



HCM2 Series

Molded Case Circuit Breakers

CATALOG

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Product Characteristics:

- High-breaking capacity and a patented arc extinguishing design
- Bearing-type spindle reduces the manual operating force required
- High quality compact modular design, energy saving and environmentally friendly

Installation flexibility:

Bus Bar Connection

Lug Line/Load Side Connection

Plug-In




Rear Connection



Product Selection Guide:

	HC	M2	250	P	/4	/10
Hecheng						
Model:		M2:16~1250A				
Rated Current :		16~1250A				
Specification :		P: Photovoltaic DC1000Vdc N: AC415Vac				
Poles:		2:Poles 3:Poles 4:poles				
Accessory :		Refer to page 4.3				

PRODUCT OVERVIEW

PN	HCM2(160)				HCM2(250)				HCM2(400)									
																		
Rated Current(In)	16A ~ 125A	16A, 20A, 25A, 32A, 40A, 50A, 63A, 80A, 100A, 125A, 140A, 150A, 160A			100A, 125A, 140A, 160A, 180A, 200A, 225A, 250A				225A, 250A, 315A, 350A, 400A									
Poles(P)	3, 4	3, 4	3, 4	3, 4	3	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3	3	3	3	
Breaking Capacity Level	C	L	M	H	C	L	M	H	L	M	H							
Rated Operating Voltage Ue(VAC)	415V	415V	415V	690V	415V	415V	415V	690V	415V	415V	415V	690V	415V	690V	800V	1000V	1140V	
Rated Ultimate Short Circuit Breaking Capacity Icu(kA)	35	50	70	20	100	35	50	70	20	100	50	70	20	100	80	50	35	10
Rated operating short-circuit breaking capacity Ics(kA)	25	35	50	10	70	25	35	50	10	70	50	70	15	75	80	52	20	10
N P Form In 4P Products	4A, 4B, 4C, 4D																	
Certificate	CCC, CE, CB (UL489Applies to: HCM2 -250)																	

PRODUCT OVERVIEW

PN	HCM2(630)								HCM2(800)			HCM2(1250)			
															
Rated Current(In)	400A, 500A, 630A								630A, 700A, 800A			800A, 1000A, 1250A			
Poles(P)	3, 4	3, 4	3, 4	3, 4	3	3	3	3	3, 4	3, 4	3, 4	3, 4			
Breaking Capacity Level	L	M		H					M		H	M		H	
Rated Operating Voltage Ue(VAC)	415V	415V	690V	415V	690V	800V	1000V	1140V	415V	690V	415V	415V	690V	415V	690V
Rated Ultimate Short Circuit Breaking Capacity Icu(kA)	50	70	20	100	80	50	35	10	75	20	100	75	35	100	20
Rated operating short-circuit breaking capacity Ics(kA)	50	70	15	75	80	50	20	10	75	10	75	55	25	75	20
N P Form In 4P Products	4A, 4B, 4C, 4D														
Certificate	CCC, CE, CB														

HCM2-250P100/2 Photovoltaic



HCM2		2 Poles-1000 Vdc		3 Poles-1000 Vdc		4 Poles-1000 Vdc	
Rated Amperage(A)		Product model	Order code	Product model	Order code	Product model	Order code
HCM2-250P	100	HCM2-250P100/2	227300030001	HCM2-250P100/3	227300030009	HCM2-250P100/4	227300040001
	125	HCM2-250P125/2	227300030002	HCM2-250P125/3	227300030010	HCM2-250P125/4	227300040002
	140	HCM2-250P140/2	227300030003	HCM2-250P140/3	227300030011	HCM2-250P140/4	227300040003
	160	HCM2-250P160/2	227300030004	HCM2-250P160/3	227300030012	HCM2-250P160/4	227300040004
	180	HCM2-250P180/2	227300030005	HCM2-250P180/3	227300030013	HCM2-250P180/4	227300040005
	200	HCM2-250P200/2	227300030006	HCM2-250P200/3	227300030014	HCM2-250P200/4	227300040006
	225	HCM2-250P225/2	227300030007	HCM2-250P225/3	227300030015	HCM2-250P225/4	227300040007
	250	HCM2-250P250/2	227300030008	HCM2-250P250/3	227300030016	HCM2-250P250/4	227300040008

HCM2 AC SERIES



HCM2N		2 Poles-415 Vac		3 Poles-415 Vac		4 Poles-415 Vac	
Rated Amperage(A)		Product model	Order code	Product model	Order code	Product model	Order code
HCM2-160N	16	HCM2-160N16/2	225300010001	HCM2-160N16/3	225300010014	HCM2-160N16/4	225300020001
	20	HCM2-160N20/2	225300010002	HCM2-160N20/3	225300010015	HCM2-160N20/4	225300020002
	25	HCM2-160N25/2	225300010003	HCM2-160N25/3	225300010016	HCM2-160N25/4	225300020003
	32	HCM2-160N32/2	225300010004	HCM2-160N32/3	225300010017	HCM2-160N32/4	225300020004
	40	HCM2-160N40/2	225300010005	HCM2-160N40/3	225300010018	HCM2-160N40/4	225300020005
	50	HCM2-160N50/2	225300010006	HCM2-160N50/3	225300010019	HCM2-160N50/4	225300020006
	63	HCM2-160N63/2	225300010007	HCM2-160N63/3	225300010020	HCM2-160N63/4	225300020007
	80	HCM2-160N80/2	225300010008	HCM2-160N80/3	225300010021	HCM2-160N80/4	225300020008
	100	HCM2-160N100/2	225300010009	HCM2-160N100/3	225300010022	HCM2-160N100/4	225300020009
	125	HCM2-160N125/2	225300010010	HCM2-160N125/3	225300010023	HCM2-160N125/4	225300020010
	140	HCM2-160N140/2	225300010011	HCM2-160N140/3	225300010024	HCM2-160N140/4	225300020011
	150	HCM2-160N150/2	225300010012	HCM2-160N150/3	225300010025	HCM2-160N150/4	225300020012
	160	HCM2-160N160/2	225300010013	HCM2-160N160/3	225300010026	HCM2-160N160/4	225300020013
HCM2-250N	100	HCM2-250N100/2	225300030001	HCM2-250N100/3	225300030009	HCM2-250N100/4	225300040001
	125	HCM2-250N125/2	225300030002	HCM2-250N125/3	225300030010	HCM2-250N125/4	225300040002
	140	HCM2-250N140/2	225300030003	HCM2-250N140/3	225300030011	HCM2-250N140/4	225300040003
	160	HCM2-250N160/2	225300030004	HCM2-250N160/3	225300030012	HCM2-250N160/4	225300040004
	180	HCM2-250N180/2	225300030005	HCM2-250N180/3	225300030013	HCM2-250N180/4	225300040005
	200	HCM2-250N200/2	225300030006	HCM2-250N200/3	225300030014	HCM2-250N200/4	225300040006
	225	HCM2-250N225/2	225300030007	HCM2-250N225/3	225300030015	HCM2-250N225/4	225300040007
	250	HCM2-250N250/2	225300030008	HCM2-250N250/3	225300030016	HCM2-250N250/4	225300040008
HCM2-400N	225	HCM2-400N225/2	225300050001	HCM2-400N225/3	225300050006	HCM2-400N225/4	225300060001
	250	HCM2-400N250/2	225300050002	HCM2-400N250/3	225300050007	HCM2-400N250/4	225300060002
	315	HCM2-400N315/2	225300050003	HCM2-400N315/3	225300050008	HCM2-400N315/4	225300060003
	350	HCM2-400N350/2	225300050004	HCM2-400N350/3	225300050009	HCM2-400N350/4	225300060004
	400	HCM2-400N400/2	225300050005	HCM2-400N400/3	225300050010	HCM2-400N400/4	225300060005
HCM2-630N	400	HCM2-630N400/2	225300070001	HCM2-630N400/3	225300070004	HCM2-630N400/4	225300080001
	500	HCM2-630N500/2	225300070002	HCM2-630N500/3	225300070005	HCM2-630N500/4	225300080002
	630	HCM2-630N630/2	225300070003	HCM2-630N630/3	225300070006	HCM2-630N630/4	225300080003
HCM2-800N	630	HCM2-800N630/2	225300090001	HCM2-800N630/3	225300090004	HCM2-800N630/4	225300100001
	700	HCM2-800N700/2	225300090002	HCM2-800N700/3	225300090005	HCM2-800N700/4	225300100002
	800	HCM2-800N800/2	225300090003	HCM2-800N800/3	225300090006	HCM2-800N800/4	225300100003
HCM2-1250N	800	HCM2-1250N800/2	225300110001	HCM2-1250N800/3	225300110004	HCM2-1250N800/4	225300120001
	1000	HCM2-1250N1000/2	225300110002	HCM2-1250N1000/3	225300110005	HCM2-1250N1000/4	225300120002
	1250	HCM2-1250N1250/2	225300110003	HCM2-1250N1250/3	225300110006	HCM2-1250N1250/4	225300120003

