Schneider Charge

Charging Station, 48 A

EVRBA48ANAMJ1772 & EVRBA48ANAMJ3400

Installation and Operation Guide



https://www.se.com/

Schneider Electric

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Contact Information

For country-specific details, please contact your local Schneider Electric Sales Representative or visit the Schneider Electric website at: https://www.se.com/

Warranty

The dated proof of purchase must be retained as evidence of the date of purchase and to establish warranty eligibility. Go to https://www.se.com/ww/en/product-range/405075119.

Information About Your System

As soon as you open your product, inspect the contents and record the following information and be sure to keep your proof of purchase. If any damage is found, contact customer support.

Serial Number _____ Purchased From _____

Purchase Date _____

Model Name:	Schneider Charge
Product Part Number:	EVRBA48ANAMJ3400
Product Part Number:	EVRBA48ANAMJ1772

Document Number: TME42385A **Date:** June 2026

Information on Non-Inclusive or Insensitive Terminology

As a responsible, inclusive company, Schneider Electric is constantly updating its communications and products that contain non-inclusive or insensitive terminology. However, despite these efforts, our content may still contain terms that are deemed inappropriate by some customers.

Validity Note

This document is valid only for the Schneider Charge EVRBA48ANAMJ1772 and EVRBA48ANAMJ3400.

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 https://www.se.com/.

The characteristics of the products described in this document are intended to match the characteristics that are available on https://www.se.com/. As a part of our corporate strategy for constant improvement, we may revise the content over time to enhance clarity and accuracy. If you see a difference between the characteristics in this document and the characteristics on https://www.se.com/, consider https://www.se.com/ to contain the latest information.

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Audience

This manual is intended for use by qualified personnel installing or operating a system involving Schneider Charge charging station.

The qualified personnel have training, knowledge, and experience in:

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

Scope

This manual provides safety guidelines and procedures for installing, commissioning, maintaining, operating, and troubleshooting the Schneider Charge.

This manual does not provide details about electric vehicles. Consult individual manufacturers for information.

Related Information

For more information about the Schneider Charge, related documents, and compatible equipment, go to https://www.se.com/ww/en/product-range/405075119.

Related Documents

- *Schneider Charge Quick Install Guide (TME42387)*
- *Schneider Charge Homeowner's Guide (JPS02469)*

Abbreviations and Acronyms

~	Alternating Current (AC)
1Φ	Single Phase
	Ground (Protective Earth)
	AC (input) terminals
	Charging cable terminals
	L1 terminal
	L2 terminal
A	Amps
AC	Alternating Current
AP	Access Point
AWG	American wire gauge
CT	Current Transformer
DER	Distributed Energy Resource
EV	Electric Vehicle
EVSE	Electric Vehicle Supply Equipment
L1	Line 1
L2	Line 2
LOTO	Lock-Out Tag-Out
NACS	North American Charging System
PCB	Printed circuit board
PCS	Power Control System
PPE	Personal Protective Equipment
SOC	State of Charge
SSID	Service Set Identifier (a Wi-Fi network name)

Safety Information

Important Information

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 documentation 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.



Stored energy hazard and discharge time



Fire hazard



Hot surface



Protective Earth (grounding) conductor terminal



Refer to the Installation or Operation instructions

⚠ 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.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Product Safety Information

READ AND SAVE THESE INSTRUCTIONS - DO NOT DISCARD

Before installing or operating the Schneider Charge, read all instructions and cautionary markings on the unit, and all appropriate sections of this manual.

IMPORTANT: Refer to your warranty for instructions on obtaining service. Go to https://www.se.com/.

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, ARC FLASH, AND FIRE

- This equipment must only be installed and serviced by qualified electrical personnel.
- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E or CSA Z462.
- Turn off all power supplying this equipment before working on or inside equipment. Before removing the cover, de-energize, lock out and tag out, and wait five minutes for circuits to discharge.
- This single source Power Control System (PCS) includes Distributed Energy Resource (DER) sources not controlled by the PCS. DER sources shall be sized in accordance with 705.12 of NFPA 70 or Canadian Electrical Code C22.1.

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

IMPORTANT:

- This equipment has an automatic reset feature.
- The maximum operating current of this system may be controlled electronically. Refer to "Load Management with SmartAmp" on page 51 for more information.

