sprecher+schuh

KS7-C0S4R

IEC / EN 62208
IEC / EN 60947-4-1
UL 508
CSA 22.2, No. 14

CE

Plastic Enclosure for DOL and Reversing Starter - Application Instruction

WARNING:

To prevent electrical shock, disconnect from power source before installing or servicing. To be commissioned and maintained only by qualified personnel; pay attention to the operating instructions!

The opening of the branch circuit protective device may be an indication that a fault current has been interrupted. To reduce the risk of fire or electric shock, current-carrying parts and other components of the starter should be examined and replaced if damaged.

When wired for 2-wire control, a motor connected to the circuit may start automatically when the overload relay is in the automatic reset position.

When wired for 2-wire control, a motor connected to the circuit may start when a person actuates the RESET push button.

Kunststoffgehäuse für DOL- und Wende-Starter - Anwendungsanweisung

WARNUNG:

Vor Installations- oder Servicearbeiten Stromversorgung unterbrechen, um Unfälle zu vermeiden. Inbetriebsetzung und Wartung nur durch Fachpersonal; Betriebsanleitung beachten!

Das Ansprechen eines Schutzgeräts kann auf einen aufgetretenen Kurzschluss hinweisen. Um Risiken wie Feuer oder Stromschlag zu vermeiden sollten die Starterkomponenten überprüft und gegebenenfalls ersetzt werden.

Bei Startern mit Dauerkontaktsteuerung kann ein Motor automatisch starten, wenn das Motorschutzrelais auf automatische Rückstellung eingestellt ist.

Bei Startern mit Dauerkontaktsteuerung kann ein Motor automatisch starten, wenn nach einer Auslösung des Motorschutzrelais die Rückstelltaste betätigt wird.

Boîtier plastique pour démarreur direct et inverseur - Notice d´application

AVERTISSEMENT:

Avant le montage et la mise en service, couper l'alimentation secteur afin d'éviter tout accident. Mise en service et entretien: seulement par du personnel spécialisé; respecter les instructions d'exploitation!

Le déclenchement d'un dispositif de protection peut indiquer qu'un court-circuit s'est produit. Pour éviter des risques tels qu'un incendie ou un choc électrique, les éléments du démarreur devraient être contrôlés et remplacés si nécessaire.

Si la commande de démarrage est réalisée avec un contact permanent, le moteur peut démarrer automatiquement lorsque le relais de surcharge est en mode de réarmement automatique.

Si la commande de démarrage est réalisée avec un contact permanent, le moteur peut démarrer lorsque, après déclenchement du relais de surcharge, le bouton de réinitialisation est actionné.

Custodie plasitce per avviatore diretto e invertitore - Istruzione d'applicazione

AVVERTENZA:

Per prevenire infortuni, togliere tensione prima dell'installazione o manutenzione. Messa in servizio e manutenzione devono essere effettuate solo da personale specializzato; attenersi alle istruzioni per l'esercizio!

L'intervento di un dispositivo di protezione può indicare che si è verificato un corto circuito. Per evitare rischi, quali incendi o scosse elettriche, i componenti dell'avviatore dovrebbero essere controllati e sostituiti se necessario.

Quando collegato con controllo a due fili, il motore connesso al circuito può avviarsi automaticamente se il relè è impostato su reset automatico.

Quando collegato con controllo a due fili, il motore connesso al circuito può avviarsi automaticamente se il pulsante di RESET del relè di sovraccarico viene premuto.

Cofre en plástico para arrancador directo e inversor - Instrucciones de montaje

ADVERTENCIA:

Desconectar la alimentación eléctrica antes de realizar el montaje, con el objeto de evitar accidentes. La puesta en servicio y el mantenimiento ha de realizarse exclusivamente por personal especializado; ¡prestar atención a las instrucciones de montaje y puesta en marcha!

