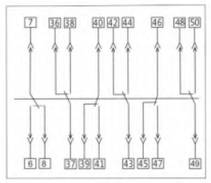


Figure 4
3NO 3NC contacts

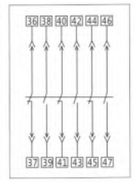


Figure 5
4NO 4NC contacts

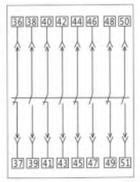


Figure 6
5NO 5NC contacts

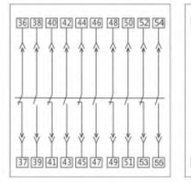
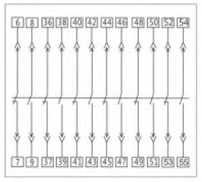


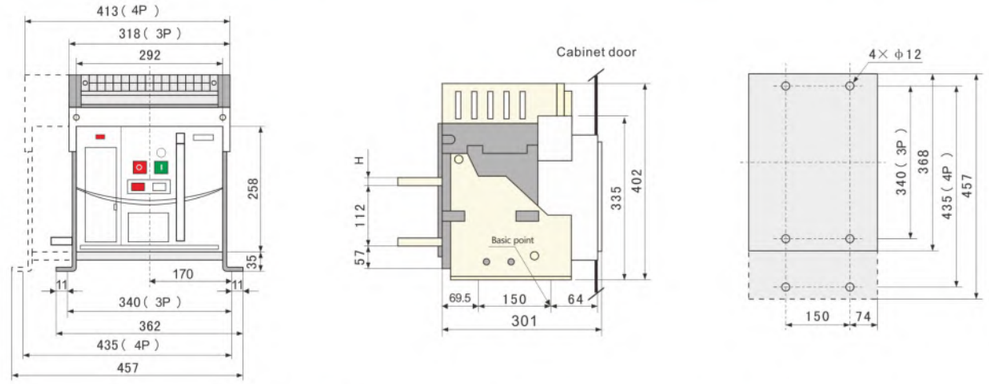
Figure 7
6NO 6NC contacts



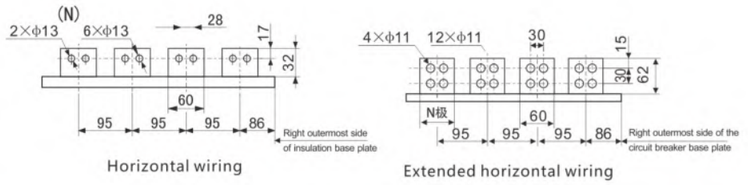
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■ Overall and installation dimensions(mm)

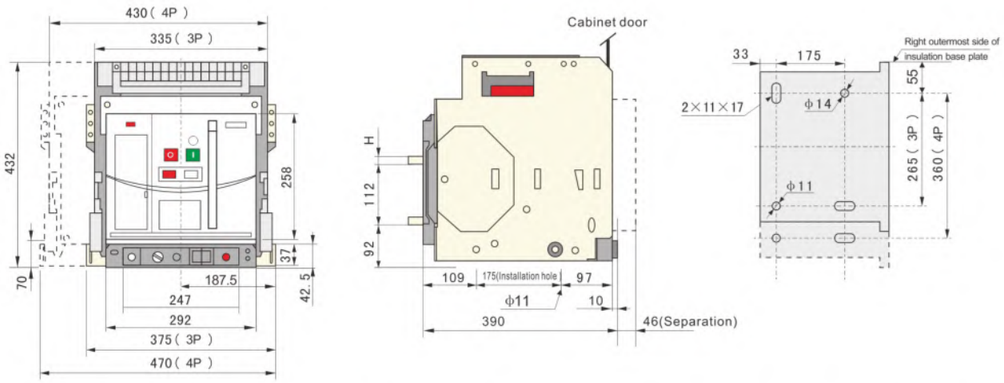
1. Installation dimension and external dimension of fixed circuit breaker (GYW1-2000/3, 2000/4)



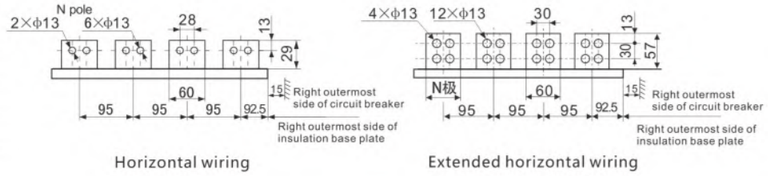
In(A)	H(mm)
400~800	10
1000~1600	15
2000	20



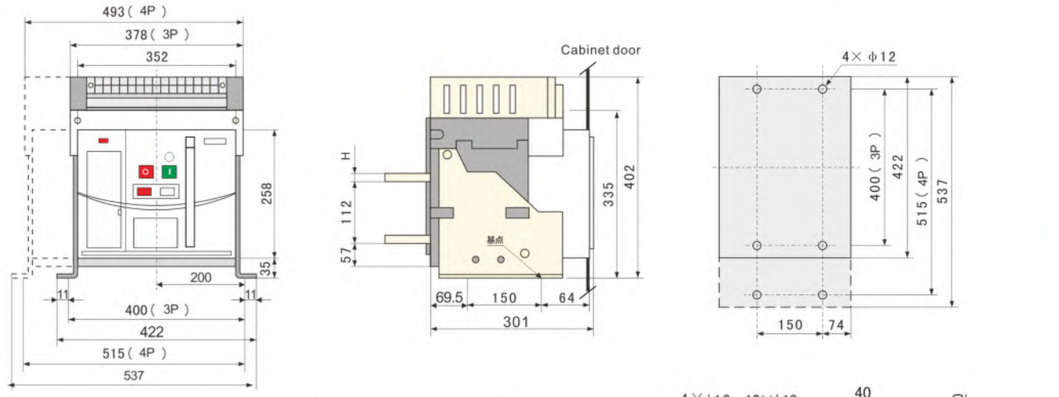
2. Installation and overall dimensions of draw-out circuit breakers (GYW1-2000/3, 2000/4)



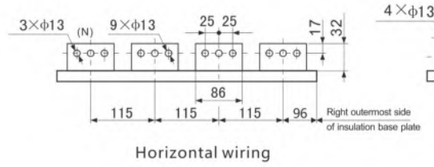
In(A)	H(mm)
400~800	10
1000~1600	15
2000	20

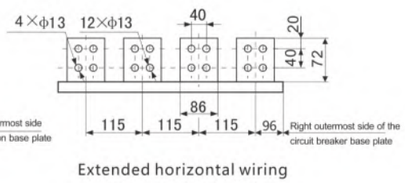


3. Installation dimension and external dimension of fixed circuit breaker (GYW1-3200/3, 3200/4)

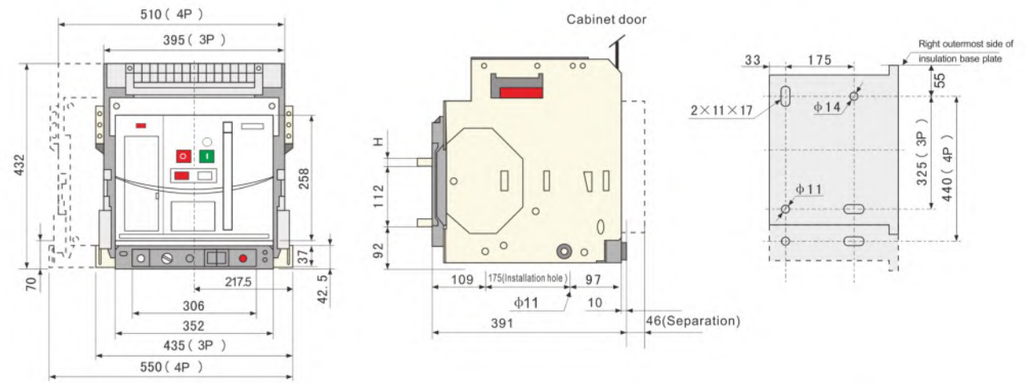


In(A)	H(mm)
2000,2500	20
2900,3200	30

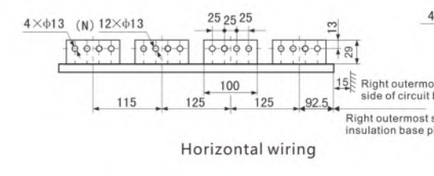


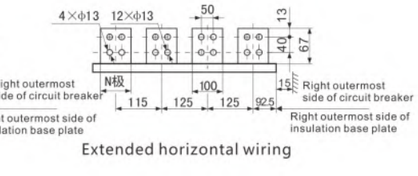


4. Installation and overall dimensions of draw-out circuit breakers



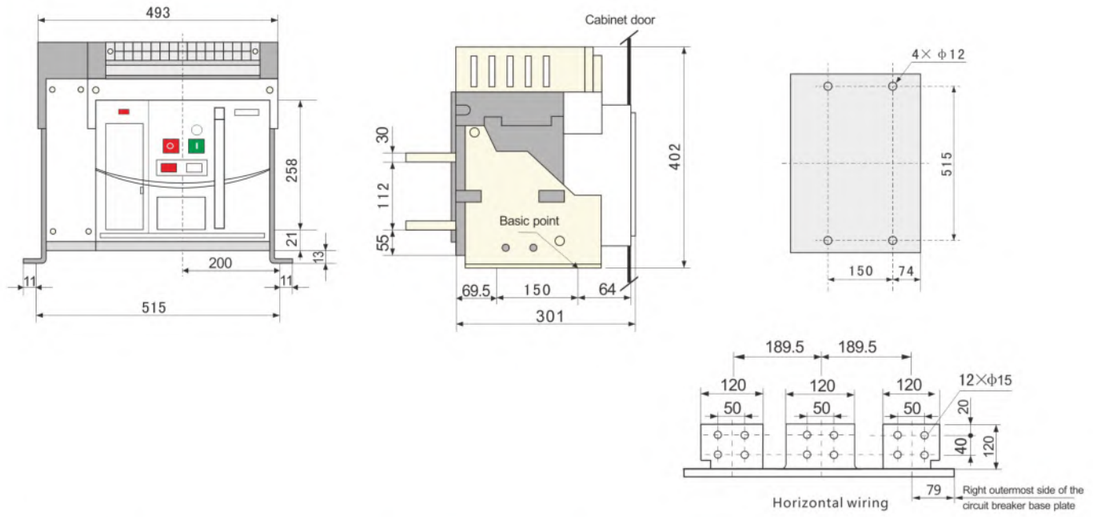
In(A)	H(mm)
2000,2500	20
2900,3200	30



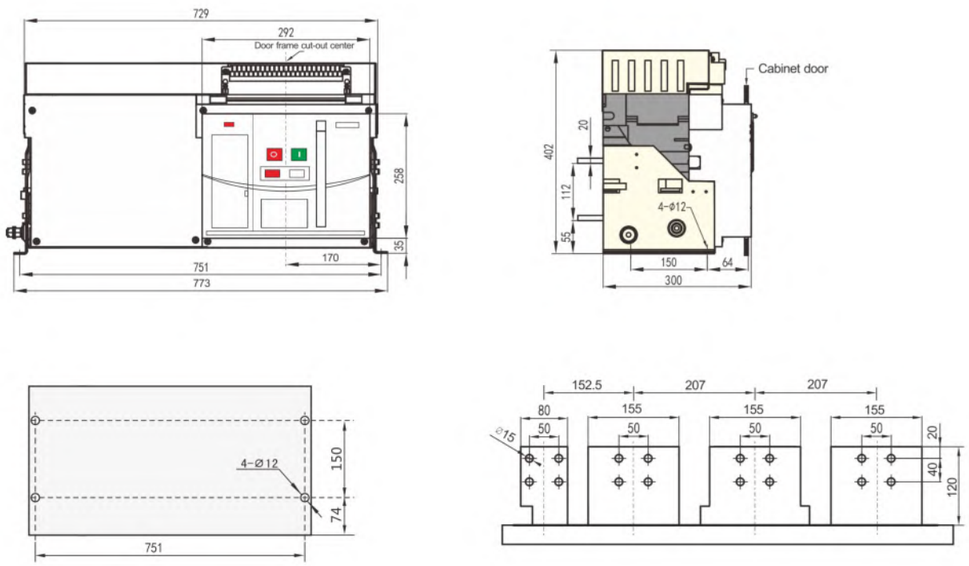


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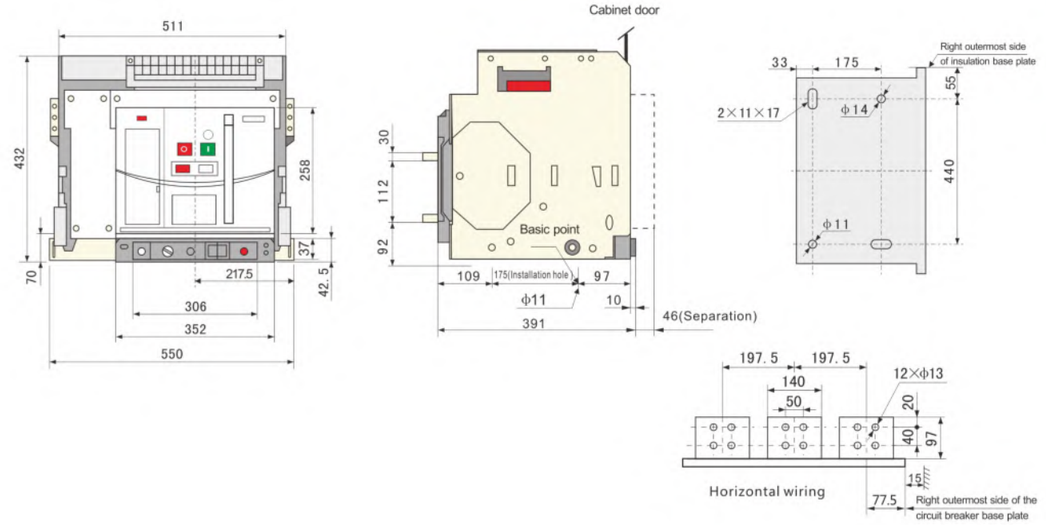
5. Installation and overall dimensions of fixed circuit breakers (GYW1 -4000/3)



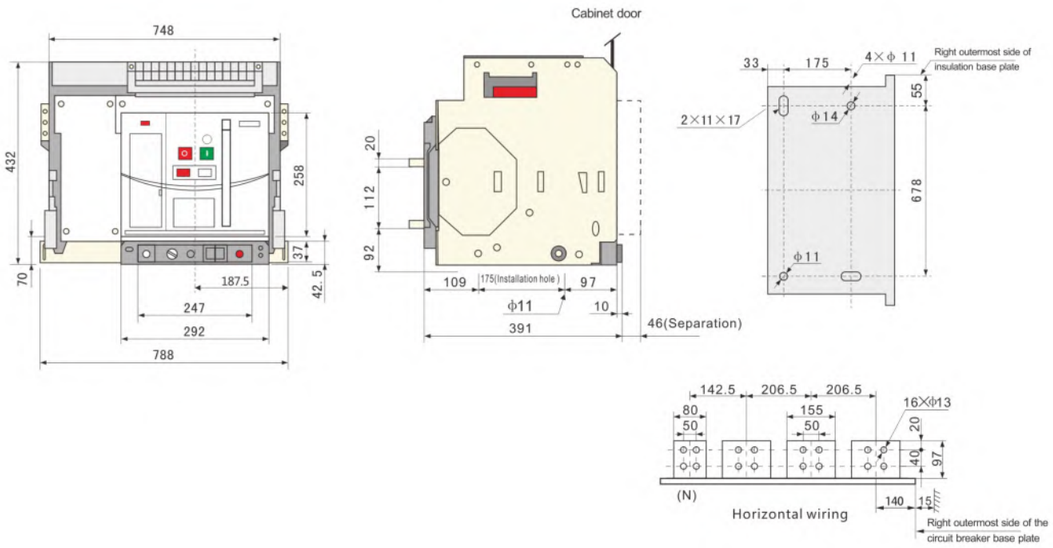
6. Installation and overall dimensions of fixed circuit breakers (GYW1 -4000/4)



7. Installation and overall dimensions of draw-out circuit breakers (GYW1 -4000/3)

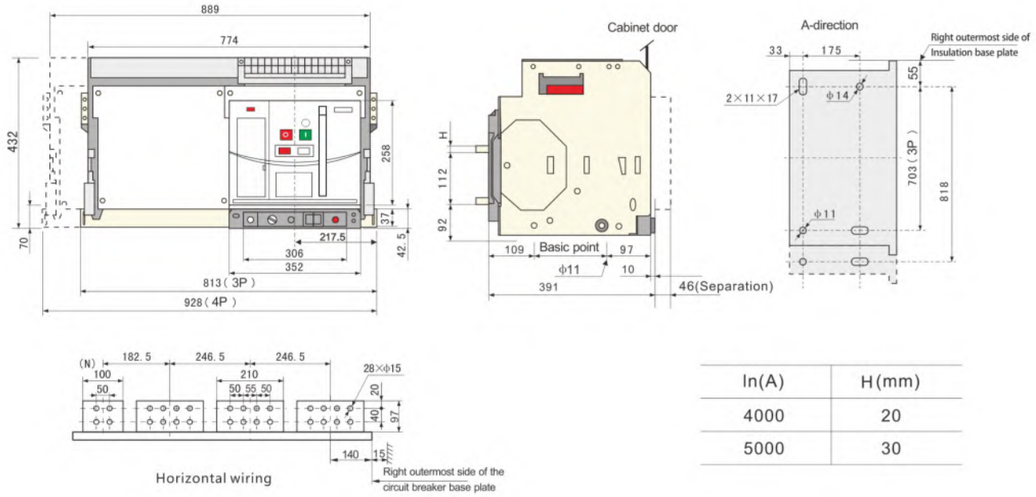


8. Installation and overall dimensions of draw-out circuit breakers (GYW1-4000/4)



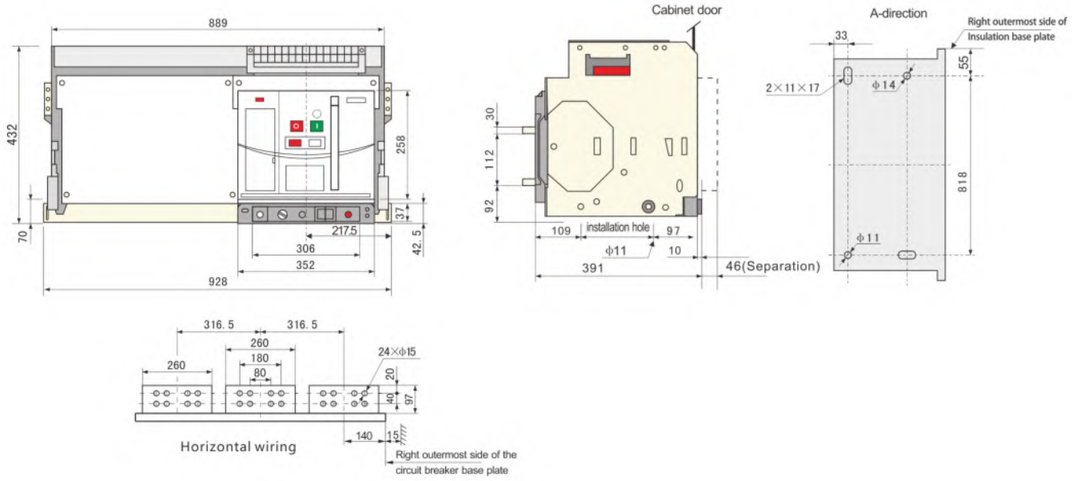
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9. Installation and overall dimensions of draw-out circuit breakers (GYW1 -6300/3, 6300/4 In: 4000, 5000)

