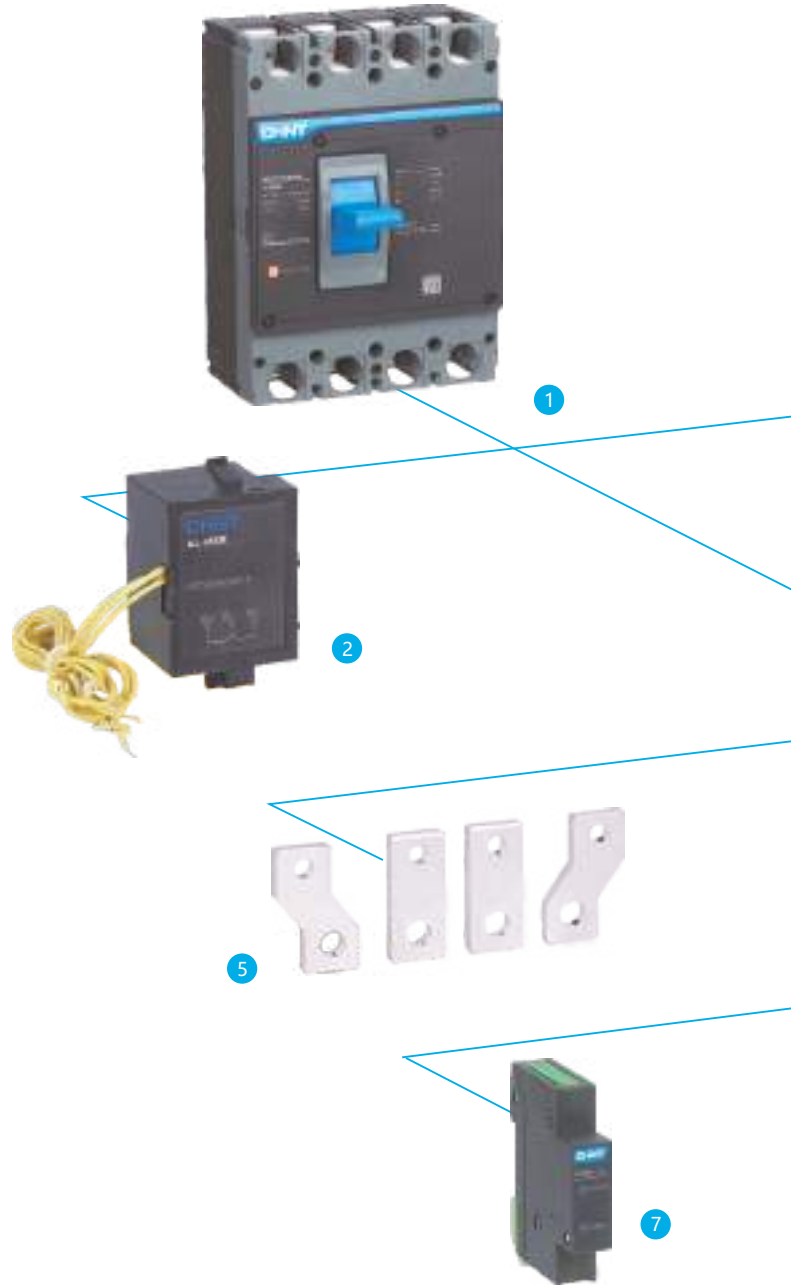


Accessories

- 1 Body
- 2 Alarm contact (optional)
- 3 Motor-driven mechanism (optional)
- 4 Auxiliary contact (optional)
- 5 Connection plate (optional)
- 6 Shunt release (optional)
- 7 Communication module(optional)
- 8 Rear connection plate (optional)
- 9 Under voltage release (optional)
- 10 Interphase barrier (standard)
- 11 Plug-in basement(optional)
- 12 Handheld test module(optional)
- 13 Manual operation mechanism (optional)





3



4



6



9



10



8



11



12



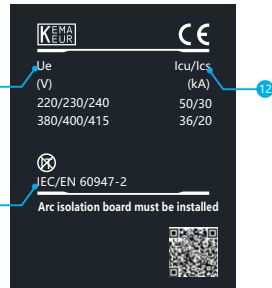
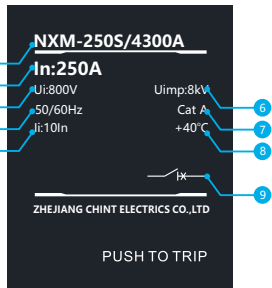
13



