Circuit Protectors

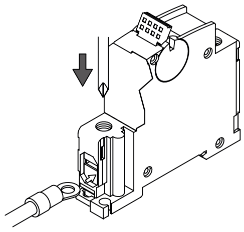
NC1V

IDEC's original Spring-up Terminals and Cover.
Provide IP20 Finger-safe Protection.

- Note: TÜV, CE, and CCC marks are applicable for series trip type only.
- See website for details on approvals and standards.

Finger-safe, spring-up terminal reduces wiring time.

Ring terminal tabs can be installed easily, and screws are held captive.



Main Circuit Terminals are Fingersafe (IP20)

Spring-up, fingersafe structure requires no terminal cover.

Auxiliary/Alarm Contact Terminals are Equipped with a Terminal Cover

Voltage coil terminals on the relay trip version are also equipped with a terminal cover as standard.

Retractable Actuator

The actuator is retracted while the circuit protector is turned on. Inadvertent operation, due to touching the actuator, can be prevented.

Rated Short-circuit Capacity 2500A

Available with Inertial Delay

Allows for use with large inrush currents such as motors

Safe Trip-free Mechanism

The circuit remains open even when the operator is turned on after tripping (unit must be manually reset after removing the cause of the tripping).

Padlock Attachment

Locks the retractable actuator in the off position to prevent NC1V from being switched on inadvertently.

For more information, visit http://eu.idec.com

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NC1V Circuit Protectors

IDEC's original spring-up, fingersafe terminals enhance reliability and safety.

Specifications

Shape		 1-pole	 2-pole	 3-pole
Part No.		NC1V		
Operator Style		Retractable actuator		
Internal Circuit		Series trip (current trip), Relay trip (voltage trip)		
Protection Method		Hydraulic magnetic tripping system, Magnetic tripping system (voltage trip)		
No. of Poles		1-pole	2-pole	3-pole
Rated Voltage (AC/DC) (*1)		250V AC 50/60Hz, 65V DC	250V AC 50/60Hz, 125V DC	250V AC, 50/60Hz
Series Trip (Current Trip)	Rated Short-circuit Capacity	250V AC, 2500A 65V DC, 2500A	250V AC, 2500A 125V DC, 2500A	250V AC, 2500A
	Rated Current	0.1A, 0.3A, 0.5A, 1A, 2A, 3A, 5A, 7A, 10A, 15A, 20A, 25A, 30A		
	Trip Characteristics (*2)	Time delay curve curve M (slow), curve A (medium), S (instantaneous) Curves M and A are avilable with inertial delay.		
Relay Trip (Voltage Trip) (*3)	Rated Current	30A		
	Trip Voltage	24 to 48V DC (at 25°C) Voltage application duration 10 sec maximum, tripping time 0.1 sec maximum (at rated voltage)		
Auxiliary Contact/Alarm Contact	Contact Rating	125V AC 3A (resistive load), 30V DC 2A (resistive load)		
	Minimum Applicable Load	24V DC 1mA (resistive load, reference value)		
Insulation Resistance		100 MΩ minimum (500V DC megger)		
Dielectric Strength		2000V AC, 1 minute (between terminals when main contacts are open, between live parts of different poles, between live and dead parts) 600V AC (between terminals when auxiliary circuits are open)		
Vibration Resistance (with rated current applied)		Damage limits: 147 m/s^2 (10 to 55 Hz) (1-pole, 2-pole), 78 m/s^2 (3-pole) Operating extremes: 98 m/s^2 (1-pole, 2-pole), 78 m/s^2 (3-pole)		
Shock Resistance (S time delay curve: 80% rated current, A, M time delay curve: 100% rated current)		Damage limits: 490 m/s^2 (1-pole, 2-pole), 297 m/s^2 (3-pole) Operating extremes: 196 m/s^2		
Electrical Life		10,000 cyles minimum (at rated curent), 10 operations per minute		
Reference Temperature		40°C		
Operating Tempperature		–10 to +60°C (no freezing) Rated current is based on an ambient temperature of 40°C. When the operating temperature exceeds 40°C, derate the rated current by using the factors shown below.		
Storage Temperature		–40 to +60°C (no freezing)		
Operating Humidity		45 to 85% RH (no condensation)		
Storage Humidity		45 to 85% RH (no condensation)		
Terminal Style	Main Circuit Terminal	Spring-up, fingersafe terminal: M4 screw (up to 20A), M5 screw (25A and 30A)		
	Auxiliary/Alarm Contacts, Voltage Coil Terminal	M3.5 screw		
Weight (approx.)		1-pole: 90g, 2-pole: 170g, 3-pole: 260g		

*1) 3-pole type is for AC voltage only.
*2) For S (instantaneous) tripping curve, humming sound may be caused when used in an AC sinusoidal-wave current circuit around 80% of the rated current, however, the performance of the circuit protector will not be affected.
To avoid unnecessary tripping, do not use in circuits where inrush currents may be present.
*3) Relay trip (voltage trip) type is not equipped with an overcurrent trip function.

Operating Temp.	Derating Factor
50°C	0.9
55°C	0.8
60°C	0.7

- Do not use the NC1V circuit protectors in environments where they are exposed to extreme temperature, humidity, dust, corrosive gases, vibration, shock, or in a circuit where inrush current may be present, otherwise unnecessary operations and damage may occur.

Download catalogs and CAD from http://eu.idec.com/downloads

NC1V Circuit Protectors

Part No. Development

NC1V - 2 1 00 F - 30A A DC24V

[1] **Model**
NC1V: Flap actuator type
DIN rail and panel mounting

[2] **No. of Poles**
1: 1-pole
2: 2-pole
3: 3-pole

[3] **Internal Circuit**
1: Series trip (current trip)
5: Relay trip (voltage trip)

[4] **Auxiliary/Alarm Contacts**
00: None
11: With one auxiliary contact
12: With two auxiliary contacts
13: With three auxiliary contacts
21: With one alarm contact
31: With one auxiliary contact and one alarm contact
32: With two auxiliary contacts and one alarm contact

[8] **Voltage Trip Coil Voltage**
DC24V: 24-48V DC
∗ Specified for relay trip only.