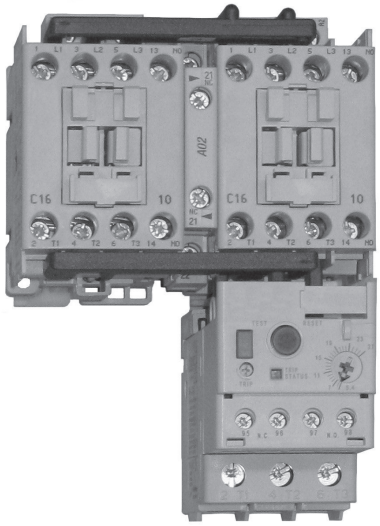
El disparo de un dispositivo de protección puede indicar que se ha producido un cortocircuito. Para evitar riesgos como incendio o descargas eléctricas, los componentes del arrancador deben ser examinados y reemplazados si fuera necesario.

Cuando el sistema de control es por contacto permanente, el motor se puede conectar automáticamente si el relé de sobrecarga tiene ajustado el rearme en posición de automático.

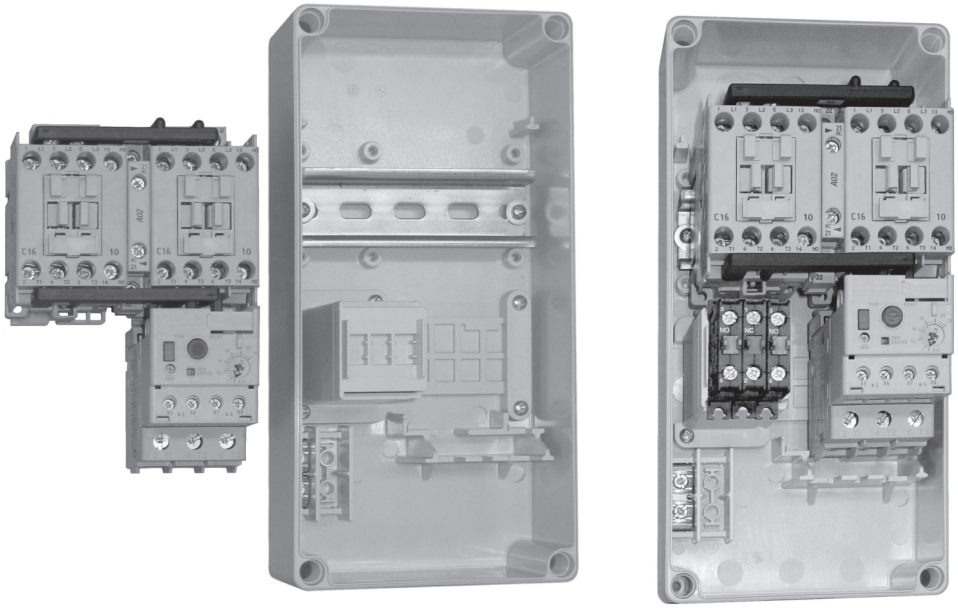
Cuando el sistema de control es por contacto permanente, después del disparo del relé térmico, el motor se puede conectar cuando se presiona el pulsador de RESET (rearme).

Assembly of Reversing Starters

1



2



Assemble the reversing starter:

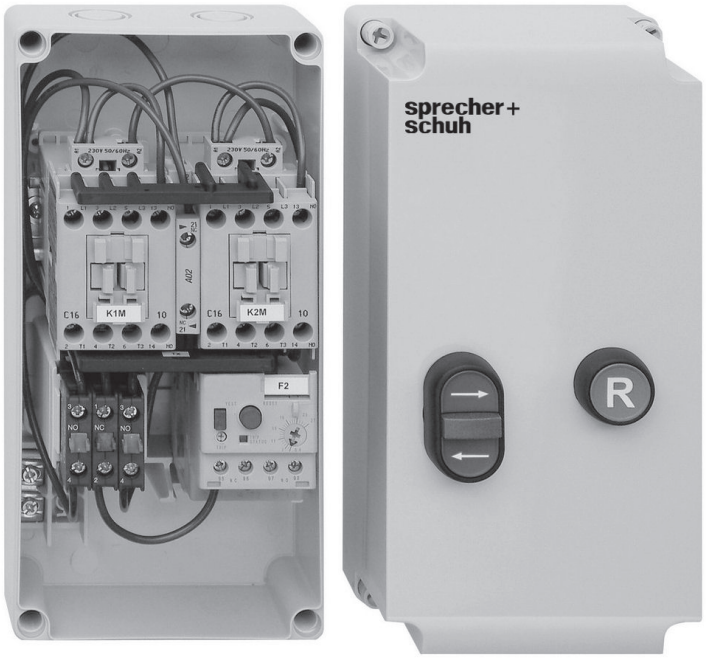
- Place the mechanical interlock between contactors
- Insert the dovetail connector from rear side
- Attach the parallel connection on line side
- Attach the reversing connection and the overload relay on load side

