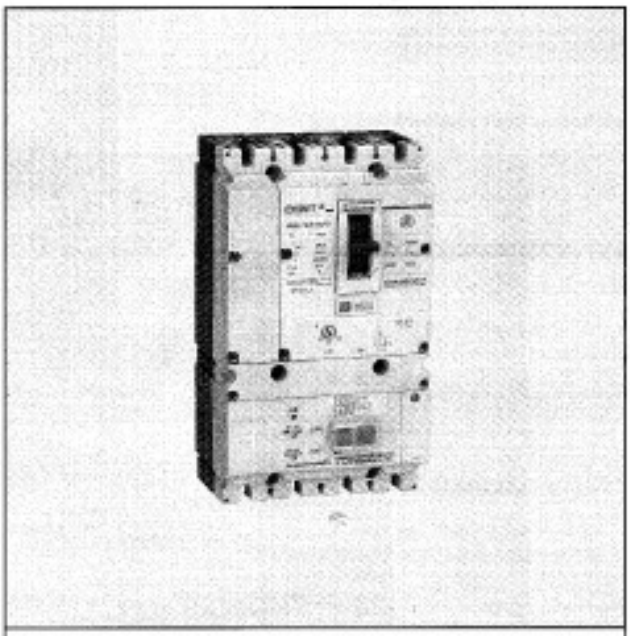


NM8L and NM8SL Series Residual Current Operated Circuit Breaker

1. Scope of application

NM8L or NM8SL residual current operated circuit breaker is made of NM8 or NM8S combined with residual current protection module, NM8Land NM8SL series residual current operated circuit breakers ,mainly apply to the circuits with alternating current of 50Hz, rated voltage of 400V and rated current up to 630A, and their main function is to offer indirect contact protection for personal electric shock and prevent fire caused by ground fault current.it can also protect circuits from overload, short circuit and under-voltage, and can be used for non-frequent switch of circuits. They are in accordance with the standards of IEC 60947-2.

2. Normal service and installation conditions

2.1 The altitude of the site of installation does not exceed 2000 m.
2.2 Foreign field of the installation site for residual current operated circuit breaker should not exceed five times of earth magnetic field in any direction.
2.3 Operating value of Electronic release will not be affected by temperature variation; however, the maximum permissible current of residual current operated circuit breaker is related to ambient temperature.

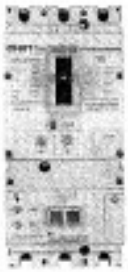
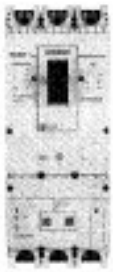
NM8SL-100、250		40℃	45℃	50℃	55℃	60℃	65℃	70℃
Fixed value	In：250A	250	250	250	240	230	220	210
	Maximum value of Ir	250	250	250	220	210	195	175
NM8SL-630		40℃	45℃	50℃	55℃	60℃	65℃	70℃
Fixed value	In：630A	630	615	600	585	570	550	535
	Maximum value of Ir	630	584	558	526	502	468	444

2.4 Humidity: Relative humidity of atmosphere doesn't exceed 50% at ambient temperature of +40℃. Higher relative humidity may be permitted at lower temperature, and average maximum relative humidity for the wettest month can reach 90% ,at the same time, the average lowest temperature is +25℃, and condensation produced on the surface of products due to temperature change shall be taken into consideration.
2.5Pollution degree: pollution degree of residual current operated circuit breaker is Grade Ⅲ.

B

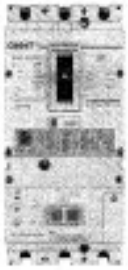
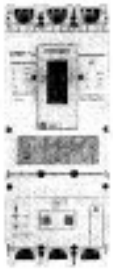
3. Main technical parameters and configuration

