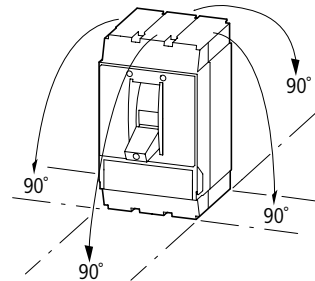


NZMN(H)(L)3(-4)-AE(VE)(ME)...
NZMB(C)(N)(S)(H)3(-4)-A(S)
(P)N3-...
+NZM3(-4)-XT
NZMN(H)(L)3-AE(VE)...-AP
(P)N3-...-AP

NZMN(H)(L)3-AE(AEF)...-NA
NZMN(H)(L)3-VE(VEF)...-NA
NZMN(H)(L)3-SE...-CNA
N(S)3-...-NA
NZMB(N)(H)3-A(-AF)...(-BT)-NA
NZMB(N)(H)3-S...(-BT)-CNA



Lebensgefahr durch elektrischen Strom!
Nur Elektrofachkräfte und elektrotechnisch unterwiesene Personen dürfen die im Folgenden beschriebenen Arbeiten ausführen.

Electric current! Danger to life!

Only skilled or instructed persons may carry out the following operations.

Tension électrique dangereuse !

Seules les personnes qualifiées et averties doivent exécuter les travaux ci-après.

Tensione elettrica: Pericolo di morte!

Solo persone abilitate e qualificate possono eseguire le operazioni di seguito riportate.

¡Corriente eléctrica! ¡Peligro de muerte!

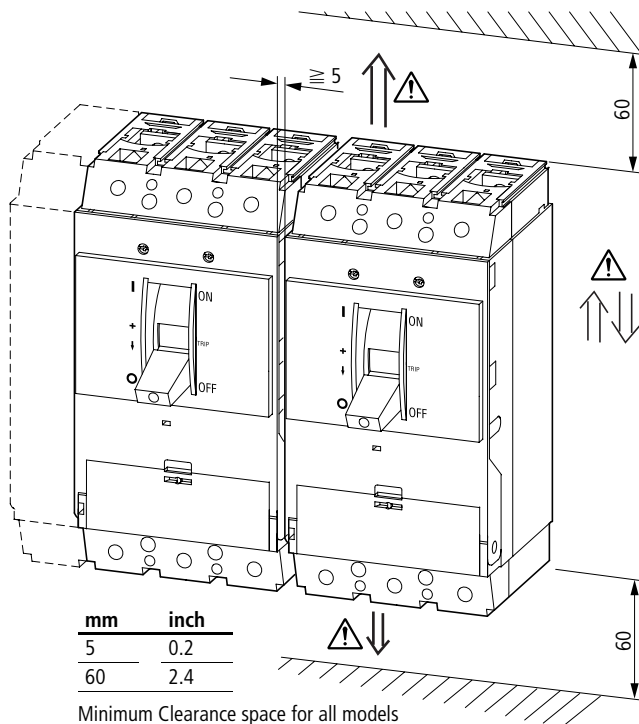
El trabajo a continuación descrito debe ser realizado por personas cualificadas y advertidas.

Электрический ток! Опасно для жизни!

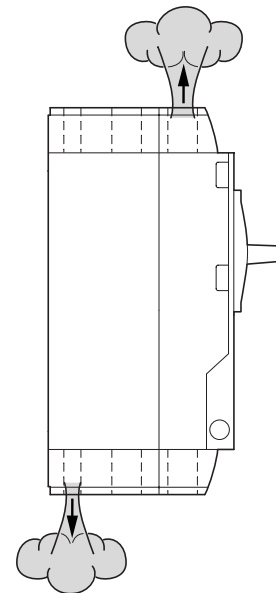
Только специалисты или проинструктированные лица могут выполнять следующие операции.

触电危险!

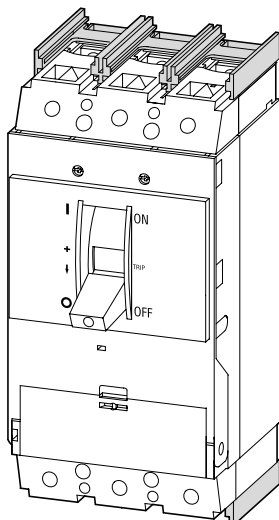
只允许专业人员和受过专业训练的人员进行下列工作。



Ausblasrichtung im Kurzschlussfall
Blowout direction in case of a short-circuit
Dégagement gazeux en cas de court-circuit.
Direzione di estinzione in caso di corto circuito
Dirección de salida de los gases en caso de cortocircuito
Направление продувки в случае короткого замыкания
短路时的排空方向



-NA
-CNA
(UL/CSA models)



Vorsicht!

Für die Durchführung der beschriebenen Arbeiten kann das Entfernen oder der Austausch von Teilen notwendig sein.
Bitte alle Installations-Anweisungen beachten, um die erforderlichen Luft- und Kriechstrecken nach dem Zusammenbau zu gewährleisten.

Caution!

The removal or exchange of parts during mounting may become necessary.
Refer to installation instructions for proper assembly and to maintain electrical clearances.

Attention !

L'enlèvement ou l'échange de certaines pièces pendant le montage est parfois nécessaire.
Consultez l'instruction d'assemblage pour assurer une installation conforme aux normes.

Attenzione!

Per l'esecuzione degli interventi descritti potrebbe essere necessaria la rimozione o sostituzione di alcuni pezzi.
Attenersi alle istruzioni d'installazione per garantire dopo l'assemblaggio le vie di dispersione necessarie.

Atención!

