

HDM3SV

Moulded Case Circuit Breaker

User Manual



← Detailed manual, please scan the code
← Manuel détaillé, veuillez scanner le code
← Ayrıntılı kılavuz, lütfen kodu tarayın
← للدليل التفصيلي، يرجى مسح الرمز

Standard: IEC/EN 60947-2

□ Please carefully read the user manual before installing and operating the products, and then keep it properly for further reference.



Apr.2025 Ver.01

Safety Notice

Before installation, operation, maintenance and inspection, please read this instruction carefully, and install and use this product accurately according to contents of the instruction.



Danger:





- It is strictly prohibited to operate the circuit breaker with wet hands
- It is strictly prohibited to touch any conductive parts during use.
- During maintenance and upkeep, it must ensure that the product is not electrified.
- It is strictly prohibited to use any short-circuit method to test products.







Note:

- It should be installed, maintained, and serviced by personnel with professional qualifications.
- The insulation resistance shall be no less than 20MΩ.
- The various characteristics of the product have been set at the time of leaving the factory, and it cannot be disassembled or adjusted arbitrarily during use.
- Before use, please confirm whether the rated current, voltage, frequency, and characteristics of the product meet the working requirements.
- To prevent phase to phase short circuits, this product is equipped with a phase to phase barrier at the factory. Please make sure to install it correctly during use.
- If the product is damaged or makes any abnormal noises when unpacking, it should be immediately stopped from use and the supplier should be contacted.
- Please handle the discarded products properly. Thank you for your cooperation.