HCM series Attached List

Code	Name	Part Number
10	Shunt Release	590000110000
20	Double Auxiliary Contacts	590000120000
21	Single Auxiliary Contact	590000130000
30	Undervoltage Release	590000140000
40	Shunt Release /Double Auxiliary Contacts	590000150000
41	Shunt Release /Single Auxiliary Contact	590000160000
50	Shunt Release Undervoltage Release	590000170000
60	Two Sets Of Double Auxiliary Contacts	590000180000
61	Two Sets Of Single Auxiliary Contacts	590000190000
62	Double Auxiliary/Single Auxiliary Contact	590000200000
70	Undervoltage Release/ Double Auxiliary Contacts	590000210000
71	Undervoltage Release/ Single Auxiliary Contact	590000220000
08	Alarm Contact	590000230000
18	Shunt Release /Alarm Contact	590000240000
28	Double Auxiliary Contact/ Alarm Contact	590000250000
38	Undervoltage Release/ Alarm Contact	590000260000
48	Shunt Release Auxiliary /Alarm Contact	590000270000
58	Auxiliary Alarm Contact	590000280000
68	Double Auxiliary / Alarm contact	590000290000
78	Undervoltage release Auxiliary alarm contact	590000300000

Features

Scope of application and useage

- ◆ HCM Series Molded Case Circuit Breakers(MCCB), The productissui table for infrequent switching and infrequent starting of motor sin circuit swith 50/60Hz,rated operating voltage up to AC690V,and rated operating current up to 1250A
- ◆ And the MCCB has the function of overload alarm and non-tripping. When the line is overloaded, the MCCB with this function will not trip the public output signal to ensure the continuity of power supply. The product can be used for a long time with an overload of 1.3 times the rated current for 8 hours, and the performance of the product remains the same after cooling.The MCCB can replace the thermal relay solution. The circuit breaker has overload, short circuit and undervoltage protection functions, which can protect the circuit and power supply equipment from damage.

Design Features

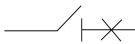
MCCB are divided into ,L type (standard type), according to the base rated limit short-circuit breaking capacity. The circuit breaker has the characteristics of small size,high breaking capacity,short flas hover and anti-vibration.

Standards Compliant

- ◆ GB/T 14048.1 Low-voltage switchgear and controlgear Part 1: General
- ◆ GB/T 14048.2 Low-voltage switchgear and controlgear Part 2: Low-voltage circuit breakers
- ◆ IEC 60947-1 Low-voltage switchgear and controlgear-Part1:General rules
- ◆ IEC 60947-2 Low-voltage switchgear and controlgear-Part 2:Circuit-breakers

Electrical Symbol

The MCCB has an isolation function, and its corresponding symbol is:



Applicable environment

Ambient temperature

-35°C~+70°C, the average value of 24 hours does not exceed +35°C.When the temperature is higher than +40°C, the user needs to derate for use. For the derating coefficient, please refer to the HCM2 table.

Storage temp

-40°C~+75°C

Altitude

The altitude temperature of the installation site is ≤2500m, and the derating coefficient at high altitude is shown in the table.

Relative temperature in use/relative storage temperature

When the ambient temperature is +40°C, the relative humidity doesn't exceed 50%,and the lower temperature can have a higher temperature, such as: when the relative humidity is 20°C, the relative humidity can reach 90%.Take corresponding measures for frosting caused by temperature changes.

Pollution level

III

Application range

Type of installation

The installation category of the circuit breaker connected to the main circuit is: Category III (power distribution and control level)

The installation category where the circuit breaker is not connected to the main circuit is: Category II (load level level)

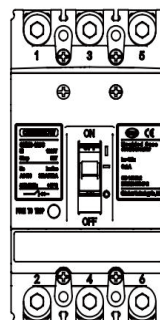
Installation Environment

The product is installed in a non-explosive medium, and the medium isn't enough to corrode the metal and destroy the insulating gas and conductive dust, and avoid using it in the place where rain and snow invade.

Installation direction

The product is installed vertically, and the inclination between the installation surface and the vertical surface is ≤±22.5°

Horizontal installation of the product.



Vertical installation



Horizontal installation

Table1 Main Performance Technical Parameters of Circuit Breaker

Product Technical Features																		
Case grade rated current(A)	150					250					400							
Poles(P)	3, 4	3, 4	3, 4	3, 4	3, 4	3	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3	3	3	3
Breaking Capacity Level	C	L	M	H	H	C	L	M	H	H	L	M	M	H	H	H	H	H
Rated Operating Voltage U _e (VAC)	415V	415V	415V	690V	415V	415V	415V	415V	690V	415V	415V	415V	690V	415V	690V	800V	1000V	1140V
Rated Current(In)	16A, 20A, 25A, 32A, 40A, 50A, 63A, 80A, 100A, 125A, 140A, 150A, (160A)					100A, 125A, 140A, 160A, 180A, 200A, 225A, 250A					225A, 250A, 315A, 350A, 400A							
Rated ultimate short-circuit breaking capacity I _{cu} (kA)	35	50	70	20	100	35	50	70	20	100	50	70	20	100	80	50	35	10
Rated operating short-circuit breaking capacity I _{cs} (kA)	25	35	50	10	70	25	35	50	10	70	50	70	15	75	80	52	20	10
Rated insulation voltage U _i	AC 1000V																	
Rated impulse withstand voltage U _{imp}	8kV					8kV					12kV							
Mechanical life	20000										10000			10000				
Electrical life	10000										7500			1500				
Arcing distance	≥50mm										≥100mm							
Dimensions (W*L*H)	W	75/100	92/122			107	107/142			150/198								
	L	133	150			165	165			257								
	H	65	88			88	105			113								

Table 2 Main Performance Technical Parameters of Circuit Breakers (Continued)

Product Technical Features																		
Case grade rated current(A)	630								800				1250					
Poles(P)	3, 4	3, 4	3, 4	3, 4	3	3	3	3	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	
Breaking Capacity Level	L	M	M	H	H	H	H	H	M	M	H	M	M	H	M	H	H	
Rated Operating Voltage U _e (VAC)	415V	415V	690V	415V	690V	800V	1000V	1140V	415V	690V	415V	415V	690V	415V	690V	415V	690V	
Rated Current(In)	400A, 500A, 630A								630A, 700A, 800A				800A, 1000A, 1250A					
Rated ultimate short-circuit breaking capacity I _{cu} (kA)	50	70	20	100	80	50	35	10	75	20	100	75	35	100	20	20	20	
Rated operating short-circuit breaking capacity I _{cs} (kA)	50	70	15	75	80	50	20	10	75	10	75	55	25	75	20	20	20	
Rated insulation voltage U _i	AC 1000V																	
Rated impulse withstand voltage U _{imp}	12kV								12kV				12kV					
Mechanical life	10000				10000				10000				2500					
Electrical life	7500				1500				1500				500					
Arcing distance	≥100mm								≥100mm				≥100mm					
Dimensions (W*L*H)	W	182/240								210/280				210/280				
	L	270								280				330				
	H	117								124				137				

HCM2 Temperature Change Derating Factor

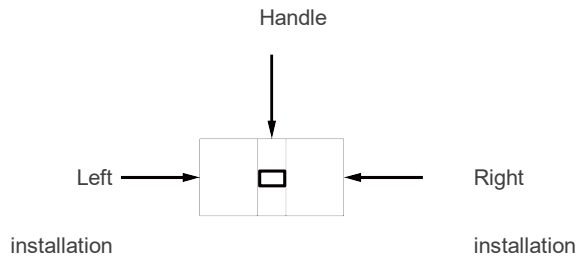
Item	PN	Temperature corresponding product derating factor						
		40°C	45°C	50°C	55°C	60°C	65°C	70°C
1	HCM2-160N C	1	0.977	0.957	0.936	0.915	0.894	0.873
2	HCM2-160NL/M/H	1	0.959	0.918	0.877	0.835	0.794	0.752
3	HCM2-250N C	1	0.985	0.968	0.952	0.935	0.919	0.887
4	HCM2-250N L/M/H	1	0.985	0.968	0.952	0.935	0.919	0.887
5	HCM2-400N L/M/H	1	0.978	0.957	0.936	0.915	0.894	0.873
6	HCM2-630N L/M/H	1	0.978	0.957	0.936	0.915	0.894	0.873
7	HCM2-800N M/H	1	0.978	0.957	0.936	0.915	0.894	0.873
8	HCM2-1250N M/H	1	0.96	0.92	0.87	0.82	0.76	0.7

Note: When the ambient temperature is lower than 40°C, the product can be used normally without derating.

