

# Manual Motor Starter / Circuit Breaker - Installation instructions

The Bulletin 140 meets the requirements of IEC/EN 60947-2 as a circuit breaker. This device, however does not meet UL and CSA circuit breaker requirements. The Bulletin 140 is UL listed (UL508) and CSA certified as a Manual Motor Controller and is rated for Group Motor Installation. All installations, commissioning and maintenance must be carried out by qualified personnel, taking local regulations into account.



## Bulletin 140-MN

### Leistungsschalter - Montageanleitung

Alle Montage-, Inbetriebnahme- und Wartungsarbeiten müssen durch Fachpersonal, unter Berücksichtigung der örtlichen Vorschriften, ausgeführt werden.

### Disjoncteur - Instructions de montage

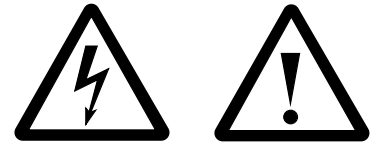
Tous les travaux de montage, de mise en service et de maintenance ne doivent être exécutés que par du personnel spécialisé en respectant les prescriptions locales.

### Interruttore automatico - Istruzioni per il montaggio

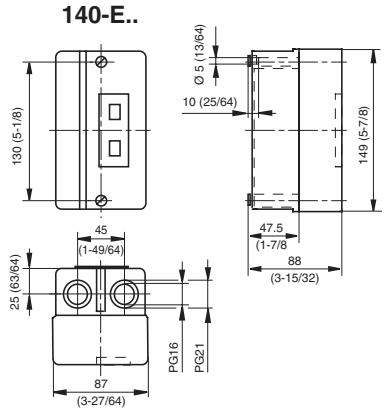
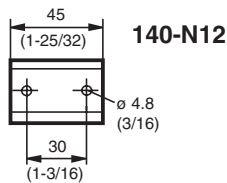
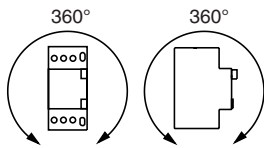
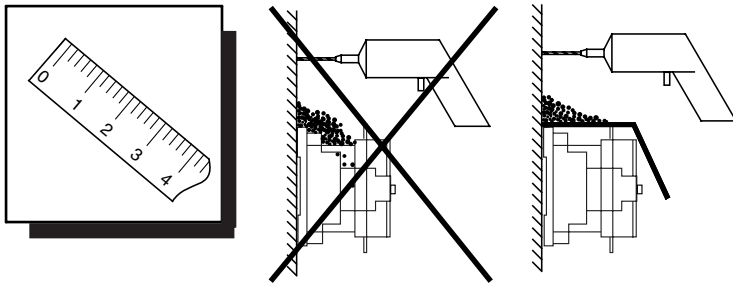
Tutti i lavori di montaggio, messa in funzione e manutenzione devono essere eseguiti da personale specializzato, conformemente alle norme vigenti localmente.

### Interruptor automático - Instrucciones de montaje

Todos los trabajos de montaje, de puesta en servicio y de mantenimiento deberán ser efectuados por personal especializado, considerando las prescripciones locales.



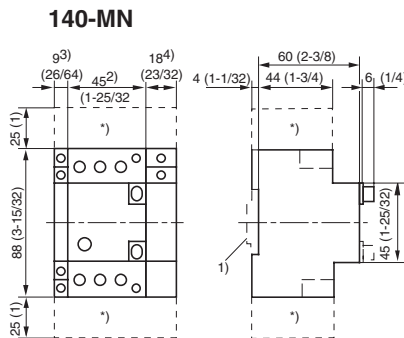
IEC/EN 60947-1/-2/-5-1  
UL 508; CSA 22.2 Teil 14;



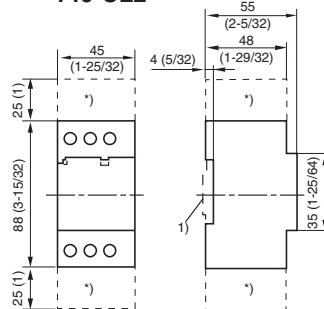
Dimensions in mm (inches)

- \*) - Minimum distance to grounded parts or walls  
- Minimaler Abstand gegen geerdete Teile oder Wände  
- Distance minimale envers pièces mises à terre ou parois.  
- Distanza minima per pezzi a massa o pareti.  
- Distancia mínima a chasis o paredes.