Con el fin de llevar a cabo los trabajos descritos, puede ser necesario eliminar o cambiar alguna pieza.
Le rogamos tenga en cuenta todas las instrucciones de instalación para así garantizar las líneas de fuga y eflujo necesarias tras el montaje.

Осторожно!

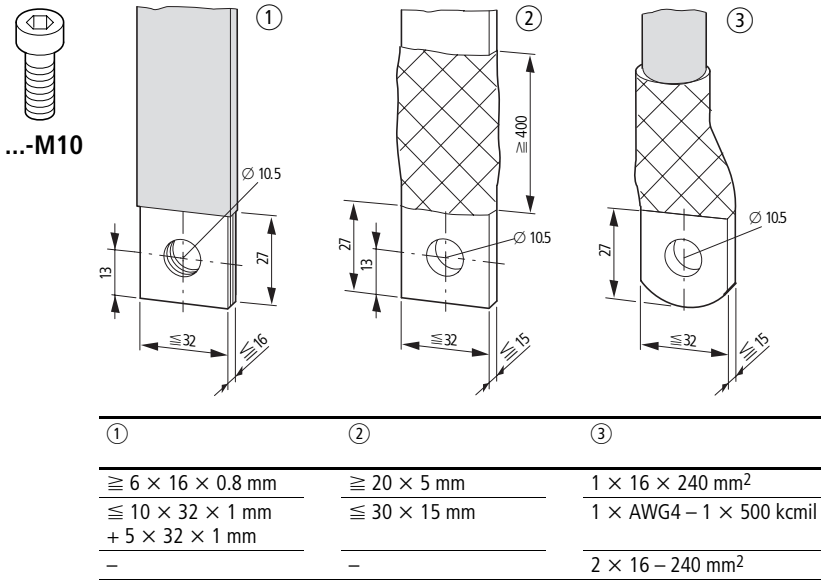
При проведении описанных процедур может возникнуть необходимость демонтировать или заменить детали.

Для обеспечения надлежащих зазоров и вывода тока утечки, соблюдайте все инструкции по монтажу.

小心！ 执行所描述的操作时可能需要拆除或更换零部件。

请遵守所有相关的安装说明，

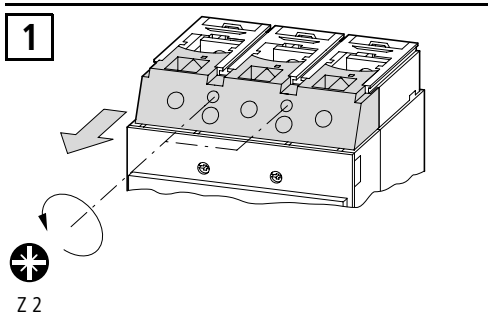
以确保在组装后能获得需要的空间距离或爬电距离。



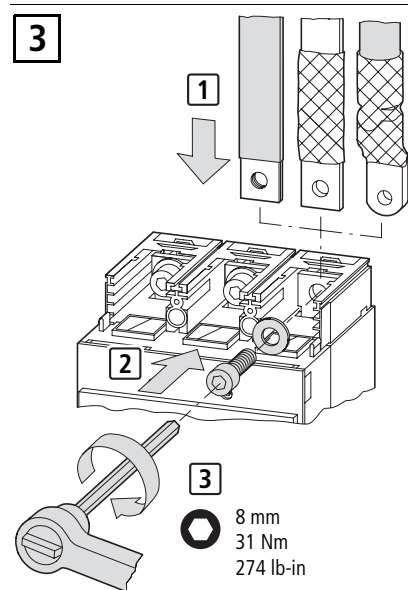
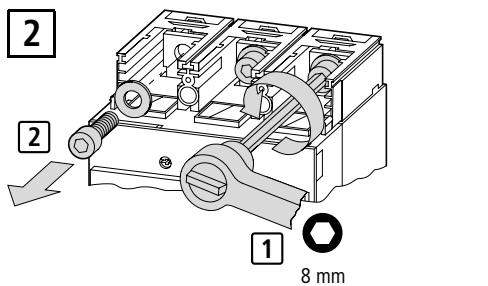
	n = Anzahl der Pressungen n = Number of crimps n = Nombre de sertissages n = Numero delle crimpature n = Número de compresiones n = Число прессований n = 压制数量
n	
2	NZM3-XKS185
4	NZM3-XKS240

	A
185 mm ²	NZM3-XKS185
240 mm ²	NZM3-XKS240

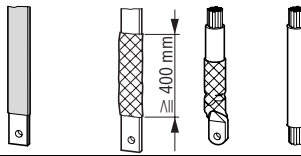
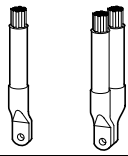
	M10 × 30
3pol	
4pol	



UL/CSA models:
Follow diagrams below when making connections using XKS screw terminations for compression crimp lugs:
– Always use terminal cover NZM3-XKSA when making connections with bare bus or non-insulated crimp lugs, or when two wires per phase are connected.
To mount terminal cover NZM3-XKSA, refer to instruction sheet AWA1230-2048.