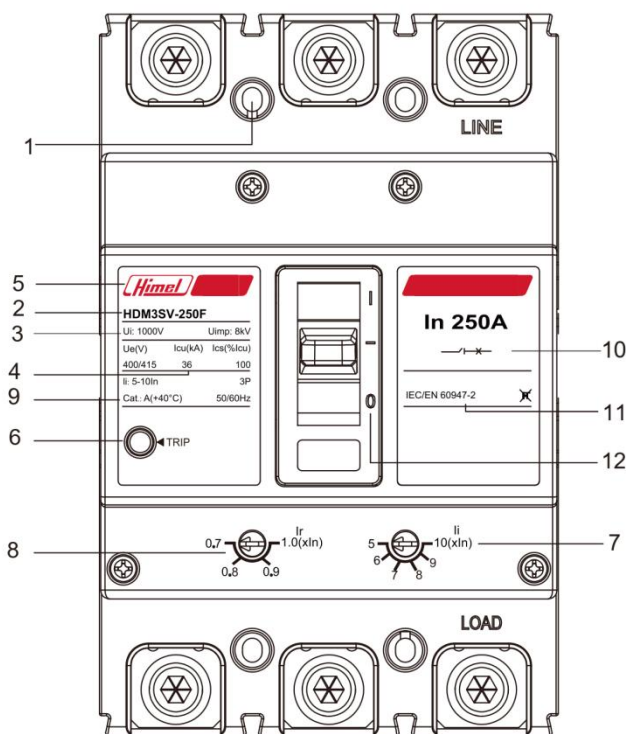
Packing list

Name	HDM3SV 3P	Screw.Nut	Phase barrier	Manual
Diagram				
QTY.	1	4	4	1

Name	HDM3SV 4P	Screw.Nut	Phase barrier	Manual
Diagram				
QTY.	1	4	6	1

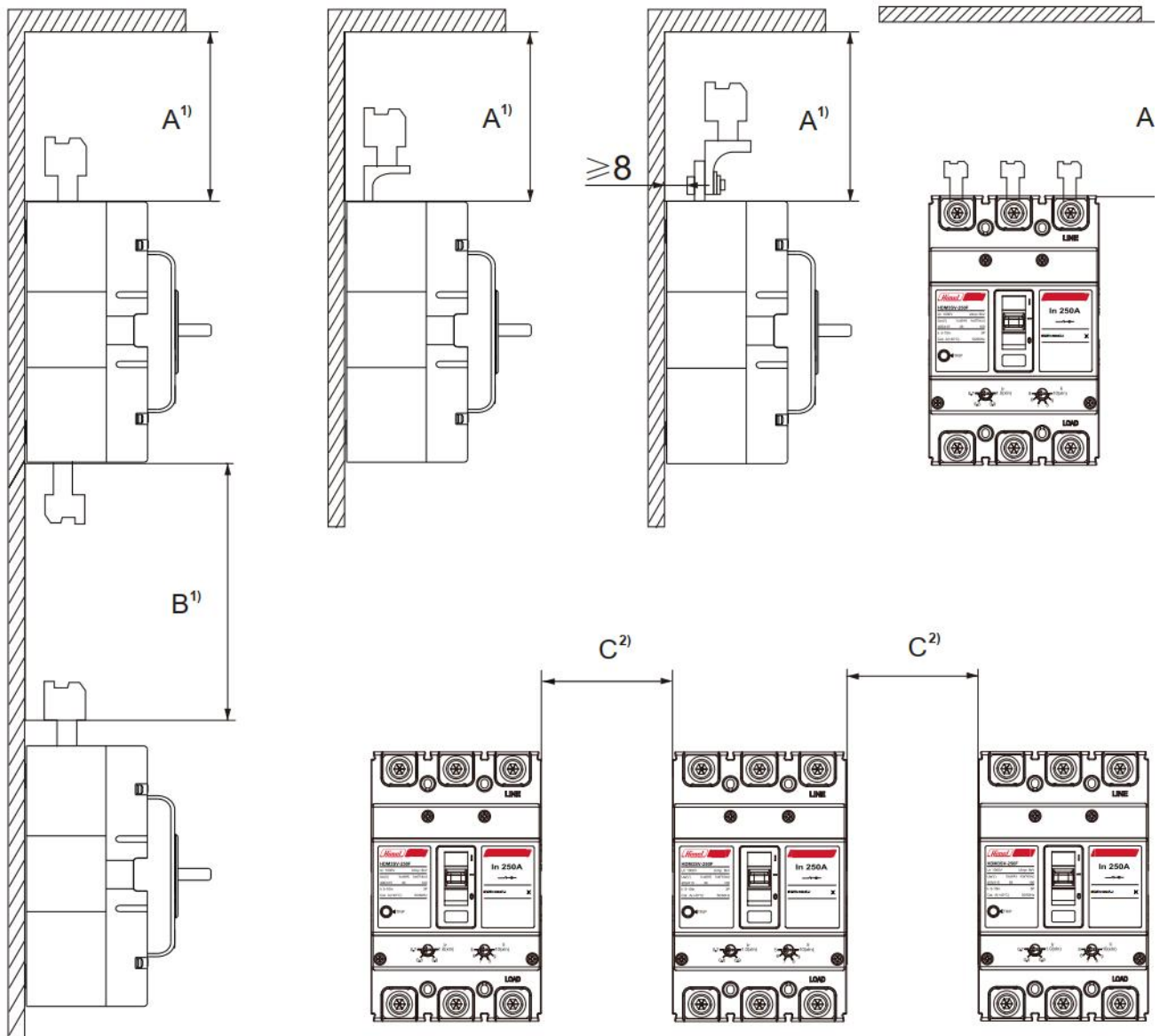
Know HDM3SV

- Protection class: 125AF-IP30; Others IP20
- Pollution class: 3
- Allowable ambient temperature range(-20~+60°C), relative humidity (at an ambient temperature of 25°C)≤95%, 24h average temperature is not exceeding 35°C;
- The altitude at the installation site cannot be higher than 2000m; otherwise, degrade the products.
- The relative humidity of the atmosphere shall not exceed 50% at maximum ambient temperature+40°C. The relative humidity can be higher at a lower temperature (such as 90%at+20°C) and the condensation on the product surface due to temperature variation shall be considered.



1	Mounting hole
2	Product name
3	Technical parameters
4	Breaking capacity
5	Brand name
6	Test button
7	Instant adjustable parameter
8	Delay adjustable parameter
9	Use category
10	Breaker with isolating function
11	Complied standard
12	Closing, tripping and opening

HDM3SV Safety clearance



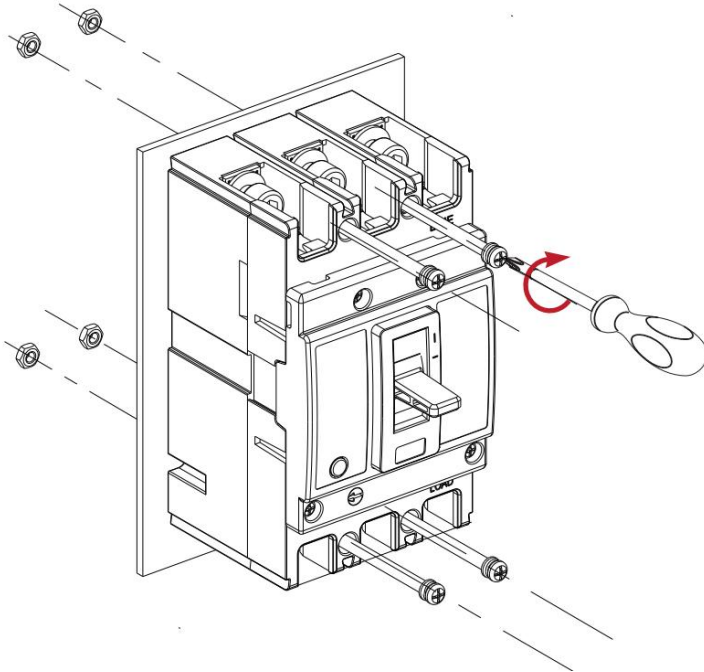
Model	A(mm)	B(mm)	C* (mm)
HDM3SV-125	60	60	30
HDM3SV-160	60	60	30
HDM3SV-250	60	60	30
HDM3SV-630	110	110	70

Note:

- 1) Please take care cable isolation to make sure enough safety distance.
- 2) Please make sure to provide additional insulation protection between the products, if the distance needs to be 0mm.

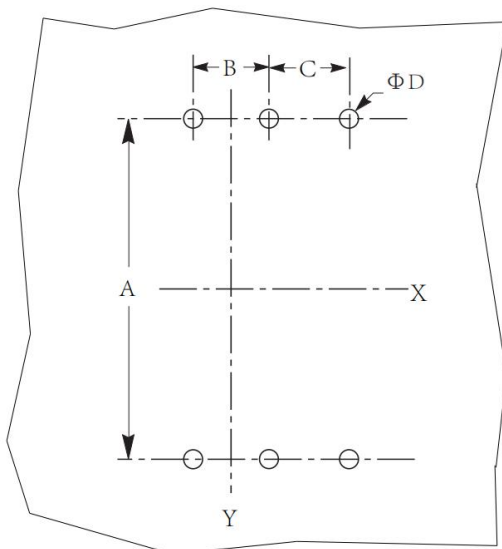
HDM3SV Installation

Mounting the MCCB



Model	Torque (N.m)
HDM3SV-125	1.2(M4)
HDM3SV-160	1.2(M4)
HDM3SV-250	1.2(M4)
HDM3SV-630	3.0(M6)