HCM2 High Altitude Derating Factor

Altitude (m)	2000	2500	3000	4000	4500	5000
Working current correction factor	1	1	0.985	0.95	0.94	0.93
Max operating voltage (V)	690	690	620	540	500	460
Power frequency voltage (V)	3000	3000	2500	2200	2100	2000
Insulation Voltage (V)	800	800	720	630	580	530

Annex Code Comparison Table



- Icon :
- Alarm Contact
 - Dual Auxiliary Contacts
 - Single Auxiliary Contact
 - Undervoltage Release
 - Shunt Release
 - Auxiliary alarm contact (Auxiliary and alarm function)

Table 2 Comparison Table Of Accessory Codes

Code	Position Accessory Name	PN		HCM2-160		HCM2-250		HCM2-400		HCM2-630		HCM2-800	
		P		3	4	3	4	3	4	3	4	3	4
00	None			—	—	—	—	—	—	—	—	—	—
10	Shunt Release												
20	Dual Auxiliary Contacts												
21	Single Auxiliary Contact												
30	Undervoltage Release												
40	Shunt Release /Double Auxiliary Contacts												
41	Shunt Release /Single Auxiliary Contact												
50	Shunt Release Undervoltage Release												
60	Two Sets Of Dual Auxiliary Contacts												
61	Two Sets Of Single Auxiliary Contacts												
62	Dual Auxiliary/Single Auxiliary Contact												
70	Undervoltage Release/ Double Auxiliary Contacts												
71	Undervoltage Release/ Single Auxiliary Contact												
08	Alarm Contact												
18	Shunt Release /Alarm Contact												
28	Double Auxiliary Contact/ Alarm Contact												
38	Undervoltage Release/ Alarm Contact												
48	Shunt Release Auxiliary /Alarm Contact												
58	Auxiliary Alarm Contact												
68	Double Auxiliary / Alarm contact												
78	Undervoltage release Auxiliary alarm contact												

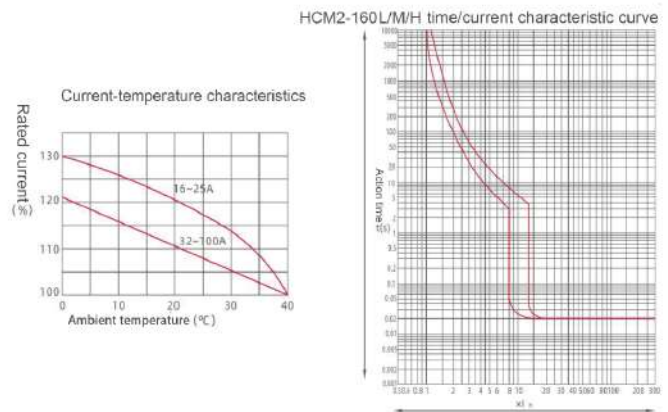
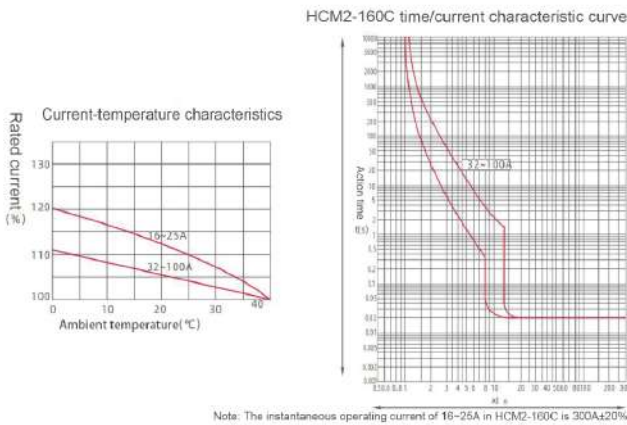
Product Trip Curve

Product Protection Requirements

Rated current of the release (A)	Thermal release (ambient temperature +40°C)		Electromagnetic release action Current (A)	Remark
	1.05In (cold state) no action time (h)	1.3In (thermal state) action time (h)		
10 ≤ In ≤ 63	1	1	10In×(1±20%)	Power distribution
63 ≤ In ≤ 1250	2	2	10In×(1±20%)	
10 ≤ In ≤ 1000	1.0In (cold state) non-action time (h)	1.2In (hot state) action time (h)	12In×(1±20%)	Motor protection
	2	2		

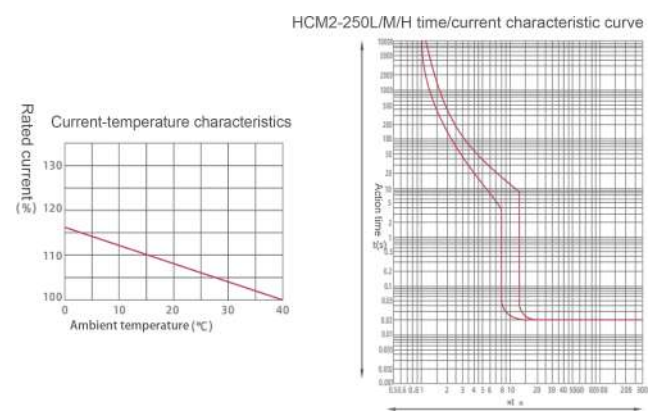
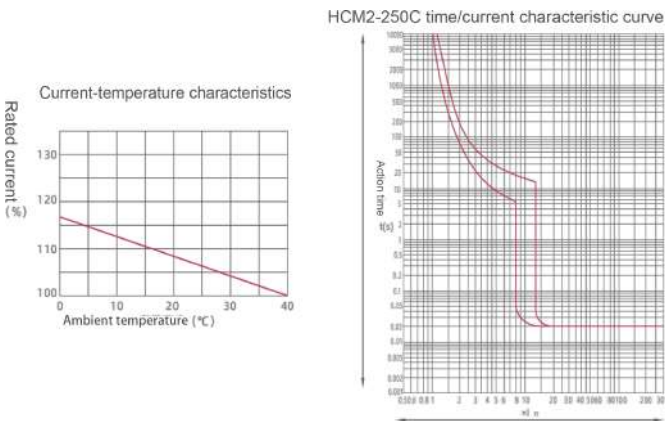
HCM2-160 series C type

HCM2-160 series L/M/H type

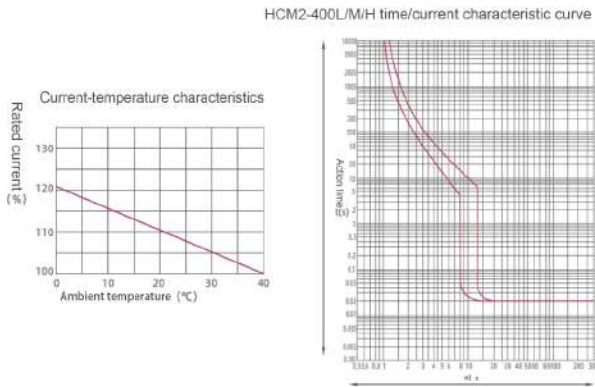


HCM2-250 series C type

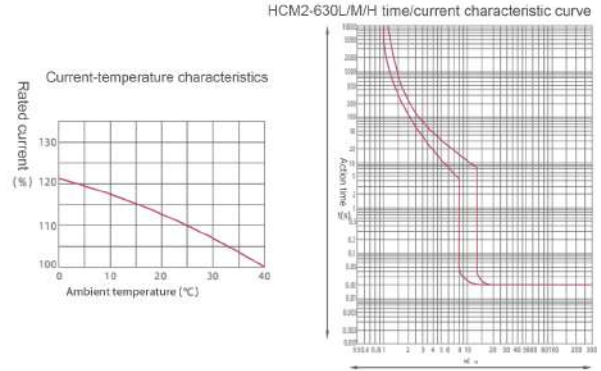
HCM2-250 series L/M/H type



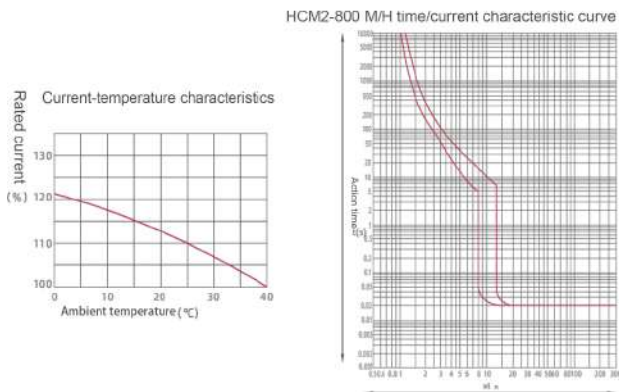
HCM2-400 series L/M/H type



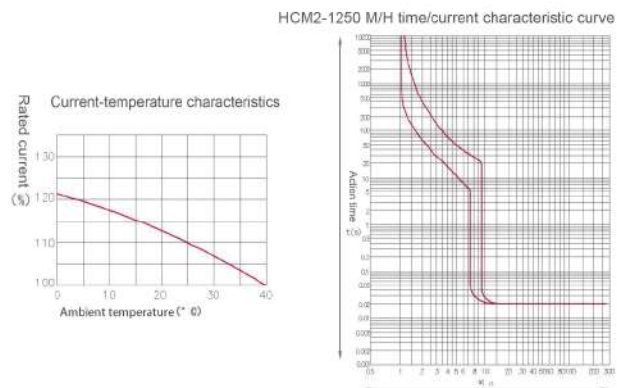
HCM2-630 series L/M/H type



HCM2-800 series M/H type



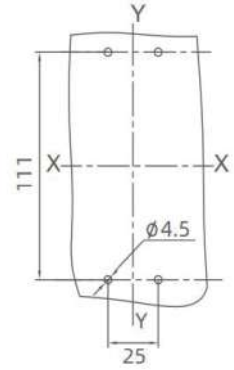
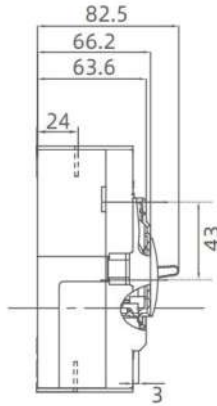
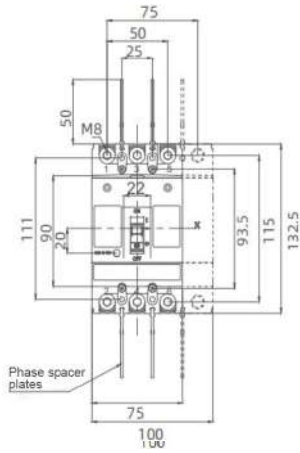
HCM2-1250 series M/H type



