

### Important Safety Information

This Guide is intended for any qualified personnel who need to operate, configure, and troubleshoot the Conext Battery Fuse Combiner Box. Certain configuration tasks should only be performed by qualified personnel in consultation with your local utility and/or an authorized dealer. Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. Servicing of batteries must only be performed or supervised by qualified personnel with knowledge of batteries and their required precautions.

Qualified personnel have training, knowledge, and experience in:

- Installing electrical equipment
- Applying applicable installation codes
- Analyzing and reducing the hazards involved in performing electrical work
- Installing and configuring batteries
- Selecting and using Personal Protective Equipment (PPE)

No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

1. Before using this product, read all instructions and cautionary markings on the unit, the batteries, and all appropriate sections of this manual.
2. Use of accessories not recommended or sold by the manufacturer may result in a risk of fire, electric shock, or injury to persons.
3. The manufacturer recommends that all wiring be done by a certified technician or electrician to ensure adherence to the local and national electrical codes applicable in your jurisdiction.
4. To avoid a risk of fire and electric shock, make sure that existing wiring is in good condition and that wire is not undersized. Do not operate the equipment with damaged or substandard wiring.
5. Do not operate the equipment if it has been damaged in any way.
6. This unit does not have any user-serviceable parts. Do not disassemble the combiner box except where noted for connecting wiring and cabling. See your warranty for instructions on obtaining service. Attempting to service the unit yourself may result in a risk of electrical shock or fire. Internal capacitors remain charged after all power is disconnected.
7. To reduce the risk of electrical shock, disconnect both AC and DC power from the equipment before attempting any maintenance or cleaning or working on any components connected to the equipment. Putting the unit in Standby mode will not reduce this risk.
8. The equipment must be provided with an equipment-grounding conductor connected to the AC input ground.
9. Do not expose this unit to rain, snow, or liquids of any type. This product is designed for indoor use only. Damp environments will significantly shorten the life of this product and corrosion caused by dampness will not be covered by the product warranty.
10. To reduce the chance of short-circuits, always use insulated tools when installing or working with this equipment.
11. Remove personal metal items such as rings, bracelets, necklaces, and watches when working with electrical equipment.

#### Read and Save These Instructions - Do Not Discard

This guide contains important safety instructions for the Conext Battery Fuse Combiner Box that must be followed during installation procedures. Read and keep this Quick Install Guide for future reference.

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service or maintain it. The following special messages may appear throughout this bulletin or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

#### ⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

#### ⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

#### ⚠ DANGER

##### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Turn off all power supplying this equipment before working on or inside equipment. Lock the switchgear in the isolated position.
  - Install safety barriers and display a danger sign.
  - Keep sparks and flames away from the batteries.
  - Do not install the Battery Fuse Combiner Box inside your battery enclosure.
  - Install in a well-ventilated area to help prevent the possible buildup of explosive gases.
  - Battery Circuit Breakers must be installed according to the specifications and requirements specified by Schneider Electric.
  - Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E or CSA Z462.
  - This equipment must only be installed and serviced by qualified electrical personnel.
  - Never operate energized with covers removed.
  - Energized from multiple sources. Before removing covers identify all sources, de-energize, lock-out, and tag-out and wait 2 minutes for circuits to discharge.
  - Always use a properly rated voltage sensing device to confirm all circuits are de-energized.
  - Replace all devices, doors, and covers before turning on power to this equipment.
  - Battery Circuit Breakers must be installed according to the specifications and requirements specified by Schneider Electric.
  - Servicing of batteries must only be performed by qualified personnel and the required precautions. Keep unqualified personnel away from batteries.
- Batteries can present a risk of electric shock and high short-circuit current. The following precautions must be observed when working with batteries:
- Remove watches, rings or other metal objects.
  - Use tools with insulated handles.
  - Wear protective glasses, gloves and boots.
  - Do not lay tools or other metal parts on top of batteries.
  - Disconnect the charging source prior to connecting or disconnecting battery terminals.
- Failure to follow these instructions will result in death or serious injury.**

#### ⚠ DANGER

##### HAZARD OF ELECTRIC SHOCK AND FIRE

- All wiring must be done by qualified personnel to ensure compliance with all applicable installation codes and regulations.
  - For Indoor Use Only.
  - Do not disassemble. No user serviceable parts inside.
- Failure to follow these instructions will result in death or serious injury.**

