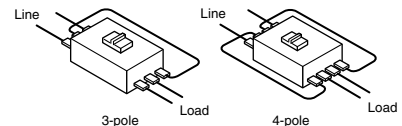


NF-C (Economy class)

Frame (A)	30	50	60	63	100	125			
Model	NF30-CS		NF63-CV		NF125-CV				
Image									
Rated current In (A)	3 5 10 15 20 30	3 4 (5) 6 10 (15) 16	(60)	63	50 (60) 63 (75) 80 100	125			
Rated ambient temperature 40°C (45°C for marine use)									
Number of poles	2 3	2 3	2 3	2 3	2 3	2 3			
Rated insulation voltage Ui (V)	500	600	600	600	600	600			
Rated short-circuit breaking capacities (kA)	IEC 60947-2 EN 60947-2 (Icu/Ics)	AC	690V	-	-	-	-	-	
			500V	-	2.5/2.5	2.5/2.5	2.5/2.5	7.5/4	7.5/4
			440V	-	2.5/2.5	2.5/2.5	2.5/2.5	10/5	10/5
			415V	1.5/1.5	2.5/2.5	2.5/2.5	2.5/2.5	10/5	10/5
			400V	1.5/1.5	5/5	5/5	5/5	10/5	10/5
			380V	1.5/1.5	5/5	5/5	5/5	10/5	10/5
			230V	2.5/2 (240V)	7.5/7.5	7.5/7.5	7.5/7.5	30/15	30/15
			200V	2.5/2 (240V)	7.5/7.5	7.5/7.5	7.5/7.5	30/15	30/15
DC	250V	-	2.5/2.5 (*7)	2.5/2.5 (*7)	2.5/2.5 (*7)	7.5/4 (*4)	7.5/4 (*4)		
Rated impulse withstand voltage Uimp (kV)	4	8	8	8	8	8			
Current (*1)	AC	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible			
Suitability for isolation	-	Yes	Yes	Yes	Yes	Yes			
Reverse connection	-	Available	Available	Available	Available	Available			
Number of operating cycles	Without current	10,000	10,000	10,000	10,000	10,000			
	With current (440VAC)	6,000 (415VAC)	6,000	6,000	6,000	6,000			
Utilization category	A	A	A	A	A	A			
Pollution degree	2	3	3	3	3	3			
EMC environment condition (environment A or B)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable			
Overall dimensions (mm)		a	45 67.5	50 75	50 75	50 75 90	60 90		
		b	96	130	130	130	130		
		c	52	68	68	68	68		
		ca	67	90	90	90	90		
Mass of front-face type (kg)	0.25 0.35	0.45 0.65	0.5 0.7	0.5 0.7	0.6 0.9	0.6 0.9			
Installation and connections	Front connection (F)	Page	●Screw terminal	●Screw terminal	●Screw terminal	●Screw terminal	●Screw terminal		
	Solderless (BOX) terminal (SL)	-	-	-	-	-	-		
	Rear (B)	98	●Round stud (assembled in)	●Round stud	●Round stud	●Round stud	●Bar stud	●Bar stud	
Cassette-type accessories	Plug-in (PM)	-	-	-	-	-	-		
	Alarm switch (AL)	115	● (*5)	● (*6)	● (*6)	● (*6)	● (*6)		
	Auxiliary switch (AX)	-	● (*5)	● (*6)	● (*6)	● (*6)	● (*6)		
	Shunt trip (SHT)	-	-	● (*6)	● (*6)	● (*6)	● (*6)		
	Undervoltage trip (UVT)	-	-	● (*6)	● (*6)	● (*6)	● (*6)		
	With lead-wire terminal block (SLT)	120	●	●	●	●	●		
	Pre-alarm (PAL)	122	-	-	-	-	-		
External accessories	Enclosure	Closed (S)	137	●	●	●	●	●	
		Dustproof (I)	-	-	-	-	-	-	
		Waterproof (W)	-	-	●	●	-	●	
	Electrical operation device (NFM)	140	-	-	-	-	-		
		Mechanical interlock (M) (*10)	136	-	●	●	●	●	
	Handle lock device	Panel mounting	-	●	●	●	●		
		LC	135	●	●	●	●		
		HL	-	●	●	●	●		
	External operating handle	HL-S	-	●	●	●	●		
		(F)	123	-	●	●	●		
Terminal cover (TC-L, TC-S, TTC, BTC, PTC)	(V)	128	-	●	●	●			
Rear stud (B-ST)	98	-	●	●	●	●			
Plug-in (PM)	-	-	●	●	●	●			
IEC 35mm rail mounting adapters	143	●	●	●	●	-			
CE marking	TÜV approval	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration			
CCC recognition	Recognized	Recognized	Recognized	Recognized	Recognized	Recognized			
Marine use approval (*: Certified) (NK, LR, ABS, DNV-GL)	☆ (NK, LR, ABS)	☆	☆	☆	☆	☆			
Automatic tripping device	Hydraulic magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic			
Trip button	- (*2)	Equipped	Equipped	Equipped	Equipped	Equipped			
Page of Characteristics and dimensions	146		148			150			

- Notes:
- *1 The operating characteristics are different between AC and DC.
 - *2 Equipped if AL is installed.
 - *3 For 100A of rated current, NK rating is not shown.
 - *4 For 3-pole product, connect cables/busbars to any two terminals, and for 4-pole product, connect cables/busbars to any two terminals except N-pole.
When connected cables/busbars as shown on the right, maximum of 400VDC can be applied to 3-pole product and maximum of 500VDC to 4-pole product.
 - *5 For draw-out direction of lead wire, lateral direction is standard but for front connection, load-side direction is available if specified.
 - *6 This accessory is cassette type and can be installed by customer. The frame size up to 250A can be closely installed, except for those with UVT.
 - *7 For 3-pole product, connect cables/busbars to any two terminals, and for 4-pole product, connect cables/busbars to any two terminals except N-pole.
Not available for use with connection as shown on the right.
 - *8 Place an order with circuit breaker.
 - *9 Solid state relay output is available as an option. Specify if this contact output is required. Lead-wire terminal block (SLT) is equipped as standard.
 - *10 No isolation function except 400A to 800A frame.



