

HDM2L Earth-leakage Circuit Breaker



Range Presentation

HDM2L is himel range of 2P ELCB with thermal magnetic trip unit and residual operating current protection, providing line protection, up to 250A

Features

- ◆ 125AF & 250AF , 2P, 2 frame size
- ◆ Rated current 16A to 250A
- ◆ Adjustable residual current protection
- ◆ Adjustable time delay with residual current protection

Selection Code

Series Name	Frame Size	Breaking Capacity	Rated Current	Poles	Leakage current	Leakage current	Time delay
HDM2L	125	S	100	2	3C	C	1
HDM2L	125: 125A (16-125A) 250: 250AF (100-125A)	S	016: 16A 020: 20A 025: 25A 032: 32A 040: 40A 050: 50A 063: 63A 080: 80A 100: 100A 125: 125A 160: 160A 180: 180A 200: 200A 225: 225A 250: 250A	2: 2P	3C: thermal -Magnet with line protection, N pole with switch and protection	A: 30/100/300mA B: 100/300/500mA C: OFF/100/300mA	0: No delay 1: 0.1/0.2/0.3s

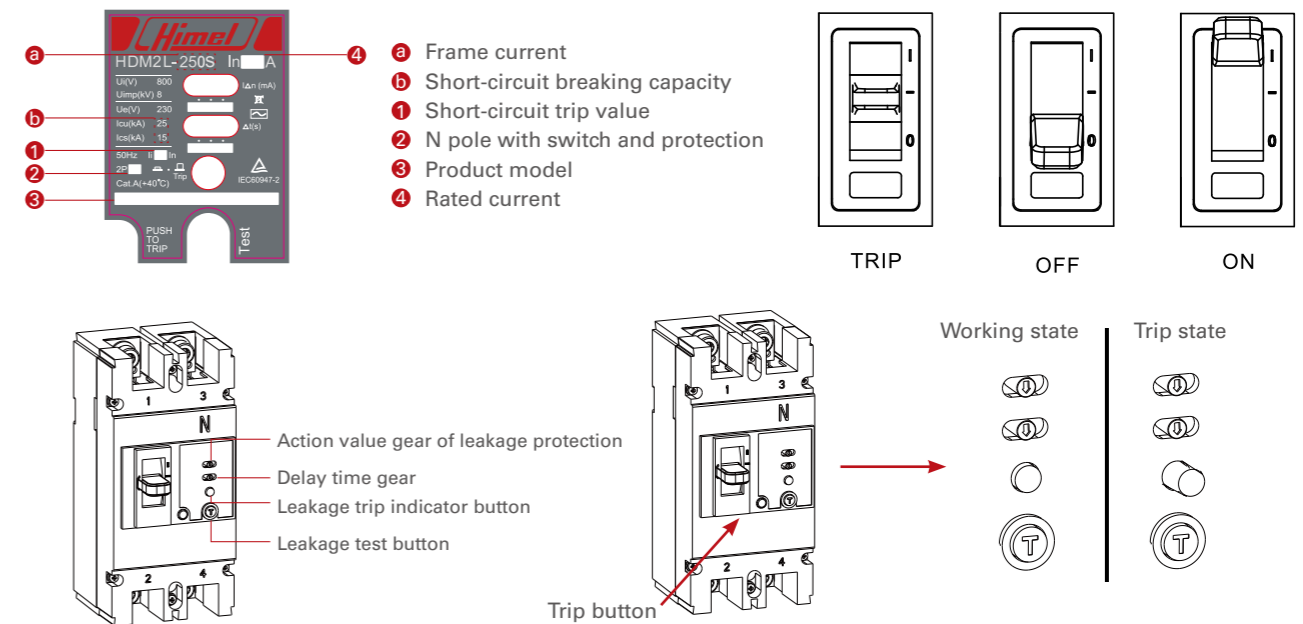
Technical Parameters		
Frame size	HDM3L-125	HDM3L-250
[Ue] rated operational voltage (V)	230	230
[In]Current (A)	16/20/25/32/40/50/63/80/100/125	100/125/140/160/180/200/225/250
[Ui] rated insulation voltage (V)	800	800
[Uimp] rated impulse withstand voltage (Kv)	8	8
Pole	2	2
Breaking Capacity (Ka)	S	S
Icu (230V)	35	35
Ics (230V)	21	21
Rated residual operating current I Δ n (mA)	Non time delay	A:30/100/300mA B:100/300/500mA C: OFF/100/300mA
	Adjustable time delay	B:100/300/500mA
rated residual non-operating current I Δ n (mA)	50% I Δ n	50% I Δ n
Non time delay: tripping time (s)	\leq 0.1	\leq 0.1
Adjustable time delay: 2I Δ n non tripping time (s)	Y1: 0.1/0.2/0.3s	Y1: 0.1/0.2/0.3s
Rated residual short-circuit connection capacity I Δ m(kA)	25% Icu	25% Icu
Mechanical Life	10000	10000
Electrical Life	4000	4000
Utilisation category	Category A	
Trip unit technology	Thermal-magnetic (Fixed) , line protection (10xIn,400A below In=40A)	
Suitability for isolation	■	
IP degree of protection	IP20 conforming to IEC 60529	
Ambient air temperature for operation	upto...40 °C	
Certificates	IEC60947-2 TUV/CB	
Dimension (WxHxD)	62*150*72	75*165*74

