



NM1

Moulded Case Circuit Breaker

1.General

- 1.1 Certificates: KEMA, UKrSEPRO, EAC, RCC, EK;
 - 1.2 Electric ratings: AC 690V, 50/60HZ, 10~1250A;
 - 1.3 Mounting mode: Vertical and horizontal;
 - 1.4 Standard: IEC/EN60947-2.

2.Type designation

NM1 - □□□/□□□

Type of N-pole for 4-P breaker*

Application: Blank: for power distribution;
2: for motor protection

Release type and accessory code
(please refer to table on page 94)

Number of poles

Operation mode: Blank: direct operation with handle;
P: motor-driven operation;
Z: Operation with rotary handle

Code of Breaking capacity :
C-basic type;
S-standard type;
H-higher type;
R-current limiting type

Frame size rated current

MCCB code

Note *: There is types of N-pole for 4P breaker

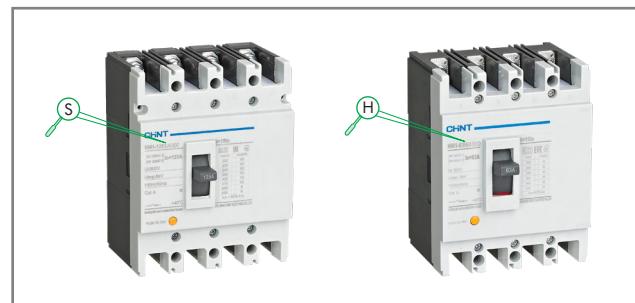
B: Without current release components, N-Pole makes with the other three poles(N-pole first makes then breaks);

3. Classification

According to breaking capacity of breaker:

Standard type (C,S)

Higher type (H)



Current-limiting type (R)



According to wiring mode:

Front connection



According to operation mode:

Direct operation with handle



Operation with rotary handle



Motor-driven operation



According to number of poles:

2P



3P



4P



4. Operating conditions

4.1 Temperature: $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$; the average value within 24h shall not exceed $+35^{\circ}\text{C}$. (please refer to coefficients on P79 for temperature compensation correction); for the circuit breaker with thermo-magnetic release, $+40^{\circ}\text{C}$ is set to be the standard temperature for ratings. For temperature not between $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$, please contact us for temperature compensation correction.

4.2 Altitude: not exceed 2000m (Please contact with us for reduction coefficient if altitude at the mounted site beyond 2000m).

4.3 Pollution grade: Grade 3

4.4 IP grade: IP30

4.5 Air conditions

At mounting site, relative humidity not exceed 50% at the max temperature of $+40^{\circ}\text{C}$, higher relative humidity is allowable under lower temperature. For example, RH could be 90% at $+20^{\circ}\text{C}$, special measures should be taken to occurrence of dews.

5. Technical data

According to wiring mode	63	125				250								400				630				800				1250								
Electric characteristics as per IEC 60947-2, EN 60947-2	10, 16, 20, 25, 30, 32, 40, 50, 63								25, 30, 32, 40, 50, 63, 80, 100, 125								100, 125, 140, 150, 160, 175, 180, 200, 225, 250								400, 450, 500, 630									
Rated current (A) In 40°C	500								800								800								630, 700, 800									
Rated insulation voltage (V) Ui	6								8								8								800, 1000, 1250									
Rated impulse withstand voltage(kV) Uimp	415								690								690								690									
Rated impulse withstand voltage(kV) Uimp	≤50								≤50								≤100								≤100									
Rated impulse withstand voltage(kV) Uimp	S	H	C	S	H	R	C	S	H	R	S	H	R	S	H	R	S	H	R	S	H	R	H	S	H	R								
Number of poles	3	3	3	3	2	3	4	1	3	4	3	3	4	3	3	4	3	3	4	3	3	4	3	3	4	3	3							
Rated ultimate short-circuit breaking capacity Icu (kA, rms)	AC 220/230/240V	20	42	42	25	42	65	65	65	85	25	25	25	20	42	65	65	65	85	50	50	85	100	50	50	85	100							
Test sequence:O-t-CO	AC 380/400/415V	15	35	35	20	25	50	50	50	65	20	20	20	10	25	50	50	50	65	35	35	50	70	35	35	50	70							
Test sequence:O-t-CO-t-CO	AC 660/690V	-	-	-	3	3	-	8	8	10	-	5	5	-	5	5	-	8	8	10	10	10	12	15	12	12	20	20						
Rated service short-circuit breaking capacity Ics (%Icu)	50%				50%								50%								50%				50%									
Isolation function	■				■								■								■				■									
Utilization class	A				A								A								A				A									
Front connection	■				■								■								■				■									
Rear connection	■				■								■								■				■									
Plug in type	■				■								■								■				■									
Shunt release	■				■								■								■				■									
Under-voltage release	■				■								■								■				■									
Auxiliary contact	■				■								■								■				■									
Alarm contact	■				■								■								■				■									

Note:

The symbols O-t-Co, O-t-Co-t-Co are used for defining the sequence of operations.

O: breaking operation; t: the time interval between two successive short-circuit operations;

CO: a making operation followed, after the appropriate opening time, by a breaking operation.

50% 50% 50% 50%

6. Release

Inverse time breaking action property of the over current releasing of the breaker (for power distribution) at the status that all poles are electrified simultaneously

No.	Test current	I/In	Conventional time	Initial status
1	Conventional non-trip current	1.05	2h($I_n > 63A$, $I_h/I_n \leq 63A$)	Cold status
2	Conventional trip current	1.30	2h($I_n > 63A$, $I_h/I_n \leq 63A$)	Right after test no. 1

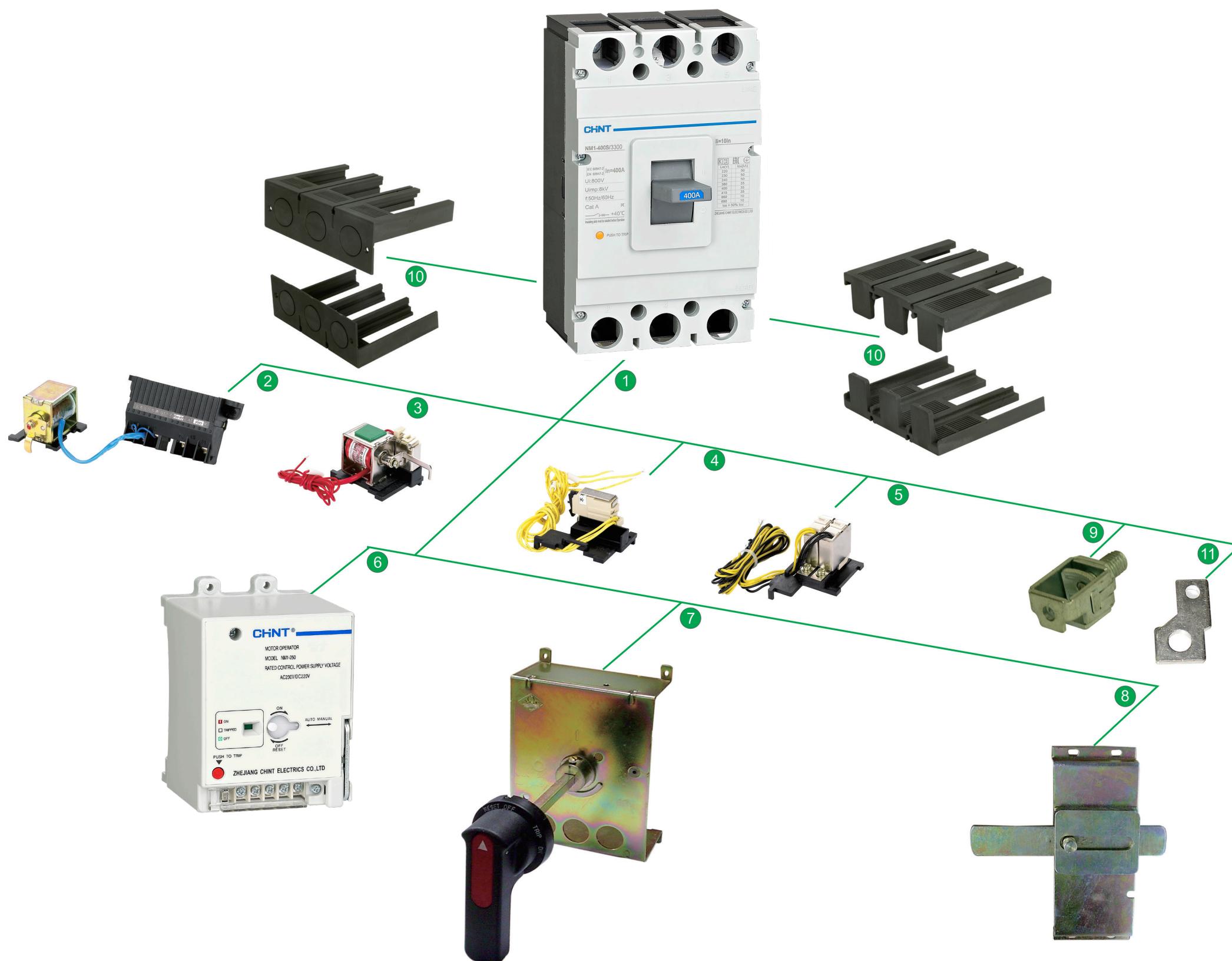
Inverse time-delay breaking operation property of the over current tripping of the breaker(for motor protection) at the status that all poles are electrified simultaneously(conforms to IEC60947-3)

