

## MOULDED CASE CIRCUIT BREAKER



**RKM1-100L**  
**RKM1-250L**  
**RKM1-400L**  
**RKM1-630L**

## MOULDED CASE CIRCUIT BREAKER



RIKEN ELECTRIC

91 Fascia rd, Silvertondale, Silvertown

Tel: 012 804 2226

[www.riken.co.za](http://www.riken.co.za)

- The moulded case circuit breaker will provide protection for the circuit and equipment in case of overload, short circuit and under voltage condition occurred in the power distribution circuit. Besides, it can also provide protection of overload, short circuit and under voltage for the non-frequent start of motor.

- It is in conformity with IEC 60947-2 standard.

Main Parameter		100L	250L	400L	630L
Rated Operational Voltage	VAC	380/400/415V			
Poles	P	3P			
Rated Current	A	16, 20, 25, 32, 40, 50, 63, 80, 100	100, 125, 160, 180, 200, 225, 250	225, 250, 315, 350, 400	400, 450, 500, 630
Rated Frequency	Hz	50/60			
rated insulation voltage Ui	V	630V			
rated impulse withstand voltage Uimp	kV	8kV			
rated ultimate short-circuit breaking capacity Icu	kA	35kA	35kA	50kA	50kA
rated service short-circuit breaking capacity Ics	kA	22kA	22kA	35kA	35kA
Degree of Protection	IP	IP40 for front cover			
Electrical Endurance Cycle	Times	500			
Mechanical Endurance Cycle	Times	2500			
Pollution degree	/	3			
Utilization category	/	A			
Operating Temperature	°C	-5... +40			

