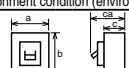


2 Detailed Specifications 1 Molded Case Circuit Breakers

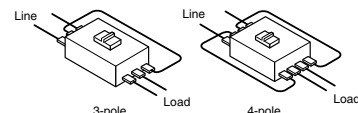
2

1 Detailed Specifications

NF-S (Standard class)

Frame (A)		30		32		50		60		63		
Model		NF32-SV				NF63-SV						
Image												
Rated current In (A)		3 4 (5) 6 10		32		3 4 (5) 6 10 (15) 16		(60)		63		
Rated ambient temperature 40°C (45°C for marine use)		15 16 20 25 (30)				20 25 (30) 32 40 50						
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 capacity (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)			
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		Compatible		Compatible		Compatible		Compatible		Compatible		
Reverse connection		Possible		Possible		Possible		Possible		Possible		
Number of operating cycles	Without current	10,000		10,000		10,000		15,000		15,000		
	With current (440VAC)	6,000		6,000		6,000		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)		N/A		N/A		N/A		N/A		N/A		
Overall dimensions (mm)			a	50	75	50	75	100	50	75	100	
			b	130	130	130	130	130	130	130	130	
			c	68	68	68	68	68	68	68	68	
			ca	90	90	90	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	
Isolation and connections	Front connection (F)	Page	●Screw terminal		●Screw terminal		●Screw terminal		●Screw terminal		●Screw terminal	
	Solderless (BOX) terminal (SL)	92	-		-		-		-		-	
	Rear (B)	92	●Bar stud		●Round stud		●Round stud		●Round stud		●Round stud	
	Plug-in (PM)	92	●		●		●		●		●	
Cassette-type accessories	Alarm switch (AL)	102	●(*4)		●(*4)		●(*4) ●		●(*4) ●		●(*4) ●	
	Auxiliary switch (AX)	102	●(*4)		●(*4)		●(*4) ●		●(*4) ●		●(*4) ●	
	Shunt trip (SHT)	102	●(*4)		●(*4)		●(*4) ●		●(*4) ●		●(*4) ●	
	Undervoltage trip (UVT)	102	●(*4)		●(*4)		●(*4) ●		●(*4) ●		●(*4) ●	
With lead-wire terminal block (SLT)	Pre-alarm (PAL)	114	●		●		●		●		●	
	Enclosure (S)	116	-		-		-		-		-	
	Dustproof (D)	130	●		●		●		●		●	
	Waterproof (W)	130	-	●	-	●	-	●	-	●	-	●
External accessories	Electrical operation device (NFM)	133	-		-		-		-		-	
	Mechanical interlock (MI) (*7)	129	●		●		●		●		●	
	Panel mounting	129	●		●		●		●		●	
	Breaker mounting	129	●		●		●		●		●	
	LC	127	●		●		●		●		●	
	HL	127	●		●		●		●		●	
	HL-S	127	●		●		●		●		●	
	External operating handle (F)	117	●		●		●		●		●	
	(V)	117	●		●		●		●		●	
	Terminal cover (TC-L, TC-S, TTC, BTC, PTC)	121	●		●		●		●		●	
Rear stud (B-ST)	Plug-in (PM)	94	●		●		●		●		●	
	IEC 35mm rail mounting adapters	137	●		●		●		●		●	
	CE marking		Self-declaration		Self-declaration		Self-declaration		Self-declaration		Self-declaration	
	CCC recognition		Recognition in process		Recognition in process		Recognition in process		Recognition in process		Recognition in process	
Marine use approval (NK, LR, ABS, 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		142		142		142		142		142		

- Notes: *1 The trip action characteristics differ between AC and DC for products that are compatible with both AC and DC.
 *2 In case of a current rating of 100A, it does not specify NK rating.
 *3 Use two poles for three- and four-pole products. In this case, do not use the neutral pole of the four-pole products. If wired as shown on the right, three and four poles can be used for up to 400 and 500VDC, respectively. (In case of NF250-SV, three and four poles can be used for up to 500 and 600VDC)
 *4 The cassette type design makes it easy for customer to install. Available for installation on side below 250A frame (excluding UVT).
 *5 Use two poles for three- and four-pole products. In this case, do not use the neutral pole of the four-pole products. Not available for use with connection as shown on the right.
 *6 Place an order of other models in conjunction with the circuit breaker.
 *7 Not isolation compatible, excluding 400 to 800A frame.



NF-S (Standard class)

[illegible]

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

1 Detailed Specifications

NF-S (Standard class)

	630 NF630-SEW	800 NF800-SEW	800 NF800-SDW	1000 NF1000-SEW	1250 NF1250-SEW	1200 NF1250-SDW	1600 NF1600-SEW	1600 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
	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
	Possible	Possible	Possible	Possible	Possible	Possible	Possible	Possible
	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	B
	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	N/A	A	A	N/A	A	A
	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)
	●	●	●	●	●	●	●	●
	–	–	–	–	–	–	–	–
	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●
	–	–	–	–	–	–	–	–
	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration
	Recognition in process	Recognition in process	Recognition in process	Recognition in process	Recognition in process	–	Recognition in process	–
	☆	☆	–	☆	☆	–	–	–
	Electronic (effective value detection)	Electronic (effective value detection)	Thermal-magnetic	Electronic (effective value detection)	Electronic (effective value detection)	Thermal-magnetic	Electronic (effective value detection)	magnetic
	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped
	164	166	168	172	172	174	176	178

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