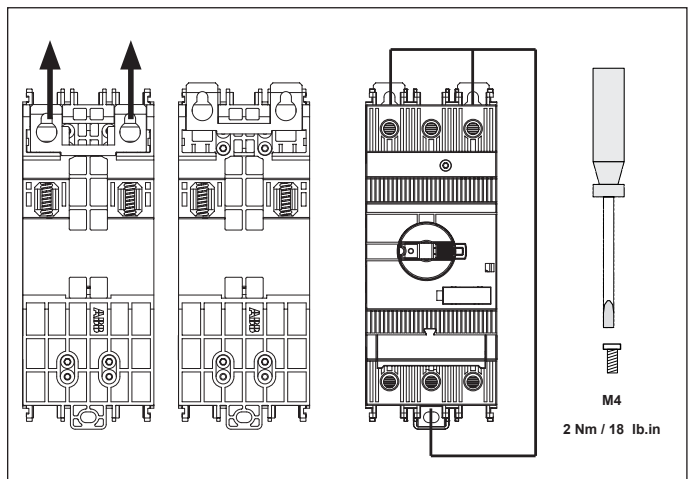
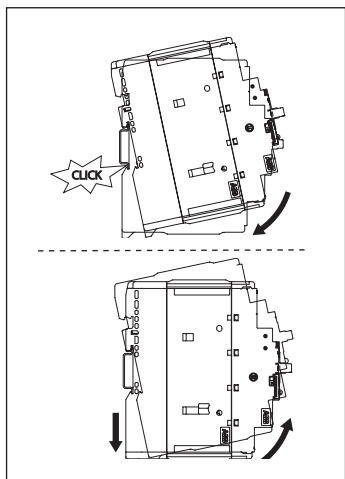
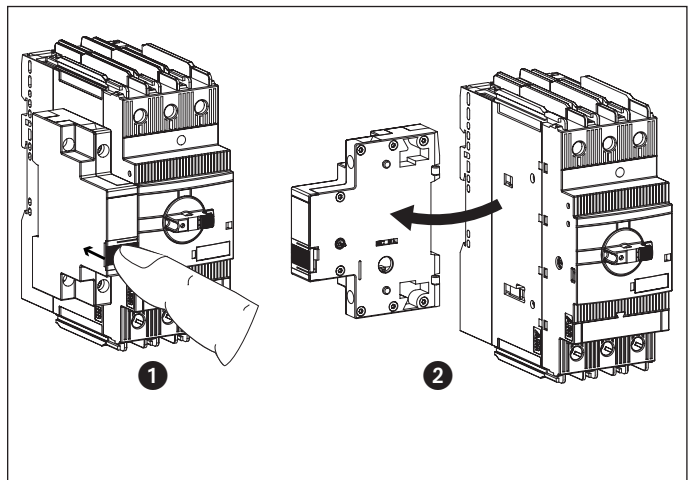
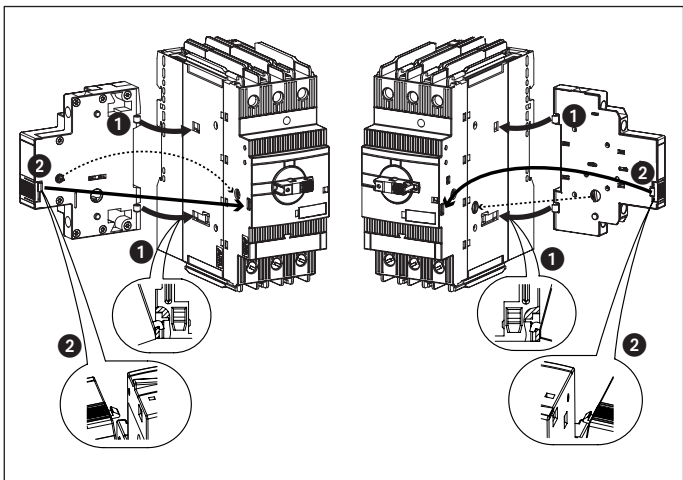
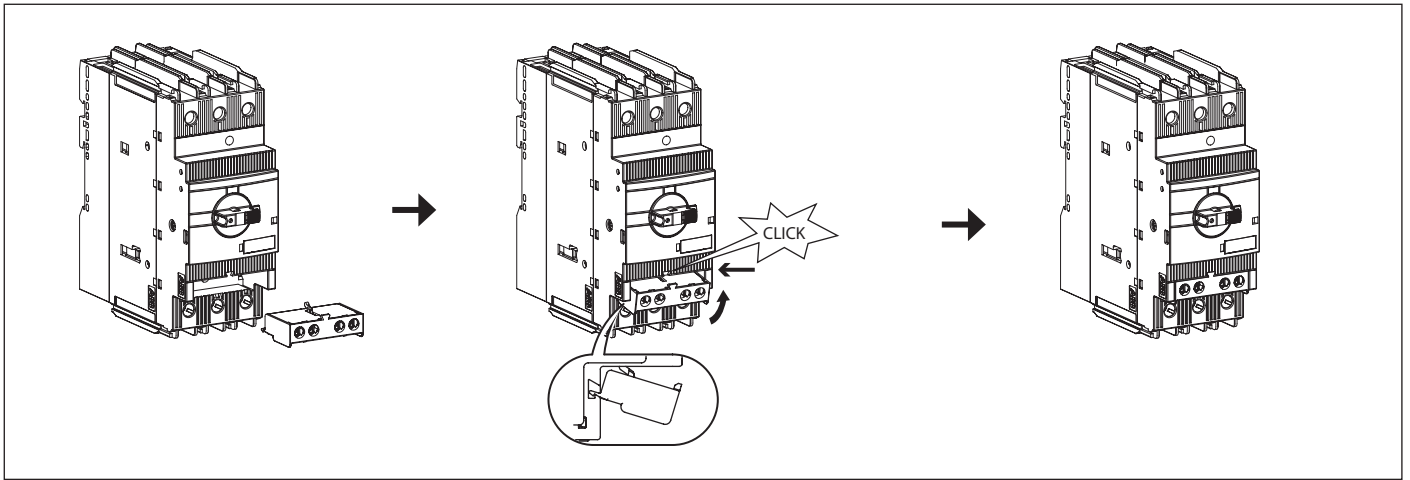
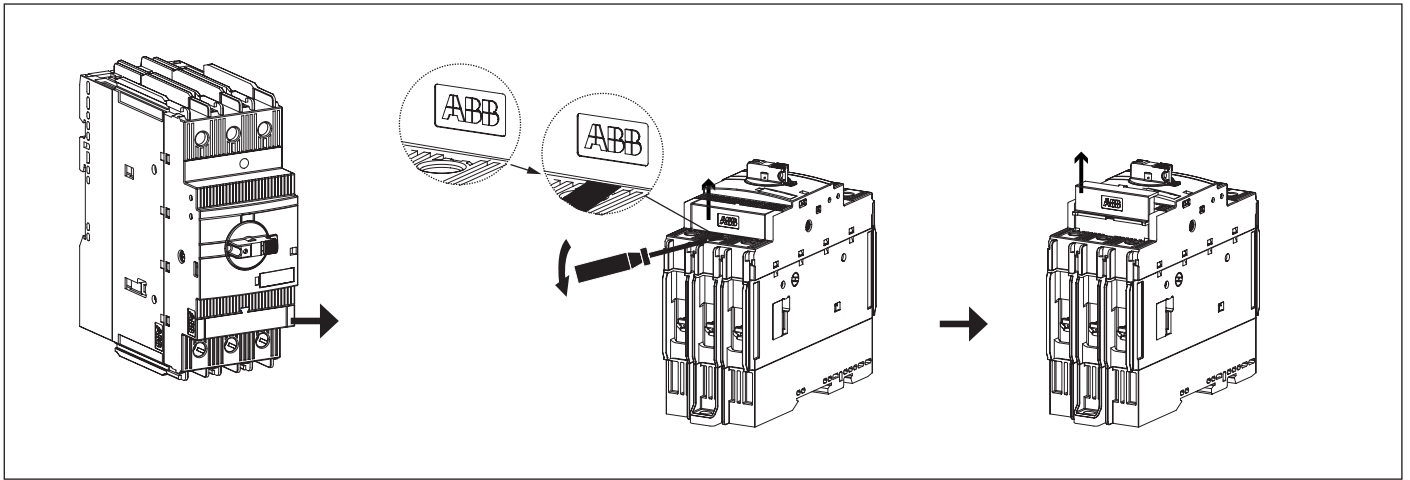


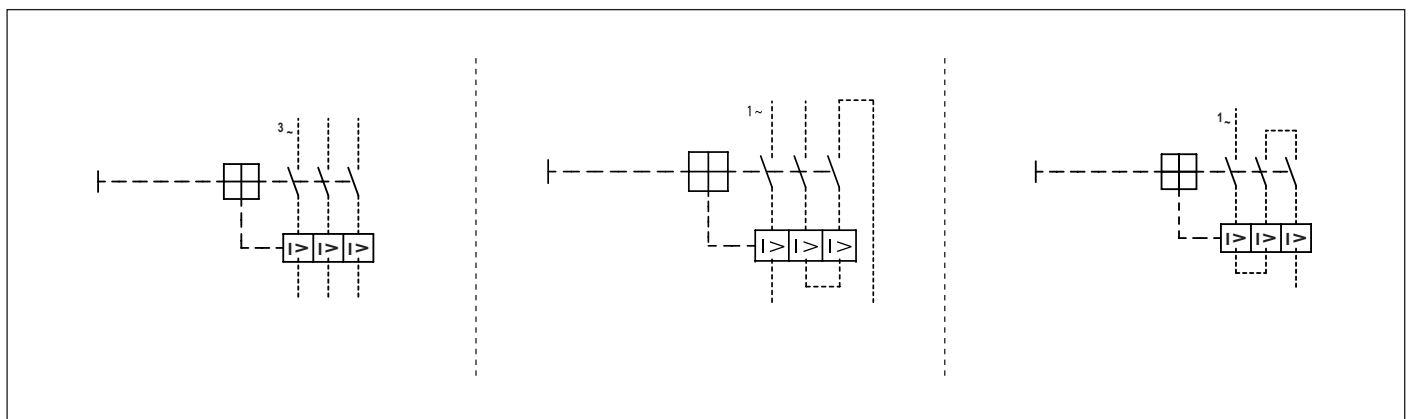
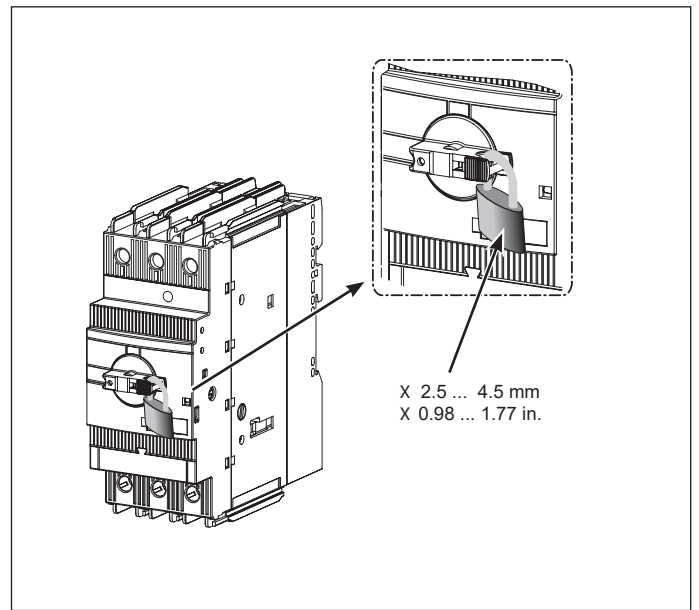
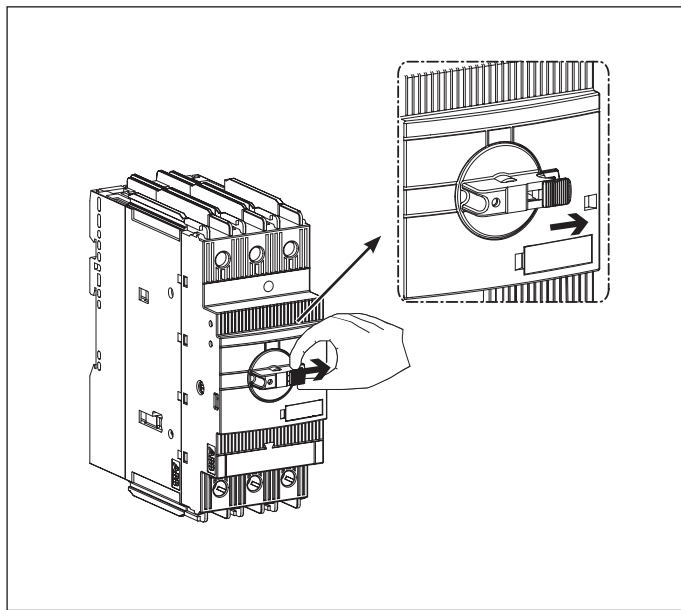
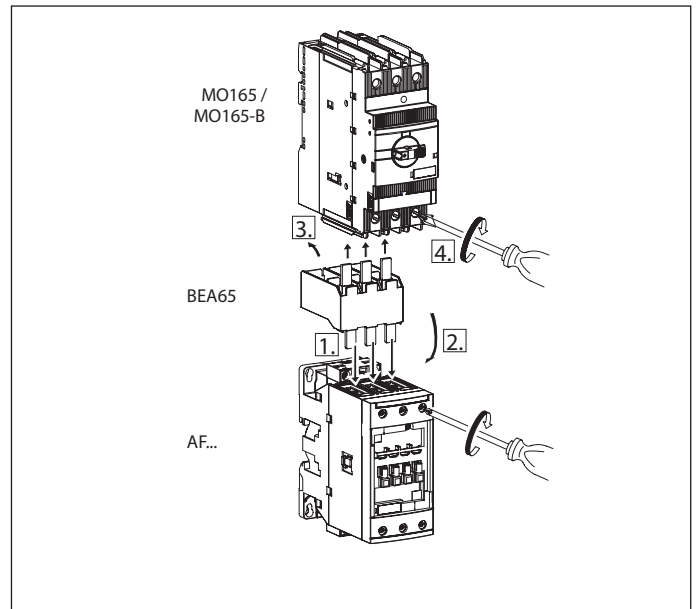
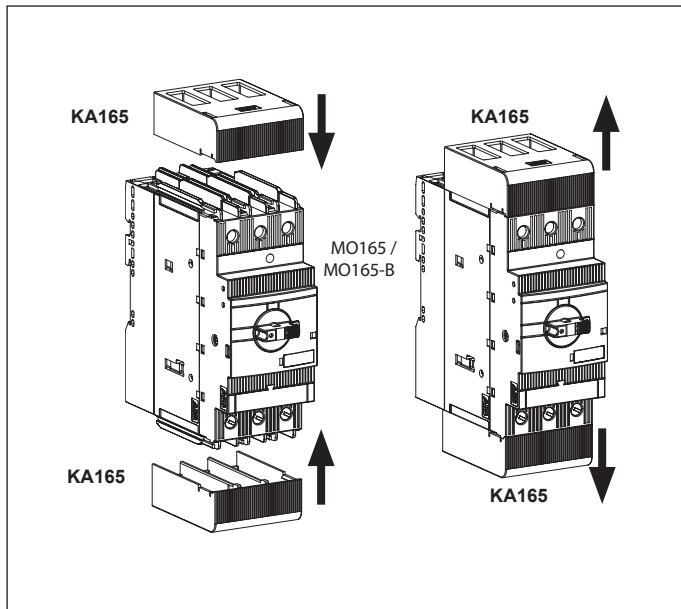
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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>en</b> Installation instructions<br><b>de</b> Montageanweisung<br><b>es</b> Instrucciones de montaje<br><b>fr</b> Notice de montage<br><b>it</b> Istruzioni di montaggio<br><b>sv</b> Installation och skötsel<br><b>cn</b> 安装说明书<br><b>ru</b> Инструкция по монтажу<br><b>ar</b> إرشادات التثبيت | <b>Manual Motor Starter MO165 / MO165-B</b><br><b>Motorschutzschalter MO165 / MO165-B</b><br><b>Guardamotor MO165 / MO165-B</b><br><b>Disjoncteur-moteur MO165 / MO165-B</b><br><b>Salvatore MO165 / MO165-B</b><br><b>Handmanövrerad Motorskydds brytare MO165 / MO165-B</b><br><b>电动机保护用断路器 MO165 / MO165-B</b><br><b>Автомат защиты электродвигателя MO165 / MO165-B</b><br><b>بادئ يدوي لحركة المحرك MO165 / MO165-B</b> |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

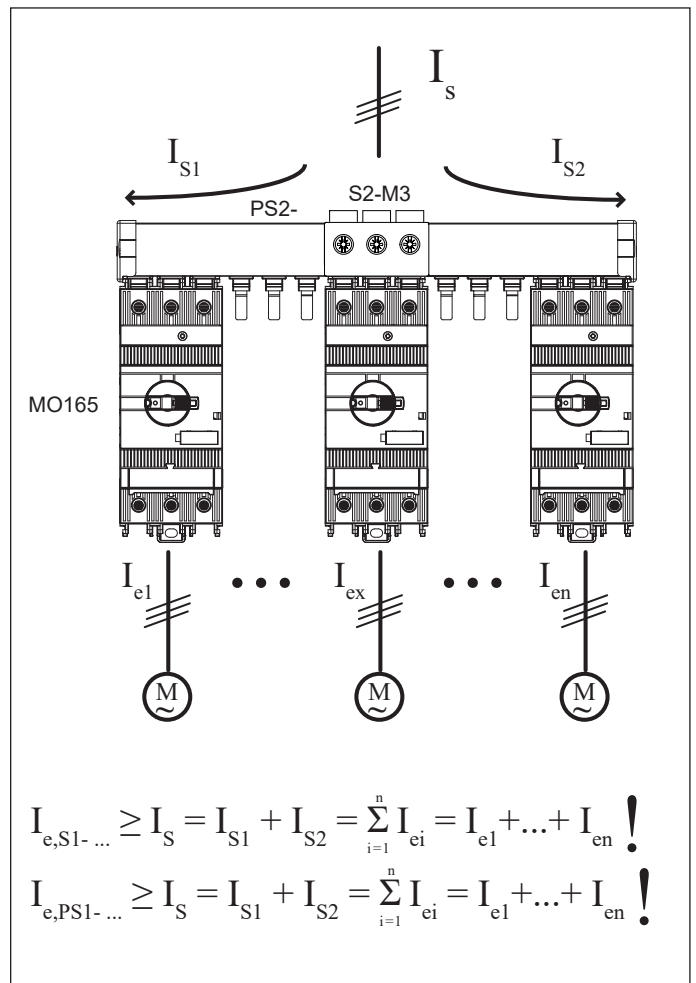