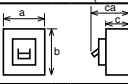


NF-C (Economy class)

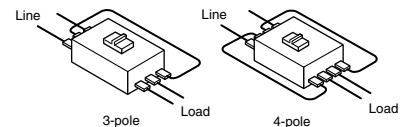
225		250		400		600		630		800	
NF250-CV		NF250-CV		NF400-CW		NF630-CW		NF630-CW		NF800-CEW	
(100) 125 150 175 200 225 (*3)		250		250 300 350 400		500 600		630		Adjustable 400 450 500 600 700 800	
2 3		2 3		2 3		2 3		2 3		3	
600		600		690		690		690		690	
-		-		-		-		-		-	
10/8		10/8		15/8		18/9		18/9		18/9	
15/12		15/12		25/13		36/18		36/18		36/18	
25/19		25/19		36/18		36/18		36/18		36/18	
25/19		25/19		36/18		36/18		36/18		36/18	
25/19		25/19		40/20		40/20		40/20		40/20	
36/27		36/27		50/25		50/25		50/25		50/25	
36/27		36/27		50/25		50/25		50/25		50/25	
15/12 (*4)		15/12 (*4)		20/10 (*4)		20/10 (*4)		20/10 (*4)		-	
8		8		8		8		8		8	
AC/DC compatible		AC/DC compatible		AC/DC compatible		AC/DC compatible		AC/DC compatible		AC	
Yes		Yes		Yes		Yes		Yes		Yes	
Available		Available		Available		Available		Available		Available	
8,000		8,000		6,000		6,000		6,000		4,000	
4,000		4,000		1,000		1,000		1,000		500	
A		A		A		A		A		B	
3		3		3		3		3		3	
Not Applicable		Not Applicable		Not Applicable		Not Applicable		Not Applicable		A	
105		105		140		140		140		210	
165		165		257		257		257		275	
68		68		103		103		103		103	
92		92		134		134		134		155	
1.3 1.5		1.3 1.5		4.4 5.0		5.2 6.0		5.2 6.0		10.9	
●Screw terminal		●Screw terminal		●Busbar terminal		●Busbar terminal		●Busbar terminal		●Busbar terminal	
●		●		-		-		-		-	
●Bar stud		●Bar stud		●Bar stud		●Bar stud		●Bar stud		●Bar stud	
●		●		●		●		●		●	
●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)	
●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)	
●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)	
●(*6)		●(*6)		●		●		●		●	
-		-		-		-		-		●(*9)	
●		●		-		-		-		-	
-		-		●(*8)		●(*8)		●(*8)		●(*8)	
●		●		●		●		●		●	
●		●		●		●		●		●	
●		●		●		●		●		●	
●		●		●		●		●		●	
●		●		●		●		●		●	
●		●		●		●		●		●	
●		●		●		●		●		●	
●		●		●		●		●		●	
●		●		●		●		●		●	
-		-		●		●		●		●	
-		-		-		-		-		-	
TÜV approval Recognized		TÜV approval Recognized		Self-declaration Recognized		Self-declaration Recognized		Self-declaration Recognized		Self-declaration Recognized	
☆		☆		☆		☆		☆		☆	
Thermal-magnetic Equipped		Thermal-magnetic Equipped		Thermal-magnetic Equipped		Thermal-magnetic Equipped		Thermal-magnetic Equipped		Electronic (effective value detection) Equipped	
154		154		162		168		168		172	

Remarks: 1. Products with rated current parenthesized are produced when an order is placed.
 2. Specify "P-LT" when selecting plug-in type with lead-wire terminal block.
 3. The circuit breaker has the rated short-circuit breaking capacity specified in the shaded cells.






NF-S (Standard class)

