Overview

The SJKM8L 160~630 (100A~630A) leakage protection circuit breaker product has a built-in leakage protection device. The leakage protection and distribution protection products have the same size, but are compact in size, which can save 30% of installation space.

Application

The SJKM8L series plastic case residual current circuit breaker is suitable for distribution networks with AC 50/60Hz, rated working voltage 440V, and rated current 100A to 630A. It is used to distribute electrical energy and protect lines, power sources, and electrical equipment from overload and short circuit hazards, improving the reliability and continuity of power supply.

Ensure 100% power supply reliability and continuity

The setting current range of the release device is 100A to 630A The sensitivity and delay time of the entire series of products are adjustable The breaking capacity includes 25KA, 36KA, and 50KA

Provides triple protection

Overload protection/short circuit protection/leakage protection

It has two options: leakage tripping and alarm non tripping

160~630A adopts a built-in leakage module, whose volume is exactly the same as that of the distribution circuit breaker

● Power supply

○ Reverse incoming line

300V AC and below can achieve reverse input

○ Leakage module power supply

No external power supply required, powered from three phases, even if one phase is missing, it can still work

● Insulation performance test

Before conducting insulation performance testing, please place the insulation performance test switch (4) in a horizontal position to protect electronic components. At this position, the switch automatically trips and makes it impossible for the switch to close

● Release characteristics

○ Fault indication

Leakage mechanical indication can locally indicate leakage faults, leakage alarm switch ALV can remotely indicate leakage faults ○ Reset

After troubleshooting the leakage fault, the switch needs to be turned to the disconnected position to reset. After resetting, the leakage mechanical indicator and ALV will automatically return to their normal positions

SJKM8L series plastic case residual current circuit breaker

Functions and Features

SJKM8L系列塑壳漏电断路器				SJKM8L-160		SJKM8L-250		SJKM8L-400		SJKM8L-630	
极数				3P3t/4P3t		3P3t/4P3t		3P3t/4P3t		3P3t/4P3t	
电气性能符合IEC60947-2和EN60947-2标准											
断路器类型				N	H	N	H	N	H	N	H
额定电流(A)	In	40℃		160		250		400		630	
额定绝缘电压(V)		Ui		440		440		440		440	
额定冲击耐受电压(kV)		Uimp		6		6		6		6	
额定工作电压(V)	Ue	AC50/60Hz		440		440		440		440	
极限分断能力(kArms) Icu	AC50/60Hz	220/230V		50	85	50	85	85	100	85	100
		380/416V		25	36	25	36	36	50	36	50
		440V		20	25	20	25	36	50	36	50
运行分断能力(kArms) Ics	AC50/60Hz	%Icu		50%		50%		50%		50%	
隔离功能				■		■		■		■	
应用类别				AC		AC		AC		AC	
最大期望维护值(C-O周期)	机械			10000		10000		6000		6000	
	电气	440V	In	5000		5000		1000		1000	
过负荷保护											
脱扣器电流整定值(A)				100/125/160		175/200/225/250		250/320/350/400		400/500/630	
中性线保护(A)				4P3t		4P3t		4P3t		4P3t	
短路电流保护											
脱扣电流值(A)	Im(短路保护)			1000/1250/1600		1750/2000/2250/2500		2500/3200/3500/4000		4000/5000/6300	
	Isd			-		-		-		-	
	Ii			Ii-In x…10固定		Ii-In x…10固定		Ii-In x…10固定		Ii-In x…10固定	
漏电保护(脱扣)											
灵敏度	I△n(A)			可调0.1-0.3-0.5-1		可调0.1-0.3-0.5-1		可调0.1-0.3-0.5-1		可调0.1-0.3-0.5-1	
延时时间	延时设定(ms)			可调0/200/500/1000		可调0/200/500/1000		可调0/200/500/1000		可调0/200/500/1000	
	总分断时间(ms)			<150<400<1000<2000							
报警				■		■		■		■	
漏电保护(只报警不脱扣)											
灵敏度	I△n(A)			可调0.1-0.3-0.5-1		可调0.1-0.3-0.5-1		可调0.1-0.2-0.5-1		可调0.1-0.2-0.5-1	
延时时间	延时设定(ms)			可调0/200/500/1000							
安装与联接											
固定/板前联接				■		■		■		■	
监测与指示辅助装置											
辅助开关(FZ/BJ)				■		■		■		■	
控制辅助装置											
辅助脱扣元件(FL/QY)				■		■		■		■	
安装和联接附件											
锁定装置				■		■		■		■	
终端扩展器				■		■		■		■	
相间隔板				■		■		■		■	
端子罩盖				■		■		■		■	
尺寸和重量											
尺寸 W x H x D (mm)		3P/4P		105×165×68/140×165×68				140×257×103/185×257×103			
重量(kg)		3P/4P		1.8/2.35				6.3/8.2		6.8/8.85	