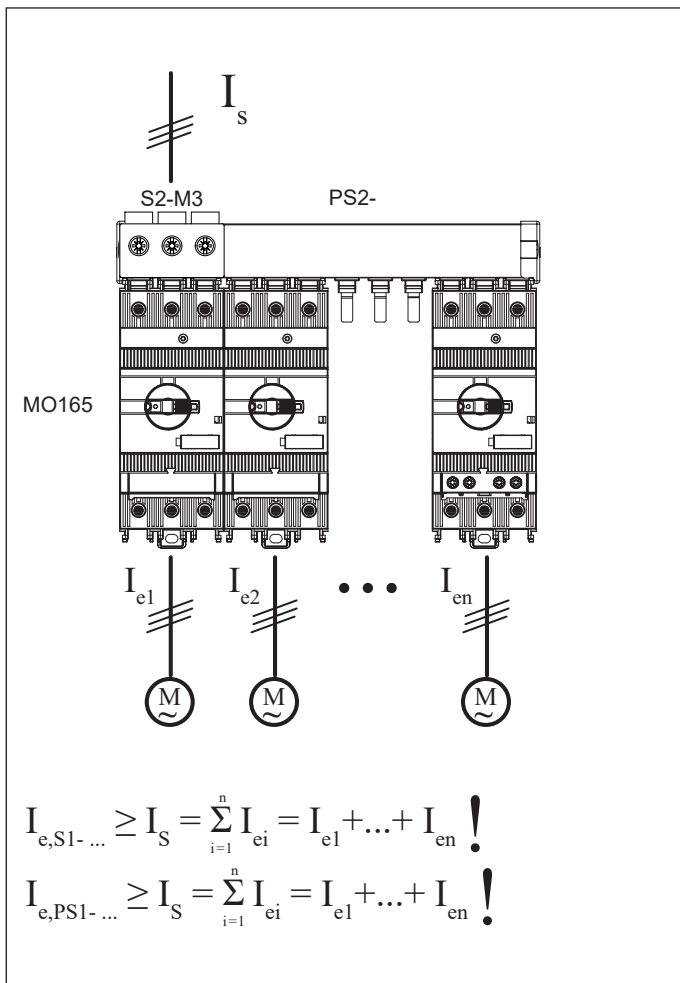
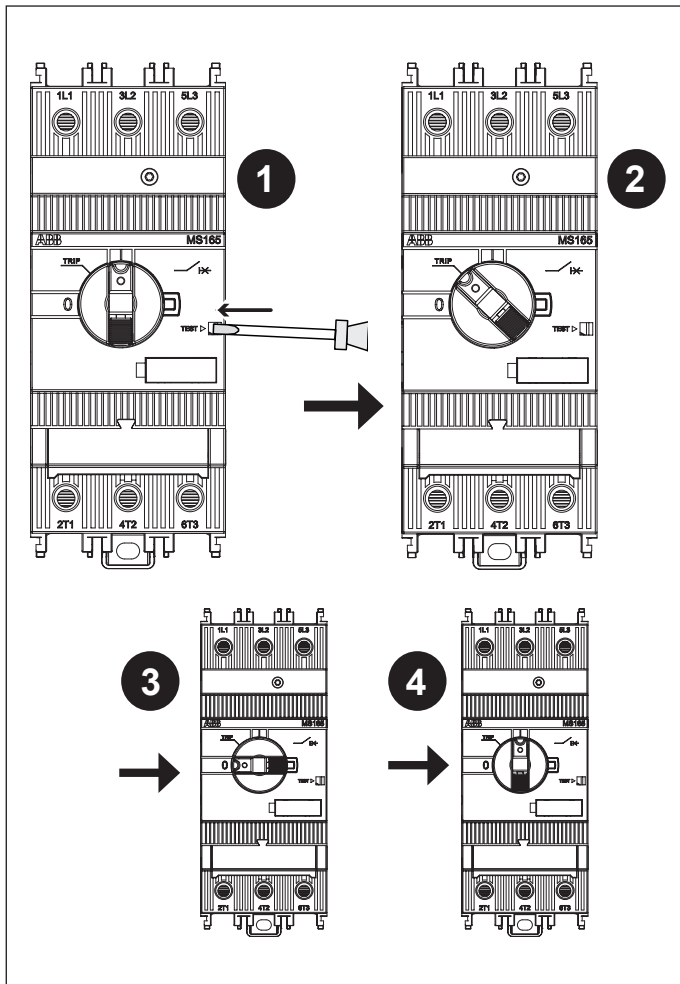
ABB STOTZ-KONTAKT GmbH  
Eppelheimer Str. 82  
69123 Heidelberg  
Germany  
<http://www.abb.com/lowvoltage>



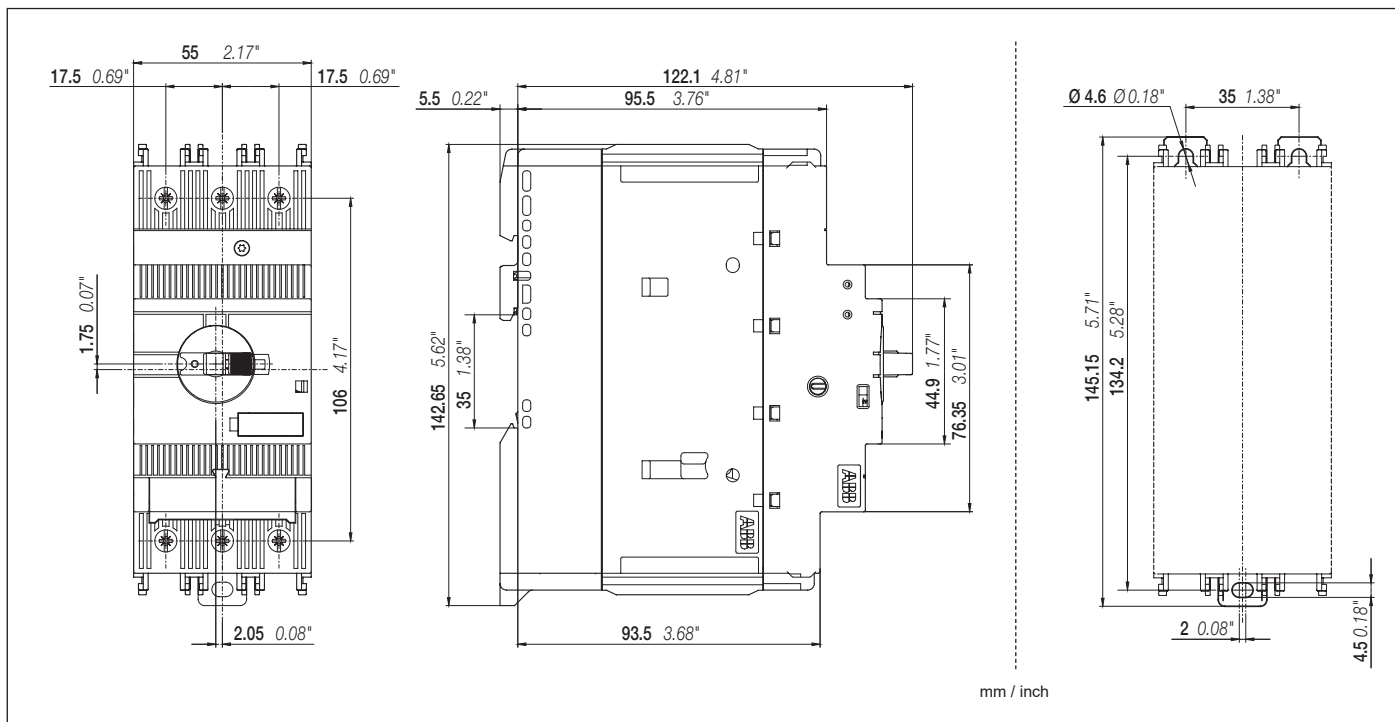
|                        |  |  |  |  |  |  |  |  |
|------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| MO165 /<br>MO165-B     | M6<br>4 Nm / 35 lb.in                                                               | X 6.5 mm                                                                            | Pozidriv<br>No. 2                                                                   | 1/2 x 1 ... 50 mm <sup>2</sup><br>1/2 x AWG 16 ... 0                                | 1/2 x 1 ... 35 mm <sup>2</sup><br>1/2 x AWG 16 ... 0                                | 1/2 x 1 ... 35 mm <sup>2</sup>                                                       | 16 mm                                                                                 |                                                                                       |
| HK1, HKF1,<br>CK1, SK1 | M3<br>0.8 ... 1.2 Nm / 7 lb.in                                                      | X 5.5 mm                                                                            |                                                                                     | 1/2 x 1 ... 