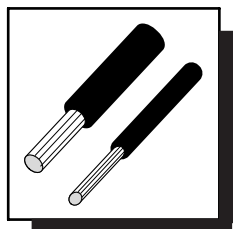
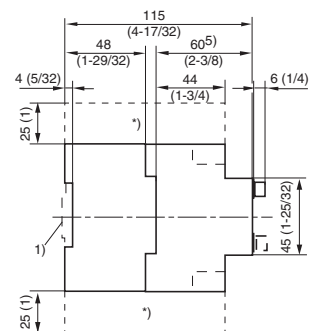
- 1) EN 50 022-35
- 2) 140-MN
- 3) -PA
- 4) -UA/-AA
- 5) 140-LD/140-CL2



### 140-LD 140-CL2



### 140-LD + 140-MN 140-CL2 + 140-MN

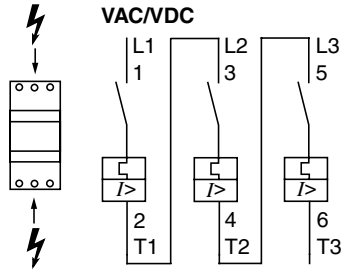
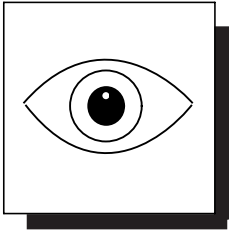


140-MN		15 mm		11 mm	
L1 1	L2 3	L3 5			
2	4	6	2 x 1...4 mm <sup>2</sup>	2...2,5 Nm	2...2,5 Nm
T1	T2	T3	2 x 1...6 mm <sup>2</sup>	18...22 lb-in	18...22 lb-in
			No.16...10 AWG		
			2 x 1...4 mm <sup>2</sup>	2...2,5 Nm	2...2,5 Nm
			2 x 1...6 mm <sup>2</sup>	18...22 lb-in	18...22 lb-in
			No. 16...10 AWG		

140-CL2/140-LD		11 mm		13 mm	
2, 4, 6					
	2 x 1...4 mm <sup>2</sup>	2,3...2,9 Nm	2 x 1...6 mm <sup>2</sup>	20...26 lb-in	2,8...3,3 Nm
	No.14...10 AWG		1 x 4...16 mm <sup>2</sup>	25...29 lb-in	
			1 x 6...25 mm <sup>2</sup>		
			No. 14...6 AWG		

140-L2		13 mm	
1, 3, 5			
	1 x 4...16 mm <sup>2</sup>	4 Nm	36 lb-in
	1 x 6...25 mm <sup>2</sup>		
	No.14...6 AWG		

140-A..T./UV/RT		9 mm	
D1, D2			
	1 x 0,75...2,5 mm <sup>2</sup>	1...1,5 Nm	
	1 x 0,75...4 mm <sup>2</sup>	8,8...13,3 lb-in	
	No.18...14 AWG		



For single-phase applications, the three poles have to be connected in series.

Bei einphasigem Betrieb müssen alle 3 Phasen in Serie geschaltet werden.

En service monophasé, les 3 phases doivent être connectées en série.

Per il funzionamento monofase devono essere collegate le 3 poli in serie.

Para aplicaciones monofásicas, los tres polos deben conectarse en serie.