Frame (A)		30		32		50			60			63				
Model		NF32-SV						NF63-SV								
Image																
Rated current In (A) Rated ambient temperature 40°C (45°C for marine use)		3 4 (5) 6 10 15 16 20 25 (30)		32		3 4 (5) 6 10 (15) 16 20 25 (30) 32 40 50			(60)			63				
Number of poles		2 3		2 3		2 3 4			2 3 4			2 3 4				
Rated insulation voltage Ui (V)		600		600		600			600			600				
Rated short-circuit breaking capacities (kA)	IEC 60947-2 EN 60947-2 (Icu/Ics)	AC	690V	-		-		-			-			-		
			500V	2.5/2.5		2.5/2.5		7.5/7.5			7.5/7.5			7.5/7.5		
			440V	2.5/2.5		2.5/2.5		7.5/7.5			7.5/7.5			7.5/7.5		
			415V	2.5/2.5		2.5/2.5		7.5/7.5			7.5/7.5			7.5/7.5		
			400V	5/5		5/5		7.5/7.5			7.5/7.5			7.5/7.5		
			380V	5/5		5/5		7.5/7.5			7.5/7.5			7.5/7.5		
			230V	7.5/7.5		7.5/7.5		15/15			15/15			15/15		
			200V	7.5/7.5		7.5/7.5		15/15			15/15			15/15		
DC	250V	2.5/2.5 (*5)		2.5/2.5 (*5)		7.5/7.5 (*5)			7.5/7.5 (*5)			7.5/7.5 (*5)				
Rated impulse withstand voltage Uimp (kV)		8		8		8			8			8				
Current (*1)		AC/DC compatible		AC/DC compatible		AC/DC compatible			AC/DC compatible			AC/DC compatible				
Suitability for isolation		Yes		Yes		Yes			Yes			Yes				
Reverse connection		Available		Available		Available			Available			Available				
Number of operating cycles	Without current	10,000		10,000		15,000			15,000			15,000				
	With current (440VAC)	6,000		6,000		8,000			8,000			8,000				
Utilization category		A		A		A			A			A				
Pollution degree		3		3		3			3			3				
EMC environment condition (environment A or B)		Not Applicable		Not Applicable		Not Applicable			Not Applicable			Not Applicable				
Overall dimensions (mm)		a	50	75	50	75	50	75	100	50	75	100	50	75	100	
		b	130		130		130			130			130			
		c	68		68		68			68			68			
		ca	90		90		90			90			90			
Mass of front-face type (kg)		0.45	0.65	0.45	0.65	0.5	0.7	0.9	0.55	0.75	1.0	0.55	0.75	1.0		
Installation and connections	Front connection (F)	Page	●Screw terminal		●Screw terminal		●Screw terminal			●Screw terminal			●Screw terminal			
	Solderless (BOX) terminal (SL)	98	-		-		-			-			-			
	Rear (B)	98	●Bar stud		●Round stud		●Round stud			●Round stud			●Round stud			
	Plug-in (PM)	98	-		-		-			-			-			
Cassette-type accessories	Alarm switch (AL)	115	●(*4)		●(*4)		●(*4)			●(*4)			●(*4)			
	Auxiliary switch (AX)	115	●(*4)		●(*4)		●(*4)			●(*4)			●(*4)			
	Shunt trip (SHT)	115	●(*4)		●(*4)		●(*4)			●(*4)			●(*4)			
	Undervoltage trip (UVT)	115	●(*4)		●(*4)		●(*4)			●(*4)			●(*4)			
	With lead-wire terminal block (SLT)	120	●		●		●			●			●			
Pre-alarm (PAL)	122	-		-		-			-			-				
External accessories	Enclosure	Closed (S)	●		●		●			●			●			
		Dustproof (I)	●		●		●			●			●			
		Waterproof (W)	-	●	-	●	-	●	-	●	-	●	-	●		
	Electrical operation device (NFM)	Mechanical interlock (MI) (*7)	136	●		●		●			●			●		
		Panel mounting Breaker mounting	136	●		●		●			●			●		
	Handle lock device	LC	135	●		●		●			●			●		
		HL HL-S	135	●		●		●			●			●		
	External operating handle	(F)	123	●		●		●			●			●		
		(V)	123	●		●		●			●			●		
	Terminal cover (TC-L, TC-S, TTC, BTC, PTC)	128	●		●		●			●			●			
Rear stud (B-ST)	98	●		●		●			●			●				
Plug-in (PM)	98	●		●		●			●			●				
IEC 35mm rail mounting adapters	143	●		●		●			●			●				
CE marking		Self-declaration		Self-declaration		Self-declaration			Self-declaration			Self-declaration				
CCC recognition		Recognized		Recognized		Recognized			Recognized			Recognized				
Marine use approval (*:Certified) (NK, LR, ABS, DNV-GL)		☆		☆		☆			☆			☆				
Automatic tripping device		Thermal-magnetic		Thermal-magnetic		Thermal-magnetic			Thermal-magnetic			Thermal-magnetic				
Trip button		Equipped		Equipped		Equipped			Equipped			Equipped				
Page of Characteristics and dimensions		148		148		148			148			148				

- Notes: *1 The operating characteristics are different between AC and DC.
 *2 For 100A of rated current, NK rating is not shown.
 *3 For 3-pole product, connect cables/busbars to any two terminals, and for 4-pole product, connect cables/busbars to any two terminals except N-pole.
 When connected cables/busbars as shown on the right, maximum of 400VDC can be applied to 3-pole product and maximum of 500VDC to 4-pole product.
 (For NF250-SV model, connected as shown on the right, maximum of 500VDC can be applied to 3-pole product and maximum of 600VDC to 4-pole product.)
 *4 This accessory is cassette type and can be installed by customer. The frame size up to 250A can be closely installed, except for those with UVT.
 *5 For 3-pole product, connect cables/busbars to any two terminals, and for 4-pole product, connect cables/busbars to any two terminals except N-pole.
 Not available for use with connection as shown on the right.
 *6 Place an order with circuit breaker.
 *7 No isolation function except 400A to 800A frame.



NF-S (Standard class)

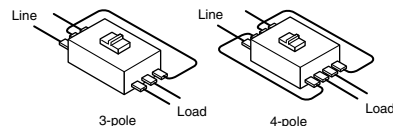
100				125				125				125				160				225				250			
NF125-SV				NF125-SGV				NF125-SEV				NF160-SGV				NF250-SV											
																											