[7] **Time Delay Curve**
M: Slow
A: Medium
S: Instantaneous
∗ For both AC/DC.
∗ Specified for series trip only.

[6] **Rated Current**
0.1A, 0.3A, 0.5A, 1A, 2A, 3A, 5A, 7A, 10A 15A, 20A, 25A, 30A
∗ Specified for series trip only.

[5] Inertial Delay
Blank: Without
F: With
∗ Inertial delay is for AC voltage only.
∗ Available with medium and slow types
(not applicable with relay trip).

• Specity rated current, time delay curve, or voltage trip coil voltage in place of [6][7][8] in the Part No.

Internal Circuit	No. of Poles	Inertial Delay	Auxiliary Contact Alarm Contact	Part No.	Code		
					[6] Rated Current	[7] Time Delay Curve	[8] Voltage Trip Coil Voltage
Series Trip (Current Trip)	1-pole	—	—	NC1V-1100-[6][7]	0.1A 0.3A 0.5A 1A 2A 3A 5A 7A 10A 15A 20A 25A 30A	M (slow) A (medium) S (instantaneous)	—
			One Auxiliary Contact	NC1V-1111-[6][7]			
			One Alarm Contact	NC1V-1121-[6][7]			
		With	—	NC1V-1100F-[6][7]			
			One Auxiliary Contact	NC1V-1111F-[6][7]			
			One Alarm Contact	NC1V-1121F-[6][7]			
	2-pole	—	—	NC1V-2100-[6][7]			
			One Auxiliary Contact	NC1V-2111-[6][7]			
			Two Auxiliary Contacts	NC1V-2112-[6][7]			
			One Alarm Contact	NC1V-2121-[6][7]			
			One Auxiliary Contact and One Alarm Contact	NC1V-2131-[6][7]			
		With	—	NC1V-2100F-[6][7]			
			One Auxiliary Contact	NC1V-2111F-[6][7]			
			Two Auxiliary Contacts	NC1V-2112F-[6][7]			
			One Alarm Contact	NC1V-2121F-[6][7]			
			One Auxiliary Contact and One Alarm Contact	NC1V-2131F-[6][7]			
	3-pole	—	—	NC1V-3100-[6][7]			
			One Auxiliary Contact	NC1V-3111-[6][7]			
			Two Auxiliary Contacts	NC1V-3112-[6][7]			
			Three Auxiliary Contacts	NC1V-3113-[6][7]			
			One Alarm Contact	NC1V-3121-[6][7]			
			One Auxiliary Contact and One Alarm Contact	NC1V-3131-[6][7]			
			Two Auxiliary Contacts and One Alarm Contact	NC1V-3132-[6][7]			
		With	—	NC1V-3100F-[6][7]			
			One Auxiliary Contact	NC1V-3111F-[6][7]			
			Two Auxiliary Contacts	NC1V-3112F-[6][7]			
			Three Auxiliary Contacts	NC1V-3113F-[6][7]			
			One Alarm Contact	NC1V-3121F-[6][7]			
			One Auxiliary Contact and One Alarm Contact	NC1V-3131F-[6][7]			
			Two Auxiliary Contacts and One Alarm Contact	NC1V-3132F-[6][7]			
Relay Trip (Voltage Trip)	1-pole	—	—	NC1V-1500-[8]	—	—	24V DC
	2-pole			NC1V-2500-[8]			
	3-pole			NC1V-3500-[8]			

Note: Inertial delay is for AC circuit. Also, time delay curve of S (instantaneous) is not available with inertial delay.

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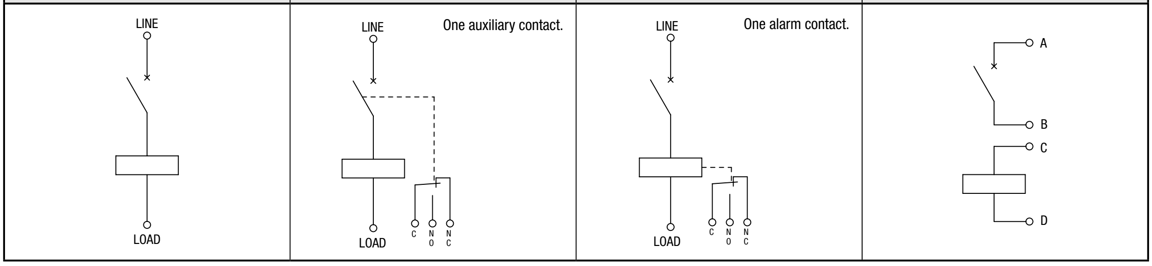
Internal Circuit

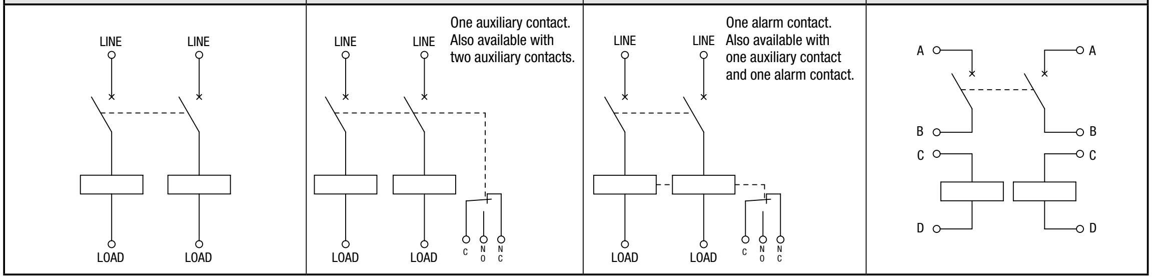
1-pole

NC1V-1100 (Without auxiliary/alarm contacts)	NC1V-1111 (With auxiliary contact)	NC1V-1121 (With alarm contact)	NC1V-1500 (Relay Trip)