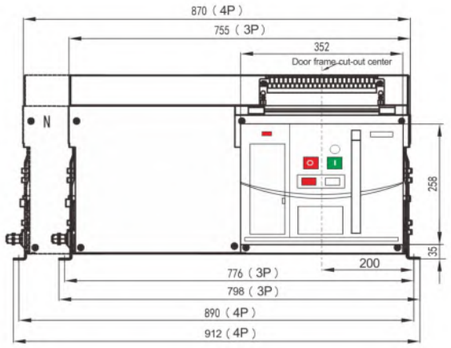


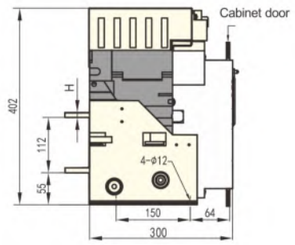
In(A)	H(mm)
4000	20
5000	30

10. Installation and overall dimensions of draw-out circuit breakers (GYW1 -6300/3 In: 6300A)

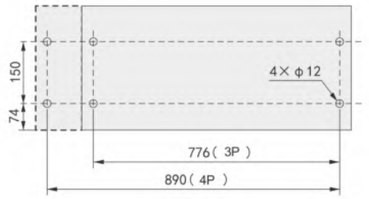


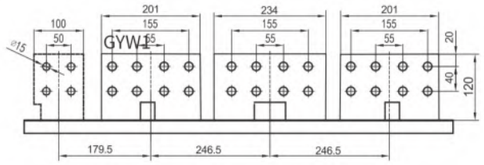
11. Installation and overall dimensions of fixed circuit breakers (GYW1 -6300/3, 6300/4 In: 4000, 5000)





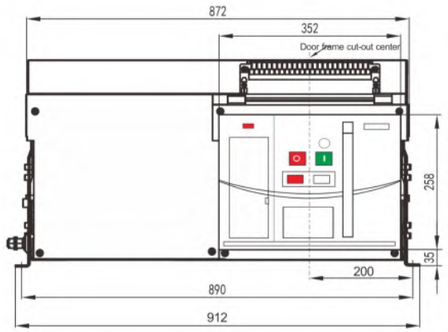
In(A)	H(mm)
4000	20
5000	30

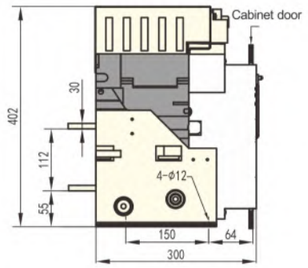




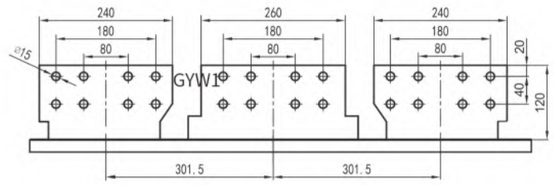
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12. Installation and overall dimensions of fixed circuit breakers (GYW1-6300/3 In: 6300A)

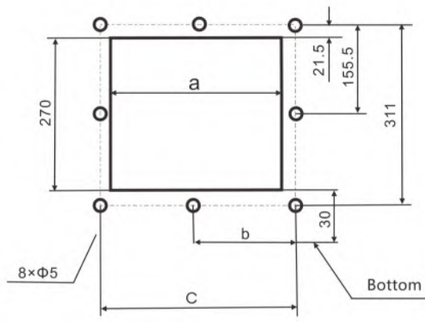




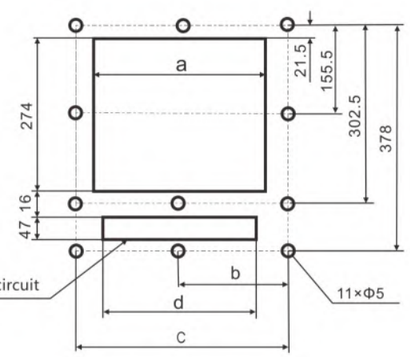




14. Panel cut-out and installation dimension diagram



Fixed type



Draw-out style

Table14

Inm	a (mm)	b (mm)	c (mm)	d (mm)
2000 series, 4000 series 4P	302	172.5	345	262
3200 series, 4000 series 3P	362	202.5	405	322
63000 series				

Note: The 1600 frame series is shown in Figures 19 and 20

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GYCM6

Moulded Case Circuit Breaker Series (MCCB)



■ Scope of application

☐ The GYCM6 series moulded case circuit breakers (hereinafter referred to as circuit breakers) are suitable for AC 50Hz (or 60Hz) circuits with rated insulation voltage of 1000V (800V for GYCM6 -63 and 1140V for GYCM6 -1600), rated operating voltage of 400V/690V (1140V for GYCM6 -1600) and below, and rated operating current up to 1600A for infrequent switching and infrequent motor starting. The circuit breaker has overload, short circuit, and undervoltage protection functions, which can protect the circuit and power equipment from damage.

☐ Circuit breakers are classified into L-type (standard type) and M-type (high breaking type) according to their rated ultimate short-circuit breaking capacity.

☐ This circuit breaker has the characteristics of small volume, high breaking capacity, short arcing, and high vibration resistance.

☐ The circuit breaker has isolation function, and its corresponding symbol is " —/⊢— " .

☐ Compliant standards: GB/T 14048.2, IEC60947-2.

☐ This circuit breaker allows for reverse wiring.

■ Model and meaning

GYC M 6 - □□□ / □□□□

- N pole type: A, B, C, D(Note 4)
- Utilization code (Note 3)
- Release mode and accessory code (see Table 5)
- Number of poles
- Operation Mode (Note 2)
- Rated ultimate short-circuit breaking capacity
- Class (Note 1)
- Frame current
- Design code
- Moulded case circuit breaker
- Enterprise code

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Note:

1. According to rated ultimate short-circuit breaking capacity, it is classified into L type (standard) and M type (medium breaking).
2. No code for direct operation of handle; Electric operation is represented by P; The rotation handle is represented by Z.
3. The circuit breaker for power distribution has no code; The protection motor is represented by 2.
4. It is classified into three poles and four poles according to the number of poles. There are four types of neutral pole (N-pole) in the four-pole products:

Type A: The N-pole is not equipped with over-current release, and the N-pole is always connected, not closed or opened with other three poles.

Type B: N-pole is not equipped with over-current release, and N-pole is closed and opened together with other three poles (N-pole is closed first and then opened).

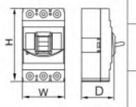
Type C: N-pole is equipped with over-current release, and N-pole is closed and opened together with other three poles (N-pole is closed first and then opened).

Type D: N-pole is equipped with over-current release, and the N-pole is always connected, not closed and opened with other three poles.

■ Main technical performance parameters of moulded case circuit breakers

Table5

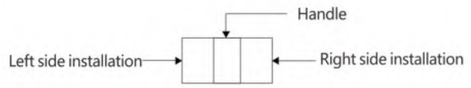
Rated frame current Inm(A)		63		125		250		400		630		800		1600	
Rated current In (A), 40℃		10、16、20、25、32、40、50、63		16、20、25、32、40、50、63、80、100、125		100、125、160、180、200、225、250		225、250、315、350、400		400、500、630		630、700、800		800、1000、1250、1600	
Rated insulation voltage Ui (V)		800		1000		1000		1000		1000		1140		1140	
Rated impulse withstand voltage Uimp (Kv)		8		12		12		12		12		12		12	
Rated operating voltage Ue (V), AC50/60Hz		400、690		400、690, 220/400 for 2P		400、690, 220/400 for 2P		400、690		400、690		400、690、800、1140		400、690、800、1140	
Selective category		A		A		A		A		A		A		A	
Arc distance (mm)		⩽50		⩽50		⩽50		⩽50		⩽100		⩽100		⩽120	
Operation performance (time)	Electrical life (power-on)	1500		1000		1000		1000		1000		500		500	
	Mechanical life (pwer-off)	8500		7000		7000		4000		4000		2500		2500	
Breaking capacity level		L	M	L	M	L	M	L	M	L	M	L	M	L	M
Number of poles	2P	-	-	■	■	■	■	-	-	-	-	-	-	-	-
	3P	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	4P	-	■	■	■	■	■	■	■	■	■	■	■	■	■
Rated ultimate short circuit breaking capacity (kA)	Ue=AC400V	35	50	35	85	35	85	50	100	50	100	75	100	75	100
	Ue=AC690V											-	50	-	50
	Ue=AC800V	-		-	-	-	-	-	-	-	-	-	50	-	50
	Ue=AC1140V	-		-	-	-	-	-	-	-	-	-	50	-	50
Rated short circuit breaking capacity (kA)	Ue=AC400V	20	35	22	50	22	50	35	75	35	75	50	65	50	65
	Ue=AC690V											-	50	-	50
	Ue=AC800V	-		-	-	-	-	-	-	-	-	-	50	-	50
	Ue=AC1140V	-		-	-	-	-	-	-	-	-	-	50	-	50
Overall dimension Width(W)x height (H)xdepth(D)	2P	-		65		75		-		-		-		-	
	3P (W)	77		92		107		150		182		210		210	
	4P (W)	103		122		142		198		240		280		280	
	(H)	136		150		165		257		270		280		330	
	(D)	74	83	70.5 (69 for 2P)	88 (86 for 2P)	89 (86 for 2P)	108 (105 for 2P)	110		116		120(3P) 118.5(4P)		137	



Note: "-" in the table represents inapplicable, "■" represents applicable

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■ Release mode and accessory code



- □ Alarm contact
- ■ Auxiliary contact
- ● Shunt release
- ○ Undervoltage release
- → Lead wire direction

Code	Accessory name	GYCM6-B63/125		GYCM6-B250		GYCM6-B400		GYCM6-B630		GYCM6-B800	
	Number of poles	3	4	3	4	3	4	3	4	3	4
200、300	No accessory										
208、308	Alarm contact										
210、310	Shunt release										
220、320	Auxiliary contact										
230、330	Undervoltage release										
240、340	Shunt release, auxiliary contact										
250、350	Shunt release, undervoltage release										
260、360	Two sets of auxiliary contact										
270、370	Auxiliary contact, undervoltage release										
218、318	Shunt release, alarm contact										
228、328	Auxiliary contact, alarm contact										
238、338	Undervoltage release, alarm contact										
248、348	Shunt release, auxiliary contact, alarm contact										
268、368	Two sets of auxiliary contact, alarm contact										
278、378	Auxiliary contact, undervoltage release, alarm contact										

Note:

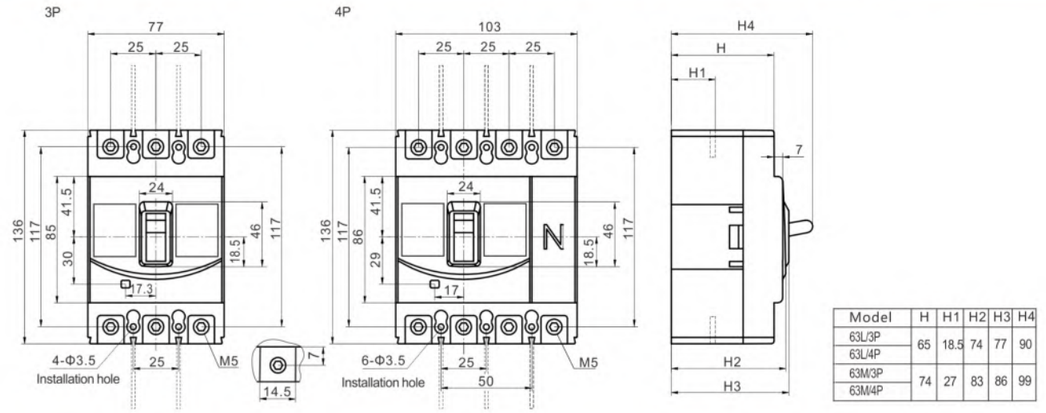
□ 200: it represents circuit breaker with only electromagnetic release; 300: it represents circuit breaker with thermal electromagnetic release; 000: it represents no thermal or electromagnetic release.

□ For GYCM6-B125 and 250 2P products, there are only 210, 310, 220, 320, 230, and 330; for GYCM6-63, 125, 250 4P circuit breakers, there are no 240, 340, 360, 260, 268, 368 when N poles are A and D types;

□ For GYCM6-B63,GYCM6-B125,and GYCM6-B250 , the two pairs of auxiliary contacts can be supplied for specifications 220, 320, 240, 340, 270, and 370 (i.e. two normally open and two normally closed), while three pairs of contacts can be supplied for260 and 360 (i.e. three normally open and three normally closed), but it should be noted when ordering.

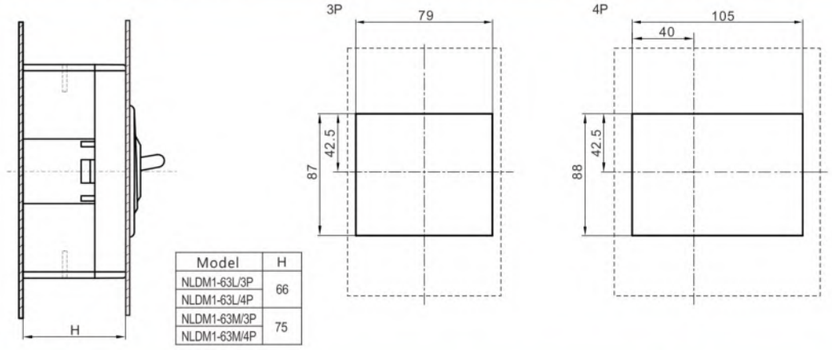
■ Overall and installation dimensions

GYCM6-B63 moulded case circuit breaker — Overall and installation dimension diagram



Model	H	H1	H2	H3	H4
63L/3P	65	18.5	74	77	90
63L/4P					
63M/3P	74	27	83	86	99
63M/4P					

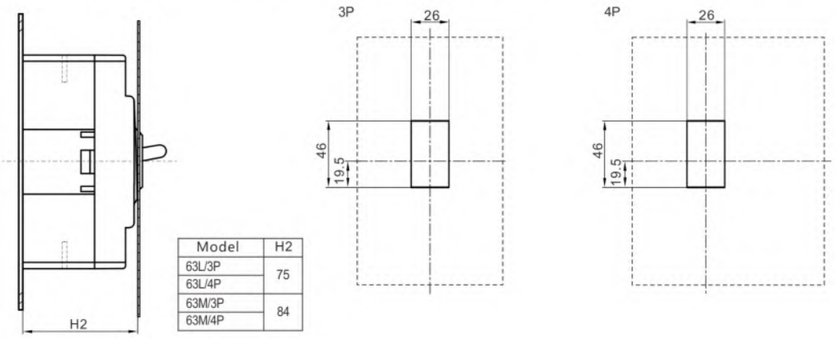
GYCM6-B63 moulded case circuit breaker — Cabinet door big cut-out diagram



Model	H
NLDM1-63L/3P	66
NLDM1-63L/4P	
NLDM1-63M/3P	75
NLDM1-63M/4P	

GYCM6-B63 moulded case circuit breaker — Cabinet door small cut-out diagram

Note: It is recommended to open large holes according to the above diagram, as the outer surface of the product handle is curved, and small holes affect the aesthetics

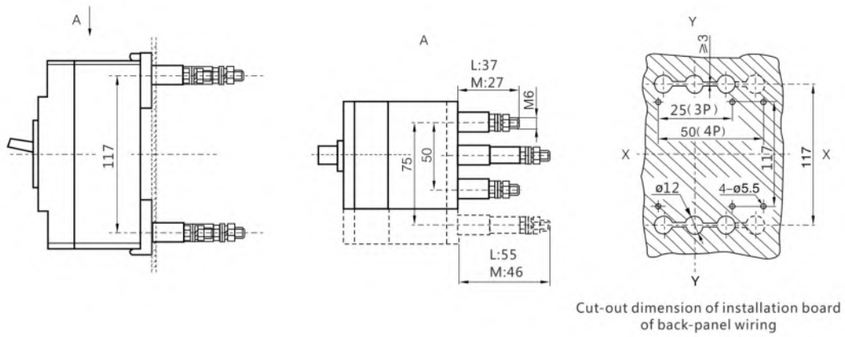


Model	H2
63L/3P	75
63L/4P	
63M/3P	84
63M/4P	

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GYCM6-B63 moulded case circuit breaker (back-panel wiring) — Installation dimension diagram

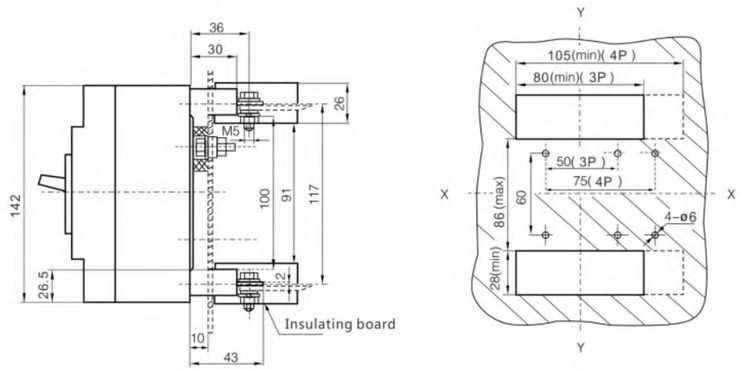
X-X, Y-Y represent the center of the three-pole circuit breaker



