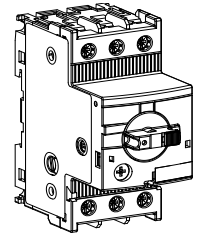


MS132 / MS132-B

en Installation instructions
de Montageanweisung
es Instrucciones de montaje
fr Notice de montage
it Istruzioni di montaggio
sv Installation och skötsel
cn 安装说明书
ru Инструкция по монтажу
ar إرشادات التثبيت

Manual Motor Starter MS132 / MS132-B
Motorschutzscharter MS132 / MS132-B
Guardamotor MS132 / MS132-B
Disjoncteur-moteur MS132 / MS132-B
Salvatore motore MS132 / MS132-B
Handmanövrerad Motorskyddsbytare MS132 / MS132-B
电动机保护用断路器 MS132 / MS132-B
Автомат защиты электродвигателя MS132 / MS132-B
بائى يدوى لحركة المحرك MS132 / MS132-B



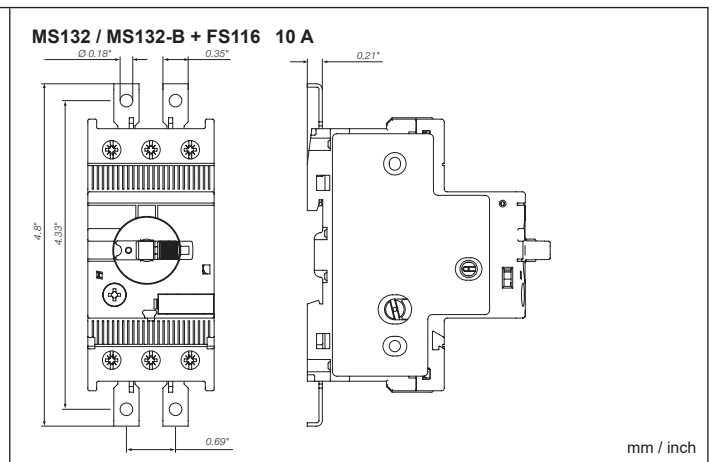
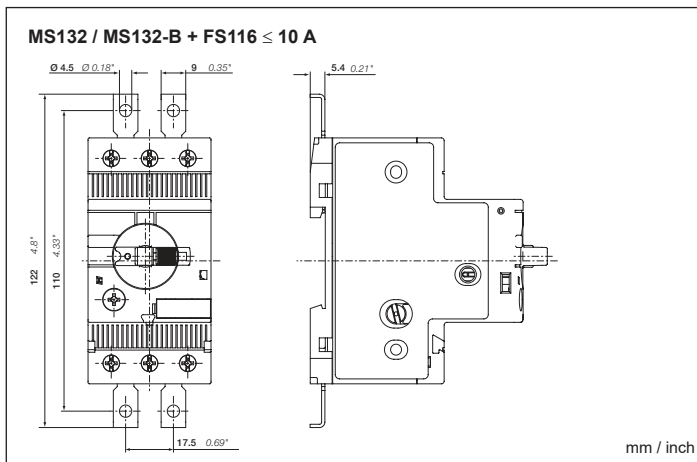
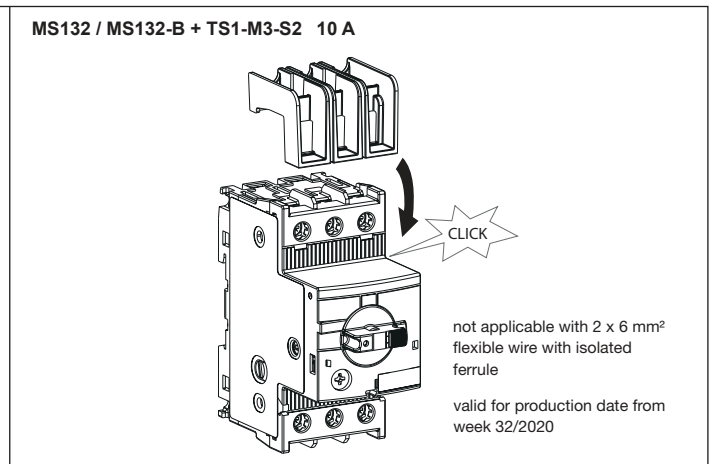
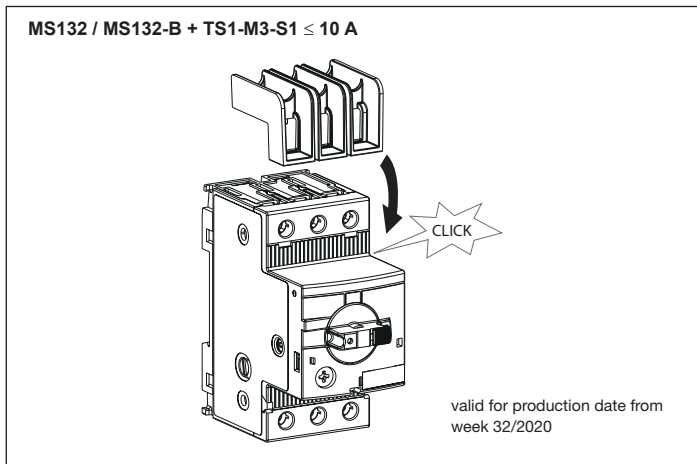
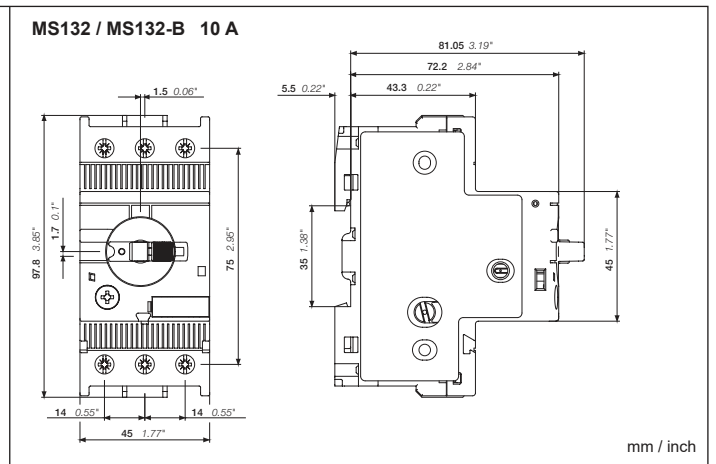
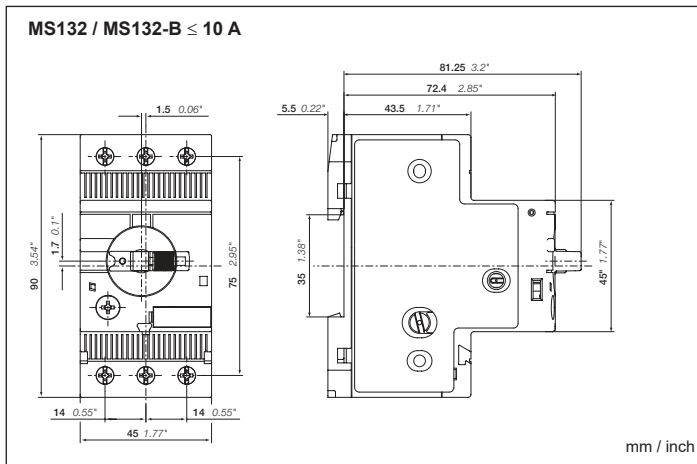
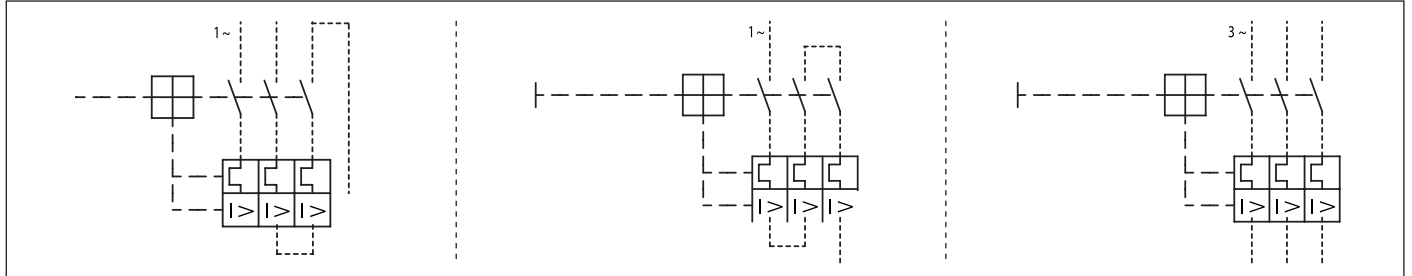