Function of SJKM8-100~630 motor protection circuit breaker:

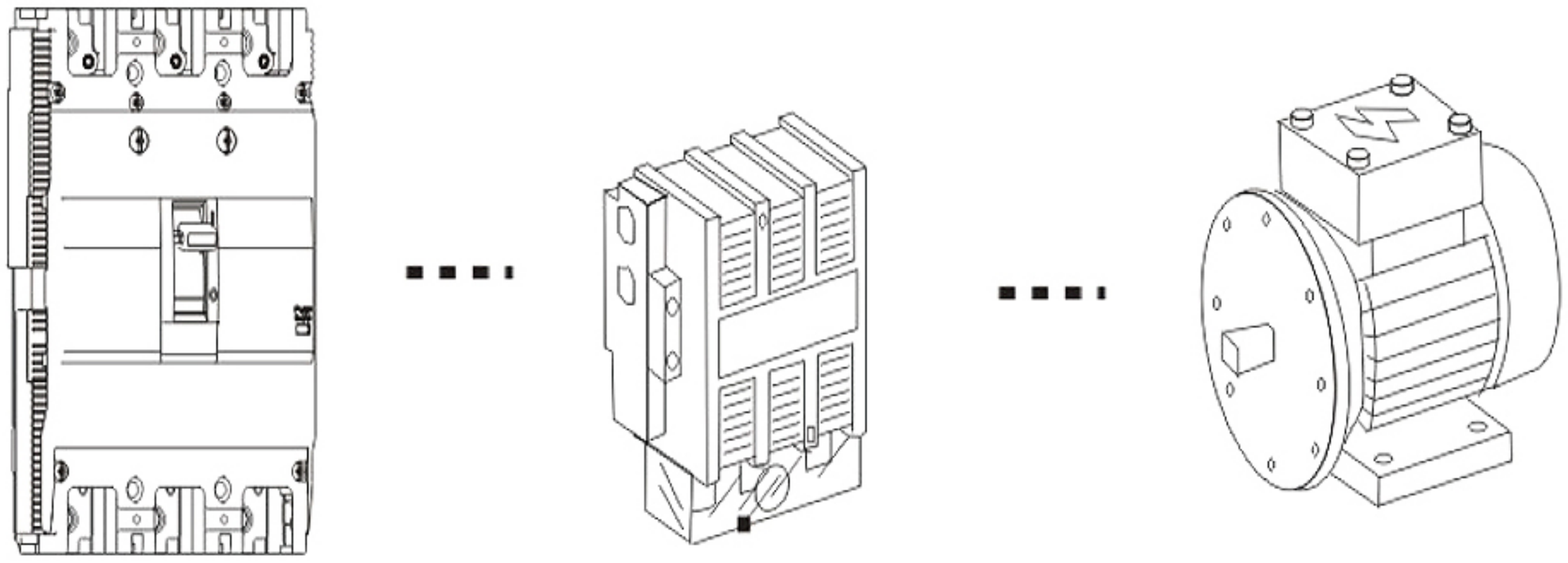
● Provide short-circuit protection

The isolation function complies with the IEC 947-2 standard Overload protection for electric motors should include the motor and its control equipment: Circuit breaker

● Independent TE thermal relay

The control equipment may be a direct starter (reversible or irreversible) or a star delta starter, and the combination method should comply with the IEC 947-4 standard

The thermal relay used in conjunction with the 100A circuit breaker must comply with GB 14048.4.10A level