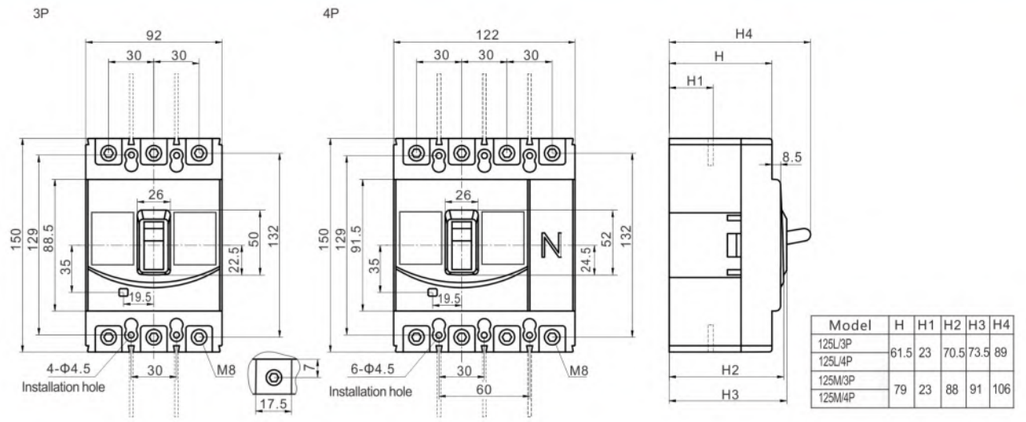
Cut-out dimension of installation board of back-panel wiring

GYCM6-B63 molded case circuit breaker (plug-in back-panel) — Installation dimension diagram

X-X, Y-Y represent the center of the three-pole circuit breaker

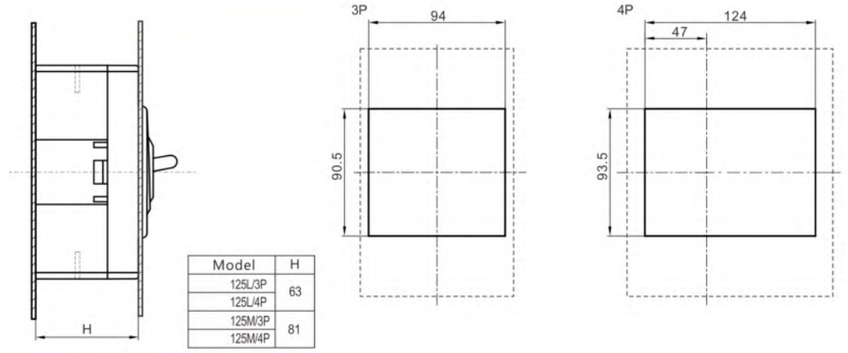


GYCM6-B125 moulded case circuit breaker — Overall and installation dimension diagram



Model	H	H1	H2	H3	H4
125L/3P	61.5	23	70.5	73.5	89
125L/4P					
125M/3P	79	23	88	91	106
125M/4P					

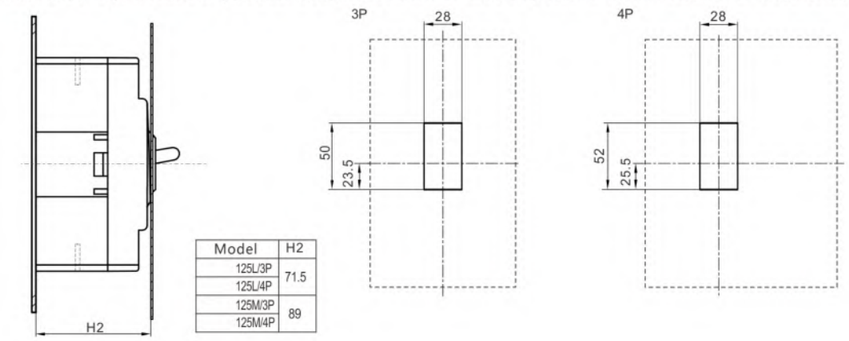
GYCM6-B125 moulded case circuit breaker — Cabinet door big cut-out diagram



Model	H
125L/3P	63
125L/4P	
125M/3P	81
125M/4P	

GYCM6-B125 moulded case circuit breaker — Cabinet door small cut-out diagram

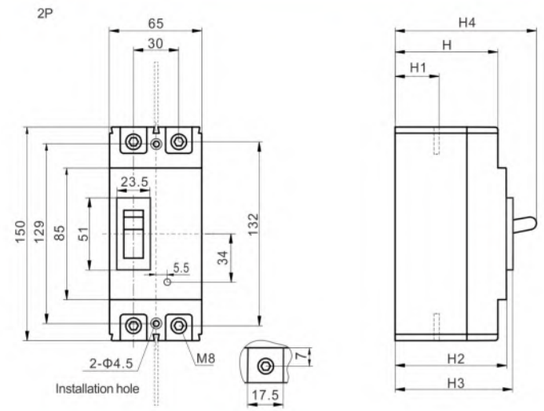
Note: It is recommended to open large holes according to the above diagram, as the outer surface of the product handle is curved, and small holes affect the aesthetics



Model	H2
125L/3P	71.5
125L/4P	
125M/3P	89
125M/4P	

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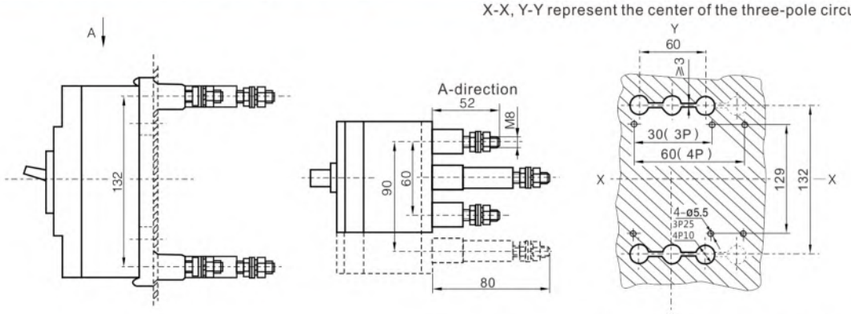
GYCM6-B125 moulded case circuit breaker — Installation dimension diagram



Model	H	H1	H2	H3	H4
125L/2P	62.5	24	69	74	89
125M/2P	79	24	86	91	106

GYCM6-B125 molded case circuit breaker (back-panel wiring) — Installation dimension diagram

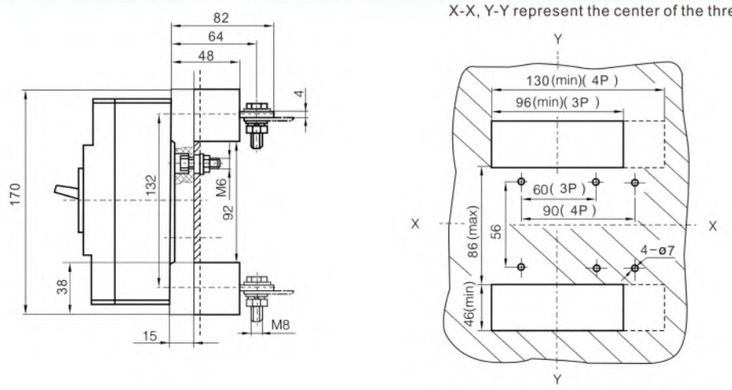
X-X, Y-Y represent the center of the three-pole circuit breaker



Cut-out dimension of installation board of back-panel wiring

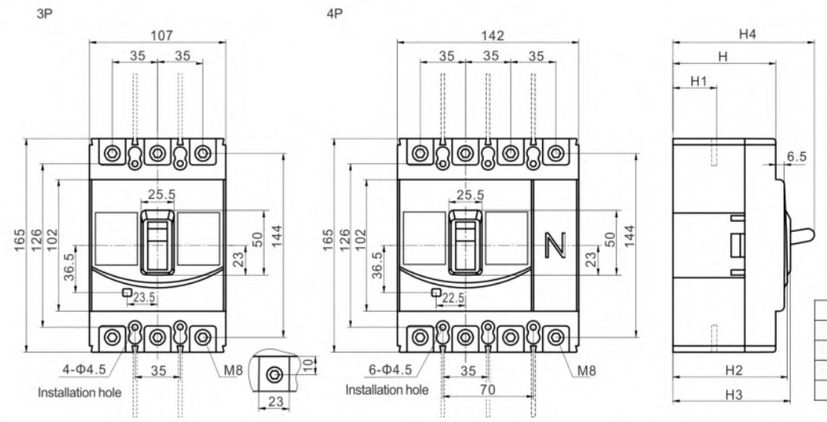
GYCM6-B125 molded case circuit breaker (plug-in back-panel) — Installation dimension diagram

X-X, Y-Y represent the center of the three-pole circuit breaker



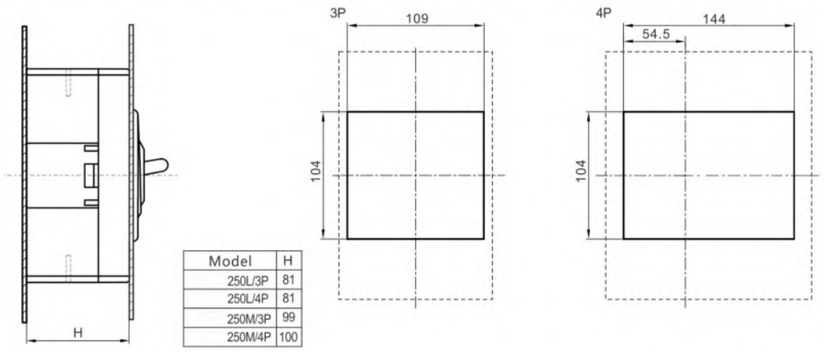
Dimensions of plug-in installation board

GYCM6-B250 moulded case circuit breaker — Overall and installation dimension diagram



Model	H	H1	H2	H3	H4
250L/3P	80	23	89	91	110
250L/4P	80	23	89	91	110
250M/3P	98	24	107	109	128
250M/4P	99	24	108	110	129

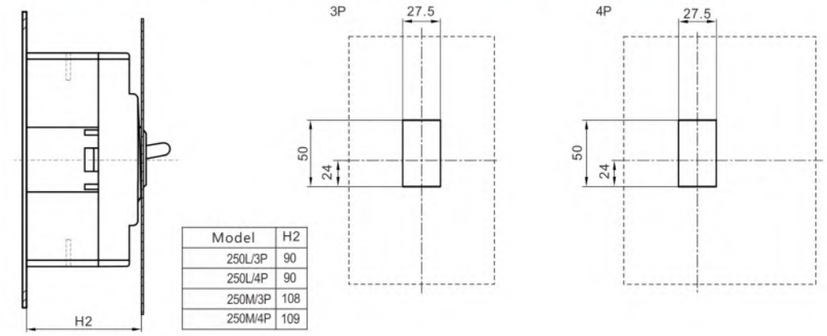
GYCM6-B250 moulded case circuit breaker — Cabinet door big cut-out dimension diagram



Model	H
250L/3P	81
250L/4P	81
250M/3P	99
250M/4P	100

GYCM6-B250 moulded case circuit breaker — Cabinet door small cut-out dimension diagram

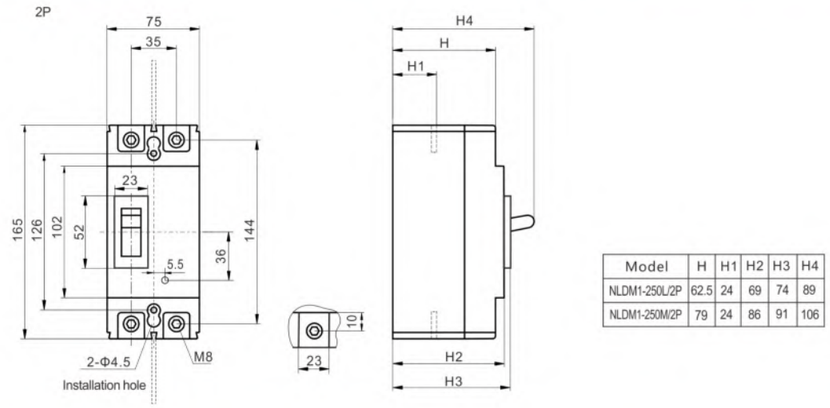
Note: It is recommended to open large holes according to the above diagram, as the outer surface of the product handle is curved, and small holes affect the aesthetics



Model	H2
250L/3P	90
250L/4P	90
250M/3P	108
250M/4P	109

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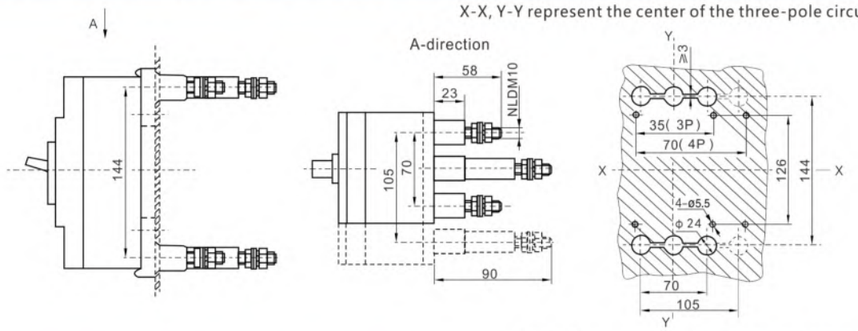
GYCM6-B250moulded case circuit breaker — Installation dimension diagram



Model	H	H1	H2	H3	H4
NLDM1-250L/2P	62.5	24	69	74	89
NLDM1-250M/2P	79	24	86	91	106

GYCM6-B250 moulded case circuit breaker (back-panel wiring) — Installation dimension diagram

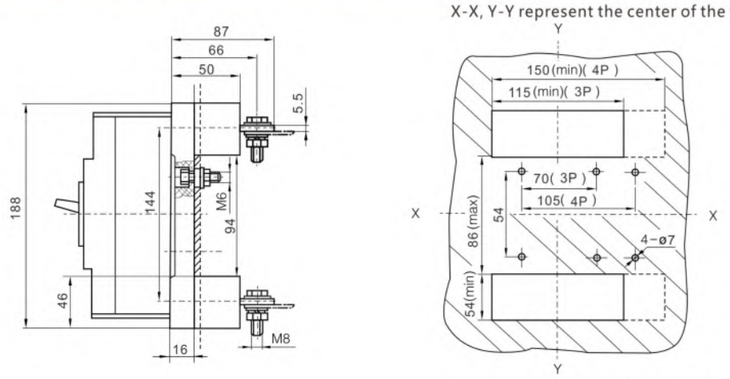
X-X, Y-Y represent the center of the three-pole circuit breaker



Cut-out dimension of installation board of back-panel wiring

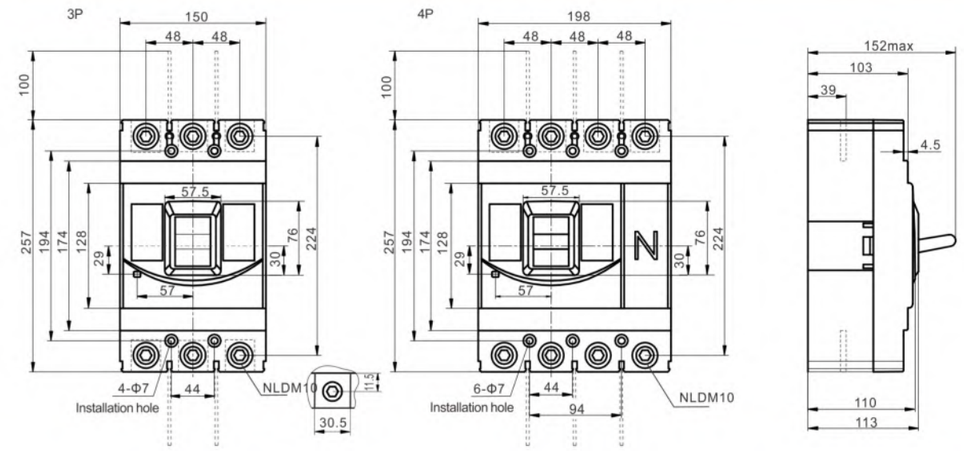
GYCM6-B250 moulded case circuit breaker (plug-in back-panel) — Installation dimension diagram

X-X, Y-Y represent the center of the three-pole circuit breaker

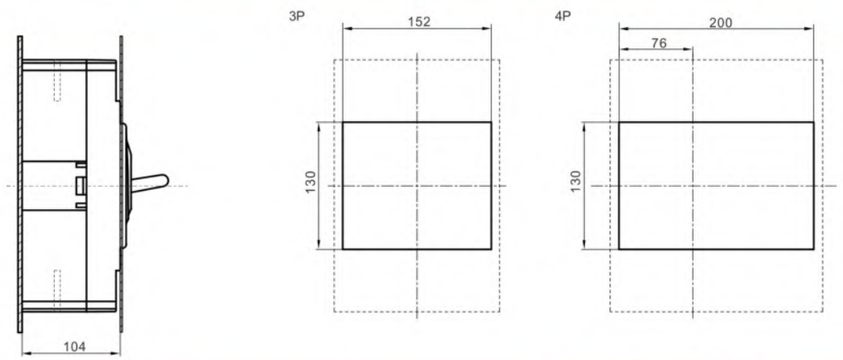


Dimensions of plug-in installation board

GYCM6-B400 moulded case circuit breaker — Overall and installation dimension diagram

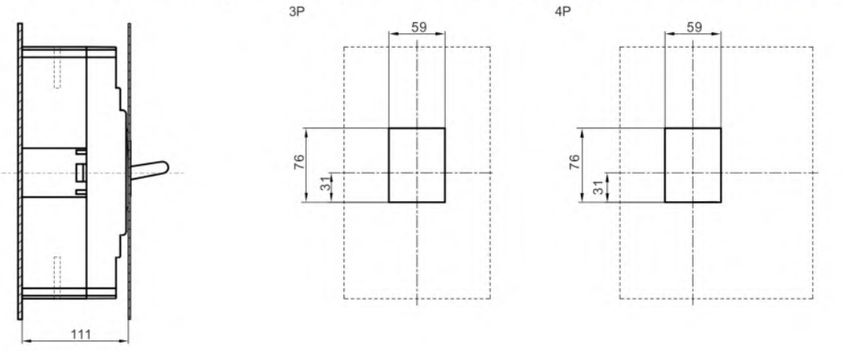


GYCM6-B400 moulded case circuit breaker — Cabinet door big cut-out dimension diagram