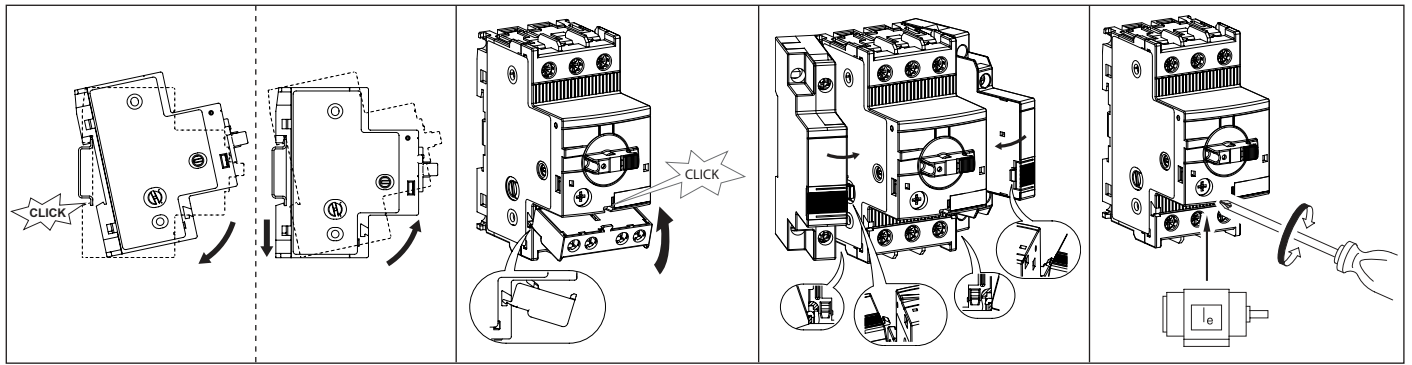
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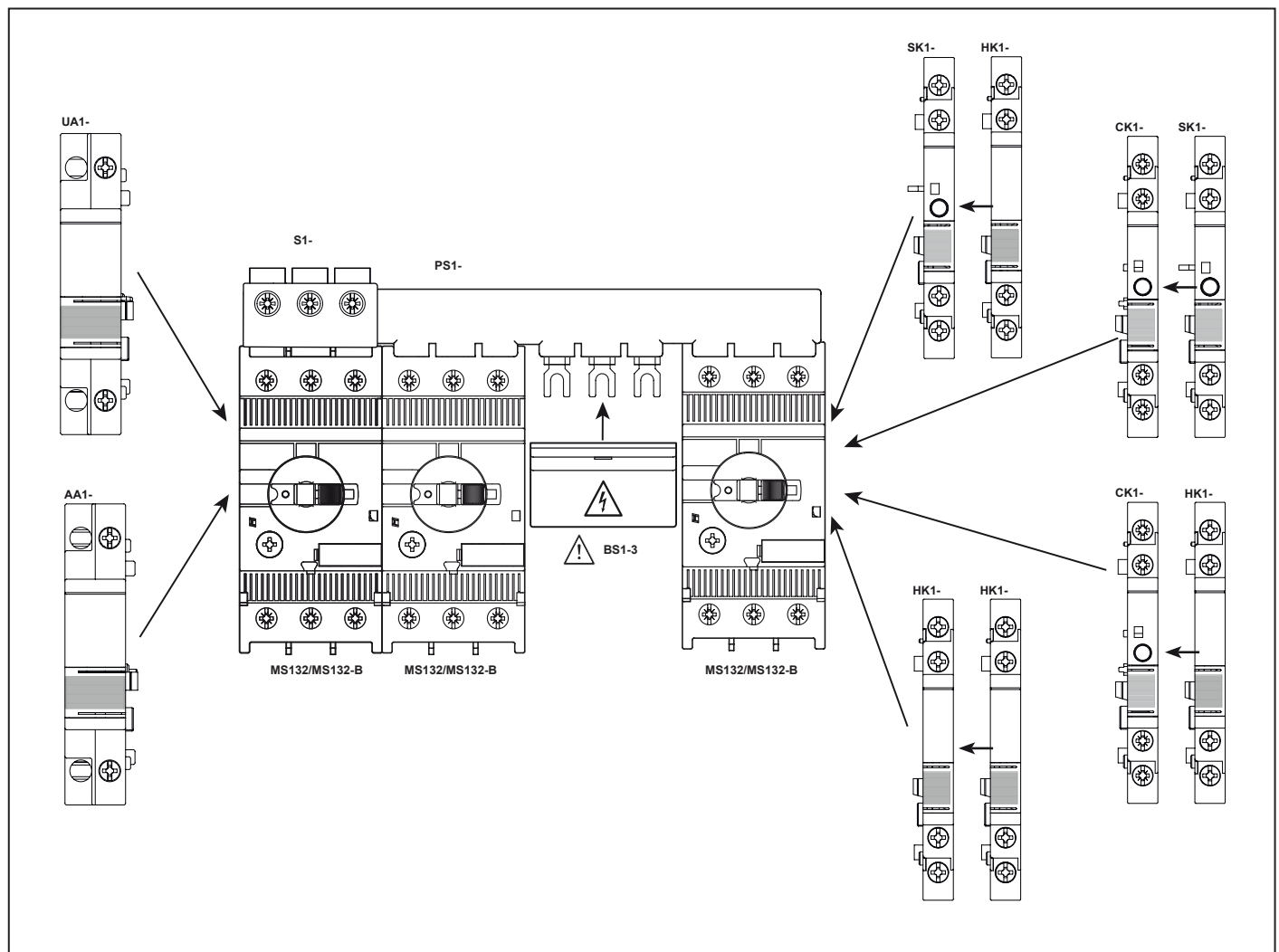
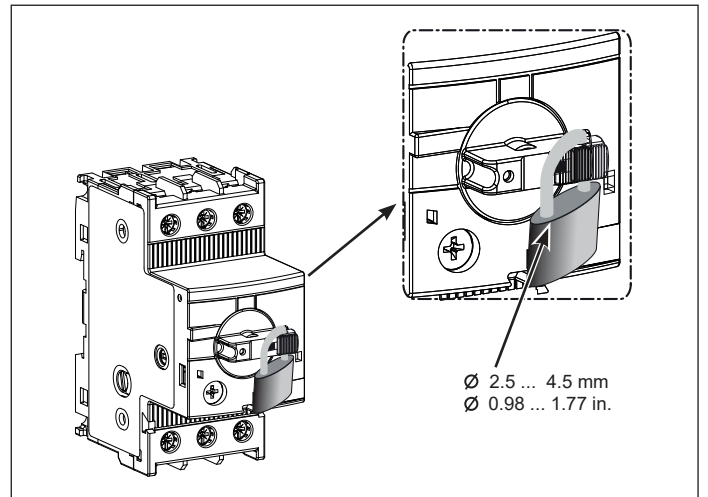
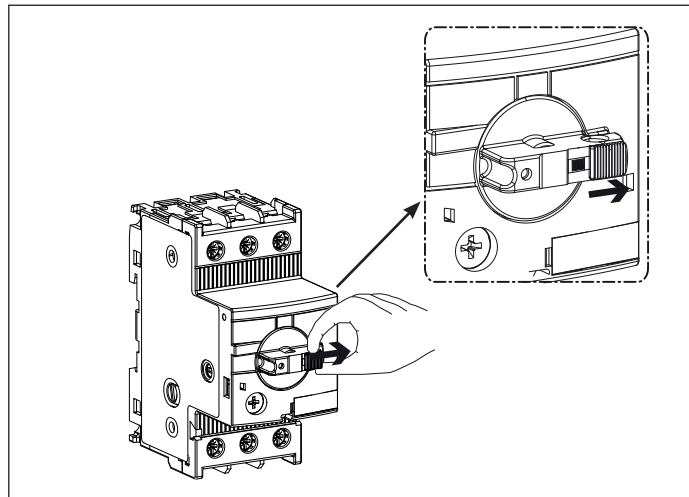
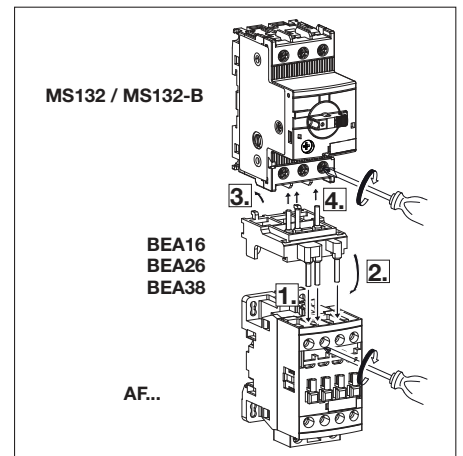
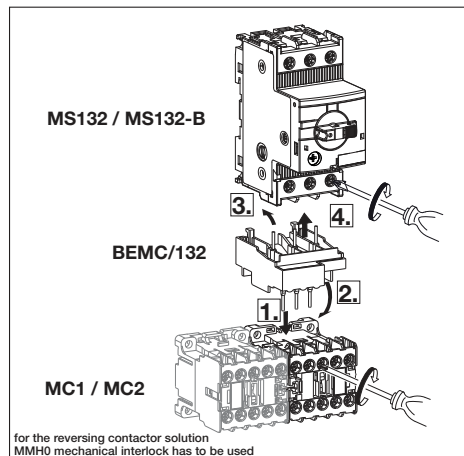
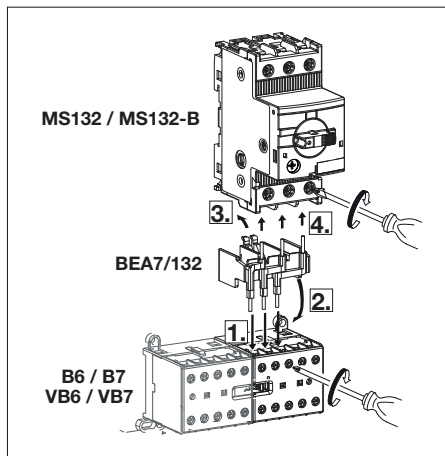
ABB STOTZ-KONTAKT GmbH
Eppelheimer Str. 82
69123 Heidelberg
Germany
<http://www.abb.com/lowvoltage>

