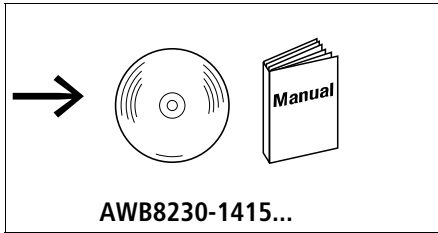


Montageanweisung
Installation Instructions
Notice d'installation
Istruzioni per il montaggio

Instrucciones de montaje
Инструкция по монтажу
安装说明

DV6-320

DV6-340



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!

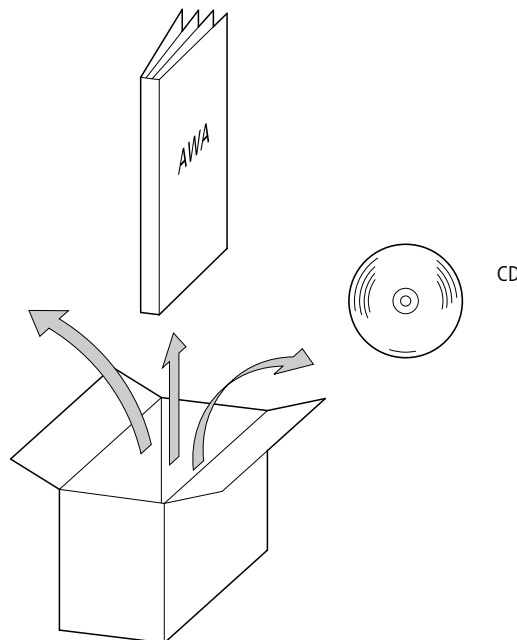
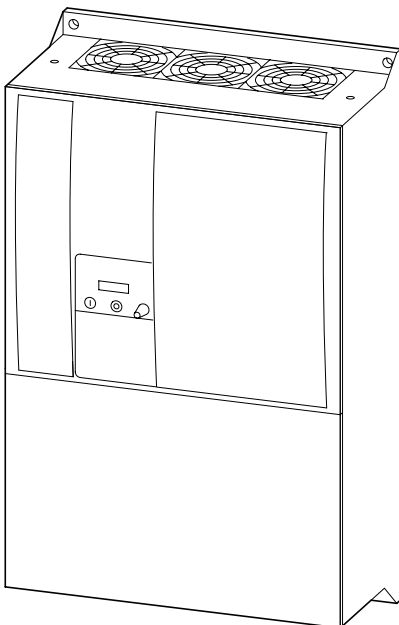
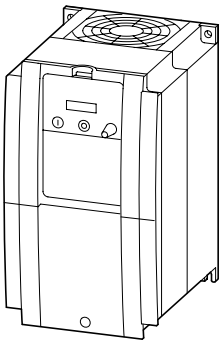
El trabajo a continuación descrito debe ser realizado por personas cualificadas y advertidas.

Электрический ток! Опасно для жизни!

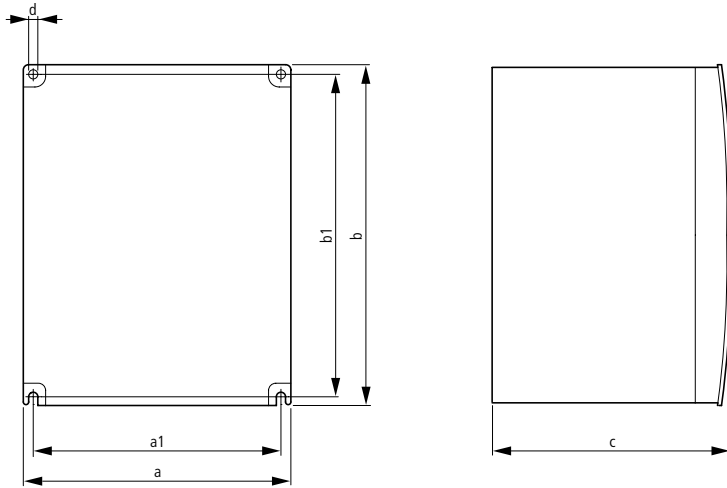
Только специалисты или проинструктированные лица могут выполнять следующие операции.

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。

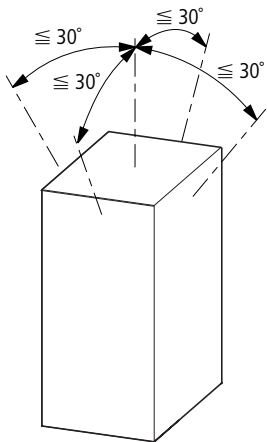


Abmessungen und Gewichte – Dimensions and weights – Dimensions et poids – Dimensioni e pesi – Dimensiones y pesos – Размеры и веса – 尺寸和重量 [mm]

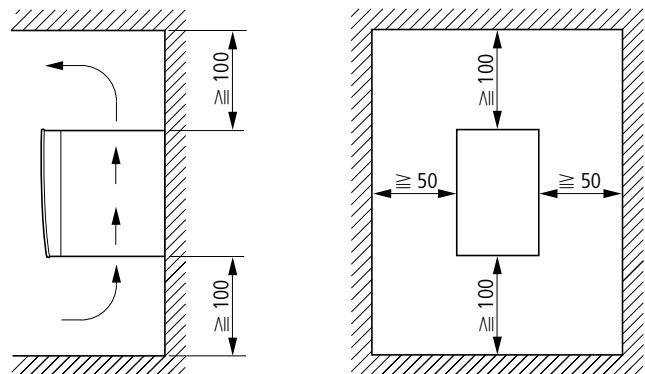


	a	a1	b	b1	c	d	[kg]
DV6-340-075	159	130	260.5	241	152	6	3.5
DV6-340-1K5	159	130	260.5	241	152	6	3.5
DV6-340-2K2	159	130	260.5	241	152	6	3.5
DV6-340-4K0	159	130	260.5	241	152	6	3.5
DV6-340-5K5	159	130	260.5	241	152	6	3.5
DV6-340-7K5	216	189	266	246	190.5	7	5
DV6-320-11K	216	189	266	246	190.5	7	5
DV6-340-11K	216	189	266	246	190.5	7	5
DV6-340-15K	256	229	396	376	210.5	7	12
DV6-340-18K5	256	229	396	376	210.5	7	12
DV6-340-22K	256	229	396	376	210.5	7	12
DV6-340-30K	310	265	540	510	202	10	20
DV6-340-37K	390	300	550	520	255.2	10	30
DV6-340-45K	390	300	550	520	255.2	10	30
DV6-340-55K	390	300	550	520	255.2	10	30
DV6-340-75K	390	300	700	670	275.2	12	60
DV6-340-90K	390	300	700	670	275.2	12	60
DV6-340-110K	480	380	740	710	293.2	12	80
DV6-340-132K	480	380	740	710	293.2	12	80

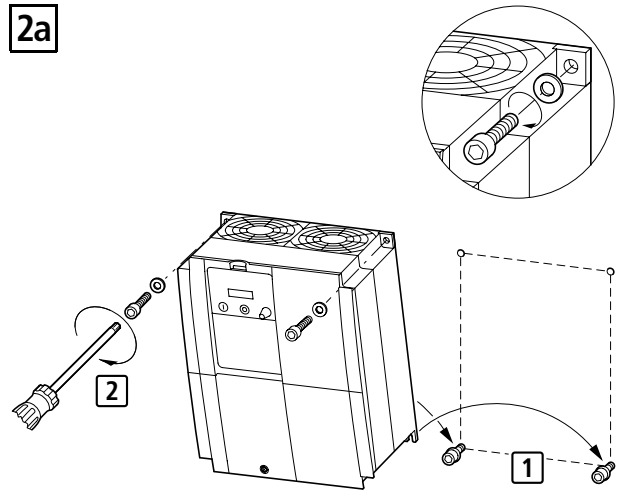
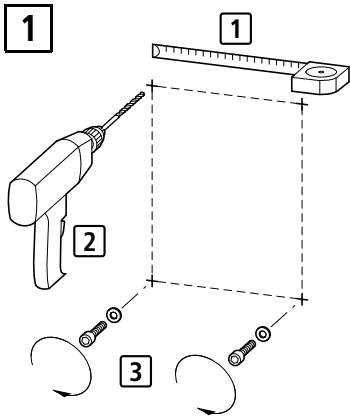
Einbaulage – Mounting position – Position de montage – Posizione di montaggio – Posición de montaje – Положение установки – 安装位置