Motor protection circuit breaker

Functions and Features

SJKM8系列断路器				SJKM8-100	SJKM8-160/250	SJKM8-160/250	SJKM8-400		SJKM8-630	
极数				3	3	3	3		3	
电气性能符合IEC 60947-2和EN60947-2标准										
额定电流(A)	In	65℃		100	160	250	400		630	
额定绝缘电压(V)	Ui			690	690	690	690		690	
额定冲击耐受电压(kV)	Uimp			6	6	6	6		6	
额定工作电压(V) Ue	AC50/60Hz			500	500	500	440		440	
断路器类型				H	H	H	N	H	N	H
极限分断能力(kA rms) Icu	AC50/60Hz	220/240V		65	85	85	85	100	85	100
		380/400V		35	36	36	36	50	36	50
		415V		30	36	36	36	50	36	50
		440V		20	25	25	36	50	36	50
		500V		10	10	10	20	36	20	36
使用分断能力(kA rms) Ics	AC50/60Hz	220/240V		33	43	43	40	50	40	50
		380/400V		17	18	18	18	25	18	25
		415V		7	18	18	18	25	18	25
		440V		5	13	13	18	25	18	25
		500V		3	5	5	10	10	10	10
隔离功能				■	■	■	■		■	
应用类别				A	A	A	A		A	
最大期望维护值(C-O周期)	机械			8500	10000	10000	6000		6000	
	电气	440V	In	4000	5000	5000	1000		1000	
保护										
过负荷和短路保护		额定值(A)		—	—	—	—		—	
短路保护(需加独立热继电器)		额定值(A)		15…100	100,125,160,175,200,225,250		320		500	
安装和联接										
固定/板前联接				■	■	■	■		■	
固定/板后联接				—	■	■	■		■	
显示辅助装置										
辅助开关				■	■	■	■		■	
电子脱扣器				—	—	—	—		—	
控制辅助装置										
旋转手柄(直接，延伸)				■	■	■	■		■	
闭锁系统				■	■	■	■		■	
安装和联接附件										
锁定装置				■	■	■	■		■	
终端扩展器				■	■	■	■		■	
相间隔板				■	■	■	■		■	
端子罩盖				■	■	■	■		■	
尺寸和重量										
尺寸(mm) W×H×D				75×130×60	105x165x60	105x165x68	140x257x103			
重量(Kg)				0.78	1.3	1.6	6.05			

The influence of temperature on the release device

SJKM8 -100 ~630

额定电流 (A)	环境温度 40°C	45°C	50°C	55°C	60°C	65°C	70°C
15	15.7	15.3	15	14.7	14.6	14.2	13.8
20	20.4	20.2	20	19.9	19.2	18.9	16.5
25	25.7	25.3	25	24.7	24.5	24.3	24.0
30	31.4	30.7	30	29.4	29.1	28.5	28.0
40	40.9	40.4	40	39.5	38.0	37.6	37.1
50	52.1	51.0	50	49.3	48.1	47.3	46.6
60	61.8	60.9	60	59.0	57.5	56.6	55.7
75	76.8	75.9	75	73.5	70.4	69.8	69.1
80	82.2	81.1	80	78.5	77.3	75.7	76.1
100 (1)	103	101	100	99.2	94.2	93.5	92.7
100 (2)	106.8	103.5	100	96.4	92.7	88.8	84.7
125	134.9	130	125	119.8	114.3	108.5	102.5
160	170.9	165.5	160	154.3	148.3	142.1	135.6
175	175	168	161	154	146	138	126
200	215	207.6	200	192	183.8	175.1	165.9
225	243.5	234.5	225	215.1	204.8	193.9	182.3
250 (3)	270.6	260.5	250	239	227.5	215.4	202.6
250 (4)	268	260	250	240	228	218	208
320	342	333	320	307	291	278	266
350	375	364	350	336	319	305	291
400 (5)	428	416	400	384	364	348	332
400 (6)	400	390.5	381	371.4	361.9	349.2	339.7
500	500	488.1	476.2	464.3	452.4	436.5	424.6
630	630	615	600	585	570	550	535