Serial No.	Setting current	Conventional time	Start-up status	Remark
1	1.0In	> 2h	Cold status	
2	1.2In	$\leq 2h$	Right after test number 1	
3	1.5In	$\leq 2min$	Hot state	$10A \leq I_n \leq 25A$
		$\leq 4min$	Hot state	$25A \leq I_n \leq 63A$
		$\leq 8min$	Hot state	$63A \leq I_n \leq 125A$
		$0.5s \leq T_p \leq 5s$	Cold state	$125A \leq I_n \leq 800A$
		$2s \leq T_p \leq 10s$	Cold state	$10A \leq I_n \leq 25A$
4	7.2In	$4s \leq T_p \leq 10s$	Cold state	$25A \leq I_n \leq 63A$
		$6s \leq T_p \leq 20s$	Cold state	$63A \leq I_n \leq 125A$
				$125A \leq I_n \leq 800A$

7. Product overview

NM1 Molded Case Circuit Breaker

- 1 MCCB (fixed type)
- 2 Under-voltage release
- 3 Shunt release
- 4 Alarm contact
- 5 Auxiliary contact
- 6 Motor-driven operation mechanism
- 7 Extended manual operation handle
- 8 Mechanical interlock
- 9 Cage clamp terminal
- 10 Terminal cover
- 11 Front connection plate



8. Curves (for power distribution, calibrated at 40°C)

8.1 The characteristic curve of anti-time limit and the correcting curve of temperature see fig.

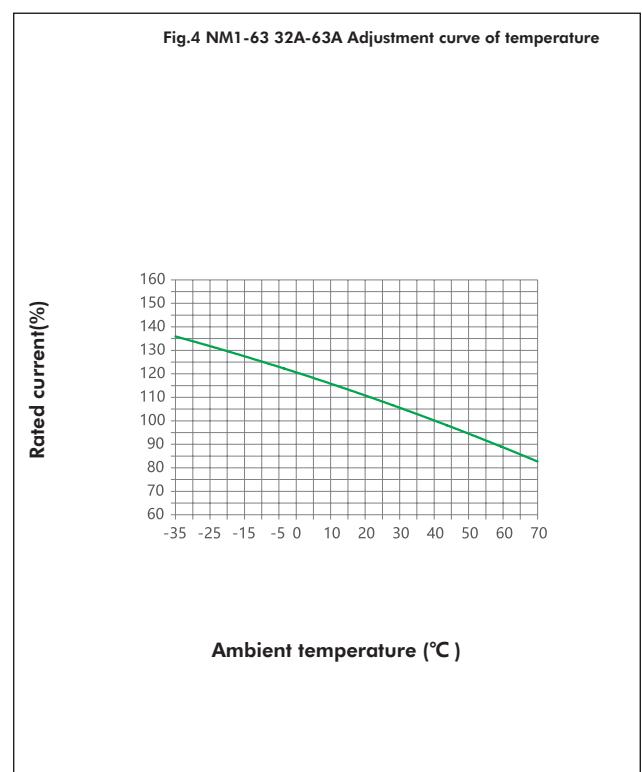
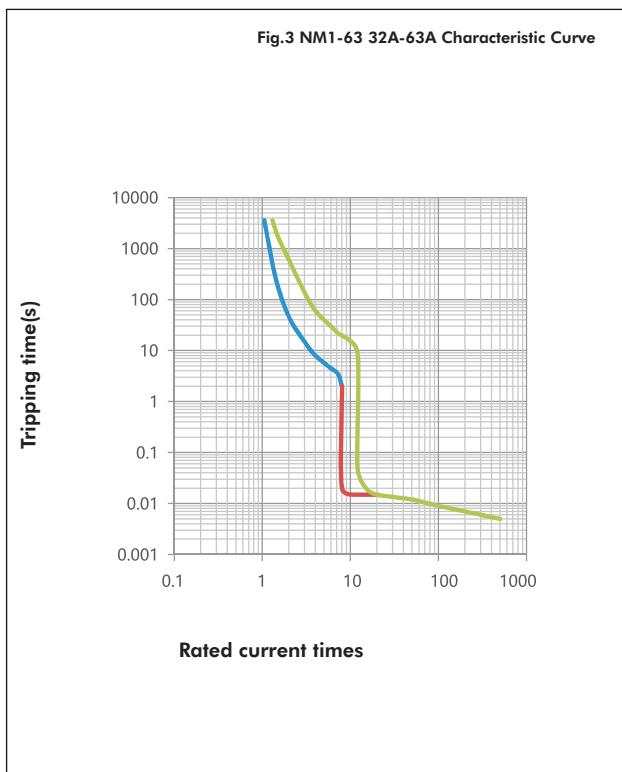
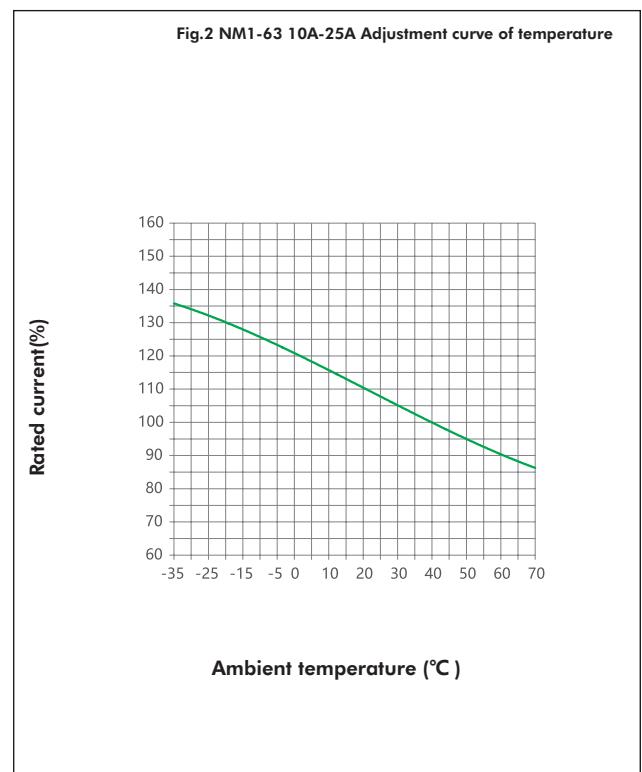
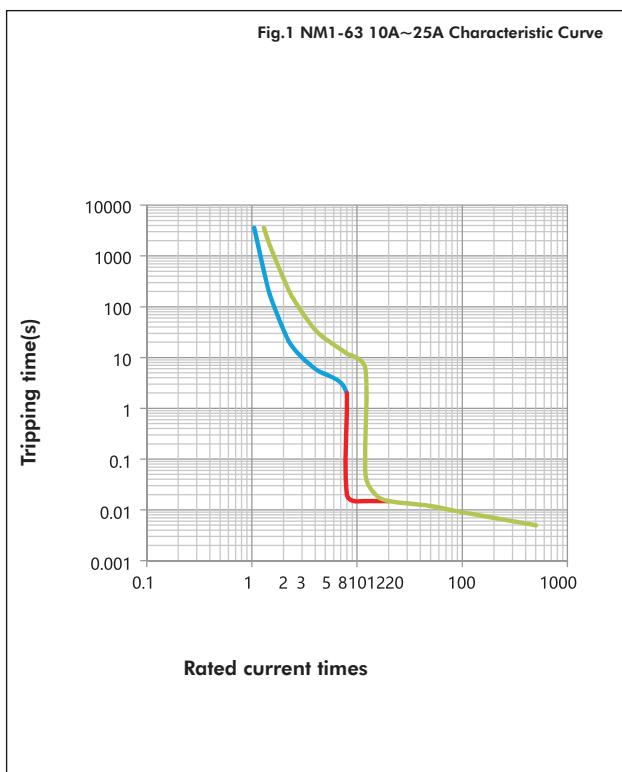