Explosive Gas Precautions

⚠ WARNING

IGNITION AND FIRE HAZARD

This equipment is not ignition protected. To prevent fire or explosion, do not install this product in locations that require ignition-protected equipment. This includes any confined space containing lead acid batteries, or flammable chemicals such as, natural gas (NG), liquid petroleum gas (LPG) or gasoline (Benzine/Petrol).

- Do not install in a confined space with machinery powered by flammable chemicals, or storage tanks, fittings, or other connections between components of fuel or flammable chemical systems.
- Do not install the charging station on a flammable surface. If installing the charging station on a wood surface, ensure that the wood is flame retardant.
- Do not install the charging station near readily flammable materials such as cloth, paper, straw, or plastic sheeting. Keep flammable materials a minimum distance of 24 in. (600 mm) from the top surface and 12 in. (300 mm) from either side surface and the front of the charging station.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

Contents

Legal Information ... 1
Contact Information ... 1
Warranty ... 1
Information About Your System ... 1
Information on Non-Inclusive or Insensitive Terminology ... 2
Validity Note ... 2
Scope ... 3
Related Information ... 3
Related Documents ... 3
Abbreviations and Acronyms ... 4
Safety Information ... 5
- READ AND SAVE THESE INSTRUCTIONS - DO NOT DISCARD ... 6

Overview ... 14
- System Diagram ... 14
- Types of Installations ... 15
- Moving and Storing the Charging Station ... 16
- What's in the Box ... 17
- Physical Features ... 18
- Related Products ... 19
- Required Installer Commissioning App ... 19
- Required Homeowner App ... 19
- Cybersecurity Guidelines ... 20

Pre-Installation ... 23
- Planning the Installation ... 23
- Required Tools and Materials ... 23
- Choosing a Location ... 25
- Communication Requirements ... 26
- Operating Temperature ... 26
- Installation Height ... 27
- Clearance Requirements ... 27
- Using Lever Push-In Terminals ... 28

Installation ... 31
- Removing the Charging Station Cover ... 31
- Selecting the Conduit Entry ... 32
- Preparing Conduit Holes ... 33
- Installing the Mounting Bracket and Charging Station ... 34
- Mounting the Bracket and Charging Station ... 35

Wiring the Charging Station 39
Guidelines for Routing Cables 39
Lock-Out and Tag-Out (LOTO) 40
Wiring Compartment Overview 41
AC Cables 42
Ground Cables 42
Installing the Charging Cable 45
Reinstalling the Charging Station Cover 49
Load Management with SmartAmp 51
Planning the CT Installation 53
SmartAmp Installation Order 54
CT Installation Locations for SmartAmp 55
Connecting Current Transformers to the Charging Station 56
Installing Current Transformers in the Service Panel 58
Apply SmartAmp PCS Label to Service Panel 62
Commissioning Checklist 64
Commissioning 65
Commissioning with eSetup™ 65
Connecting to the Wi-Fi Access Point 65
Selecting the Breaker Size in eSetup 67
Configuring SmartAmp in eSetup 68
Troubleshooting in eSetup 69
Charging Station Operation 71
Powering on the Charging Station 71
Modes of Operation 71
LED Display 72
Starting a Charge 73
Storing the Charging Cable 74
General Troubleshooting Checklist 76
Getting Support 76
Maintenance 78
Routine Maintenance 78
Decommissioning 79
Recycling and Disposal 79
Specifications 81
Free and Open Source Software (FOSS) Declaration 83
Radio Frequency Interference Notices 90
Industry Canada (IC) Notices 92