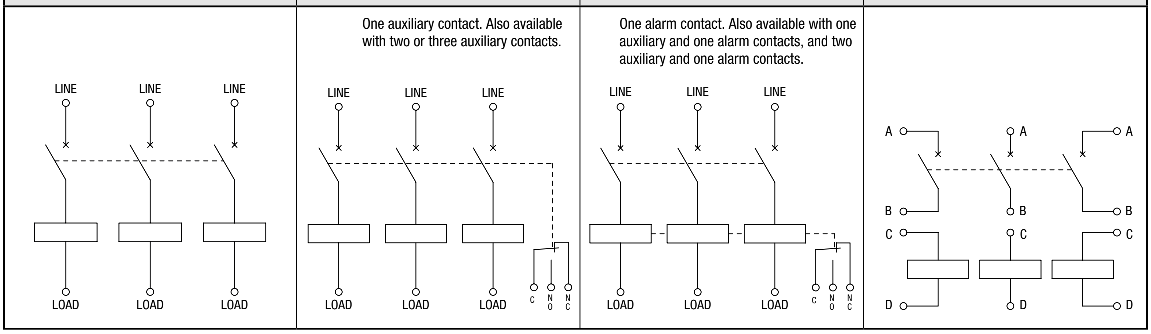
2-pole

NC1V-2100 (Without auxiliary/alarm contacts)	NC1V-2111 (With auxiliary contact)	NC1V-2121 (With alarm contact)	NC1V-2500 (Relay Trip)



3-pole

NC1V-3100 (Without auxiliary/alarm contacts)	NC1V-3111 (With auxiliary contact)	NC1V-3121 (With alarm contact)	NC1V-3500 (Relay Trip)



Overcurrent-Time Delay Characteristics (sec at 40°C) [vertical mounting]

Item	Time Delay Curve	Percent of Rated Current								
		100%	125%	150%	175%	200%	400%	600%	800%	1000%
AC (50/60 Hz)/DC	S (instantaneous)	NO TRIP	—	∗0.005 to 0.1	0.003 to 0.06	0.0027 to 0.05	0.002 to 0.03	0.002 to 0.028	0.002 to 0.025	0.002 to 0.022
	A (medium)	NO TRIP	∗25 to 240	16 to 140	—	6 to 32	0.4 to 4	0.0055 to 1.5	0.004 to 0.8	0.004 to 0.65
	M (slow)	NO TRIP	∗60 to 600	30 to 200	—	9 to 60	0.4 to 10	0.006 to 4.5	0.004 to 1.8	0.004 to 0.8
AC (50/60 Hz)	With Inertial Delay A (medium)	NO TRIP	25 to 240	—	—	6 to 32	0.8 to 6	0.09 to 3.5	0.02 to 1.8	0.01 to 1.0
	With Inertial Delay M (slow)	NO TRIP	60 to 600	—	—	10 to 60	0.8 to 10	0.06 to 4.5	0.02 to 3	0.01 to 1.75

∗: May trip on DC.

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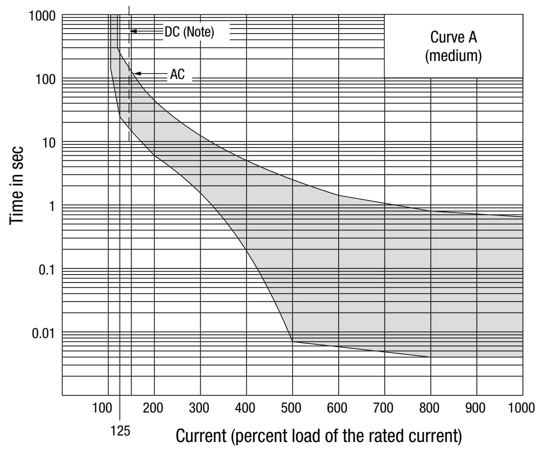
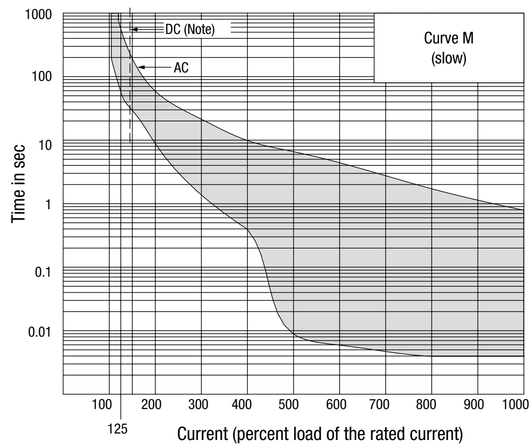
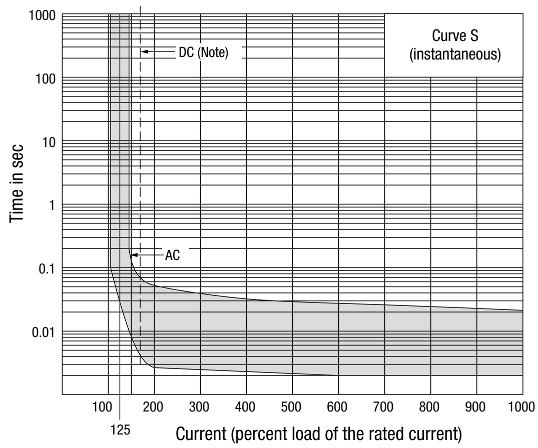
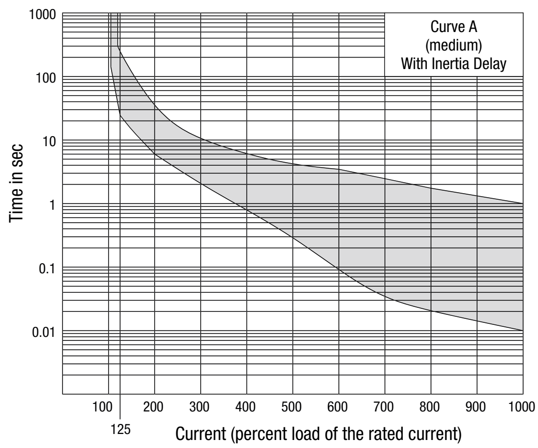
Time Delay Curves at 40°C

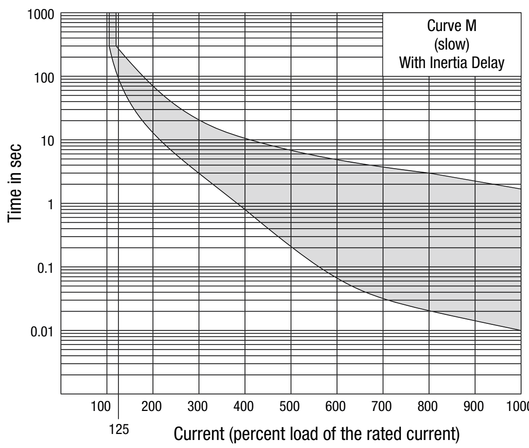






Note: The entire shaded area applies to AC.
For DC, the shaded area on the right of the dashed line applies.