GYCM6-B400 moulded case circuit breaker — Cabinet door small cut-out dimension diagram

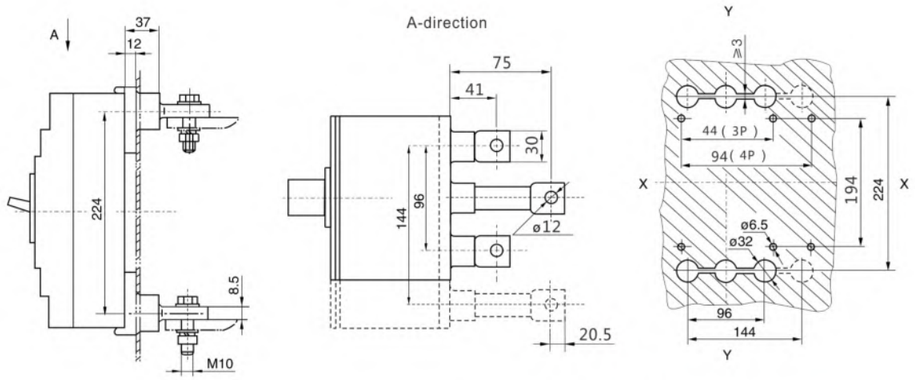
Note: It is recommended to open large holes according to the above diagram, as the outer surface of the product handle is curved, and small holes affect the aesthetics



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GYCM6-B400 moulded case circuit breaker(back-panel wiring) — Installation dimension diagram

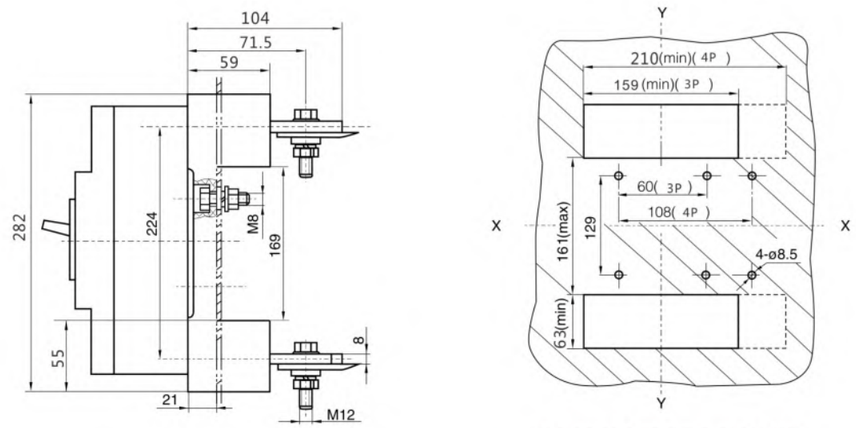
X-X, Y-Y represent the center of the three-pole circuit breaker



Cut-out dimension of installation board of back-panel wiring

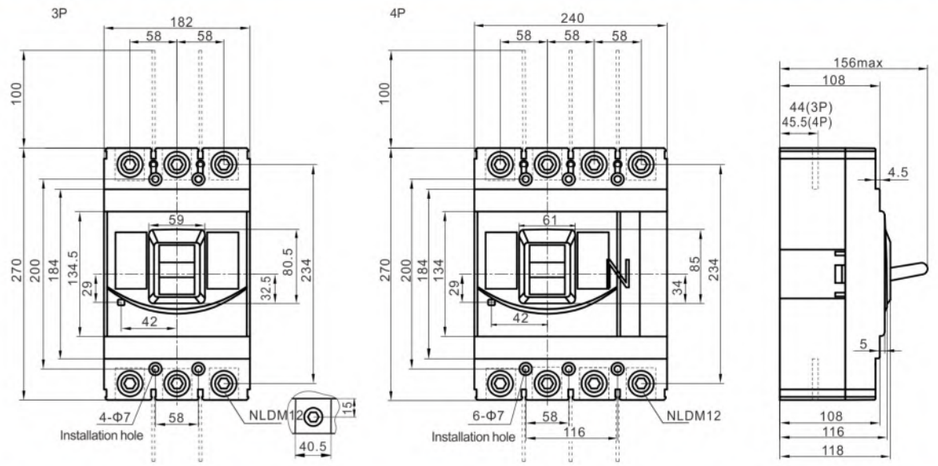
GYCM6-B400 moulded case circuit breaker(plug-in back-panel) — Installation dimension diagram

Installation dimension diagram

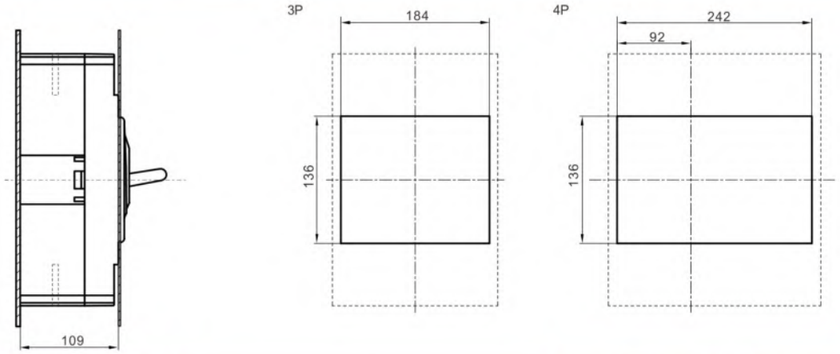


Dimensions of plug-in installation board

GYCM6-B630 moulded case circuit breaker — Overall and installation dimension diagram

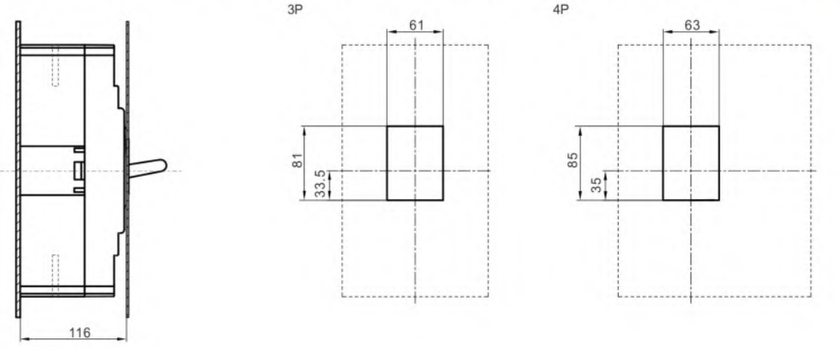


GYCM6-B630 moulded case circuit breaker — Cabinet door big cut-out dimension diagram



GYCM6-B630 moulded case circuit breaker — Cabinet door small cut-out dimension diagram

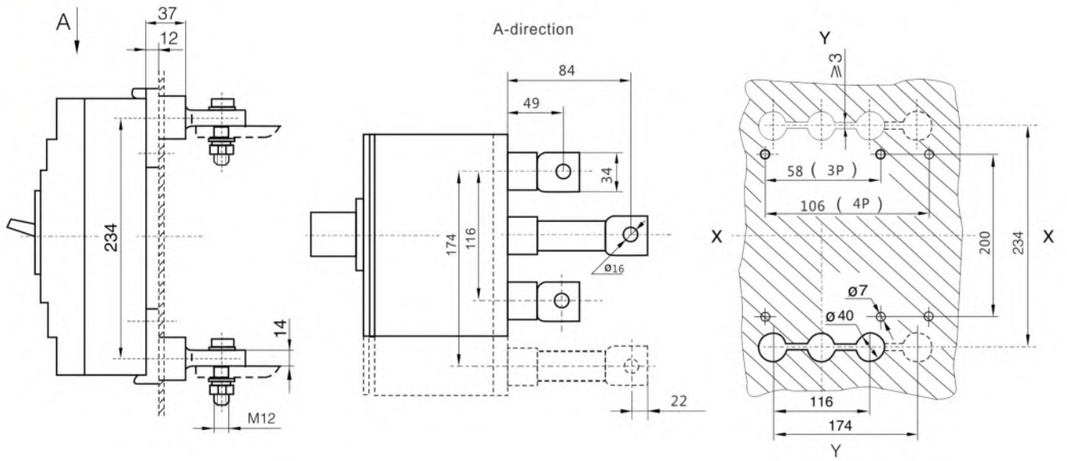
Note: It is recommended to open large holes according to the above diagram, as the outer surface of the product handle is curved, and small holes affect the aesthetics



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GYCM6-B630 moulded case circuit breaker(back-panel wiring) — Installation dimension diagram

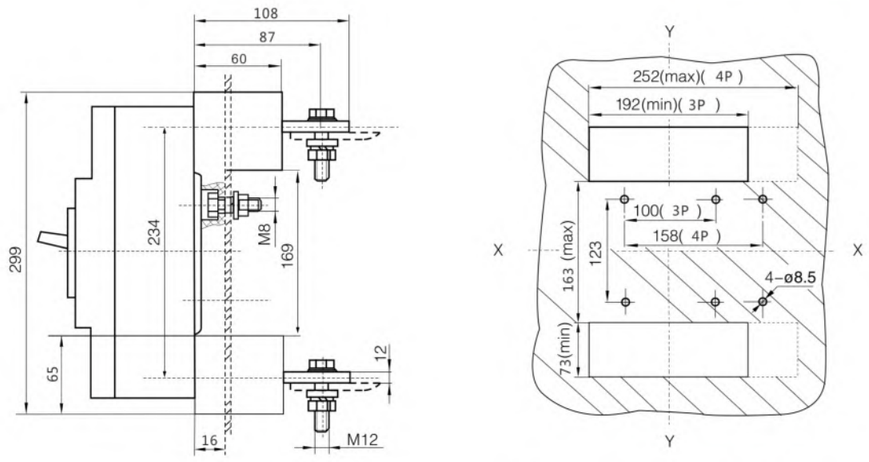
X-X, Y-Y represent the center of the three-pole circuit breaker



Cut-out dimension of installation board of back-panel wiring

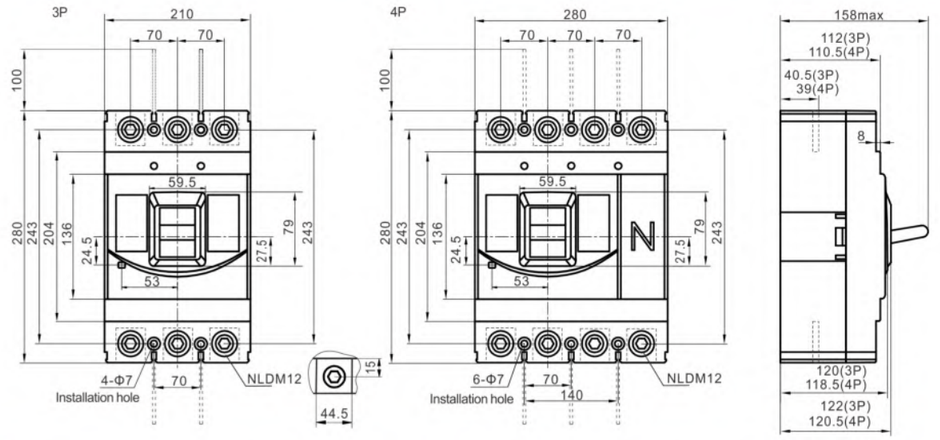
GYCM6-B630 moulded case circuit breaker(plug-in back-panel) — Installation dimension diagram

Installation dimension diagram

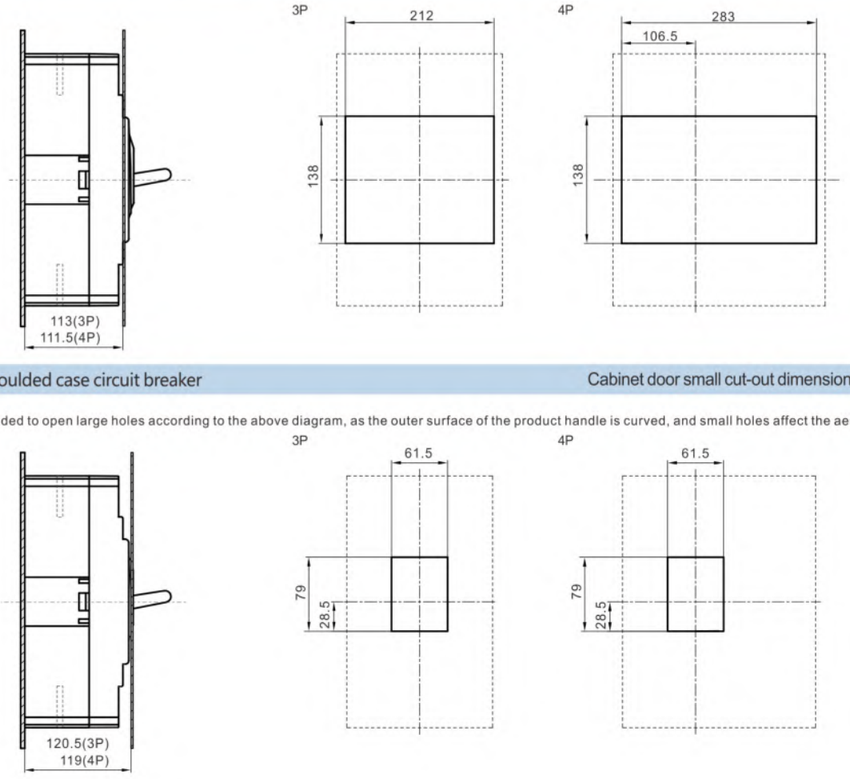


Dimensions of plug-in installation board

GYCM6-B800 moulded case circuit breaker — Overall and installation dimension diagram



GYCM6-B800 moulded case circuit breaker — Cabinet door big cut-out dimension diagram



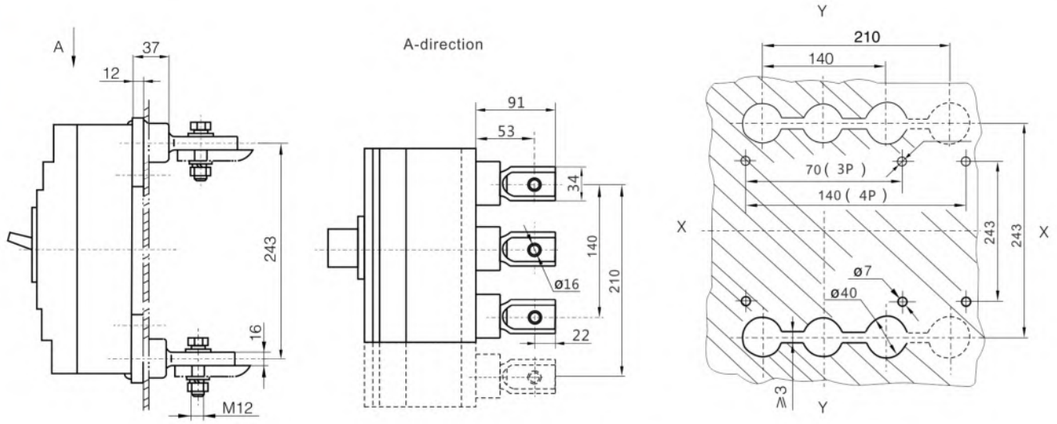
GYCM6-B800 moulded case circuit breaker — Cabinet door small cut-out dimension diagram

Note: It is recommended to open large holes according to the above diagram, as the outer surface of the product handle is curved, and small holes affect the aesthetics

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GYCM6-B800 moulded case circuit breaker (back-panel wiring) — Installation dimension diagram

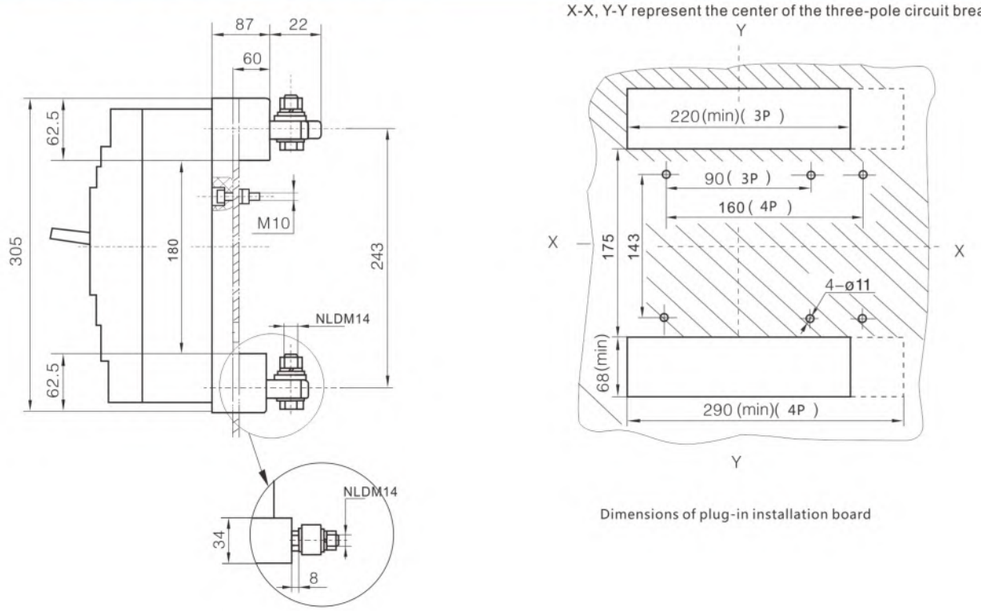
X-X, Y-Y represent the center of the three-pole circuit breaker



Cut-out dimension of installation board of back-panel wiring

GYCM6-B800 moulded case circuit breaker (plug-in back-panel) — Installation dimension diagram