Figures

Figure 1 Example system diagram 14
Figure 2 Split-phase 120 V/240 V installations using 240 V (L-L) 15
Figure 3 Three-Phase WYE installations using any L-L 15
Figure 4 Three-Phase 240 V high-leg delta installation 16
Figure 5 Package contents 17
Figure 6 Physical features 18
Figure 7 Recommended installation height 27
Figure 8 Clearances 27
Figure 9 Lifting the terminal lever 28
Figure 10 Opening the lever using a screwdriver 28
Figure 11 Inserting the wire 29
Figure 12 Removing the cover 31
Figure 13 Conduit entry locations and sizes 32
Figure 14 Positioning the hole saw 33
Figure 15 Marking the mounting surface 35
Figure 16 Drilling pilot holes 35
Figure 17 Installing bracket on wall 36
Figure 18 Positioning the charging station on the mounting bracket 36
Figure 19 Fastening mounting bracket to enclosure 37
Figure 20 Installing the screws at the top of the enclosure 37
Figure 21 Wiring compartment detail 41
Figure 22 Wire strip length 43
Figure 23 Ground wire terminal 44
Figure 24 AC wiring terminals 44
Figure 25 Loosening the clamp screws 45
Figure 26 O-ring position 45
Figure 27 Inserting the gland on charging cable 45
Figure 28 Lock nut position 46
Figure 29 Inserting the charging cable 46
Figure 30 Tightening the lock nut on the cable gland 46
Figure 31 Tightening the clamp screws 47
Figure 32 Control pilot terminal 47
Figure 33 Hand tightening the external lock nut 48
Figure 34 Reinstalling the front cover 49
Figure 35 Example system diagram with current transformers installed in main service panel 52
Figure 36 Main service panel installation 55

Figure 37 Subpanel installation 55
Figure 38 Location of CT terminals in charging station 56
Figure 39 CT wire strip length 57
Figure 40 Installing wires on CT terminals 57
Figure 41 CT location in service panel 59
Figure 42 Correct CT orientation 59
Figure 43 Opening the CT clamp 60
Figure 44 Connecting the CTs to the corresponding main in the service panel 60
Figure 45 Correct CT orientation 61
Figure 46 Applying the SmartAmp label 62
Figure 47 Connecting to the Wi-Fi access point during commissioning 65
Figure 48 Location of QR code 66
Figure 49 LED location 72
Figure 50 Charging cable storage 74

Tables

Table 1 Related products 19
Table 2 Installation height guide 27
Table 3 Mounting surfaces 34
Table 4 AC cable specifications 42
Table 5 Ground cable specifications 42
Table 6 SmartAmp installation requirements 53
Table 7 Breaker size for current limit 67
Table 8 Charging station status 71
Table 9 LED status 72
Table 10 Routine maintenance 78

1 Introduction

What's in This Chapter?

Overview 14
System Diagram 14
Types of Installations 15
Moving and Storing the Charging Station 16
What's in the Box 17
Physical Features 18
Related Products 19
Required Installer Commissioning App 19
Required Homeowner App 19
Cybersecurity Guidelines 20

Overview

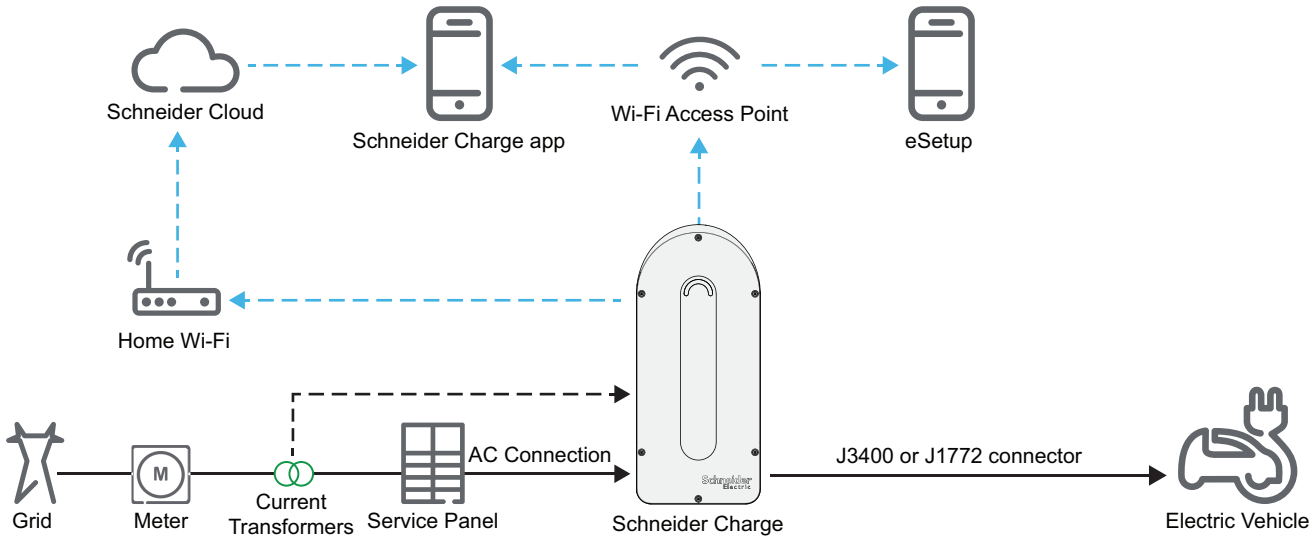
Schneider Charge is a Level 2 AC electric vehicle charging station designed for residential use. This charging station is intended for charging electric vehicles with a J1772 (Type 1) or J3400 (NACS) charging port. The charging station can be installed indoors or outdoors.

