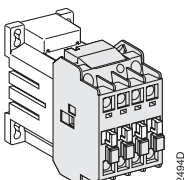


(T)AL9...16 , (T)NL22E...80E , AL9Z...16Z , NLZ22E...40E

1SBC101003M5501-09/03

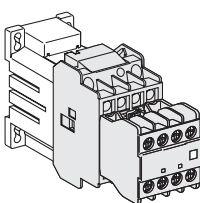
Contactors
Schütze
Contacteurs
Kontaktor
Contattori
Contactores
Kontaktori

Operating instructions
Betriebsanleitung
Notice d'instruction
Instruktion
Istruzioni tecniche
Instrucciones de empleo
Ohje



(T)AL9 ... 16-30-10
(T)AL9 ... 16-30-01
(T)AL9 ... 16-40-00
(T)AL9 ... 16-22-00
(T)NL22E ... 40E

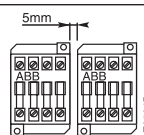
AL9Z ... 16Z-30-10
AL9Z ... 16Z-30-01
NLZ22E ... NLZ40E



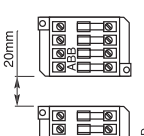
AL9...AL16-30-22
(T)NL44E...80E

AL9...16 AL9Z...16Z TAL9...16						
	M 3,5 1 N.m	Ø 5,5	2 x 1...4	2 x 0,75...2,5	2 x 0,75...2,5	L < 7,7
	M 3,5 1 N.m	Ø 5,5	2 x 1...4	2 x 0,75...2,5	2 x 0,75...2,5	L < 8

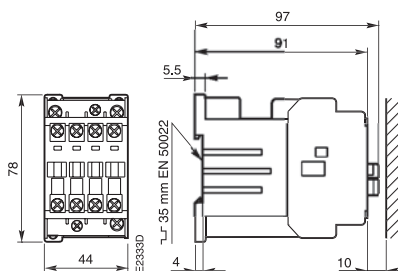
NL...E NLZ...E TNL...E						
	M3,5 1 N.m	Ø 5,5	2 x 1...4	2 x 0,75...2,5	2 x 0,75...2,5	L < 7,7
	M 3,5 1 N.m	Ø 5,5	2 x 1...4	2 x 0,75...2,5	2 x 0,75...2,5	L < 8



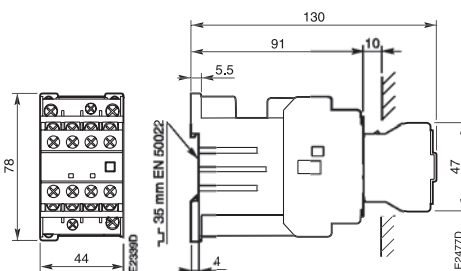
TNL, TAL9...16 - Pos. 1, 2, 5
 20°C ≤ θ ≤ 55°C



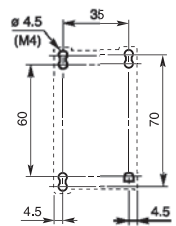
TNL, TAL9...16 - Pos. 3, 4
 20°C ≤ θ ≤ 55°C

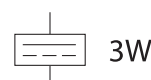


(T)AL9...16-30, (T)AL9...16-40
(T)AL9...16-22, AL9Z...16Z-30
(T)NL22E...40E, NLZ22E...40E



AL9...16-30-22, (T)NL44E...80E





**NL...E,
 AL9 ... AL16**
 Uc = 12Vd.c...
 Uc = 250Vd.c

**TNL...E,
 TAL9 ... TAL16**
 Uc = 9-15Vd.c...
 Uc = 152-264Vd.c



**NLZ...E,
 AL9Z ... AL16Z**
 Uc = 24Vd.c
 Uc = 48Vd.c

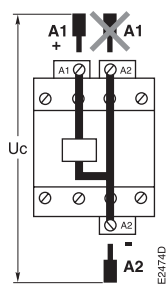
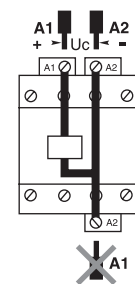


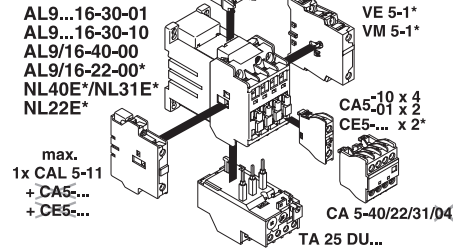
ABB Entelec

10, rue Ampère Z.I.- BP.114
 F-69685 Chassieu cedex / France
 Telephone : +33 (0)4 7222 1722
 Telefax : +33 (0)4 7222 1935