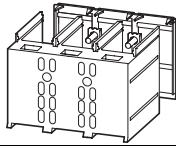
07/07 AWA1230-1992



XKSA

≅ 415 V

✓ +



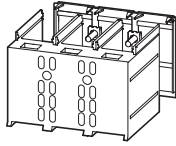
✓

✓

XKSA

≅ 525 V

✓ +



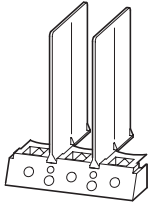
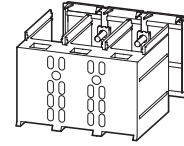
✓

KXSA

oder*

XKP

✓ +



XKSA

XKSA

oder*

XKP

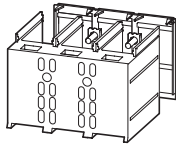
XKSA

oder*

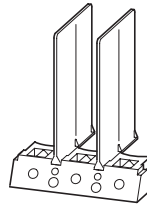
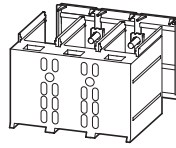
XKP

> 525 V

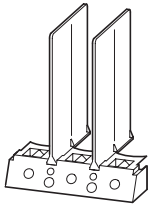
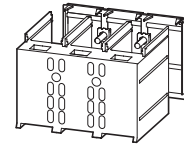
✓ +



✓ +



✓ +

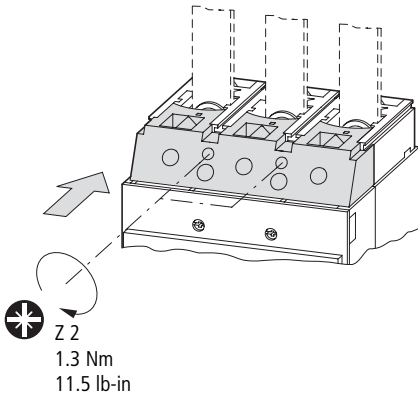


✓ Kombinationsmöglichkeiten – Combination options – Combinaisons possibles – Combinazioni possibili – Combinaciones posibles – Комбинационные возможности – 组合方法

* or – ou – oppure – ó – или – 或者

07/07 AWA 1230-1992

4



Z 2
1.3 Nm
11.5 lb-in

5

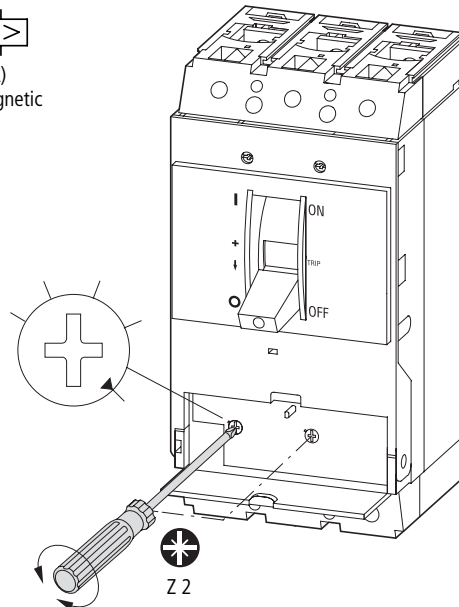
NZMB(C)(N)(H)3(-4)-A(S)
NZM...3-A(AF)...-NA
NZM...3-S...-CNA



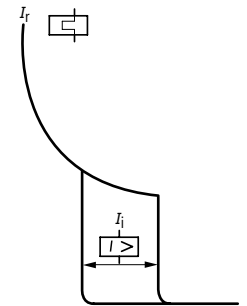
I_r (A)
Thermal



I_i (A)
Magnetic

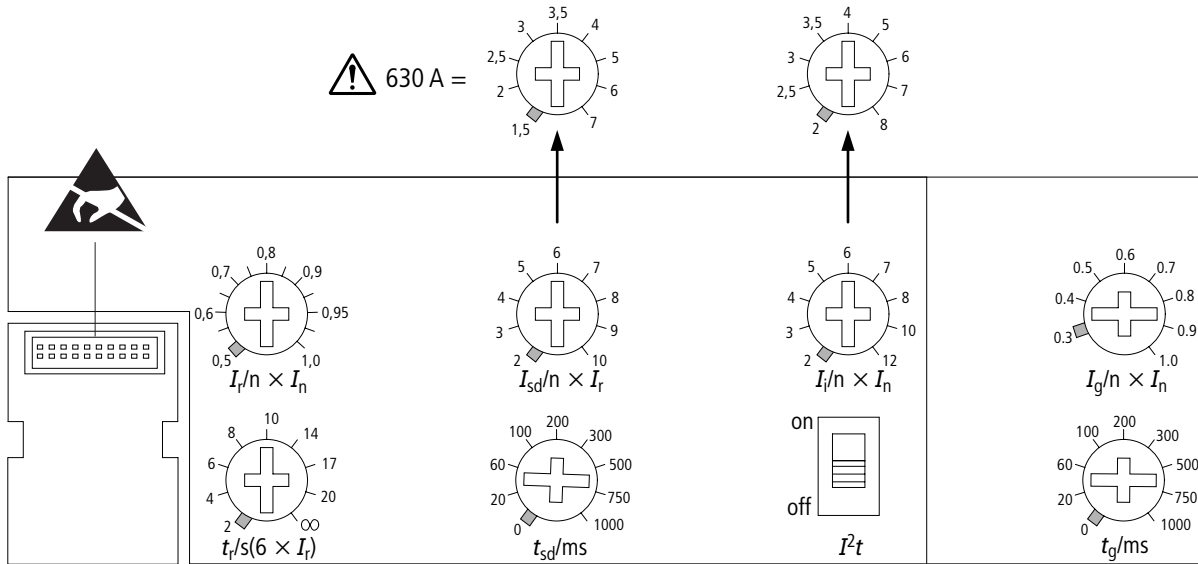


Note: On certain models with UL/CSA labeling the thermal trip setting is fixed and only the magnetic trip (instantaneous) setting is adjustable.