1.5 mm <sup>2</sup>                                                     | 1/2 x 0.75 ... 1.5 mm <sup>2</sup><br>1/2 x AWG 16 ... 14                           | 1/2 x 0.75 ... 1.5 mm <sup>2</sup>                                                   | 8 mm                                                                                  |                                                                                       |
| UA1, AA1               | M3<br>0.8 ... 1.2 Nm / 7 lb.in                                                      | X 5.5 mm                                                                            |                                                                                     | 1/2 x 1 ... 4 mm <sup>2</sup>                                                       | 1/2 x 0.75 ... 2.5 mm <sup>2</sup><br>1/2 x AWG 16 ... 14                           | 1/2 x 0.75 ... 2.5 mm <sup>2</sup>                                                   |                                                                                       |                                                                                       |
| S2-M3-50               | M8<br>6 Nm / 54 lb.in                                                               |                                                                                     | Hex5                                                                                | 1 x 10 mm <sup>2</sup>                                                              | 1 x 10 ... 50 mm <sup>2</sup><br>1 x AWG 8 ... 0                                    | 1 x 10 ... 50 mm <sup>2</sup><br>1 x AWG 8 ... 0                                     | 16 mm                                                                                 |                                                                                       |











#### 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 290 x 130 x 190 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 290 x 130 x 190 mm



When used with PS2-xx-125 busbars, suitable for installation in an enclosure with minimum dimensions:

Si utilisé avec un peigne PS2-xx-125, convient pour l'installation dans un coffret de dimensions minimum:

| Type        | Height (mm) | Width (mm) | Depth (mm) |
|-------------|-------------|------------|------------|
| PS2-2-0-125 | 280         | 165        | 195        |
| PS2-3-0-125 | 280         | 248        | 195        |
| PS2-4-0-125 | 280         | 330        | 195        |
| PS2-2-2-125 | 280         | 219        | 195        |
| PS2-3-2-125 | 280         | 329        | 195        |
| PS2-4-2-125 | 280         | 438        | 195        |

