

UL Certified Circuit Breakers

NF50-SVFU NV50-SVFU



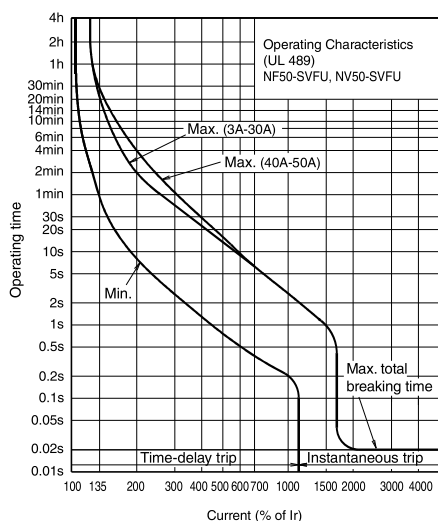
NV50-SVFU

Model		NF50-SVFU		Model		NV50-SVFU	
Rated current I_n (A) Reference ambient temperature 40°C		(3) 5 10 15 20 30 40 50		Rated current I_n (A) Reference ambient temperature 40°C		(5) (10) 15 20 30 40 50	
Number of poles		2 3		Number of poles		2 3	
Phase line		1 ϕ 2W 3 ϕ 3W 1 ϕ 2W		Phase line		1 ϕ 2W 3 ϕ 3W 1 ϕ 2W	
Rated voltage VAC		240		Rated voltage VAC		120-240	
UL 489 CSA C22.2 No.5		AC		UL 489 CSA C22.2 No.5		120-240	
Rated insulation voltage UI V		440		Rated insulation voltage UI V		440	
IEC 60947-2 EN 60947-2 (Icu/Ics)		AC		IEC 60947-2 EN 60947-2 (Icu/Ics)		100-240 100-440	
Rated short-circuit breaking capacity (kA)		AC		Rated short-circuit breaking capacity (kA)		AC	
600Y/347V		-		600Y/347V		-	
480V		-		480V		-	
480Y/277V		-		480Y/277V		-	
240V		14		240V		14	
120V		-		120V		-	
Rated current sensitivity $I_{\Delta n}$ mA		30 50		Rated current sensitivity $I_{\Delta n}$ mA		30 50 30 50 100	
Pick-up current UL 1053		75% of $I_{\Delta n}$		Pick-up current UL 1053		75% of $I_{\Delta n}$	
Operating time (sec) within AT 5 $I_{\Delta n}$		0.04 (*1)		Operating time (sec) within AT 5 $I_{\Delta n}$		0.04 (*1)	
Earth-leakage indication system		Indicator window		Earth-leakage indication system		Indicator window	
UL 489 CSA C22.2 No.5		AC		UL 489 CSA C22.2 No.5		AC	
480V		-		480V		-	
240V		14		240V		14	
120V		14		120V		14	
IEC 60947-2 EN 60947-2 (Icu/Ics)		AC		IEC 60947-2 EN 60947-2 (Icu/Ics)		AC	
440V		-		440V		-	
400V		10/5		400V		10/5	
230V		15/8		230V		15/8	
100V		15/8		100V		15/8	
Standard attached parts (Front connection)		Terminal screw: M5×14 (2P: 4pcs, 3P: 6pcs) IEC35 rail mounting claws		Standard attached parts (Front connection)		Terminal screw: M5×14 (2P: 4pcs, 3P: 6pcs) IEC35 rail mounting claws	

Note *1 0.1 for UL1053.

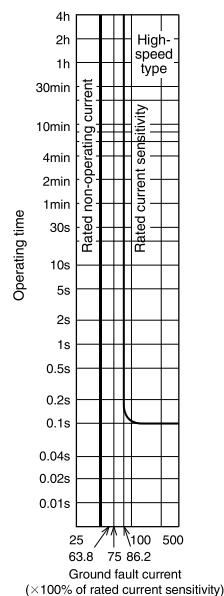
Remark: 1. The mounting screws must be prepared by the user. (Recommended size: M4×0.7×65 (2 pcs).)

Operating Characteristics

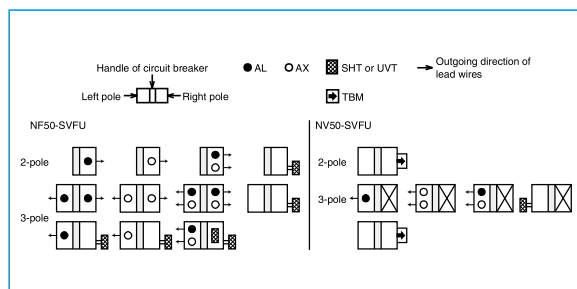


Earth Leakage Tripping Characteristics

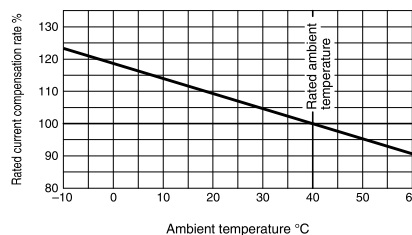
NV50-SVFU (UL 1053)