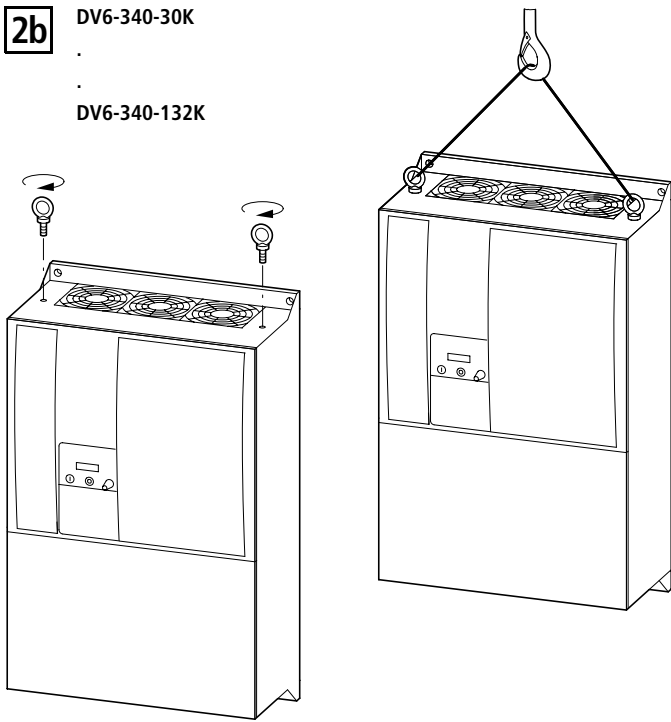
Einbaumaße – Fitting dimensions – Dimensions de montage – Dimensioni di montaggio – Dimensiones de montaje – монтажные размеры – 安装尺寸



06/04 AWA8230-1938

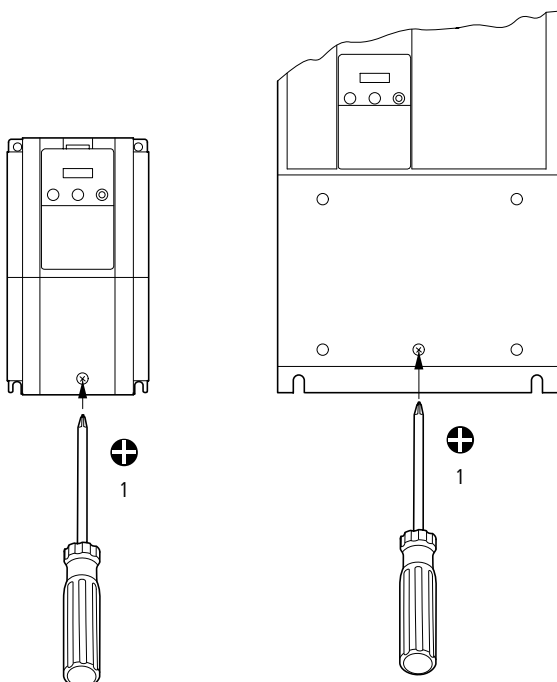


2b DV6-340-30K
DV6-340-132K



Ø mm		Nm	ft lbs
6	M5	4	3
7	M6	4.9	3.6
10	M8	8.8	6.5

06/04 AWA8230-1938



Warning!
Nur im spannungsfreien Zustand öffnen!

Warning!
Only open in de-energized state!

Avertissement !
N'ouvrir qu'en absence de tension !

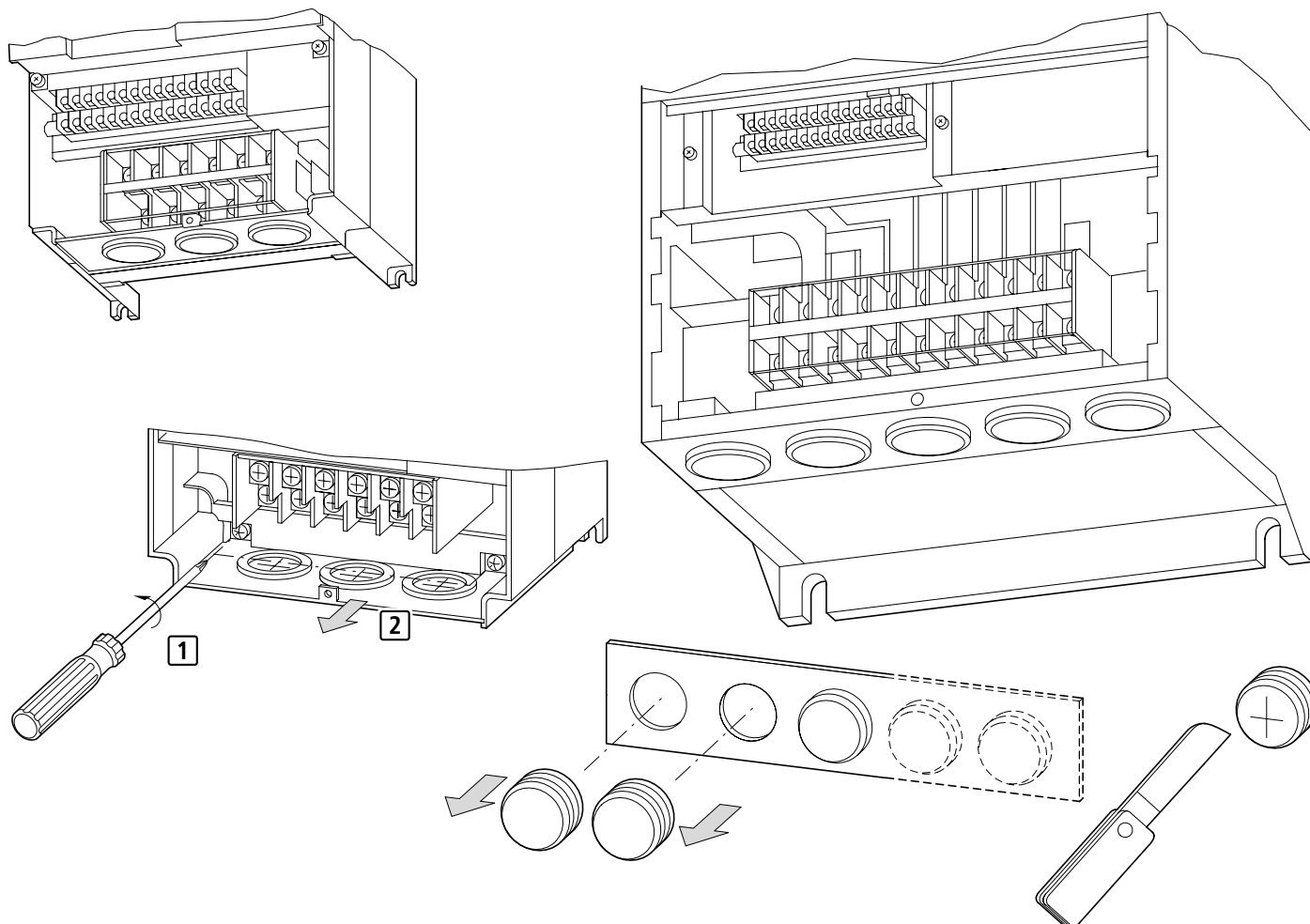
Avvertimento!
Aprire solo se l'apparecchio è spento!