SmartAmp is an integrated load management feature that dynamically adjusts the charging amperage based on the total sum of monitored loads in the home. For more information, see "Load Management with SmartAmp" on page 51.

Note: The charging station is designed for operation with a L1-L2 208/240 split phase VAC source.

System Diagram

Figure 1 Example system diagram



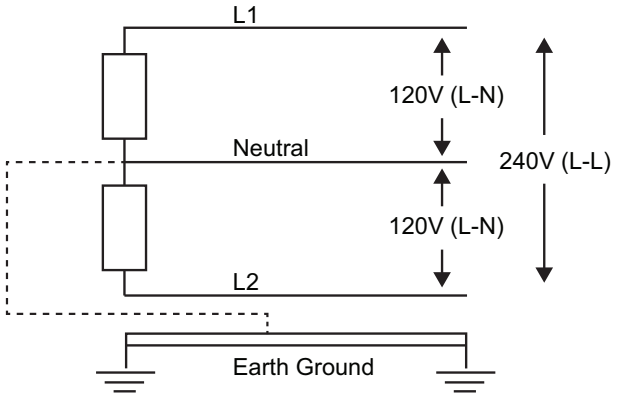
Types of Installations

Split-Phase Installations

Single-phase 120/240 V, also referred to as Split Phase 240, is the most common source of AC power for residential use.

The configuration consists of 2 voltage legs that are 180 degrees apart. The voltage between the 2 legs (called phase-to-phase or line-to-line) is 240 V, and the phase-to-neutral voltage is 120 V. The phase-to-phase voltage is referred to as 120/240 single phase.

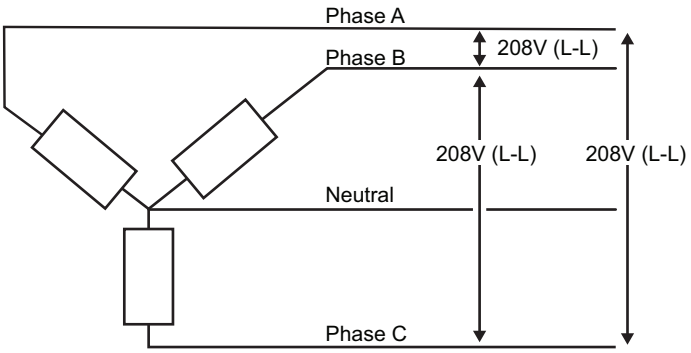
Figure 2 Split-phase 120 V/240 V installations using 240 V (L-L)



Three-Phase 208 V WYE Configuration

In this configuration, the line to line (L-L) voltage is 208 VAC and the line to neutral (L-N) voltage is 120 VAC. This may also be designated as 120/208 VAC, 120/208 WYE, 208/120 WYE, 4-wire WYE or 120/208 Y.