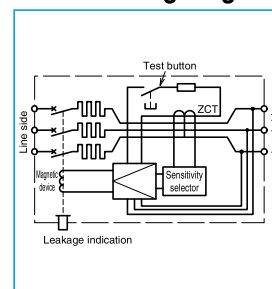
Internal Accessories



Temperature Compensation Curve



Internal Wiring Diagram

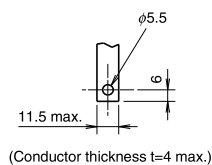
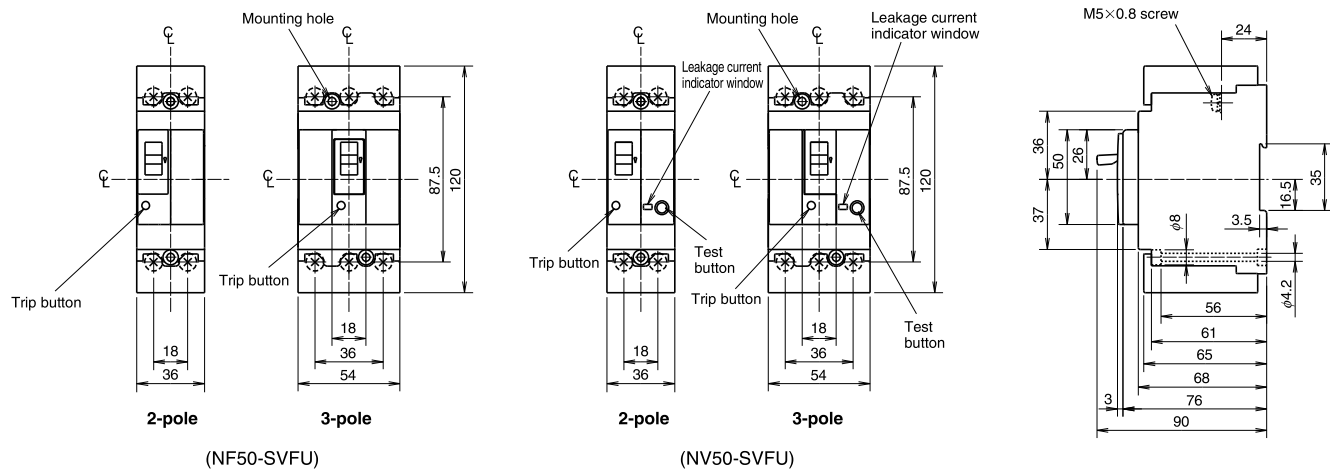


External Accessories

Accessories			Type name	Reference page	Accessories				Type name	Reference page	
Operating handle	F	2P	F-03SVUL2	123	Terminal cover	Large	TC-L	2P	TCL-03SVU2	128	
		3P	F-03SVUL					3P	TCL-03SVU3		
	V	2P	V-03SVUL2	125							
		3P	V-03SVUL								
Handle lock device	HL		HLF-03SVU	134							
	HL-S		HLS-03SVU								

Outline Drawing

Front connection



Conductor drilling for direct connection

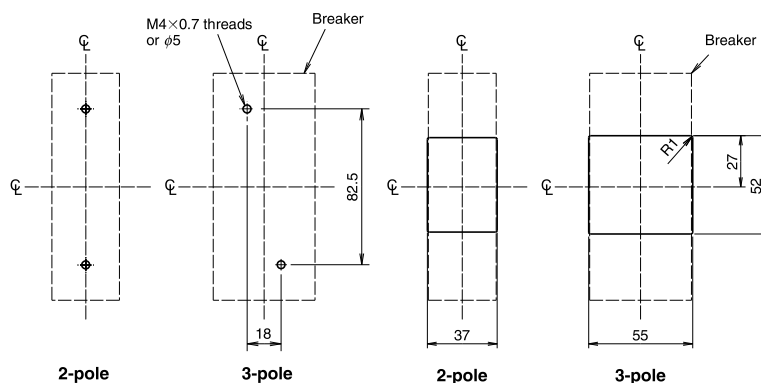
Remarks: 1. The mounting screws are not enclosed with the breaker.
2. The wires cannot be connected directly.

Compatible crimp terminals

Applicable wire range (*1)		Crimp terminal type (*2)	
mm ²	AWG (#) (60°C/75°C)	JST	NTM
2.5-2.63	14	R2-5 2-M5 V2-5 V2-M5	R2-5 R2-5M
2.63-4.6	12	-	R3.5-5S R3.5-5L
2.63-6.64	12-10	R5.5-5 V5.5-5	R5.5-5S R5.5-5N
6.64-10.52	8	R8-5	R8-5S
10.52-16.78	6	R14-5 14-NK5	R14-5S
16.78-26.66	4	22-S5 22-S6	R22-5S

JST: Japan Solderless Terminal Mfg. Co.
NTM: Nichifu Co., Ltd.

Notes *1 14AWG or larger to comply with UL Standards.
*2 When using with a wire connection, use the crimp terminal combination shown above.



The drilling dimensions have a 1.0mm clearance on each side of breaker window frame.

Drilling (Tapping)

Front-panel cutout