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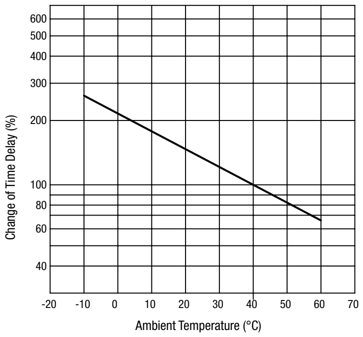
Time Delay Curve and Ambient Temperature

NC1V circuit protectors employ an electromagnetic tripping system, where the rated current (trip current) is not affected by ambient temperatures. But the time delay may vary with the oil viscosity in the oil dash pot. Lower oil viscosity at higher temperatures results in a shorter delay, whereas at lower temperatures the delay will be longer.

Temperature Correction Curve

The time delay curves on the preceding page are measured at 40°C. With reference to the following curves, time delays can be corrected according to ambient temperature.



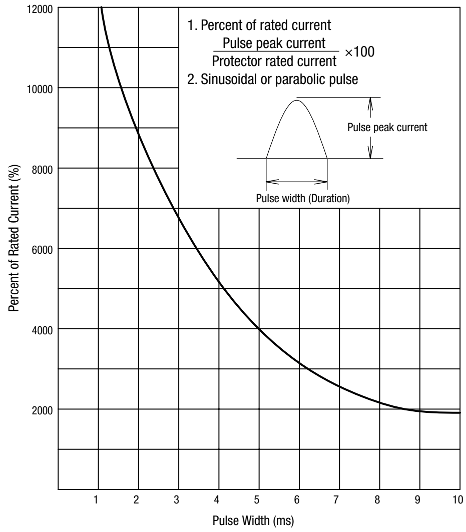
The time delay is based on an ambient temperature of 40°C. Time delays at other temperatures are corrected according to the temperature correction curve. The time delay of the instantaneous time delay curve (S) is not affected by the ambient temperature.

When operating temperature exceeds 40°C, derate the rated current by multiplying the derating factor shown on the right.

Operating Temp.	Derating Factor
50°C	0.9
55°C	0.8
60°C	0.7

Inertial Delay

Inertial delay is designed not to trip on a non-repeating single pulse of 20 times the rated current (peak value) for a duration of 8 ms. In addition, circuit protectors equipped with inertial delay do not respond to high inrush currents caused by transformer or lamp loads, but perform the specified interruption on the subsequent overcurrents. Inertial delay is available on AC circuits, and is not available with the series trip curve S (instantaneous).



Impedance and Coil Resistance

Series Trip (Current Trip) (initial value)

at 25°C

Rated Current	For AC 50/60 Hz Impedance (Ω)		For DC Resistance (Ω)	
	Curve S	Curves A, M	Curve S	Curves A, M
0.1A	66.0	116.0	43.0	106.0
0.3A	6.6	11.0	4.1	10.0
0.5A	1.92	3.65	0.86	3.40
1A	0.50	0.93	0.25	0.90
2A	0.16	0.27	0.11	0.25
3A	0.07	0.12	0.050	0.11
5A	0.025	0.050	0.015	0.045
7A	0.014	0.027	0.011	0.025
10A	0.007	0.021	0.005	0.020
15A	0.006	0.010	0.005	0.009
20A	0.005	0.006	0.004	0.005
25A	0.004	0.005	0.004	0.005
30A	0.003	0.004	0.003	0.004

Tolerance: ±25% (up to 20A),
±50% (25A and 30A)

Relay Trip (Voltage Trip)

at 25°C

Tripping Voltage	For DC Resistance (Ω)
24-48V	100.0

Tolerance: ±25%

Voltage Drop Due to Coil Resistance or Impedance

The internal resistance or impedance of a circuit protector tends to be larger for a smaller rated current. Therefore, when circuit protectors of a small rated current are used, voltage drop should be taken into consideration. Internal resistance also varies with time delay curves, which should also be considered during installation.

Main Contact - Auxiliary/Alarm Contact

[Auxiliary Contact]

Main Contact	NO ontact	NC Contact
ON	closed	open
Tripped	open	closed
OFF	open	closed

[Alarm Contact]

Main Contact	NO ontact	NC Contact
ON	open	closed
Tripped	closed	open
OFF	open	closed

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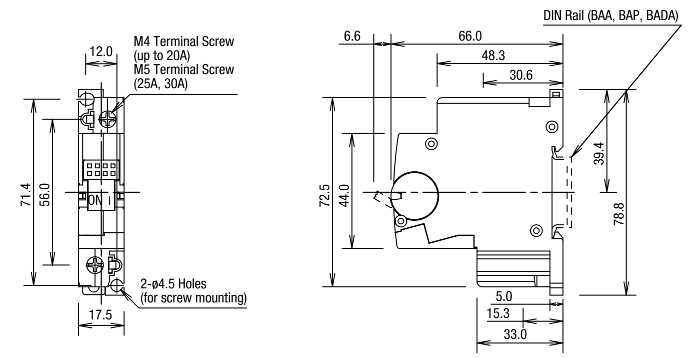
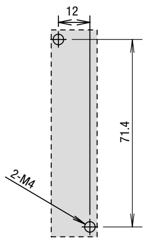
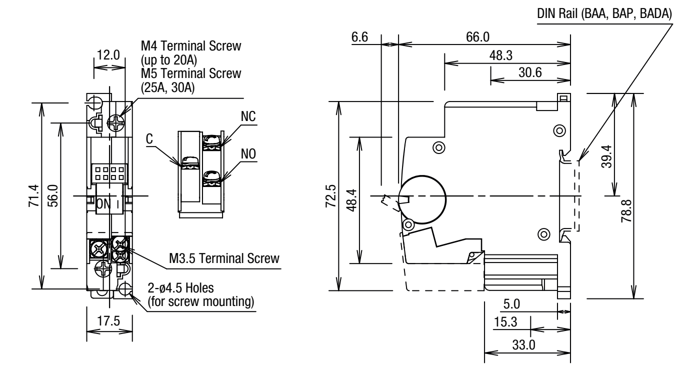
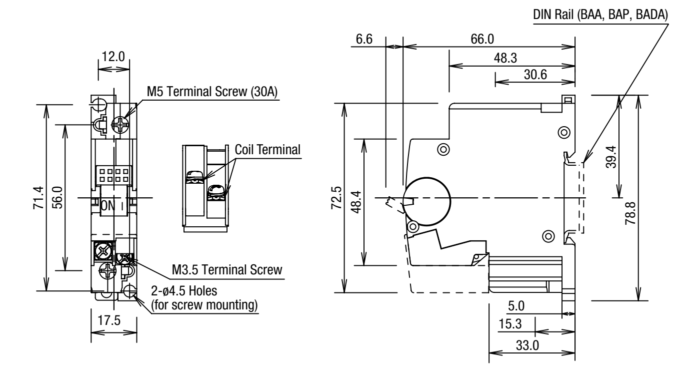
NC1V