SJKM8 L-160 ~630

额定电流 (A)	环境温度 40°C	45°C	50°C	55°C	60°C	65°C	70°C
100	100	95	91	86	80	74	68
125	125	120	114	108	102	95	88
160	160	154	148	141	135	127	120
175	175	168	161	154	146	138	126
200	200	192	183	175	165	155	144
225	225	218	211	203	196	180	162
250 (3)	250	240	230	220	209	198	180
250 (4)	268	260	250	240	228	218	208
320	342	333	320	307	291	278	266
350	375	364	350	336	319	305	291
400 (5)	428	416	400	384	364	348	332
400 (6)	360	351	343	334	326	314	306
500	450	439	429	418	407	393	382
630	567	554	540	527	513	495	482

SJK9M-100 ~630 插入式（相对于固定式的降容系数）

额定电流 (A)	环境温度 40°C	45°C	50°C	55°C	60°C	65°C	70°C
100~160				0.9			
200~250 (3)				0.85			
250 (4)~400 (5)	1.00	0.98	0.95	0.95	0.95	0.95	0.94
400 (6)~630	0.90	0.89	0.89	0.89	0.89	0.89	0.89

(1)用于 FNT9M-100。

(2)用于FNT9M(E)-160。

(3)用于FNT9M(E)-250。

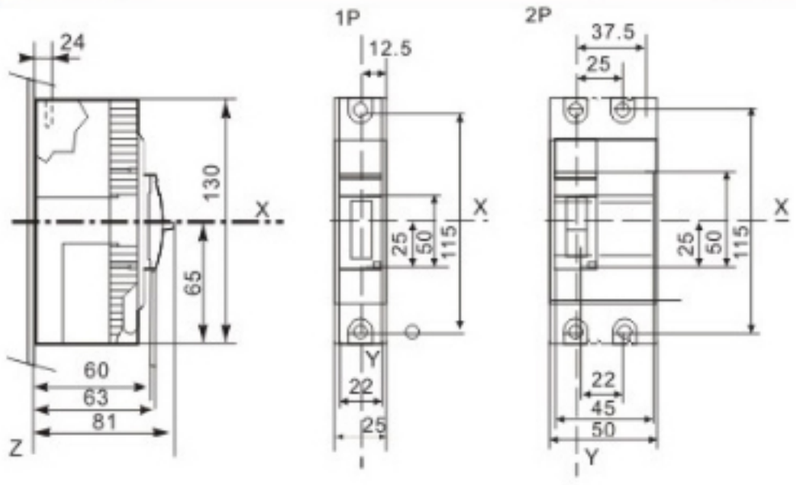
(4)用于FNT9M-400。

(5)用于FNT9M-400。

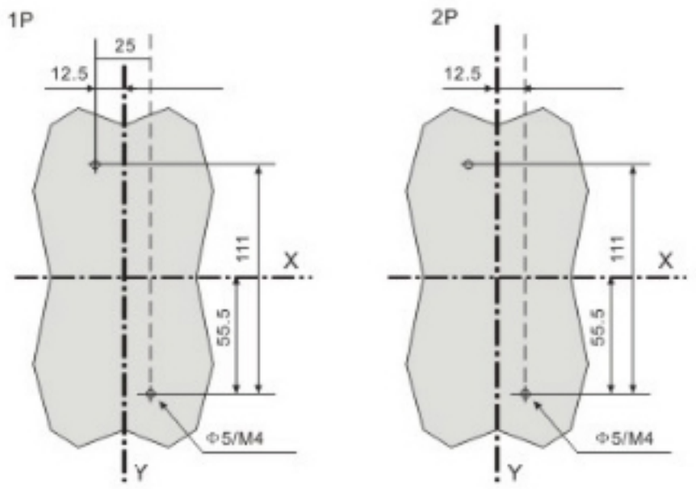
(6)用于FNT9M-630。

SJKM8-100 1P 2P 固定式配电和电动机保护

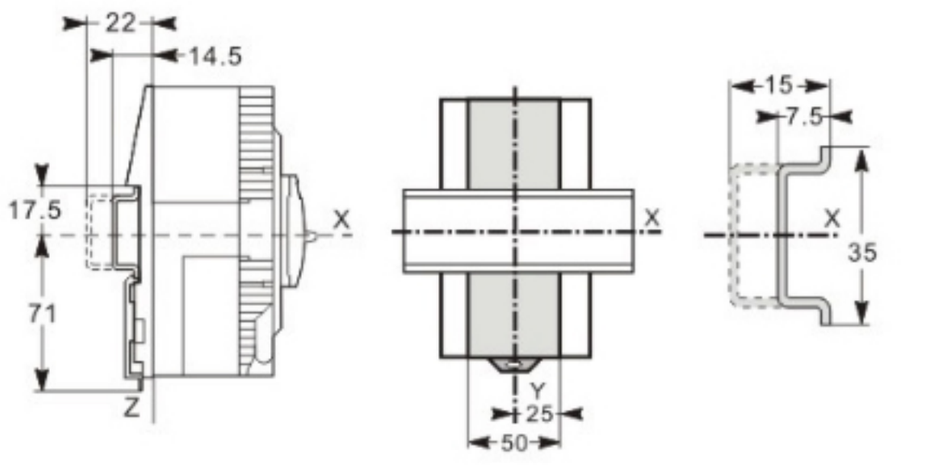
外形尺寸



底板安装

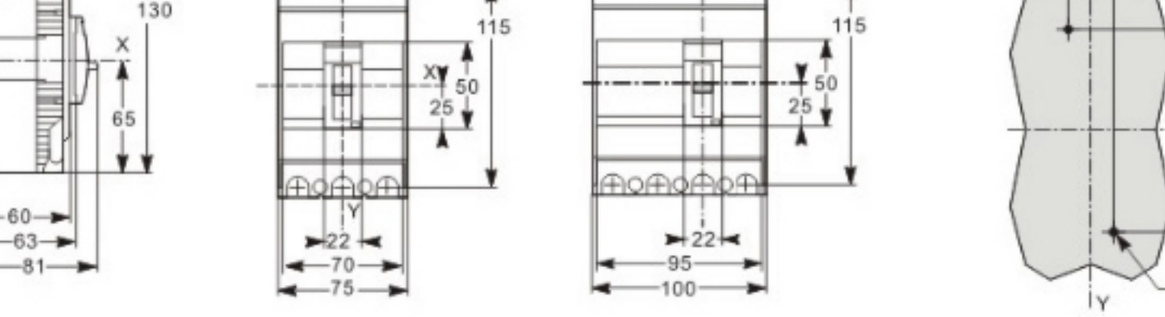


DIN导轨安装

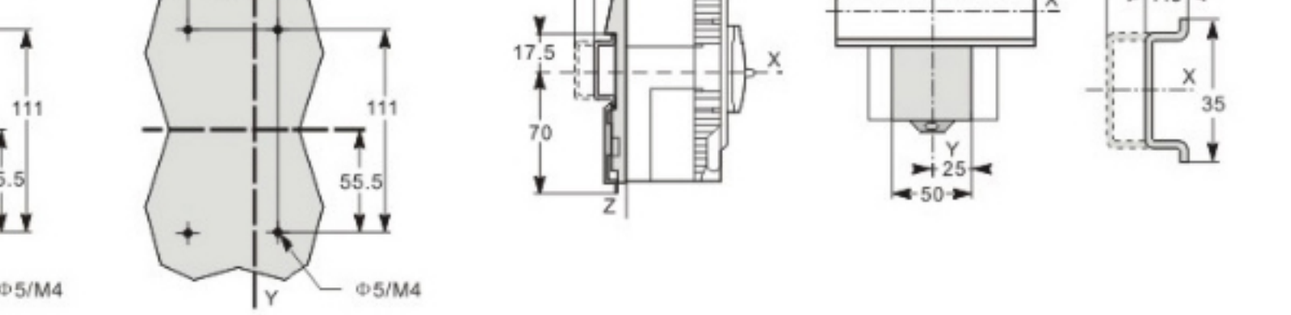


SJKM8-100 1P 2P 固定式配电和电动机保护

屏前开孔(小)



屏前开孔(大)



SJKM8-100固定式配电和电动机保护

外形尺寸

底板安装

DIN导轨安装

SJKM8-100固定式配电和电动机保护

屏前开孔(小)

屏前开孔(大)