¡Advertencia!
¡Sólo se debe abrir en ausencia de tensión!








Предупреждение!
Открывать только в свободном от напряжения состоянии!

警告!
只能在不通电的情况下打开!

Leistungsklemmen – Power terminals – Bornes de puissance – Morsetti di potenza – Bornes de la etapa de potencia –
 Силовые зажимы – 功率接线柱



RO, TO							
	mm ²	AWG	w mm	w mm	Mmm	Nm	+
DV6-340-...	1.5 – 2.5	16 – 14	8 – 10	9	M4	1.2 – 1.38	1

L1, L2, L3, PE, L+, DC+, DC-, BR, U, V, W							
	mm ²	AWG	w mm	w mm	Ø mm	Nm	Nm

DV6-340-075	1.5	20	< 13		M4	4.5	1.5	1	–
DV6-340-1K5	2.5	18	< 13		M4	4.5	1.5	1	–
DV6-340-2K2	2.5	16	< 13		M4	4.5	1.5	1	–
DV6-340-4K0	2.5	14	< 13		M4	4.5	1.5	1	–
DV6-340-5K5	2.5	14	< 13		M5	5.5	2.5	1	–
DV6-340-7K5	4	10	< 17		M5	5.5	2.5	1	–
DV6-320-11K	6	8	< 17		M6	6.5	4.9	1	–
DV6-340-11K	6	8	< 17		M6	6.5	4.9	1	–
DV6-340-15K	10	6	< 17		M6	6.5	4.9	1	–
DV6-340-18K5	16	6	< 18		M6	6.5	4.9	1	–
DV6-340-22K	16	4	< 18		M6	6.5	4.9	1	–
DV6-340-30K	25	3	< 23		M6	6.5	4.9	1	–
DV6-340-37K	35	1	< 23		M6	6.5	4.9	1	–
DV6-340-45K	35	1	< 23		M8	8.5	–	–	8.8
DV6-340-55K	2 × 35	1/0	< 23		M8	8.5	–	–	8.8
DV6-340-75K	2 × 35	2 × 1 (75 °C)	< 29		M8	8.5	–	–	8.8
DV6-340-90K	2 × 50	2 × 1 (75 °C)	< 29		M10	10.5	–	–	13.7
DV6-340-110K	2 × 70	2 × 1/0	< 40		M10	10.5	–	–	13.7
DV6-340-132K	2 × 70	2 × 2/0	< 40		M10	10.5	–	–	13.7

06/04 AWA8230-1938



Achtung!

Im Geltungsbereich der EG-Richtlinien dürfen die Frequenzrichter und deren Zubehör nur dann in Betrieb genommen werden, wenn festgestellt wird, dass die Maschine die Schutzanforderungen der Maschinenrichtlinie 89/392/EWG erfüllt.

Attention!

Within the scope of the EU Directives, the frequency inverters and their accessories may be commissioned only provided it is established that the machine fulfils the protective requirements of Machine Directive 89/392/EWG.

Attention !

En application des directives européennes, les convertisseurs de fréquence et leurs accessoires ne doivent être mis en service que s'il a été vérifié que la machine répond bien aux exigences de la directive machines 89/392/EWG.

Attenzione!

Nel campo di validità delle direttive CEE i convertitori di frequenza e i loro accessori possono essere messi in esercizio solamente se è verificato che la macchina soddisfa i requisiti di sicurezza delle direttive macchine 89/392/CEE.

¡Atención!

En el campo de aplicación de la normativa CE, los convertidores de frecuencia y sus correspondientes accesorios sólo deberán ponerse en marcha cuando se asegure que la máquina cumple con las exigencias de seguridad de la normativa de máquinas 89/392/CE.

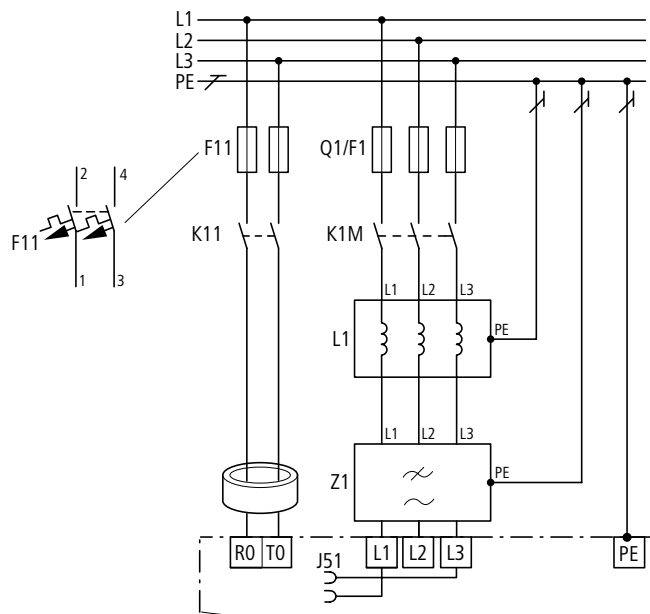
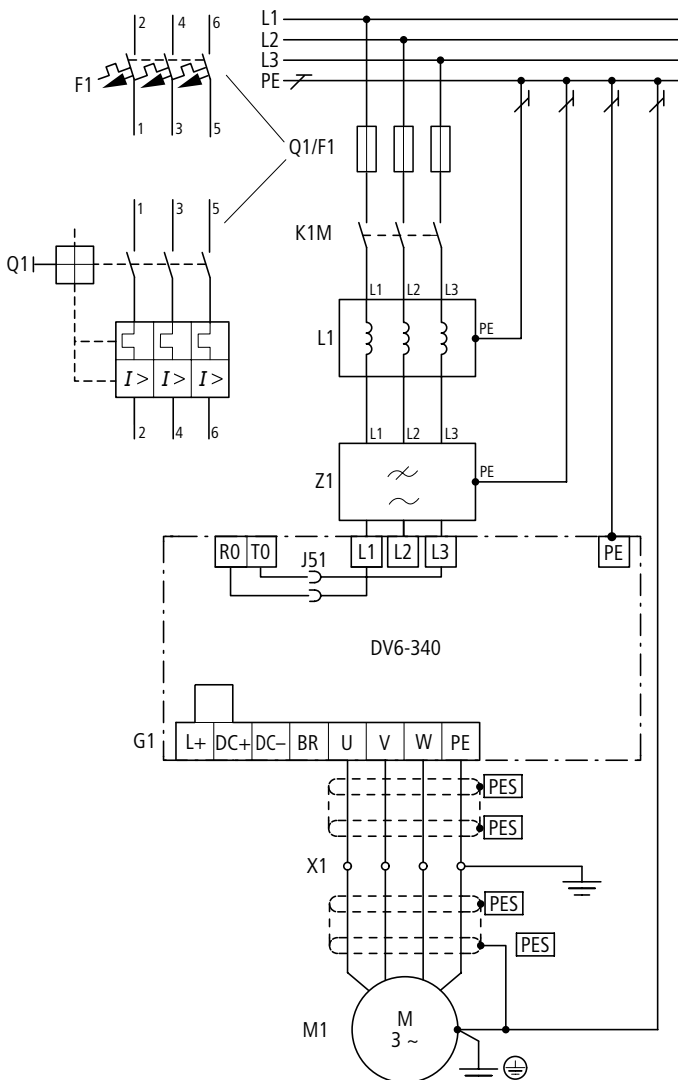
Внимание!

На территории действия Предписаний ЕС преобразователя частоты и его принадлежности можно вводить в эксплуатацию только в том случае, если будет установлено, что машина выполняет требования по защите согласно Предписанию для машин 89/392/ЕЭС.

注意!