(15) 16 20 (30) 32 40 50 (60) 63 (75) 80 100	125				16-20 20-25 25-32 32-40 35-40-50 45-50-63 53-63-80 70-80-100 90-100-125	16-19 21-32(by 1.5A) 32-47 54-63(by 3A) 63-81 88-106 113-125(by 6A)				125-160				(100) 125 150 160 175 200 225 (*2)	250												
2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4											
690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690											
8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8											
18/18	18/18	30/30	30/30	30/30	30/30	30/30	30/30	30/30	30/30	30/30	30/30	30/30	30/30	30/30	30/30	30/30											
25/25	25/25	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36											
30/30	30/30	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36											
30/30	30/30	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36	36/36											
50/50	50/50	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85											
50/50	50/50	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85	85/85											
40/40 (*3)	40/40 (*3)	20/20 (300V) (*3)	20/20 (300V) (*3)	20/20 (300V) (*3)	20/20 (300V) (*3)	20/20 (300V) (*3)	20/20 (300V) (*3)	20/20 (300V) (*3)	20/20 (300V) (*3)	20/20 (300V) (*3)	20/20 (300V) (*3)	20/20 (300V) (*3)	20/20 (300V) (*3)	20/20 (300V) (*3)	20/20 (300V) (*3)	20/20 (300V) (*3)											
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8											
AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible	AC/DC compatible											
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes											
Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available											
25,000	25,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000											
10,000	10,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000											
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A											
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3											
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable											
60 90 120	60 90 120	105 140	105 140	105 140	105 140	105 140	105 140	105 140	105 140	105 140	105 140	105 140	105 140	105 140	105 140	105 140											
130	130	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165											
68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68											
90	90	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92											
0.7 1.0 1.3	0.7 1.0 1.3	1.4 1.6 2.0	1.4 1.6 2.0	1.4 1.6 2.0	1.4 1.6 2.0	1.4 1.6 2.0	1.4 1.6 2.0	1.4 1.6 2.0	1.4 1.6 2.0	1.4 1.6 2.0	1.4 1.6 2.0	1.4 1.6 2.0	1.4 1.6 2.0	1.4 1.6 2.0	1.4 1.6 2.0	1.4 1.6 2.0											
•Screw terminal	•Screw terminal	•Screw terminal	•Screw terminal	•Screw terminal	•Screw terminal	•Screw terminal	•Screw terminal	•Screw terminal	•Screw terminal	•Screw terminal	•Screw terminal	•Screw terminal	•Screw terminal	•Screw terminal	•Screw terminal	•Screw terminal											
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
•Bar stud	•Bar stud	•Bar stud	•Bar stud	•Bar stud	•Bar stud	•Bar stud	•Bar stud	•Bar stud	•Bar stud	•Bar stud	•Bar stud	•Bar stud	•Bar stud	•Bar stud	•Bar stud	•Bar stud											
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)											
•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)											
•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)											
•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)	•(*4)											
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized	Self-declaration Recognized											
☆ -	☆ -	(LR, ABS, DNV-GL) -	(LR, ABS, DNV-GL) -	(LR, ABS, DNV-GL) -	(LR, ABS, DNV-GL) -	(LR, ABS, DNV-GL) -	(LR, ABS, DNV-GL) -	(LR, ABS, DNV-GL) -	(LR, ABS, DNV-GL) -	☆ -	☆ -	☆ -	☆ -	☆ -	☆ -	☆ -											
Thermal-magnetic Equipped	Thermal-magnetic Equipped	Thermal-magnetic Equipped	Thermal-magnetic Equipped	Electronic (effective value detection) Equipped	Thermal-magnetic Equipped	Thermal-magnetic Equipped	Thermal-magnetic Equipped	Thermal-magnetic Equipped	Thermal-magnetic Equipped	Thermal-magnetic Equipped	Thermal-magnetic Equipped	Thermal-magnetic Equipped	Thermal-magnetic Equipped	Thermal-magnetic Equipped	Thermal-magnetic Equipped	Thermal-magnetic Equipped											
150				158				160				158				154											

Remarks: 1. Products with rated current parenthesized are produced when an order is placed.
2. Specify "P-LT" when selecting plug-in type with lead-wire terminal block.
3. The circuit breaker has the rated short-circuit breaking capacity specified in the shaded cells.







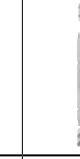

NF-S (Standard class)

Frame (A)		250			250			400			400			600			630			
Model		NF250-SGV			NF250-SEV			NF400-SW			NF400-SEW			NF630-SW						
Image																				
Rated current In (A)		125-160 140-160-200			80-160(by 8A)			250 300			Adjustable 200 225			500 600			630			
Rated ambient temperature 40°C (45°C for marine use)		175-200-250			125-250(by 12.5A)			350 400			250 300 350 400									
Number of poles		2 3 4			3 4			2 3 4			3 4			2 3 4			2 3 4			
Rated insulation voltage Ui (V)		690			690			690			690			690			690			
Relative short-circuit breaking capacities (kA)	IEC 60947-2 EN 60947-2 (Icu/Ics)	AC	690V	8/8			8/8			10/10			10/10			10/10				
			500V	30/30			30/30			30/30			30/30			30/30				
			440V	36/36			36/36			42/42			42/42			42/42				
			415V	36/36			36/36			45/45			50/50			50/50				
			400V	36/36			36/36			45/45			50/50			50/50				
			380V	36/36			36/36			50/50			50/50			50/50				
			230V	85/85			85/85			85/85			85/85			85/85				
			200V	85/85			85/85			85/85			85/85			85/85				
			DC	250V	20/20 (300V) (*2)			-			40/40 (*2)			-			40/40 (*2)			
			Rated impulse withstand voltage Uimp (kV)		8			8			8			8			8			8
Current		AC/DC compatible			AC			AC/DC compatible			AC			AC/DC compatible			AC/DC compatible			
Suitability for isolation		Yes			Yes			Yes			Yes			Yes			Yes			
Reverse connection		Available			Available			Available			Available			Available			Available			
Number of operating cycles	Without current		25,000			25,000			6,000			6,000			6,000			6,000		
	With current (440VAC)		10,000			10,000			1,000			1,000			1,000			1,000		
Utilization category		A			A			A			B			A			A			
Rated short time with stand current Icw (kA) at 0.25s		-			-			-			5			-			-			
Pollution degree		3			3			3			3			3			3			
EMC environment condition (environment A or B)		Not Applicable			A			Not Applicable			A			Not Applicable			Not Applicable			
Overall dimensions (mm)	a		105 140			105 140			140 185			140 185			140 185			140 185		
	b		165			165			257			257			257			257		
	c		68			68			103			103			103			103		
	ca		92			92			155			155			155			155		
Mass of front-face type (kg)		1.4 1.6 2.0			1.7 2.2			4.6 5.2 6.8			6.0 7.6			5.4 6.2 8.0			5.4 6.2 8.0			
Installation and connections	Front connection (F)		Page			●Screw terminal			●Screw terminal			●Busbar terminal			●Busbar terminal			●Busbar terminal		
	Solderless (BOX) terminal (SL)		98			●Bar stud			●Bar stud			●Bar stud			●Bar stud			●Bar stud		
	Rear (B)		98			●Bar stud			●Bar stud			●Bar stud			●Bar stud			●Bar stud		
	Plug-in (PM)		98			●Bar stud			●Bar stud			●Bar stud			●Bar stud			●Bar stud		
Cassette-type accessories	Alarm switch (AL)		●(*3)			●(*3)			●(*3)			●(*3)			●(*3)			●(*3)		
	Auxiliary switch (AX)		●(*3)			●(*3)			●(*3)			●(*3)			●(*3)			●(*3)		
	Shunt trip (SHT)		●(*3)			●(*3)			●(*3)			●(*3)			●(*3)			●(*3)		
	Undervoltage trip (UVT)		●(*3)			●(*3)			●(*3)			●(*3)			●(*3)			●(*3)		
	With lead-wire terminal block (SLT)		120			●			●			●			●			●		
	Pre-alarm (PAL)		122			-			-			●(*5)			-			-		
External accessories	Enclosure Closed (S)		●			●			-			-			-			-		
	Dustproof (I)		●			●			-			-			-			-		
	Waterproof (W)		●			●			-			-			-			-		
	Electrical operation device (NFM)		140			●			●(*6)			●(*6)			●(*6)			●(*6)		
	Mechanical interlock (MI) (*7)		136			●			●			●			●			●		
	Panel mounting Breaker mounting		136			●			●			●			●			●		
	Handle lock device LC		135			●			-			-			-			-		
	HL		135			●			●			●			●			●		
	HL-S		135			●			●			●			●			●		
	External operating handle (F)		123			●			●			●			●			●		
(V)		123			●			●			●			●			●			
Terminal cover (TC-L, TC-S, TTC, BTC, PTC)		128			●			●			●			●			●			
Rear stud (B-ST)		98			●			●			●			●			●			
Plug-in (PM)		98			●			●			●			●			●			
IEC 35mm rail mounting adapters		143			-			-			-			-			-			
CE marking		Self-declaration			Self-declaration			Self-declaration			Self-declaration			Self-declaration			Self-declaration			
CCC recognition		Recognized			Recognized			Recognized			Recognized			Recognized			Recognized			
Marine use approval (*:Certified) (NK, LR, ABS, DNV-GL)		☆ (LR, ABS, DNV-GL) -			☆ (LR, ABS, DNV-GL) -			☆ -			☆ -			☆ -			☆ -			
Automatic tripping device		Thermal-magnetic			Electronic (effective value detection)			Thermal-magnetic			Electronic (effective value detection)			Thermal-magnetic			Thermal-magnetic			
Trip button		Equipped			Equipped			Equipped			Equipped			Equipped			Equipped			
Page of Characteristics and dimensions		158			160			162			164			168			168			