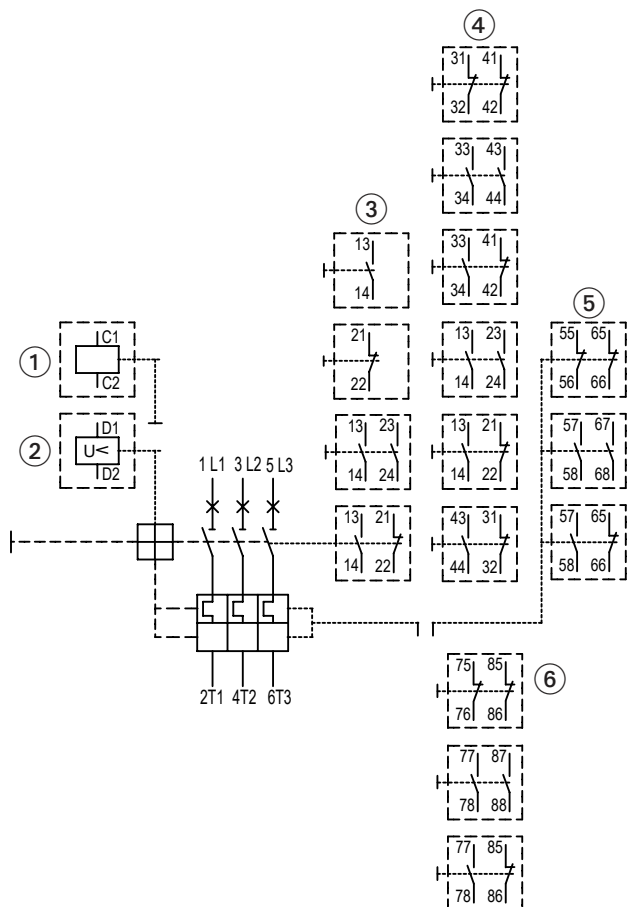


en	Warning: Hazardous voltage! Refer to operating instructions. Disconnect and lock out power before working on this device. Attention! Installation by person with electrotechnical expertise only. The English text applies in case of doubt.	et	Hoiatus: Elektrilöögi oht! Lisateavet vaadake kasutusjuhendist. Enne selle seadmega töötamist ühendage lahti ja lukustage toide. Tähelepanu! Seadet tohib paigaldada ainult elektrotehnilise kogemusega isik. Ingliskeelne tekst kehtib kahtluse korral.
de	Warnung: Gefährliche Spannung! Siehe Bedienungsanleitung. Vor dem Arbeiten Gerät ausschalten und von der Spannungsversorgung trennen. Achtung! Installation nur durch elektrotechnische Fachkraft. In Zweifelsfällen gilt der englische Text.	fi	Varoitus: Vaarallinen jännite! Katso käyttöohje. Katkaista virta ja estä virran kytkeminen lukituksella ennen töiden aloittamista. Huomio! Asennuksen saa suorittaa vain henkilö, jolla on kokemusta sähkötekniikasta. Englanninkielistä tekstiä sovelletaan epäilyksissä.
fr	Avertissement: Tension dangereuse! Consultez les consignes d'utilisation. Débranchez et verrouillez l'alimentation électrique avant d'entreprendre des travaux sur cet appareil. Attention! L'installation doit être effectuée uniquement par une personne ayant une expertise en électrotechnique. En cas de doute, c'est le texte anglais qui s'applique.	hr	Upozorenje: Opasan napon! Pogledajte upute za uporabu. Odspojite i isključite struju prije rada na ovom uređaju. Pažnja! Ugradnja je dopuštena samo osobama stručnim u području elektrotehnike. Tekst na engleskom jeziku primjenjuje se u slučaju sumnje.
sv	Varning: Livsfarlig spänning! Se i bruksanvisningen. Frånkoppla och blockera anläggning eller en anläggningsdel innan arbete utförs. Obs! Får endast installeras av behörig elektriker. Vid oklarheter gäller den engelska texten.	hu	Figyelmeztetés: Veszélyes feszültség! Lásd a használati utasítást. Válassza le és zárja ki az áramellátást, mielőtt a berendezésen dolgozni kezd. Figyelem! Az üzembe helyezés csak elektrotechnikai szakértelemmel rendelkező személy végezheti el. Az angol szöveg kétség esetén alkalmazandó.
it	Attenzione: Tensione pericolosa! Fare riferimento alle istruzioni per l'uso. Prima di intervenire su questo dispositivo, scollegare e isolare tutte le fonti di alimentazione. Attenzione! L'installazione deve essere eseguita esclusivamente da un installatore qualificato. Il testo inglese si applica in caso di dubbio.	lt	Įspėjimas: pavojinga įtampa! Žiūrėkite naudojimo instrukcijas. Prieš pradėdami dirbti su šiuo prietaisu, atjunkite ir atjunkite maitinimą. Dėmesio! Montuoja tik asmuo, turintis elektrotechnikos žinių. Tekstas angliskai taikomas iškilus abejonoms.
es	Advertencia: ¡Tensión peligrosa! Consulte las instrucciones de funcionamiento. Antes de trabajar con este dispositivo, desconecte y bloquee la corriente. ¡Atención! La instalación debe ser realizada únicamente por un técnico electricista. En casos de duda será válido el texto inglés.	lv	Bīdīnājums: Bīstams spriegums! Skatiet darba norādījumus. Pirms sākt darbu ar šo ierīci, atvienojiet un bloķējiet strāvas padevi. Uzmanību! Uzstādīšanu drīkst veikt tikai persona ar zināšanām par elektrotehniku. Saūbu gadījumā piemēro tekstu angļu valodā.
zh	警告：高压危险！ 请参见操作手册。 操作本设备前请断开并锁定电源。 注意：安装仅限专业电工人员。如有更改，恕不预先通知。 有疑问时以英文版为准。	nl	Waarschuwing: Gevaarlijke spanning! Raadpleeg de bedieningsinstructies. Koppel dit apparaat los van de stroomvoorziening voordat u werkzaamheden uitvoert. Let op! Installatie mag alleen worden uitgevoerd door een monteur met elektrotechnische expertise. De Engelse tekst is van toepassing in geval van twijfel.