Fig.5 -125 16-25A Characteristic Curve

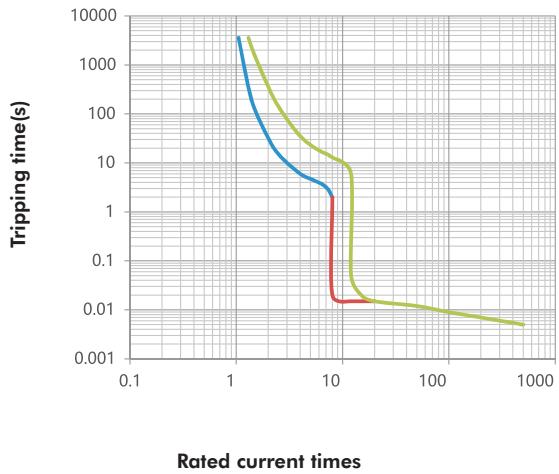


Fig.6 NM1-125 16-25A Adjustment curve of temperature

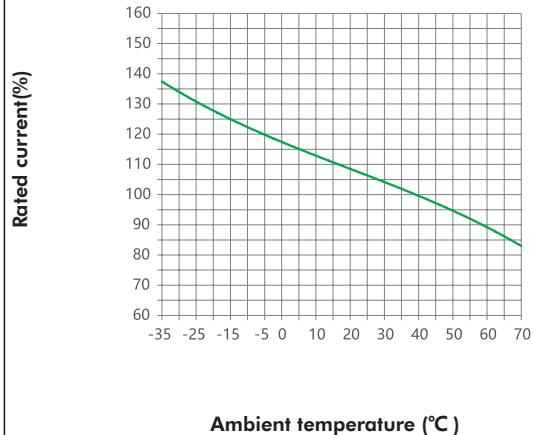


Fig.7 NM1-125 32A-63A Characteristic Curve

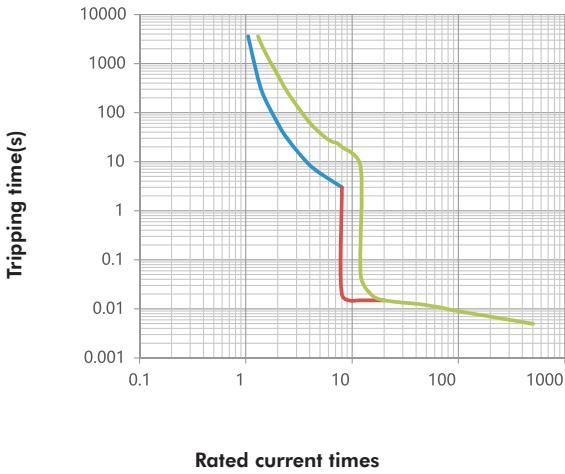


Fig.8 NM1-125 32A-63A Adjustment curve of temperature

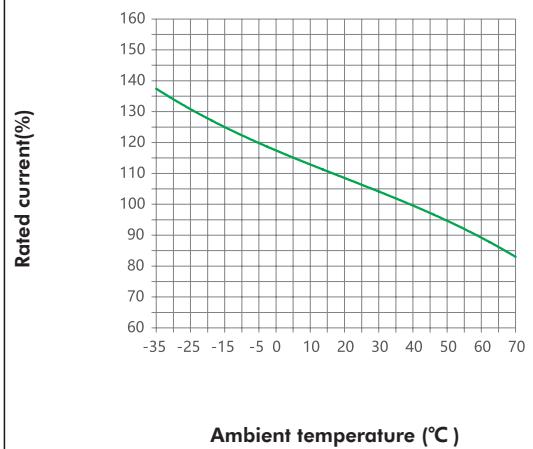


Fig.9 NM1-125 63A above Characteristic Curve

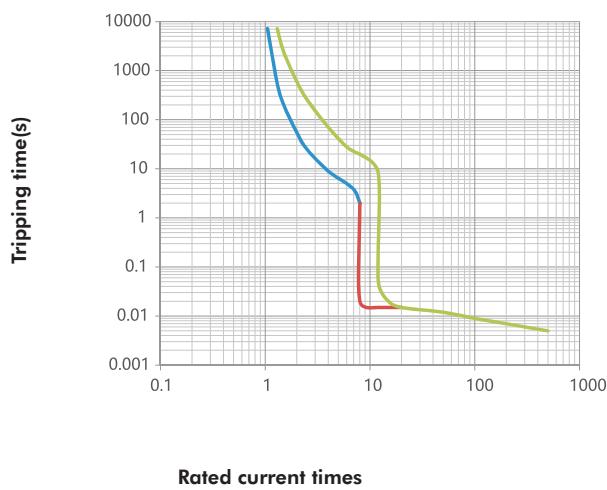


Fig.10 NM1-125 63A above Adjustment curve of temperature

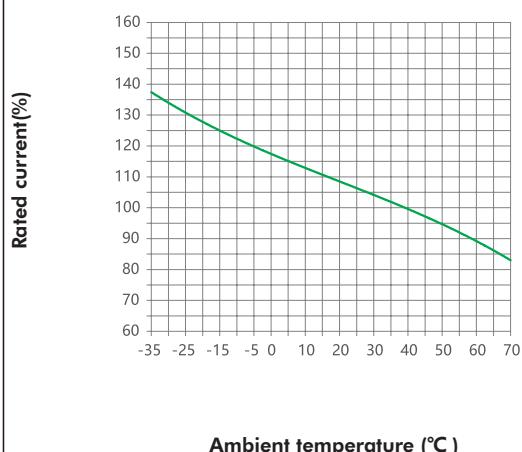


Fig.11 NM1-250 Characteristic Curve

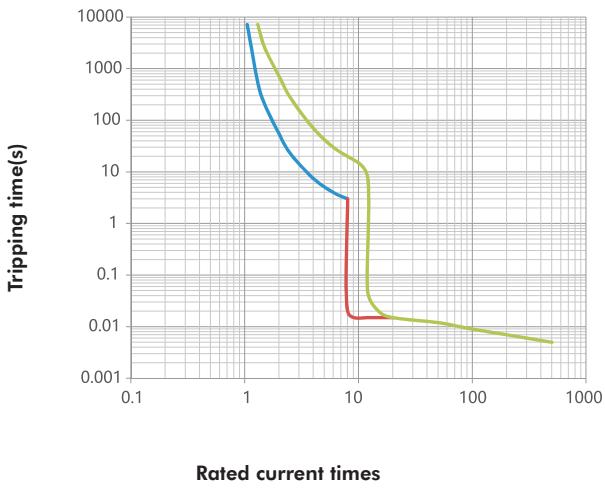


Fig.12 NM1-250 Adjustment curve of temperature

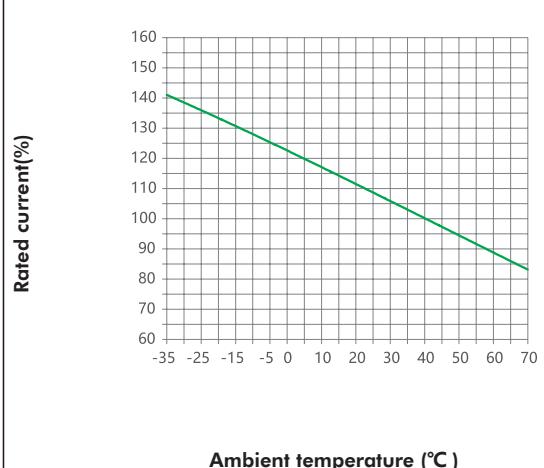


Fig.13 NM1-400 Characteristic Curve

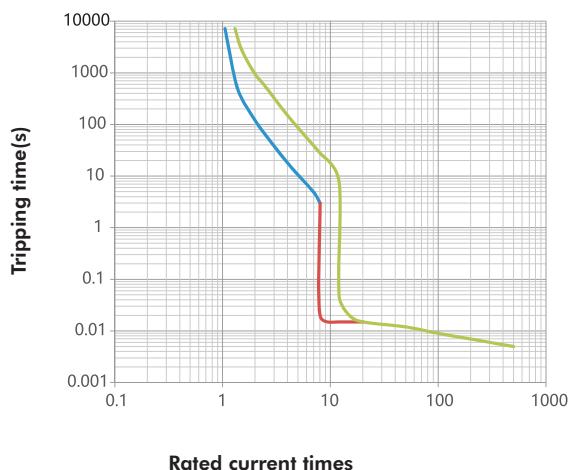


Fig.14 NM1-400 Adjustment curve of temperature

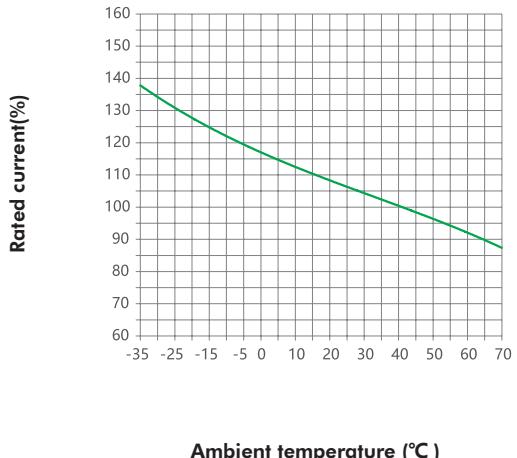


Fig.15 NM1-800 Characteristic Curve

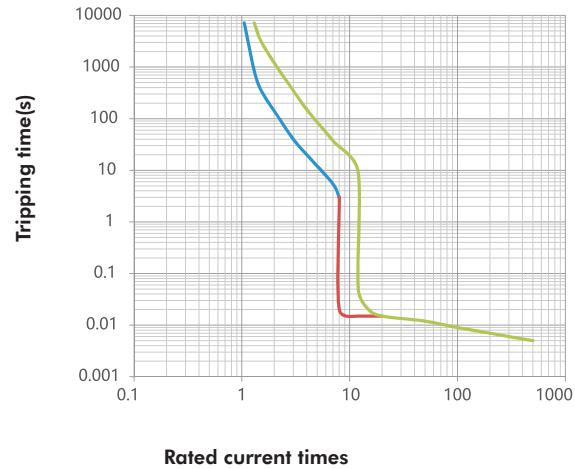


Fig.16 NM1-800 Adjustment curve of temperature

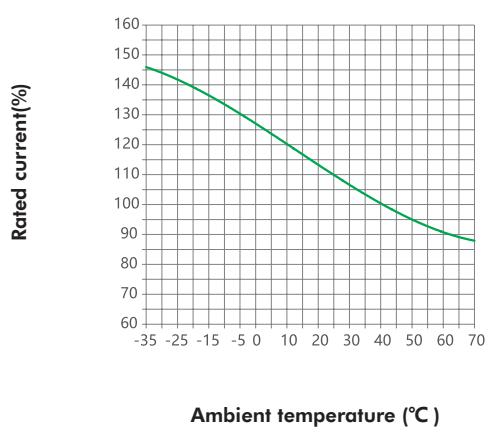


Fig.17 NM1-1250 Characteristic Curve

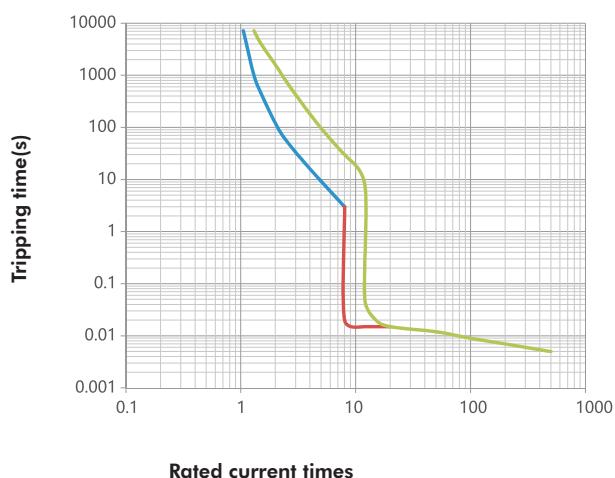
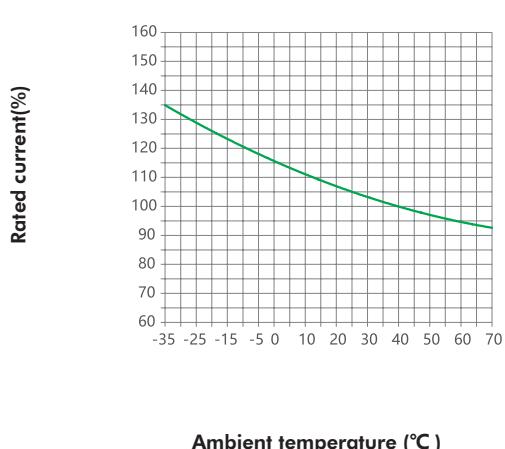


Fig.18 NM1-1250 Adjustment curve of temperature



8.2 Temperature compensation correction

NM1 series temperature compensation coefficient table (calibration at 40°C , for the calibration at other temperature standards please contact with us)

Type	Current range	Compensation coefficient													
		-5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
NM1-63S, H	10~32A	1.18	1.17	1.16	1.14	1.12	1.09	1.07	1.05	1.03	1	0.97	0.95	0.92	0.87
NM1-63S, H	40~63A	1.16	1.16	1.15	1.14	1.12	1.10	1.08	1.06	1.03	1	0.97	0.94	0.87	0.82