- Notes: *1 The operating characteristics are different between AC and DC.
 *2 For 3-pole product, connect cables/busbars to any two terminals, and for 4-pole product, connect cables/busbars to any two terminals except N-pole.
 When connected cables/busbars as shown on the right, maximum of 400VDC can be applied to 3-pole product and maximum of 500VDC to 4-pole product.
 *3 This accessory is cassette type and can be installed by customer. The frame size up to 250A can be closely installed, except for those with UVT.
 *4 For 3-pole product, connect cables/busbars to any two terminals, and for 4-pole product, connect cables/busbars to any two terminals except N-pole.
 Not available for use with connection as shown on the right.
 *5 Solid state relay output is available as an option. Specify if this contact output is required. Lead-wire terminal block (SLT) is equipped as standard. AS for flush plate type, an outline differs from a standard.
 *6 Place an order with circuit breaker.
 *7 No isolation function except 400A to 800A frame.



NF-S (Standard class)

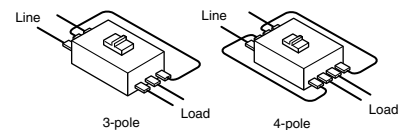
630		800		800		1000		1250		1200		1600		1600	
NF630-SEW		NF800-SEW		NF800-SDW		NF1000-SEW		NF1250-SEW		NF1250-SDW		NF1600-SEW		NF1600-SDW	
															
Adjustable 300 350 400 500 600 630		Adjustable 400 450 500 600 700 800		(700) 800		Adjustable 500 600 700 800 900 1000		Adjustable 600 700 800 1000 1200 1250		1000 1250		Adjustable 800 1000 1200 1400 1500 1600		1600	
3 4		3 4		2		3 4		3 4		2		3 4		2	
690		690		690		690		690		690		690		690	
10/10		10/10		-		25/13		25/13		-		25/13		-	
30/30		30/30		-		65/33		65/33		-		65/33		-	
42/42		42/42		-		85/43		85/43		-		85/43		-	
50/50		50/50		-		85/43		85/43		-		85/43		-	
50/50		50/50		-		85/43		85/43		-		85/43		-	
50/50		50/50		-		85/43		85/43		-		85/43		-	
85/85		85/85		-		125/63		125/63		-		125/63		-	
85/85		85/85		-		125/63		125/63		-		125/63		-	
-		-		40/40		-		-		40/20		-		40/20	
8		8		8		8		8		8		8		8	
AC		AC		DC		AC		AC		DC		AC		DC	
Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Available		Available		Available		Available		Available		Available		Available		Available	
6,000		4,000		4,000		3,000		3,000		3,000		3,000		3,000	
1,000		500		500		500		500		500		500		500	
B		B		A		B		B		A		B		A	
7.6		9.6		-		20 at 0.1		20 at 0.1		-		20 at 0.1		-	
3		3		3		3		3		3		3		3	
A		A		Not Applicable		A		A		Not Applicable		A		Not Applicable	
140 185		210 280		210		210 280		210 280		210		210 280		210	
257		275		275		406		406		406		406		406	
103		103		103		140		140		140		140		140	
155		155		155		190		190		190		190		190	
6.5 8.3		10.9 14.2		9.0		23.5 30.7		23.5 30.7		22.0		34.5 41.2		32.0	
●Busbar terminal		●Busbar terminal		●Busbar terminal		●Busbar terminal ●Busbar terminal		●Busbar terminal ●Busbar terminal		●Busbar terminal		●Busbar terminal ●Busbar terminal		●Busbar terminal	
●Bar stud ●Bar stud		●Bar stud ●Bar stud		●Bar stud		●Bar stud ●Bar stud		●Bar stud ●Bar stud		●Bar stud		●Bar stud ●Bar stud		●Bar stud	
●(*3)		●(*3)		●		●		●		●		●		●	
●(*3)		●(*3)		●		●		●		●		●		●	
●(*3)		●(*3)		●		●		●		●		●		●	
●(*5)		●(*5)		-		●(*5)		●(*5)		-		●(*5)		-	
●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)	
●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)	
●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)	
Self-declaration Recognized		Self-declaration Recognized		Self-declaration Recognized		Self-declaration Recognized		Self-declaration Recognized		Self-declaration		Self-declaration Recognized		Self-declaration	
☆ -		☆ -		-		☆ -		☆ -		-		-		-	
Electronic (effective value detection) Equipped		Electronic (effective value detection) Equipped		Thermal-magnetic Equipped		Electronic (effective value detection) Equipped		Electronic (effective value detection) Equipped		Thermal-magnetic Equipped		Electronic (effective value detection) Equipped		magnetic Equipped	
170		172		174		178		178		180		182		184	

Remarks: 1. Products with rated current parenthesized are produced when an order is placed.
 2. Specify "P-LT" when selecting plug-in type with lead-wire terminal block.
 3. The circuit breaker has the rated short-circuit breaking capacity specified in the shaded cells.