Figure 3 Three-Phase WYE installations using any L-L



Three-Phase 240 V High-Leg Delta Configuration

⚠ WARNING

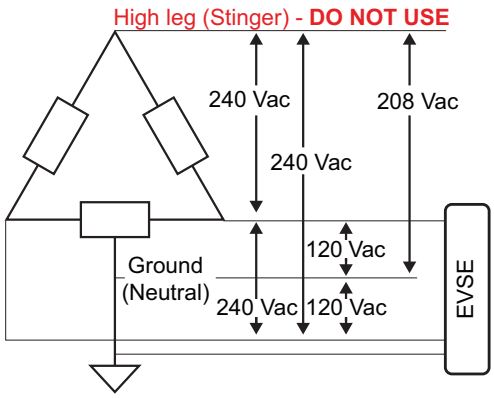
HAZARD OF ELECTRIC SHOCK, ARC FLASH, AND FIRE

If using the three-phase 240 V high-leg delta configuration, do not use the high leg. Ensure that 120 V is measured from L1/L2 to Ground.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

The three-phase delta configuration is supported only with a grounded center-tapped leg, and only using the legs on each side of the center tap.

Figure 4 Three-Phase 240 V high-leg delta installation



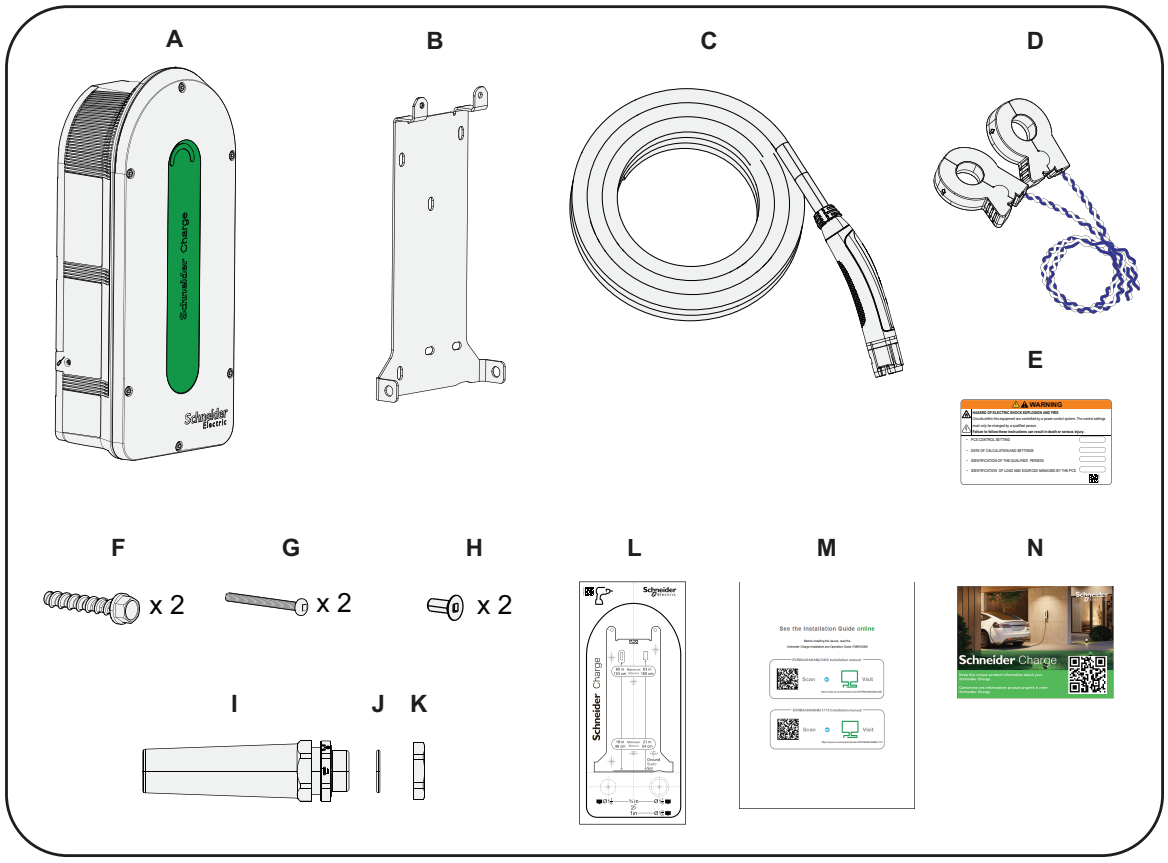
Moving and Storing the Charging Station

- Store the charging station in a dry environment, at a temperature between -58°F to 158°F (-50°C to +70°C).
- Store the charging station with the front cover face-up on the storage surface.
- When moving the charging station, hold the sides of the enclosure. Do not lift or carry the charging station by the charging cable or AC cables.
- Check the charging station for damage after transportation.