NM1-125C, S, H, R	25~32A	1.18	1.17	1.16	1.14	1.12	1.09	1.07	1.05	1.03	1	0.97	0.95	0.92	0.87
NM1-125C, S, H, R	40~125A	1.16	1.16	1.15	1.14	1.12	1.10	1.08	1.06	1.03	1	0.97	0.94	0.87	0.82
NM1-250 S, H, R	100~250A	1.14	1.13	1.13	1.12	1.10	1.08	1.07	1.05	1.03	1	0.97	0.93	0.86	0.76
NM1-400S, H, R	225~400A	1.13	1.12	1.12	1.11	1.10	1.08	1.06	1.05	1.03	1	0.97	0.93	0.85	0.75
NM1-630S, H, R	400~630A	1.13	1.12	1.12	1.11	1.10	1.08	1.07	1.05	1.03	1	0.97	0.93	0.85	0.75
NM1-800S,H, R	630~800A	1.13	1.12	1.12	1.11	1.10	1.08	1.07	1.05	1.03	1	0.97	0.93	0.85	0.75
NM1-1250H	700~1250A	1.14	1.13	1.12	1.11	1.10	1.09	1.07	1.05	1.03	1	0.97	0.92	0.85	0.76

9. Wiring

Front connection(Fixed connection)

Extended connection terminals (for products 10~1250A, extended terminals are available)

Connection screws

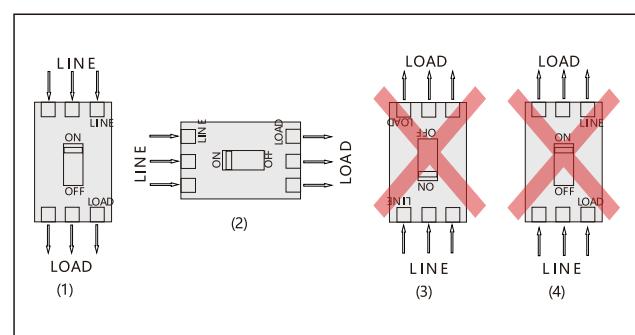
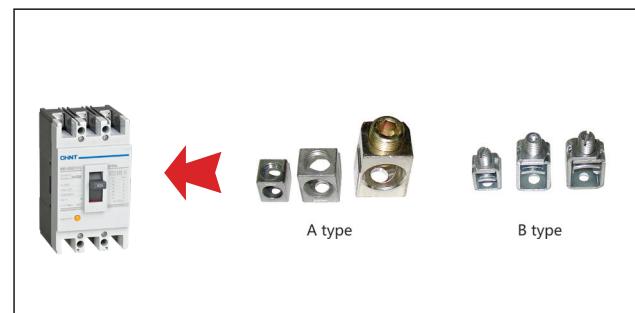


Frame level	Current (A)	Breaking capacity code	Front connection screw		
			Hexagonal head screw (A)	Hexagonal socket screw (B)	Cross screw (C)
63	10	S	■		
		H	■		
	16	S	■		
		H	■		
	20	S	■		
		H	■		
	25	S	■		
		H	■		
	30	S	■		
		H	■		
	32	S	■		
		H	■		
	40	S	■		
		H	■		
	50	S	■		
		H	■		
125	60	S	■		
		H	■		
	63	S	■		
		H	■		
	25	C	■	■	■
		S	■	■	■
		H	■	■	■
		R	■	■	■
	30	C	■	■	■
		S	■	■	■
		H	■	■	■
		R	■	■	■
	32	C	■	■	■
		S	■	■	■
		H	■	■	■
		R	■	■	■
250	40	C	■	■	■
		S	■	■	■
		H	■	■	■
		R	■	■	■
	50	C	■	■	■
		S	■	■	■
		H	■	■	■
		R	■	■	■
	60	C	■	■	■
		S	■	■	■
		H	■	■	■
		R	■	■	■
	63	C	■	■	■
		S	■	■	■
		H	■	■	■
		R	■	■	■
400	75	C	■	■	■
		S	■	■	■
		H	■	■	■
		R	■	■	■
	225	S	■	■	■
		H	■	■	■
		R	■	■	■
	250	S	■	■	■
		H	■	■	■
		R	■	■	■
	300	S	■	■	■
		H	■	■	■
		R	■	■	■