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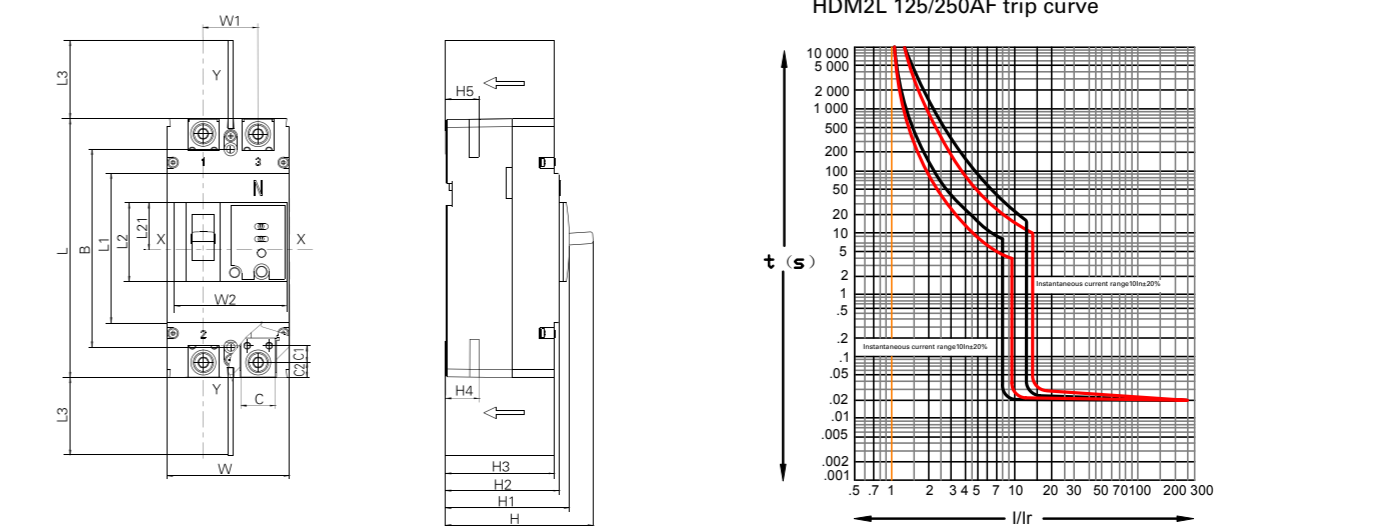


Operation

- Turn the handle to the "Trip" position before the shipment of circuit breaker;
- Turn the operating handle to the "Open" position before re-trip;
- Turn the circuit breaker to the "Closed" position;
- With the trip button pressed, the circuit breaker handle shall be return to the "Trip" position;
- The leakage test button shall be pressed once a month to check the leakage function of the product for failure;
- Select the action value gear and delay time gear of leakage protection properly.