#### ⚠ WARNING

##### OVERHEATING OF DC TERMINALS AND CABLES

- Overheating of the DC terminals or DC cables to dangerous temperatures may occur due to improper installation.
  - Do not put anything between the cable lug and the terminal surface.
  - Do not over-tighten connections; observe all recommended torque values.
  - Do not apply any type of anti-oxidant paste until after the cable connection is tightened.
  - Do not under size cables; install cables sized in accordance with national electrical code requirements.
  - DC cables must have crimped copper compression lugs or crimped and soldered copper compression lugs; soldered connections alone are not acceptable. Lugs must be rated for use with fine-stranded cable.
  - Do not use coarse-stranded cable; the lack of flexibility may pull DC terminal connections loose.
- Failure to follow these instructions can result in death or serious injury.**
- POTENTIAL FIRE HAZARD**  
To reduce the risk of electrical fire, replace fuse with SAME size, type, and rating ONLY.  
**Failure to follow these instructions can result in death or serious injury.**

#### Exclusion for Documentation

UNLESS SPECIFICALLY AGREED TO IN WRITING, SELLER

(A) MAKES NO WARRANTY AS TO THE ACCURACY, SUFFICIENCY OR SUITABILITY OF ANY TECHNICAL OR OTHER INFORMATION PROVIDED IN ITS MANUALS OR OTHER DOCUMENTATION;

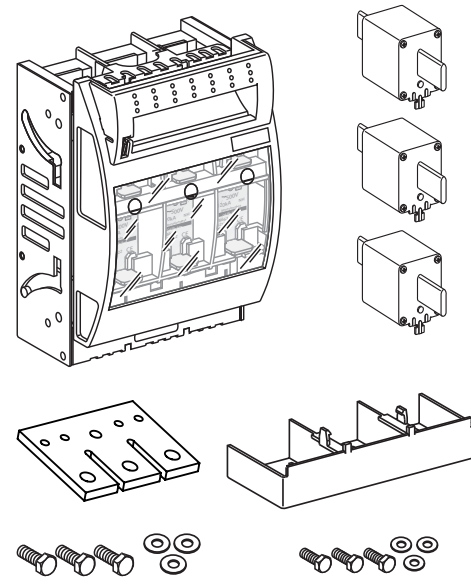
(B) ASSUMES NO RESPONSIBILITY OR LIABILITY FOR LOSSES, DAMAGES, COSTS OR EXPENSES, WHETHER SPECIAL, DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL, WHICH MIGHT ARISE OUT OF THE USE OF SUCH INFORMATION. THE USE OF ANY SUCH INFORMATION WILL BE ENTIRELY AT THE USER'S RISK; AND

(C) REMINDS YOU THAT IF THIS MANUAL IS IN ANY LANGUAGE OTHER THAN ENGLISH, ALTHOUGH STEPS HAVE BEEN TAKEN TO MAINTAIN THE ACCURACY OF THE TRANSLATION, THE ACCURACY CANNOT BE GUARANTEED. APPROVED CONTENT IS CONTAINED WITH THE ENGLISH LANGUAGE VERSION WHICH IS POSTED AT WWW.SESOLAR.COM.