当确定机器设备满足了设备准则 89/392/EWG (欧共体旧称) 时, 变频器及其附件才能在 EG (欧共体) 原则的适用范围内投入使用。

06/04 AWA8230-1938



J51 = OFF

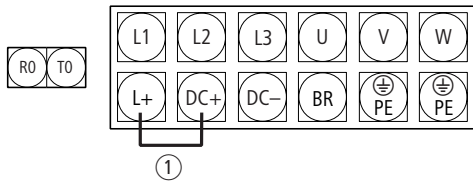
F11 = 6 A

Typ/Référence/Type Тип/Тип/ 型号	F1/Q1
DV6-340-075	6 A
DV6-340-1K5	6 A
DV6-340-2K2	10 A
DV6-340-4K0	10 A
DV6-340-5K5	16 A
DV6-340-7K5	20 A
DV6-320-11K	58 A
DV6-340-11K	32 A
DV6-340-15K	40 A
DV6-340-18K5	50 A
DV6-340-22K	58 A
DV6-340-30K	70 A
DV6-340-37K	90 A
DV6-340-45K	125 A
DV6-340-55K	125 A
DV6-340-75K	175 A
DV6-340-90K	220 A
DV6-340-110K	300 A
DV6-340-132K	300 A

DV6-340-075

....

DV6-340-5K5

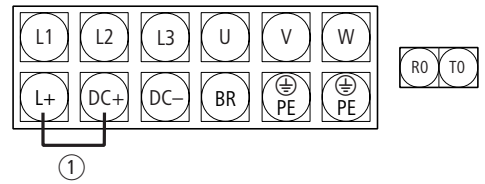


DV6-340-7K5

....

DV6-340-11K

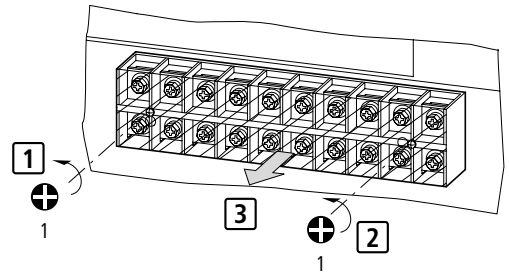
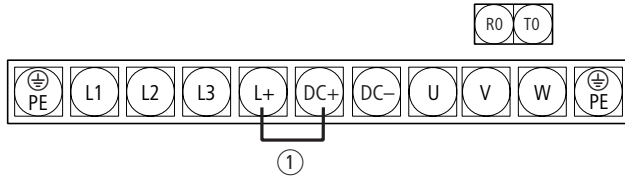
DV6-320-11K



DV6-340-15K

....

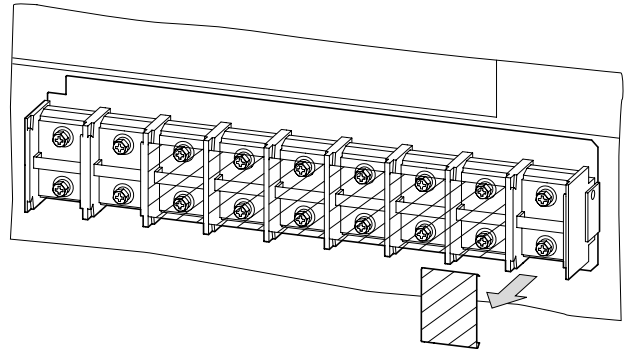
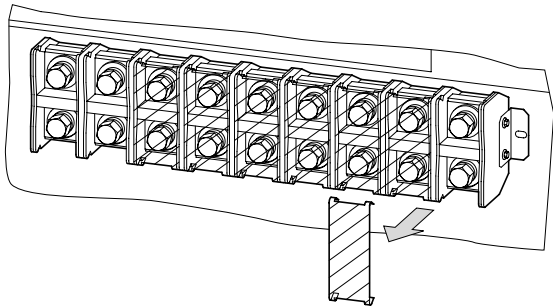
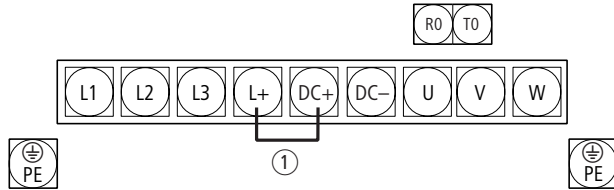
DV6-340-55K



DV6-340-75K

....

DV6-340-132K



① Interne Verbindung. Beim Einsatz einer Zwischenkreisdrossel entfernen.

① Internal link. Remove link when an intermediate circuit choke is being used.

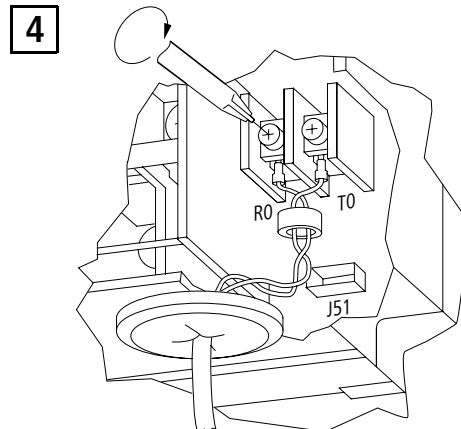
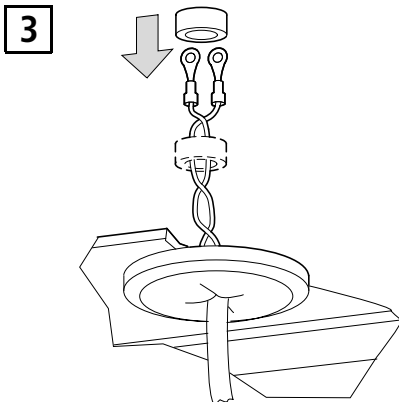
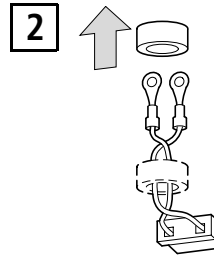
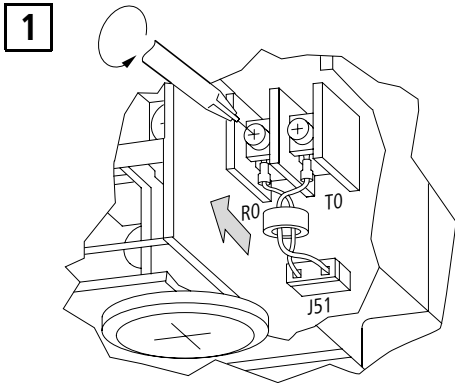
① Jonction interne. Oter en cas d'utilisation d'une inductance indirecte.

① Collegamento interno. Rimuovere il collegamento per l'inserimento dell'induttanza.