ru	Внимание: Опасное электрическое напряжение! Обратитесь к инструкциям по эксплуатации. Отключите питание и обесточьте устройство перед началом работ. Внимание! Установка должна выполняться только специалистом по электротехническим работам. В случае сомнений действителен английский текст.	no	Advarsel: Farlig spenning! Se i bruksanvisningen. Koble fra og steng av strømmen før du arbeider på denne enheten. Forsiktig! Montering skal kun utføres av kvalifiserte personer med elektrokompetanse. Den engelske teksten gjelder i tvilstilfeller.
tr	Uyarı: Tehlikeli gerilim! Çalışma talimatlarına bakın. Bu cihaz üzerinde çalışmadan önce elektrikli kesin ve kilitleyin. Dikkat! Yalnızca elektroteknik uzmanlığı sahip kişiler tarafından kurulabilir. Şüpheli durumlarda İngilizce metin geçerlidir.	pl	Ostrzeżenie: Niebezpieczne napięcie! Patrz: instrukcja obsługi. Przed rozpoczęciem wykonywania pracy z tym urządzeniem odłącz i zablokuj zasilanie. Uwaga! Montaż może wykonywać wyłącznie osoba posiadająca doświadczenie elektrotechniczne. W przypadku wątpliwości zastosowanie ma tekst angielski.
ar	خطر: يائابدهك دهج: يذحت! لي.غثرتالت تامزلعت جأجر. زادهال اذه يف لمجال لبك اذهنمأب مقو. ابدهكالك لصف. فئابدهكالك لئوقتل لاجب فئادر لعل صخش لالغ نم ابك بركتل مدع بجي اذهي بنت. يؤيؤلؤلال صئلال جأجر لكشل قئالغ يف، قب سزم راعاشر.	pt	Aviso: Tensão perigosa! Consulte as instruções de operação. Desconecte e desligue a energia elétrica antes de trabalhar nesse dispositivo. Atenção! A instalação deve ser feita apenas por uma pessoa com especialidade eletrotécnica. O texto em inglês se aplica em caso de dúvida.
bg	Предупреждение: Опасно напрежение! Вижте инструкциите за работа. Изключете и блокирайте захранването преди да работите с устройството. Внимание! Да се монтира само от експерт електротехник. Английският текст се прилага в случай на съмнение.	ro	Avertisment: Tensiune electrică periculoasă! Consultați instrucțiunile de utilizare. Deconectați și închideți sursa de energie înainte de a lucra cu acest dispozitiv. Atenție! Instalarea trebuie realizată doar de către o persoană cu expertiză electrotehnică. Textul englez se aplică în caz de îndoială.
cs	Varování: Nebezpečné napětí! Viz návod k obsluze. Před zahájením prací na tomto zařízení odpojte a uzamkněte napájení. Pozor! Toto zařízení smí instalovat pouze osoba s elektrotechnickou odborností. Anglické znění se použije v případě pochybností.	sk	Výstraha: Nebezpečné napätie! Pozrite si návod na použitie. Pred začatím prác na tomto zariadení odpojte a zablokujte napájanie. Pozor! Inštaláciu smie vykonávať len osoba s odbornými znalosťami v oblasti elektrotechniky. Anglické znenie sa uplatňuje v prípade pochybností.
da	Advarsel: Farlig elektrisk spænding! Se betjeningsvejledningen. du arbejder med denne enhed. Giv agt! Installation må kun foretages af personer med elektroteknisk ekspertise. Den engelske tekst gælder i tvivlstilfælde.	sl	Opozorilo: Nevarna napetost! Glejte navodila za uporabo. Pred delom na tej napravi izklopite in zaklenite električno napajanje. Pozor! Namestitve sme izvesti samo elektrotehnični strokovnjaki. V primeru dvoma velja angleško besedilo.
el	Προειδοποίηση: Επικίνδυνη τάση! Ανατρέξτε στις οδηγίες λειτουργίας. Αποσυνδέστε και απομονώστε την παροχή ισχύος προτού ξε κινήσετε τις εργασίες σε αυτήν τη συσκευή. Προσοχή! Η εγκατάσταση πρέπει να γίνεται μόνο από αδειούχο ηλεκτρολόγο εγκαταστάτη. Το αγγλικό κείμενο ισχύει σε περίπτωση αμφιβολίας.		