NXM-250S/4300A



NXMS-250H/3300



NXM Nameplate of thermomagnetic stationary molded case circuit breaker

NXM series moulded case circuit breaker

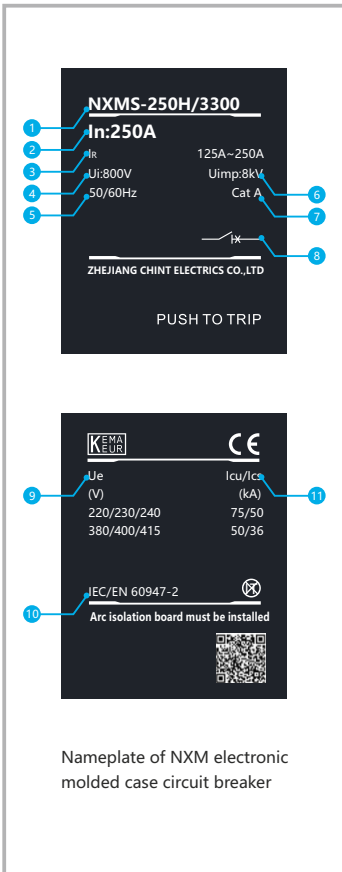
Breaker

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

- Frame size:
 NXM series moulded case circuit breaker: 63A, 125A, 160A, 250A, 400A, 630A, 800A, 1000A, 1250A, 1600A
 NXMS series electronic breaker: 160A, 250A, 400A, 630A, 1000A, 1250A, 1600A
- Rated operational voltage: Ue (VAC): 220/230/240, 380/400/415, 690
- Breaking capacity code: E, S, F, H
- Number of poles: 2P, 3P, 4P
- Release type: thermal magnetic fixed type; magnetic fixed type; electronic type.
- Installation method: Fixed type; plug-in type

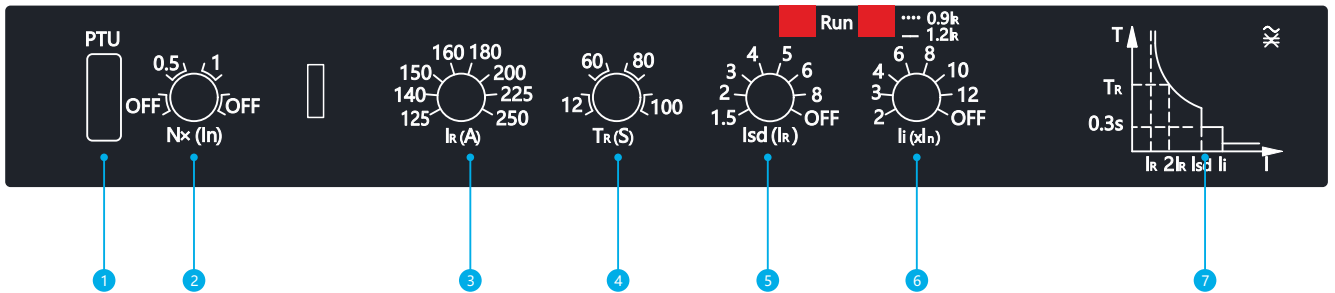
Nameplate interpretation

- 1 Product type: Frame size; breaking capacity; poles number
- 2 In: Rated operational current
- 3 Ui: Rated insulation voltage
- 4 Frequency of A.C.
- 5 li: 10In: Multiple of current of transient behavior
- 6 Uimp: Rated impulsive withstand voltage
- 7 Cat A: Utilization category of breaker
- 8 +40°C: Ambient temperature
- 9 Electrical symbol for circuit breaker with isolating function
- 10 Ue: Rated operational voltage
- 11 The product is in conformity with standard IEC/EN 60947.2
- 12 Icu/Ics: Ultimate short circuit breaking capacity/Service short circuit breaking capacity