NF-L / NF-H / NF-R (High-performance class)

Frame (A)	50	60	63	100	125	125	125	125
Model	NF63-HV			NF125-HV		NF125-LGV	NF125-HGV	NF125-RGV
Image								
Rated current In (A) Rated ambient temperature 40°C (45°C for marine use)	10 15 16 20 25 30 32 40 50	60	(63)	15 16 20 30 32 40 50 60 63 75 80 100	125	16-20 20-25 25-32 32-40 35-40-50 45-50-63 53-63-80 70-80-100 90-100-125	16-20 20-25 25-32 32-40 35-40-50 45-50-63 53-63-80 70-80-100 90-100-125	16-20 20-25 25-32 32-40 40-50 50-63 63-80 80-100 100-125
Number of poles	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3
Rated insulation voltage Ui (V)	690	690	690	690	690	690	690	690
Rated short-circuit breaking capacities (kA) IEC 60947-2 EN 60947-2 (Icu/Ics)	AC	2.5/2.5	2.5/2.5	2.5/2.5	10/8	10/8	8/8	10/8
	500V	7.5/7.5	7.5/7.5	7.5/7.5	30/23	30/23	36/36	50/38
	440V	10/8	10/8	10/8	50/38	50/38	50/50	65/65
	415V	10/8	10/8	10/8	50/38	50/38	50/50	70/70
	400V	10/8	10/8	10/8	50/38	50/38	50/50	75/75
	380V	10/8	10/8	10/8	50/38	50/38	50/50	75/75
	230V	25/19	25/19	25/19	100/75	100/75	90/90	100/100
	200V	25/19	25/19	25/19	100/75	100/75	90/90	100/100
DC	7.5/7.5 (*5)	7.5/7.5 (*5)	7.5/7.5 (*5)	-	-	20/20 (300V) (*2)	40/40 (300V) (*2)	-
Rated impulse withstand voltage Uimp (kV)	8	8	8	8	8	8	8	8
Current	AC/DC compatible (*1)	AC/DC compatible (*1)	AC/DC compatible (*1)	AC	AC	AC/DC compatible	AC/DC compatible	AC
Suitability for isolation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reverse connection	Available	Available	Available	Available	Available	Available	Available	Available
Number of operating cycles	Without current	15,000	15,000	15,000	25,000	50,000	50,000	50,000
	With current (440VAC)	8,000	8,000	8,000	10,000	30,000	30,000	30,000
Utilization category	A	A	A	A	A	A	A	A
Pollution degree	3	3	3	3	3	3	3	3
EMC environment condition (environment A or B)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Overall dimensions (mm)	a	50 75 100	50 75 100	50 75 100	90 120	90 120	105 140	105 140
	b	130	130	130	130	130	165	165
	c	68	68	68	68	68	68	68
	ca	90	90	90	90	90	92	92
	Mass of front-face type (kg)	0.5 0.7 0.9	0.55 0.75 1.0	0.55 0.75 1.0	0.8 1.0 1.3	0.8 1.0 1.3	1.4 1.6 2.0	1.4 1.6 2.0
Installation and accessories	Front connection (F)	Page	●Screw terminal	●Screw terminal	●Screw terminal	●Screw terminal	●Screw terminal	●Screw terminal
	Solderless (BOX) terminal (SL)		●	●	●	●	●	●
	Rear (B)	98	●Round stud	●Round stud	●Round stud	●Bar stud	●Bar stud	●Bar stud
	Plug-in (PM)		●	●	●	●	●	●
	Alarm switch (AL)	115	●(*3)	●(*3)	●(*3)	●(*3)	●(*3)	●(*3)
	Auxiliary switch (AX)		●(*3)	●(*3)	●(*3)	●(*3)	●(*3)	●(*3)
	Shunt trip (SHT)		●(*3)	●(*3)	●(*3)	●(*3)	●(*3)	●(*3)
Undervoltage trip (UVT)		●(*3)	●(*3)	●(*3)	●(*3)	●(*3)	●(*3)	
With lead-wire terminal block (SLT)	120	●	●	●	●	●	●	
Pre-alarm (PAL)	122	-	-	-	-	-	-	-
External accessories	Enclosure	Closed (S)	●	●	●	●	●	●
		Dustproof (I)	●	●	●	●	●	●
		Waterproof (W)	-	-	-	-	-	-
	Electrical operation device (NFM)		●	●	●	●	●	●
		Mechanical interlock (MI) (*4)	●	●	●	●	●	●
	Handle lock device	LC	●	●	●	●	●	●
		HL	●	●	●	●	●	●
		HL-S	●	●	●	●	●	●
	External operating handle	(F)	●	●	●	●	●	●
		(V)	●	●	●	●	●	●
Terminal cover (TC-L, TC-S, TTC, BTC, PTC)	128	●	●	●	●	●	●	
Rear stud (B-ST)	98	●	●	●	●	●	●	
Plug-in (PM)		●	●	●	●	●	●	
IEC 35mm rail mounting adapters	143	●	●	●	●	●	●	
CE marking	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration	
CCC recognition	Recognized	Recognized	Recognized	Recognized	Recognized	Recognized	Recognized	
Marine use approval (☆:Certified) (NK, LR, ABS, DNV-GL)	☆	☆	☆	☆	☆	(LR, ABS, DNV-GL) ☆	(LR, ABS, DNV-GL) ☆	
Automatic tripping device	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	
Trip button	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	
Page of Characteristics and dimensions		148		150		158	158	158

- Notes: *1 The operating characteristics are different between AC and DC.
 *2 For 3-pole product, connect cables/busbars to any two terminals, and for 4-pole product, connect cables/busbars to any two terminals except N-pole.
 When connected cables/busbars as shown on the right, maximum of 500VDC can be applied to 3-pole product and maximum of 600VDC to 4-pole product.
 *3 This accessory is cassette type and can be installed by customer. The frame size up to 250A can be closely installed, except for those with UVT.
 *4 No isolation function except 400A to 800A frame.
 *5 For 3-pole product, connect cables/busbars to any two terminals, and for 4-pole product, connect cables/busbars to any two terminals except N-pole.
 Not available for use with connection as shown on the right.