ABB

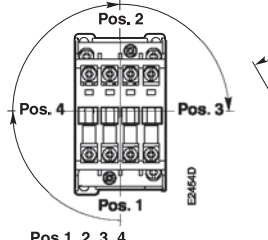
TP...A : NL22E...40E , NLZ22E...40E, TNL22E...40E, AL9...AL16 , AL9Z...AL16Z, TAL9...TAL16

AL9...16 NL



*AL9 / AL16-22-00
NL22E / 31E / 40E } VE5-1, VM5-1

*AL9 / AL16-22-00
NL22E } CE5

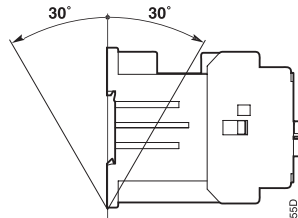


AL9...AL16-30... + VE5-1
AL9...AL16-40... + VE5-1 } + 3NO max

AL9...AL16-30...
AL9...AL16-40...
VE5-1 / VM5-1 } 0,9...1,1Uc

CAL5-11

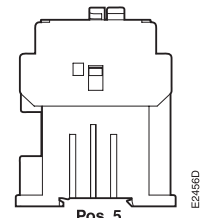
NL40E / NL31E / NL22E
+ CAL5-11 } 0,9...1,1Uc



Pos. 1 ± 30°

2NC aux. contacts
or 2CE5 max

VE5-1, VM5-1
CAL5-11



no NC aux. contacts
AL9...AL16-30... + VE5-1
AL9...AL16-40... + VE5-1 } + 3NO max

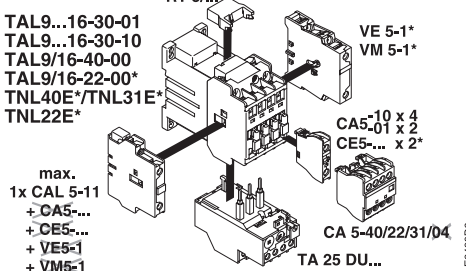
AL9...AL16-30...
AL9...AL16-40...
+ VE5-1 / VM5-1 } 0,9...1,1Uc

+ CAL5-11

NL40E / NL31E
+ CAL5-11 } 0,9...1,1Uc

CE5, NL22E
AL9-22-00, AL16-22-00

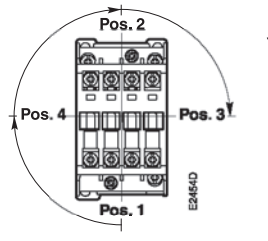
TAL9...16 TNL



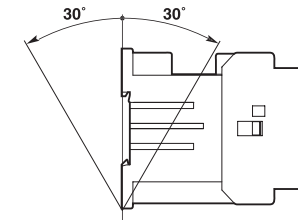
*TAL9 / TAL16-22-00
TNL22E / 31E / 40E } VE5-1, VM5-1

*TNL22E / 31E / 40E : CAL5-11

*TAL9 / TAL16-22-00
TNL22E } CE5



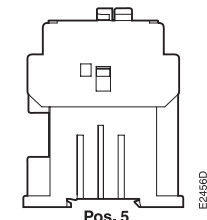
TAL9...TAL16-30... + VE5-1
TAL9...TAL16-40... + VE5-1 } + 3NO max



Pos. 1 ± 30°

2NC aux. contacts
or 2CE5 max

CAL5-11
VE5-1, VM5-1

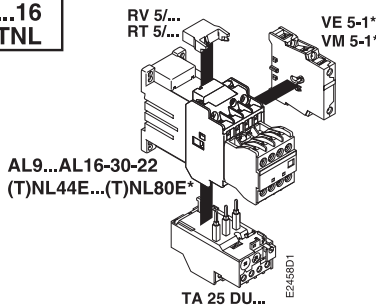


no NC aux. contacts

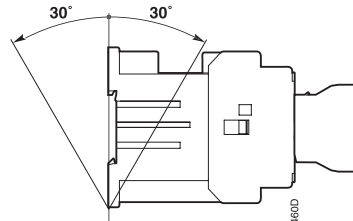
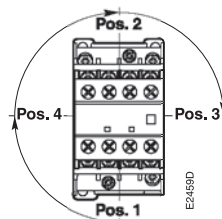
TAL9...TAL16-30... + VE5-1
TAL9...TAL16-40... + VE5-1 } + 3NO max