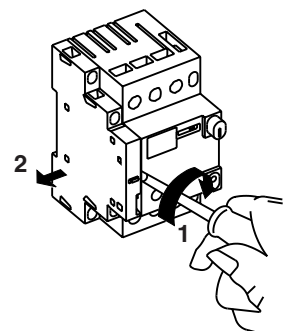
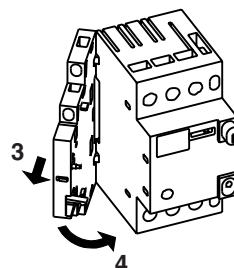
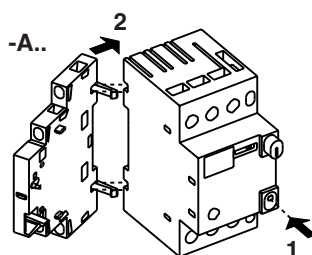
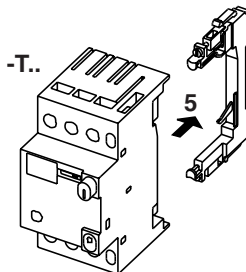
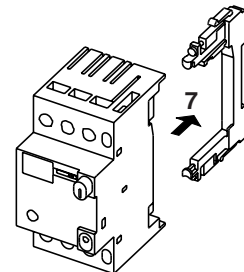
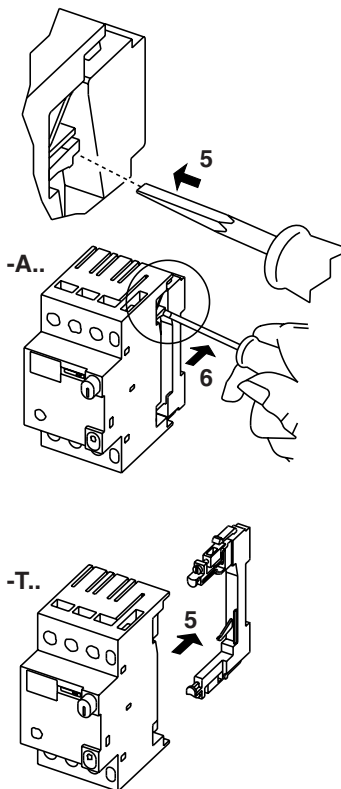
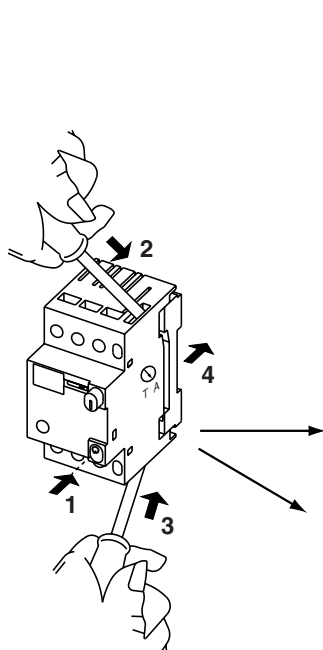
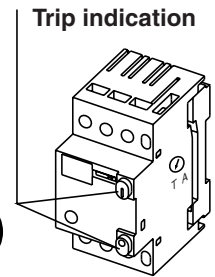
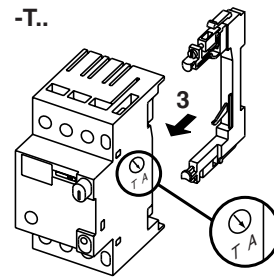
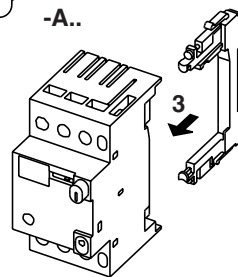
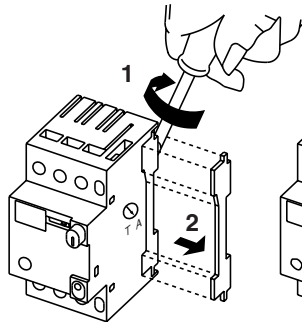
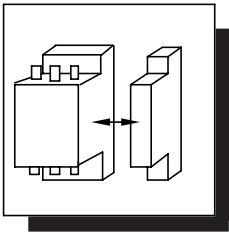
Install accessories to 140-MN before mounting on hat-rail.