**“Combination motor controller Type F, when used with AF contactor series and overload relays EF or TF series and optional connector BEAxx”**

| Combination Motor Controller Type F<br>Type 1 Coordination |                   |           |             |                   |           |             |
|------------------------------------------------------------|-------------------|-----------|-------------|-------------------|-----------|-------------|
| Type                                                       | 480Y/277V<br>[kA] | OL Relay  | Contactor   | 600Y/347V<br>[kA] | OL Relay  | Contactor   |
| MO165-16                                                   | 65                | EF19-18.9 | AF09...AF38 | 50                | EF19-18.9 | AF09...AF38 |
| MO165-20                                                   | 65                | EF45-30   | AF26...AF38 | 50                | EF45-30   | AF26...AF38 |
| MO165-25                                                   | 65                | EF45-30   | AF26...AF38 | 50                | EF45-30   | AF26...AF38 |
| MO165-32                                                   | 65                | EF45-45   | AF26...AF38 | 50                | EF45-45   | AF26...AF38 |
| MO165-42                                                   | 65                | EF65      | AF40...AF65 | 30                | EF65      | AF40...AF65 |
| MO165-54                                                   | 65                | EF65      | AF40...AF65 | 30                | EF65      | AF40...AF65 |
| MO165-65                                                   | 65                | EF65      | AF40...AF65 | 30                | EF65      | AF40...AF65 |
| MO165-73                                                   | 50                | EF96      | AF80...AF96 | —                 | —         | —           |
| MO165-80                                                   | 50                | EF96      | AF80...AF96 | —                 | —         | —           |

| Combination Motor Controller Type F<br>Type 1 Coordination |                   |          |             |                   |          |             |
|------------------------------------------------------------|-------------------|----------|-------------|-------------------|----------|-------------|
| Type                                                       | 480Y/277V<br>[kA] | OL Relay | Contactor   | 600Y/347V<br>[kA] | OL Relay | Contactor   |
| MO165-16                                                   | 65                | TF42     | AF09...AF38 | 30                | TF42     | AF09...AF38 |
