

SJKM1L Earth Leakage Circuit Breaker

SJKM1L Earth Leakage Circuit Breaker ELCB for Industrial Safety

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*Scope of Application

The SJKM1L Earth Leakage Circuit Breaker ELCB provides comprehensive electrical protection for 400V/50Hz systems (up to 800A). This SJKM1L ELCB combines overload, short-circuit, and 30mA-30A residual current protection to prevent fire hazards from ground faults. Available in M-type (molded case) and H-type (high-breaking capacity) versions, it features 800V insulation and vibration resistance. The breaker's compact design allows for both vertical and horizontal installation in distribution panels. This SJKM1L ELCB is ideal for motor circuits, industrial plants, and power distribution systems requiring infrequent switching and reliable earth leakage protection.

*Type Designation

SJK M 1 L □ □ □ / □ □ □ □ □
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

①	Manufacturer Code
②	Molded Case Circuit Breaker (MCCB)
③	Design Serial Number
④	With Residual Current Protection
⑤	Frame Size
⑥	Breaking Capacity: L (Standard) M (Medium) H (High)
⑦	Operation: None (Manual) Z (Rotary Handle) D (Motorized)
⑧	Poles: 3(3-Pole),4 (4-Pole)
⑨	Trip Type & Accessory Code (See Table 1)
⑩	Application Code: None (Distribution) 2 (Motor Protection)
⑪	4-Pole Code (A/B/C/D for Neutral), 3-Pole: No Code
⑫	Alarm Module: I (Alarm + Trip) II (Alarm Only)

Notes: Frame Size: 1N25 (125A), 2N50 (250A), 4N00 (400A), 6N30 (630A), 8N00 (800A)

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◆ Trip - opening method and accessory code

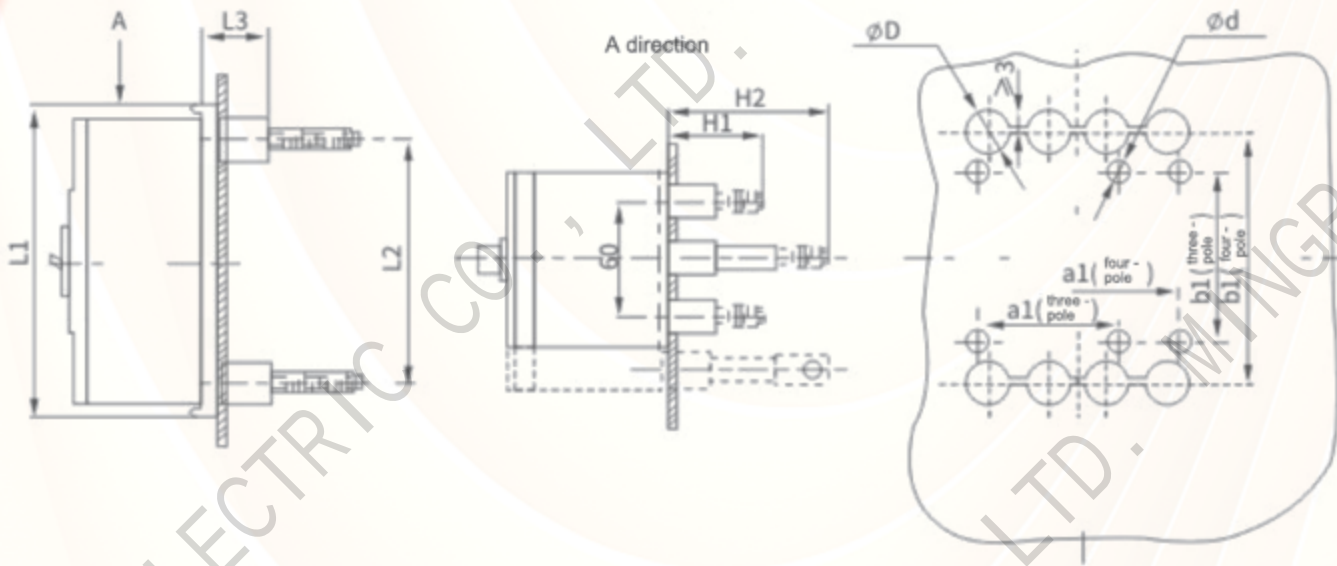
Accessory Name	Trip - opening Modes and Accessory Codes		Accessory Installation and Lead - out Modes	
	Electromagnet release	Compound release	SJKM1L□/3□	SJKM1L□/4□
No accessory	200	300		
Alarm contact	208	308		
Shunt trip	210	310		
Auxiliary contact	220	320		
Auxiliary contact, alarm contact	228	328		
Under - voltage release	230	330		
Shunt trip, auxiliary contact	240	340	without	
Leakage alarm module	1orIII	1orIII		