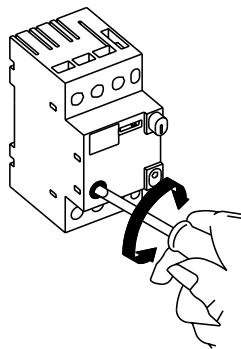
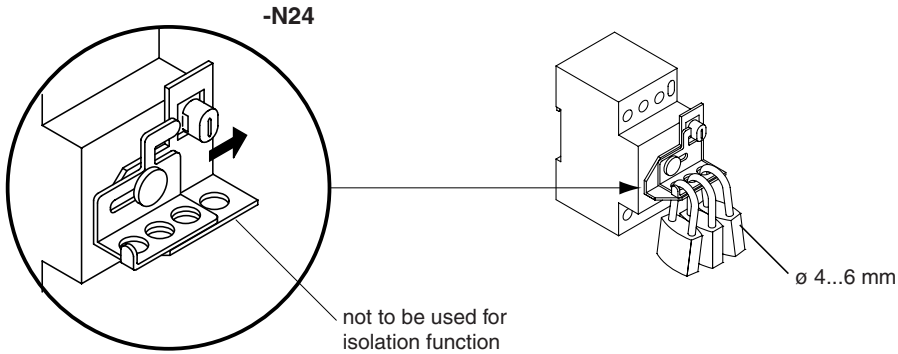
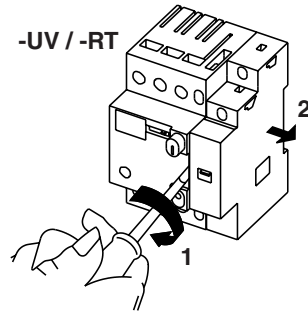
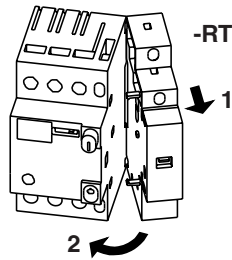
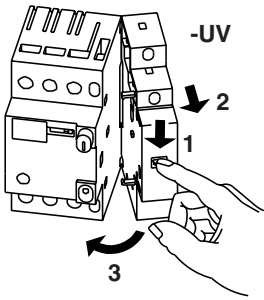
Die Montage oder Demontage der Zubehörteile darf nicht auf der Hutschiene erfolgen.

Le montage et le démontage des accessoires ne doit pas être effectué directement sur le rail-chap.

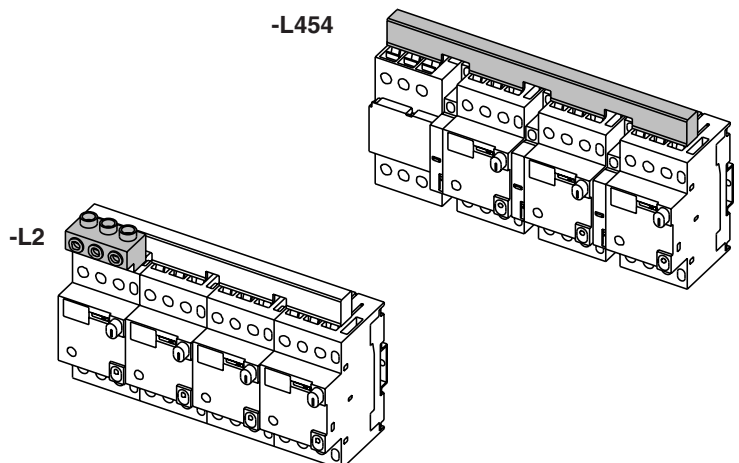
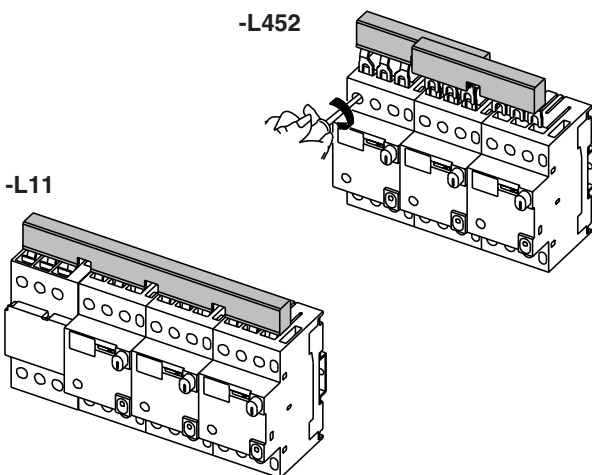
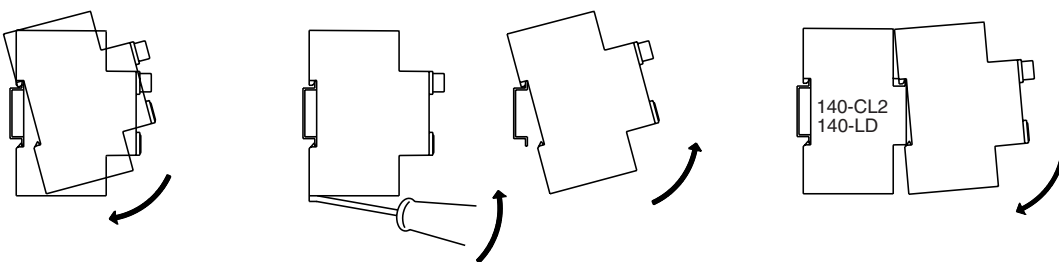
Il montaggio o lo smontaggio degli accessori non deve essere effettuato con l'apparecchio sulla guida DIN.

