Important Safety Information

This Guide is intended for anyone who needs to operate, configure, and troubleshoot the Conext XW+ Inverter/Charger. It contains configuration tasks that should only be performed by qualified personnel in consultation with your local utilities and/or an authorized distributor. 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.

Before using the inverter, read all instructions and cautionary markings on the unit, the batteries, and all appropriate sections of this manual.

A. Important Safety Information

1. Before using the inverter, read all instructions and cautionary markings on the unit, the batteries, and all appropriate sections of this manual.
2. Do not operate the inverter if it has been damaged in any way.
3. The inverter is designed to be permanently connected to your AC and DC electrical systems. 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 the existing wiring is in good condition and that wire is not twisted. Do not operate the inverter with damaged or substandard wiring.
5. Do not operate the inverter if it has been damaged in any way.
6. This unit does not have any user-serviceable parts. Do not disassemble the inverter except where noted for maintenance or cleaning or working on any components connected to the inverter. Putting the unit in Standby mode will not reduce this risk.
7. The inverter must be provided with an equipment-grounding conductor connected to the AC input ground. Internal capacitors remain charged after all power is disconnected.
8. To reduce the risk of electrical shock, disconnect both AC and DC power from the inverter before attempting any maintenance or cleaning or working on any component connected to the inverter. Pulling the unit in Standby mode will not reduce this risk.
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.

B. Materials List

Conduit Box for attaching to the bottom of second or third Conext XW+ inverter/charger:

- 2 x #4/0 AWG (107 mm²) DC battery cables for connecting second or third inverter/chargers to the Power Distribution Panel (PDP)
- Bushings for AC wiring knockouts
- AC Sync and Xanbus knockouts
- 5 x #6 AWG (13.3 mm²) cables for GRID, LOAD and Neutral AC connections (labelled)
- 1 x #4 AWG (21.15 mm²) cable for grounding (labelled)
- GJ 250 Amp 160 VDC circuit breaker

DC positive bus bar for up to 3 DC disconnected breakers. Replaces factory-installed bus bar:

- 2 x #4/0 AWG (107 mm²) DC battery cables for connecting second or third inverter/chargers to the Power Distribution Panel (PDP)

Exclusion for Documentation

Unless specifically agreed to in writing, Schneider Electric makes no warranty as to the accuracy, sufficiency or suitability of any technical or other information provided in this manual or other documentation.

11-2017
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975-0708-01-01 Revision B
**C Knockout Dimensions**

**NOTICE**

**EQUIPMENT DAMAGE**
Do not drill, cut or punch holes into the Conduit Box, XW+ chassis, or Power Distribution Panel. Use only the knockouts provided for conduit entry.

Failure to follow these instructions can result in damage to equipment.

When removing your choice of knockouts, ensure no debris remains inside the chassis. Insert appropriately sized conduit bushings.

- **Back Knockouts**
  - **Inner:** 3/4” Trade (PG 21)
  - **Outer:** 1” Trade
  - **Inner:** ISO-16
  - **Outer:** 1/2” Trade (PG 16)
  - **Inner:** 1 1/2” Trade
  - **Outer:** 2” Trade

- **Bottom Knockouts**
  - **Inner:** 3/4” Trade (PG 21)
  - **Outer:** 1” Trade

- **Inner:** 2” Trade (62.7 mm)
  - **Outer:** 3” Trade (90.0 mm)

- **Inner:** 1/2” Trade (22.2 mm or PG16)
  - **Outer:** 3/4” trade (28.0 mm)

- **Inner:** ISO-50
  - **Outer:** ISO-40
  - **Inner:** ISO-16
  - **Outer:** 1/2” Trade (PG 16)

**Side Knockouts**

- **Horizontal raceway for routing Xanbus, AC Sync, Aux, and BTS cabling between inverters or outside the unit**
  - **Inner:** 3/4” trade (28.2 mm or PG21)
  - **Outer:** 1” trade (35.0 mm)
  - **Inner:** 2” trade (62.7 mm)
  - **Outer:** 3/4” trade (28.0 mm)