## PRIDUCT CODE EXAMPLE

BASE NO.	POLES	AMPERAGE	CURVE
----------	-------	----------	-------

RKM1-100L	3P	80A	/
RKM1-250L	3P	200	/
RKM1-400L	3P	315	/
RKM1-630L	3P	630	/

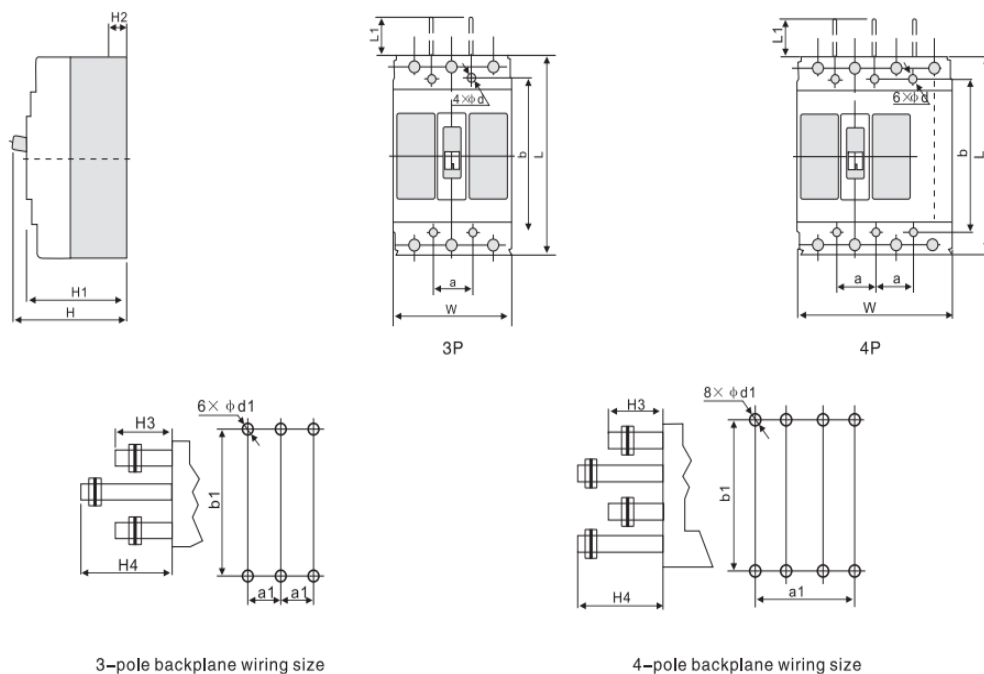
EXAMPLE

RKM1-100L-80  
RKM1-250L-200  
RKM1-400L-315  
RKM1-630L-630

## MOULDED CASE CIRCUIT BREAKER

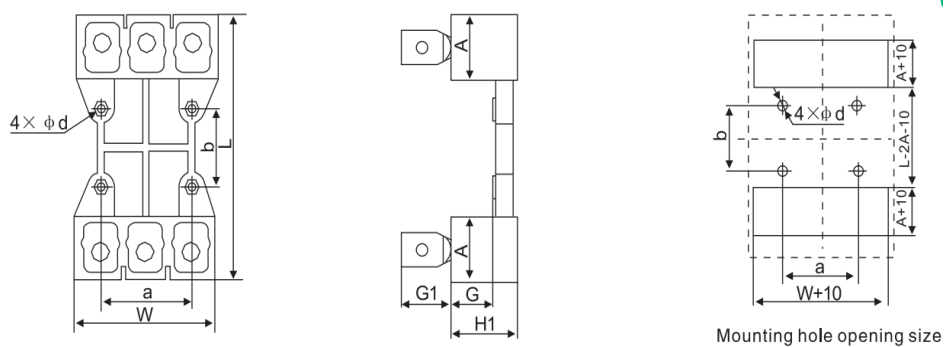
## DIMENSIONS AND MOUNTING

Fix type - Front plane's wiring and installation dimensions



Model	Pole	Dimensions mm						Installation size			Backplane wiring size				
		L	L1	W	H	H1	H2	a	b	Φd	a1	b1	d1	H3	H4
RKM1-100L	3	150	51	92	87	68	24	30	129	4.5	30	132	22	65	100
RKM1-250L	3	164	64	107	124.5	86	38	35	126	5.5	35	144	24	70	110
RKM1-400L	3	257	105	150	153	106	43	44	194	7	48	224	32	48.5	108.5
RKM1-630L	3	270	105	182	157	111	42	58	200	7	58	234	40	70	120

### Plug-in type - Back plane's wiring and installation dimensions

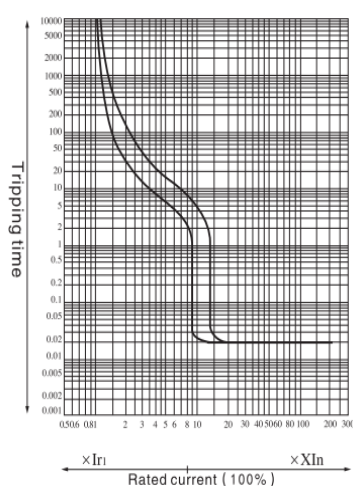
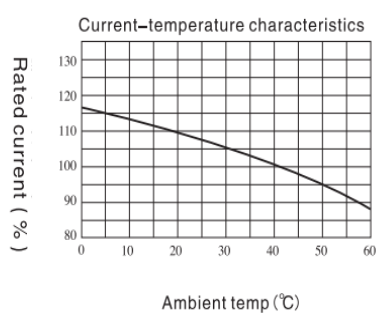
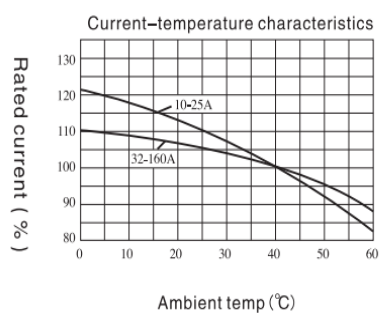


Unit (mm)