Installation Dimensions

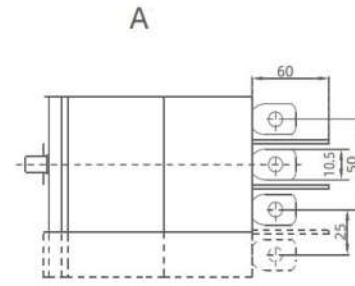
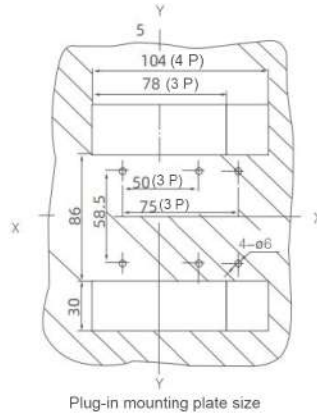
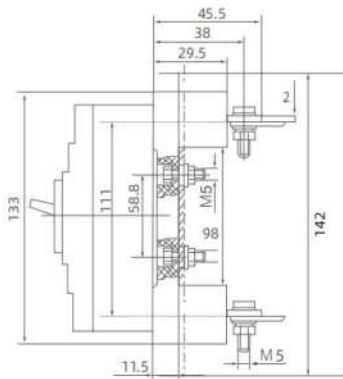
HCM2-160 series C type front connection

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



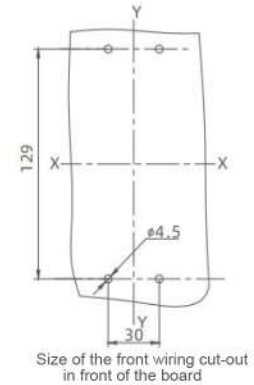
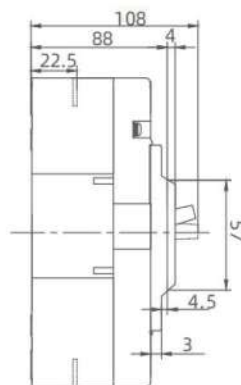
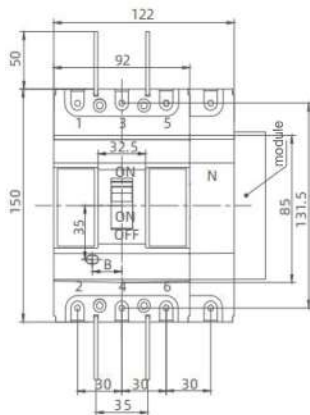
HCM2-160 series C-type plug-in front wiring

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



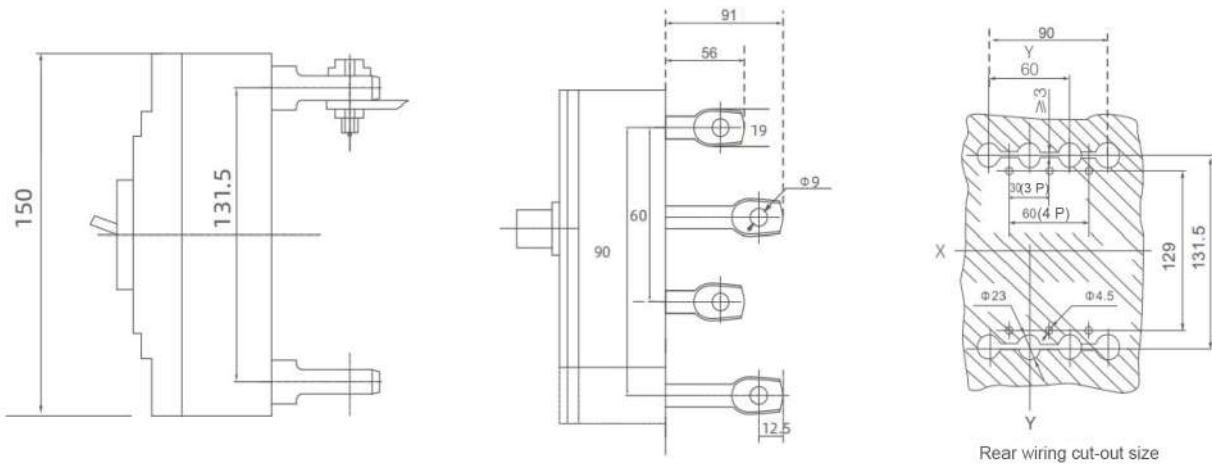
HCM2-160 series L M H type front wiring

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



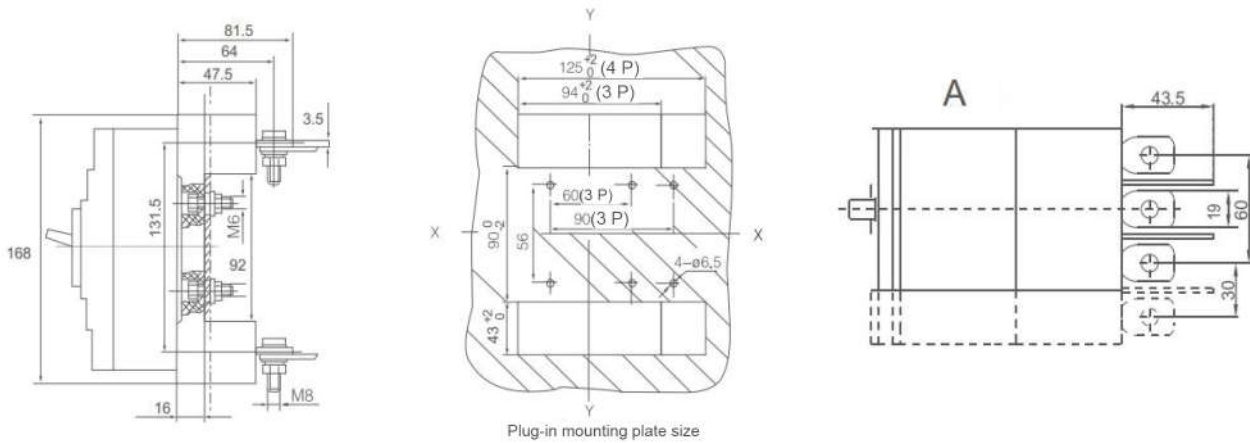
HCM2-150 series L M H type rear connection

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



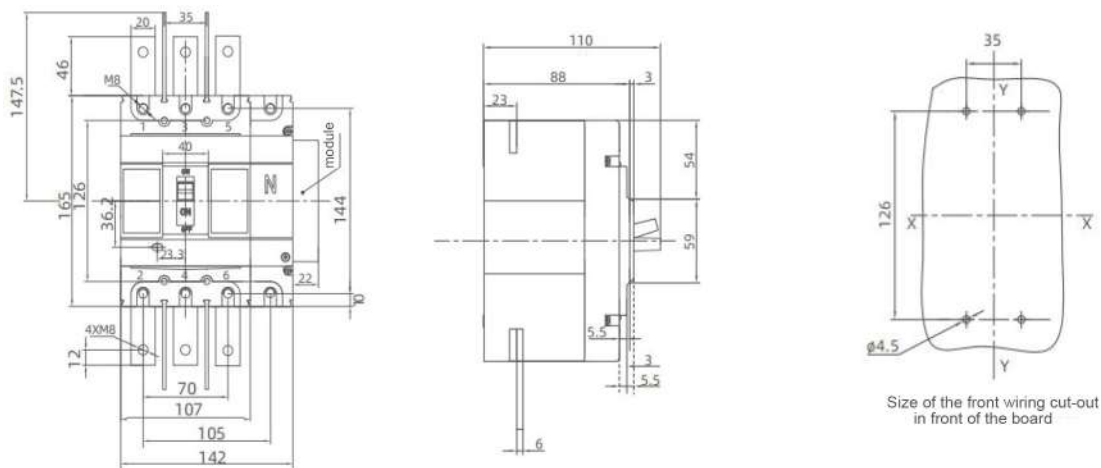
HCM2-250 series L M H type plug-in rear connection