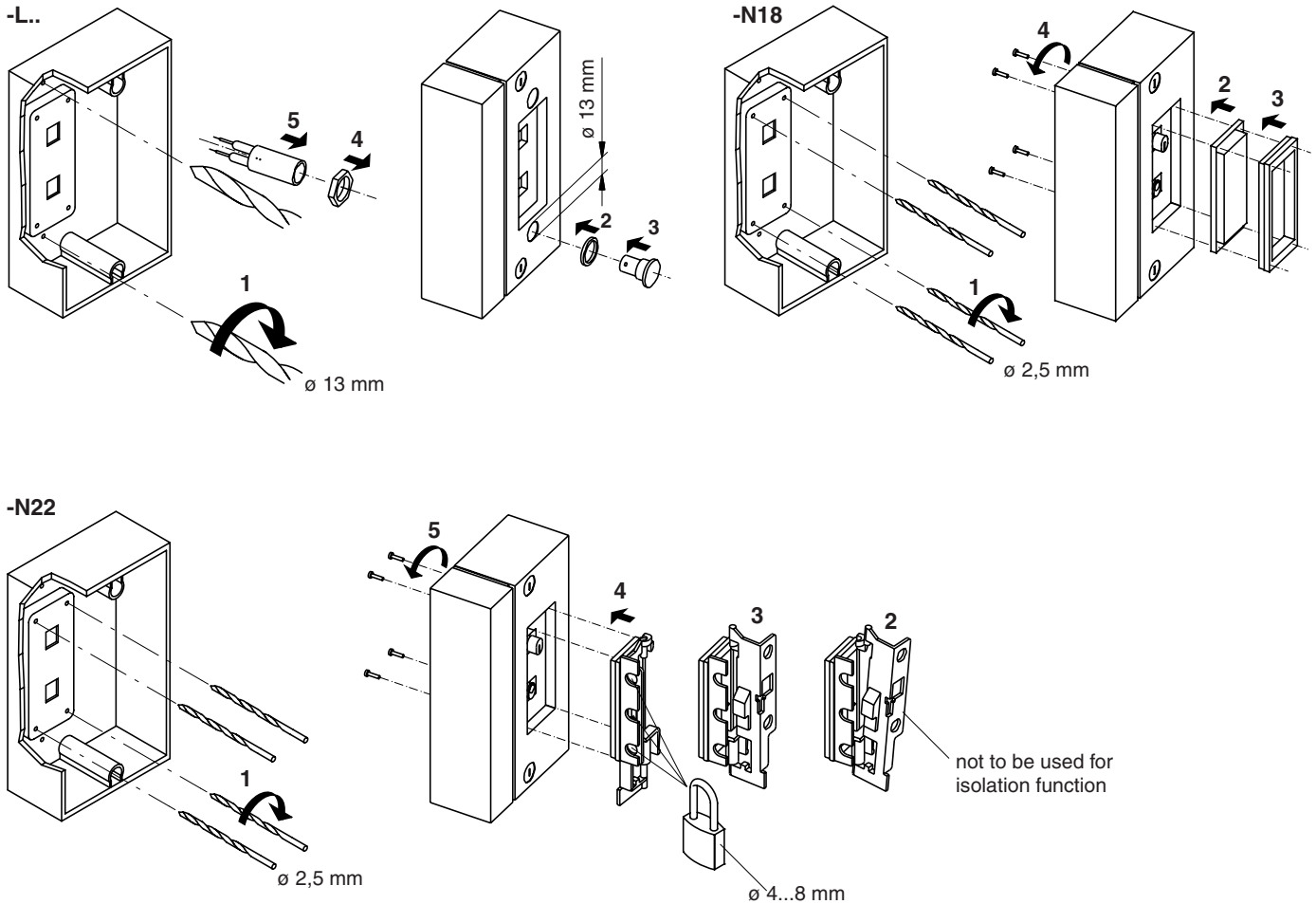
El montaje y desmontaje de los accesorios no deben ser efectuados sobre el perfil omega DIN.