Frame level	Current (A)	Breaking capacity code	Front connection screw		
			Hexagonal head screw (A)	Hexagonal socket screw (B)	Cross screw (C)
80	C		■		■
	S		■		■
	H			■	■
	R		■	■	■
100	C		■		■
	S		■		■
	H		■		■
	R		■	■	■
125	C		■		■
	S		■		■
	H		■		■
	R		■	■	■
140	S		■		
	H		■		
	R		■		
	S		■		
150	H		■		
	R		■		
	S		■		
	H		■		
160	S		■		
	H		■		
	R		■		
	S		■		
175	H		■		
	R		■		
	S		■		
	H		■		
180	S		■		
	H		■		
	R		■		
	S		■		
200	H		■		
	R		■		
	S		■		
	H		■		
225	S		■		
	H		■		
	R		■		
	S		■		
250	H		■		
	R		■		
	S		■		
	H		■		
225	S		■		
	H		■		
	R		■		
	S		■		
250	H		■		
	R		■		
	S		■		
	H		■		
300	S		■		
	H		■		
	R		■		

Frame level	Current (A)	Breaking capacity code	Front connection screw		
			Hexagonal head screw (A)	Hexagonal socket screw (B)	Cross screw (C)
400	315	S	■	■	
		H	■	■	
		R	■	■	
	350	S	■	■	
		H	■	■	
		R	■	■	
	400	S	■	■	
		H	■	■	
		R	■	■	
630	400	S	■	■	
		H	■	■	
		R	■	■	
	450	S	■	■	
		H	■	■	
		R	■	■	
	500	S	■	■	
		H	■	■	
		R	■	■	
800	630	S	■	■	
		H	■	■	
	700	R	■	■	
		S	■	■	
	800	H	■	■	
	R	■	■	■	

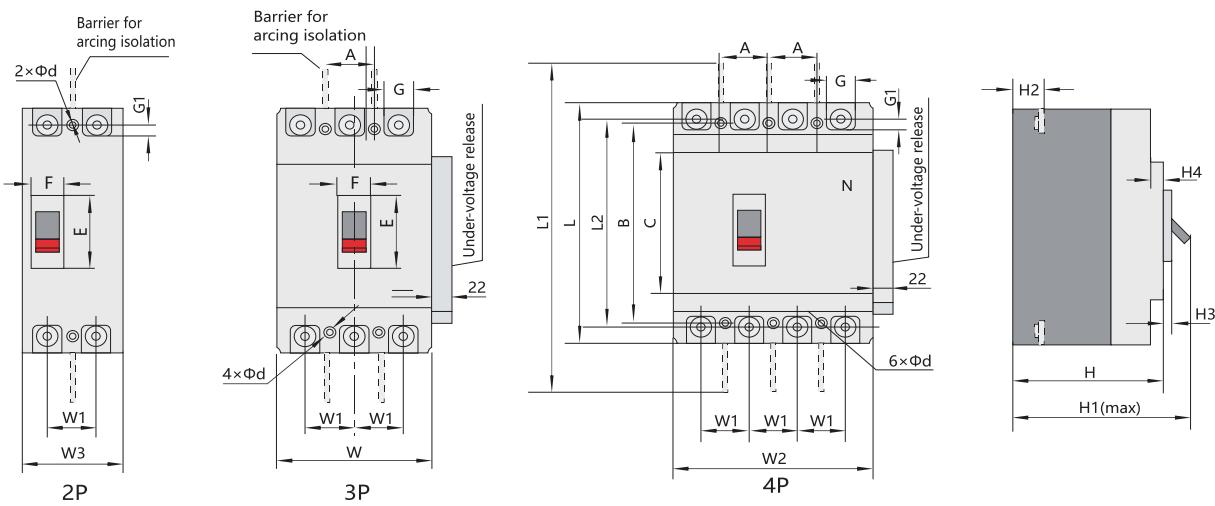
Cage clamp terminals (for products 16~400A, cage clamp terminals are available)



Modes of down-lead (1) and (2) illustrated in the figure are available for your wiring operation. For its breaking capacity may be affected, mode of down-lead (3) is not recommended, before reception of any authorized announcement from the manufacturer; the mode of down-lead (4) is prohibited for your wiring.

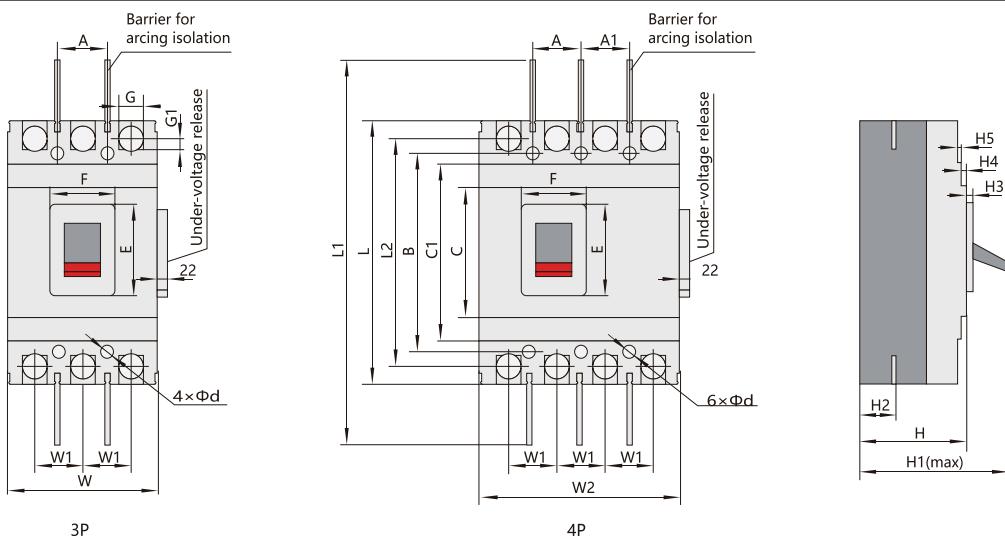
10. Overall and mounting dimensions

Fig.15a NM1-63, 125, 250 fixed connection



Dimension		NM1-63S	NM1-63H	NM1-125S	NM1-125H NM1-125R	NM1-125H/2P	NM1-250S	NM1-250H NM1-250R	NM1-250S/2P
Overall dimensions	C	85	85	85	85	85	102	102	102
	E	48	48	51	51	51	51	51	51
	F	23	23	23/22	23	23	23	23	23
	G	14	14	17.5	17.5	17.5	23	23	23
	G1	6.5	6.5	7.5	7.5	7.5	11.5	11.5	11.5
	H	71	80	68	86	86	87	103.5	85.5
	H1	91	100	86	104	102	110	127	109
	H2	18.5	27.5	24	24	24	24	24	23
	H3	6	6	4	4	4	3.5	3.5	3.5
	H4	5	5	7	7	7	5.5	5.5	5.5
	L	135	135	155	155	150	165	165	165
	L1	235	235	255	255	250	362	362	362
	L2	117	117	136	136	130	144	144	144
	W	76	76	90	90	—	105	105	—
Mounting dimensions	W1	25	25	30	30	30	35	35	35
	W2	—	103	120	120	—	140	140	—
	W3	—	—	65	—	65	—	75	75
	A	25	25	30	30	—	35	35	—
	B	117	117	130.5	130.5	129	126	126	126
	Φd	4.5	4.5	4.5×6	4.5×6	4.5	5	5	5

Overall and mounting dimensions of NM1-400, 630, 800, 1250(Fixed type)



Dimension		NM1-400S/3P NM1-400H/3P NM1-400R/3P	NM1-400S/4P NM1-400H/4P	NM1-630S/3P NM1-630H/3P NM1-630R/3P	NM1-630S/4P NM1-630H/4P	NM1-800S/4P NM1-800H/4P NM1-800R/3P	NM1-800S/4P NM1-800H/4P	NM1-1250S/3P	NM1-1250H/3P
Overall dimensions	C	128	128	136	136	135.5	135.5	204	204
	C1	174	174	184.5	184.5	204	204	316	345.5
	E	89	89	89	89	81	81	100	100
	F	66	66	66	66	66	66	78	78
	G	30	30	40.5	40.5	45	45	—	—
	G1	11.5	11.5	15.5	15.5	12	12	—	—
	H	107.5	107.5	112	112	118	118	141	141
	H1	162	162	164.5	164.5	168	168	202	202
	H2	40	40	42	42	42	42	55/57	55/57
	H3	6	6	6.5	6.5	4.5	4.5	19	19
	H4	5	5	3.5	3.5	4.5	4.5	2	2
	H5	4.5	4.5	4.5	4.5	8	8	4.5	4.5
	L	257	257	270	270	280	280	406	406*
	L1	466	466	472	472	490	490	710	715
	L2	224	224	234	234	243	243	—	—
Mounting dimensions	W	150	—	182	—	210	—	210	210
	W1	48	48	58	58	70	70	70	70
	W2	—	198	—	240.5	—	280	—	—
	Φd	8	8	7	7	7	7	10	10

*Note: Length of NM1-1250H with the connection board, is 545mm

11. Accessories

Inner accessories



Accessory	Accessory code		Mounting and wiring mode		
	Magnetic only release	Compound release	NM1-125H,R NM1-250H,R	NM1-63S,H NM1-125C,S,H,R NM1-250S,H NM1-400S,H,R NM1-630S,H,R NM1-800H, R	
			2P	3P 4P	3P
No accessory	200	300			
Alarm contact	208	308			
Shunt release	210	310			
Auxiliary contact	220	320			
Under-voltage release	230	330			
Shunt release, auxiliary contact	240	340			
Shunt release, under-voltage release	250	350			
Two groups of auxiliary contacts	260	360			
Auxiliary contact, under-voltage release	270	370			
Shunt release, alarm contact	218	318			
Auxiliary alarm contact	228	328			
Under-voltage release, auxiliary alarm contact	238	338			
Shunt release, auxiliary alarm contact	248	348			
Two groups auxiliary contact of auxiliary alarm contact	268	368			
Under-voltage release auxiliary alarm contact	278	378			

Note: ■ Shunt release ▲ Under-voltage release ○ Auxiliary contact ● Alarm contact

11.1 Under-voltage release

- a. $U_n = 70\sim 35\% U_s$, reliable operation
- b. $U_n < 35\% U_s$, prevent breaker from making
- c. $U_n > 85\% U_s$, guarantee the breaker making

The rated voltage of the under-voltage release is 50Hz, 230V and 400V.

