

Conext™ SW AC Switchgear 120/240V (865-1017)

Installation Guide



Important Safety Instructions

READ AND SAVE THESE INSTRUCTIONS - DO NOT DISCARD

⚠ DANGER

ELECTRIC SHOCK, EXPLOSION, AND ARC FLASH HAZARDS

All wiring must be done by qualified personnel to ensure compliance with all applicable installation codes and regulations.

Disconnect and lockout all DC and AC sources that are powering this equipment and any connected equipment before installing, servicing, and performing any upgrades.

Always wear proper personal protective equipment (PPE) before working on or inside this equipment.

Always use a properly rated voltage sensing device to check the presence of potential and residual energy.

Do not route and mix DC cables and wires with AC cables and wires within the same compartment. This equipment is equipped with a partition (item O) that isolates AC wiring from DC wiring.

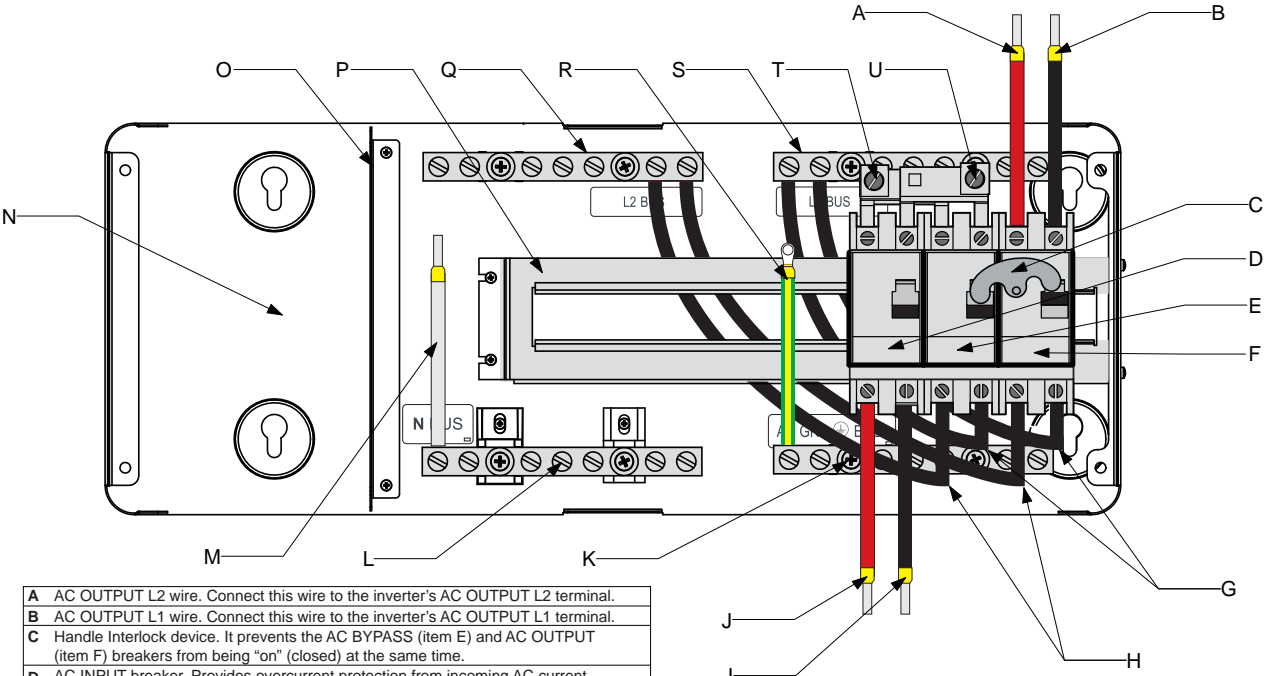
Failure to follow these instructions will result in death or serious injury.

NOTICE

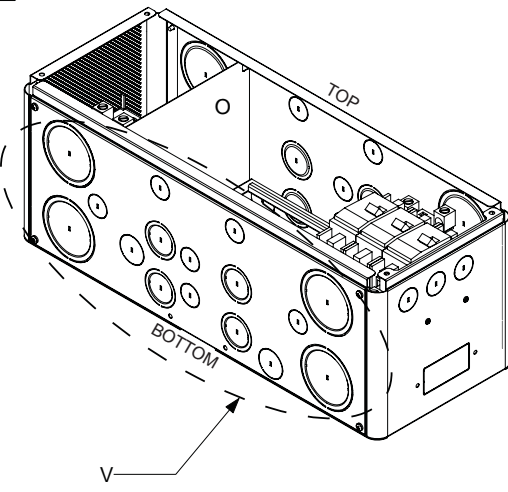
EQUIPMENT DAMAGE
Do not remove the pre-installed Handle Interlock device (item C).

Failure to follow these instructions can cause equipment damage.

NOTE: The double pole breakers (items D, E, F) are used for a dual line application. For a single line application, use only either the L1 line or L2 line for AC input and output. Do not use L1 line for AC input then use L2 line for AC output and vice versa.