X-X, Y-Y represent the center of the three-pole circuit breaker

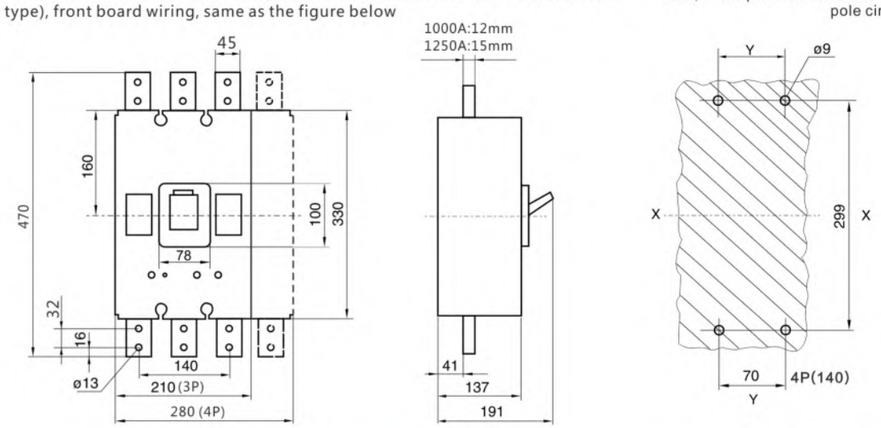


Dimensions of plug-in installation board

GYCM6-B1250 moulded case circuit breaker (front board wiring) — Overall and installation dimension diagram

NLDM1L-1250 residual current circuit breaker, NLDM1E-1250 moulded case circuit breaker (electronic type), front board wiring, same as the figure below

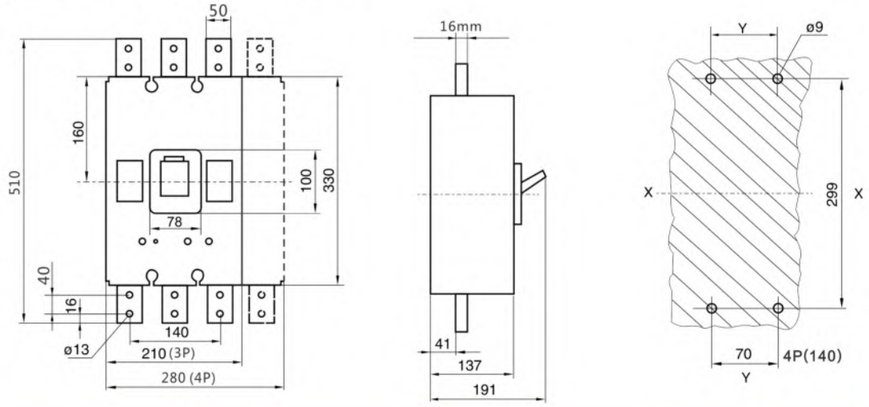
X-X, Y-Y represent the center of the three-pole circuit breaker



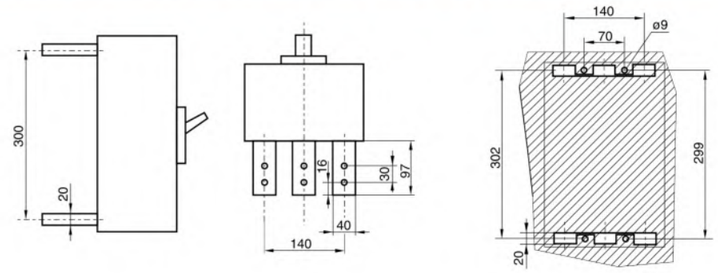
GYCM6-B1600 moulded case circuit breaker, front board wiring — Overall and installation dimension diagram (mm)

NLDM1L-1600 residual current circuit breaker, NLDM1E-1600 moulded case circuit breaker (electronic type), front board wiring, same as the figure below

X-X, Y-Y represent the center of the three-pole circuit breaker



GYCM6-B1250~1600，GYCM6L-B1250~1600，GYCM6E-B1250~1600， back-panel wiring(3P) — Dimension diagram (mm)



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■ Scope of application

□ Scope of applicationThe GYCM6L series moulded case circuit breaker with residual current protection (hereinafter referred to as residual current circuit breaker) is suitable for infrequent switching and motor starting in AC 50Hz (or 60Hz)circuits with rated insulation voltage of 1000V, rated operating voltage of 400V and rated operating current of 630A (800A). The circuit breaker has overload, short circuit, and undervoltage protection functions, which can protect the circuit and power equipment from damage; meanwhile, it can provide indirect contact protection for people and also provide protection against potential fire hazards caused by long-term grounding faults that cannot be detected by overcurrent protection. When other protective devices fail, the GYCM6L residual current circuit breaker with rated residual operating current of 30mA can directly provide additional protection.

□ The circuit breakers are classified into L-type and M-type according to their rated ultimate short-circuit breaking capacity.

The circuit breaker has the characteristics of small volume, high breaking capacity, short arc and high vibration resistance.

□ The circuit breaker can be installed vertically (i.e. upright) or horizontally (i.e. transversely).

□ The circuit breaker has isolation function, and its corresponding symbol is "⎯⎯/⊬".

□ The circuit breaker complies with the standards of IEC60947-2, GB14048.2 and Appendix B for circuit reakers with residual current protection.

□ The circuit breaker doesn't allow reverse wiring, that is, only 1, 3, and 5 are allowed to connect to the power line, and 2, 4, and 6 are allowed to connect to the load line.

□ Reverse wiring can be customized if needed.

■ Model and meaning

GYC M 6 L - □□□ / □□□□/□□

- Leakage alarm unit module (Note 6)
- Residual current release mode (Note 5)
- N-pole type: A, B (Note 4)
- Utilization code (Note 3)
- Release mode and accessory code (see Table 6)
- Number of poles
- Operation Mode (Note 2)
- Rated ultimate short-circuit breaking capacity level (Note 1)
- Frame current
- With residual current protection
- Design code
- Moulded case circuit breaker
- Enterprise code

Note:

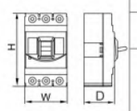
1. According to rated ultimate short-circuit breaking capacity, it is classified into L type (medium breaking) and M type (high breaking).
2. No code for direct operation of handle; Electric operation is represented by P; The rotation handle is represented by Z.
3. The circuit breaker for power distribution has no code; The protection motor is represented by 2.
4. It is classified into three poles and four poles according to the number of poles. There are four types of neutral pole (N-pole) in the four-pole products:
   Type A: The N-pole is not equipped with over-current release, and the N-pole is always connected, not closed or opened with other three poles.
   Type B: N-pole is not equipped with over-current release, and N-pole is closed and opened together with other three poles (N-pole is closed first and then opened).
5. The residual current release mode is classified into Type I and Type II (see Table for details). Type I is the standard type, and Type II should be specified when ordering.
6. If there is no alarm unit module, then there is no code. It should be specified when ordering if the product with alarm unit module.

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■ Main performance parameters of molded case residual current circuit breaker

Table5

Rated frame current Inm (A)			125		250		400		630、800	
Rated current In, 40℃			16A、20A、25A、32A、40A、50A、63A、80A、100A、125A		100、125、140、160、180、200、225、250		225、250、315、350、400		400、500、630、800	
Rated insulation voltage Ui (V)			1000		1000		1000		1000	
Rated impulse withstand voltage Uimp (kV)			12		12		12		12	
Rated operating voltage Ue (V), AC 50/60Hz			400		400		400		400	
Rated residual operating current IΔn	Type I		30、100、300mA		30、100、300mA		100、300、500mA		100、300、500mA	
	Type II		100、300、500mA		100、300、500mA		300、500、1000mA		300、500、1000mA	
Rated residual non-operating current			$I_{\Delta n}$×50%							
Rated residual short circuit making (breaking) capacity IΔm			I_{cu}×25%							
Selective category			A		A		A		A	
Arc distance (mm)			≤50		≤50		≤100		≤100	
Operating performance (time)	Electrical life (power-on)		3000		3000		1500		1500	
	Mechanical life (power-off)		7000		7000		5000		5000	
Breaking capacity level			L	M	L	M	L	M	L	M
Number of poles	2P		■	■	■	■	-	-	-	-
	3P		■	■	■	■	■	■	■	■
	4P		■	■	■	■	■	■	■	■
Rated ultimate short circuit breaking capacity Icu (kA)	Ue=AC400V		35	75	35	75	50	85	50	85
Rated service short circuit breaking capacity Ics(kA)	Ue=AC400V		22	50	22	50	35	65	35	65
Overall dimension Width (W) x height (H) x depth (D)	W	2P	62		72		-		-	
		3P	92		107		150		210	
		4P	122		142		198		280	
	H		150		165		257		280	
	D	2P	74	89	71	88	-		-	
		3P	73	89	71	88	105		112	
		4P	75.5	92.5	73.5	92	107		114	



Note: "-" in the table represents inapplicable, and "■" represents applicable

■ Derating coefficient

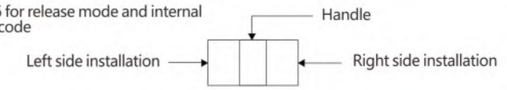
☐ The derating coefficient of the environmental temperature change of the residual current circuit breaker (all derating coefficients in this table are measured at the rated current of the frame)

Table6

Model	Derating coefficient				
	40℃	+45℃	+50℃	+55℃	+60℃
GYCM6L-B125	1In	0.95In	0.89In	0.84In	0.76In
GYCM6L-B250	1In	0.96In	0.91In	0.87In	0.82In
GYCM6L-B400	1In	0.94In	0.87In	0.81In	0.73In
GYCM6L-B630、800	1In	0.93In	0.88In	0.83In	0.76In

■ Release mode and accessory code

☐ See table 6 for release mode and internal accessory code



☐ Alarm contact
■ Auxiliary contact
● Shunt release
○ Undervoltage release
→ Lead wire direction

Table 6

Release mode and internal accessory code	Accessory name	GYCM6L-B125/250		GYCM6L-B400		GYCM6L-B630	
	Model / Number of poles and N-pole type	3P, 4P A type	4P B type	3P, 4P A type	4P B type	3P, 4P A type	4P B type
208、308▲	Alarm contact	←□	←□	←□	←□	←□	←□
210、310▲	Shunt release	←●	←●	←●	←●	←●	←●
220、320▲	Auxiliary contact	←■	←■	←■	←■	←■	←■
230、330▲	Undervoltage release	←○	←○	←○	←○	←○	←○
240、340	Shunt release, auxiliary contact	—	←●■→	—	←●■→	—	←●■→
250、350	Shunt release, undervoltage release	—	—	—	—	—	—
260、360	Two sets of auxiliary contact	←■■	■■→	←■■	■■→	←■■	■■→
270、370	Auxiliary contact, undervoltage release	—	←○■→	—	←○■→	—	←○■→
218、318	Shunt release, alarm contact	—	←●□→	—	—	—	—
228、328▲	Auxiliary contact, alarm contact	←■□	←■□→	←■□	←■□	←■□	←■□
238、338▲	Undervoltage release, alarm contact	—	←○□→	—	—	—	—
248、348	Shunt release, auxiliary contact, alarm contact	—	←●■□→	—	—	—	—
268、368	Two sets of auxiliary contact, alarm contacts	—	←□■□→	—	←□■□→	—	←□■□→
278、378	Auxiliary contact, undervoltage release, alarm contact	—	←○■□→	—	—	—	—

Note:

☐ The first digit of the release mode and internal accessory code 2 represents electromagnetic (instantaneous) release, and 3 represents thermal-electromagnetic (compound) release; the last two digits represent the internal accessory code. If there are no accessories, they are represented by 00.

☐ Two pairs of auxiliary contacts can be supplied for specifications 220, 320, 240, and 340 of GYCM6L-125 and 250 (i.e. two normally open and two normally closed), but they must be specified when ordering.

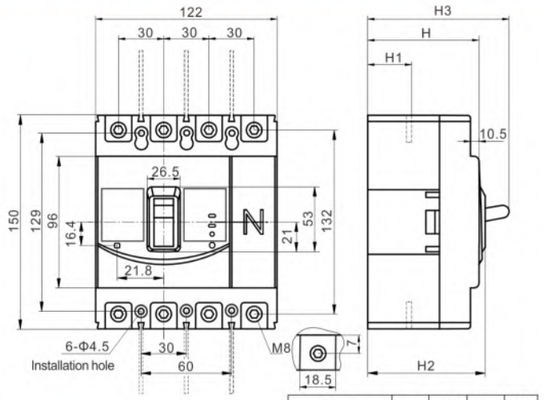
☐ If the GYCM6L series is equipped with a residual current alarm unit module, only ▲ specifications are provided for the accessories: There are two methods for the residual current alarm unit module, which users should specify when ordering according to their needs:
Method 1: When residual current occurs, the residual current alarm module sends a signal and the circuit breaker trips:
Method 2: When residual current occurs, the residual current alarm module sends a signal, but the circuit breaker does not trip. This method is to meet the needs of special occasions, and users should carefully consider using this function to protect electrical appliances.

☐ The wiring diagram of the residual current alarm module can be found in the product markings or user manual. P1-P2 and P3-P4 are normally open and normally closed contacts, with contact capacity of AC230V 5A. The input power supply to the P5P6 terminal is AC50Hz, 230 or 400V (according to user needs).

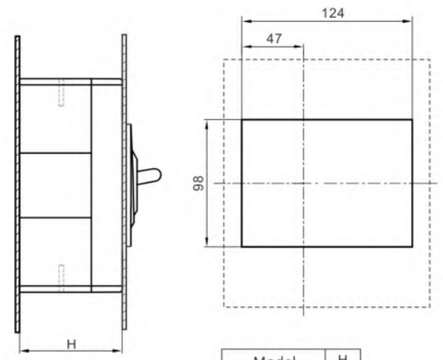
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■ Overall and installation dimensions

GYCM6L-B125 residual current circuit breaker — Overall and installation dimension diagram — Cabinet door big cut-out dimension diagram (mm)

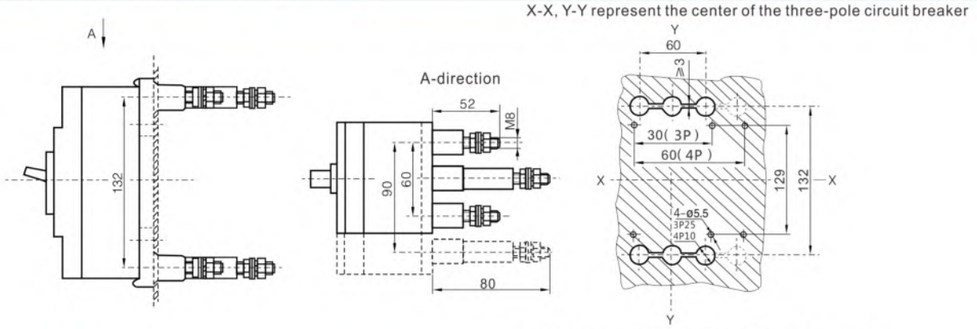


Model	H	H1	H2	H3
NLDM1L-125L/4P	75.5	25.5	79	97
NLDM1L-125M/4P	92.5	28	96	114



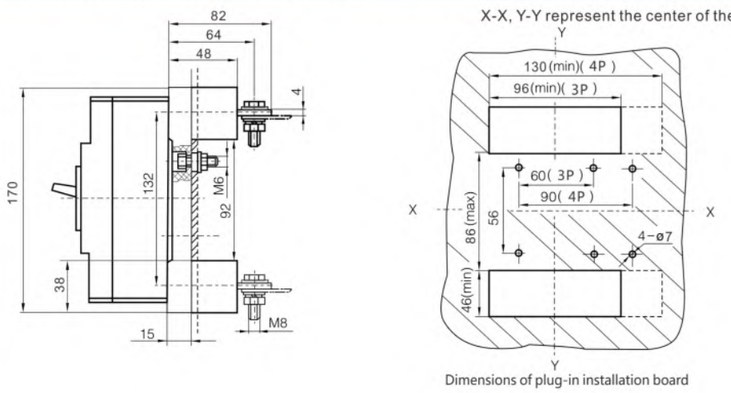
Model	H
NLDM1L-125L/4P	66
NLDM1L-125M/4P	83

GYCM6L-B125 residual current circuit breaker (back-panel wiring) — Installation dimension diagram



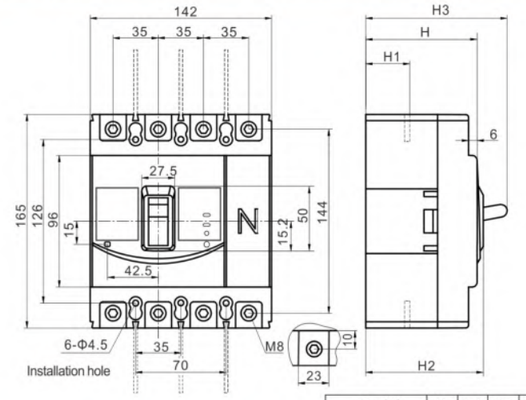
Cut-out dimension of installation board of back-panel wiring

GYCM6L-B125 residual current circuit breaker (plug-in back-panel) — Installation dimension diagram

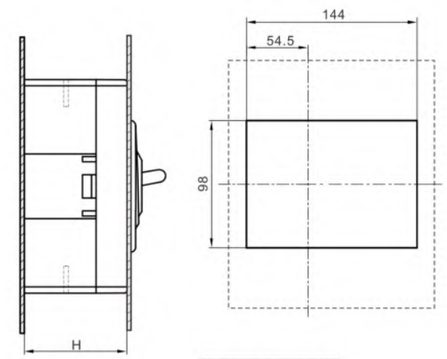


Dimensions of plug-in installation board

GYCM6L-B125 residual current circuit breaker — Overall and installation dimension diagram — Cabinet door big cut-out dimension diagram (mm)