MS132 / MS132-B ≤ 10 A	M3.5 0.8 ... 1.2 Nm / 10 ... 12 lb-in	Ø 5.5 mm	Pozidriv No. 2	1/2 x 1 ... 4 mm²	1/2 x 0.75 ... 2.5 mm² 1/2 x AWG 16 ... 12	1/2 x 0.75 ... 2.5 mm²	9 mm
MS132 / MS132-B ≥ 12 A	M4 2 Nm / 18 lb-in	Ø 6.5 mm		1/2 x (1 ... 2.5) (2.5 ... 6) mm²	1/2 x (1 ... 2.5) (2.5 ... 6) mm² 1/2 x AWG 16 ... 8	1/2 x 0.75 ... 6 mm²	10 mm
SK1, HK1, CK1, HKF1	M3.5 0.8 ... 1.2 Nm / 7 lb-in	Ø 5.5 mm		1/2 x 1 ... 1.5 mm²	1/2 x 0.75 ... 1.5 mm² 1/2 x AWG 16 ... 14	1/2 x 0.75 ... 1.5 mm²	8 mm
UA1, AA1	M3.5 0.8 ... 1.2 Nm / 7 lb-in	Ø 5.5 mm		1/2 x 1 ... 4 mm²	1/2 x 0.75 ... 2.5 mm² 1/2 x AWG 16 ... 14	1/2 x 0.75 ... 2.5 mm²	
S1-Mx-25	M3.5 2.5 Nm / 22 lb.in	Ø 5.5 mm		1 x 2.5 ... 25 mm² 1 x AWG 14 ... 8	1 x 2.5 ... 16 mm² 1 x AWG 14 ... 4	1 x 2.5 ... 16 mm²	10 mm
S1-Mx-35	M8 4.5 Nm / 40 lb.in		Hexagon 4	1 x 10 ... 35 mm² 1 x AWG 8 ... 2	1 x 10 ... 35 mm² 1 x AWG 8 ... 2	1 x 10 ... 35 mm²	12 mm