- 1 Product type: Frame size; breaking capacity; poles number
- 2 In: Rated operational current
- 3 Ir: Long-time-delay setting current range
- 4 Ui: Rated insulation voltage
- 5 Frequency of A.C.
- 6 Uimp: Rated impulsive withstand voltage
- 7 Cat A: Utilization category of breaker
- 8 Electrical symbol for circuit breaker with isolating function
- 9 Ue: Rated operational voltage
- 10 The product is in conformity with standard IEC/EN 60947.2
- 11 Icu/Ics: Ultimate short circuit breaking capacity/Service short circuit breaking capacity

Electronic release



- 1 PTU interface
- 2 Neutral pole protection current setting, with 2 steps of current that is adjustable and can be turned off (OFF)
- 3 Rated current setting with 8 steps
- 4 Long-time-delay (S) setting with 4 steps
- 5 Short-time-delay current I_{sd} setting with 7 steps that is adjustable and can be turned off (OFF)
- 6 Instantaneous action current I_i setting with 7 steps and that can be turned off (OFF)
- 7 Current-time protection curve



Compliant with standard



- Product standard
 - IEC 60947-1(General rules)
 - IEC 60947-2(Breaker)
 - IEC 60947-3(switch, disconnector)
 - IEC 60947-4(motor, drive)
- Use standard in extreme environment
 - IEC 60068-2-1(low temperature)
 - IEC 60068-2-2(dry heat)
 - IEC 60068-2-11(salt mist)
 - IEC 60068-2-30(damp and hot)

Anti-humid heat capacity



The product has passed the environmental test of dry cold, dry heat, and wet heat and the like. It can operate reliably under extreme environmental conditions.



Environment temperature



It must calculate according to the temperature compensation coefficient table provided in the sample in the event the temperature is lower than -5°C or higher than 40°C .

Altitude and pollution degree



The installation altitude of normal operation is 2000 m and below. In case of higher than 2000m, it must consider the decrease of dielectric strength and colder air. The amendment action shall be implemented according to the altitude derating factor table provided in the sample.

The product can operate reliably in pollution degree III environment defined in IEC 60947-1 and 60664-1 (industrial environment).

Protection grade



The product is in conformity with the standard requirements of IEC 60529 (enclosure protection grade).

Product body: protection grade is IP30 (except the wiring terminal position)

- Installation of cabinet door
 - Equipped with toggle handle: the protection grade is IP40
 - Equipped with rotation handle: the protection grade is IP50
 - Equipped with motor-driven mechanism: the protection grade is IP40

NXM series moulded case circuit breaker

Model definition and description

NXM	-	160	S	P	/	4	300
Product code		Frame size code	Breaking capacity code ²⁾	Operation way code		Number of poles code	Code of release type and inner accessories ³⁾
NXM: moulded case circuit breaker		63A 125A 160A 250A 400A 630A 800A 1000A 1250A 1600A	E: 15kA S: 25kA F: 36kA H: 50kA E: 20kA S: 36kA F: 36kA H: 50kA E: 36kA S: 50kA F: 50kA H: 70kA S: 50kA F: 50kA H: 70kA S: 50kA H: 70kA	No code: direct handle operation P: motor operation Z: rotary handle operation		2: 2 poles 3: 3 poles 4: 4 poles	First number represents the release type 2: only magnetic type 3: thermal magnetic type The second number and the third number are codes of inner accessories

Model selection examples:

NXM-160S P/4300 2 A G 100 R: To order one moulded case circuit breaker with 160A frame size, 35kA breaking capacity, thermal adjustable and magnetic fixed release, with motor-driven mechanism, 4 poles, with no inner accessories, motor protection, the category of four poles is A, with overload alarm non-tripping function. The rated current is 100A and rear connection.

Note: ¹⁾ The rated current of each frame can be seen in table 1.

²⁾ The corresponding poles number and breaking capacity related to frame size can be seen in table 2.