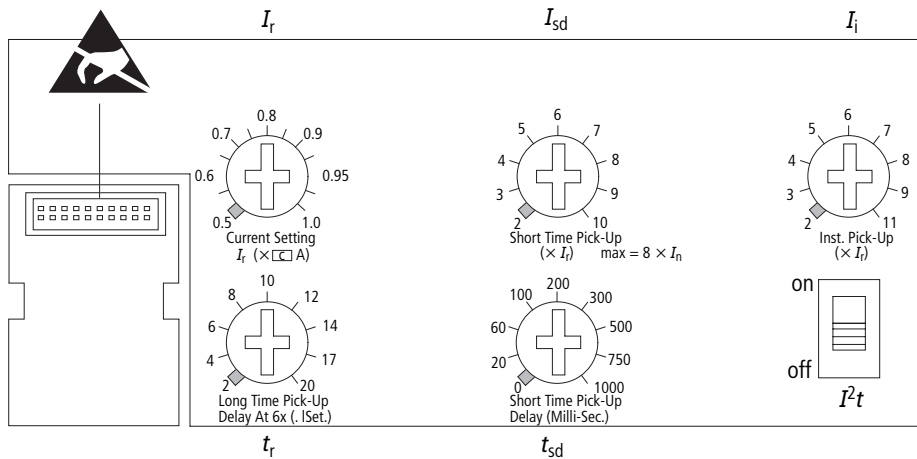


Einstellwert I_i bei DC = Einstellwert I_i AC/1,45
Setting I_i with DC = setting I_i AC/1.45
Valeur de réglage I_i avec CC = valeur de réglage I_i CA/1,45
Valore di regolazione I_i con DC = valore di regolazione I_i AC/1,45
Valor de respuesta I_i con CC = valore de respuesta I_i CA/1,45
Значение I_i при постоянном токе = I_i при переменном токе /1.45
DC 的设置值 I_i = AC/1.45 的设置值 I_i

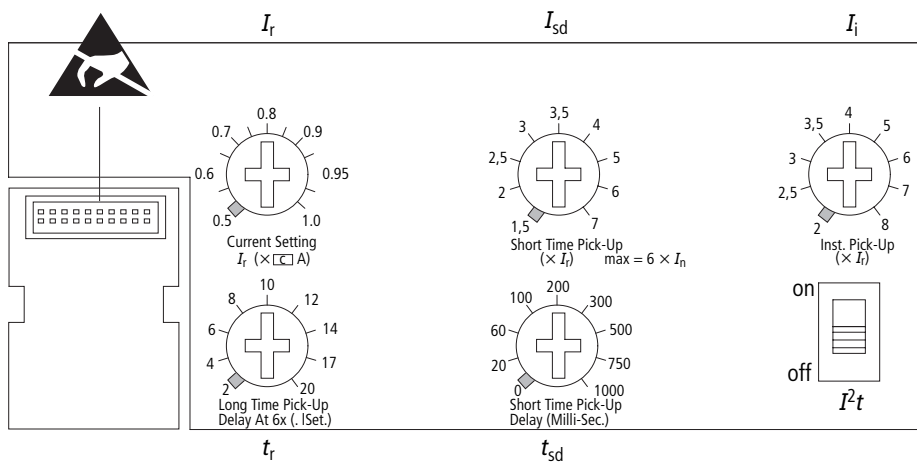
NZMN(H)(L)3(-4)-AE(VE)(ME)...(-AP)
+NZM3(-4)-XT



-NA, -CNA Electronic Trip Circuit Breaker Adjustable Settings (UL/CSA models)
250...400 A



450...600 A

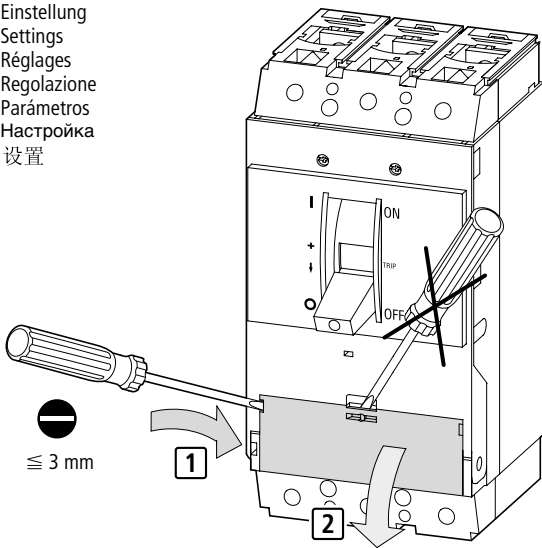


	Current setting $I_r (\times c A)$	Long Time Pick-Up Delay at $6 \times I_r$ (sec)	Short Time Pick-Up ($\times I_r$)	Short Time Pick-Up Delay (milli-sec.)	Inst. Pick-Up ($\times I_n$)	I^2t
NZM3-VE...-NA	×	×	×	×	×	×
NZM3-VEF...-NA	Fixed current Rating	×	×	×	×	×
NZM3-AE...-NA	×	-	-	-	×	-
NZM3-AEF...-NA	Fixed current Rating	-	-	-	×	-
NZM3-SE...-CNA	-	-	-	-	×	-