Snap the starter combination onto the metal hat rail in the enclosure base.

Snap the D7 contact blocks onto the device support:

- Pos. 1 (left): N.O. contact
- Pos. 2 (center): N.C. contact
- Pos. 3 (left): N.O. contact

3



Do the control wiring according the wiring diagram / wiring table.
Mount the D7 push button operators into the cover.

Component Selection for Reversing Starters

Contactors CA7 and Overload Relays CEP7-ED / CEP7-EE

Current Range		230V 50Hz	400V 50Hz	500V 50Hz	690V 50Hz	200V 60Hz	230V 60Hz	460V 60Hz	575V 60Hz	100kA, 690V	100kA, 600V	Components	
Min [A]	Max [A]	[kW]	[kW]	[kW]	[kW]	[HP]	[HP]	[HP]	[HP]	DIN Fuses Type gL/gG	Max. Fuse Class CC, J	Contactor ✶	Overload Relay ❄
0.10	0.50	0.06…0.09	0.06…0.12	0.06…0.12	0.06...0.18					2	3	CA7-9-10-⊗	CEP7-ED1AB
0.20	**1.0**	**0.12**	**0.18…0.25**	**0.18…0.37**	**0.25…0.55**			**1/4…1/3**	**1/4...1/2**	4	6	CA7-9-10-⊗	CEP7-ED1BB
1.0	5.0	0.18…1.1	0.37…1.5	0.55…2.2	0.75…3	1/4…3/4	1/4…1	1/2...2	3/4…3	16	20	CA7-9-10-⊗	CEP7-ED1CB
3.2	11.3	1.5…3	2.2…4	3.0…4	4	1…2	1 1/2...2	3…5	5...7 1/2	20	20	CA7-9-10-⊗	CEP7-ED1DB
3.2	15.0	4	5.5	5.5	5.5	3	3	7 1/2	10	25	20	CA7-12-10-⊗	CEP7-ED1DB
3.2	**16.0**		**7.5**	**7.5**	**7.5**	3	3	**7 1/2**	10	32	30	CA7-16-10-⊗	CEP7-ED1DB
5.7	**20.0**	**5.5**				**5**	**5**	**10**	**15**	35	40	CA7-16-10-⊗	CEP7-ED1EB
5.7	26.5	7.5	10…11	10…13	10	5	**7 1/2**	**15**	15	40	40	CA7-23-10-⊗	CEP7-ED1EB

✶ To complete the cat. no., please replace ⊗ with a coil voltage code.