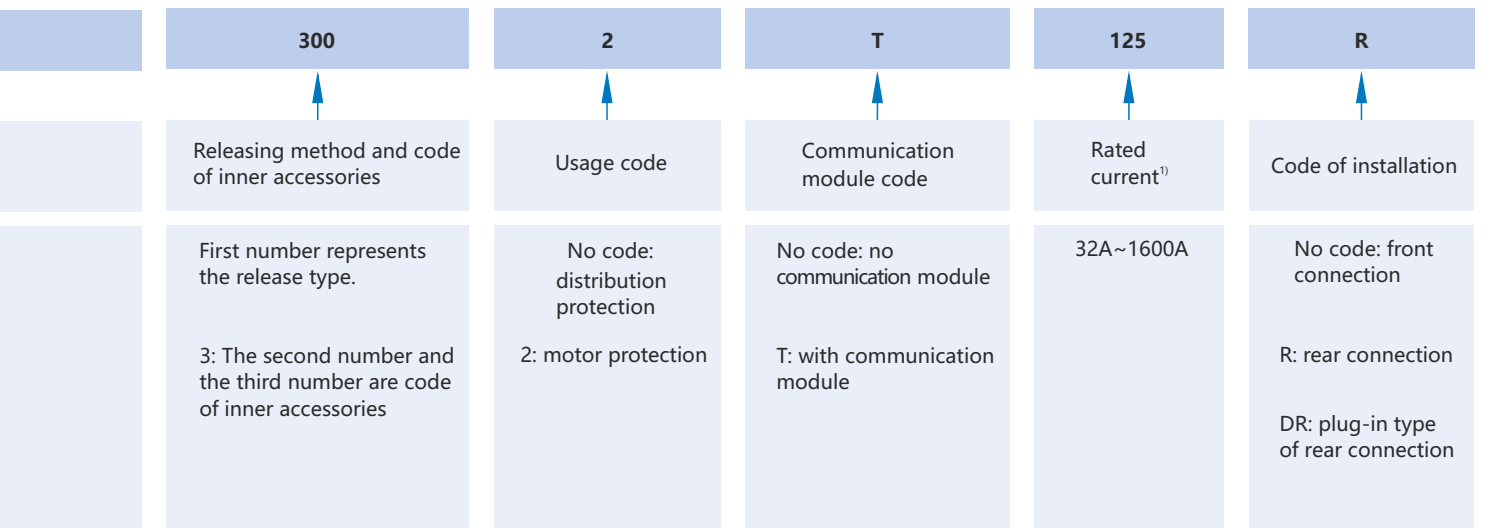
³⁾ For tripping method and inner accessories, see page 17-20.

Comparison table of frame sizes and rated current

Rated current (A)	10	16	20	25	30	32	40	50	60	63	70	75	80	100	125	140	150	160	170	180	200	225	250	280	
63	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
125	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
160						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
250																		■	■	■	■	■	■	■	■
400																									
630																									
800																									
1000																									
1250																									
1600																									

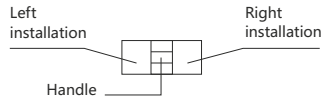
Comparison table of frame sizes, number of poles and breaking capacity

Frame size (A)	63	125	160	250																				
Number of poles	2P	3P	4P	2P	3P	4P	2P	3P	4P															
Code of breaking capacity	E	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	S	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	F	-	■	■	-	■	-	■	■	-	■	-	■	■	-	■	-	■	■	-	■	-	■	■
	H	-	■	■	-	■	-	■	■	-	■	-	■	■	-	■	-	■	■	-	■	-	■	■



NXM series moulded case circuit breaker, code of inner accessories

□ Alarm contact, ■ Auxiliary contact, ● Shunt release, ○ Under voltage release.