07/07 AWA1230-1992

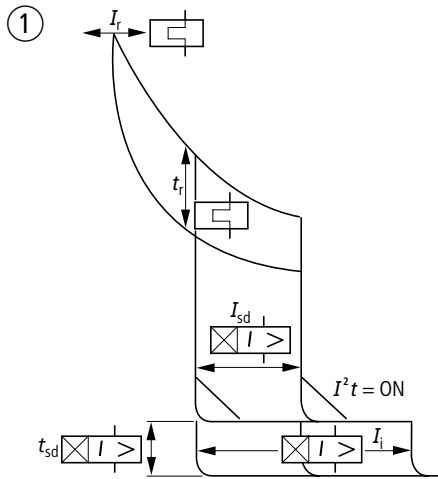
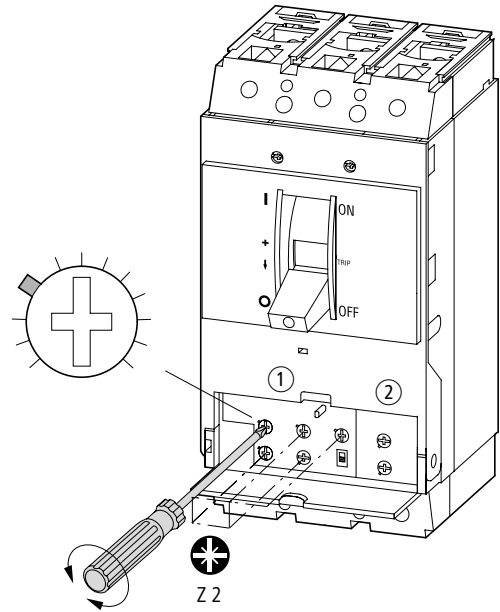
1

Einstellung
Settings
Réglages
Regolazione
Parámetros
Настройка
设置

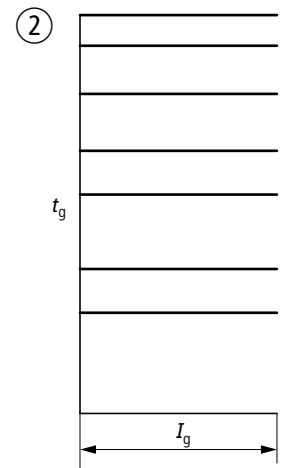


2

I_r (A), t_r (s), I_{sd} (A), t_{sd} (ms)
 I_i (A)
 I^2t ON/OFF
 I_g (A), t_g (ms)

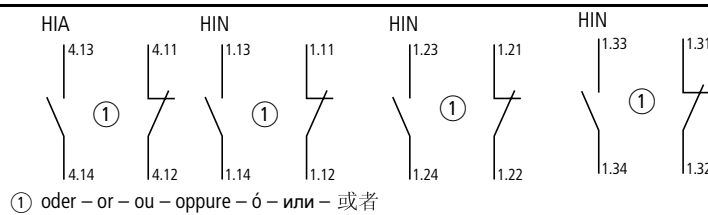


(I_n = Max. current rating)
 I_r = Adjustable current setting ($0.5 - 1.0 \times I_n$) for Long Time Pick-up.
 t_r = Adjustable Long Time Pick-up Delay (2 – 20 sec.) factory set at 10 seconds.
 I_{sd} = Adjustable Short Time Pick-up ($2 - 10 \times I_r$) factory set at $6 \times I_r$.
(NZM...3-VE600-NA: $1.5 - 7 \times I_r$, factory set at $6 \times I_r$).
 t_{sd} = Short-Time Pick-up Delay (0 – 1000 ms) factory set at 0 ms.
 I_i = Instantaneous Pick-up ($2 - 12 \times I_n$) factory set at $12 \times I_n$.
NZM3-VE250/400-NA: ($2 - 11 \times I_n$) factory set at $11 \times I_n$.
NZM3-VE600-NA: ($2 - 8 \times I_n$) factory set at $8 \times I_n$.
 I^2t function switch = factory set to OFF.



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M22-K10
M22-K01
M22-CK10
M22-CK01
Auxiliary Switches



① oder – or – ou – oppure – ó – или – 或者

-NA
-CNA
(UL/CSA)

$I_{th} = I_e$

U_e (V)	I_e (A)
600 AC	10
250 DC	1

Pilot Duty Ratings:
A 600, P 300
Above 300 VAC
Same polarity

Notes on mounting and wiring Auxiliary Switches for UL/CSA labeled models:

- M22-K (10)(01) have screw terminals. M22-CK (10)(01) have clamp terminals
- Switch modules are snapped into place at the locations shown in the diagrams that follow.
- Switches will function as either „standard“ or „trip/alarm“ contacts depending on their mounting location.
- Location „HIN“ refers to standard operation. Location „HIA“ refers to „trip/alarm“ operation.
- Follow the numbering and wiring scheme provided above depending on the contact location and function. (N.O. or N.C.)

Permissible contact configuration: 1 × HIA and/or 3 × HIN.

Note:

After mounting of the M22... switch is complete, check off the appropriate box on the auxiliary switch label provided on the side of the breaker or switch.

IEC

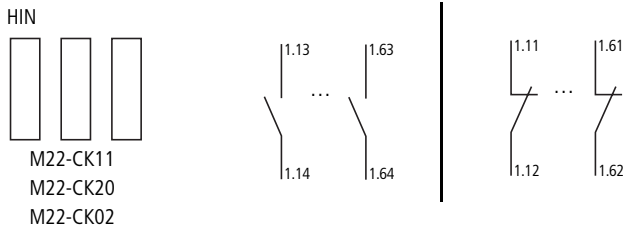
$I_{th} = I_e$

	U_e (V)	I_e (A)
AC-15	115	4
	230	4
	400	2
	500	1
DC-13	24	3
	42	1.7
	60	1.2
	110	0.8
	220	0.3