Dimension of the Mounting Holes

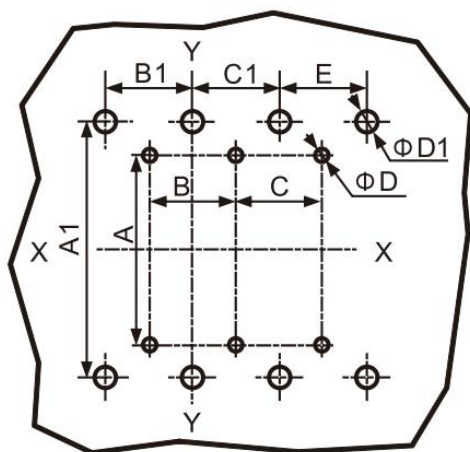


Model	Poles	A	B	C	D
HDM3SV-125	3	110	25	-	4.5
	4	110	25	25	4.5
HDM3SV-160	3	132	30	-	4.5
	4	132	30	30	4.5
HDM3SV-250	3	126	35	-	4.5
	4	126	35	35	4.5
HDM3SV-630	3	194	44	-	7
	4	194	44	44	7

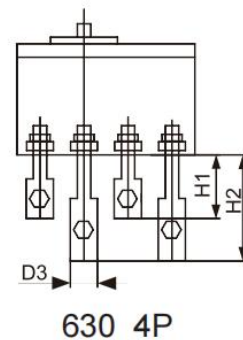
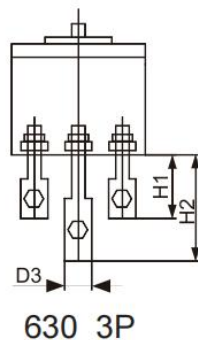
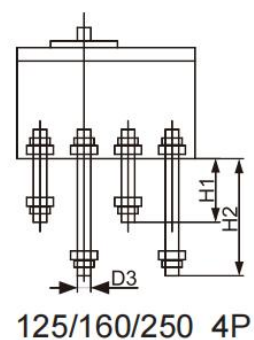
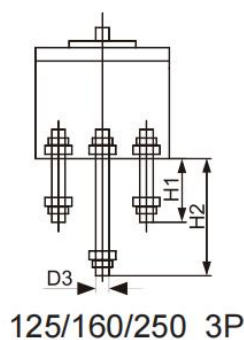
Note: X and Y is the center of the breaker.

HDM3SV Installation

Fixed Rear Mounting Hole Drawing



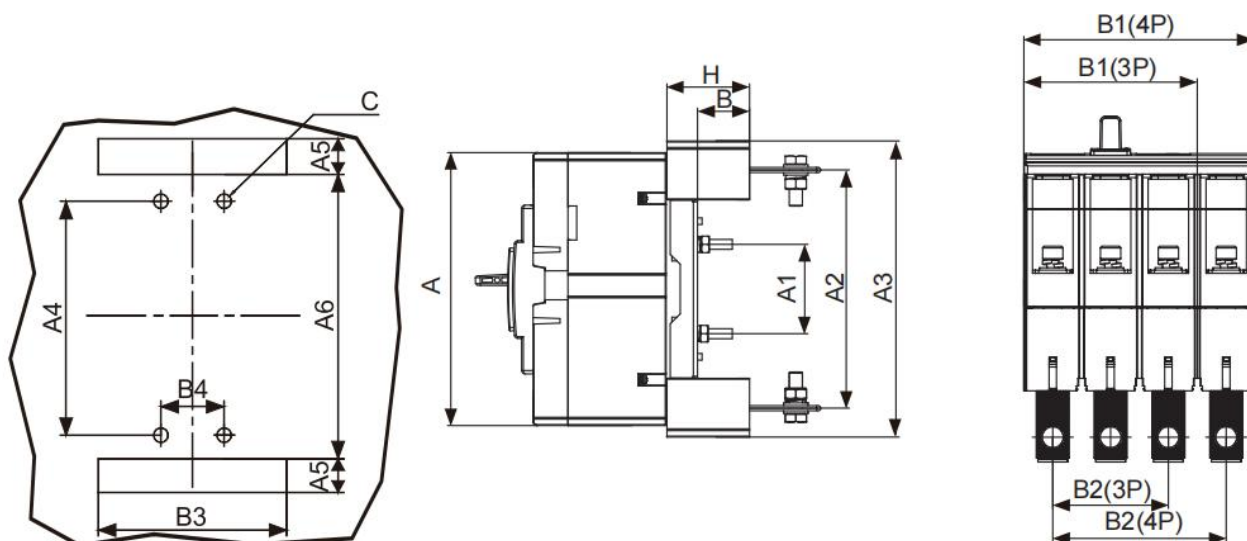
Note: X-X and Y-Y is the center of the three-pole break



Model	Poles	A	B	C	D	A1	B1	C1	E	D1	H1	H2	D3
HDM3SV-125	3	110	25	-	4.5	114	25	25	-	10.5	51	81	Ø8
	4	110	25	25	4.5	114	25	25	25	10.5	51	81	Ø8
HDM3SV-160	3	132	30	-	4.5	134	30	30	-	9.8	49	94	Ø8
	4	132	30	30	4.5	134	30	30	30	9.8	49	94	Ø8
HDM3SV-250	3	126	35	-	4.5	144	35	35	-	8	82	121	12
	4	126	35	35	4.5	144	35	35	35	8	82	121	12
HDM3SV-630	3	194	44	-	7	230	43.5	43.5	-	10.5	87	128	30
	4	194	44	44	7	230	43.5	43.5	44	10.5	87	128	30