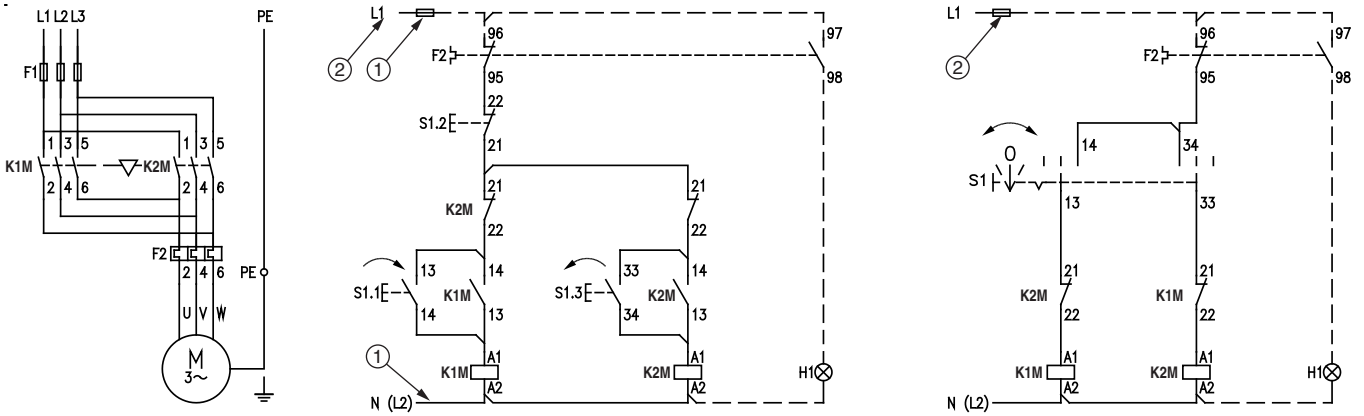
❄ The electronic overload relay CEP7-EE* can be taken as well.

Additional components

Description		Required Quantity	Cat. No.
Mechanical / Electrical Interlock		1	CM7-02
Power Wiring Kit for Reversing Starters		1	CAUT7-PW23
Neutral Terminal	¥	1	KS7-PNT
Control Components required for Impulse Control			
Multi-Function Push Button Operator, 3 Functions, without Markings	‡§	1	D7P-U3F3F34
Base Mounted Contact Block 1 N.C.		1	D7-BX01
Base Mounted Contact Block 1 N.O.		2	D7-BX10
Reset Push Button Operator, Marking "R"		1	D7P-F611
Control Components required for Maintained Control			
Selector Switch Operator, non-illuminated, 3-position	§	1	D7P-SM32
Base Mounted Contact Block 1 N.O.		2	D7-BX10
Reset Push Button Operator, Marking "R"		1	D7P-F611

‡ For button caps with text or symbols, order the operator without cap (cat. no. **D7P-U3X**). Caps are to be ordered separately.
§ For legend plates and frames, please see catalog A116.
¥ For UL applications.

Schematic Diagram for Reversing Starters

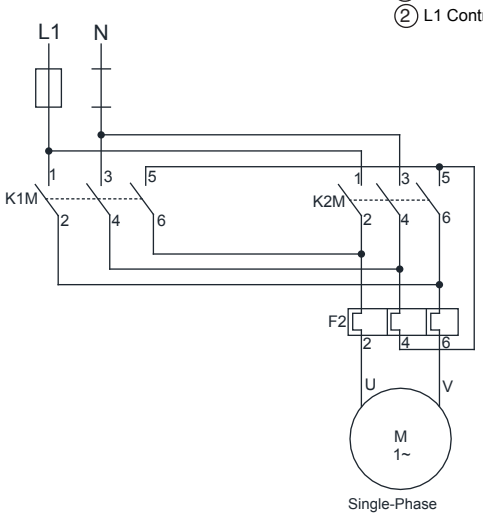


Impulse Control, Multi Function Push Button

Maintained Control, Selector Switch < O >

① Add wires for common control. Remove if separate control is required.

② L1 Control voltage supplied from external source.



Single-Phase

WARNING: Bonding between metallic conduits must be provided.

AVERTISSEMENT: Une liaison électrique doit être assurée entre les conduits métalliques.