M22-CK11
M22-CK20
M22-CK02

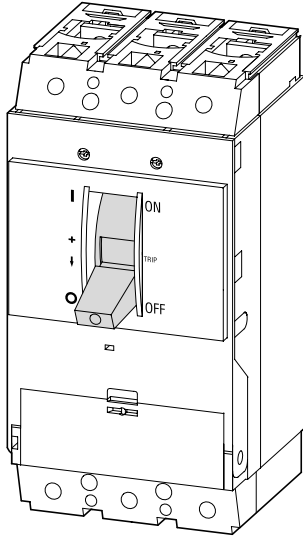


① oder – or – ou – oppure – ó – или – 或者

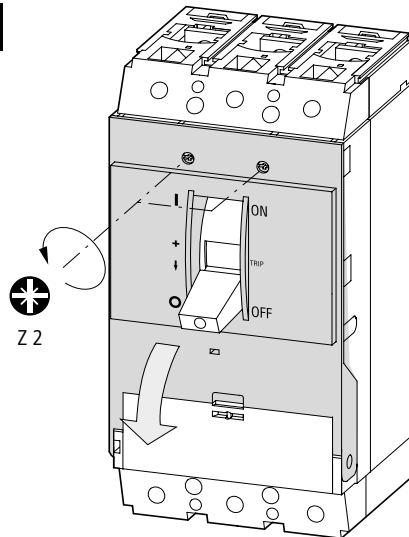


1

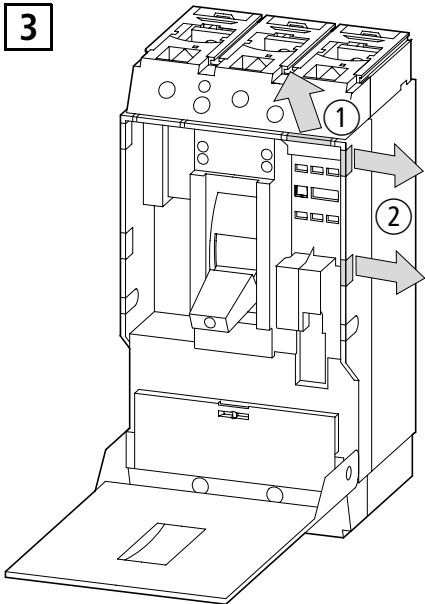
Montage
Mounting
Montaggio
Montaje
Монтаж
安裝



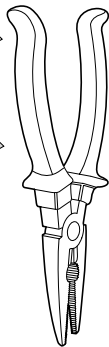
2



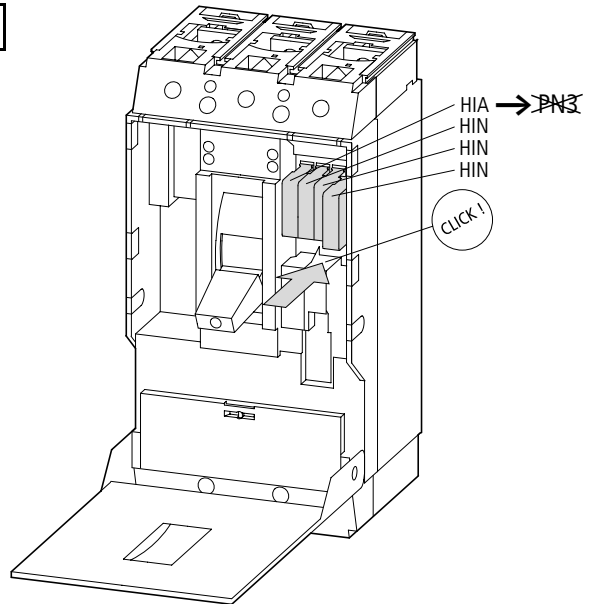
3



① oder ②
or
ou
oppure
ó
или
或者






4

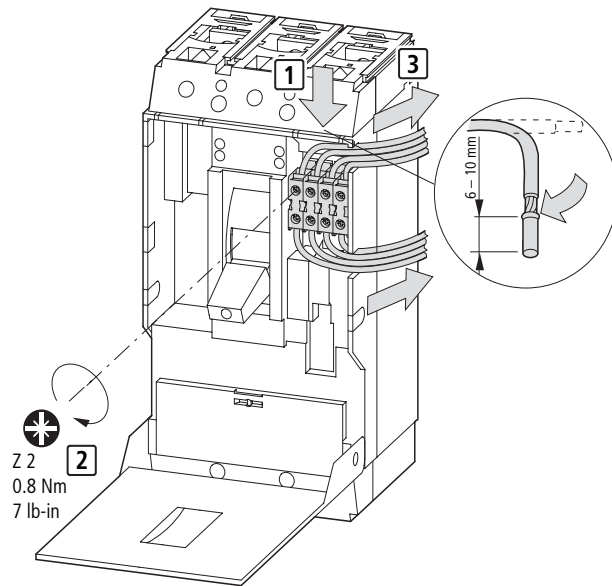


07/07 AWA1230-1992




5a M22-K10, M22-K01
(Screw Terminals)

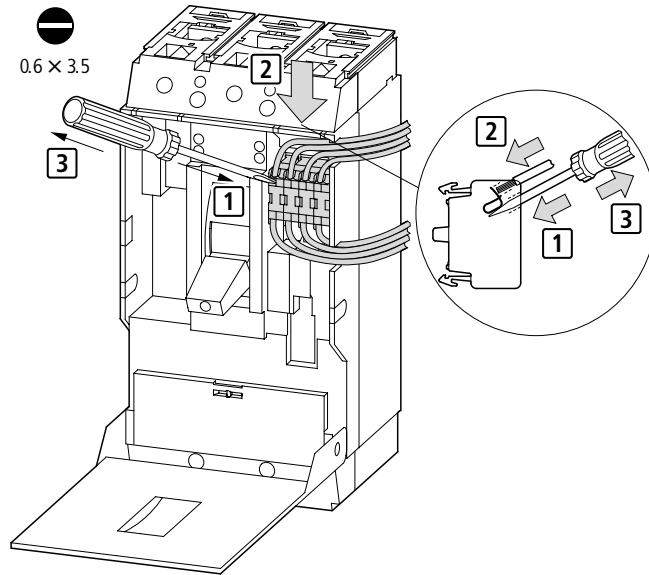
...K10: N. O. Contact
...K01: N. C. Contact