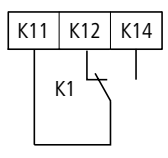
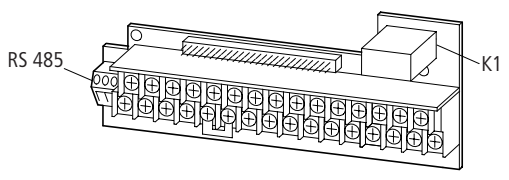
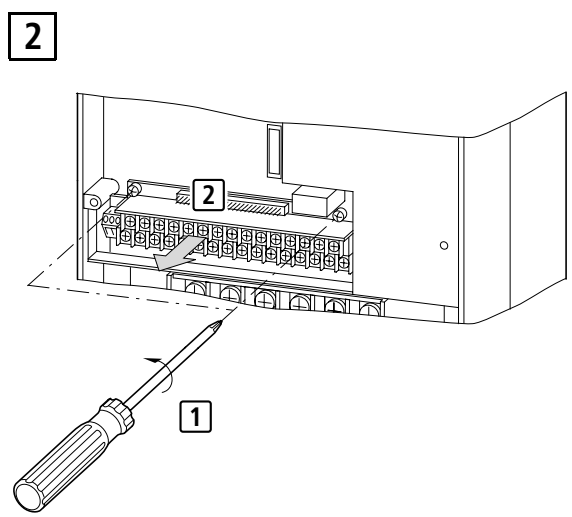
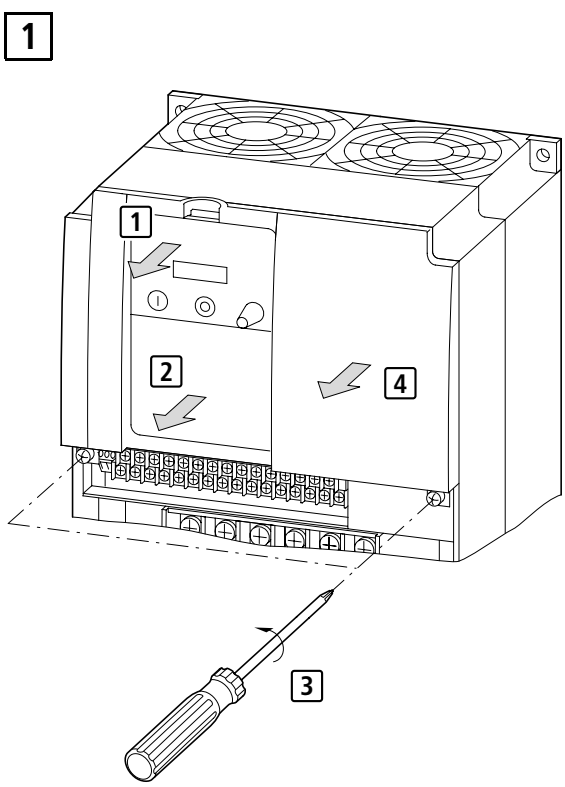
① Conexión interna. Retirar al aplicar una reactancia de circuito de frecuencia intermedia.

① Внутреннее соединение. Удалить при эксплуатации сглаживающего реактора звена постоянного тока.

① 内部跨接 在使用中间电路电抗器时去除



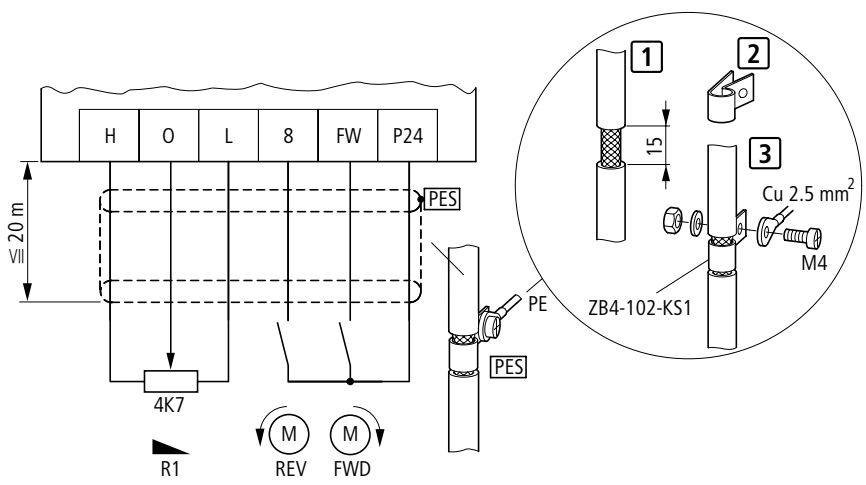
06/04 AWA8230-1938



06/04 AWA8230-1938

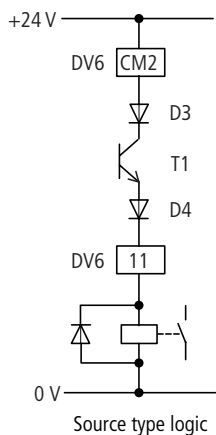
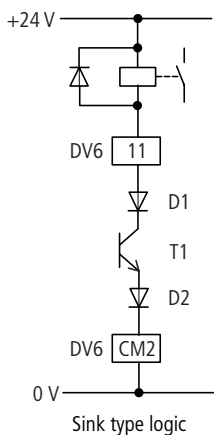
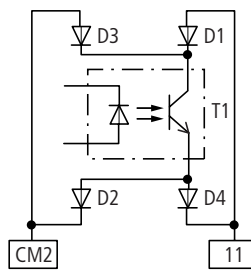
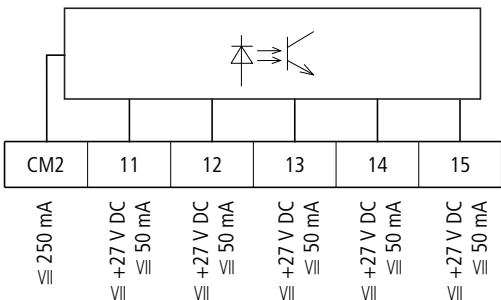
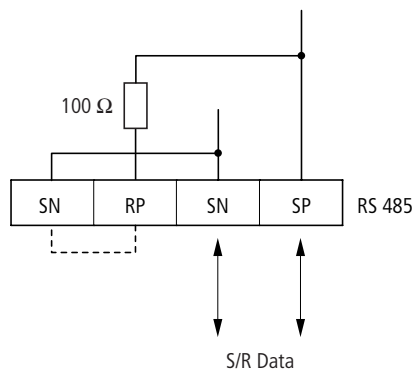
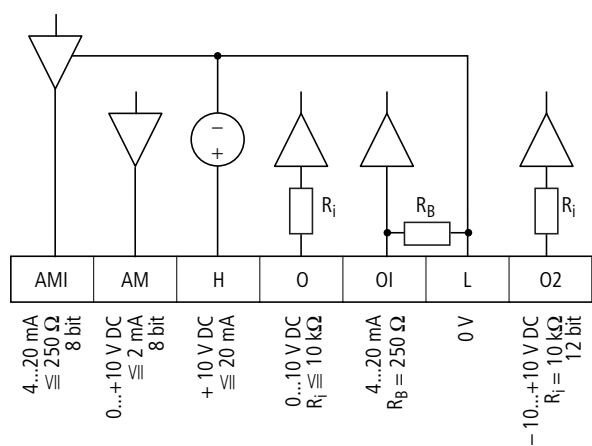
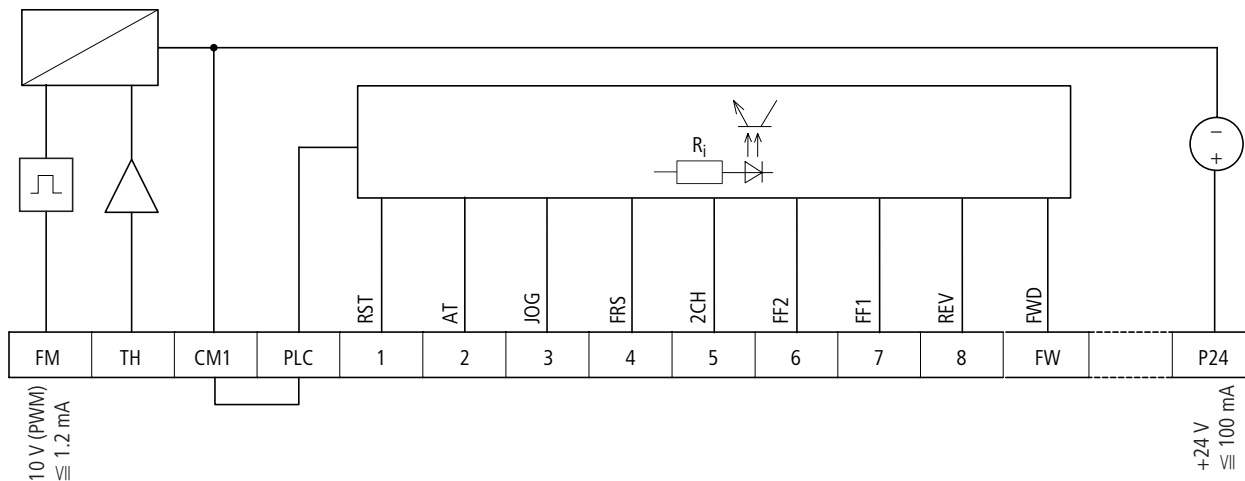
n	mm ²	AWG	mm	mm	Nm	ft-lbs
1 ×	0.14 – 1.5	6 – 16	6	0.4 × 2.5	0.5 – 0.6	0.36
2 ×	0.14 – 0.75	–	6	0.4 × 2.5	0.5 – 0.6	0.36