SUPPLY CONDUCTOR SIZE (AWG)	BONDING CONDUCTOR	
	QTY.	SIZE
14	1	14
12	1	12
10	2	12
FOR USE WITH SPRECHER+SCHUH GROUNDING ADAPTER KIT, CAT. NO. KS7-GR1		
SEE APPLICABLE CODES AND LAW FOR GROUNDING REQUIREMENTS		

Wiring Tables

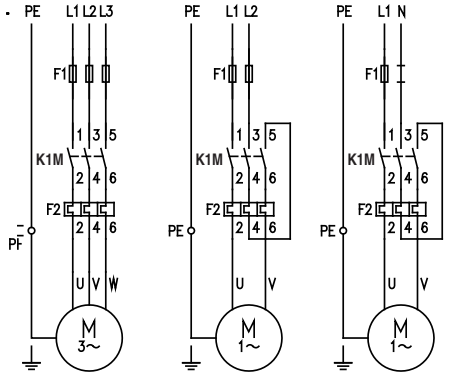
Impulse Control

From	To	Length mm
K1M - A2	K2M - A2	100
K1M - A1	K1M - 14	100
	S1 - 14	300
K2M - A1	K2M - 14	100
	S1 - 34	280
K2M - 22	K1M - 22	300
	S1 - 22	140
K2M - 21	K1M - 13	100
	S1 - 13	140
K2M - 13	K1M - 21	300
	S1 - 33	140
Q1 - 14	S1 - 21	180

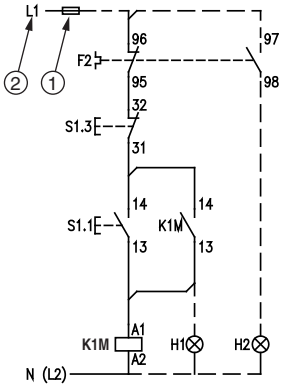
Maintained Control

From	To	Length mm
K1M - A2	K2M - A2	100
K1M - A1	K2M - 22	300
	K1M - 22	100
K1M - 21	S1 - 34	300
	S1 - 14	100
S1 - 13	S1 - 33	100
	Q1 - 14	180

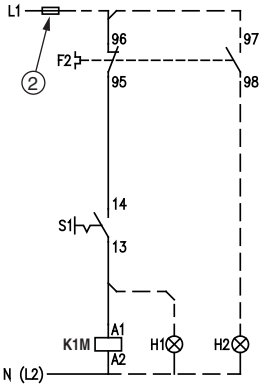
Schematic Diagram for Direct On-line Starters



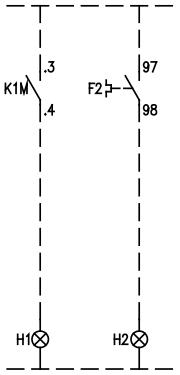
3-phase 2-phase Single-phase

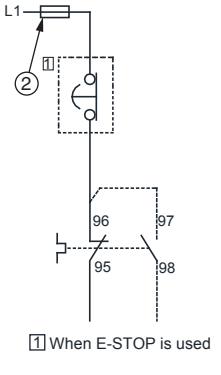


Impulse Control
Multi Function Push Button



Maintained Control
O - I Selector Switch



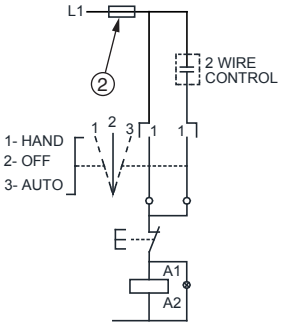


1 When E-STOP is used

WARNING: Bonding between metallic conduits must be provided.
AVERTISSEMENT: Une liaison électrique doit être assurée entre les conduits métalliques.

SUPPLY CONDUCTOR SIZE (AWG)	BONDING CONDUCTOR	
	QTY.	SIZE
14	1	14
12	1	12
10	2	12
FOR USE WITH SPRECHER+SCHUH GROUNDING ADAPTER KIT, CAT. NO. KS7-GR1		
SEE APPLICABLE CODES AND LAW FOR GROUNDING REQUIREMENTS		

1 Add wires for common control. Remove if separate control is required.
2 L1 Control voltage supplied from external source.