NF-L / NF-H / NF-R (High-performance class)

125		160			160			225			250			250			250			250				
NF125-HEV		NF160-LGV			NF160-HGV			NF250-HV			NF250-LGV			NF250-HGV			NF250-RGV							
16-19 21-32(by 1.5A) 32-47 54-63(by 3A) 63-81 88-106 113-125(by 6A)		125-160			125-160			125 150 160 175 200 225			250			125-160 140-160-200 175-200-250			125-160 140-160-200 175-200-250			125-160 160-200 200-250				
3	4	2	3	4	2	3	4	2	3	4	2	3	4	2	3	4	2	3	4	2	3			
690		690			690			690			690			690			690			690				
10/8		8/8			10/8			10/8			10/8			8/8			10/8			10/8			-	
50/38		36/36			50/38			50/38			50/38			36/36			50/38			50/38			-	
65/65		50/50			65/65			65/65			65/65			50/50			65/65			65/65			125/125	
70/70		50/50			70/70			70/70			70/70			50/50			70/70			70/70			150/150	
75/75		50/50			75/75			75/75			75/75			50/50			75/75			75/75			150/150	
75/75		50/50			75/75			75/75			75/75			50/50			75/75			75/75			150/150	
100/100		90/90			100/100			100/100			100/100			90/90			100/100			100/100			150/150	
100/100		90/90			100/100			100/100			100/100			90/90			100/100			100/100			150/150	
-		20/20 (300V) (*2)			40/40 (300V) (*2)			40/40 (300V) (*2)			40/40 (300V) (*2)			20/20 (300V) (*2)			40/40 (300V) (*2)			-			-	
8		8			8			8			8			8			8			8			8	
AC		AC/DC compatible			AC/DC compatible			AC/DC compatible (*1)			AC/DC compatible (*1)			AC/DC compatible			AC/DC compatible			AC			AC	
Yes		Yes			Yes			Yes			Yes			Yes			Yes			Yes			Yes	
Available		Available			Available			Available			Available			Available			Available			Available			Available	
25,000		40,000			40,000			25,000			25,000			25,000			25,000			25,000			25,000	
10,000		15,000			15,000			10,000			10,000			10,000			10,000			10,000			10,000	
A		A			A			A			A			A			A			A			A	
3		3			3			3			3			3			3			3			3	
A		Not Applicable			Not Applicable			Not Applicable			Not Applicable			Not Applicable			Not Applicable			Not Applicable			Not Applicable	
105	140	105	140		105	140		105	140		105	140		105	140		105	140		105	140		105	
165		165			165			165			165			165			165			165			165	
68		68			68			68			68			68			68			68			68	
92		92			92			92			92			92			92			92			92	
1.7	2.2	1.4	1.6	2.0	1.4	1.6	2.0	1.4	1.6	2.0	1.4	1.6	2.0	1.4	1.6	2.0	1.4	1.6	2.0	1.4	1.6	2.0	1.5	1.8
●Screw terminal	●Screw terminal	●Screw terminal	●Screw terminal		●Screw terminal	●Screw terminal		●Screw terminal	●Screw terminal		●Screw terminal	●Screw terminal		●Screw terminal	●Screw terminal		●Screw terminal	●Screw terminal		●Screw terminal	●Screw terminal		●Busbar terminal	
●Bar stud	●Bar stud	●Bar stud	●Bar stud		●Bar stud	●Bar stud		●Bar stud	●Bar stud		●Bar stud	●Bar stud		●Bar stud	●Bar stud		●Bar stud	●Bar stud		●Bar stud	●Bar stud		●Bar stud	
●(*3)	●	●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	
●(*3)	●	●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	
●(*3)	●	●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	
●(*3)	●	●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	●		●(*3)	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
●	●	●	●		●	●		●	●		●	●		●	●		●	●		●	●		●	
Self-declaration	Self-declaration	Self-declaration	Self-declaration		Self-declaration	Self-declaration		Self-declaration	Self-declaration		Self-declaration	Self-declaration		Self-declaration	Self-declaration		Self-declaration	Self-declaration		Self-declaration	Self-declaration		Self-declaration	
Recognized	Recognized	Recognized	Recognized		Recognized	Recognized		Recognized	Recognized		Recognized	Recognized		Recognized	Recognized		Recognized	Recognized		Recognized	Recognized		Recognized	
☆ (LR, ABS, DNV-GL)	-	☆ (LR, ABS, DNV-GL)			☆ (LR, ABS, DNV-GL)			☆	-		☆	-		☆ (LR, ABS, DNV-GL)			☆ (LR, ABS, DNV-GL)			☆ (LR, ABS, DNV-GL)			☆ (LR, ABS, DNV-GL)	
Electronic (effective value detection)		Thermal-magnetic			Thermal-magnetic			Thermal-magnetic			Thermal-magnetic			Thermal-magnetic			Thermal-magnetic			Thermal-magnetic			Thermal-magnetic	
Equipped		Equipped			Equipped			Equipped			Equipped			Equipped			Equipped			Equipped			Equipped	
160		158			158				154					158			158			158			158	

Remarks: 1. Products with rated current parenthesized are produced when an order is placed.
2. Specify "P-LT" when selecting plug-in type with lead-wire terminal block.
3. The circuit breaker has the rated short-circuit breaking capacity specified in the shaded cells.