U	I	
100 – 250 V ~	0.2 A	1 A
5 – 30 V =	0.2 A	1 A



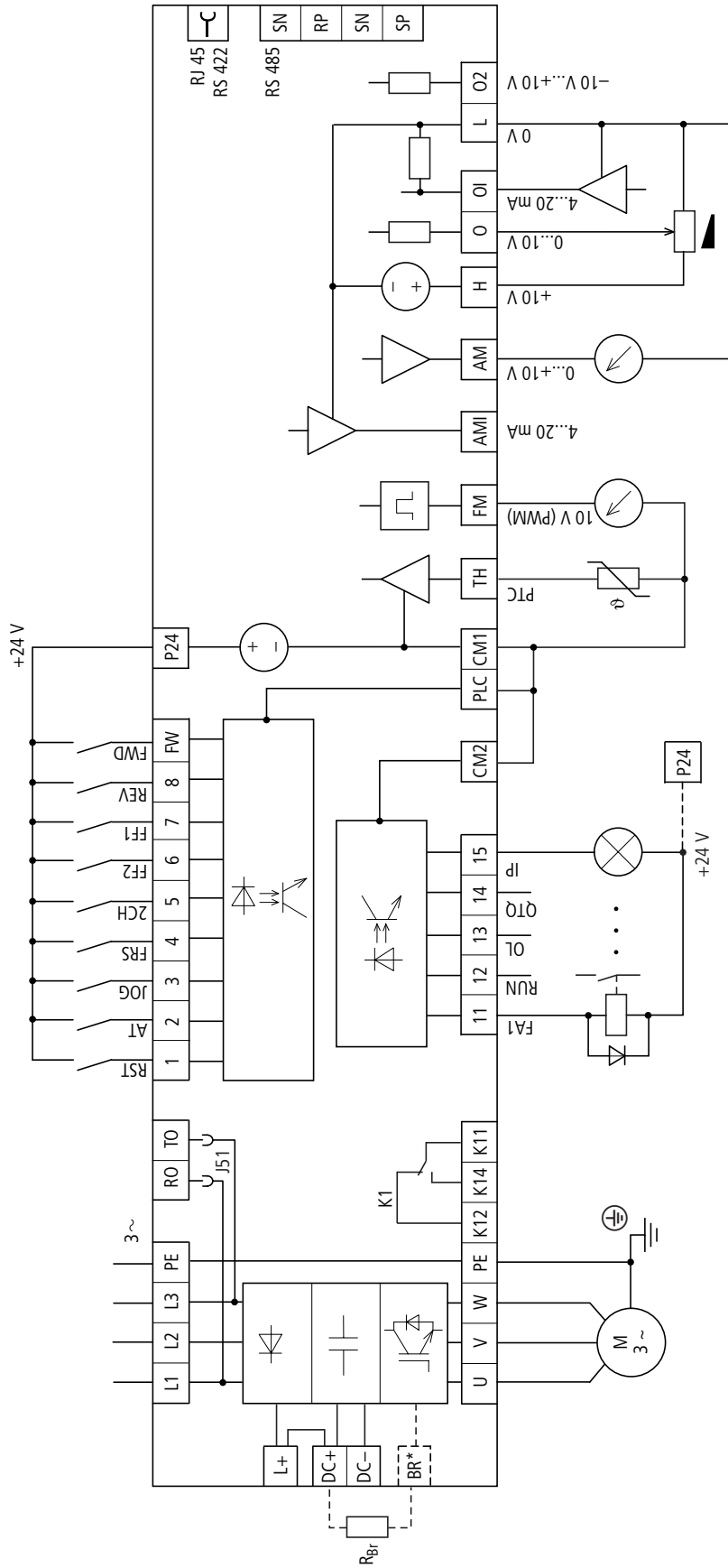
→ ZB4-102-KS1 muss separat bestellt werden.
 ZB4-102-KS1 must be ordered separately.
 ZB4-102-KS1 doit être commandé séparément.
 ZB4-102-KS1 deve essere ordinata separatamente.
 ZB4-102-KS1 debe adquirirse por separado.
 ZB4-102-KS1 нужно заказывать отдельно.
 ZB4-102-KS1 必须单独订购

**Blockschaltbild Steuerklemmen – Block diagram control terminals – Schéma fonctionnel des bornes de commande –
 Schema a blocchi morsetti di comando – Pantalla de esquema modular bornes de mando –
 Структурная схема Зажимы цепей управления – 控制接线柱方块图**



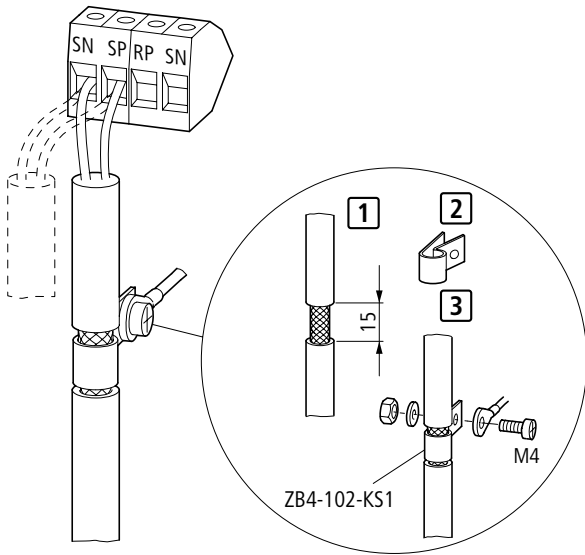
06/04 AWA8230-1938

06/04 AWA8230-1938

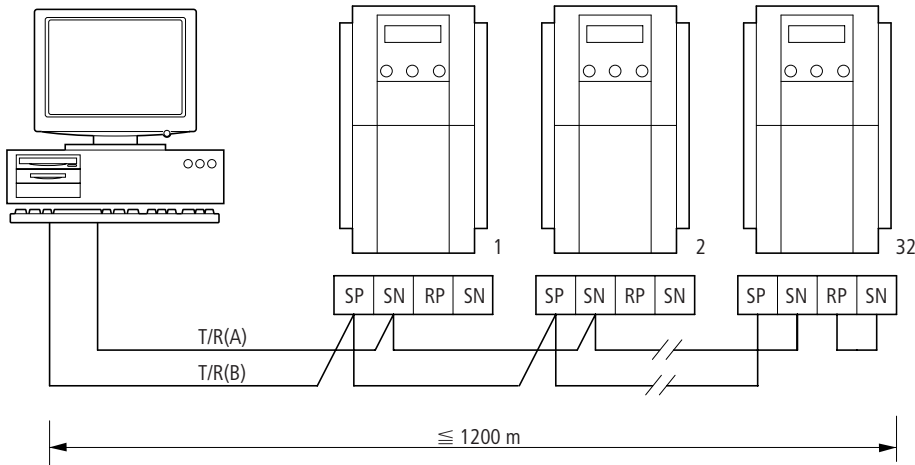
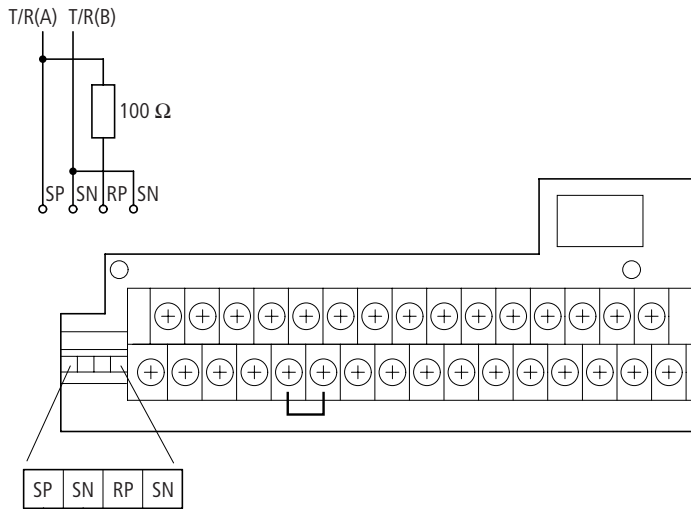