What's in the Box

IMPORTANT: Inspect the package for damage. If damage is found, contact Schneider Electric customer service.

Figure 5 Package contents

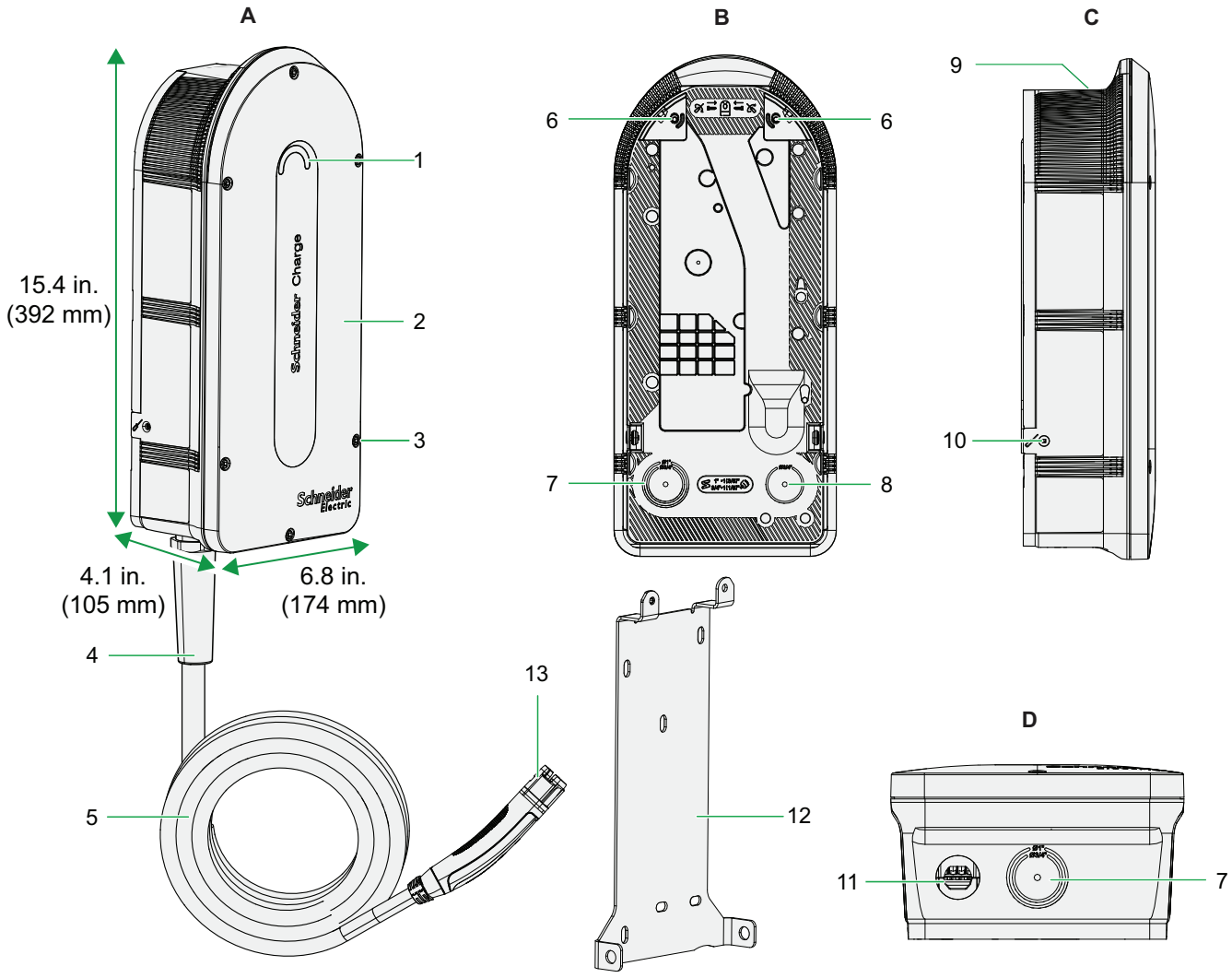


A	Schneider Charge
B	Mounting bracket
C	Charging cable with J1772 (Type 1) or J3400 (NACS) connector
D	Current transformers (JPT45792A) (x2)
E	SmartAmp PCS label
F	#10 1-1/2 in. flanged hex head stainless steel wood screw for attaching mounting bracket to wall (x2)
G	M4 x 45 pan head square drive screw for attaching charging station to bracket (x2)
H	M4 x 10 flat head square drive screw for attaching charging station to bracket (x2)
I	Cable gland
J	O-ring for cable gland
K	Lock nut for cable gland
L	Drilling template
M	Safety Guide
N	Homeowner information postcard