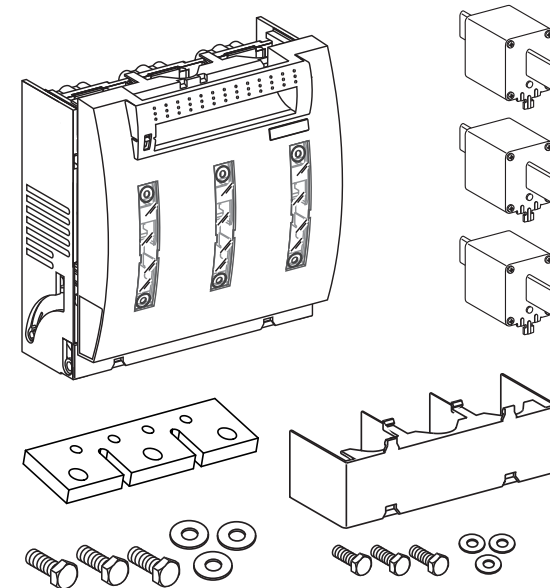
#### Contact Information

www.SESolar.com

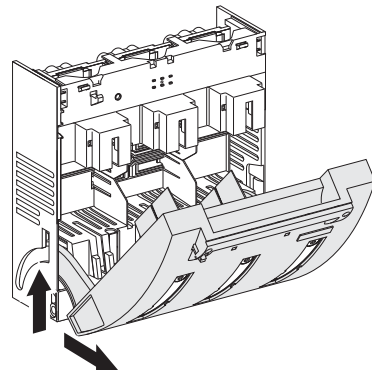
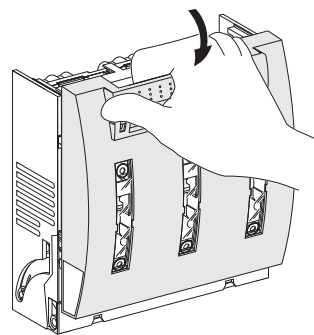
### Battery Fuse Combiner Box 160 865-1030-01



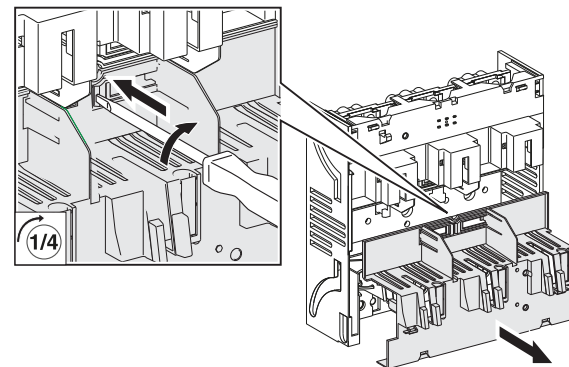
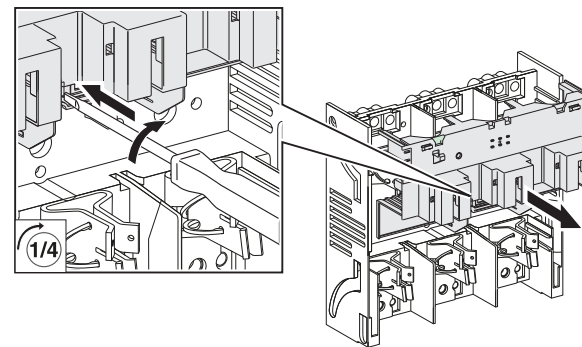
### Battery Fuse Combiner Box 250 865-1031-01