Main Parameters and Technical Performances

Model		SJKM1LE-125		SJKM1LE-250		SJKM1LE-400		SJKM1LE-630、800	
Maximum Rated Current of Shell Frame Grade A		125		250		400		800	
Rated Current In A		16 20 25 32 40 50 63 80 100 125		125 160 180 200 225 250		250 315 350 400		400 500 630 700 800	
Number of Poles		3	4	3	4	3	4	3	4
Rated Insulation Voltage Ui V		AC800							
Rated Working Voltage Ue V		AC400							
Rated Impulse Withstand Voltage Uimp V		8000							
Arc - Quenching Distance mm		50		50		100		100	
Breaking Capacity Icu Ics		L	M	L	M	L	M	L	M
	AC400V	35	50	35	50	50	65	50	65
	AC400V	22	35	25	35	35	42	35	42
Rated Residual Short - Circuit Making (Breaking) Capacity Icu/4		8.75		12.5		15.75		16.25	
Rated Residual Operating Current IΔn (mA)	Non - delay type	30/50/100 100/300/500		30/50/100 100/300/500		100/300/500		300/500/1000	
	Delay type	100/300/500		100/300/500		100/300/500		300/500/1000	
Rated Residual Operating Current IΔn (mA)		1/2IΔn		1/2IΔn		1/2IΔn		1/2IΔn	
Number of Operating Performances	Energized	1500		1000		1000		1000	
	De - energized	8500		7000		4000		4000	
	Total number of times	10000		8000		5000		500	
Operating Time of Residual Current Protection		2IΔn		2IΔn		5IΔn		10IΔn	
Maximum Breaking Time (S)	Non - delay type	0.2		0.1		0.4		0.04	
	Delay type	0.5/1.15/2.15		0.35/1/2		0.25/0.9/1.9		0.25/0.9/1.9	

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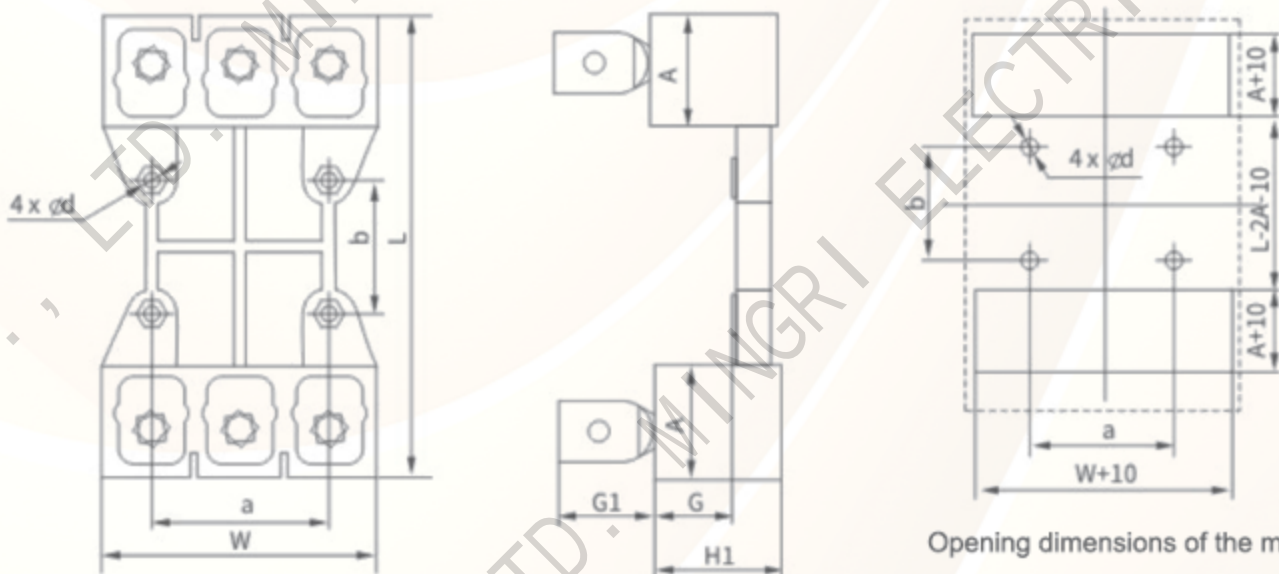
◆ Outline and Installation Dimensions of the Circuit Breaker After Wiring