2
1 Detailed Specifications

NF-H / NF-R (High-performance class)

Frame (A)		250		400				630				800			
Model		NF250-HEV		NF400-HEW		NF400-REW		NF630-HEW		NF630-REW		NF800-HEW		NF800-REW	
Image															
Rated current In (A)		80-160(by 8A)		Adjustable 200 225		Adjustable 250 300 350 400		Adjustable 200 225 400 500 600 630		Adjustable 300 350 400 500 600 630		Adjustable 400 450 500 600 700 800		Adjustable 400 450 500 600 700 800	
Rated ambient temperature 40°C (45°C for marine use)		125-250(by 12.5A)													
Number of poles		3 4		3 4		3		3 4		3		3 4		3	
Rated insulation voltage Ui (V)		690		690		690		690		690		690		690	
Relative short-circuit breaking capacities (kA)	IEC 60947-2 EN 60947-2 (Icu/Ics)	AC	690V	10/8	35/18	-	35/18	-	15/15	-					
			500V	50/38	50/50	70/35	50/50	70/35	50/50	70/35					
			440V	65/65	65/65	125/63	65/65	125/63	65/65	125/63					
			415V	70/70	70/70	125/63	70/70	125/63	70/70	125/63					
			400V	75/75	70/70	125/63	70/70	125/63	70/70	125/63					
			380V	75/75	70/70	125/63	70/70	125/63	70/70	125/63					
			230V	100/100	100/100	150/75	100/100	150/75	100/100	150/75					
			200V	100/100	100/100	150/75	100/100	150/75	100/100	150/75					
			DC	250V	-	-	-	-	-	-	-				
			Rated impulse withstand voltage Uimp (kV)		8		8		8		8		8		8
Current		AC		AC		AC		AC		AC		AC		AC	
Suitability for isolation		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Reverse connection		Available		Available		Available		Available		Available		Available		Available	
Number of operating cycles	Without current	25,000		6,000		6,000		6,000		6,000		4,000		4,000	
	With current (440VAC)	10,000		1,000		1,000		1,000		1,000		500		500	
Utilization category		A		B		B		B		B		B		B	
Rated short time with stand current Icu (kA) at 0.25s		-		5		5		7.6		7.6		9.6		9.6	
Pollution degree		3		3		3		3		3		3		3	
EMC environment condition (environment A or B)		A		A		A		A		A		A		A	
Overall dimensions (mm)	a	105	140	140	185	140	185	140	185	140	280	210	280	210	
	b	165		257		257		257		257		275		275	
	c	68		103		103		103		103		103		103	
	ca	92		155		155		155		155		155		155	
Mass of front-face type (kg)		1.7 2.2		6.0 7.6		6.0		6.5 8.3		6.0		10.9 14.2		10.9	
Installation and connections	Front connection (F)	Screw terminal		Busbar terminal		Busbar terminal		Busbar terminal		Busbar terminal		Busbar terminal		Busbar terminal	
	Solderless (BOX) terminal (SL)	-		-		-		-		-		-		-	
	Rear (B)	Bar stud		Bar stud		Bar stud		Bar stud		Bar stud		Bar stud		Bar stud	
Plug-in (PM)		-		-		-		-		-		-		-	
Cassette-type accessories	Alarm switch (AL)	● (*1)		● (*1)		● (*1)		● (*1)		● (*1)		● (*1)		● (*1)	
	Auxiliary switch (AX)	● (*1)		● (*1)		● (*1)		● (*1)		● (*1)		● (*1)		● (*1)	
	Shunt trip (SHT)	● (*1)		● (*1)		● (*1)		● (*1)		● (*1)		● (*1)		● (*1)	
	Undervoltage trip (UVT)	● (*1)		●		●		●		●		●		●	
	With lead-wire terminal block (SLT)	●		●		●		●		●		●		●	
	Pre-alarm (PAL)	-		● (*2)		● (*2)		● (*2)		● (*2)		● (*2)		● (*2)	
External accessories	Enclosure Closed (S)	-		-		-		-		-		-		-	
	Dustproof (I)	●		-		-		-		-		-		-	
	Waterproof (W)	-		-		-		-		-		-		-	
	Electrical operation device (NFM)	●		● (*3)		● (*3)		● (*3)		● (*3)		● (*3)		● (*3)	
	Mechanical interlock (MI) (*4)	●		●		●		●		●		●		●	
	Panel mounting Breaker mounting	-		-		-		-		-		-		-	
	Handle lock device LC	-		-		-		-		-		-		-	
	HL	●		●		●		●		●		●		●	
	HL-S	●		●		●		●		●		●		●	
	External operating handle (F)	●		●		●		●		●		●		●	
(V)	-		-		-		-		-		-		-		
Terminal cover (TC-L, TC-S, TTC, BTC, PTC)	●		●		●		●		●		●		●		
Rear stud (B-ST)	●		●		●		●		●		●		●		
Plug-in (PM)	-		-		-		-		-		-		-		
IEC 35mm rail mounting adapters	-		-		-		-		-		-		-		
CE marking		Self-declaration		Self-declaration		Self-declaration		Self-declaration		Self-declaration		Self-declaration		Self-declaration	
CCC recognition		Recognized		Recognized		Recognized		Recognized		Recognized		Recognized		Recognized	
Marine use approval (*: Certified) (NK, LR, ABS, DNV-GL)		☆		☆		☆		☆		☆		☆		☆	
Automatic tripping device		Electronic (effective value detection)		Electronic (effective value detection)		Electronic (effective value detection)		Electronic (effective value detection)		Electronic (effective value detection)		Electronic (effective value detection)		Electronic (effective value detection)	
Trip button		Equipped		Equipped		Equipped		Equipped		Equipped		Equipped		Equipped	
Page of Characteristics and dimensions		160		164		164		170		170		172		172	

Notes: *1 This accessory is cassette type and can be installed by customer. The frame size up to 250A can be closely installed, except for those with UVT.
 *2 Solid state relay output is available as an option. Specify if this contact output is required. Lead-wire terminal block (SLT) is equipped as standard.
 *3 Place an order with circuit breaker.
 *4 No isolation function except 400A to 800A frame.