HDM3SV Installation

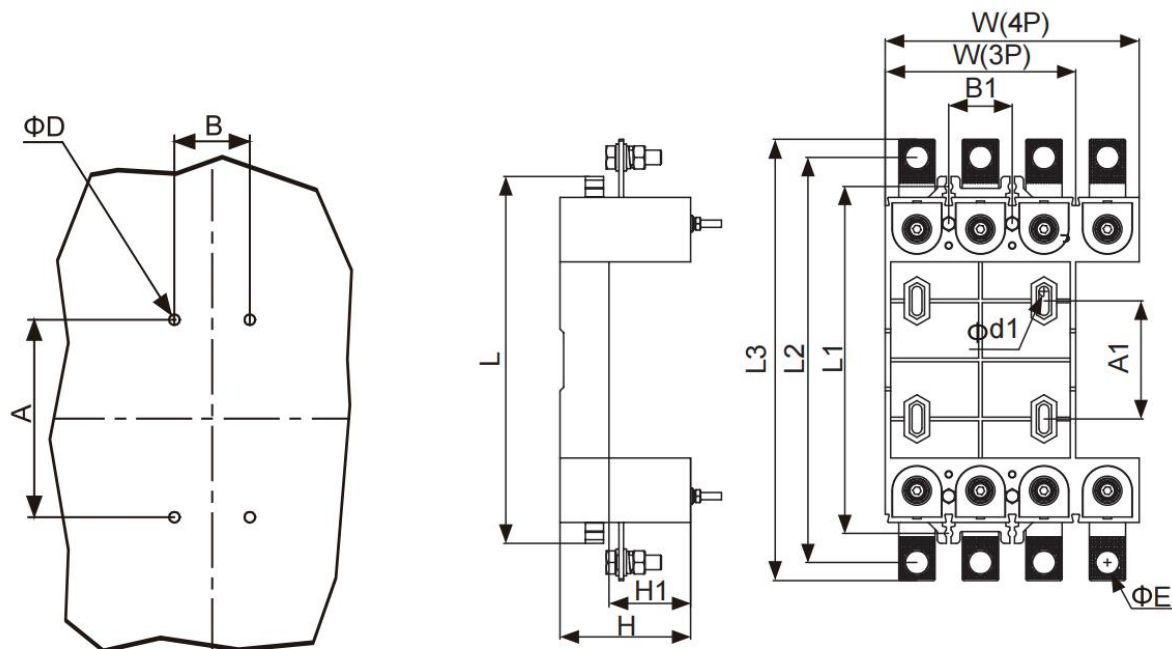
Plug-in Rear Installation Dimension



Model	Poles	Hole size													
		A	A1	A2	A3	A4	A5	A6	H	B	B1	B2	B3	B4	C
HDM3SV-125	3P	130	50.6	114	160.5	50.6	27	88	56	35	75	50	75	25	4.5
	4P	130	50.6	114	160.5	50.6	27	88	56	35	100	75	100	50	4.5
HDM3SV-160	3P	155	54	132	181.5	67	29	103	56	38.5	90	60	90	60	4.5
	4P	155	54	132	181.5	67	29	103	56	38.5	120	90	120	90	4.5
HDM3SV-250	3P	165	54	144	179	54	35	108	50	31.5	105	70	105	70	6
	4P	165	54	144	179	54	35	108	50	31.5	140	105	140	105	6
HDM3SV-630	3P	257	132	230	279	132	49	181	61	38.5	140	87	132	44	7
	4P	257	132	230	279	132	49	181	61	38.5	184	131	176	44	7

HDM3SV Installation

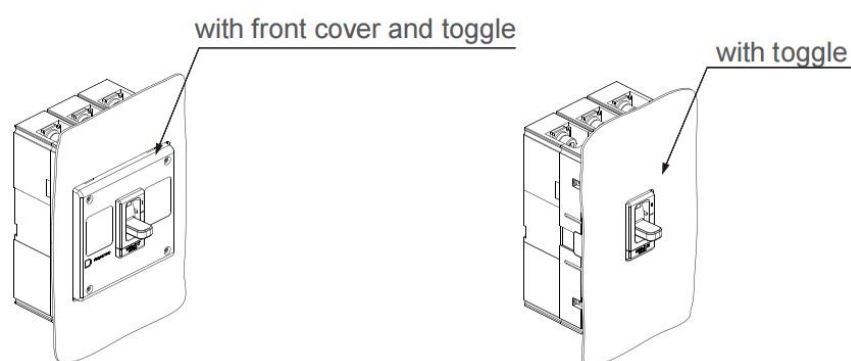
Plug-in Front installation Dimension



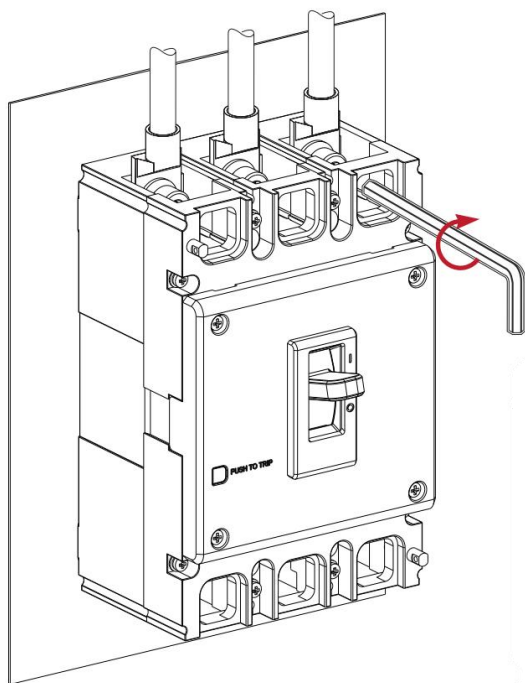
Note: 400A, 630A don't need insulating plate.