Code of under-voltage release

code	A2	A4
voltage	AC 230V	AC 400V
rated frequency	50Hz	50Hz



11.2 Shunt release

The rated control voltage of shunt release is 50Hz,

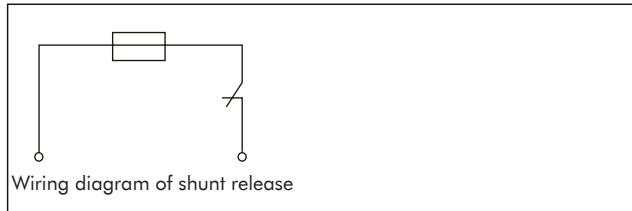
230V and 400V.

$U_n = 70\sim 110\% U_s$, reliable operation

Code of shunt release

code	A2	A4	D3
voltage	AC 230V	AC 400V	DC 24V
rated frequency	50Hz/ 60Hz	50Hz/ 60Hz	-

Note: when voltage is DC 24V, rated current should be up to $5A \pm 10\%$

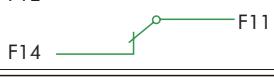


11.3 Auxiliary contact and alarm contact

Rated parameter of auxiliary contact

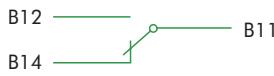
Frame size	Conventional heating current I_{th} (A)	Rated current I_e (A) at AC 400 V	Rated current I_e (A) at DC 230 V
$I_{nm} \leq 250A$	3	0.26	0.14
$I_{nm} \geq 400A$	6	3	0.2

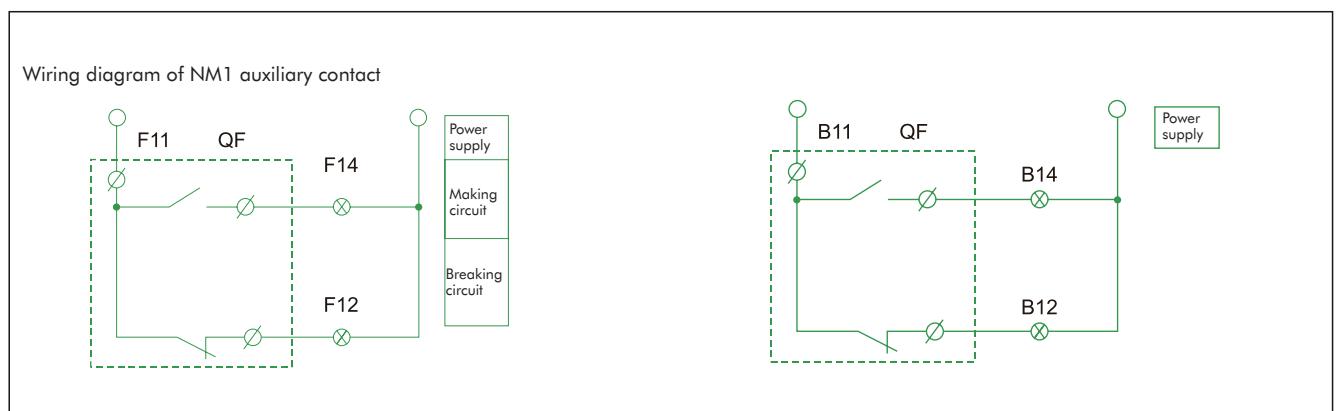
a. Auxiliary contact

Circuit breaker is at "breaking" status	
Circuit breaker is at "making" status	

b. Alarm contact

When circuit breaker normally makes and breaks, alarm contact doesn't operate. After free release (or release due to failure) alarm contact operate; and after the circuit breaker operates again, alarm contact returns to the original status.

Circuit breaker is at "breaking" or "making" status	
Circuit breaker is at free release (or alarming) status	



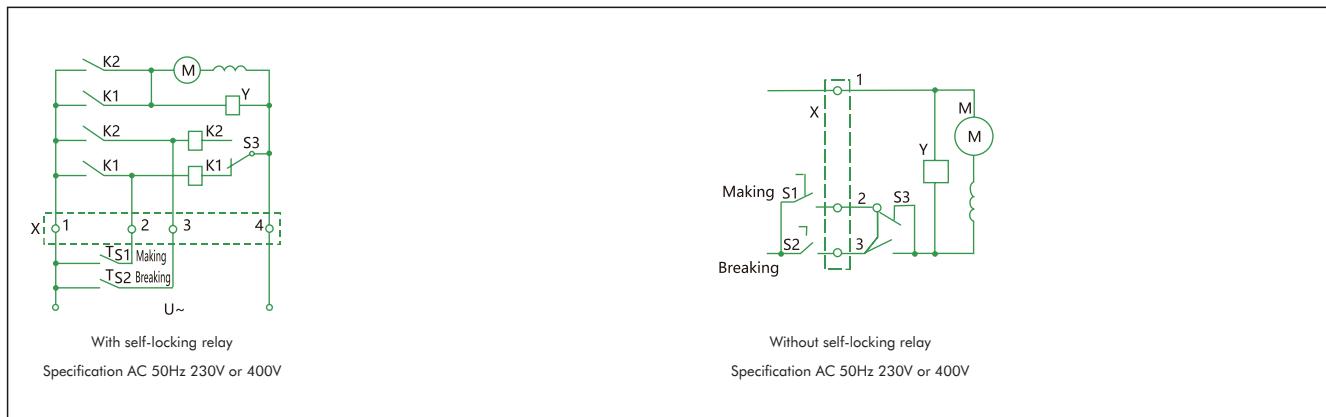
External accessories

11.4 Motor-driven operation mechanism

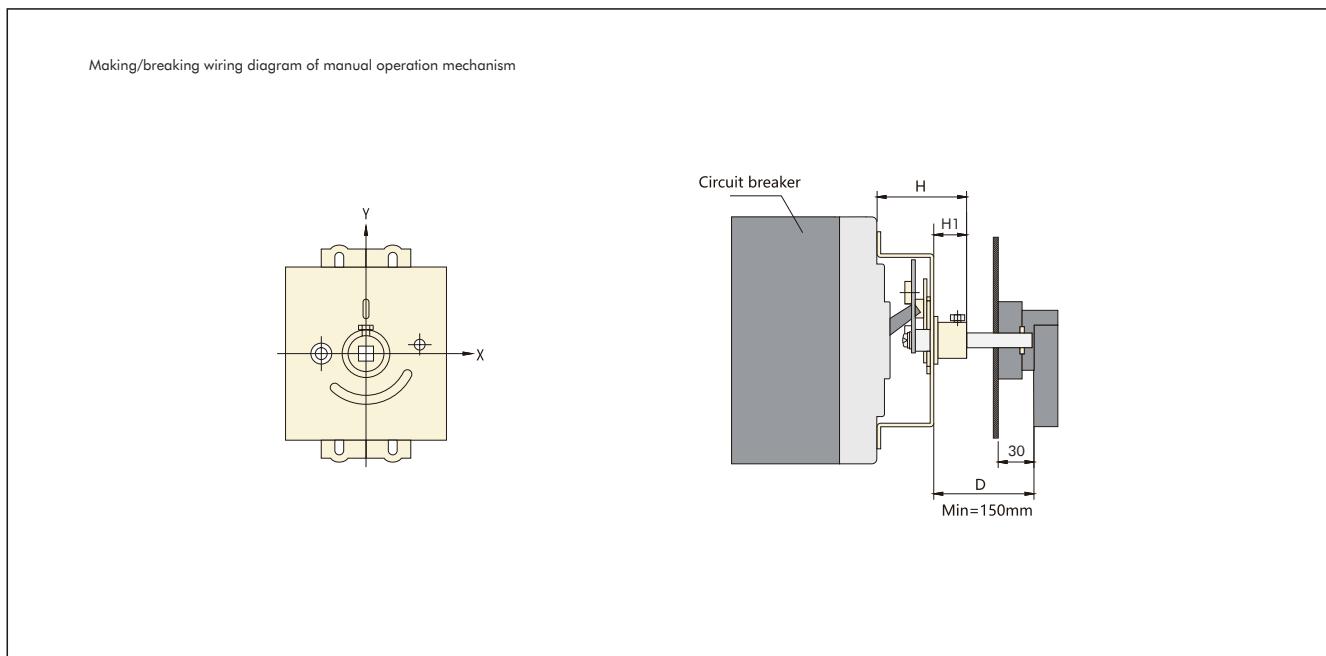
Items	Model	NM1-63 NM1-125, NM1-250, NM1-400, NM1-630, NM1-800, NM1-1250
Structure form	Motor	
Code of AC/DC voltage	A1/D1, A2/D2, A4	