nur bei – only with – uniquement pour – solo con – sólo con – только с – 仅对
 DV6-340-075 ... DV6-340-11K, DV6-320-11K

BR*



n	mm ²	AWG	mm	mm	Nm	ft-lbs
1 ×	0.14 – 1.5	6 – 16	6	0.4 × 2.5	0.5 – 0.6	0.38
2 ×	0.14 – 0.75	–	6	0.4 × 2.5	0.5 – 0.6	0.38



06/04 AWA8230-1938

EMV-gerechter Aufbau. Steuer- und Netzleitungen räumlich getrennt von der Motorleitung verlegen. [PES] Leitungsschirm großflächig mit PE verbinden.

Ensure EMC-compliant installation. Lay control and communication cables spatially separated from the motor cable. Ensure a large contact area connection between [PES] cable screen and PE.

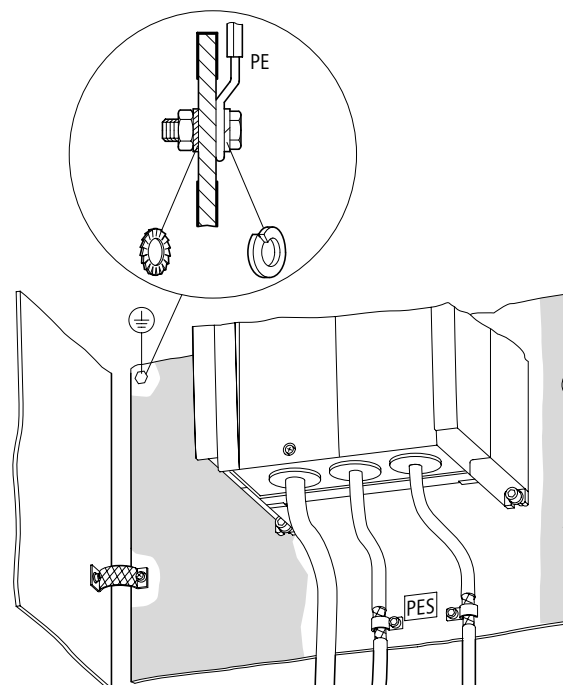
Montage conforme aux règles de la CEM. Eloigner les câbles de commande et de réseau des câbles puissance. Relier le blindage au PE en assurant de grandes surfaces de contact.

Montaggio secondo CEM. Disporre i cavi comandi e di alimentazione separati dal cavo del motore. Collegare lo schermo del cavo [PES] con PE con un'ampia superficie.

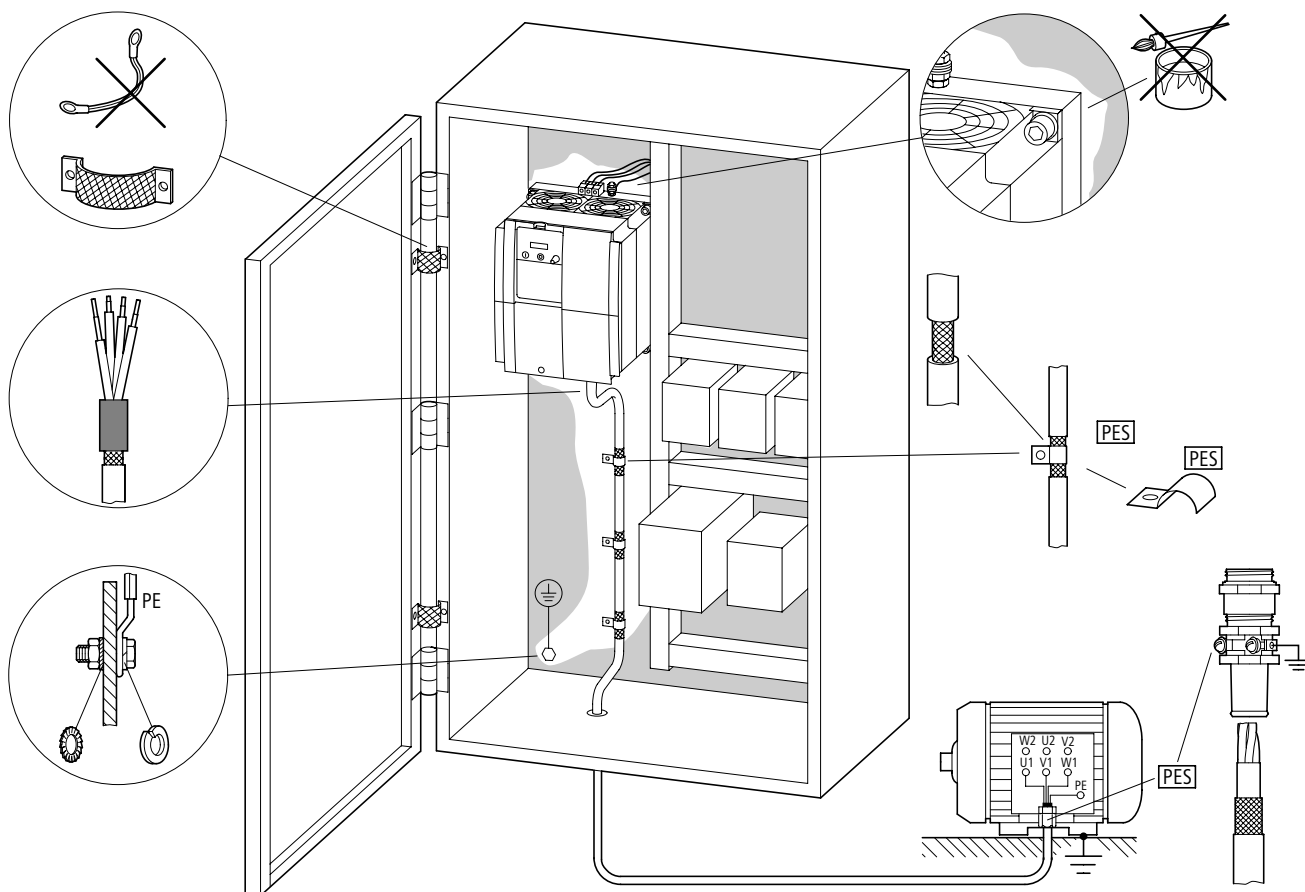
El montaje debe cumplir CEM. Los cables de mando y de conexión a red se deben instalar independientemente del cable de conexión al motor. El cable apantallado [PES] se debe conectar a masa utilizando una amplia superficie de contacto.