Model	Poles	Hole size												
		A	b	Ød	L	L1	L2	L3	A1	B1	Ød1	W	H	H1
HDM3SV-125	3P	96	50	4.5	160	152	182	198	50.5	50	4.5	75	56	28
	4P	96	50	4.5	160	152	182	198	50.5	50	4.5	100	56	28
HDM3SV-160	3P	112	30	4.5	182	172	200	216	61.5	30	4.5	90	56	34.5
	4P	112	30	4.5	182	172	200	216	61.5	30	4.5	120	56	34.5
HDM3SV-250	3P	150	35	4	202	191	223	243	65	35	5.5	105	72	48
	4P	150	35	4	202	191	223	243	65	35	5.5	140	72	48
HDM3SV-630	3P	249	43.5	4.2	309	294	332	358	144	43.5	6.5	132	84.5	48.5
	4P	249	43.5	4.2	309	294	332	358	144	43.5	6.5	176	84.5	48.5

Front Hole Indication

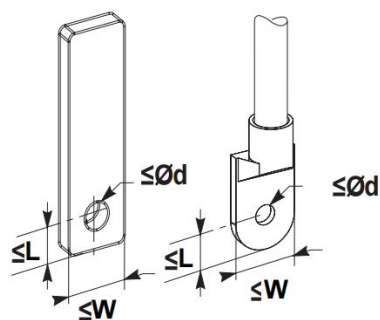


HDM3SV Wiring



Model	Torque (N.m)	(mm)	
125	6-8	M8	
160/250	9.5-10.5	M8	
630	9.5-20.5	M10	

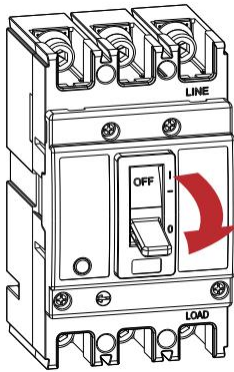
Current Rating(A)	Quantity	Conductor cross section(mm ²)	Copper busbar size:mm
20	1	2.5	-
25	1	4	
30/32	1	6	
35/40/50	1	10	
63	1	16	
70/80	1	25	
100	1	35	
125	1	50	
140/150	1	50	
160	1	70	
180/200/225	1	95	
250	1	120	
315	1	185	
400	1	240	
500	2	150	30x5
600/630	2	185	40x5



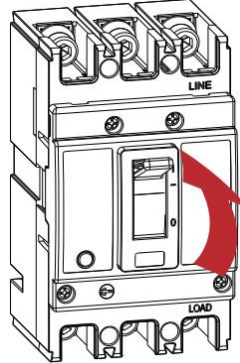
Model	Dimension (mm)		
	L	W	d
125	7.7	15	9
160	7.7	17	9
250	10	22	9
630	13.4	30	11