- ① AA1-
- ② UA1-
- ③ HKF1-
- ④ HK1-
- ⑤ SK1-
- ⑥ CK1-

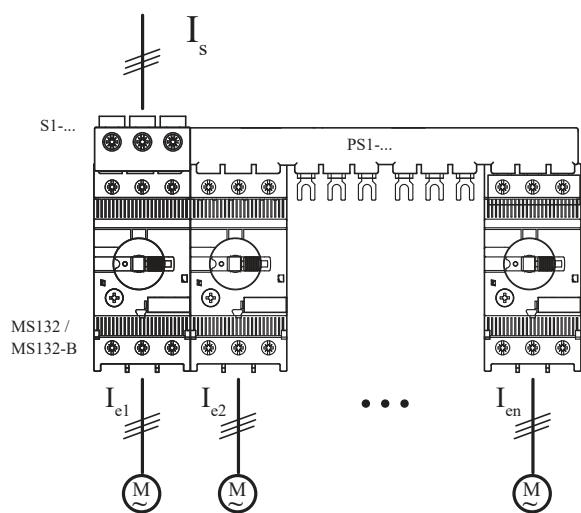
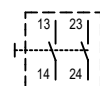
⚠ Same terminal markings for:

HK1-20A

HKF1-20

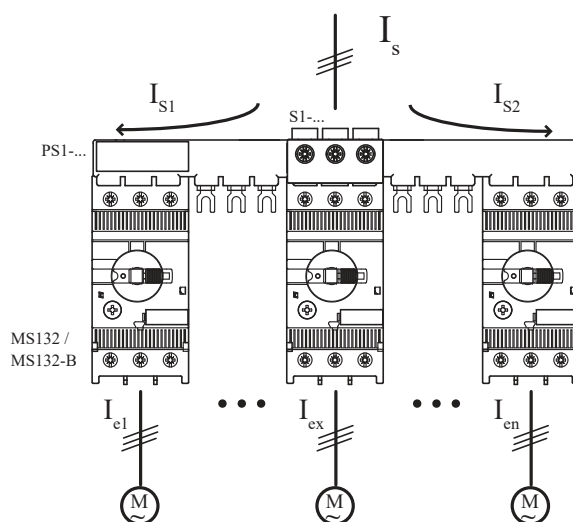
HK1-11A

HKF1-11



$$I_{e,S1-...} \geq I_S = \sum_{i=1}^n I_{ei} = I_{e1} + \dots + I_{en} !$$

$$I_{e,PS1-...} \geq I_S = \sum_{i=1}^n I_{ei} = I_{e1} + \dots + I_{en} !$$



$$I_{e,S1-...} \geq I_S = I_{S1} + I_{S2} = \sum_{i=1}^n I_{ei} = I_{e1} + \dots + I_{en} !$$

$$I_{e,PS1-...} \geq I_S = I_{S1} + I_{S2} = \sum_{i=1}^n I_{ei} = I_{e1} + \dots + I_{en} !$$

	S1-M1-25	S1-M2-25	S1-M3-25	S1-M3-35	BS1-3
PS1- ... -65	x	x	x ¹⁾	x ¹⁾	x
PS1- ... -100	x	-	x ¹⁾	x ¹⁾	x

¹⁾ Combination Motor Controller Type E / F



WARNING

When an overload or a fault current interruption occurs, circuits must be checked to determine the cause of the interruption. When a fault condition exists, the current-carrying components should be examined and replaced when damaged, and the integral current sensors must be replaced to reduce the risk of fire or electric shock. To maintain overcurrent, short-circuit, and ground-fault protection, the manufacturer's instructions for selection of overload and short-circuit protection must be followed to reduce the risk of fire or electric shock.

Suitable for installation in an enclosure with minimum dimensions of 180 x 120 x 165 mm

AVERTISSEMENT

En cas d'intervention due à une surcharge ou un courant de défaut, les circuits doivent être vérifiés pour déterminer la cause de l'interruption. En condition de défaut, les composants porteurs de courant devraient être examinés et remplacés au besoin, et les capteurs de courant intégrés doivent être remplacés afin de réduire le risque d'incendie et ou de choc électrique. Pour assurer une protection continue contre les surintensités, les courts-circuits et les fuites à la terre, les instructions du fabricant relatives à la sélection d'une protection contre la surcharge et les courts-circuits doivent être respectées afin de réduire le risque d'incendie et ou de choc électrique.