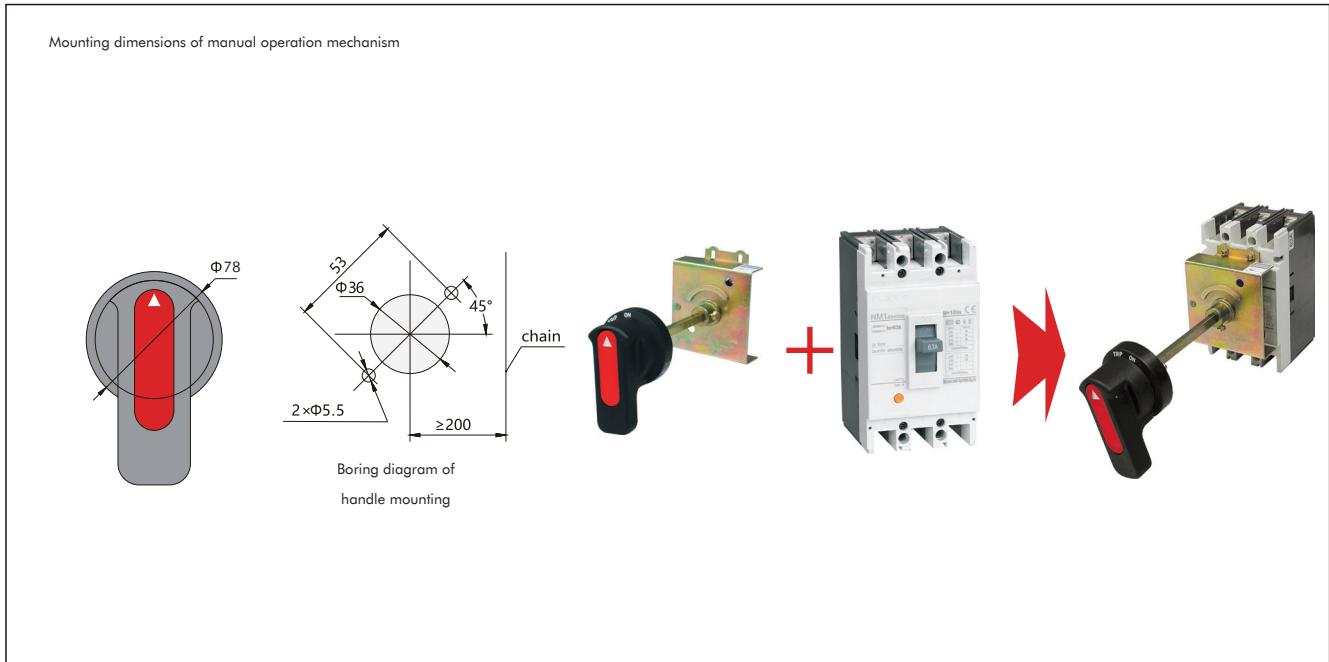
Note: A1 AC 110V, A2 AC 230V, A4 AC 400V, D1 DC 110V, D2 DC 230V

Making and breaking diagram of motor-driven operation mechanism(AC/DC)

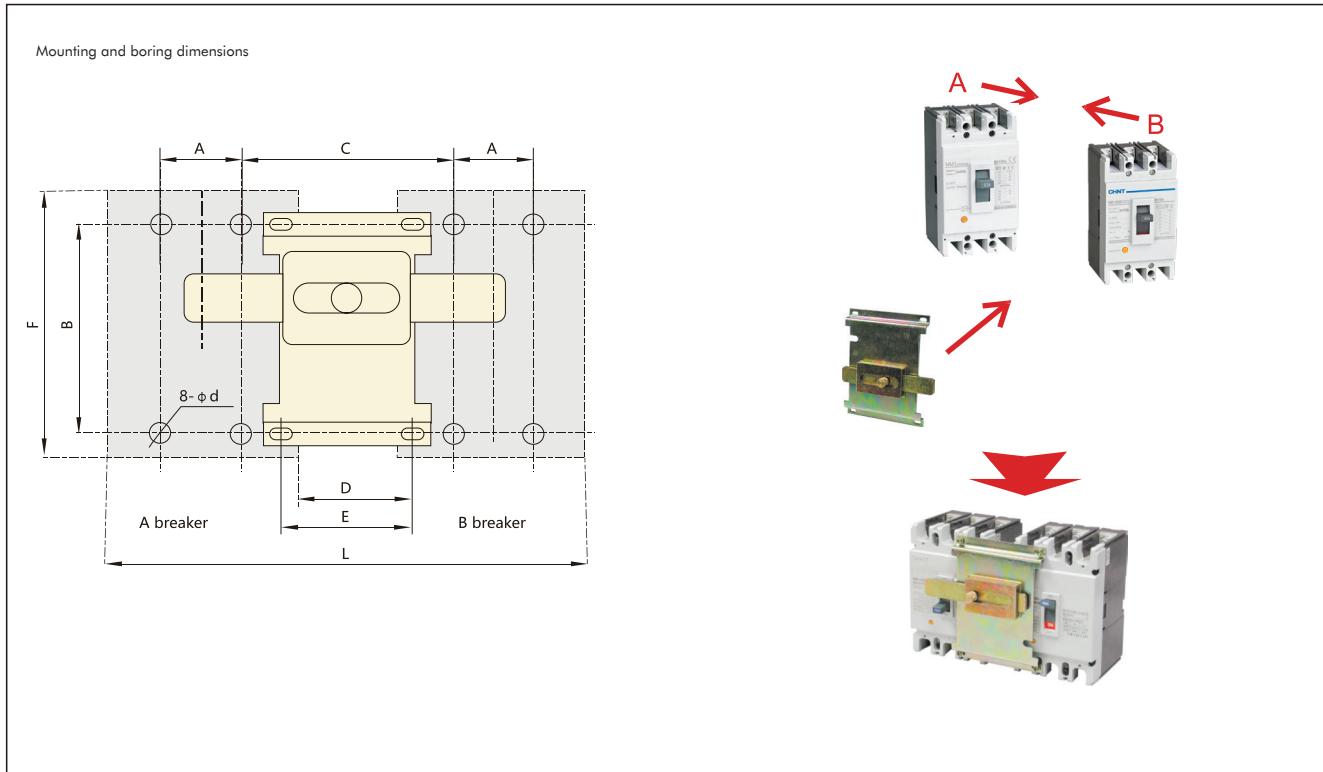


Rotary manual operation mechanism





Frame size	NM1-63	NM1-125	NM1-250	NM1-400	NM1-630	NM1-800	NM1-1250H
Mounting size H	51	53	56.5	100	3P : 90 4P : 96.5	3P : 100 4P : 90	103
Mounting size H1	20	20	20	20	20	3P : 18 4P : 20	18
Y value of the handle related to the center of the breaker	0	0	0	0	0	0	15



(mm)