Table 1

Type		NM8L-100S	NM8L-250S	NM8L-630S
Appearance				
Number of poles		3P/4P	3P/4P	3P/4P
Rated current (A)	In	16,20,25,32,40,50,63,80,100	100,125,160,180,200,225,250	250,315,350,400,500
Rated insulation voltage (V)	Ui	750	750	750
Rated impulse withstand voltage (kV)	Uimp	8	8	8
Rated operational voltage (V)	Ue	400	400	400
Rated ultimate short-circuit breaking capacity (kA)	Icu AC50Hz 400V	50	50	70
Rated service short-circuit breaking capacity (kA)	Ics AC50Hz 400V	50	50	70
Rated residual making and breaking capacity I△m is 25%Icu.		12.5	12.5	17.5
Utilization category		A	A	A
Isolation function		●	●	●
Life expectancy	With load/No load/Total	3000/17000/20000	2000/14000/16000	2000/8000/10000
Protection				
Types of release		Thermo-magnetic type	Thermo-magnetic type	Thermo-magnetic type
Overload protection		●	●	●
Short circuit protection		●	●	●
Earth-fault protection		●	●	●
Residual operating current (the fourth gear being adjustable)	I△n(A)	X1：0.05/0.1/0.2/0.5； X2：0.1/0.3/0.5/1	X1：0.05/0.1/0.2/0.5； X2：0.1/0.3/0.5/1	X2：0.1/0.3/0.5/1
Break-time (the fourth gear being adjustable)	Total break-time (s)	t1：0.1/0.3/0.5/1	t1：0.1/0.3/0.5/1	t1：0.1/0.3/0.5/1
Installation and connection				
Fixed/front connection plate(internal)		●	●	●
Fixed/rear connection plate (internal)		■	■	■
Indicating auxiliary devices (auxiliary switch)		■	■	■
Control auxiliary devices				
Motor operating mechanism		■	■	■
Standard rotary operating handles		■	■	■
Extended rotary operating handles		■	■	■
Installation and connection accessories			■	
Cage clamp terminals		■	■	■
DIN rail adapter		■	■	—
Terminal shield		■	■	■
Inter-phase isolation board		●	●	●
Dimension L x H x D(mm)	3P/4P	90×205×103/120×205×103	105×232×126/140×232×126	140×355×168/185×355×168
3P/4P Weight (Kg)		2/3.5	2.6/4	9.5/11.5

* with■ inside table 1 means you can configure ; ● means standard configuration.
* Accessories can be used interchangeably with NM8 series MCCB.

Table 2

Type	NM8SL-100S	NM8SL-250S	NM8SL-630S
Appearance			
Number of poles	3P/4P	3P/4P	3P/4P
Rated current (A) In	40,50,63,80,100	125,160,180,200,225,250	250,315,350,400,500,630
Rated insulation voltage (V) Ui	750	750	750
Rated impulse withstand voltage (kV) Uimp	8	8	8
Rated operational voltage (V) Ue	400	400	400
Rated ultimate short-circuit breaking capacity (kA) Icu AC50Hz 400V	50	50	70
Rated service short-circuit breaking capacity (kA) Ics AC50Hz 400V	50	50	70
Rated residual making and breaking capacity I△m is 25%Icu.	12.5	12.5	17.5
Utilization category	A	A	A
Isolation function	●	●	●
Life expectancy with load No-load Amount	1500/8500/10000	1500/8500/10000	2000/8000/10000
Protection			
Types of release	Electronic type	Electronic type	Electronic type
Overload protection	●	●	●
Short circuit protection	●	●	●
Earth-fault protection	●	●	●
Residual operating current (the fourth gear being adjustable) I△n(A)	X1: 0.05/0.1/0.2/0.5; X2: 0.1/0.3/0.5/1	X1: 0.05/0.1/0.2/0.5; X2: 0.1/0.3/0.5/1	X2: 0.1/0.3/0.5/1
Break-time (the fourth gear being adjustable) Total break-time (s)	t1: 0.1/0.3/0.5/1	t1: 0.1/0.3/0.5/1	t1: 0.1/0.3/0.5/1
Installation and connection			
Fixed/front connection plate(internal)	■	■	■
Fixed/rear connection plate (internal)	■	■	■
Indicating auxiliary devices (auxiliary switch)	■	■	■
Control auxiliary devices			
Motor operating mechanism	■	■	■
Standard rotary operating handles	■	■	■
Extended rotary operating handles	■	■	■
Installation and connection accessories			
Cage clamp terminals	■	■	■
DIN rail adapter	■	■	—
Terminal shield	■	■	■
Inter-phase isolation board	●	●	●
Dimension Lx H x D(mm) 3P/4P	105×232×126/140×232×126	105×232×126/140×232×126	140×355×168/185×355×168
3P/4P Weight (Kg)	2.6/4	2.6/4	10.5/12.5

* with■ inside table 2 means you can configure ; ● means standard configuration.
* Accessories can be used interchangeably with NM8 series MCCB.