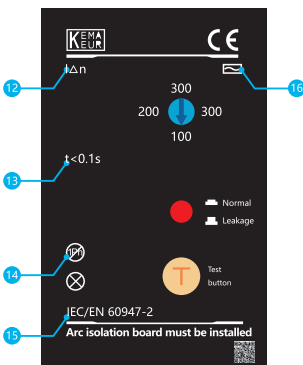
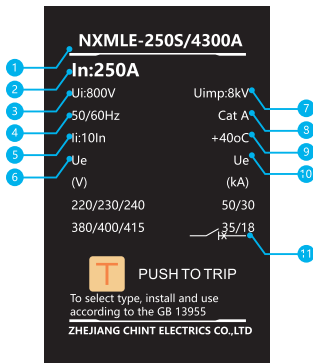




NXMLE-250S/4300A



Nameplate of NXMLE residual current circuit breaker

## NXMLE series residual current circuit breaker

### Residual current operated protection breaker (Coming soon)

Residual current circuit breakers are used mainly to provide protection against leakage current which may cause insulation failure, electric shock to equipment and human body irrespectively along with the standard protection against over load & short circuit condition.

- Frame size: 125A, 160A, 250A, 400A, 630A
- Rated operational voltage: U<sub>e</sub>(V AC): 220/230/240,(1P+N,2P) 380/400/415(3P,3P+N,4P)
- Breaking capacity code: S, F, H
- Number of poles: 1PN, 2P, 3P, 3PN, 4P
- Installation method: fixed type; plug-in type

### Nameplate interpretation

- 1 Product type: Frame size; breaking capacity; poles number
- 2 In: Rated operational current
- 3 U<sub>i</sub>: Rated insulation voltage
- 4 Frequency of A.C.
- 5 I<sub>i</sub>: 10In Multiple of current of transient behavior
- 6 U<sub>e</sub>: Rated operational voltage
- 7 U<sub>imp</sub>: Rated impulsive withstand voltage
- 8 Cat A: Utilization category of breaker
- 9 +40°C : Ambient temperature
- 10 I<sub>cu</sub>/I<sub>cs</sub>: Rated ultimate breaking capacity / Rated service breaking capacity
- 11 Electrical symbol for circuit breaker with isolating function
- 12 Rated residual operating current value
- 13 t: Maximum breaking time
- 10 Only applicable for three-phase power
- 11 The product is in conformity with standard IEC/EN 60947.2
- 12 Leakage current selection (mA)

# NXMLE series residual current circuit breaker

## Description

<b>NXMLE</b>	-	<b>125</b>	<b>H</b>	<b>P</b>	/	<b>3</b>	<b>300</b>	<b>2</b>	
Product code		Frame size code	Breaking capacity code <sup>2)</sup>	Code of operation mode		Code of poles number	Releasing method and code of inner accessories <sup>3)</sup>	Usage code	
NXMLE: residual current circuit breaker		125A 160A 250A 400A 630A	S: 25kA F: 18kA H: 36kA  S: 35kA H: 50kA  S: 50kA H: 75kA	No code: direct handle operation P: motor operation Z: rotary handle operation		1PN 2P 3P 3PN 4P	First number represents the release type. only magnetic type 2: type6) 3: thermal magnetic type The second number and the third number are codes of accessories	No code distribution protection  2: motor protection	

Model selection examples:

NXMLE-125H P/4300 2 A 100 J A Y R: To order one residual current circuit breaker with 125A frame size, 35kA breaking capacity, with motor-driven mechanism, 3 poles, thermal magnetic fixed type release, with no inner accessories, motor protection, the code of N pole is A. The rated current is 100A with electric leakage alarm non-trip function, and the residual current value is A (30/50/100). It is delay type and rear connection.