NC1V Circuit Protectors

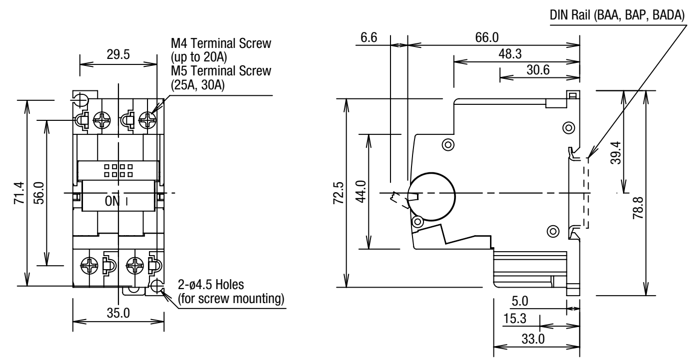
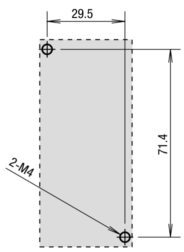
Dimensions

1-pole

All dimensions in mm.

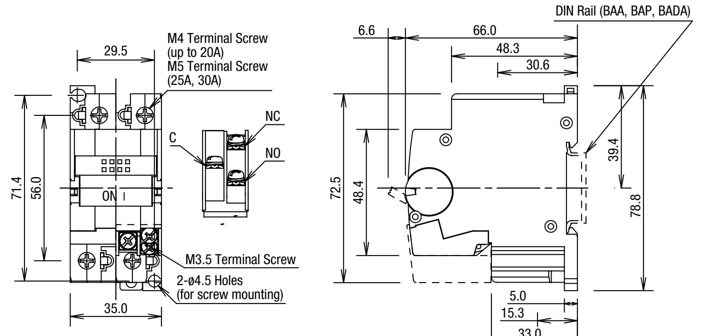
		Mounting Hole Layout
NC1V-1100		Mounting Hole Layout (M4 Mounting Screws) 
NC1V-1111 (Auxiliary Contact) NC1V-1121 (Alarm Contact)		
NC1V-1500 (Relay Trip)		

2-pole

		Mounting Hole Layout
NC1V-2100 (without auxiliary/alarm contacts)		Mounting Hole Layout (M4 Mounting Screws) 

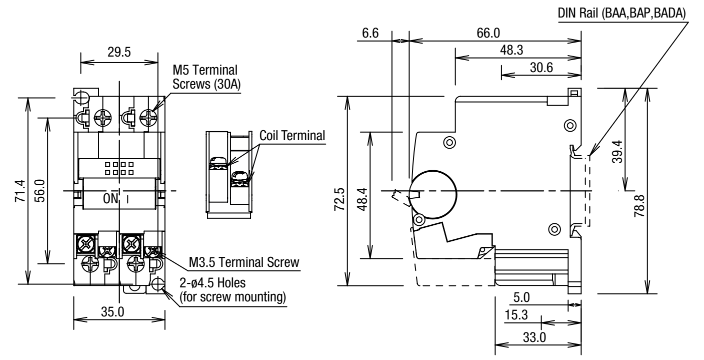
2-pole

NC1V-2111
(one auxiliary contact)
NC1V-2112
(two auxiliary contacts)
NC1V-2121
(one alarm contact)
NC1V-2131
(one auxiliary contact and one alarm contact)

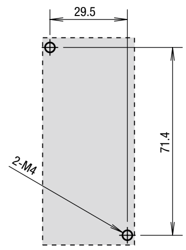


The dimensions are for NC1V-2111 and NC1V-2121.

NC1V-2500
(Relay Trip)

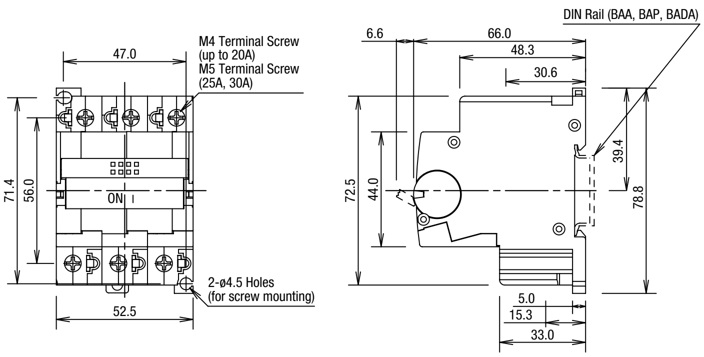


Mounting Hole Layout
(M4 Mounting Screws)

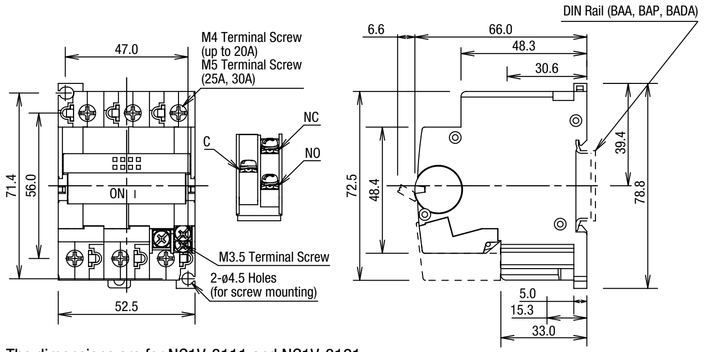


3-pole

NC1V-3100
(without auxiliary/alarm contacts)