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



HCM2-250 series C L M H type front wiring

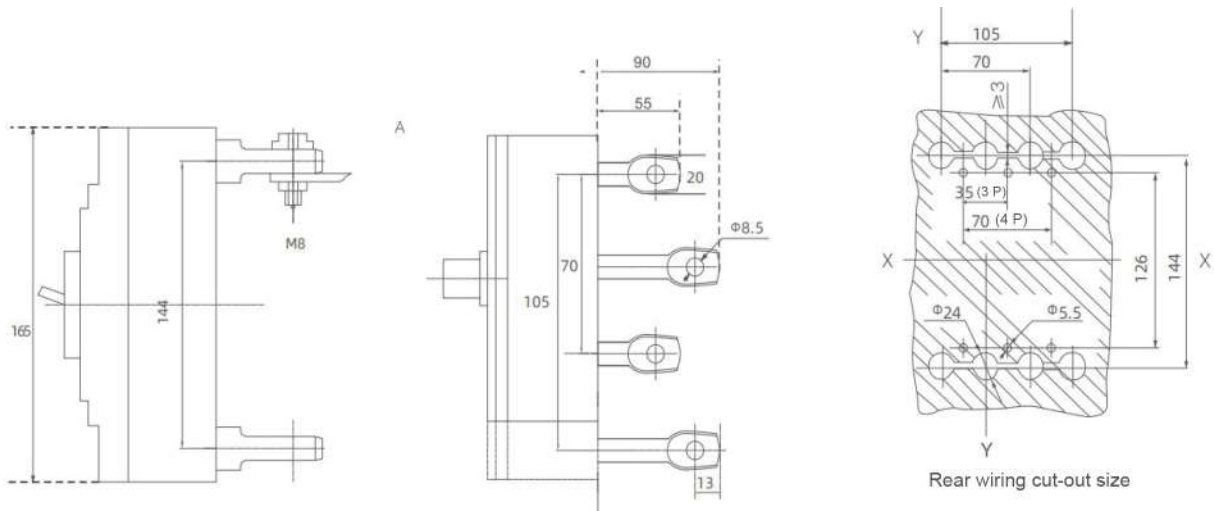
X-X, Y-Y are the center of the three-pole circuit breaker



HCM2 SERIES

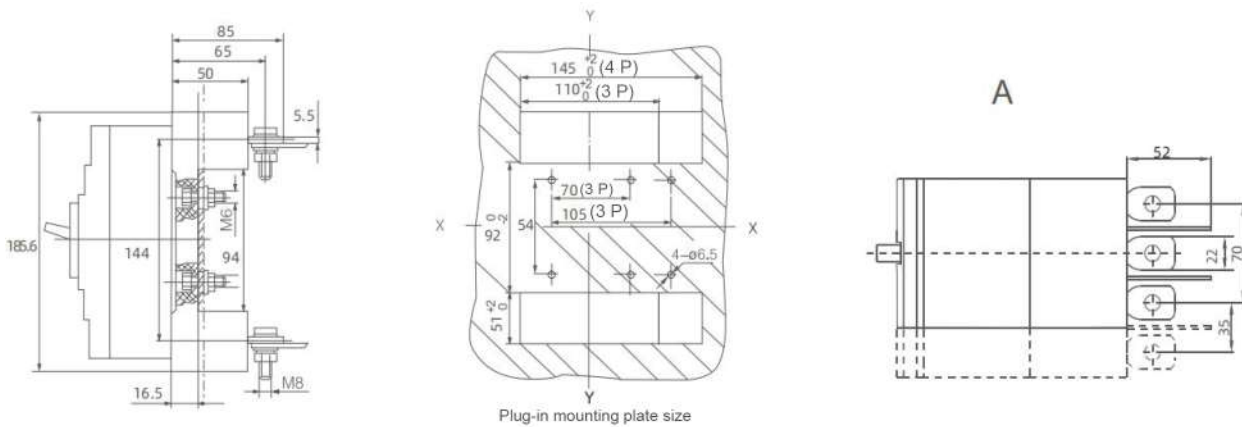
HCM2-250 series C L M H type rear connection

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



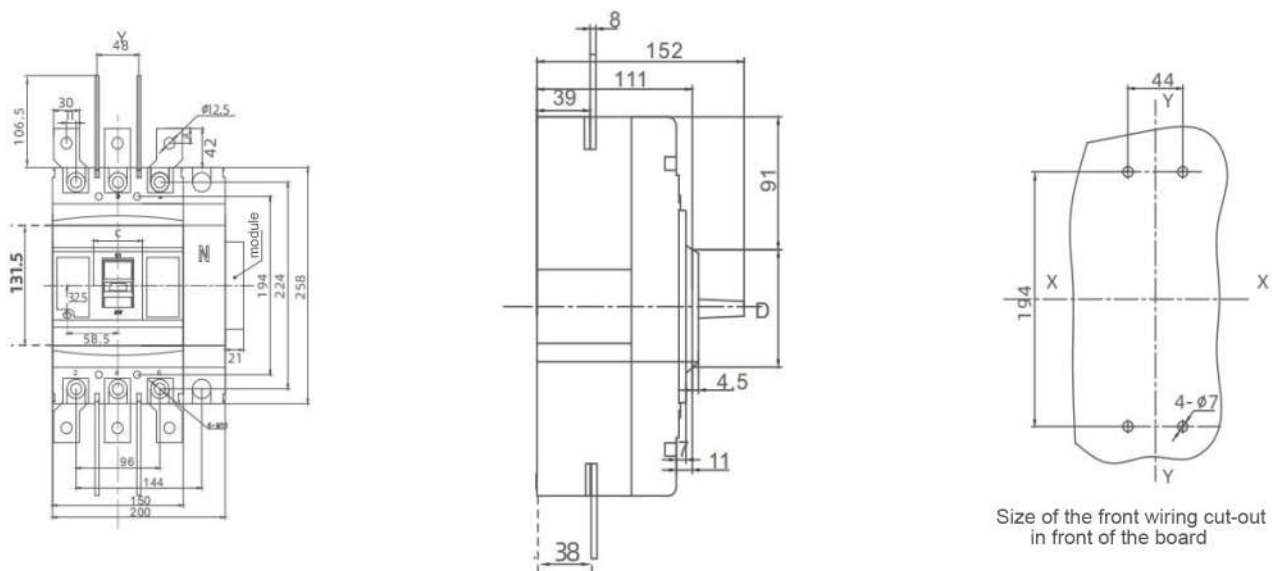
HCM2-250 series L M H type plug-in rear connection