Convient pour l'installation dans un coffret de minimum dimensions of 180 x 120 x 165 mm



When used with PS1-xx-65 or PS1-xx-100 busbars, suitable for installation in an enclosure with minimum dimensions:

Si utilisé avec un peigne PS1-xx-65 or PS1-xx-100, convient pour l'installation dans un coffret de dimensions minimum:

Type	Height (mm)	Width (mm)	Depth (mm)
PS1-2-0-65	220	135	205
PS1-3-0-65	220	203	205
PS1-4-0-65	220	270	205
PS1-5-0-65	220	338	205
PS1-2-1-65	220	162	205
PS1-3-1-65	220	243	205
PS1-4-1-65	220	324	205
PS1-5-1-65	220	340	205
PS1-2-2-65	220	189	205
PS1-3-2-65	220	284	205
PS1-4-2-65	220	378	205
PS1-5-2-65	220	472	205
PS1-3-0-100	220	203	205
PS1-3-0-100	220	270	205
PS1-3-0-100	220	338	205
PS1-3-1-100	220	243	205
PS1-4-1-100	220	324	205
PS1-5-1-100	220	340	205
PS1-3-2-100	220	284	205

“Manual self-protected combination motor controller (Type E)” or “Combination motor controller Type F, when used with AF contactor series and (optional) overload relays EF or TF series and optional connector BEAxx”

Manual Self-Protected Combination Motor Controller (“Type E”)¹⁾ Max. Short Circuit Current Rating [kA]		
Type	480Y/277V [kA]	600Y/347V [kA]
MS132-0.16 (B)	65	47
MS132-0.25 (B)	65	47
MS132-0.40 (B)	65	47
MS132-0.63 (B)	65	47
MS132-1.0 (B)	65	47
MS132-1.6 (B)	65	47
MS132-2.5 (B)	65	47
MS132-4.0 (B)	65	47
MS132-6.3 (B)	65	18
MS132-10 (B)	65	18
MS132-12 (B)	30	–
MS132-16 (B)	30	–
MS132-20 (B)	30	–
MS132-25 (B)	30	–
MS132-32 (B)	30	–

Combination Motor Controller Type F¹⁾ Type 2 Coordination				
Type	480Y/277V [kA]	Minimum contactor size	600Y/347V [kA]	Minimum contactor size
MS132-0.16 (B)	65	AF26 ... AF38	47	AF26 ... AF38
MS132-0.25 (B)	65	AF26 ... AF38	47	AF26 ... AF38
MS132-0.40 (B)	65	AF26 ... AF38	47	AF26 ... AF38
MS132-0.63 (B)	65	AF26 ... AF38	47	AF26 ... AF38
MS132-1.0 (B)	65	AF26 ... AF38	47	AF26 ... AF38
MS132-1.6 (B)	65	AF26 ... AF38	47	AF26 ... AF38
MS132-2.5 (B)	65	AF26 ... AF38	47	AF26 ... AF38
MS132-4.0 (B)	65	AF26 ... AF38	47	AF26 ... AF38
MS132-6.3 (B)	65	AF26 ... AF38	47	AF26 ... AF38
MS132-10 (B)	65	AF26 ... AF38	47	AF26 ... AF38
MS132-12 (B)	30	AF26 ... AF38	–	AF26 ... AF38
MS132-16 (B)	30	AF26 ... AF38	–	AF26 ... AF38
MS132-20 (B)	30	AF26 ... AF38	–	AF26 ... AF38
MS132-25 (B)	30	AF26 ... AF38	–	AF26 ... AF38
MS132-32 (B)	30	AF26 ... AF38	–	AF26 ... AF38

Combination Motor Controller Type F¹⁾ Type 1 Coordination				
Type	480Y/277V [kA]	Minimum contactor size	600Y/347V [kA]	Minimum contactor size
MS132-0.16 (B)	100	AF09 ... AF38	50	AF09 ... AF38
MS132-0.25 (B)	100	AF09 ... AF38	50	AF09 ... AF38
MS132-0.40 (B)	100	AF09 ... AF38	50	AF09 ... AF38
MS132-0.63 (B)	100	AF09 ... AF38	50	AF09 ... AF38
MS132-1.0 (B)	100	AF09 ... AF38	50	AF09 ... AF38
MS132-1.6 (B)	100	AF09 ... AF38	50	AF09 ... AF38
MS132-2.5 (B)	100	AF09 ... AF38	50	AF09 ... AF38
MS132-4.0 (B)	100	AF09 ... AF38	50	AF09 ... AF38
MS132-6.3 (B)	100	AF09 ... AF38	47	AF09 ... AF38
MS132-10 (B)	100	AF09 ... AF38	30	AF09 ... AF38
MS132-12 (B)	65	AF09 ... AF38	30	AF09 ... AF38
MS132-16 (B)	65	AF26 ... AF38	30	AF26 ... AF38
MS132-20 (B)	65	AF26 ... AF38	–	AF26 ... AF38
MS132-25 (B)	50	AF26 ... AF38	–	AF26 ... AF38
MS132-32 (B)	50	AF38	–	AF38

¹⁾ MS132/ MS132-B in combination with feeder block S1-M3-xx or terminal spacer TS1-M3-S1 (for 0,16...10)/ TS1-M3-S2 (for 12...32)