#### 1 Remove fuse door

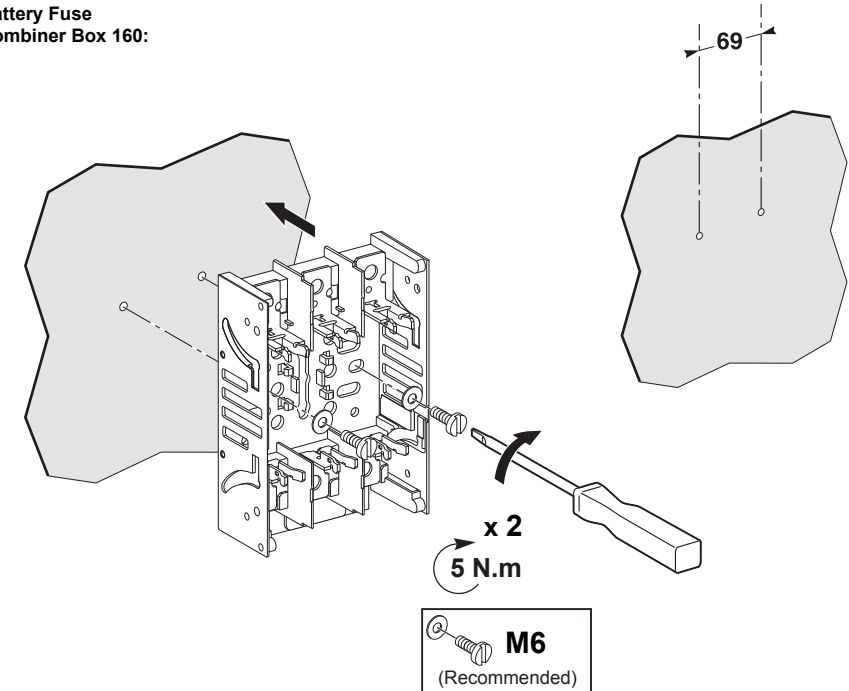


#### 2 Remove covers



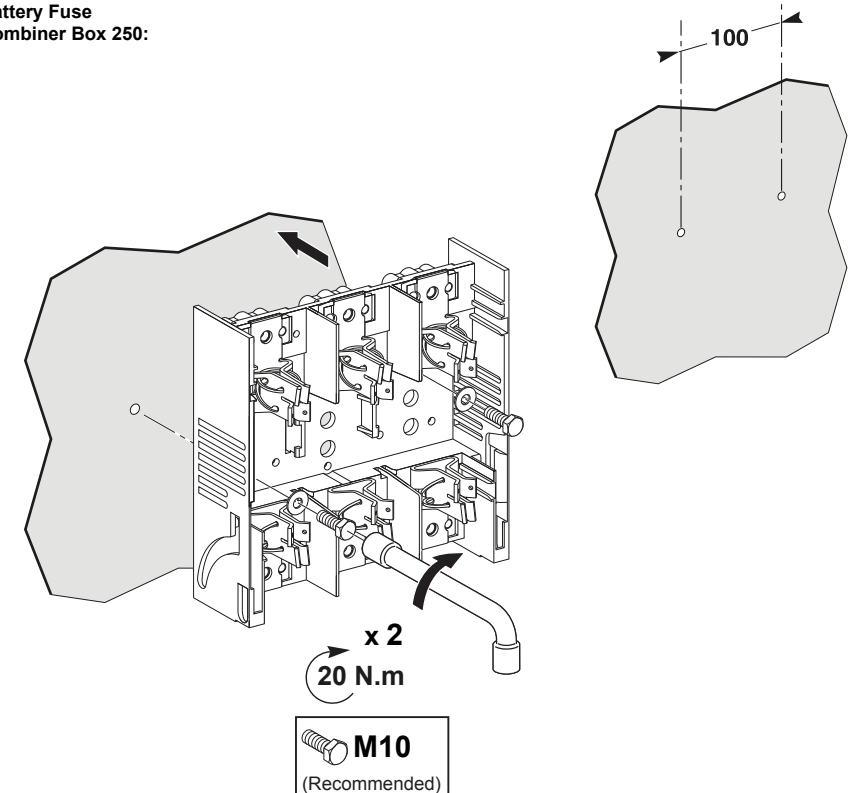
#### 3 Wall-mount

##### Battery Fuse Combiner Box 160:



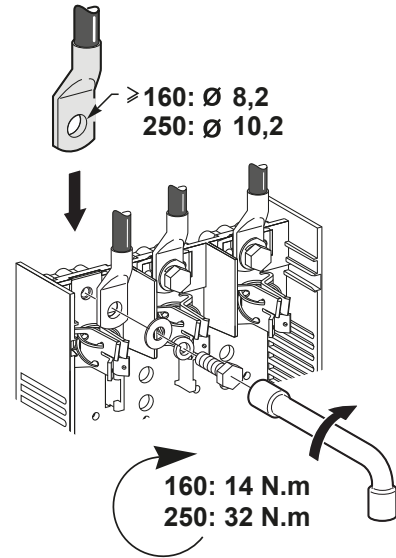
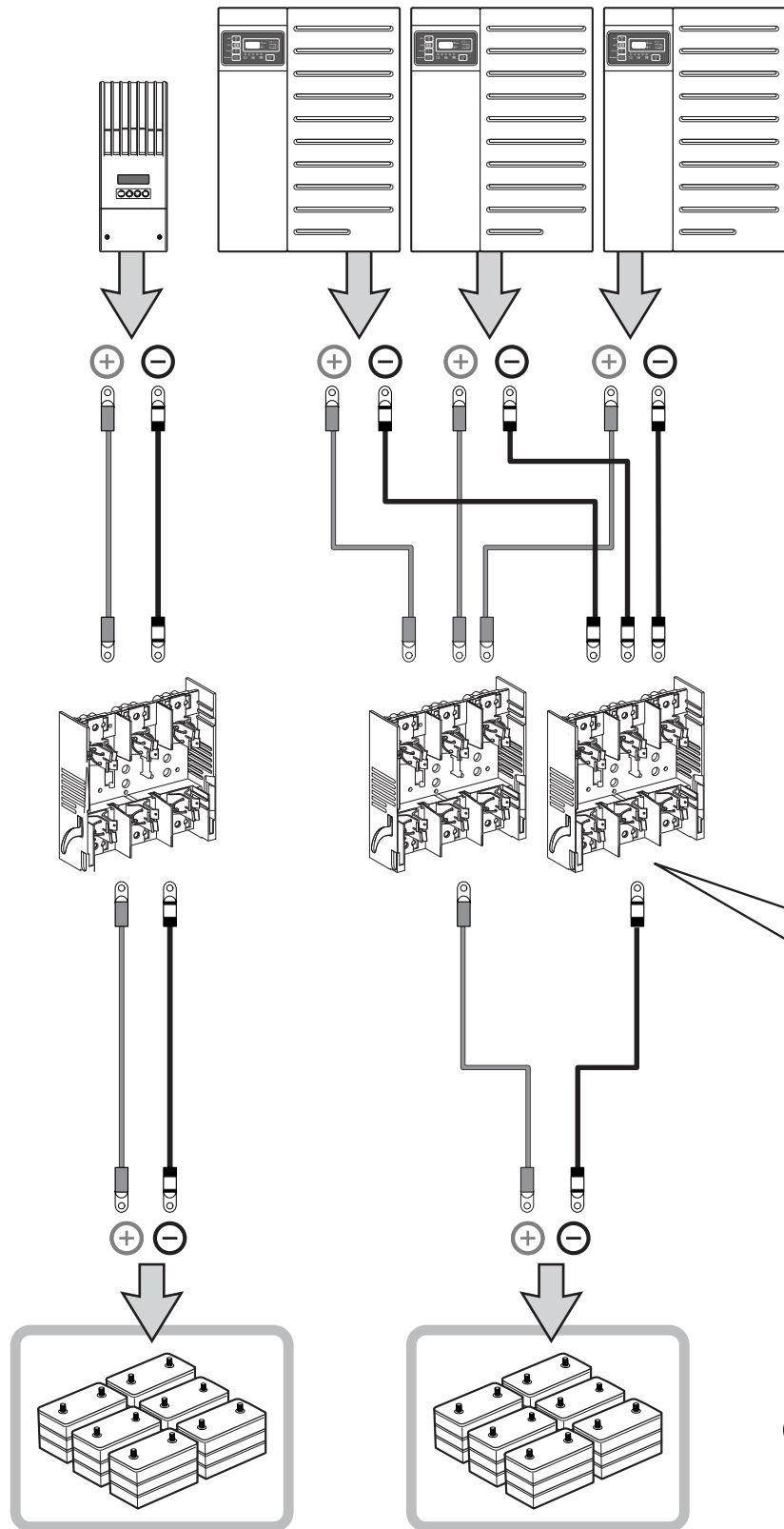