	2 × 0.75 – 2.5 mm ²
	2 × AWG 18 – AWG 14
	
UL/CSA = Cu only	







5b M22-CK10, M22-CK01
(Clamp Terminals)

	2 × 0.75 – 2.5 mm ²
	2 × AWG 18 – AWG 14
	
UL/CSA = Cu only	

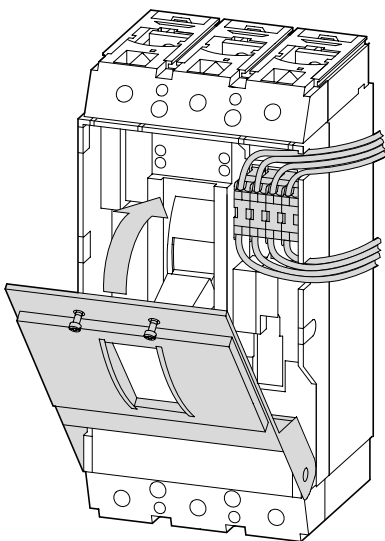


5c M22-CK11, M22-CK20, M22-CK02
(Clamp Terminals)

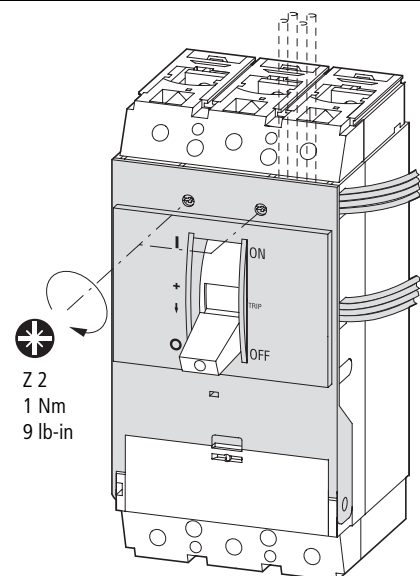
	a = 8 mm
	1 × 0.5 – 1.5 mm ²
	2 × 0.5 – 0.75 mm ²
	