Physical Features

For interior features, see "Wiring Compartment Overview" on page 41.

Figure 6 Physical features



A	Front view	**C**	Side view
B	Back view	**D**	Bottom view
1	Main LED display	8	3/4 in. (19 mm) conduit entry location
2	Enclosure cover	9	Trough for winding charging cable
3	Cover fasteners (x6)	10	Side screw hole for fastening enclosure to bracket (x2)
4	Flexible strain-relief cable gland	11	Charging cable gland hole (14 - 18 mm diameter)
5	Charging cable	12	Mounting bracket
6	Rear screw hole for fastening enclosure to bracket (x2)	13	Charging connector (J1772 (Type 1) or J3400 (NACS))
7	3/4 in. (19 mm) or 1 in. (25 mm) conduit entry location		

Related Products

Table 1 Related products

Product	SKU
Schneider Charge with J3400 (NACS) connector	EVRBA48ANAMJ3400
Schneider Charge with J1772 (Type 1) connector	EVRBA48ANAMJ1772

Required Installer Commissioning App

eSetup™

eSetup is a mobile app that allows qualified installers to configure the charging station for first-time setup and commissioning. Ensure you have the latest version downloaded to your device.

For more information or to download **eSetup™** click below or go to:

https://www.se.com/ww/en/work/solutions/software/applications/esetup-for-electricians.jsp



Required Homeowner App

Schneider Charge App

The Schneider Charge app is a mobile app that allows homeowners to monitor and control the charging station, view charging history, schedule charging sessions, configure notifications, and more.

Help the homeowner download and set up the Schneider Charge app.

To download the Schneider Charge app, search "Schneider Charge" on the app store.



Cybersecurity Guidelines

This section includes information on how to help secure your system.

⚠ WARNING

POTENTIAL COMPROMISE OF SYSTEM AVAILABILITY, INTEGRITY, AND CONFIDENTIALITY

Follow the cybersecurity best practices in this document to help prevent unauthorized access to the system software.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

To find out about the latest cybersecurity news, sign up for security notifications, or to report a vulnerability, visit the Schneider Electric Cybersecurity Support Portal.

Recommended Actions

Note: The list of recommended actions below is not a complete list of possible cybersecurity measures. It is meant to be a starting point to improve the security of your system.

Upgrades

- Always use the latest firmware for your Schneider Electric devices in order to get new features, cybersecurity fixes, and improvements.

  IMPORTANT: Always keep the system connected to the internet to allow updates.

- Keep your devices and apps up to date.

Passwords

- Passwords should include upper case, lower case, number, and special characters
- The password must have 8 characters minimum
- The password should not be easily found in the dictionary and a phrase is preferred.
- Passwords should be changed frequently, at least once a year
- A default password must be changed immediately when first received
- Never reuse passwords
- Never share passwords with unauthorized personnel

Network

- Schneider Electric devices should only be used in your personal home network
- Schneider Electric devices should not have a publicly accessible IP address
- Do NOT use port forwarding to access a Schneider Electric device from the public internet
- Schneider Electric devices should be on their own network segment. If your router supports a guest network or VLAN, it is preferable to locate the devices there
- Use the strongest Wi-Fi encryption available
- Use HTTPs in local network
- Use only a 2.4 GHz network

Physical Site Security

To help prevent physical attacks:

- Install the system on private property, away from public passageways.
- Properly reinstall and close all covers.
- Route all cables through conduits.

Decommissioning

Before a device is permanently removed from the home network, ask the homeowner to remove the charging station from the Schneider Charge (homeowner) app to erase all data.

2 Pre-Installation

What's in This Chapter?