**NOTE:** Use mounting hardware appropriate for wall material. (Wall-mounting hardware not included.)

##### Battery Fuse Combiner Box 250:

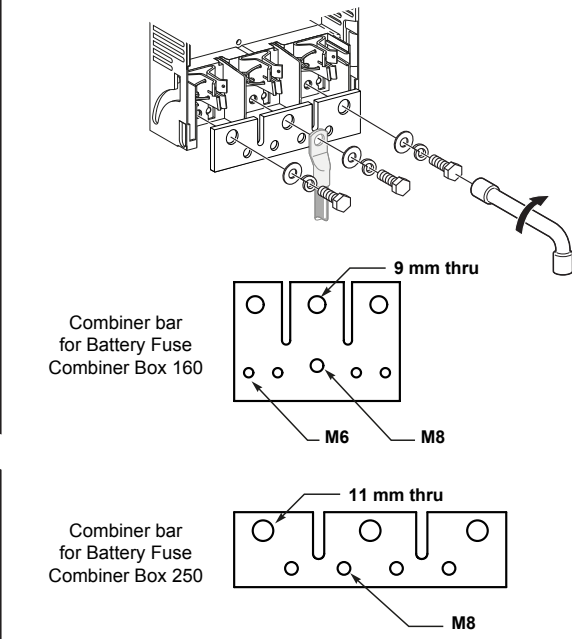


**4** Connect DC cables from your Conext product (see **Compatible Products**) to the upper terminals of the Battery Fuse Combiner Box.