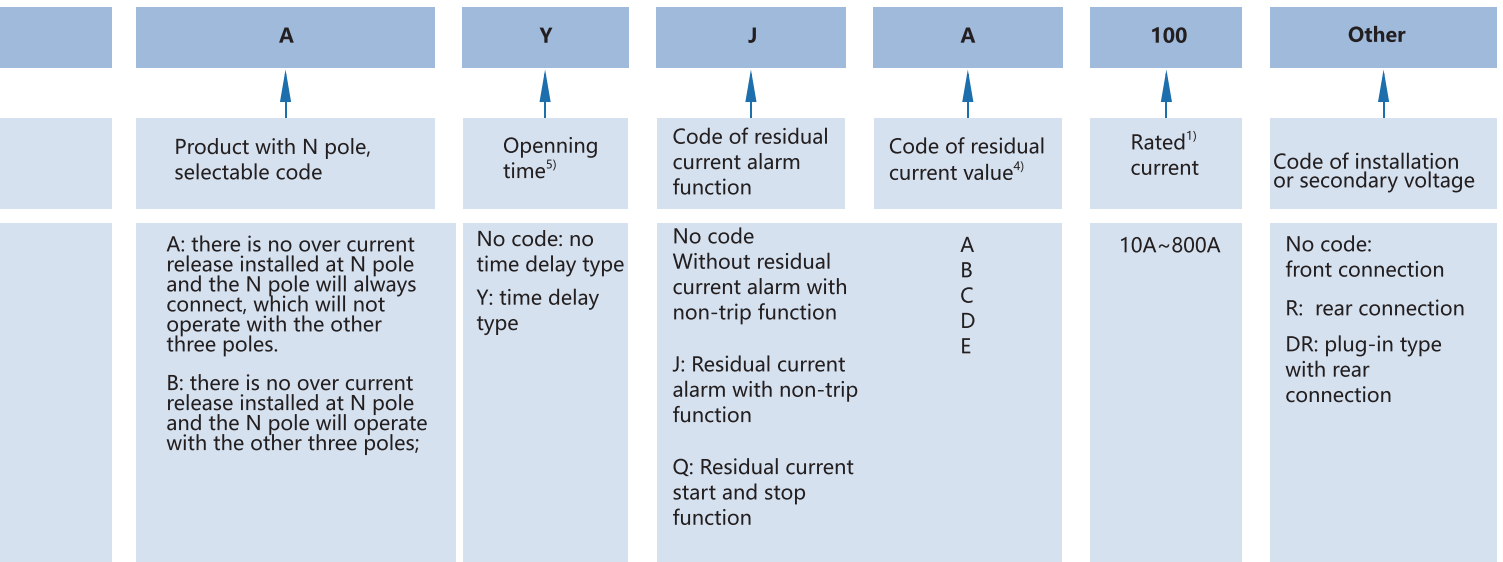
Rated current (A)	10	16	20	25	32	40	50	63	80	100	125	160	180
125	■	■	■	■	■	■	■	■	■	■	■		
160											■	■	
250												■	■
400													
630													

Comparison table of frame size, poles number and breaking capacity

Frame size (A)		125			160			250		
Number of poles		1PN/2P	3P	3PN/4P	1PN/2P	3P	3PN/4P	1PN/2P	3P	3PN/4P
Code of breaking capacity	S	■	■	■	■	■	■	■	■	■
	F	-	■	■	-	■	■	-	■	■
	H	-	■	■	-	■	■	-	■	■

Comparison table of frame size and residual current value and code

Frame size (A)		125	160	250
Fixed single grade, non-delay type	Residual current value and code (mA)	30/50/100/200/300/500	30/50/100/200/300/500	30/50/100/200/300/500
Adjustable 3 grades, non-delay type		A: 30/50/100	A: 30/50/100	A: 30/50/100
		B: 50/100/200	B: 50/100/200	B: 50/100/200
		C: 100/200/300	C: 100/200/300	C: 100/200/300
Fixed single grade, delay type		D: 200/300/500	D: 200/300/500	D: 200/300/500
		50/100/200/300/500	50/100/200/300/500	50/100/200/300/500
		B: 50/100/200	B: 50/100/200	B: 50/100/200
Adjustable 3 grades, delay type		C: 100/200/300	C: 100/200/300	C: 100/200/300
		D: 200/300/500	D: 200/300/500	D: 200/300/500
		-	-	-



Note: <sup>1)</sup> See table 5 for rated current included in each frame size  
<sup>2)</sup> See table 6 for corresponding poles, breaking capacity.  
<sup>3)</sup> See page 23-24 for release type and inner accessories.

<sup>4)</sup> As for the un-adjustable type, mark the residual current value directly; for the adjustable type, mark the code.  
<sup>5)</sup> See table 8 for opening time.

Table 5

	200	225	250	315	350	400	500	630
	■	■	■					
			■	■	■	■		
						■	■	■

Table 6

	400			630	
	3P	3PN/4P	3PN/4P	3P	3PN/4P
	■	■	■	■	■
	■	■	■	■	■
	■	■	■	■	■

Table 7

	400	630
	50/100/200/300/500/1000	50/100/200/300/500/1000
	B: 50/100/200	B: 50/100/200
	C: 100/200/300	C: 100/200/300
	D: 200/300/500	D: 200/300/500
	E: 300/500/1000	E: 300/500/1000
	50/100/200/300/500/1000	50/100/200/300/500/1000
	B: 50/100/200	B: 50/100/200
	C: 100/200/300	C: 100/200/300
	D: 200/300/500	D: 200/300/500
	E: 300/500/1000	E: 300/500/1000