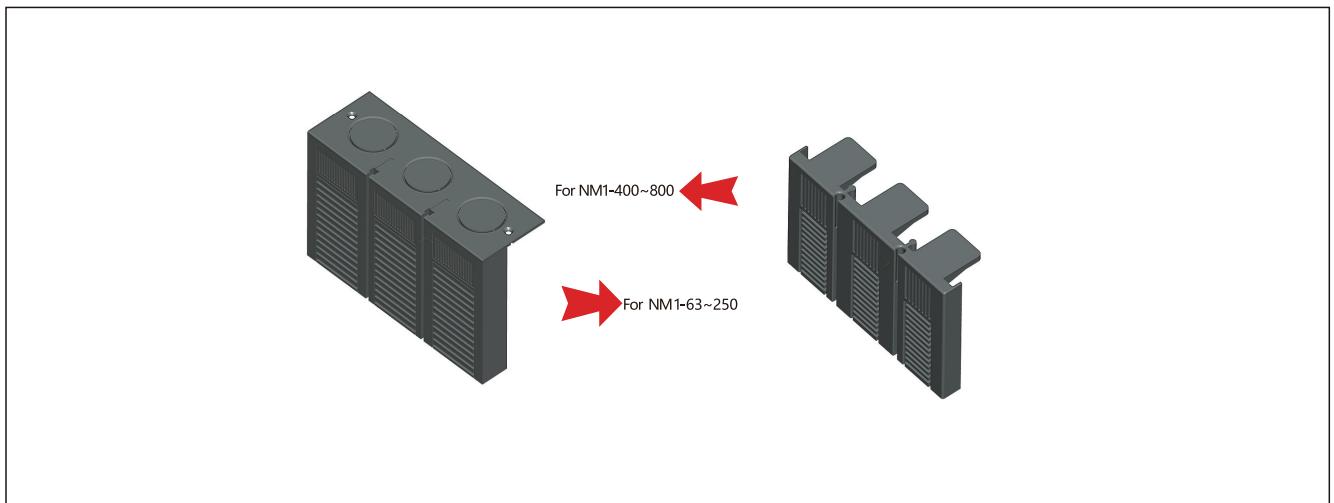
Model	A	B	C	D	E	F	L	Φd
NM1-63	25	117	80	30	80	135	182	4.5
NM1-125	30	130.5	90	30	90	155	210	$4.5 \times 6^*$
NM1-250	35	126	100	30	100	165	240	5.5
NM1-400	44	194	136	30	40	257	330	7
NM1-630	58	200	172	48	62	270	412	7
NM1-800	70	243	167	28	40	280	448	7

Note:

1. * stands for length of boring.
2. Install the breaker on the frame first, then install the mechanical interlock on the breaker.

12. Complementary technical information

- 12.1 The customized products of NM1-250, of which the capacity can be enriched to 250A is available.
- 12.2 NM1-1250 products are equipped with connection plate when they are sold; if you need connection plate for products of other model, the connection plate should be ordered separately.
- 12.3 Only H type breaker is applicable to manufacture NM1 series switch disconnector.
- 12.4 Terminal covers of the whole series NM1 products are available, and the protection degree can be up to IP40 after the breaker is equipped with terminal cover.
- 12.5 Safe distance between other electric apparatuses for mounting.



(mm)

Type Distance(min)	NM1-63	NM1-125	NM1-250	NM1-400	NM1-630	NM1-800	NM1-1250
Line side	50	50	50	100	100	100	100
Load side	20	20	20	20	20	20	20
Right side	25	25	25	25	25	25	25
Left side	25	25	25	25	25	25	25

12.6 Tightening torque table

Wire size(copper)		Rated current (A)	Tightening torque(N·m)	
AWG/MCM	mm ²		Front connection plate	Boxing terminal
16-6	1.5-16	10≤In≤63	5	3
4-3	25-50	63 < In≤125	10	8
1-250	50-120	100 < In≤250	12	10
250-500	120-240	250 < In≤400	22	16
300×2	150×2	400 < In≤500	28	18
350×2	185×2	500 < In≤630	28	20
500×2	240×2	630 < In≤800	30	-
350×4	185×4	800 < In≤1250	30	-

12.7 Technical Data of NM1 series

Frame current (A)	Model	Number of poles	Ui (V)	Icu/Ics(kA)			
				220V	230V	240V	380V 400V 415V
63	NM1-63S	3	500	20/10	15/7.5		-
	NM1-63H	3/4	500	42/21	35/17.5		-
125	NM1-125C	3	800	25/12.5	20/10		3/1.5
	NM1-125S	3	800	42/21	25/12.5		3/1.5
	NM1-125H	2	800	65/32.5	50/25		-
		3/4	800	65/32.5	50/25		8/4
	NM1-125R	3	800	85/42.5	65/32.5		10/5
250	NM1-250S	1	800	20/10	10/5		-
		3/4	800	42/21	25/12.5		5/2.5
	NM1-250R	3	800	85/42.5	65/32.5		-
		2	800	65/32.5	50/25		8/4
	NM1-250H	3/4	800	65/32.5	50/25		10/5
400	NM1-400S	3/4	800	50/25	35/17.5		10/5
	NM1-400H	3	800	85/42.5	50/25		12/6
	NM1-400R	3	800	100/50	70/35		15/7.5
630	NM1-630S	3/4	800	50/25	35/17.5		12/6
	NM1-630H	3	800	85/42.5	50/25		15/7.5
	NM1-630R	3	800	100/50	70/35		20/10
800	NM1-800H	3/4	800	85/42.5	60/30		20/10
	NM1-800R	3	800	100/50	70/35		20/10
1250	NM1-1250H	3	800	85/42.5	65/32.5		20/10

Frame current (A)	Model	Number of poles	Ui (V)	Icu/Ics(kA)						
				220V	230V	240V	380V	400V	415V	660V
63	NM1-63S	3	500	20/40	15/30	-				
	NM1-63H	3/4	500	42/88.2	35/73.5	-				
125	NM1-125C	3	800	25/52.5	20/40	-				
	NM1-125S	3	800	42/88.2	25/52.5	-				
	NM1-125H	2	800	65/43	50/105	-				
		3/4	800	65/43	50/105	-				
250	NM1-250S	1	800	20/40	-	-				
		2/ 3/4	800	42/88.2	25/52.5	-				
	NM1-250H	2/ 3/4	800	65/136.5	50/105	-				
	NM1-250R	3	800	85/187	65/143	-				
400	NM1-400S	3/4	800	50/105	35/73.5	-				
	NM1-400H	3	800	85/187	50/105	-				
	NM1-400R	3	800	100/220	70/154	-				
630	NM1-630S	3/4	800	50/105	35/73.5	-				
	NM1-630H	3	800	85/187	50/105	-				
	NM1-630R	3	800	100/220	70/154	-				
800	NM1-800H	3/4	800	85/187	60/132	-				
	NM1-800R	3	800	100/220	70/154	-				
1250	NM1-1250H	3	800	85/187	65/143	-				

Note: Parameters in black are only for your reference.

12.8 Cascading

12.8.1 Cascading (220/230/240V)

Upstream: NM1-63~1250

Downstream: DZ47, eB, UB, DZ158, DZ267, NB1, NBH8, NM1-63~1250

Upstream Breaking capacity (kA RMS)	NM1-63S 20	NM1-63H 42	NM1-125S 25	NM1-125H 50	NM1-125R 65	NM1-250S 25	NM1-250H 50
Downstream	Breaking capacity (kA RMS)						
DZ267	20	40	20	35	50	20	25
DZ47, eB, UB	20	40	20	35	50	20	25
NBH8	20	40	20	35	50	20	25
NB1(lcn=6000A)	20	42	25	35	50	25	35
NB1(lcn=10000A)	20	42	25	40	50	25	35
DZ158			25	40	50	25	40
NM1-63S		42	25	50	65	25	50
NM1-63H					65		
NM1-125S				50	65		50
NM1-125H					65		
NM1-250S							50
NM1-250H							
NM1-400S							
NM1-400H							
NM1-630S							
NM1-630H							
NM1-800H							
NM1-1250H							

12.8.2 Cascading (380/400/415V)

Upstream: NM1-63~1250

Downstream: DZ47, eB, UB, DZ158, DZ267, NB1, NBH8, NM1-63~1250

Upstream Breaking capacity (kA RMS)	NM1-63S 15	NM1-63H 35	NM1-125S 25	NM1-125H 50	NM1-125R 65	NM1-250S 25	NM1-250H 50
Downstream	Breaking capacity (kA RMS)						
DZ47, eB, UB	10	15	10	15	15	10	15
NB1(lcn=6000A)	15	20	15	20	20	15	20
NB1(lcn=10000A)	15	20	20	25	25	20	25
DZ158			20	25	35	20	25
NM1-63S		35	25	50	65	25	50
NM1-63H					65		
NM1-125S				50	65		50
NM1-125H					65		
NM1-250S							50
NM1-250H							
NM1-400S							
NM1-400H							
NM1-630S							
NM1-630H							
NM1-800H							
NM1-1250H							

NM1-250R
65 NM1-400S
35 NM1-400H
50 NM1-400R
70 NM1-630S
35 NM1-630H
50 NM1-630R
70 NM1-800H
60 NM1-800R
70 NM1-1250H
65

NM1-250R
65 NM1-400S
35 NM1-400H
50 NM1-400R
70 NM1-630S
35 NM1-630H
50 NM1-630R
70 NM1-800H
60 NM1-800R
70 NM1-1250H
65

15									
20									
25									
35	20	25	35						
65									
65									
65		50	70						
65			70		50	70	60	70	65
65		50	70			70		70	
65			70		50	70	60	70	65
	50	70				70		70	
		70		50	70	60	70		65
					70		70		
				50	70				
					70				
							70		