When connecting batteries, verify proper polarity, stacking order, and appropriate torque values. For more information, consult the documentation of your Conext product.



**Optional:** To reduce the number of DC cables running to your batteries, install the combiner bar (included) onto the lower terminals of the Battery Fuse Combiner Box, as shown below.



**NOTE:** Cables must be sized appropriately, based on current rating. For more information about cable sizing, consult the documentation appropriate for your installation:

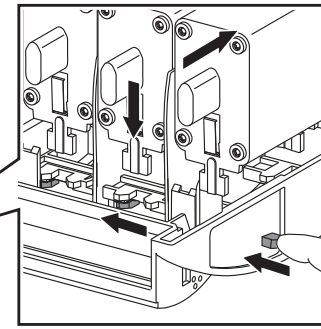
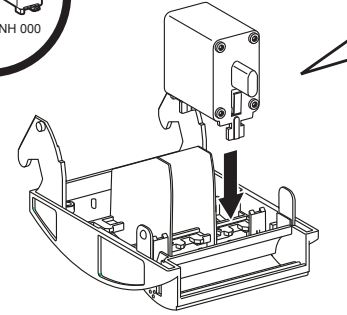
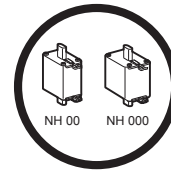
- Conext XW+ Inverter/Charger Installation Guide
- Conext SW Inverter/Charger Installation Guide
- Conext MPPT 80 600 Solar Charge Controller Installation Guide
- Conext MPPT 60 150 Solar Charge Controller Installation and Owner's Guide

**5** Connect DC cables from the lower terminals of the Battery Fuse Combiner Box to your batteries.

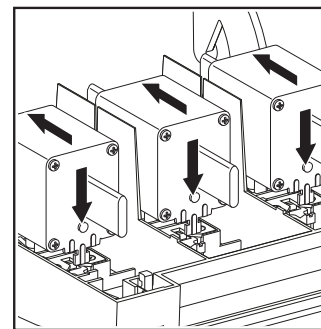
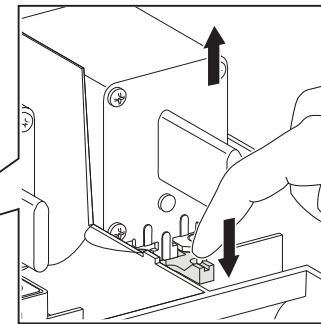
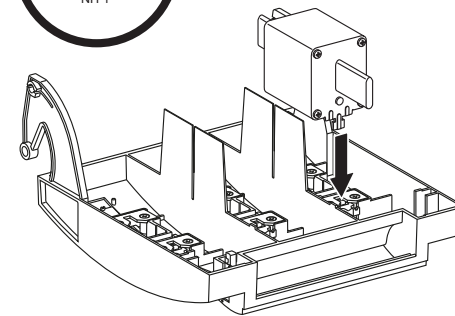
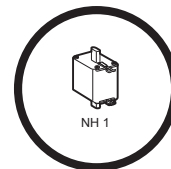
When connecting batteries, verify proper polarity, stacking order, and appropriate torque values. For more information, consult your battery manufacturer's recommendations.