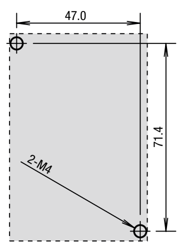


NC1V-3111
(one auxiliary contact)
NC1V-3112
(two auxiliary contacts)
NC1V-3113
(three auxiliary contacts)
NC1V-3121
(one alarm Contact)
NC1V-3131
(one auxiliary contact and one alarm contact)
NC1V-3132
(two auxiliary contacts and one alarm contact)



The dimensions are for NC1V-3111 and NC1V-3121.

Mounting Hole Layout
(M4 Mounting Screws)



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Enabling Switches
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Operator Interfaces
Sensors
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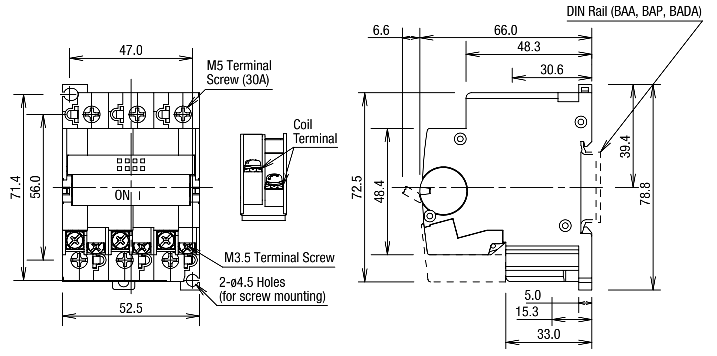
NC1V

NC1V Circuit Protectors

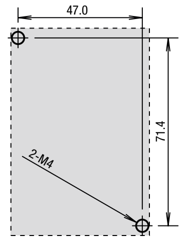
3-pole

All dimensions in mm.

NC1V-3500
(Relay Trip)

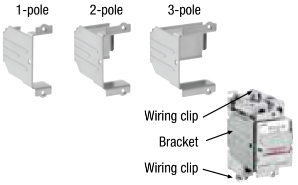
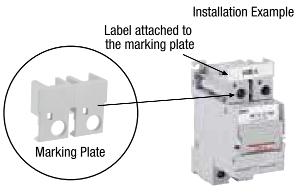
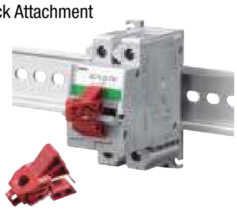
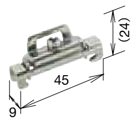


Mounting Hole Layout
(M4 Mounting Screws)



Accessories

All dimensions in mm.

Shape		Material	Part No.	Ordering No.	Package Quantity	Remarks
Panel Mounting Bracket (Note) 	1-pole	Bracket: Steel Wiring clip: brass (terminal), steel (screw, washer)	NC9Z-MA11	NC9Z-MA11	1	• Used for mounting NC1V circuit protectors in a panel cut-out. • Supplied with two wiring clips for each pole, used for wiring from the rear. For 1-pole: 2 wiring clips For 2-pole: 4 wiring clips For 3-pole: 6 wiring clips
	2-pole		NC9Z-MA21	NC9Z-MA21		
	3-pole		NC9Z-MA31	NC9Z-MA31		
Marking Plate 		PBT	NC9Z-PW1	NC9Z-PW1PN10	10	• Available for 2-pole circuit only. For use on 1-pole circuit protectors, break the marking plate into two halves. • Label is supplied by the user.
Padlock Attachment 		Polyamide body with stainless steel pin	NC9Z-LK1	NC9Z-LK1	1	• Locks the retractable actuator in the off position to prevent NC1V from being switched on inadvertently. • Can beused on 1-, 2-, and 3-pole.
DIN Rail (35mm-wide)  BAA BAP BADA	Length: 1000mm	Aluminum	BAA1000	BAA1000PN10	10	• Weight: approx. 200g • See H-071 for details on DIN rail products.
		Steel	BAP1000	BAP1000PN10		• Weight: approx. 320g • See H-071 for details on DIN rail products.
		Aluminum	BADA1000	BADA1000PN10		• Weight: approx. 280g • See H-071 for details on DIN rail products.
End Clip 		Steel (trivalent chromate)	BNL6	BNL6PN10	10	• Applicable rail: BAA, BAP, BADA Weight: approx. 15g • See H-071 for details on DIN rail products.

Note: Cannot be used with NC1V with auxiliary or alarm contact.

For more information, visit http://eu.idec.com

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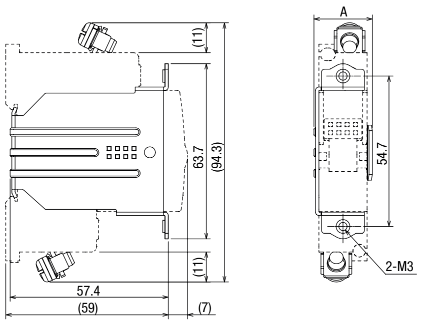
Accessories

Dimensions

All dimensions in mm.

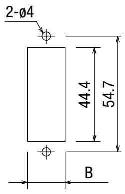
NC9Z-MA Panel Mounting Bracket



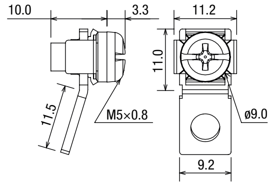
Dimensions A and B

Dimension	A	B
1-pole	21.2	17.8
2-pole	38.7	35.3
3-pole	56.2	52.8

Mounting Hole Layout



NC9Z-TA1 Wiring Clip



Insulation Sleeve

When using wiring clips on 2- or 3-pole circuit protectors, install UL/CSA-rated insulation sleeves on the crimping terminals to ensure the air gap required by UL1077.
Applicable Insulation Sleeves (Example)

- Nissei Eco (V-38)
- Tokyo Dip (TP-038)
- Nichifu (TIC38)

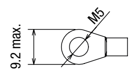
Panel Mounting Screw Length (Dimension C in mm)

Applicable Panel Thickness: 0.8 to 3.2 mm
The outside diameter of the M3 screw (including washer) must be 7 mm maximum.