HDM3SV Operation

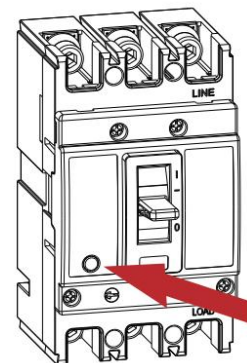
Main Switch Operation



1.CLOSE

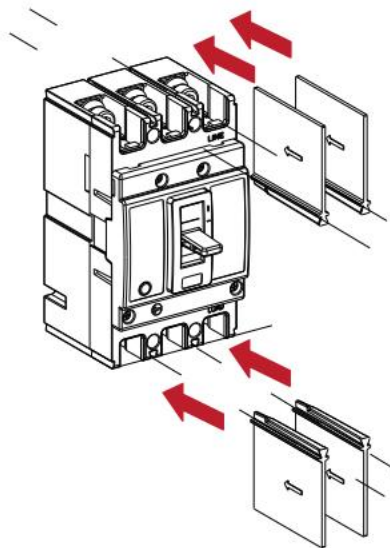


2.ON

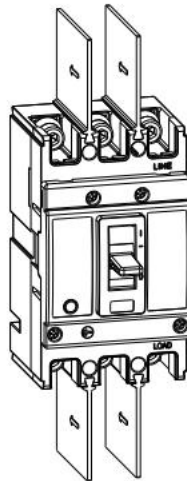


3.TRIP

Interphase Barrier Operation



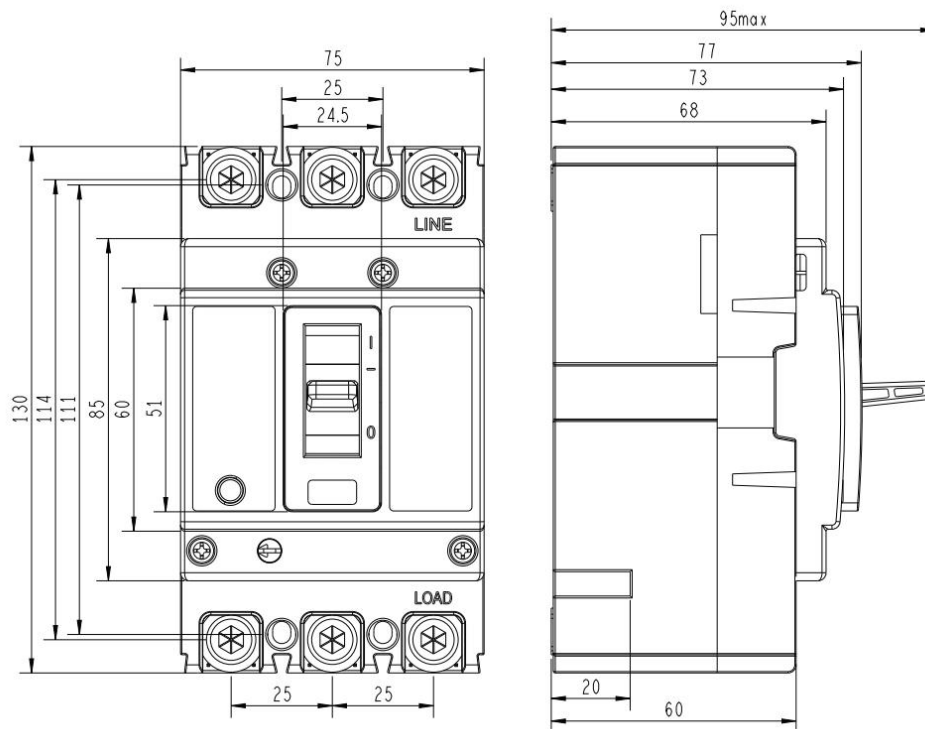
Installation



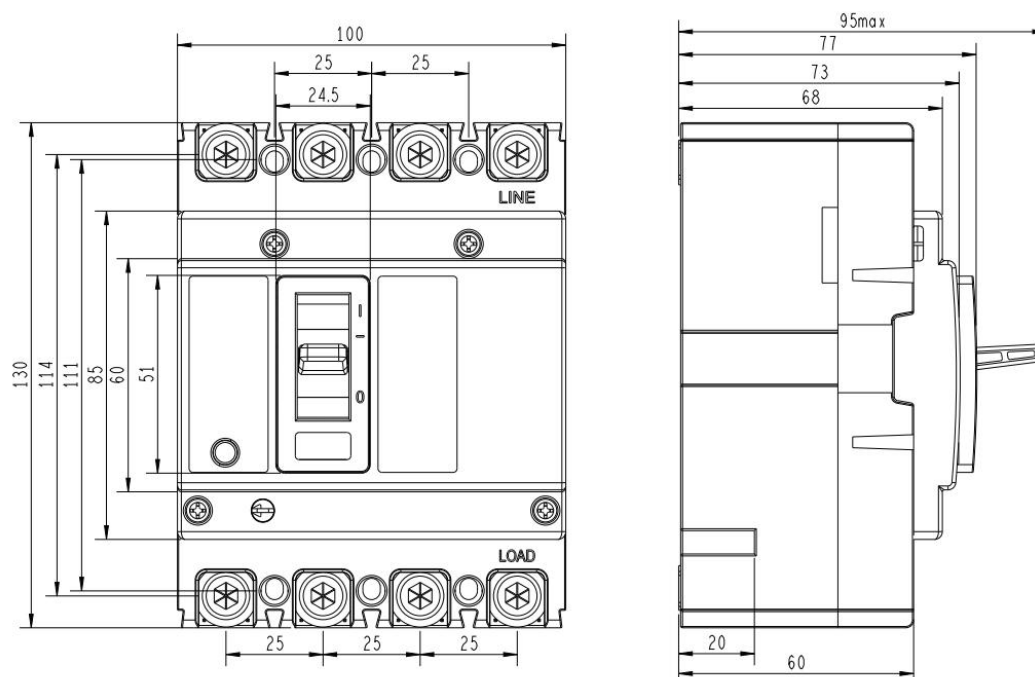
Removal

HDM3SV Dimension

HDM3SV-125 3P

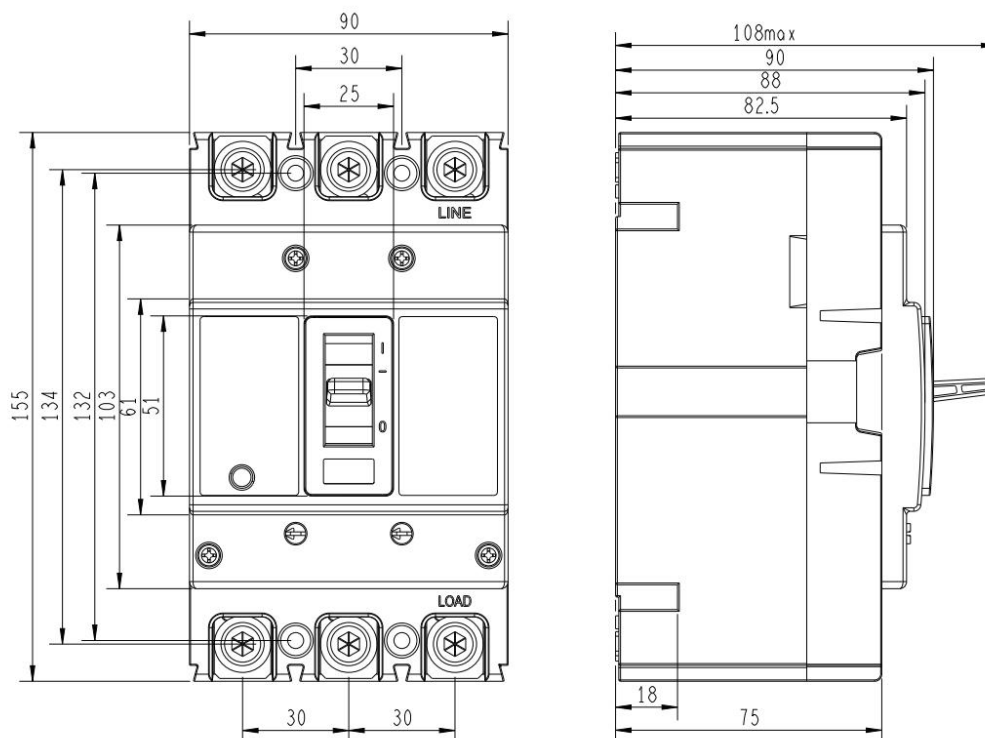


HDM3SV-125 4P

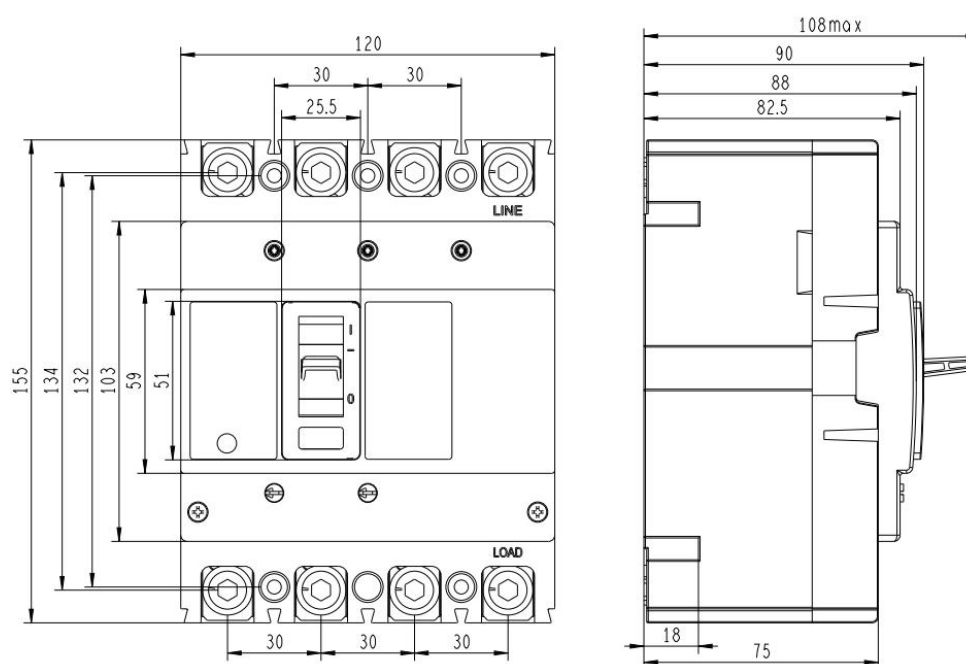


HDM3SV Dimension

HDM3SV-160 3P

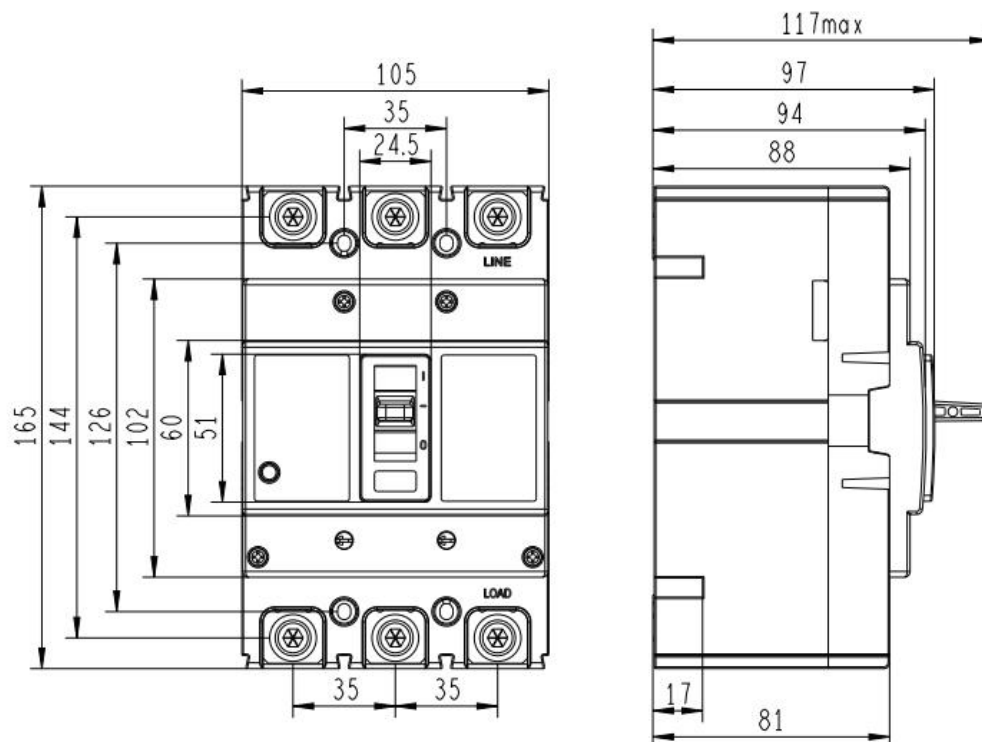


HDM3SV-160 4P

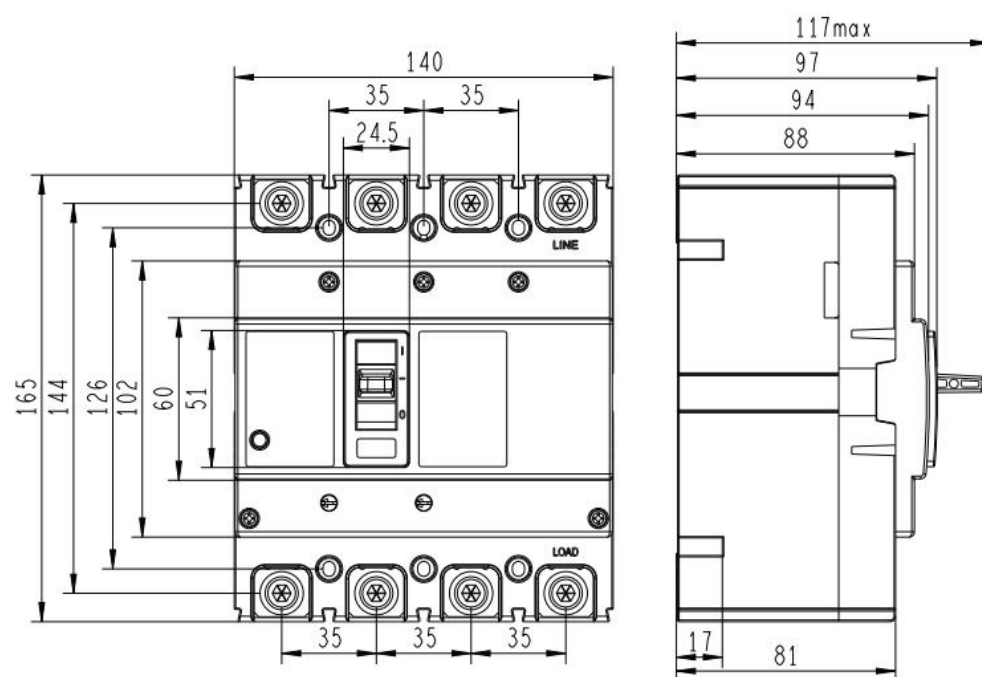


HDM3SV Dimension

HDM3SV-250 3P

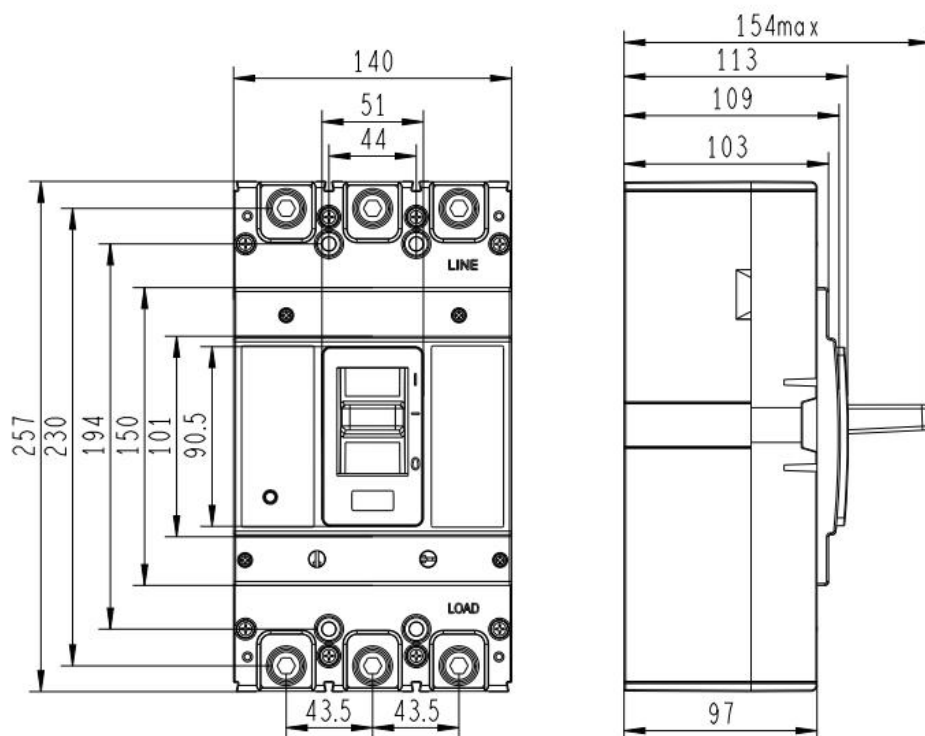


HDM3SV-250 4P

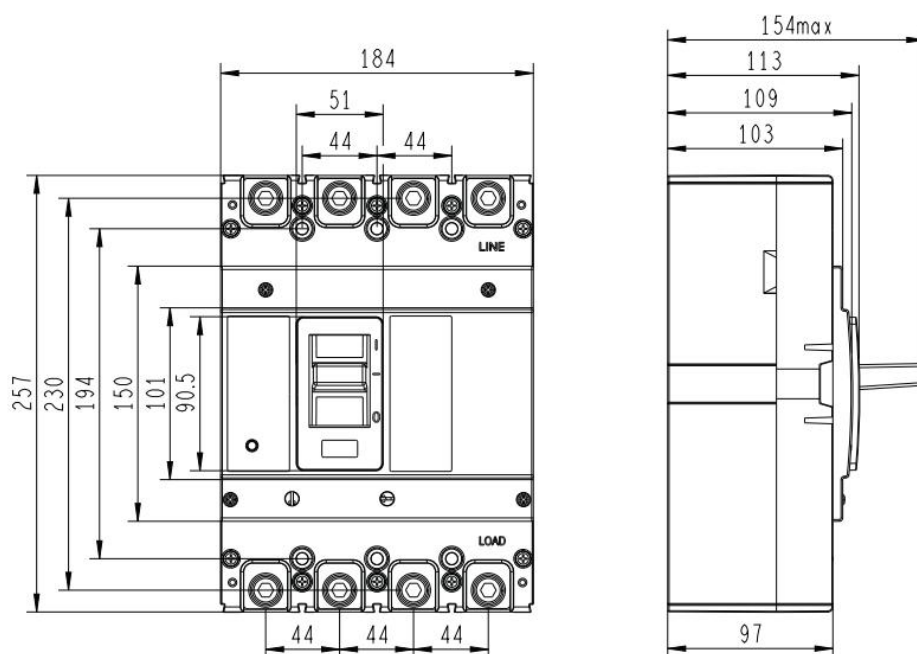


HDM3SV Dimension

HDM3SV-630 3P



HDM3SV-630 4P



Care and Maintenance

It must be maintained and serviced by personnel with professional qualifications.