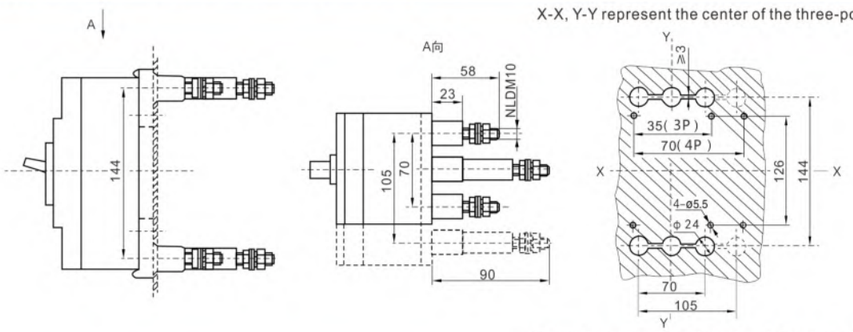


Model	H	H1	H2	H3
NLDM1L-250L/4P	73.5	24	77.5	97
NLDM1L-250M/4P	92	22.5	96	115



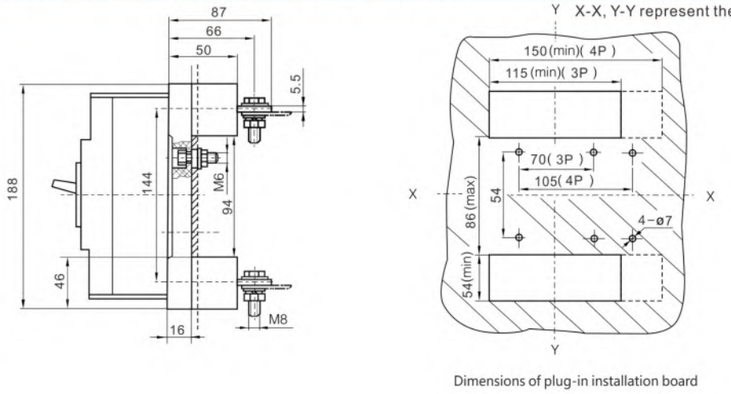
Model	H
NLDM1L-250L/4P	68.5
NLDM1L-250M/4P	87

GYCM6L-B125 residual current circuit breaker (back-panel wiring) — Installation dimension diagram



Cut-out dimension of installation board of back-panel wiring

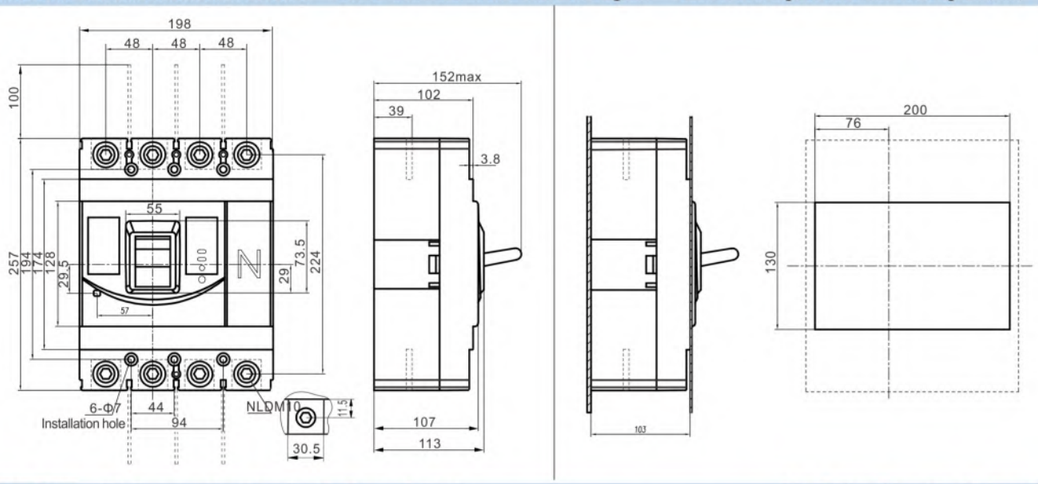
GYCM6L-B125 residual current circuit breaker (plug-in back-panel) — Installation dimension diagram



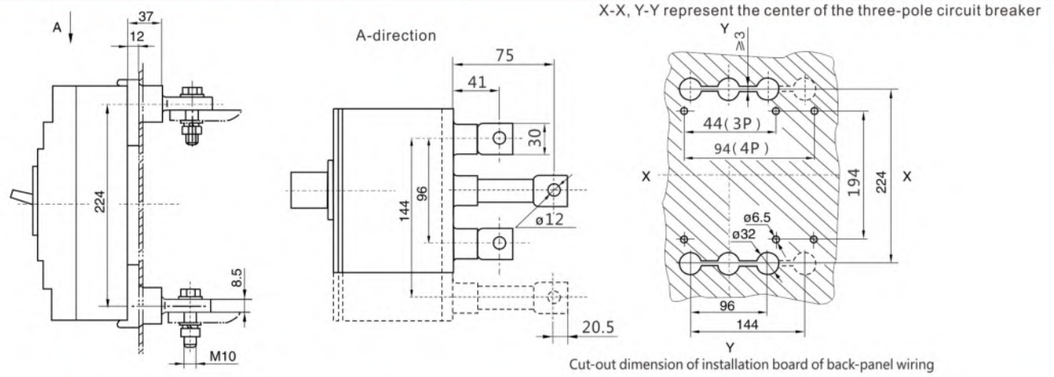
Dimensions of plug-in installation board

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GYCM6L-B400 residual current circuit breaker　Overall and installation dimension diagram　Cabinet door big cut-out dimension diagram (mm)

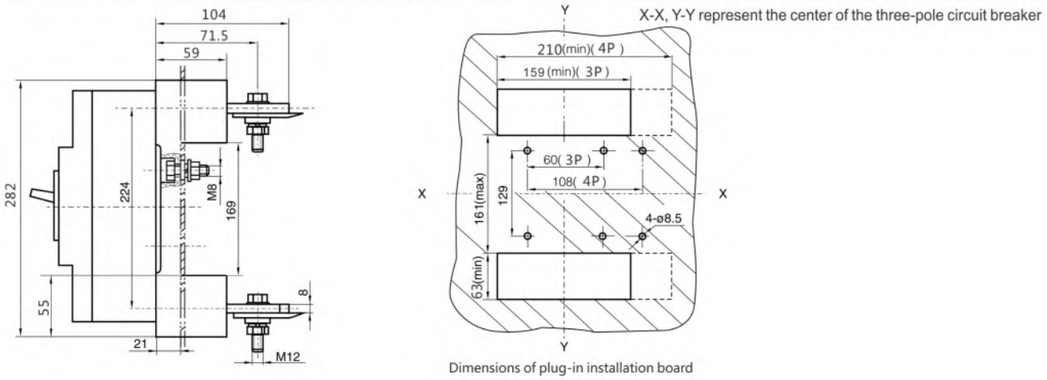


GYCM6L-B400 residual current circuit breaker (back-panel wiring)　Installation dimension diagram



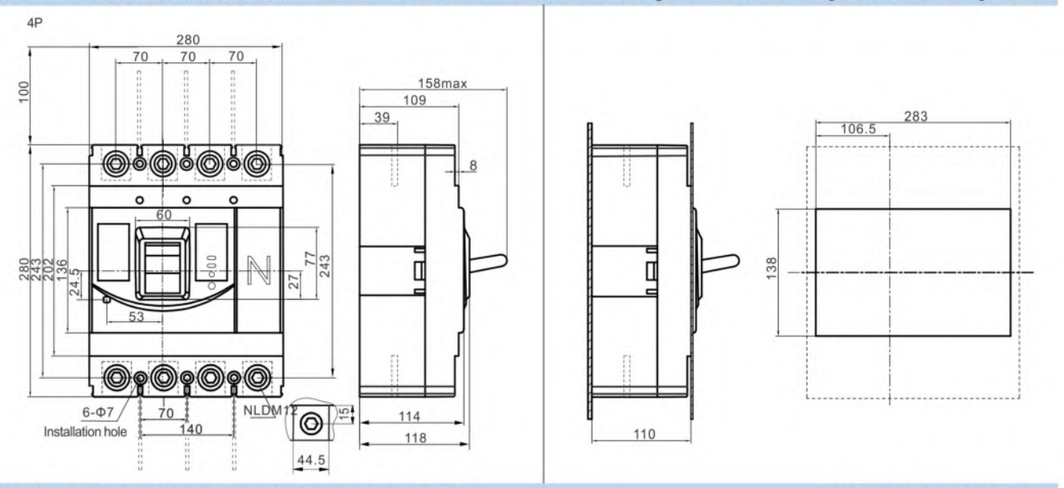
Cut-out dimension of installation board of back-panel wiring

GYCM6L-B400 residual current circuit breaker (plug-in back-panel)

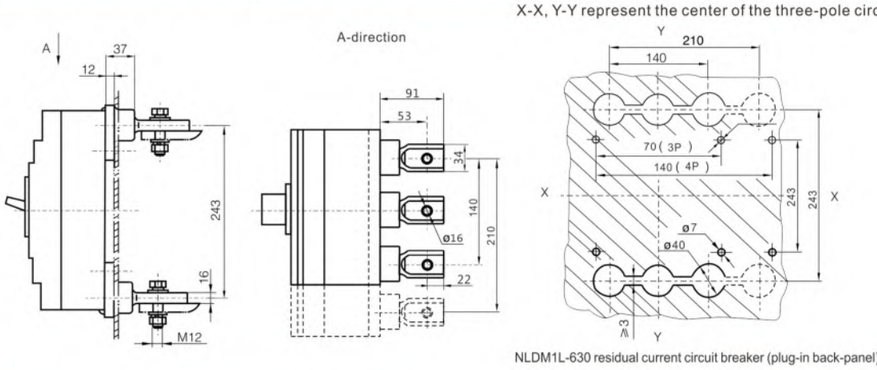


Dimensions of plug-in installation board

GYCM6L-B630 residual current circuit breaker　Overall and installation dimension diagram　Cabinet door big cut-out dimension diagram (mm)

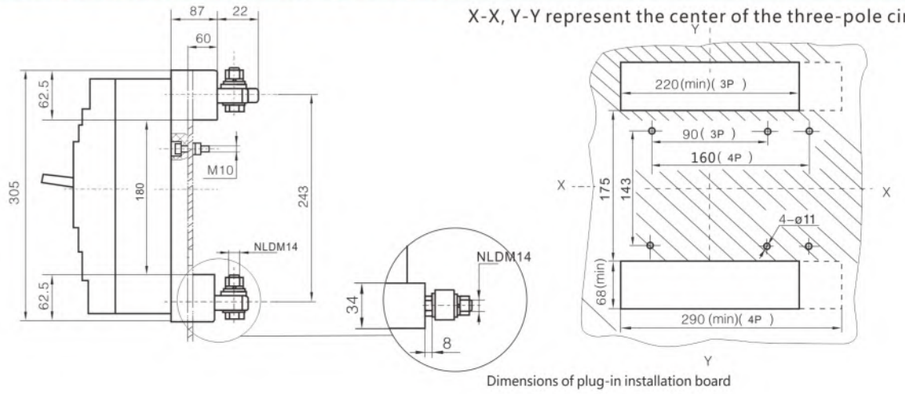


GYCM6L-B630 residual current circuit breaker (back-panel wiring)　Installation dimension diagram



NLDM1L-630 residual current circuit breaker (plug-in back-panel)

GYCM6L-B630 residual current circuit breaker (plug-in back-panel)　Installation dimension diagram



Dimensions of plug-in installation board

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■ Scope of application

□ The GYCM6E series electronic moulded case circuit breakers (hereinafter referred to as circuit breakers) are suitable for AC 50Hz (or 60Hz) circuits with rated insulation voltage of 1000V, rated operating voltage of 400V and below, and rated operating current of 800A for infrequent switching and infrequent starting of motors. The circuit breaker has overload long delay inverse time, short circuit short delay inverse time, short circuit short delay definite time, short circuit instantaneous and undervoltage protection functions, as well as residual current protection (optional) and phase loss protection function (optional), which can protect the circuit and power equipment from damage. The circuit breaker has complete and accurate protection characteristics, which can improve power supply reliability and avoid unnecessary power outages. The "Z, B" type controller has a communication interface and can be used for "three remote" to meet the requirements of the control center and automation system.

□ Circuit breakers are classified into two types based on their rated ultimate short-circuit breaking capacity: M-type (medium breaking type) and H-type (high breaking type). This circuit breaker has the characteristics of small volume, high breaking capacity, short arc and high vibration resistance.

□ The circuit breaker can be installed vertically (i.e. upright) or horizontally (i.e. transversely).
□ The circuit breaker has isolation function, and its corresponding symbol is "——/——".
□ The circuit breaker allows for reverse wiring.

■ Model and Meaning

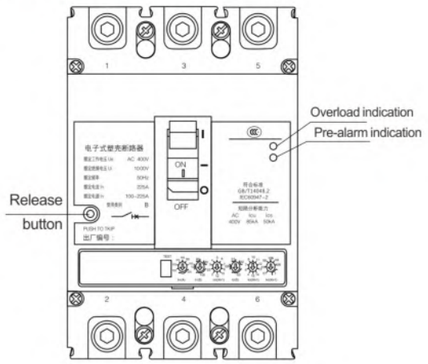
GYC M 6E - □□□ / □□□

- Product type (Note 3)
- Release mode and accessory code (see Table 7)
- Number of poles
- Operation mode (Note 2)
- Rated ultimate short-circuit breaking capacity level (Note 1)
- Frame current
- Electronic release
- Design code
- Moulded case circuit breaker
- Enterprise code

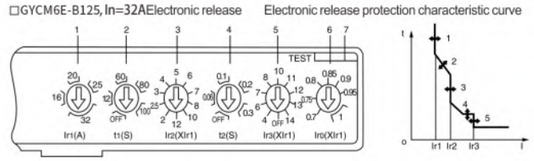
Note: 1. According to rated ultimate short-circuit breaking capacity, it is classified into M type (medium breaking) and H type (high breaking).
2. No code for direct operation of handle; Electric operation is represented by P; The rotation handle is represented by Z.
3. The basic type has no code, the intelligent communication type is represented by Z, the programming communication type is represented by B, the fire protection type is represented by X, and the LCD display is represented by L.

■ Introduction to structure and markings

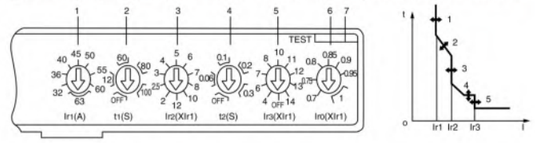
□ Circuit breaker front indication



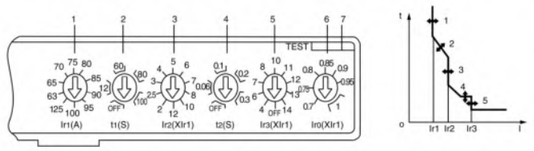
□GYCM6E-B125, In=32AElectronic release — Electronic release protection characteristic curve



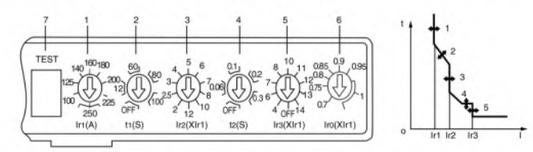
□GYCM6E-B125, In=63AElectronic release — Electronic release protection characteristic curve



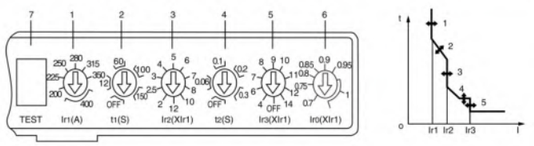
□GYCM6E-B125, In=100AElectronic release — Electronic release protection characteristic curve



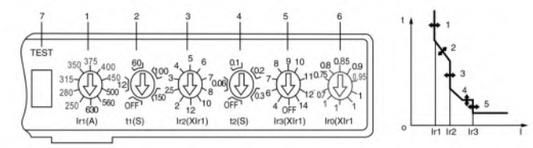
□GYCM6E-B250, In=250AElectronic release — Electronic release protection characteristic curve



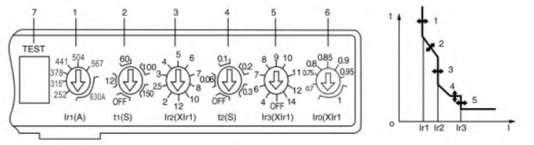
□GYCM6E-B400, In=400AElectronic release — Electronic release protection characteristic curve



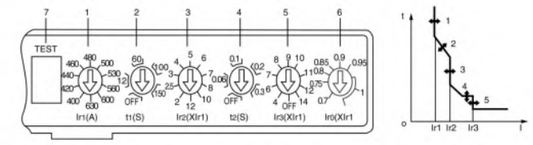
□GYCM6E-B630, In=630AElectronic release — Electronic release protection characteristic curve



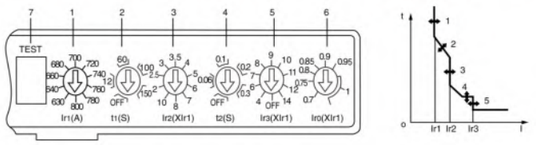
□ GYCM6E-B630(400 frame capacity increase 630), In=630A Electronic release — Electronic release protection characteristic curve



□ GYCM6E-B630 (800frame capacity increase 630), In=630AElectronic release — Electronic release protection characteristic curve



□ GYCM6E-B800, In=800A Electronic release — Electronic release protection characteristic curve



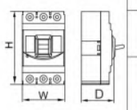
Note:
□ 1. For overload long time-delay action current Ir1 adjustment, it can be adjusted from gear 4 to gear 10 according to different rated current of the circuit breaker;
□ 2. For long delay action time t1, it can be adjusted for 4 gears;
□ 3. For short circuit short time-delay action current Ir2 adjustment, 10 gear adjustments available;
□ 4. For short delay action time t2, it can be adjusted for 4 gears;
□ 5. For short circuit instantaneous action current Ir3 adjustment, 8, 9 or 10 gears can be adjusted;
□ 6. For pre-alarm action current Ir0, it can be adjusted for 7 gears.
□ 7. Test end, for tripping test (inspection).