Panel thickness (mm)	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.3	2.6	3.2
Without washer	5	5	6	6	6	6	6	8	8	8
With plain washer (0.5 thick)	6	6	6	6	6	6	8	8	8	8
With spring washer (0.7 thick)	6	6	6	6	6	8	8	8	8	8
With plain washer (0.5 thick) and spring washer (0.7 thick)	6	6	6	8	8	8	8	8	8	8
Countersunk head screw	—	—	—	—	—	—	6	6	8	8

Tightening torque: 0.5 to 0.8 N·m
The screw length behind the panel must be 9 mm maximum.

Applicable Crimping Terminal

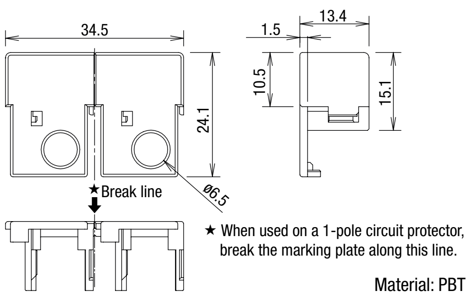


Tightening torque: 1.8 to 2.2 N·m

Materials

- Panel Mounting Bracket: Steel
- Wiring Clip: Brass (terminal strip)
  Steel (screw, washer)

NC9Z-PW1 Marking Plate

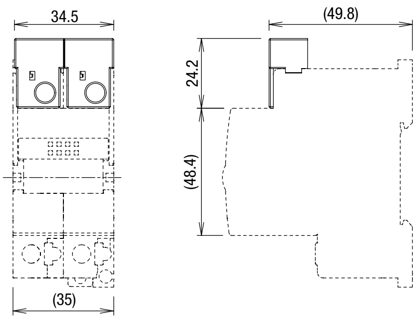


★ When used on a 1-pole circuit protector, break the marking plate along this line.

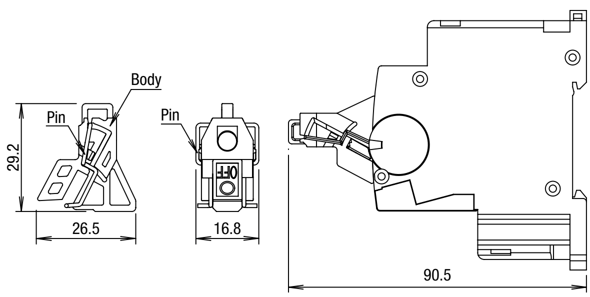
Material: PBT

Marking Plate Installed on the Circuit Protector

When installed on a 2-pole circuit protector

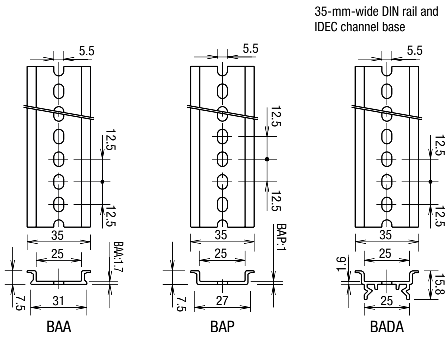


NC98-LK1 Padlock Attachment



Padlock Attachment Installed

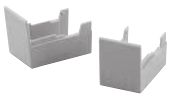
Rail



NC1V Circuit Protectors

Replacement Parts

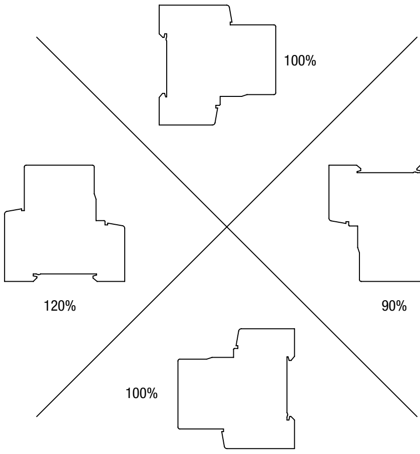
All dimensions in mm.

Shape	Material	Part No.	Ordering No.	Package Quantity	Remarks
Terminal Cover 	PA66	**NC1V-AUX-CV**	NC1V-AUX-CV	1	
Wiring Clip	Terminal: Brass Screw/washer: Steel	**NC9Z-TA1**	NC9Z-TA1PN10	10	

Instructions

Installation Angle

Tripping method is hydraulic magnetic. Minimum operating current varies with installation angle. Operating currents are influenced by the weight of movable iron core. With reference to the following figures, correct the rated current.



Minimum operating current is calculated from the following formula:
(Minimum operating current) = (Rated current) × (Correction factor by installation angle) × (Reference minimum tripping current rate)

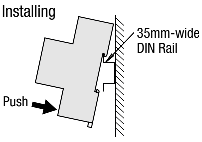
DIN Rails

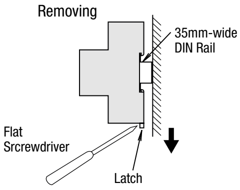
[Installation on DIN Rail]

1. Fasten the DIN rail securely.
2. With the latch facing downward, install the NC1V circuit protector on the DIN rail as shown below.

[Removal from DIN Rail]

Using a flat screwdriver, pull the latch on the circuit protector to remove from the DIN rail.