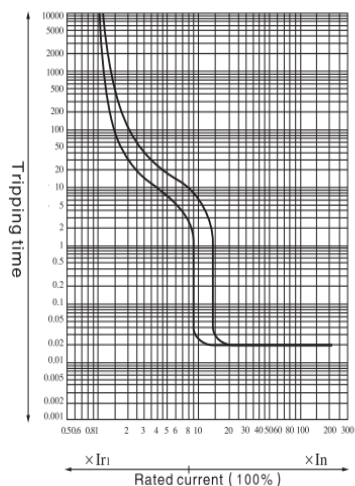
Model	W	L	A	H1	G	G1	a	b	d
<b>RKM1-100L</b>	92	170	38	50	33	28	60	56	6.5
<b>RKM1-250L</b>	107	186	46	50	33	40	70	56	6.5
<b>RKM1-400L</b>	152	280	58	60	40	46.5	60	130	8.5
<b>RKM1-630L</b>	182	300	65	60	40	53	100	123	8.5

### MOULDED CASE CIRCUIT BREAKER

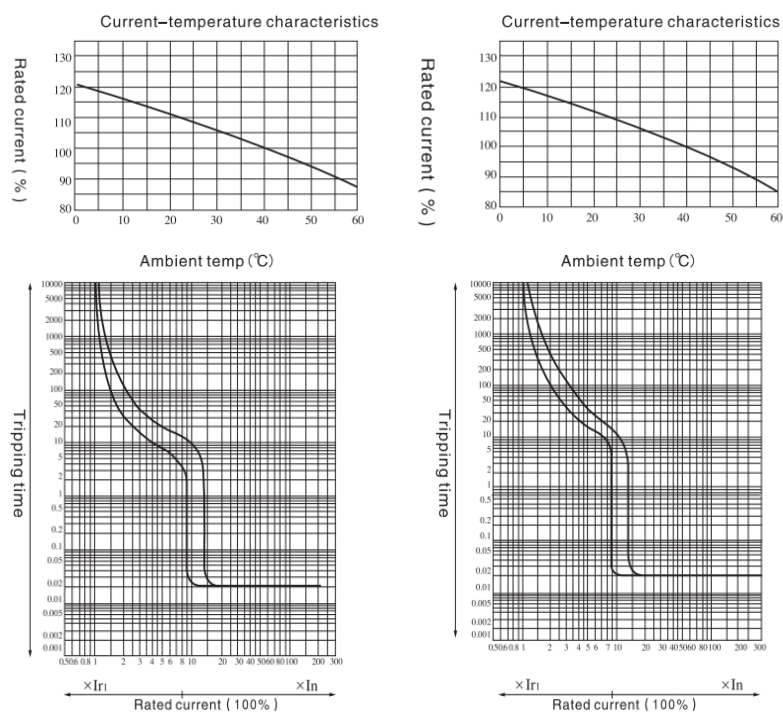
#### TRIPPING CURVE



RKM1-100L Time / current characteristic curve



RKM1-250L Time / current characteristic curve



RKM1-400L Time / current characteristic curve

RKM1-630L Time / current characteristic curve

## PROTECTION CHARACTERISTICS

### Tripping performance for power distribution

Rated operating current (A)	Thermal release (reference temperature 40°C)		Operating current of electromagnetic release (A)	Remark
	1.03In(cold state) not tripping (h)	1.3In(thermal state) not tripping (h)		
10 < In ≤ 63	≥ 1	< 1	10In ± 20%	Distribution protection type: 1600A is 7In ± 20%
63 < In ≤ 100	≥ 2	< 2	10In ± 20%	
100 < In ≤ 1600	≥ 2	< 2	5In ± 20% 7In ± 20% 10In ± 20%	

### Tripping performance for motor protection

Rated operating current (A)	Thermal release (reference temperature 40°C)				Operating current of electromagnetic release (A)
	1.0In(cold state) not tripping (h)	1.2In(thermal state) tripping (h)	1.5In(thermal state) tripping (h)	7.2In(cold state) not tripping (h)	
10 ≤ In ≤ 630	≥ 2	≤ 2	8min	6S < Tp ≤ 20s	12In ± 20%