Accessories name	Accessories code		NXM-63E/S NXM-125E/S		NXM-63F/H NXM-125F/H	
	Only magnetic	Thermal magnetic release	3P	4P	3P	4P
No inner accessories	200	300				
Alarm contact	208	308	□	□	□	□
Shunt release	210	310	●	●	●	●
Auxiliary contact (1NO1NC)	220	320	■	■	■	■
Auxiliary contact (2NO2NC)						
Under voltage release	230	330	○	○	○	○
Shunt release, auxiliary contact (1NO1NC)	240	340	● ■	● ■	● ■	● ■
Shunt release, auxiliary contact (2NO2NC)						
Under voltage release, shunt release	250	350	○ ●	○ ●	○ ●	○ ●
Two groups of auxiliary contact (2NO2NC)	260	360				
Under voltage release, auxiliary contact (1NO1NC)	270	370	○ ■	○ ■	○ ■	○ ■
Under voltage release, auxiliary contact (2NO2NC)						
Shunt release, alarm contact	218	318	● □	● □	● □	● □
Auxiliary contact (1NO1NC), alarm contact	228	328	■ □	■ □	■ □	■ □
Auxiliary contact (2NO2NC), alarm contact						
Under voltage release, alarm contact	238	338	○ □	○ □	○ □	○ □
Shunt release, auxiliary contact (1NO1NC), alarm contact	248	348	● ■ □	● ■ □	● ■ □	● ■ □
Two groups of auxiliary contact (2NO2NC), alarm contact	268	368				
Under voltage release, auxiliary contact (1NO1NC), alarm contact	278	378	○ ■ □	○ ■ □	○ ■ □	○ ■ □

	NXM-160E/S		NXM-160F/H	
	3P	4P	3P	4P

(Continued from the table above)

Accessories name	Accessories code		NXM-250E/S		NXM-250F/H	
	Only magnetic	Thermal magnetic release	3P	4P	3P	4P
No inner accessories	200	300				
Alarm contact	208	308				
Shunt release	210	310				
Auxiliary contact (1NO1NC)	220	320				
Auxiliary contact (2NO2NC)						
Under voltage release	230	330				
Shunt release, auxiliary contact (1NO1NC)	240	340				
Shunt release, auxiliary contact (2NO2NC)						
Under voltage release, shunt release	250	350				
Two groups of auxiliary contact (2NO2NC)	260	360				
Under voltage release, auxiliary contact (1NO1NC)	270	370				
Under voltage release, auxiliary contact (2NO2NC)						
Shunt release, alarm contact	218	318				
Auxiliary contact (1NO1NC), alarm contact	228	328				
Auxiliary contact (2NO2NC), alarm contact						
Under voltage release, alarm contact	238	338				
Shunt release, auxiliary contact (1NO1NC), alarm contact	248	348				
Two groups of auxiliary contact (2NO2NC), alarm contact	268	368				
Under voltage release, auxiliary contact (1NO1NC), alarm contact	278	378				



NXM-400E/S/F/H NXM-630E/S/F/H		NXM-800S/F/H NXM-1000S/H		NXM-1250S/H		NXM-1600S/H	
3P	4P	3P	4P	3P	4P	3P	4P

NXMS series electronic moulded case circuit breaker, code of inner accessories

Accessories name	Accessories code		NXMS-160F/H		NXMS-250F/H	
	Only magnetic	Thermal magnetic release	3P	4P	3P	4P
No inner accessories	200	300				
Alarm contact	208	308				
Shunt release	210	310				
Auxiliary contact (1NO1NC)	220	320				
Auxiliary contact (2NO2NC)						
Under voltage release	230	330				
Shunt release, auxiliary contact (1NO1NC)	240	340				
Shunt release, auxiliary contact (2NO2NC)						
Under voltage release shunt release	250	350				
Two groups of auxiliary contact (2NO2NC)	260	360				
Under voltage release, auxiliary contact (1NO1NC)	270	370				
Under voltage release, auxiliary contact (2NO2NC)						
Shunt release, alarm contact	218	318				
Auxiliary contact (1 NO1NC), alarm contact	228	328				
Auxiliary contact (2 NO2NC), alarm contact						
Under voltage release, alarm contact	238	338				
Shunt release, auxiliary contact (1NO1NC), alarm contact	248	348				
Two groups of auxiliary contact (2NO2NC), alarm contact	268	368				
Under voltage release, auxiliary contact (1NO1NC), alarm contact	278	378				