Illuminated HOA Selector Switch

Wiring Tables

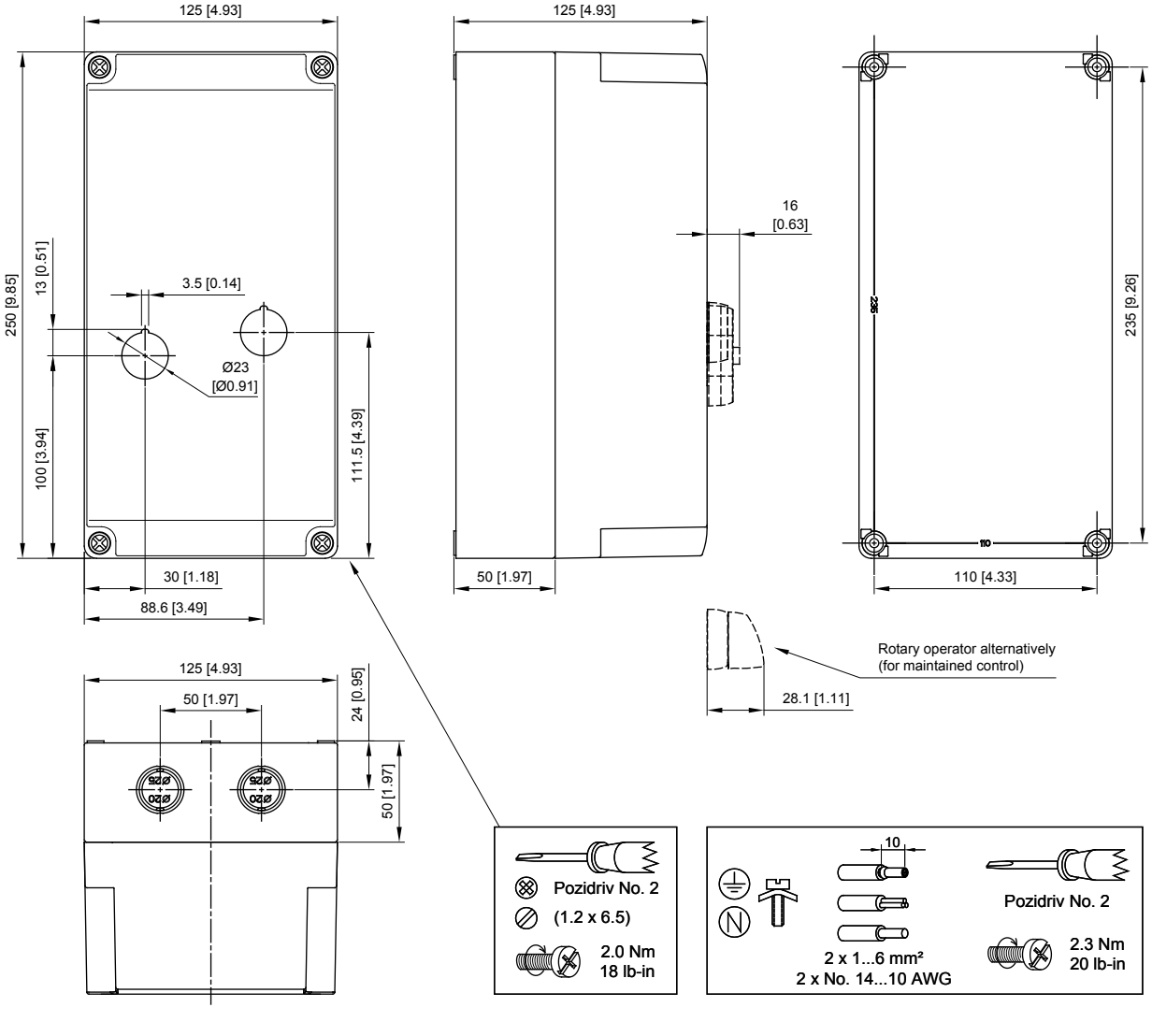
Impulse Control

From	To	Length [mm]
K1M - A2	(N)	280
K1M - A1	K1M - 13	100
	S1 - 13	140
S1 - 14	S1 - 31	100
	K1M - 14	140
F2 - 95	S1 - 32	140

Maintained Control

From	To	Length [mm]
K1M - A2	(N)	280
K1M - A1	S1 - 13	140
S1 - 14	F2 - 95	140

Dimensions



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