Circuit breaker rear - panel wiring

Model	Overall Dimensions (mm)					Installation Dimensions (mm)					
						a1		b1		ϕD	ϕd
	L1	L2	L3	H1	H2	3P	4P	3P	4P		
SJKM1LE-125	162	132	35	53	93	72	102	90	132	22	5.5
SJKM1LE-250	173	144	35	55	100	87	122	93	144	24	5.5
SJKM1LE-400	267	224	37	48.5	108.5	124	172	164	224	26	6.5
SJKM1LE-630/800	295	243	37	62	62	178	248	158	243	48	7.0

◆ Outline and Installation Dimensions of Plug - in Type Rear - panel Wiring



Opening dimensions of the mounting plate

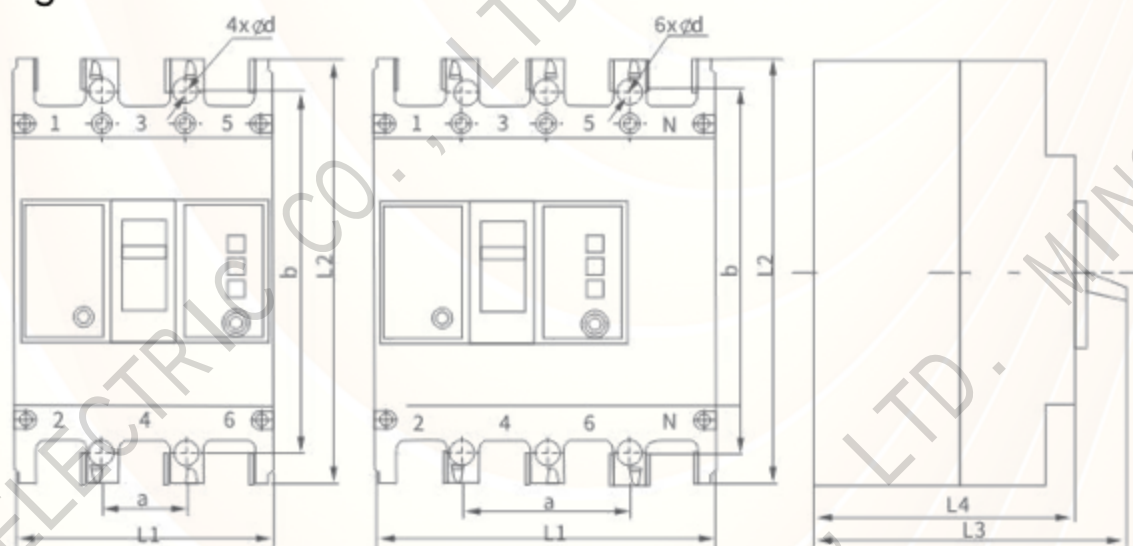
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model	w		L	A	H1	G	G1	a		b	φd
	3P	4P						3P	4P		
SJKM1LE-125	91	125	168	38	50	33	28	60	90	56	6.5
SJKM1LE-250	107	145	186	46	50	33	37	70	105	54	6.5
SJKM1LE-400	149	200	280	55	60	38	46	60	108	129	8.5
SJKM1LE-630/800	210	280	305	62	87	60	22	90	162	146	11

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Outline and Installation Dimensions

◆ Outline and Installation Dimensions of the Circuit Breaker with Front - panel Wiring



Circuit Breaker Front Terminal

Model	pole	Overall Dimensions (mm)				Installation Dimensions (mm)		
		L1	L2	L3	L4	a	b	φd
SJKM1LE-125	2	65	151	110	75		129	2×φ4.5
	3	93	151	110	92	30	129	4×φ4.5
	4	123	151	110	92	60	129	6×φ4.5
SJKM1LE-250	2	75	165	110	90		129	2×φ4.5
	3	107	165	110	90	35	126	4×φ4.5
	4	142	165	110	90	70	126	6×φ4.5
SJKM1LE-400	3	154	257	146	106	44	194	4×φ4.5
	4	198	257	146	106	94	194	6×φ4.5
SJKM1LE-630 SJKM1LE-800	3	210	280	155	116	70	243	4×φ7
	4	280	280	155	116	140	243	6×φ7