**6** Install fuses

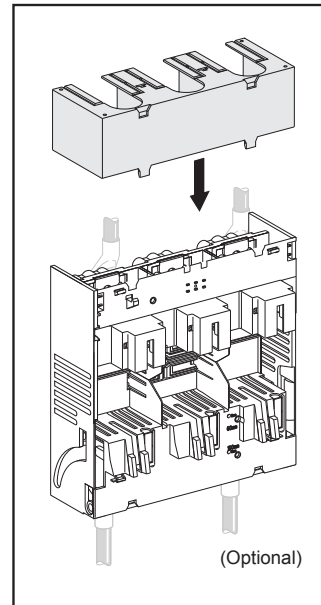
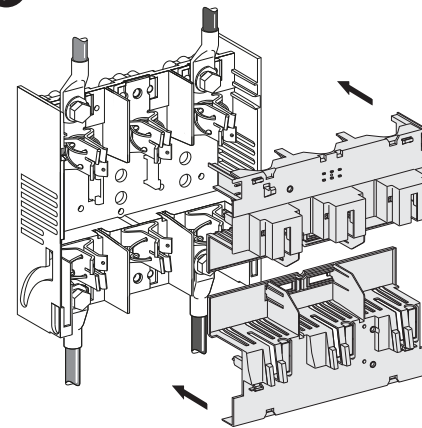
**Battery Fuse Combiner Box 160:**



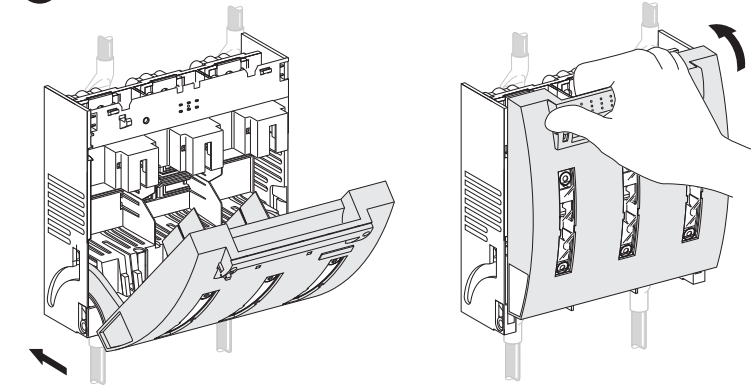
**Battery Fuse Combiner Box 250:**



**7** Attach covers



**8** Close fuse door



**WARNING**  
HAZARD OF EXPLOSION OR ARC FLASH  
Do not open fuse door while under load.  
Failure to follow these instructions can result in death or serious injury.

**Technical Specifications**

	Battery Fuse Combiner Box 160	Battery Fuse Combiner Box 250
<b>Electrical specifications</b>		
Nominal voltage	24 / 48 V DC	24 / 48 V DC
Nominal current	160 A	250 A
<b>Fuse specifications</b>		
Type	DIN	DIN
Size	NH00, NH000	NH1
Number	3	3
<b>Cable connections</b>		
Quantity per pole	3	3
Maximum cable size	95 mm <sup>2</sup>	150 mm <sup>2</sup>
Terminal type	M8	M10
<b>General specifications</b>		
Part number	865-1030-01	865-1031-01
Product dimensions	16.3 x 10.7 x 8.0 cm (6.4 x 4.2 x 3.1 in)	24.6 x 18.6 x 11.0 cm (9.7 x 7.3 x 4.3 in)
Shipping dimensions	29.2 x 15.8 x 14.5 cm 11.5 x 6.2 x 4.5 in)	34.3 x 24.6 x 26.4 cm (13.5 x 9.7 x 10.4 in)
Product weight	1.4 kg (3.1 lb)	3.6 kg (7.9 lb)
Shipping weight	1.8 kg (4.0 lb)	4.2 kg (9.2 lb)
Mounting options	Wall-mount, flush-mount	
Operating temp. range	-20°C... 70°C	
Warranty	2 - 5 years (depending on country)	
<b>Regulatory approval</b>		
Markings	CE	
Standards	EN/IEC 60947-1, EN/IEC 60947-3, IEC 60269-2-1	
IP degree of protection	IP20 conforming to IEC 60529	
<b>Included parts</b>		
Fuse box		
Mounting hardware		
Terminal shield		
Combiner bar		
Fuses (x 3)		

**Compatible Products**

**Conext XW+ Inverter/Charger**  
XW 7048 E Product no. 865-7048-61  
XW 8548 E Product no. 865-8548-61

**Conext SW Inverter/Charger**  
SW 2524 230 Product no. 865-2524-61  
SW 4024 230 Product no. 865-3524-61

**Conext MPPT 60 150 Solar Charge Controller**  
Product no. 865-1030-1

**Conext MPPT 80 600 Solar Charge Controller**  
Product no. 865-1032