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■ Main technical performance parameters of electronic moulded case circuit breaker

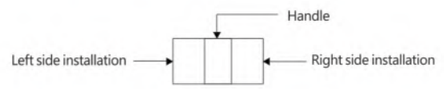
Rated frame current Inm (A)		125	250	400	400 frame capacity Increase 630	630	800 frame 630 type	800
Rated current In, 40℃ Setting current Ir1 (adjustable)		In:32A (Ir1=16A、20A、25A、32A) In:63A (Ir1=32A、35A、40A、45A、50A、55A、60A、63A) In:125A (Ir1=63A、65A、70A、75A、80A、85A、90A、95A、100A、125A)	100、125、140、160、180、200、225、250	200、225、250、280、315、350、400	252、315、378、441、504、567、450、500、560、630	250、280、315、350、375、400、450、500、560、630	400、420、440、460、480、500、530、560、600、630	630、640、660、680、700、720、740、760、780、800
Rated insulation voltage Ui (V)		1000	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage Uimp (kV)		12	12	12	12	12	12	12
Rated operating voltage Ue (V), AC50/60Hz		400	400	400	400	400	400	400
Selective category		B	B	B	B	B	B	B
Arc distance (mm)		≤50	≤50	≤100	≤100	≤100	≤100	≤100
Operating performance (times)	Electrical life (power-on)	3000	3000	1500	1500	1500	1000	1000
	Mechanical life power-off)	7000	7000	5000	5000	5000	3000	3000

Breaking capacity level		M	H	M	H	M	H	M	H	M	H	M	H	M	H
Number of poles	3P	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	4P	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rated ultimate short circuit breaking capacity Icu (kA)	Ue=AC400V	50	85	50	85	65	100	65	100	65	100	65	100	65	100
Rated service short circuit breaking capaity Ics (kA)	Ue=AC400V	35	50	35	50	50	65	50	65	50	65	50	65	50	65
Rated short time withstand current Icw/1s (kA)	Ue=AC400V	5	5	5	5	8	8	8	8	10	10	10	10	10	10

Overall dimension Width (W) x height (H) x depth (D)															
	W	3P	92		107		150		150		182		210		210	
		4P	122		142		198		198		-		280		280	
	H		150		165		257		257		270		280		280	
	D	3P	93.5		92		111		111		115		120		120	
		4P	93.5		95		111		111		-		118.5		118.5	

Note: "-" in the table represents inapplicable, and "■" represents applicable

■ Release mode and internal accessory code



□ Alarm contact
■ Auxiliary contact
● Shunt release
○ Undervoltage release
→ Lead wire direction

Table7

Release mode and internal accessory code	Accessory name	Model / Number of poles and ~pole type	GYCM6E-B125/250	GYCM6E-B400		GYCM6E-B630/800
			3P 、4P	3P	4P	3P 、4P
308	Alarm contact		← □	← □	← □	← □
310	Shunt release		● →	● →	● →	● →
320	Auxiliary contact		← ■	← ■	← ■	← ■
330	Undervoltage release		← ○	← ○	← ○	← ○
340	Shunt release, auxiliary contact		← ■ ● →	← ■ ● →	← ■ ● →	← ■ ● →
350	Shunt release, undervoltage release		——	——	——	← ○ ● →
360	Two sets of auxiliary contact		← ■ ■	← ■ ■	← ■ ■	← ■ ■
370	Auxiliary contact, undervoltage release		——	——	← ○ ■ →	← ○ ■ →
318	Shunt release, alarm contact		← □ ● →	← □ ● →	← □ ● →	← □ ● →
328	Auxiliary contact, alarm contact		← ■ □	← ■ □	← ■ □	← ■ □
338	Undervoltage release, alarm contact		——	——	——	——
348	Shunt release, auxiliary contact, alarm contact		← ■ □ ● →	← ■ □ ● →	← ■ □ ● →	← ■ □ ● →
368	Two sets of auxiliary contact, alarm contact		——	——	← □ ■ ■ →	← □ ■ ■ →
378	Auxiliary contact, undervoltage release, alarm contact		——	——	——	——

Note:

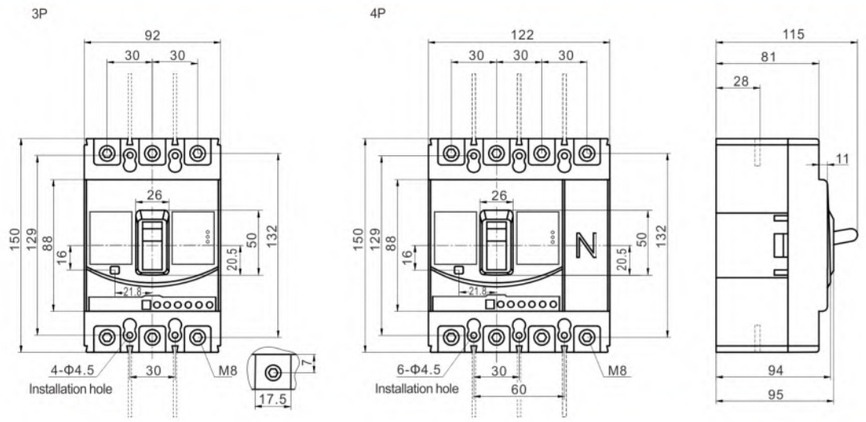
□ The first digit 3 of the release method and internal accessory code represents electronic release with three-stage protection; the last two digits represent the Internal accessory code. 0 represents no accessory;

□ When internal accessories cannot be provided or meet customers' needs, more auxiliary functions can also be provided through intelligent controllers. This series of intelligent controllers can provide the following functions: closing and opening auxiliary signals, shunt tripping functions, and various protection function fault signals (see function description 7).

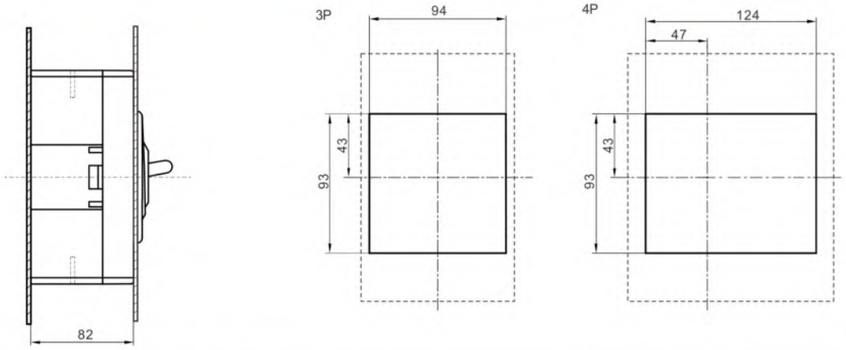
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■ Overall and installation dimensions

GYCM6E-B125 moulded case circuit breaker (electronic) — Overall and installation dimension diagram (mm)

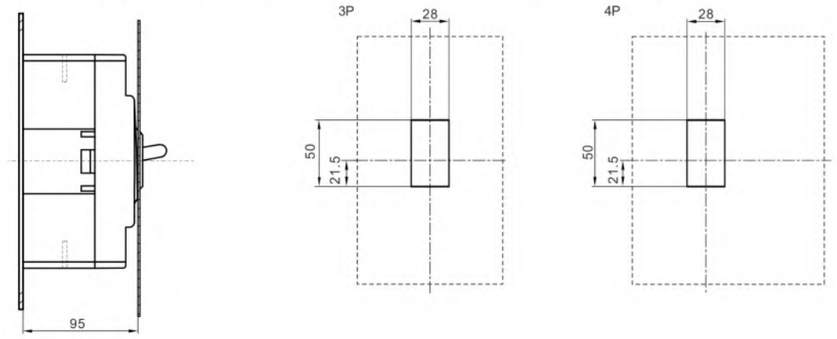


GYCM6E-B125 moulded case circuit breaker (electronic) — Cabinet door big cut-out dimension diagram (mm)



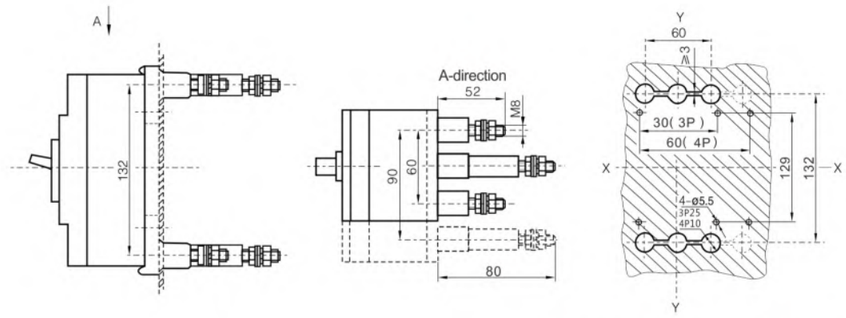
GYCM6E-B125 moulded case circuit breaker (electronic) — Cabinet door small cut-out dimension diagram (mm)

Note: It is recommended to open large holes according to the above diagram, as the outer surface of the product handle is curved, and small holes affect the aesthetics



GYCM6E-B125 moulded case circuit breaker (electronic) (back-panel wiring) — Installation dimension diagram(mm)

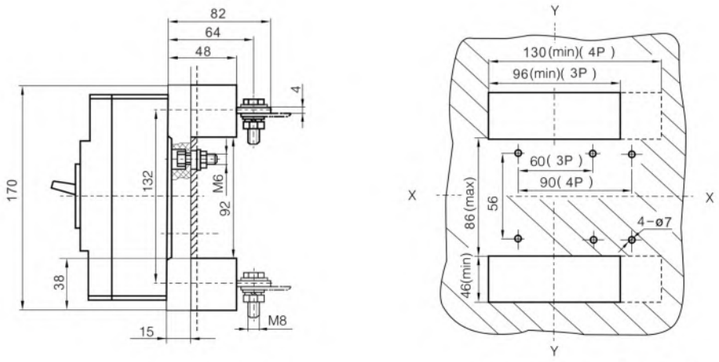
X-X, Y-Y represent the center of the three-pole circuit breaker



Cut-out dimension of installation board of back-panel wiring

GYCM6E-B125 moulded case circuit breaker (electronic) (plug-in back-panel) — Installation dimension diagram(mm)

X-X, Y-Y represent the center of the three-pole circuit breaker

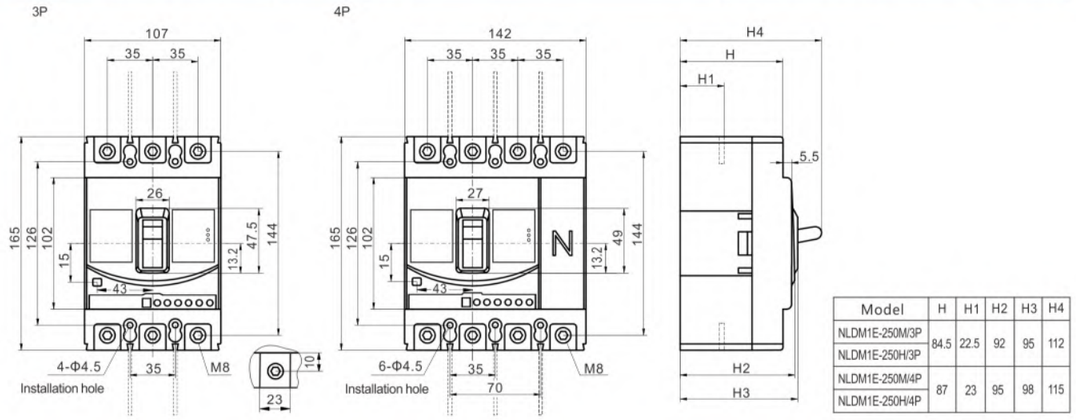


Dimensions of plug-in installation board

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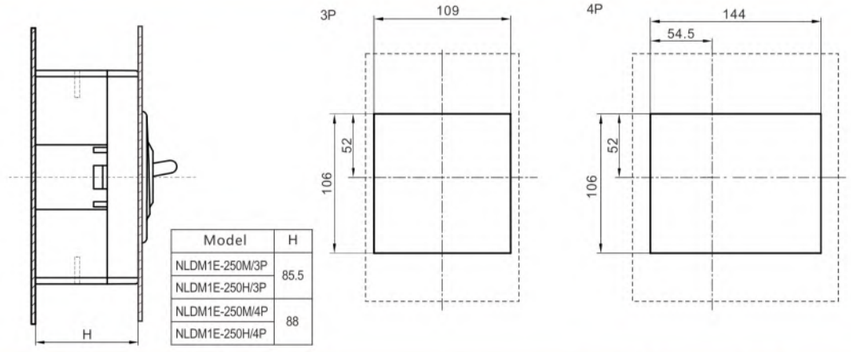
■ Overall and installation dimension

GYCM6E-B250 moulded case circuit breaker (electronic) — Overall and installation dimension diagram (mm)



Model	H	H1	H2	H3	H4
NLDM1E-250M/3P	84.5	22.5	92	95	112
NLDM1E-250H/3P					
NLDM1E-250M/4P	87	23	95	98	115
NLDM1E-250H/4P					

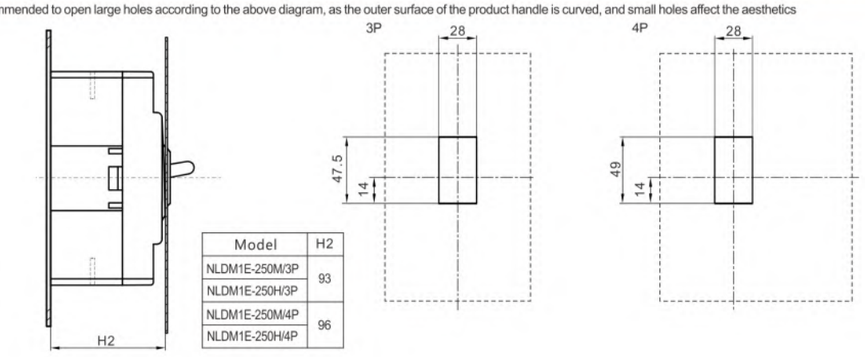
GYCM6E-B250 moulded case circuit breaker (electronic) — Cabinet door big cut-out dimension diagram (mm)



Model	H
NLDM1E-250M/3P	85.5
NLDM1E-250H/3P	
NLDM1E-250M/4P	88
NLDM1E-250H/4P	

GYCM6E-B250 moulded case circuit breaker (electronic) — Cabinet door small cut-out dimension diagram (mm)

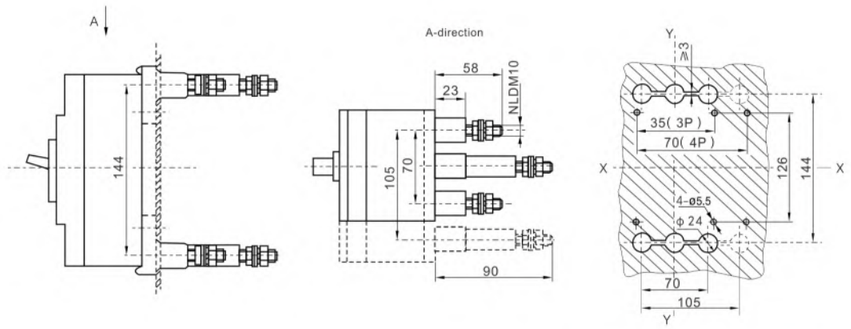
Note: It is recommended to open large holes according to the above diagram, as the outer surface of the product handle is curved, and small holes affect the aesthetics



Model	H2
NLDM1E-250M/3P	93
NLDM1E-250H/3P	
NLDM1E-250M/4P	96
NLDM1E-250H/4P	

GYCM6E-B250 moulded case circuit breaker (electronic) (back-panel wiring) — Installation dimension diagram (mm)

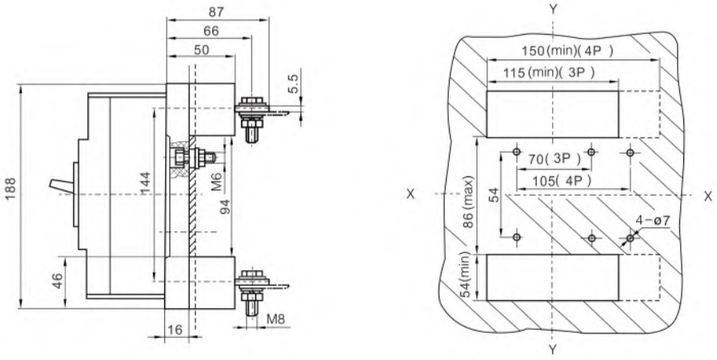
X-X, Y-Y represent the center of the three-pole circuit breaker



Cut-out dimension of installation board of back-panel wiring

GYCM6E-B250 moulded case circuit breaker (electronic) (plug-in back-panel) — Installation dimension diagram (mm)

X-X, Y-Y represent the center of the three-pole circuit breaker

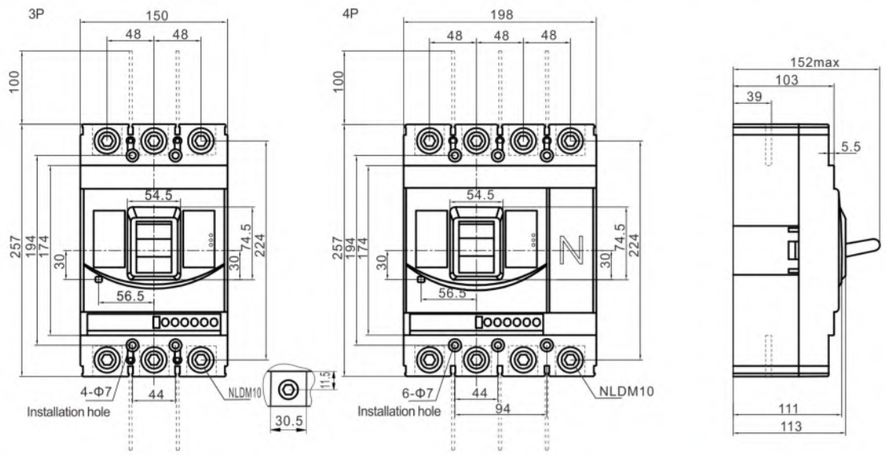


Dimensions of plug-in installation board

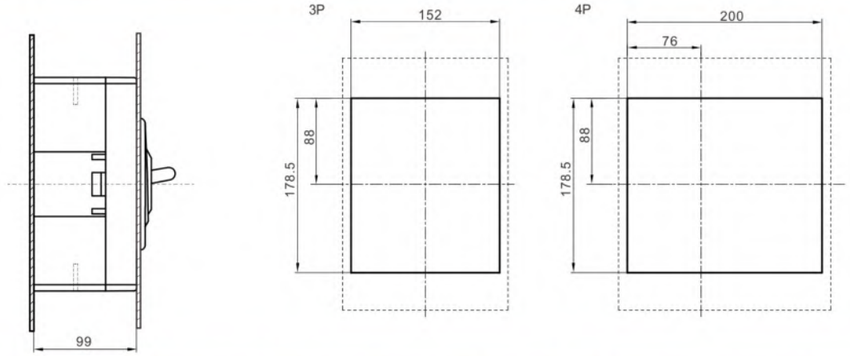
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■ Overall and installation dimension