CE5, TNL22E
TAL9-22-00, TAL16-22-00

AL9...16 NL, TNL

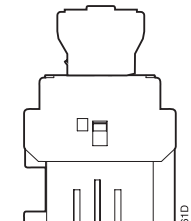


* (T)NL44E...(T)NL80E : VE5-1, VM5-1

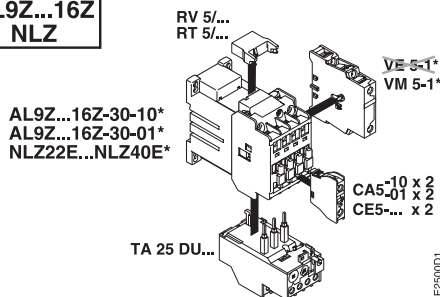


Pos. 1 ± 30°

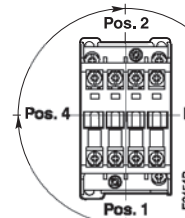
VE5-1, VM5-1



AL9Z...16Z NLZ



*NLZ22E...NLZ40E + VM5-1
*AL9Z...16Z-30-10 + VM5-1
*AL9Z...16Z-30-01 + VM5-1 + CA5.../CE5..



Pos. 1, 2, 3, 4

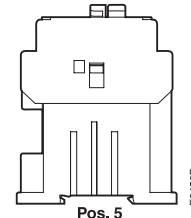
2 aux. contacts
or 2CE5 max

Pos. 5

2 NO max,
no NC aux contacts

Pos. 1, 2, 3, 4, 5

CAL5-11, VE 5-1



Warning ! The operation, installation and servicing of this appliance must be carried out by a qualified electrician applying the relevant rules of the art, installation standards and safety regulations. Before operating the contactors, check that control voltage complies with the data on the coil mounting bracket. Connection to other control voltage can destroy the coil. Do not touch live parts. Danger !

Warnung ! Die Inbetriebnahme und die Installation des vorhandenen Gerätes sowie jegliche Wartungsarbeiten müssen durch einen Fachelektriker, der die anerkannten technischen Regeln, die Montagevorschriften und die Sicherheitsvorschriften beachtet, durchgeführt werden. Vor Inbetriebnahme der Schütze prüfen ob Steuerspannung am Verwendungsort mit den aufgedruckten Spulendaten übereinstimmt. Der Anschluss einer anderen Steuerspannung kann zur Zerstörung der Spule führen. Spannung führende Teile nicht berühren. Lebensgefahr !

Attention ! La mise en œuvre, l'installation de cet appareil et toute intervention doivent être effectuées par un électricien professionnel appliquant les règles de l'art, les normes d'installation et les règlements de sécurité. Avant la mise en marche des contacteurs, vérifiez que la tension du circuit de contrôle correspond bien aux indications de la bobine. Le raccordement d'une tension différente peut mener à une destruction de la bobine. Ne pas toucher les pièces sous tension. Danger de mort !

Varning ! Igångsättning och installation av apparaten samt alla ingrepp bör utföras av en kompetent elektriker enligt gällande installationsnormer och säkerhetsregler. Kontrollera före installation av kontaktorn att aktuell manöverspänning överensstämmer med spolens märkdata. Felaktig manöverspänning kan skada spolen. Beröring av spänningsförande delar är förenat med livsfara.

Attenzione ! La messa in opera, l'installazione di questo apparecchio ed ogni tipo di intervento devono essere effettuati da un elettricista professionista il quale applichi le regole del mestiere, e norme di installazione ed i regolamenti di sicurezza. Prima della messa in servizio del contattore, verificare che la tensione del circuito di comando corrisponda esattamente a quella indicata sulla bobina. L'alimentazione con una tensione diversa, può provocare la distruzione della bobina. Non toccare le parti attive. Pericolo di vita !

Atención ! La puesta en aplicación, la instalación de este aparato y cualquier intervención deben realizarse por un electricista profesional que aplique las reglas del oficio, las normas de instalaciones y la reglamentación de seguridad. Antes de la puesta en servicio del contactor, comprobar si coinciden la tensión de mando con los datos impresos en la bobina. La conexión de otra tensión de mando puede producir la destrucción de la bobina. Las partes bajo tensión no deben tocarse. Peligro de muerte !