It must ensure that the product is not electrified under normal operating conditions, the product should be maintained and serviced once a year. The maintenance content is as follows:

Appearance: No dust, no condensation, and no damage to the shell.

Terminal connection: Tighten according to the recommended torque of the product without looseness.

Circuit breaker closing and opening: This operation should be flexible and free of jamming. The product adopts a self-cleaning contact structure, if the contact resistance changes due to oxidation, it can perform multiple opening and closing operations to achieve the peeling of the oxide layer between the dynamic and static silver points, reducing contact resistance.

Unpacking Inspection

After opening the box, the user must check whether the product is intact, whether the exposed metal is rusted, and whether the product has defects due to poor transportation and storage.

If the any of the above phenomena occurs, please do not use this product and contact the supplier in a timely manner to resolve it.

Commitment

On the premise that the user complies with the usage and storage conditions and the product seal is intact, if the product is damaged or cannot be used normally due to manufacturing quality problems within 24 months from the production date, our company is responsible for free repair or replacement. Any products that exceed the warranty period require paid repairs. Any products damaged due to the following circumstances during the warranty period will be repaired for a fee:

- Improper use, maintenance or storage;
- Self modification and inappropriate maintenance;
- Falling or during installation after purchase;
- Force majeure such as earthquakes, fires, lightning strikes, abnormal voltages, and secondary disasters.