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



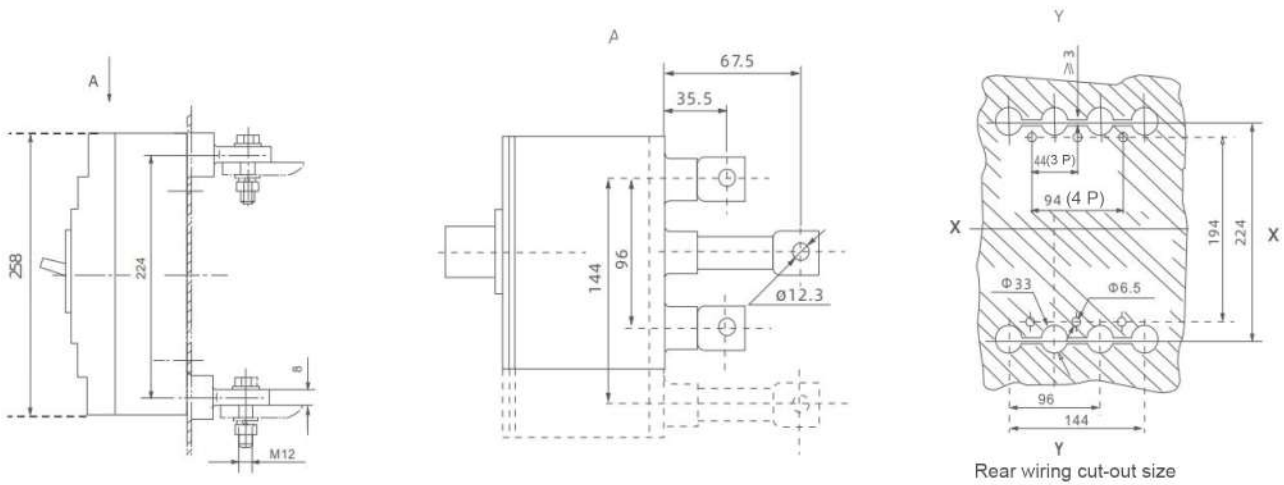
HCM2-400 series L M H type front wiring

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



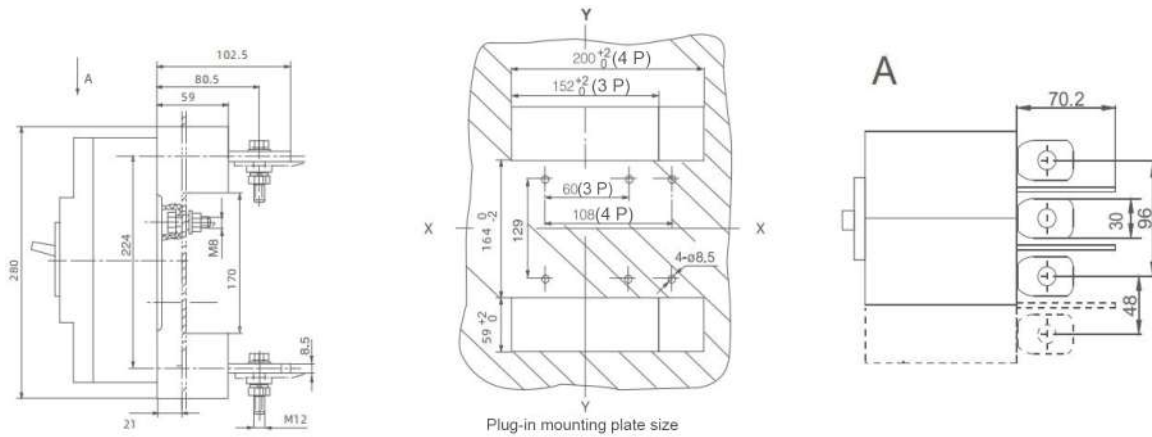
HCM2-400 series L M H type rear connection

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



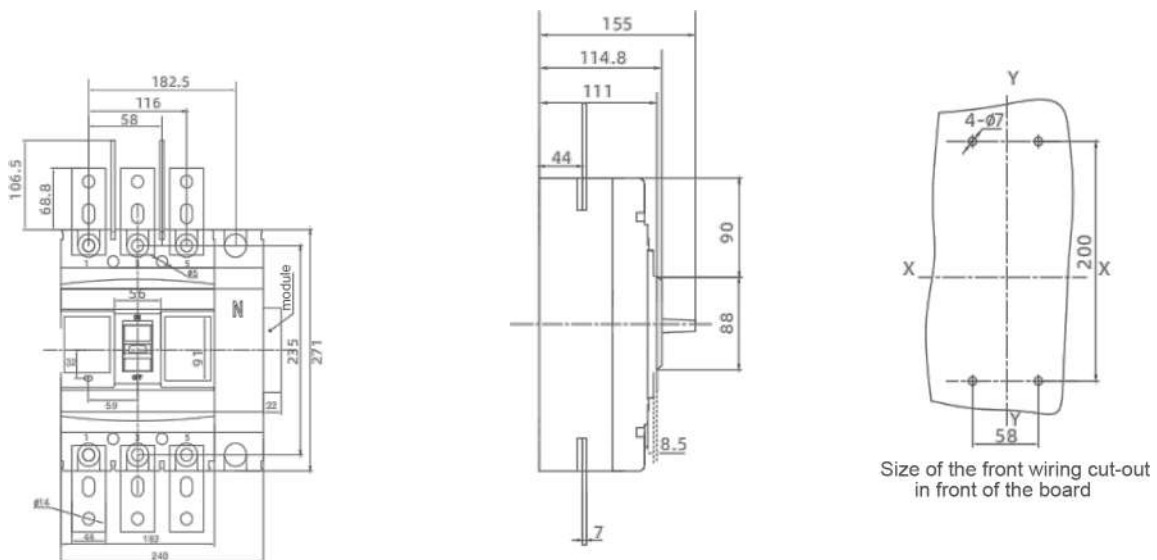
HCM2-400 series L M H type plug-in type rear panel wiring

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



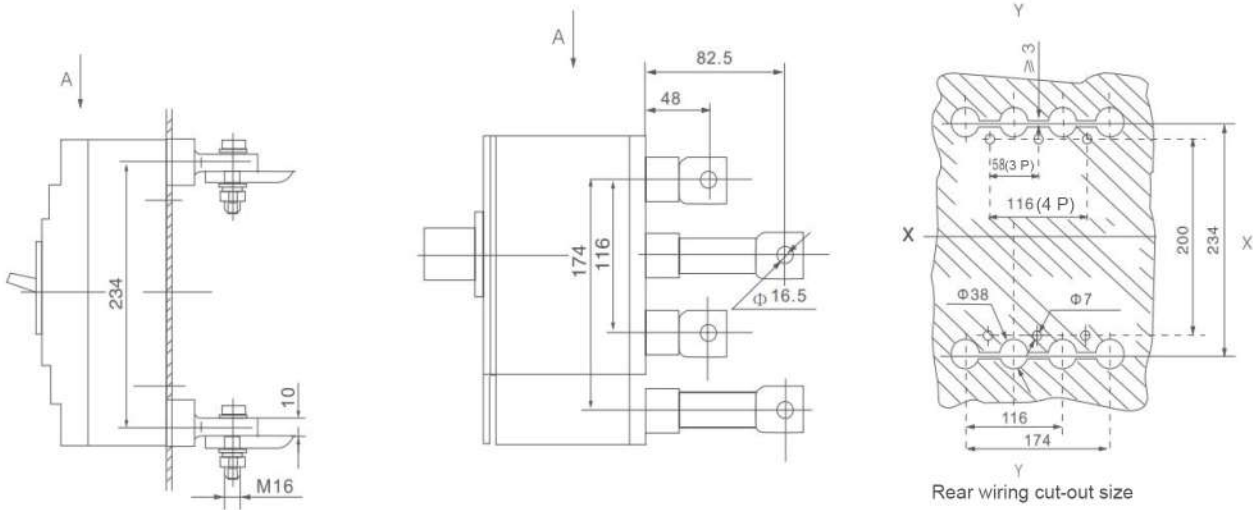
HCM2-630 series L M H type front wiring

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



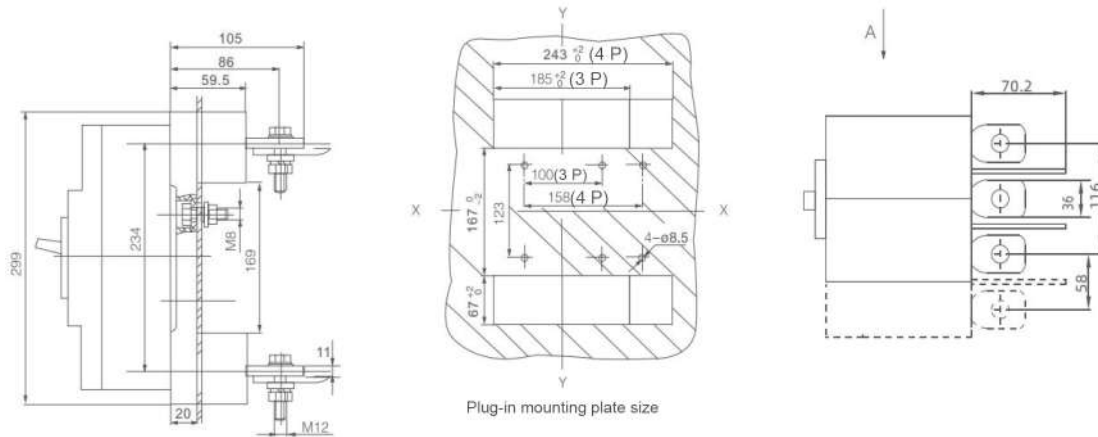
HCM2-630 series L M H type panel rear wiring

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



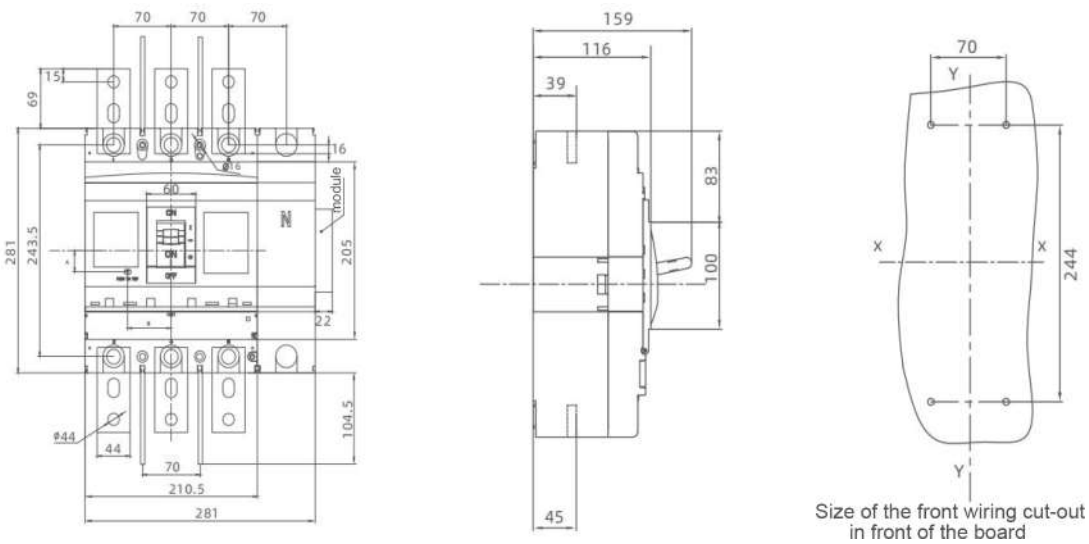
HCM2-630 series L M H type plug-in type rear panel wiring