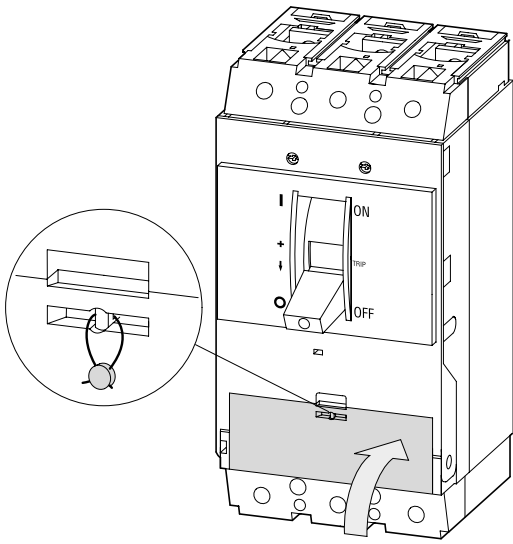
07/07 AWA 1230-1992

6

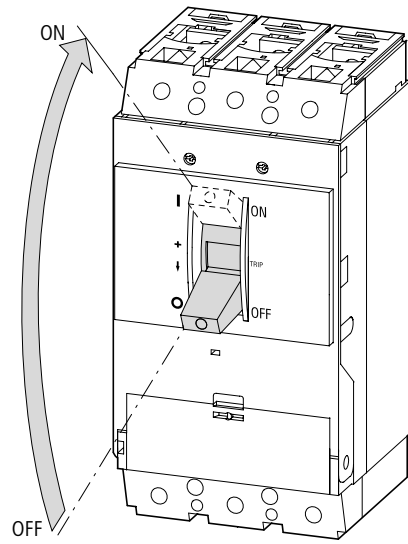


7



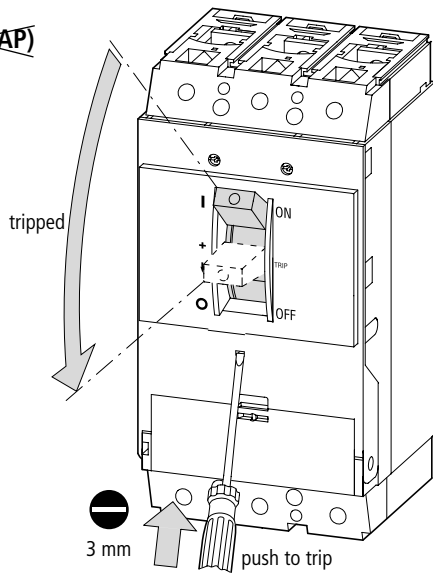


TEST 1



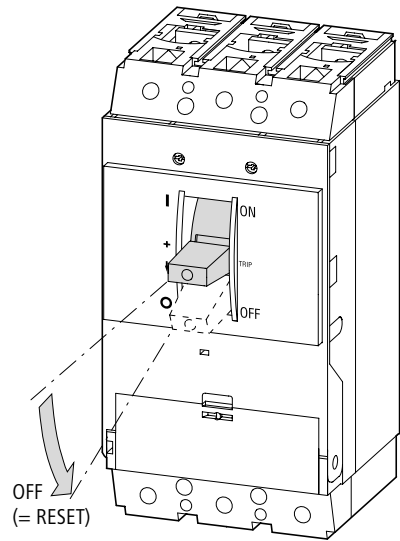
TEST 2

~~PN3...(-AP)~~



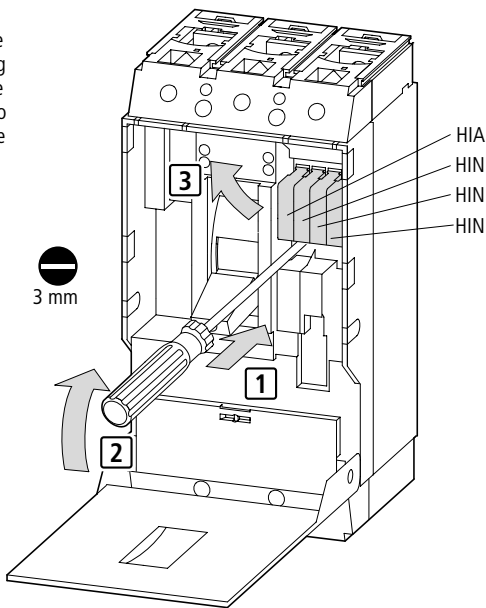
TEST 3

~~PN3...(-AP)~~

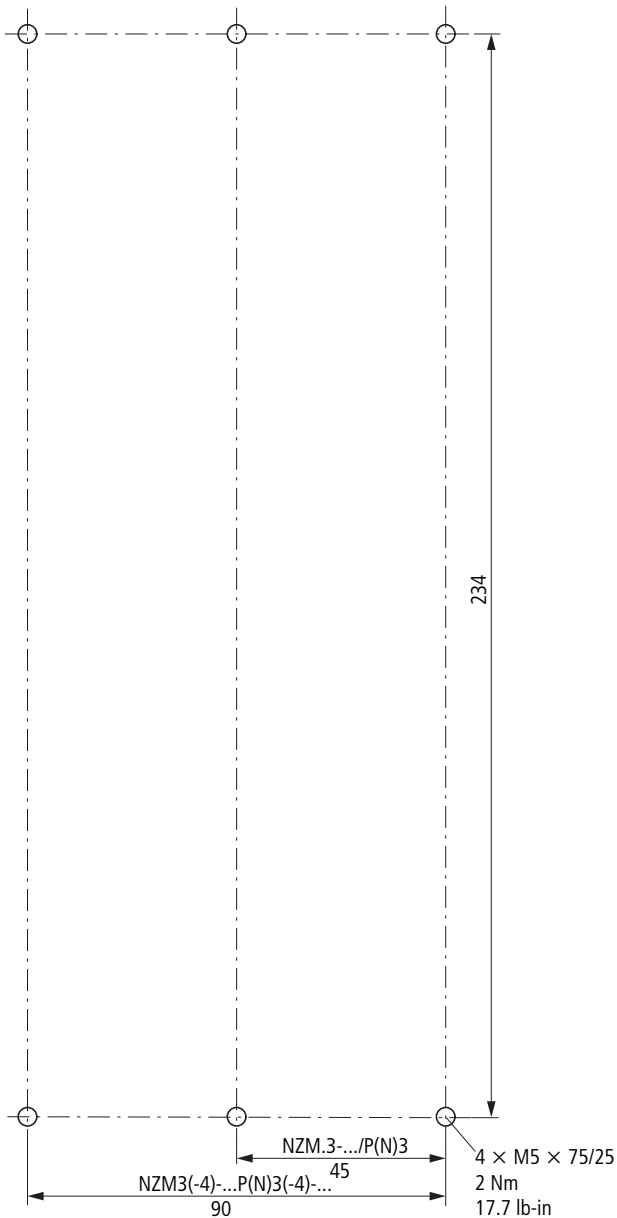


1

Demontage
Dismantling
Démontage
Smontaggio
Desmontaje
Разборка
拆卸



07/07 AWA1230-1992



Wiring terminations circuit breaker type NZM...3...-NA (CNA)
Wiring terminations molded case switch type NS3...-NA

Connector Type	Wire size	Wire 75° C	Max. A-Rating	Tightening-Torque
1) Bolt on			600	31 Nm, 275 lb-in
NZM3-XKA2	2 × AWG 1/0 – 500 kcmil	Cu only	600	31 Nm, 275 lb-in
NZM3-XKC	1 × AWG 1/0 – 500 kcmil	Cu only	400	19 Nm, 168 lb-in
2) integrated Auxiliary Terminal	1 × AWG 12 – 18	Cu only		1.2 Nm, 11 lb-in

Wiring terminations molded case switch type N3...-NA

Connector Type	Wire size	Wire 75° C	Max. A-Rating	Tightening-Torque
1) Bolt on			530	31 Nm, 275 lb-in
NZM3-XKA2	2 × AWG 1/0 – 350 kcmil	Cu only	530	31 Nm, 275 lb-in
NZM3-XKC	1 × AWG 1/0 – 500 kcmil	Cu only	400	19 Nm, 168 lb-in
2) integrated Auxiliary Terminal	1 × AWG 12 – 18	Cu only		1.2 Nm, 11 lb-in

- 1) Connector Pads Type NZM3-XKS for Compression Crimp lugs supplied standard on all NZM3 circuit breakers and switches.
- 2) Integrated Auxiliary Terminal on Barrel (Tunnel) Mechanical lug Connector Type NZM3-XKA(1)(2) only.