| MO165-20                                                   | 65                | TF42     | AF26...AF38 | 30                | TF42     | AF09...AF38 |
| MO165-25                                                   | 65                | TF42     | AF26...AF38 | 50                | TF42     | AF26...AF38 |
| MO165-32                                                   | 65                | TF42     | AF26...AF38 | 50                | TF42     | AF26...AF38 |
| MO165-42                                                   | 65                | TF65     | AF40...AF65 | 30                | TF65     | AF40...AF65 |
| MO165-54                                                   | 65                | TF65     | AF40...AF65 | 30                | TF65     | AF40...AF65 |
| MO165-65                                                   | 65                | TF65     | AF40...AF65 | 30                | TF65     | AF40...AF65 |
| MO165-73                                                   | 50                | TF96     | AF80...AF96 | —                 | —        | —           |
| MO165-80                                                   | 50                | TF96     | AF80...AF96 | —                 | —        | —           |

| Combination Motor Controller Type F<br>Type 2 Coordination |                   |          |             |                   |          |           |
|------------------------------------------------------------|-------------------|----------|-------------|-------------------|----------|-----------|
| Type                                                       | 480Y/277V<br>[kA] | OL Relay | Contactor   | 600Y/347V<br>[kA] | OL Relay | Contactor |
| MO165-73                                                   | 50                | EF96     | AF80...AF96 | —                 | —        | —         |
| MO165-80                                                   | 50                | EF96     | AF80...AF96 | —                 | —        | —         |

| Combination Motor Controller Type F<br>Type 2 Coordination |                   |          |             |                   |          |           |
|------------------------------------------------------------|-------------------|----------|-------------|-------------------|----------|-----------|
| Type                                                       | 480Y/277V<br>[kA] | OL Relay | Contactor   | 600Y/347V<br>[kA] | OL Relay | Contactor |
| MO165-73                                                   | 50                | TF96     | AF80...AF96 | —                 | —        | —         |
| MO165-80                                                   | 50                | TF96     | AF80...AF96 | —                 | —        | —         |