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



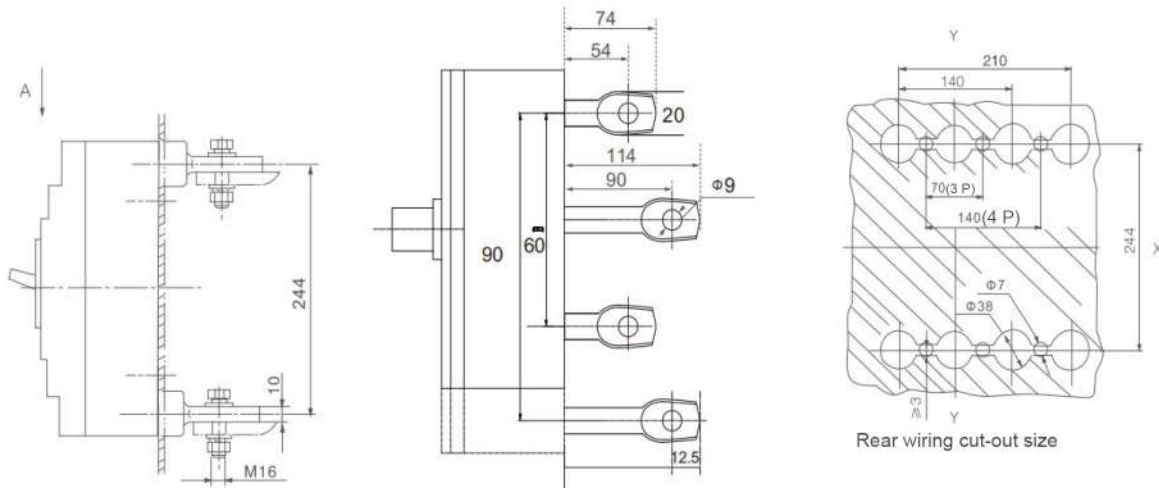
HCM2-800 series M H type panel front wiring

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



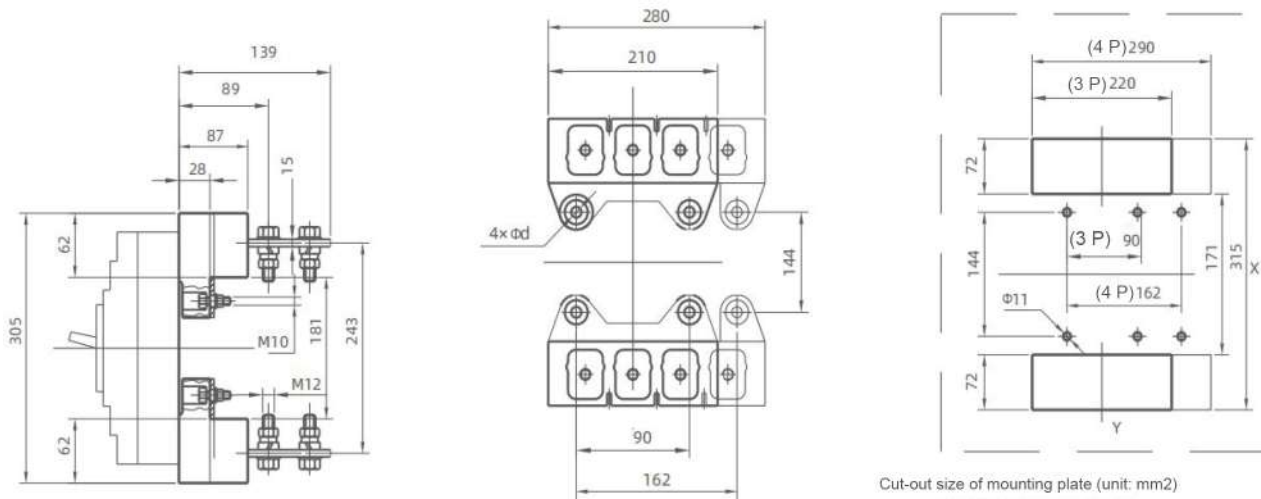
HCM2-800 series M H type panel rear wiring

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

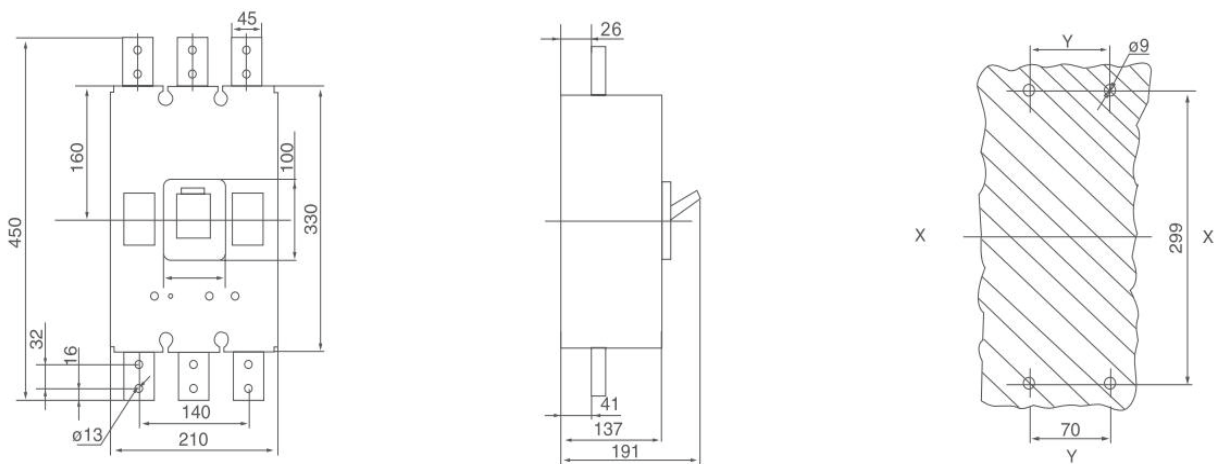


HCM2-800 series M H type plug-in type rear panel wiring

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



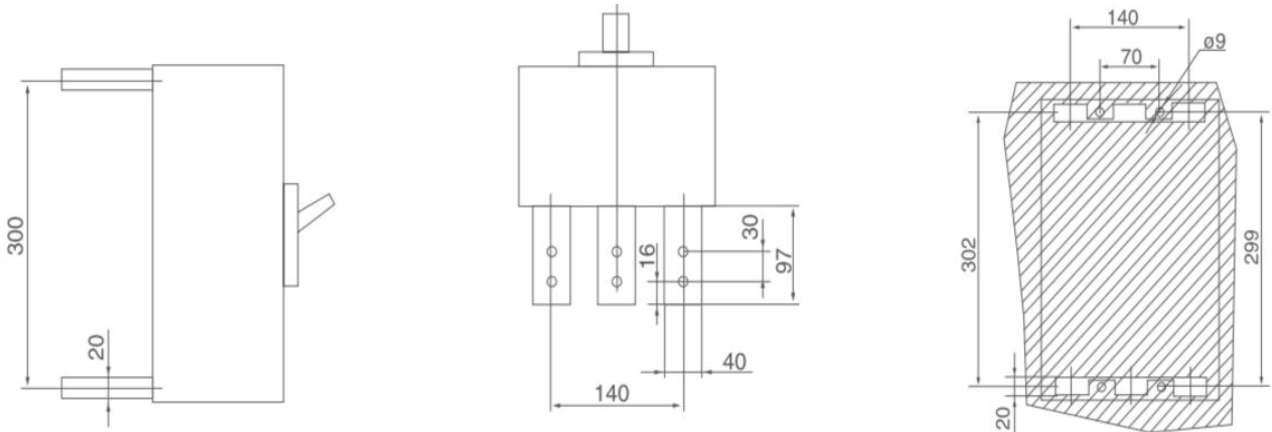
HCM2-1250 series M H type front panel wiring (three poles)