Installation and Wiring Dimensions



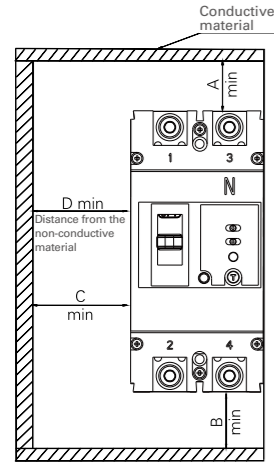
Installation dimensions	Number of poles	Installation dimensions																		
		L	L1	L2	L21	L3	W	W1	W2	H	H1	H2	H3	H4	H5	B	C	C1	C2	Ød
125	2	151	96	50	24.5	50	63	30	59	96	82	73	66	27	27	129	18	7.5	8.5	5
250	2	165	96	50.5	29	63	78	35	72	98	82	73.5	70	26	26.5	126.3	21.5	12.5	9	5

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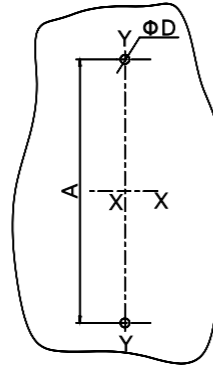
Safety distance of circuit breaker

Unit: mm



Dimensions of holes on the mounting plate

Unit: mm

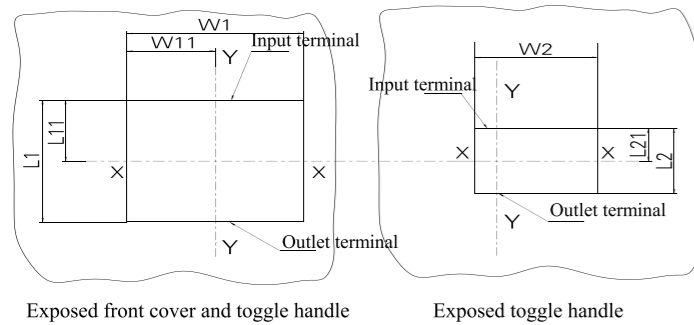


Product model HDM2L	Amin	Bmin	Cmin	Dmin
125	60	30	10	0
250	85	42.5	10	0

Product model HDM2L	Number of poles	A	ΦD
125	2	129	5
250	2	126.3	5

Dimensions of holes on the circuit breaker panel

Unit: mm



Product model HDM2L	Number of poles	Exposed front cover and toggle handle				Exposed toggle handle		
		L1	L11	W11	W1	L2	L21	W2
125	2	99	49.5	17	66	53	26	62
250	2	99	49.5	23	75	53	31	75

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Wiring capacity and recommended value

Rated current (A)	10	16 20	25	32	40 50	63	80	100	125 140	160	180 200 225	250
Recommended cross section of wire (mm ²)	1.5	2.5	4	6	10	16	25	35	50	70	95	120

⚠ Attention: Please note the outline, installation, and dimensions C, C1 and C2 and corresponding wiring screw diameter in the wiring dimensions, and select the appropriate wiring terminals or bus bar according to the corresponding wiring capacity requirements.

Recommended tightening torques of wiring screws

Product Spec. HDM2L-	125	250
Wiring hex screw	M8	M8
Torque (N.m)	7-10	7-10

⚠ Attention: Please tighten the wiring screws according to the recommended torque, because too large or too small tightening torque will result in poor contact or damage to the shell.

Recommended self-tapping and self-drilling mounting screw (cross recessed countersunk self-tapping and self-drilling screw GB/T15856.2)

Product spec. HDM2L-	125	250
Model and specification of recommended self-tapping and self-drilling screw	ST4.2X42	ST4.2X70 (Without self-lock slot)

⚠ Attention: Some models of this product support the use of self-tapping and self-drilling screws for installation. Only general screws and nuts are provided with the product. Please purchase the self-tapping and self-drilling screws of the corresponding specifications.

Maintenance and Repair

- The maintenance and repair must be performed by the qualified professions.
- Cut off the product power;
- Please maintain and service the product once a year under normal operating conditions. The maintenance contents refer to the table below.

Item	Contents
Appearance	No dust, no condensation; clean if necessary; no damage to the shell.
Terminal connection	Tightened according to the torques listed in the recommended wiring screw tightening torque table of 4.5 without looseness.
Closed / open / trip operations via handle	The handle shall be operated flexibly without blockage. With the self-cleaning contact structure used, open and closed operations can be performed many times to peel the oxide layers of dynamic and static sliver points for any change of contact resistance due to oxidation to reduce the contact resistance.

Unpacking Inspection

Check the product for damage, check the exposed metal for rust, and check the product for defects due to poor transport or storage after unpacking. If found, do not use the product and please contact the supplier without hesitation.

Product model HDM2L-	Number of poles	Mounting screws - Qty.	Wiring screws - Qty.	Phase partition - Qty	Extended handle	Circuit breaker	Manual (with certificate)
125	2	M4x40-2	M8x16-4	2	-	1	1
250	2	M4x60-2	M8x20-4	2	-	1	1