- **Vertical raceway for routing Xanbus, AC Sync, Aux, and BTS cabling to data ports on the bottom of the inverter**
  - **Inner:** 2” Trade (62.7 mm)
  - **Outer:** 3” trade (90.0 mm)
  - **Inner:** 1/2” trade (22.2 mm or PG16)
  - **Outer:** 3/4” trade (28.0 mm)

**D Wall Mounting the Conduit Box**

**Wall Mounting Considerations**
- If conduit is routed from the floor, remove the bottom panel of the Conduit Box before wiring. Remove the appropriate knockouts and re-attach the bottom panel to proceed with conduit installation and wiring.
- If conduit is routed through the wall on which the XW+ unit and PDP are mounted, remove the appropriate knockouts on the back panel of the Conduit Box.
- Use plastic cable ties (not supplied) for cable management inside the Conduit Box.

1. **Wall mount the Conext XW+**
   - **IMPORTANT:** Before installing the Conduit Box, wall mount the Conext XW+.
   - For detailed mounting instructions, see the Conext XW+ Inverter/Charger Installation Guide.

2. **Remove the Conduit Box front panel, the left or right sideplate and the raceway knockout**
   - Either sideplate can be removed depending on the location of the adjacent PDP and Conext XW+. If the Conduit Box is located between two XW+ units, then remove both sideplates and knockouts.

3. **Secure the Conduit Box to the Conext XW+**
   1. Align the keyhole slots on the top edge of the Conduit Box with the corresponding screws on the bottom of the inverter. Loosen the screws if necessary.
   2. Hang the Conduit Box on the XW+ unit by fitting the keyholes to the screws and pushing towards the wall until snug.

4. **Secure the Conduit Box to the wall**
   - Using two screws suitable for the type of wall material (not provided), secure the bracket at the bottom edge of the rear panel to the wall.

When removing your choice of knockouts, ensure no debris remains inside the chassis. Insert appropriately sized conduit bushings.
Installing additional AC breakers for two inverter/chargers or three inverter chargers onto the DIN rail next to the factory-installed AC breakers.

North America (NEC)

The following AC breaker kits for NEC split phase and three-phase systems are available from Schneider Electric:

- Conext XW+ 120/240 VAC Breaker Kit (865-1215-01)
- Conext XW+ Three-Phase Breaker Kit (865-1315-01)

Compatible AC breakers must support DIN rail (35 mm).

International (IEC)

The following compatible AC breakers are available from Schneider Electric:

- Acti 9 (formerly Multi 9)

For detailed instructions and wiring diagrams, see the Conext XW+ Inverter/Charger Installation Guide.

 WIRING THE AC, DC, AND NETWORK CABLE CONNECTIONS

Connect the AC, DC and Xanbus network cables and route through the Conduit Box as instructed in the Conext XW+ Inverter/Charger Installation Guide.

SECURE THE FRONT PANEL OF THE CONDUIT BOX

Re-attach the front panel of the Conduit Box when the wiring is complete.

1. Slide the bottom lip of the front panel over the lower edge of the rear panel.
2. Align the two holes in the front panel with the two holes in the back panel.
3. Using two #10-32 screws (included), secure the front panel to the rear panel.

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HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Battery Circuit Breakers must be installed according to the specifications and requirements defined by Schneider Electric. Servicing of batteries must only be performed by qualified personnel knowledgeable about batteries and the required precautions. Keep unqualified personnel away from 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 FIRE

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.

Failure to follow these instructions could result in death or serious injury.

WARNING

The assembly includes the DC positive bus bar, DC breaker and attached battery cable.

- Tighten DC terminals to the recommended torque values. See the Tightening Torque label inside the PDP.
- Connecting three DC disconnect breakers in a three-inverter system requires two Conext XW+ Connection Kits.

Connect the positive (red) DC cable provided with the Connection Kit to the stud terminal on the back of the additional breaker(s).

Factory-installed DC cable not shown

Tighten DC terminals to the torque values recommended by the breaker manufacturer.

Re-attach the assembly to the DC breaker mounting rail using the 35 mm mounting screws (two per breaker) Remove breaker knockouts on mounting rail as needed.