HCM2 SERIES

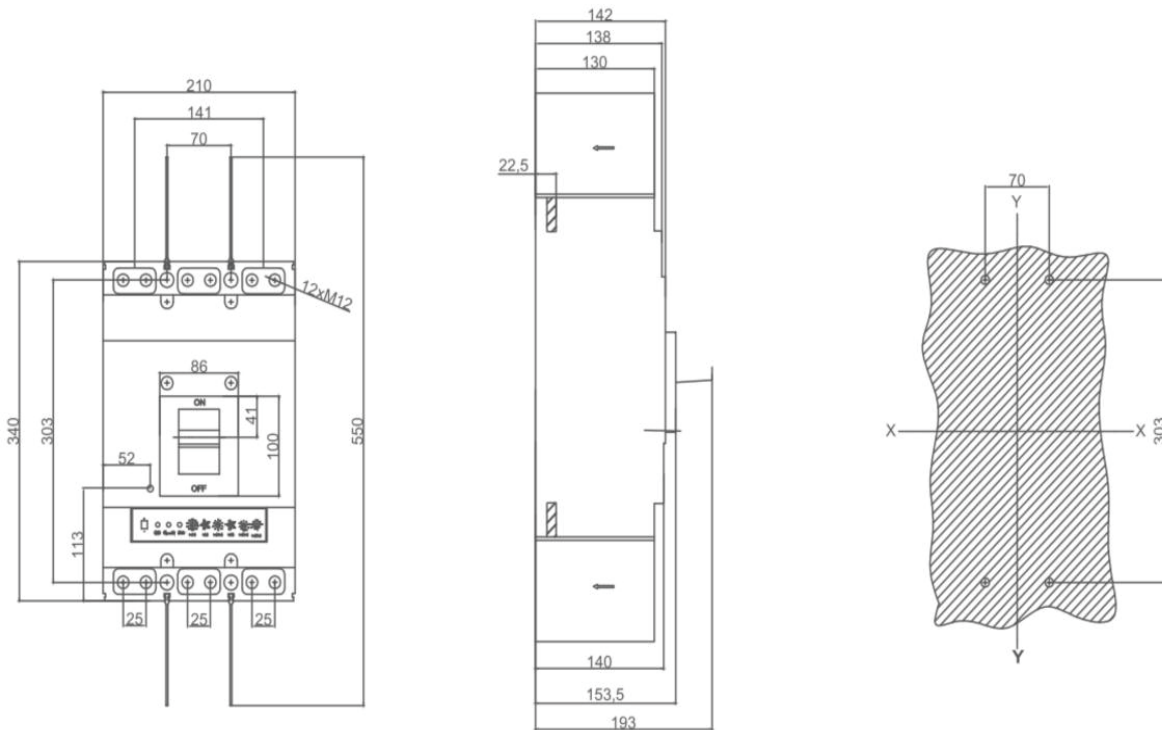
HCM2-1250 series M H type rear wiring (three poles)

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



HCM2-1250 series M H type plug-in rear panel wiring (three poles)

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



Accessories

Auxiliary Contact

The circuit breaker is "open" or "Trip free" position		Frame level current 400A and above circuit breakers (A group is four pairs of contacts)
		Frame level current 250A and below circuit breakers (A group is two pairs of contacts)
The circuit breaker is in the "closed" position	The "normally closed" contacts (F11~F12) turn from "closed" to "open" The "normally closed" contacts (F11~F12) turn from "open" to "closed"	
Note: For circuit breakers of 400A and above, two or four pairs of contacts can be installed in one group according to user needs.		

Technical parameters of auxiliary contacts

Auxiliary Contact Current Parameters

Frame	Promised Fever Wave Ith	Rated Operating Current at AC 400V
Inm≤250	3A	0.30A
Inm≤400	3A	0.30A

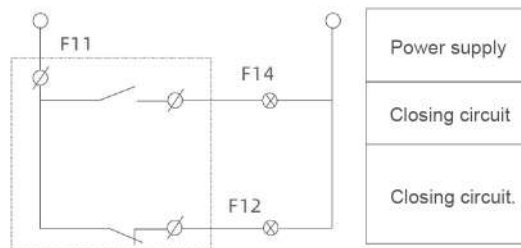
Electrical life of auxiliary contacts

Use class	Connect			Division			Times	operating frequency (T/h)	Power-on time
	I/le	U/Je	COSφ	I/le	U/Je	COSφ			
AC-15	16	1	0.3	1	1	0.3	6050	360	≥0.05S
AC-13	1	1	6Pe	1	1	6Pe			≥T0.95

Make and Break Capacity of Auxiliary Contacts

Use class	Connect			Division			Times	operating frequency (T/h)	Power-on time
	I/le	U/Je	COSφ	I/le	U/Je	COSφ			
AC-15	10	1.1	0.3	10	1.1	0.3	10	360	≥0.05S
AC-13	1.1	1.1	6Pe	1.1	1.1	6Pe			≥T0.95

Auxiliary Contact Wiring Diagram



Auxiliary contact wiring diagram

Alarm Contact

Alarm contacts and their combinations

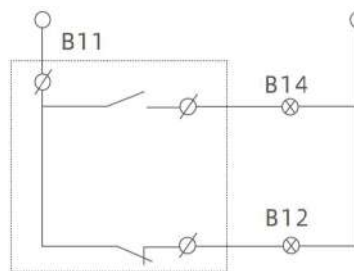
Alarm contact $U_e=230V$, $I_{th}=3A$

The position of the circuit breaker in "open" and "closed"	
The position of the circuit breaker when it is in "partial free trip"	

The agreed heating current of the alarm contact is 3A, and when the rated working voltage is AC400V, the rated working current is 0.3A.

Alarm contact wiring diagram

When the circuit breaker closes and closes normally, the contacts do not move, and only after free tripping (or fault tripping), the contacts change the original state, that is, normally open becomes closed, normally closed becomes open, and after the circuit breaker is buckled again, The contacts return to their original positions.



Alarm contact wiring diagram

Shunt Release

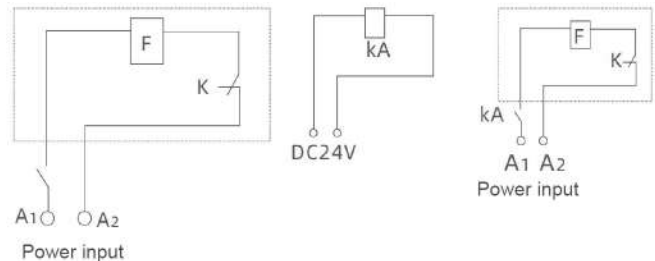
Generally installed on phase C of the circuit breaker. When the rated control power supply voltage is between 70% and 110%, the shunt releaser should be farther away to make the circuit breaker reliably trip under all operating conditions.

Control voltage: AC 50Hz 230V 400V DC 24V 220V

Note: When the power supply of the control loop is DC24V, it is recommended to use the diagram on the right to design the shunt control loop.

KA: DC24V intermediate relay, contact current capacity is 1A

K: The micro-switch connected in series with the coil inside the shunt release is a normally closed contact. When the circuit breaker is opened, the contact is automatically disconnected and closed when the circuit breaker is closed.

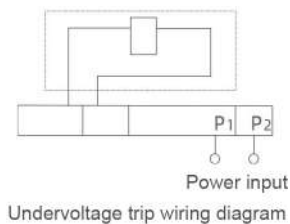


Shunt release wiring diagram

Undervoltage Release

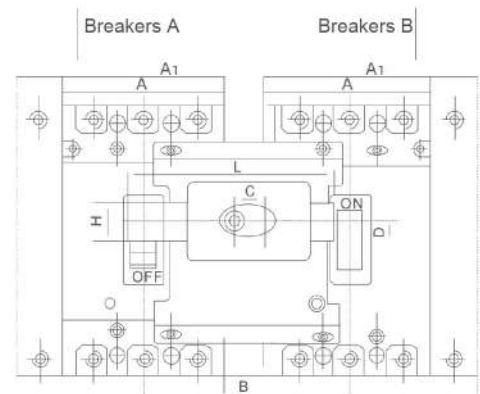
When the rated control power supply voltage is 35%~70%, the under-power release should act reliably and disconnect the circuit breaker. When it is less than 35% of the rated voltage, the circuit breaker should be reliably prevented from closing. When the power supply voltage is equal to or greater than 85% of the rated voltage, ensure that the circuit breaker can be closed.

Control voltage: AC 50Hz 230V 400V DC 110V 220V



Undervoltage trip wiring diagram

Interlocking mechanism and related dimensions



Warning: The circuit breaker must be energized before the under-power release can be released and closed, otherwise the circuit breaker will be damaged

Usage and Maintenance

- ◆ The various characteristics and accessories of the circuit breaker are set by the manufacturer. Only trained or certified professionals can adjust, install and maintain the circuit breaker, trip unit or other accessories with reference to the circuit design parameters;
- ◆ Ensure that the power supply is in a judged state before installing or removing any device;
- ◆ The handle of the circuit breaker can be in three positions, which respectively represent the three states of closed, disconnected and self-test trip. When the handle is in the free trip position, the handle should be pulled in the direction of disconnection. Only then can the gate be closed;
- ◆ Users are requested to abide by the storage and use conditions. The date of delivery from the manufacturer shall not exceed 36 months. If the product is damaged or cannot be used normally due to manufacturing quality problems, the manufacturer shall be responsible for free repair or replacement.



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