- A AC OUTPUT L2 wire. Connect this wire to the inverter's AC OUTPUT L2 terminal.
- B AC OUTPUT L1 wire. Connect this wire to the inverter's AC OUTPUT L1 terminal.
- C Handle Interlock device. It prevents the AC BYPASS (item E) and AC OUTPUT (item F) breakers from being "on" (closed) at the same time.
- D AC INPUT breaker. Provides overcurrent protection from incoming AC current.
- E AC BYPASS breaker. Passes AC current through from the source to the inverter.
- F AC OUTPUT breaker. Provides overcurrent protection from outgoing AC current.
- G AC LOAD L1 wires that attach to the AC output to load L1 BUS.
- H AC LOAD L2 wires that attach to the AC output to load L2 BUS.
- I AC INPUT L1 wire. Connect this wire to the inverter's AC INPUT L1 terminal.
- J AC INPUT L2 wire. Connect this wire to the inverter's AC INPUT L2 terminal.
- K AC Ground Ⓢ bus bar. Attach other Ground J wires to a vacant terminal. Use proper torque (values posted inside unit) to secure the wire.
- L AC Neutral bus bar. Attach other Neutral wires to a vacant terminal. Use proper torque (values posted inside unit) to secure the wire.
- M AC Neutral wire. Connect this wire to the inverter's AC INPUT N terminal.
- N DC wire compartment. Use this compartment to route DC cables and wires through.
- O Wiring partition or barrier. Isolates DC and AC wiring from each other.
- P DIN rail. Use to mount other DIN-enabled AC breakers.
- Q L2 BUS bar. Attach L2 LOAD wire to a vacant terminal. Use proper torque (values posted inside unit) to secure the wire.
- R AC Ground Ⓢ wire. Connect this wire to the inverter's Ground Ⓢ terminal.
- S L1 BUS bar. Attach L1 LOAD wire to a vacant terminal. Use proper torque (values posted inside unit) to secure the wire.
- T AC INPUT L2 jumper bar terminal. Attach the incoming AC source L2 wire to the terminal. Use proper torque (values posted inside unit) to secure the wire.
- U AC INPUT L1 jumper bar terminal. Attach the incoming AC Source L1 wire to the terminal. Use proper torque (values posted inside unit) to secure the wire.
- V AC knockouts (top/bottom/sides). Remove to pass cables and wires through.



Knockout Dimensions	
1/2"	M13
3/4"	M19
1"	M25
2.5"	M64

- Materials List**
- The Conext SW AC Switchgear (865-1017) ships with the following items:
- 1x Installation Guide/Mounting Template
 - 1x Switchgear Box
 - 1x Switchgear Cover
 - 2x Double-pole 30-amp AC Breaker (bundled)
 - 1x Double-pole 60-amp AC Breaker
 - 4x Jumper Bar (pre-installed)
 - 1x Handle Interlock Device (pre-installed)
 - 6x 10AWG AC Wire (black, pre-wired)
 - 2x 10AWG AC Wire (red, pre-wired)
 - 1x 10AWG AC Wire (white, pre-wired)
 - 1x 12AWG Ground Wire (green, pre-wired)
 - 4x Terminal buses (one each - L1, L2, Ground, Neutral)

- Installation**
1. **Choose a location to mount the AC switchgear.** If you already have a Conext SW inverter/charger unit installed, the AC switchgear can be positioned directly underneath (see an illustration on the back page) or on top of the inverter/charger.
 2. **Remove the AC switchgear cover** to expose the mounting key holes.
 3. **Mount the AC switchgear.** Use the mounting template on the back page to mark the mounting holes on the mounting surface.
 4. **Make the proper wiring connections.** Use only qualified personnel to ensure compliance with all applicable installation and electrical codes and regulations.
 5. **Replace the AC switchgear cover.** Secure the cover using the same screws that came with the product.

LEFT EDGE OF INVERTER/CHARGER

16 in.
(406 mm)

TOOLS NEEDED

- 1x power drill
- 1x screw driver set (phillips and flathead)
- 4x #10 (M5) mounting screws
- 1x #4 (M3) screw (optional)

OPTION 1 Mounting the AC switchgear on top of the inverter/charger

1. Line up the folded bottom of the mounting template to the top of the inverter/charger.
2. Line up the down arrow below to the left edge of the inverter/charger.
3. Mark the surface wall and pre-drill.
4. Place the switchgear over the inverter/charger and line up the mounting holes with the pre-drilled holes on the wall.
5. Fasten the #10 (M5) screws to the wall to secure the switchgear.

5 in
(127 mm)

Recommended OPTION 2 Mounting the AC switchgear underneath the inverter/charger

1. Line up the top of the mounting template to the bottom of the inverter/charger.
2. Line up the up arrow above to the left edge of the inverter/charger.
3. Mark the surface wall and pre-drill.
4. Drive the screws halfway to the wall and hang the switchgear on the screws.
5. Push the switchgear up to flush against the inverter/charger's bottom and fasten the #10 (M5) screws to the wall.

FOLD LINE

FOLD LINE

LEFT EDGE OF INVERTER/CHARGER

Illustration only

Conext SW DC Switchgear
(865-1016)
Mandatory for installations in
Canada and USA.
To order, contact a
sales representative.

Conext SW Inverter/Charger
(865-2524, 865-4024)

Conext SW AC Switchgear
(865-1017)