GYCM6E-B400 moulded case circuit breaker (electronic), 400 frame capacity increase 630(please specify when ordering) Installation dimension diagram (mm)

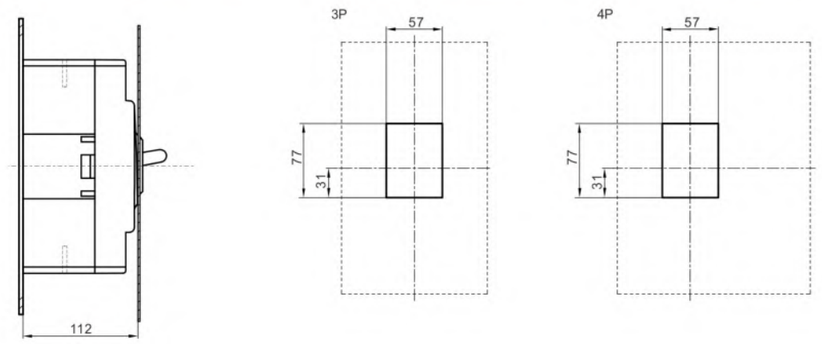


GYCM6E-B400 moulded case circuit breaker (electronic), 400 frame capacity increase 630(please specify when ordering) Cabinet door big cut-out dimension diagram (mm)



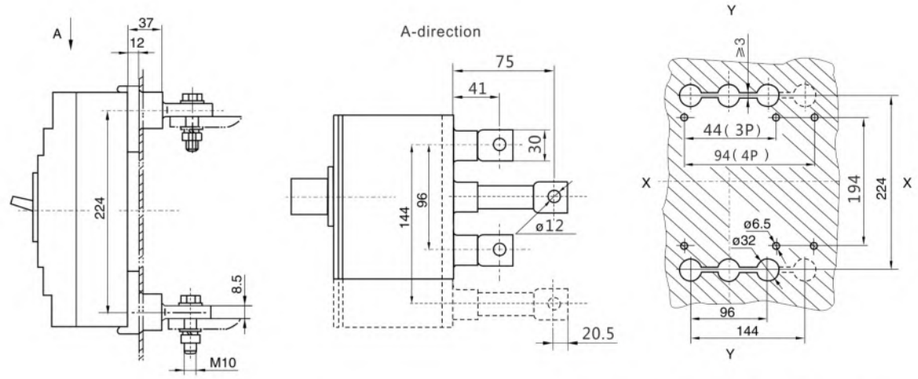
GYCM6E-B400 moulded case circuit breaker (electronic), 400 frame capacity increase 630(please specify when ordering) Cabinet door small cut-out dimension diagram (mm)

Note: It is recommended to open large holes according to the above diagram, as the outer surface of the product handle is curved, and small holes affect the aesthetics



GYCM6E-B400 moulded case circuit breaker (electronic) (back-panel wiring), 400 frame capacity increase 630(please specify when ordering) (back-panel wiring) Installation dimension diagram (mm)

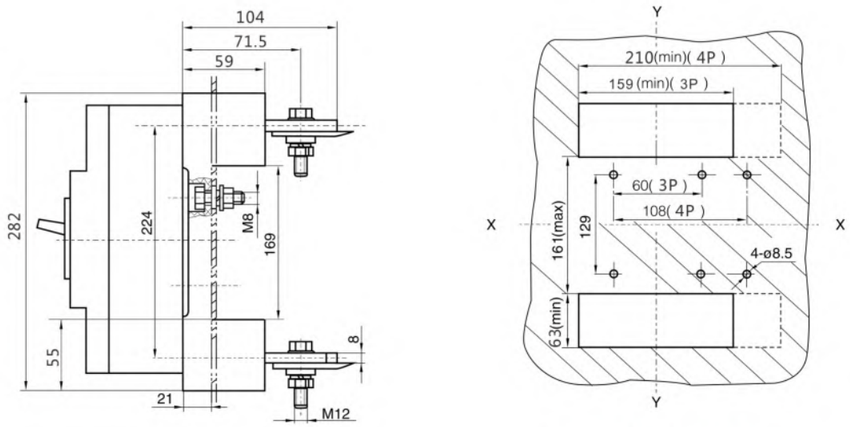
X-X, Y-Y represent the center of the three-pole circuit breaker



Cut-out dimension of installation board of back-panel wiring

GYCM6E-B400 moulded case circuit breaker (electronic) (plug-in back-panel), 400 frame capacity increase 630(please specify when ordering) (plug-in back-panel) Installation dimension diagram (mm)

X-X, Y-Y represent the center of the three-pole circuit breaker

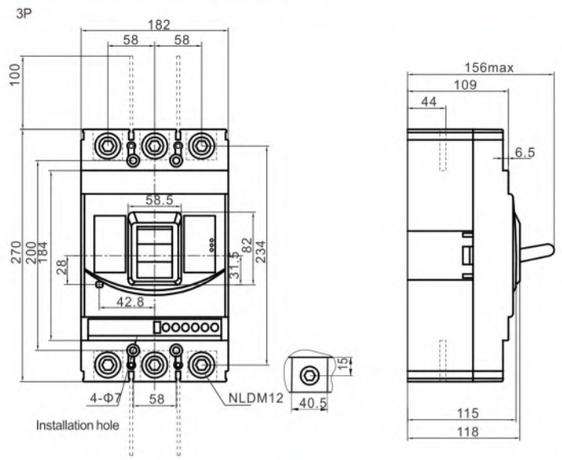


Dimensions of plug-in installation board

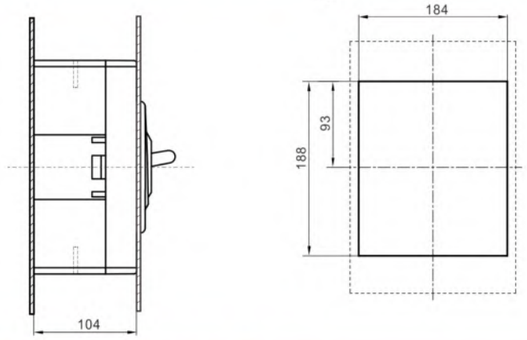
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■ Overall and installation dimension

GYCM6E-B630 moulded case circuit breaker (electronic) — Overall and installation dimension diagram (mm)

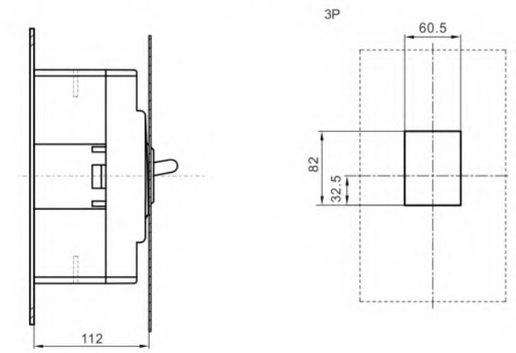


NLDM1E-630 moulded case circuit breaker (electronic) — Cabinet door big cut-out dimension diagram (mm)



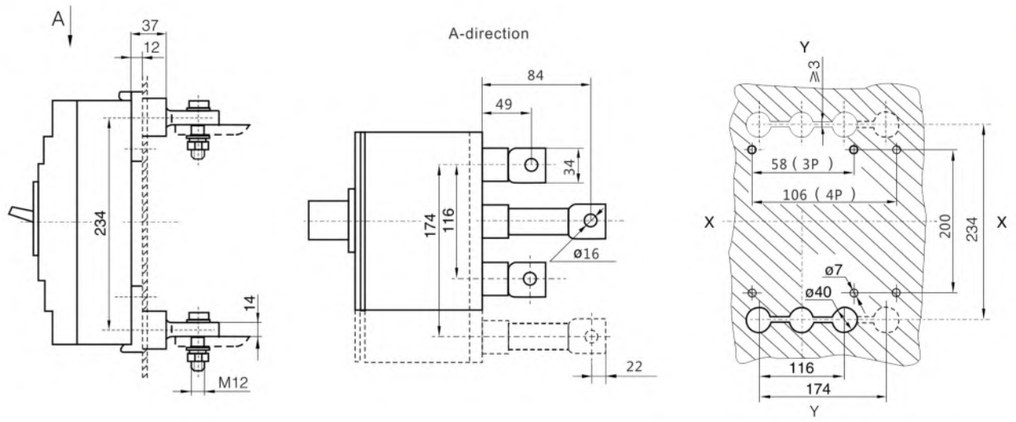
GYCM6E-B630 moulded case circuit breaker (electronic) — Cabinet door small cut-out dimension diagram (mm)

Note: It is recommended to open large holes according to the above diagram, as the outer surface of the product handle is curved, and small holes affect the aesthetics



GYCM6E-B630 moulded case circuit breaker (electronic) (back-panel wiring) — Installation dimension diagram (mm)

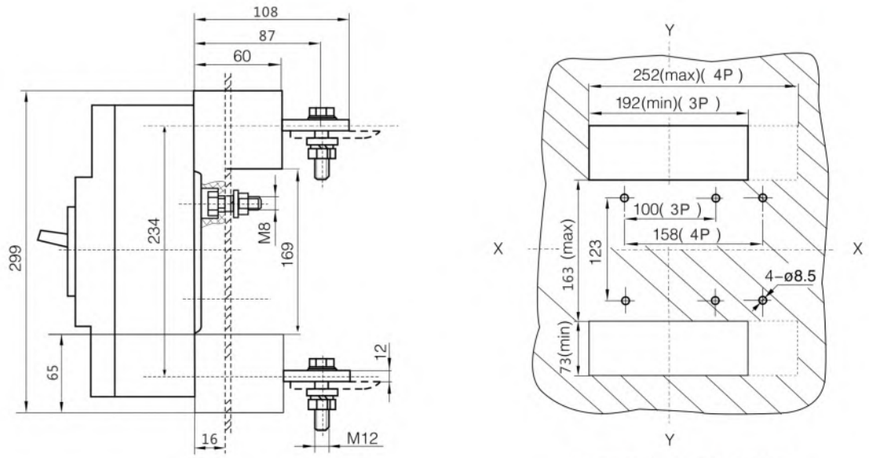
X-X, Y-Y represent the center of the three-pole circuit breaker



Cut-out dimension of installation board of back-panel wiring

GYCM6E-B630 moulded case circuit breaker (electronic) (plug-in back-panel) — Installation dimension diagram (mm)

X-X, Y-Y represent the center of the three-pole circuit breaker

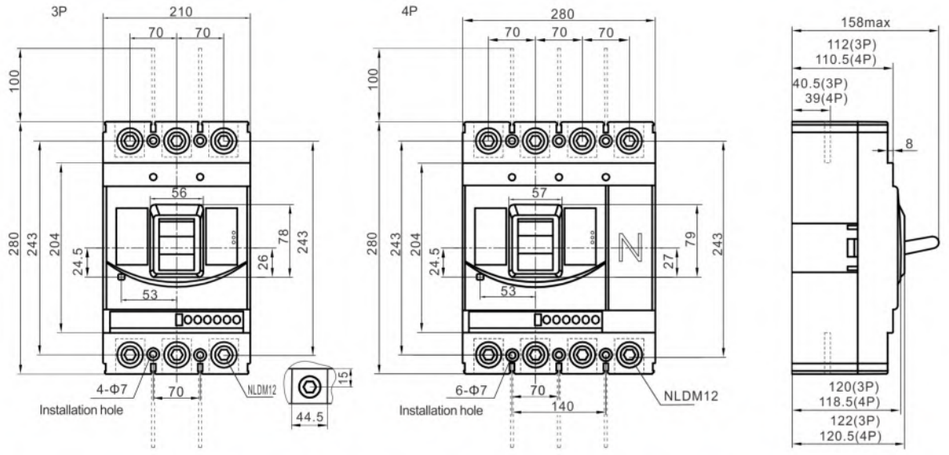


Dimensions of plug-in installation board

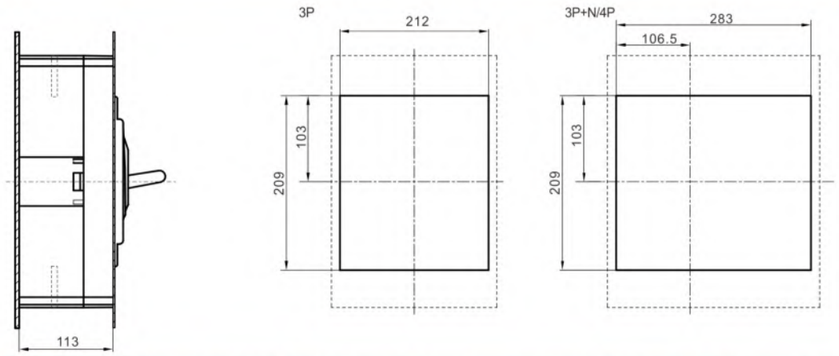
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■ Overall and installation dimension

GYCM6E-B800 moulded case circuit breaker (electronic), 800 frame capacity increase 630(please — Overall and installation dimension diagram (mm)

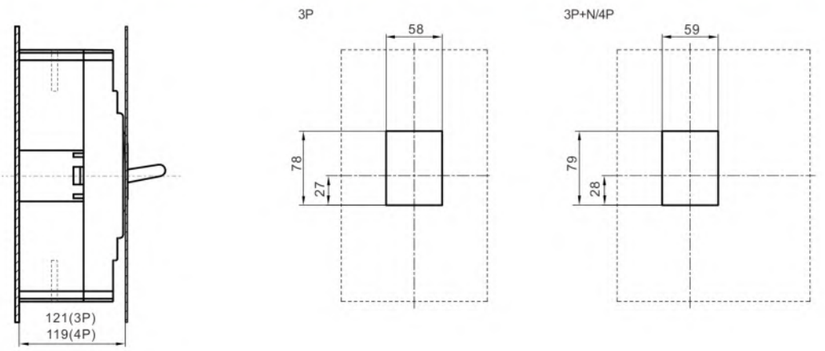


GYCM6E-B800 moulded case circuit breaker (electronic), 800 frame capacity increase 630(please specify when ordering) — Cabinet door big cut-out dimension diagram (mm)



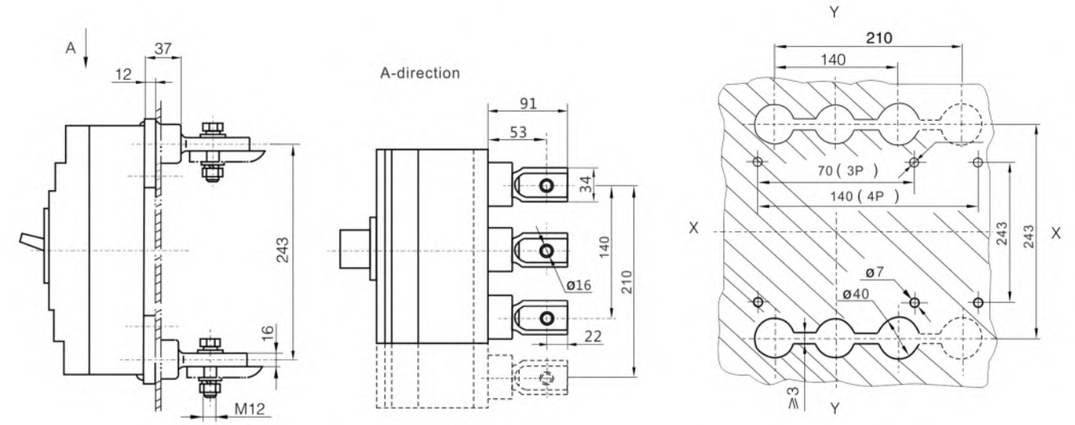
GYCM6E-B800 moulded case circuit breaker (electronic), 800 frame capacity increase 630(please specify when ordering) — Cabinet door small cut-out dimension diagram (mm)

Note: It is recommended to open large holes according to the above diagram, as the outer surface of the product handle is curved, and small holes affect the aesthetics



GYCM6E-B800 moulded case circuit breaker (electronic) (back-panel wiring), 800 frame capacity increase 630(please specify when ordering) (back-panel wiring) — Installation dimension diagram (mm)

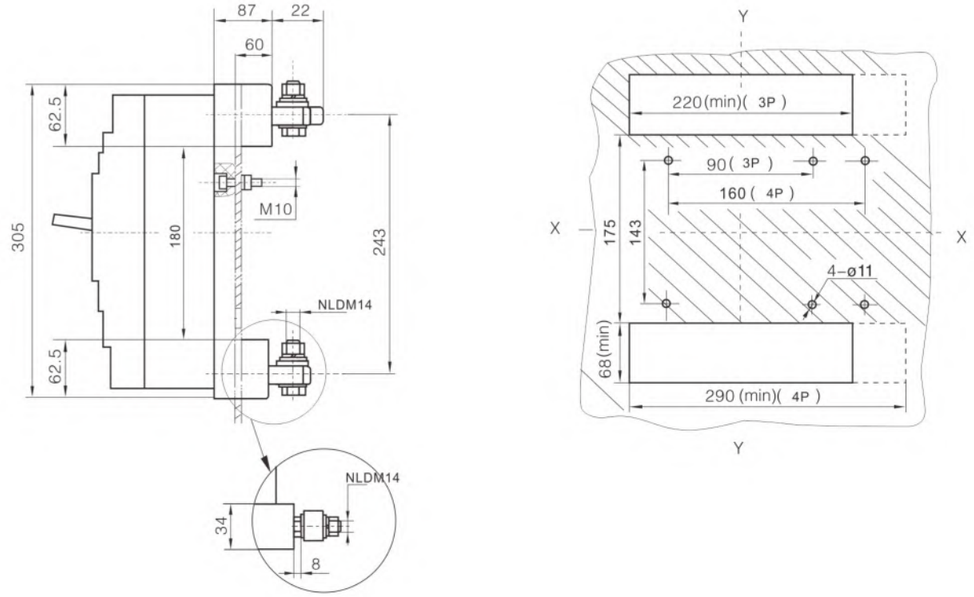
X-X, Y-Y represent the center of the three-pole circuit breaker



Cut-out dimension of installation board of back-panel wiring

GYCM6E-B800 moulded case circuit breaker (electronic) (plug-in back-panel), 800 frame capacity increase 630(please specify when ordering) (plug-in back-panel) — Cut-out dimension of installation board of back-panel wiring

X-X, Y-Y represent the center of the three-pole circuit breaker



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