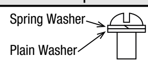


Applicable Wire and Crimp Terminal

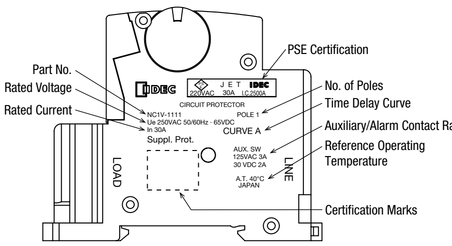
Terminal	Terminal Screw	Connectable Wire Size (mm²)	Applicable Crimping Terminal	Tightening Torque (N·m)
Main Circuit Terminals	Spring-up, fingersafe, slotted Phillips screw with square washer (up to 20A)	0.25 to 1.65	R1.25-4	1 to 1.4
		1.04 to 2.63	R2-4	
		2.63 to 6.64	R5.5-4	
	Spring-up fingersafe terminal (25A and 30A)	0.25 to 1.65	R1.25-5	1.8 to 2.2
		1.04 to 2.63	R2-5	
		2.63 to 6.64	R5.5-5	
Auxiliary Contact Alarm Contact Voltage Coil Terminals	Slotted Phillips screw with square washer	0.25 to 1.65	R1.25-3.5	0.7 to 0.9
		1.04 to 2.63	R2-3.5	

- For wiring the main circuit terminal, use the applicable crimp terminals and tighten to the recommended tightening torque.
- When using the NC1V circuit protector as CSA-certified product, use with CSA-certified crimp terminal.
- When using the NC1V circuit protector as UL-listed product, use with UL-listed crimp terminal.

Panel Mounting Screw (not supplied)

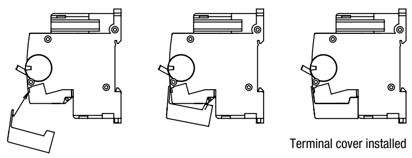
Screw Size	Tightening Torque	Shape
M4	0.8 to 1.0 N·m	 Spring Washer, Plain Washer

Product Markings (Example: NC1V-1111-30AA)



Installation of Auxiliary/Alarm Terminal Cover

After wiring the terminals, install the terminal cover by aligning the terminal cover with the circuit protector as shown below.



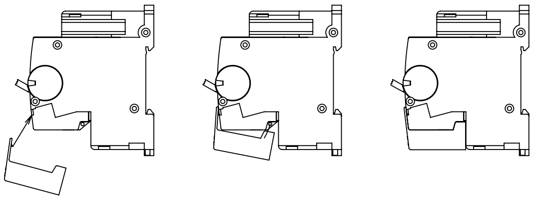
Instructions

Installing Auxiliary/Alarm Terminal Cover

Connect the terminal before installing the terminal cover.

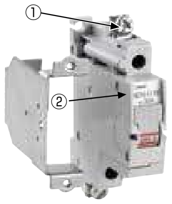
Installing

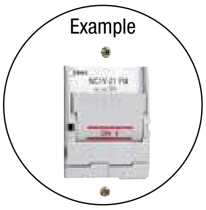
Attach the latch on TOP side and install the terminal cover as shown below.



Installing NC9Z-MA Panel Mounting Brackets

1. Insert the wiring clip into the terminal of the circuit protector, and tighten.
- Tightening torque to the main circuit terminal
- 20A max. (M4): 1 to 1.4 N·m
- 25A, 30A (M5): 1.8 to 2.2 N·m
2. Insert the panel mounting bracket to the circuit protector.
3. Install the rear of the panel mounting bracket into the DIN rail recess on the circuit protector and push in the clamp.

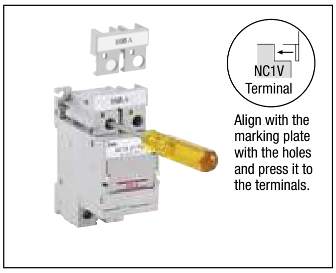




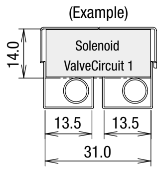
Note: NC1V circuit protectors with auxiliary/alarm contacts cannot be used with mounting brackets.

Installing the NC98-PW1 Marking Plate

Available for 2-pole circuit protectors only.
For use on 1-pole circuit protectors, break the marking plate into two halves.

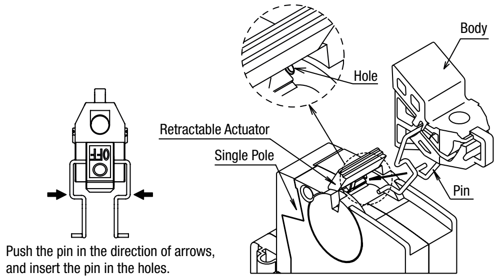


Marking Range



Installing the NC98-LK1 Padlock Attachment

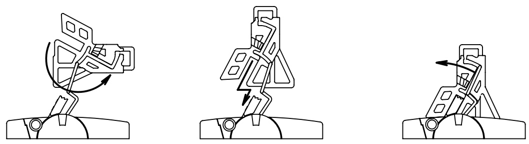
① Pull down the retractable actuator, and install the padlock attachment on the circuit protector.
  1-pole: Insert the pin into the holes under the retractable actuator.
  2- or 3-pole: Insert the pin into the holes in the center of the circuit protector.



② Turn the body.

③ Install the body on the retractable actuator as shown below.

④ Slide the pin to the lock position.

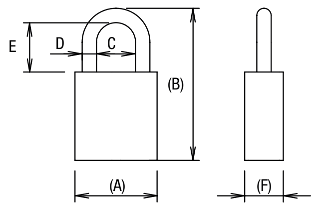


Padlock

- The padlock is not supplied with the padlock attachment and must be supplied by the user.
- The total weight of the padlock can be a maximum of 45g. Make sure the padlock weight does not exceed 45g, otherwise the NC1V circuit protector may be damaged.
- Applicable Padlock Size

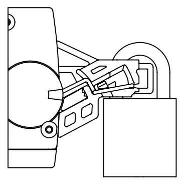
(A)	(B)	C	D	E	(F)	G
19 to 25	35 to 42	9 to 11.5	4 to 4.5	11 to 15	8 to 10	7.5 to 9.0

Note: (A) (B) (F) are for reference only.



Recommended Padlock

Manufacturer	Part No.
Alpha	1000-25
Master Lock	4120



Safety Precautions

- When using the padlock, do not use the NC1V circuit protector where it is subject to vibration or shock, otherwise failure or damage may result.
- Do not apply a force of more than 50N on the retractable actuator, otherwise the actuator will be damaged.
- When using three or more 1-pole NC1V circuit protectors adjacently, facilitate installing the padlock attachment by providing a clearance of 6mm minimum between the protectors, or by using the tweezers or flat screwdriver.