## Technical Parameters

### NXMLE series residual current circuit breaker (Coming soon)

Frame size Inm(A)		125			160		
Rated operational current In (A), 40°C		10,16,20,25,32,40,50,63,80,100,125			32,40,50,80,100,125,140,160		
Rated insulation voltage Ui(V)		800			800		
Rated impulse withstand voltage Uimp(kV)		8			8		
Rated operational voltage Ue(V), AC 50/60Hz		220/230/240,380/400/415			220/230/240,380/400/415		
Rated residual operating current I Δn(mA)	Fixed single grade, non-delay type	30/50/100/200/300/500			30/50/100/200/300/500		
	Fixed single grade, delay type	50/100/200/300/500			50/100/200/300/500		
	Adjustable non-delay type	A: 30/50/100/200			A: 30/50/100/200		
		-			-		
		C: 100/200/300/500			C: 100/200/300/500		
	Adjustable non-delay type	B: 50/100/200/300			B: 50/100/200/300		
C: 100/200/300/500			C: 100/200/300/500				
-			-				
-			-				
Rated residual non-operating current I Δno(A)		0.5IΔn			0.5IΔn		
Non-delay type 5I Δn, maximum breaking time(s)		≤ 0.04			≤ 0.04		
Delayed adjustable 2I Δn limit non-actuating time (s)non-adjustable		0.1/0.2/0.3 , optional			0.1/0.2/0.3 , optional		
Delayed adjustable 2I Δn maximum breaking time		0.3/0.4/0.5 , optional			0.3/0.4/0.5 , optional		
Breaking capacity code		S	F	H	S	F	H
Number of poles	1P+N	■	-	-	■	-	-
	2P	■	-	-	■	-	-
	3P	■	■	■	■	■	■
	3P+N	■	■	■	■	■	■
	4P	■	■	■	■	■	■
Rated ultimate short circuit breaking capacity Icu(kA)	AC220/230/240	36	36	50	50	50	75
	AC380/400/415	25	18	36	35	25	50
Rated service short circuit breaking capacity Ics (kA)	AC220/230/240	18	36	36	30	50	50
	AC380/400/415	13	18	18	18	25	25
In conformity with standard		IEC/EN 60947-2					
Utilization category		A			A		
Isolation function <sup>1)</sup>		■			■		
Ambient temperature		-25°C ~+70°C					
Arcing distance		≤ 50			≤ 50		
Mechanical life (times)	Without maintenance	20000			20000		
	With maintenance	40000			40000		
AC415V,In		10000			10000		
Accessories	Auxiliary contact (1open and 1closed)	■	■		■	■	
	Auxiliary contact (2open and 2closed)	-	-		■	■	
	Alarm contact	■	■		■	■	
	Auxiliary contact, alarm contact	■	■		■	■	
	Shunt release	■	■		■	■	
	Under voltage release	■	■		■	■	
	Residual current alarm with non-trip module	-	-		■	■	
	Manual operational mechanism	■	■		■	■	
	Motor-driven mechanism	■	■		■	■	
	Rear connection	■	■		■	■	
	Plug-in type	■	■		■	■	
	Extending terminal bonding bar	■	■		■	■	
	Interphase barrier	■	■		■	■	
Dimension and sizes(mm) width(W) x height(H) x depth(D)	Width (1PN/2P/3P/3PN/4P)	56/56/76/103/103			63/63/90/120/120		
	Height	156			160		
	Depth (S type and H type)	71/81			75.5/91		

Note: 1) 1PN/3PN has no isolation function.



250			400			630		
125,160,180,200,225,250			250,280,315,320,350,400			400,500,630		
800			800			800		
8			8			8		
220/230/240,380/400/415			220/230/240,380/400/415			220/230/240,380/400/415		
30/50/100/200/300/500			50/100/200/300/500/1000			50/100/200/300/500/1000		
50/100/200/300/500			50/100/200/300/500/1000			50/100/200/300/500/1000		
A: 30/50/100/200			B: 50/100/200			B: 50/100/200		
-			C: 100/200/300			C: 100/200/300		
C: 100/200/300/500			D: 200/300/500			D: 200/300/500		
-			E: 300/500/1000			E: 300/500/1000		
B: 50/100/200/300			B: 50/100/200			B: 50/100/200		
C: 100/200/300/500			C: 100/200/300			C: 100/200/300		
-			D: 200/300/500			D: 200/300/500		
-			E: 300/500/1000			E: 300/500/1000		
0.5IΔn			0.5IΔn			0.5IΔn		
≤ 0.04			≤ 0.04			≤ 0.04		
0.1/0.2/0.3 , optional			0.1/0.2/0.3 , optional			0.1/0.2/0.3 , optional		
0.3/0.4/0.5 , optional			0.3/0.4/0.5 , optional			0.3/0.4/0.5 , optional		
S	F	H	S	F	H	S	F	H
■	-	-	-	-	-	-	-	-
■	-	-	-	-	-	-	-	-
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
50	50	75	75	75	100	75	75	100
35	25	50	50	36	70	50	36	70
30	50	50	50	75	75	50	75	75
18	25	25	25	36	36	25	36	36
IEC/EN 60947-2								
A			A			A		
■			■			■		
-25°C ~ +70°C								
≤ 100			≤ 100			≤ 100		
20000			10000			10000		
40000			20000			20000		
10000			8000			8000		
■	■		■	■		■	■	
■	■		■	■		■	■	
■	■		■	■		■	■	
■	■		■	■		■	■	
■	■		■	■		■	■	
■	■		■	■		■	■	
■	■		■	■		■	■	
■	■		■	■		■	■	
■ <sup>2)</sup>	■ <sup>2)</sup>		■	■		■	■	
■	■		■	■		■	■	
■	■		■	■		■	■	
■	■		■	■		■	■	
78/78/105/140/140			-/-/140/185/185			-/-/140/185/185		
170			267			267		
77/80			108.5/108.5			108.5/108.5		