



# 1. Detailed Specifications

## Molded-case Circuit Breakers

### NF-C (Economy type)

Frame (A)		63	125	250		
Type name		NF63-CV	NF125-CV	NF250-CV		
Image						
Rated current In (A)		3 4 (5) 6 10 (15) 16 20 25 (30) 32 40 50 (60) 63	50 (60) 63 (75) 80 100 125	(100) 125 150 175 200 225 250		
Number of poles		2 3	2 3	2 3		
Rated ambient temperature (°C)		40	40	40		
Rated insulation voltage Ui (V)		600	600	600		
Rated short-circuit breaking capacities (kA)	IEC 60947-2 (Icu/Ics)	AC	690V	-	-	
			500V	2.5/2.5	7.5/4	10/8
			440V	2.5/2.5	10/5	15/12
			415V	2.5/2.5	10/5	25/19
			400V	5/5	10/5	25/19
			380V	5/5	10/5	25/19
			230V	7.5/7.5	30/15	36/27
			DC	250V	2.5/2.5 (*5)	7.5/4 (*2)
Rated impulse withstand voltage Uimp (kV)		8	8	8		
Current (*1)		AC/DC compatible	AC/DC compatible	AC/DC compatible		
Suitability for isolation		Compatible	Compatible	Compatible		
Reverse connection		Possible	Possible	Possible		
Number of operating cycles	Without current	10,000	10,000	8,000		
	With current (440VAC)	6,000	6,000	4,000		
Utilization category		A	A	A		
Pollution degree		3	3	3		
EMC environment condition (environment A or B)		N/A	N/A	N/A		
Overall dimensions (mm)		a	50 75	60 90	105	
		b	130	130	165	
		c	68	68	68	
		ca	90	90	92	
Mass of front-face type (kg)		0.5 0.7	0.6 1.0	1.3 1.5		
Installation and connections	Front (F)	●	●	●		
	Solderless (BOX) terminal (SL)	-	●	●		
	Rear (B)	●	●	●		
	Plug-in (PM)	●	●	●		
Cassette-type accessories	Alarm switch (AL)	● (*3)	● (*3)	● (*3)		
	Auxiliary switch (AX)	● (*3)	● (*3)	● (*3)		
	Shunt trip (SHT)	● (*3)	● (*3)	● (*3)		
	Undervoltage trip (UVT)	● (*3)	● (*3)	● (*3)		
	With lead-wire terminal block (SLT)	●	●	●		
	Pre-alarm (PAL)	-	-	-		
External accessories	Enclosure	Closed (S)	●	●	●	
		Dustproof (I)	●	●	●	
		Waterproof (W)	-	●	●	
	Electrical operation device (NFM)	-	-	●		
	Mechanical interlock (MI) (*4)	Panel mounting	●	●	●	
		LC	●	●	●	
		HL	●	●	●	
	Handle lock device	HL-S	●	●	●	
		(F)	●	●	●	
		(V)	●	●	●	
	External operating handle	(S) (*4)	●	●	●	
		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	TÜV approval		
CCC recognition		Recognized	Recognized	Recognized		
Automatic tripping device		Thermal-magnetic	Thermal-magnetic	Thermal-magnetic		
Trip button		Equipped	Equipped	Equipped		

Notes: \*1 The trip action characteristics differ between AC and DC for products that are compatible with both AC and DC.

\*2 Use two poles for three- and four-pole products. If wired as shown on the right, three and four poles can be used for up to 400 and 500VDC, respectively.

\*3 The cassette-type design makes it easy for customer to install. Available for installation on side (excluding UVT).

\*4 Not isolation-compatible.

\*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 Use two poles for three- and four-pole products. If wired as shown on the right, three and four poles can be used for up to 500 and 600VDC, respectively.