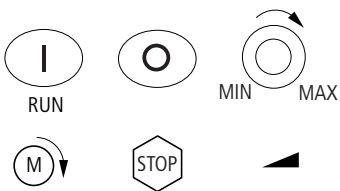
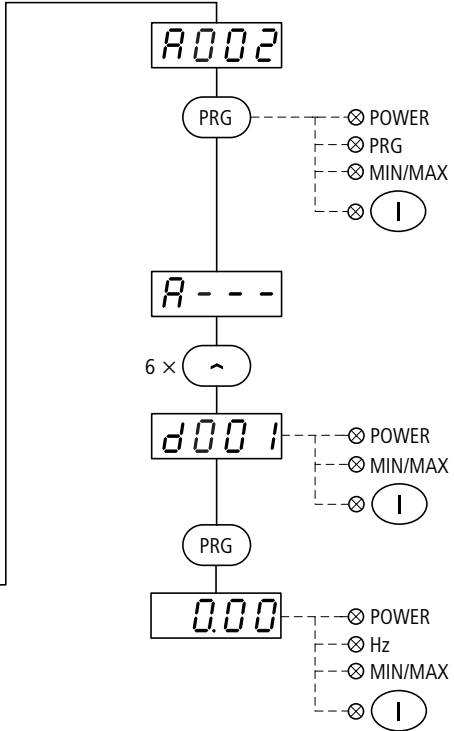
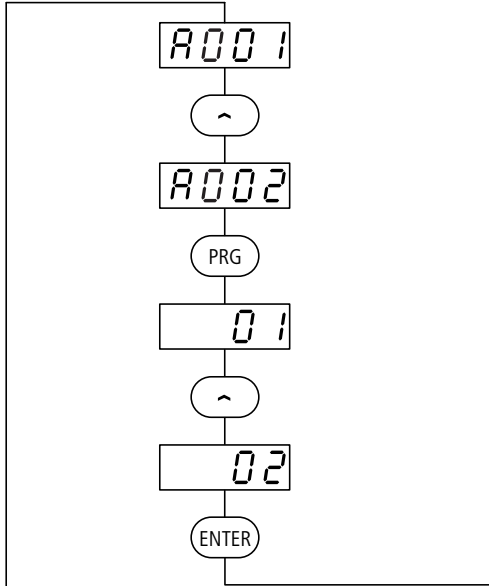
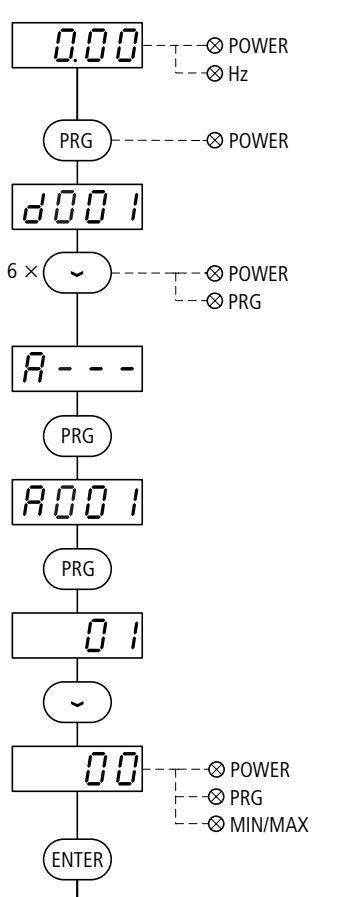
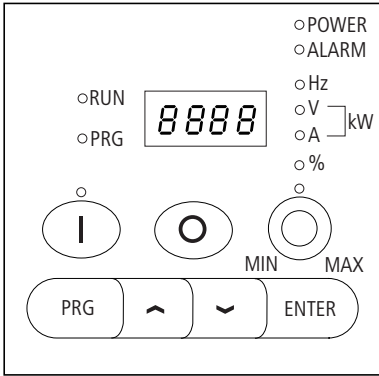
Сборка соответственно электромагнитной совместимости. Линии управления и электросети прокладывать в пространственном отношении отдельно от линии двигателя. [PES] силовой экран соединять с PE по большой площади.

具备电磁相容性的结构。控制线和网络线空间上与马达导线分开敷设。PES (聚酯人造丝) 导线屏蔽用 PE (聚乙烯) 大面积缠绕。



06/04 AWA8230-1938





Wiring Warnings for Electrical Practices and Wire Sizes

The Cautions, Warnings, and instructions in this section summarize the procedures necessary to ensure an inverter installation complies with Underwriters Laboratories® guidelines.



Warning!
Use 60/75 °C Cu wire only or equivalent.



Warning!
„Open Type Equipment. „
For models DV6-340-75K to DV6-340-132K.



Warning!
“Suitable for use on a circuit capable of delivering not more than 10,000 rms symmetrical amperes, 240 V maximum.”
For DV6-320-11K model.



Warning!
“Suitable for use on a circuit capable of delivering not more than 10,000 rms symmetrical amperes, 480 V maximum.”
For DV6-340 models.

Circuit Breaker and Fuse Sizes

The inverter's connections to input power must include UL Listed inverse time circuit breakers with 600 V rating, or UL Listed fuses as shown in the table below.

Terminal Tightening Torque and Wire Size

The wire size range and tightening torque for field wiring terminals are presented in the table below

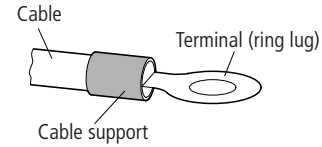
Inverter Models DV6-	Input Voltage	Motor Output		Circuit-Breaker A	Fuse A	Wire Size Range (AWG)	Torque	
		HP	kW				ft-lbs	Nm
DV6-320-11K	200 V	15	11	60	60	4	3.6	4.9
DV6-340-075	400 V	1	0.75	10	10	20	1.1	1.5
DV6-340-1K5		2	1.5	10	10	18	1.1	1.5
DV6-340-2K2		3	2.2	10	10	16	1.1	1.5
DV6-340-4K0		5	4.0	15	15	14	1.1	1.5
DV6-340-5K5		7.5	5.5	15	15	12	1.8	2.5
DV6-340-7K5		10	7.5	20	20	10	1.8	2.5
DV6-340-11K		15	11	30	30	8	3.6	4.9
DV6-340-15K		20	15	40	40	6	3.6	4.9
DV6-340-18K5		25	18.5	50	50	6	3.6	4.9
DV6-340-22K		30	22	60	60	4	3.6	4.9
DV6-340-30K		40	30	70	70	3	3.6	4.9
DV6-340-37K		50	37	90	90	4 II 4 AWG	3.6	4.9
DV6-340-45K		60	45	125	125	1 (75 °C)	6.5	8.8
DV6-340-55K		75	55	125	125	2 II 2 AWG	6.5	8.8
DV6-340-75K		100	75	175	175	1 II 1AWG (75 °C)	6.5	8.8
DV6-340-90K		125	90	220	200	1 II 1AWG (75 °C)	10.1	13.7
DV6-340-110K		150	110	250	250	1/0 II 1/0 AWG	10.1	13.7
DV6-340-132K	175	132	300	300	3/0 II 3/0	10.1	13.7	

→ AWG = American Wire Gauge. Smaller numbers represent increasing wire thickness.
kcmil = 1,000 circular mils, a measure of wire cross-sectional area
mm² = square millimeters, a measure of wire cross-sectional area

Wire Connectors



Warning!
Field wiring connections must be made by a UL Listed and CSA Certified ring lug terminal connector sized for the wire gauge being used. The connector must be fixed using the crimping tool specified by the connector manufacturer.



Motor Overload Protection

Moeller DV6 inverters provide solid state motor overload protection, which depends on the proper setting of the following parameters:

- B012 “electronic overload protection”
- B212 “electronic overload protection, 2nd motor”
- B312 “electronic overload protection, 3rd motor”

Set the rated current [Amperes] of the motor(s) with the above parameters. The setting range is 0.2 * rated current to 1.2 * rated current.



Warning!
When two or more motors are connected to the inverter, they cannot be protected by the electronic overload protection. Install an external thermal relay on each motor.

06/04 AWA8230-1938