140-MN		230/240 V	400/415 V	500 V	690 V
		gG max.	gG max.	gG max.	gG max.
0,16	0,1-0,16 A				
0,25	0,16-0,25 A				
0,4	0,25-0,4 A				
0,63	0,4-0,63 A				
1	0,63-1A				
1,6	1-1,6 A				
2,5	1,6-2,5 A				50 A
4	2,5-4 A				50 A
6,3	4-6,3 A			100 A	63 A
10	6,3-10 A		125 A	100 A	80 A
16	10-16 A	125 A	125 A	100 A	80 A
20	16-20 A	125 A	125 A	100 A	80 A
25	20-25 A	125 A	125 A	100 A	80 A





Before connecting the main and auxiliary conductors of the power switch or its accessories, e.g. auxiliary switch and circuit breaker, please ensure that all conductors, connected parts and clamps are voltage free when carrying out any tasks.

Vor dem Anschliessen der Haupt- und Hilfsleiter des Leistungsschalters oder seines Zubehörs, z. B. Hilfsschalter und -auslöser, ist sicherzustellen, dass alle Leiter, Anschlusssteile und Klemmen während der Arbeiten spannungsfrei sind.

Il faut s'assurer, avant de raccorder le conducteur auxiliaire et le conducteur principal du disjoncteur ou de ses accessoires (commutateur ou sectionneur auxiliaire par exemple), que tous les conducteurs, pièces de connexion et bornes soient hors tension pendant toute la durée des travaux.

Prima di allacciare i conduttori principale e secondario dell'interruttore di potenza o dei suoi accessori, per es. interruttore e attivatore ausiliari, occorre accertare che tutti i conduttori, gli elementi di allacciamento e i morsetti non siano sotto tensione per tutta la durata dell'intervento

Antes de proceder a la conexión de los conductores principal y auxiliar del interruptor automático o de sus accesorios, por ejemplo: conmutador y desconectador auxiliar, asegúrese de que todos los conductores, piezas de conexión y bornes están sin tensión durante los trabajos.



### Warning

Opening of branch circuit protective device may indicate that a fault current has been interrupted. To reduce the risk of fire or electric shock current carrying parts or other components of the controller should be examined and replaced if damaged. If burnout of the current element of an overload relay occurs, the complete overload relay must be replaced.

### CSA/UL Marking 140-MN

Suitable for use on circuits delivering not more than ... sym

140-MN-	600 V	480 V
- 0,16 ... 2,5	42 kA	42 kA
- 4	18 kA	18 kA
- 6,3	10 kA	18 kA
- 10	10 kA	10 kA
- 16	5 kA	10 kA
- 20	—	5 kA

Group installation 250 A max.