	NXMS-400S/F/H NXMS-630S/F/H		NXMS-1000S/H		NXMS-1250S/H		NXMS-1600S/H	
	3P	4P	3P	4P	3P	4P	3P	4P

Technical Parameters

NXM series moulded case circuit breaker

Frame Size, rated current In (A)		63				125				160				250					
Rated current In (A), 40°C, 55°C		10,16,20,25,30,32,40,50,60,63				10,16,20,25,30,32,40,50,60,63,70,75,80,100,125				32,40,50,60,63,70,75,80,100,125,140,150,160				160,170,180,200,225,250					
Rated insulation voltage Ui(V)		800				800				800				800					
Rated impulse withstand voltage Uimp(kV)		8				8				8				8					
Rated operational voltage Ue(V), AC50/60Hz		220/230/240, 380/400/415/500				220/230/240, 380/400/415/500				220/230/240, 380/400/415				220/230/240, 380/400/415					
Breaking capacity code		E	S	F	H	E	S	F	H	E	S	F	H	E	S	F	H		
Number of poles	2P	■	■	-	-	■	■	-	-	■	■	-	-	■	■	-	-		
	3P	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
	4P	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
Rated ultimate short circuit breaking capacity Icu (kA)	AC220/230/240V	18	36	50	75	18	36	50	75	40	50	50	75	40	50	50	75		
	AC380/400/415V	15	25	36	50	15	25	36	50	20	36	36	50	20	36	36	50		
	AC500V	-	-	15	25	-	-	-	-	-	-	-	-	-	-	-	-		
Rated service short circuit breaking capacity Ics (kA)	AC220/230/240V	18	18	50	50	18	18	50	50	30	30	50	50	30	30	50	50		
	AC380/400/415V	15	15	36	36	15	15	36	36	20	20	36	36	20	20	36	36		
	AC500V	-	-	15	25	-	-	-	-	-	-	-	-	-	-	-	-		
In conformity with standards		IEC/EN 60947-2																	
Utilization category		A				A				A				A					
Isolation function		■				■				■				■					
Ambient temperature		-35°C~70°C																	
Arcing distance		≤50				≤50				≤50				≤50					
Mechanical life (times)	Without maintenance	20000				20000				20000				20000					
	With maintenance	40000				40000				40000				40000					
Electrical life (times)	AC415V, In	10000				10000				10000				10000					
Release type and protection type	Magnetic release	Distribution protection	■	■			■	■			■	■			■	■			
		Motor protection	■	■			■	■			■	■			■	■			
	Thermal magnetic release	Distribution protection	■	■			■	■			■	■			■	■			
		Motor protection	■	■			■	■			■	■			■	■			
Auxiliary contact		■				■				■				■					
Alarm contact		■				■				■				■					
Auxiliary contact, alarm contact		■				■				■				■					
Shunt release		■				■				■				■					
Under voltage release		■				■				■				■					
Accessories	Manual operational mechanism		■				■				■				■				
	Motor-driven mechanism		■				■				■				■				
	Rear connection		■				■				■				■				
	Plug-in type		■				■				■				■				
	Extending terminal bonding bar		■				■				■				■				
Derivative product	For special use of prepaid ammeter		■				■				■				■				
	Overload alarm non-trip		-				-				■				■				
Dimension and size(mm) Width (w) X height (H)X depth(D)		Width (2P/3P/4P)		56/78/103				56/78/103				63/90/120				78/105/140			
		Height		130				130				155				165			
		Depth (E/S/F/H type)		70.5/70.5/80.5/80.5				70.5/70.5/80.5/80.5				75/75/90.5/90.5				76.5/76.5/101.5/101.5			

400				630				800			1000		1250		1600	
250,280,300,315,320,350,400				400,450,500,600,630				630, 700, 800			800,900,1000		1000, 1250		1000, 1250,1600	
1000				1000				1000			1000		1000		1000	
12				12				12			12		12		12	
220/230/240, 380/400/415				220/230/240, 380/400/415				220/230/240, 380/400/415			220/230/240, 380/400/415		220/230/240, 380/400/415		220/230/240, 380/400/415	
E	S	F	H	E	S	F	H	S	F	H	S	H	S	H	S	H
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
50	75	75	100	50	75	75	100	75	75	100	75	100	75	100	75	100
36	50	50	70	36	50	50	70	50	50	70	50	70	50	70	50	70
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	50	75	75	50	50	75	75	50	75	75	50	75	50	75	50	75
36	36	50	50	36	36	50	50	36	50	50	36	50	36	50	36	50
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A				A				A			A		A			
■				■				■			■		■			
≤100				≤100				≤100			≤100		≤100			
10000				10000				8000			5000		5000			
20000				20000				10000			10000		10000			
8000				8000				5000			2500		2500			
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
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■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
■	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-
■	■	■	■	■	■	■	■	■	■	■	■	■	-	-	-	-
140/185				140/185				182/240			210/280		210/280			
257				257				270			280		370			
107.5/107.5/107.5/107.5				107.5/107.5/107.5/107.5				113/113/113			116/116		152/152			
													1600A:157;<1600A:152			

Technical Parameters

NXMS series electronic moulded case circuit breaker

Frame size Inm(A)		160		250		400		
Rated current In(A),40°C		32, 63, 125, 160		250		400		
Rated insulation voltage Ui(V)		800		800		1000		
Rated impulse withstand voltage Uimp(kV)		8		8		12		
Rated operational voltage Ue(V),AC 50/60Hz		220/230/240, 380/400/415, 690*		220/230/240, 380/400/415, 690*		220/230/240, 380/400/415, 690*		
Breaking capacity code		F	H	F	H	S	F	H
Number of poles	3P	■	■	■	■	■	■	■
	4P	■	■	■	■	■	■	■
Rated ultimate short circuit breaking capacity Icu(kA)	AC220/230/240	50	75	50	75	75	75	100
	AC380/400/415V	36	50	36	50	50	50	70
	AC690V	10	10	10	10	10	10	15
Rated service short circuit breaking capacity Ics(kA)	AC220/230/240	50	50	50	50	50	75	75
	AC380/400/415V	36	36	36	36	36	50	50
	AC690V	5	5	5	5	7.5	7.5	7.5
Rated shor-time withstand current Icw(kA),1s	AC400/415V	-		-		8		
In conformity with standard		IEC/EN 60947-2						
Utilization category		A		A		B		
Isolation function		■		■		■		
Ambient temperature		-25°C~+70°C						
Arcing distance		≤50		≤50		≤100		
Mechanical life (times)	Without maintenance	20000		20000		10000		
	With maintenance	40000		40000		20000		
Electrical life (times)	AC415V,In	10000		10000		8000		
Electric release (times)	Distribution protection	■		■		■		
	Motor protection	■		■		■		
Accessories	Auxiliary contact	■		■		■		
	Alarm contact	■		■		■		
	Auxiliary contact, alarm contact	■		■		■		
	Shunt release	■		■		■		
	Under voltage release	■		■		■		
	Communication module	■		■		■		
	Maintenance tester	■		■		■		
	Setting and monitoring software	■		■		■		
	Remote indication contact	■		■		■		
	Manual operational mechanism	■		■		■		
	Motor-driven mechanism	■		■		■		
	Rear connection	■		■		■		
	Plug-in type	■		■		■		
	Extending terminal bonding bar	■		■		■		
	Temperature monitoring module	■		■		■		
Interphase barrier	■		■		■			
Dimension and size (mm) Width x height x depth	Width (3P/4P)	90/120		105/140		140/185		
	Height	155		165		257		
	Depth (S/H type)	90.5/90.5		101.5		107.5/107.5		

*690V only has CE certification



630			1000		1250		1600	
630			800, 1000		1250		1600	
1000			1000		1000		1000	
12			12		12		12	
220/230/240, 380/400/415, 690*			220/230/240, 380/400/415, 690*		220/230/240, 380/400/415, 690*		220/230/240, 380/400/415, 690*	
S	F	H	S	H	S	H	S	H
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
75	75	100	75	100	75	100	75	100
50	50	70	50	70	50	70	50	70
10	10	15	15	20	-	30	-	30
50	75	75	50	75	50	75	50	75
36	50	50	36	50	36	50	36	50
7.5	7.5	7.5	12.5	15	-	20	-	20
8			12		19.2		19.2	
B			B		B		B	
■			■		■		■	
≤100			≤100		≤100		≤100	
10000			5000		5000		5000	
20000			10000		10000		10000	
8000			2500		2500		2500	
■	■	■	■	■	■	■	■	■
■	■	■	-	-	-	-	-	-
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	-	-	-	-
■	■	■	■	■	-	-	-	-
■	■	■	■	■	■	■	■	■
-	-	-	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
140/185			210/280		210/280		210/280	
257			280		370		370	
107.5/107.5			116/116		152/152		157/157	

*690V only has CE certification