Pre-Installation 23
Planning the Installation 23
Required Tools and Materials 23
Choosing a Location 25
Communication Requirements 26
Operating Temperature 26
Installation Height 27
Clearance Requirements 27
Using Lever Push-In Terminals 28

Pre-Installation

Before installing the charging station, read all instructions and cautionary markings in this manual.

Note: Obtain all necessary permits prior to starting installation. Installations must meet all local codes and standards. Installation of equipment should only be performed by qualified personnel.

Planning the Installation

- Read this entire chapter before beginning the installation. It is important to plan the installation from beginning to end.
- Download eSetup and create your account. See "Required Installer Commissioning App" on page 19.
- Determine the intended output power setting for the unit.
- If enabling SmartAmp, determine the location and power rating of the home's service panel(s).
- Assemble all tools and materials needed for the installation.

Required Tools and Materials

The following materials and tools are not supplied but are required for installation.

Required for LOTO

- Appropriate PPE (e.g. safety glasses, cut-resistant gloves, protective footwear, etc.)
- Lock-out/Tag-out (LOTO) kit
- Calibrated professional digital multimeter (600 V, Cat III or higher)

Required Tools and Materials

- Stud finder
- Bubble/spirit level
- Screwdriver or bit: #2 square drive bit
- Screwdriver or bit: 1/4 in. hex socket bit
- Power drill and/or impact driver
- Hole saw or step drill bit (for bottom and rear conduit entries)
- Wire stripper for #18-4 AWG stranded wire
- Open-ended adjustable torque wrench
- Cable conduits and fittings (3/4 in. or 1 in.) per NEC requirements
- Electric vehicle or UL/CSA-certified EVSE tester (optional)

- iOS or Android device (phone or tablet), running the latest operating system and with internet connection

Required Cables

Note: For AC cable specifications, see "AC Cables" on page 42

- AC power cables (#10-4 AWG, THWN-2 rated copper (CU) wire, rated for 194°F / 90°C)
- Ground cable (#14 - 10 AWG)

Required for Mounting to Wood Stud

- Appropriate drill bit and impact driver

Required for Mounting to Concrete or Brick Walls

- Appropriate 1/4 in. x 1-3/4 in. concrete screws (2 or 4)
- Appropriate masonry anchors
- Appropriate drill bit and impact driver

Required Tools and Materials for Installing the Current Transformers

- To extend the CT leads if longer cables are necessary, use only twisted flexible #18 AWG, 221°F (105°C) PVC insulated extruded wire with insulated splice for crimping, rated for a minimum of 600 V (UL 1015). The maximum is 150 ft (45 m).
- Wire stripper for #18 AWG stranded wire
- Conduit fitting
- iOS or Android device (phone or tablet) with internet connection
- eSetup app

Choosing a Location

⚠ ⚠ WARNING

HAZARD OF ELECTRIC SHOCK AND FIRE

- Always install the charging station in a location that minimizes the risk of water entry. Do not install the charging station in a location that is prone to flooding, or near water sprinklers or high pressure water jets.
- Do not install the charging station near readily flammable materials such as cloth, paper, straw, or plastic sheeting. Keep flammable materials a minimum distance of 24 in. (600 mm) from the top surface and 12 in. (300 mm) from either side surface and the front of the charging station.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

NOTICE

RISK OF EQUIPMENT DAMAGE

- Do not install the charging station in a location where the charging station will operate outside of the specified operating temperature range of -22°F to 122°F (-30°C to 50°C).
- Do not install the charging station near heat sources such as steam exhausts from boilers and dryers, or engine compartments.
- Avoid installing the charging station in a dusty environment.
- Do not expose this unit to excessive shock or vibration.
- Do not expose this unit to fumes or chemical vapors, including but not limited to those containing ammonia.

Failure to follow these instructions can result in equipment damage.

The charging station is rated for indoor and outdoor use. Follow all local codes and standards.

When choosing a location, consider the following:

- Where the EV will be parked, and the location of the charging port on the vehicle
- The length of the charging cable (25 ft / 7.5 m)
- If there is sufficient space around the charging station to wind the charging cable
- If multiple EVs need to access the charging station
- If the homeowner may install additional charging stations in the future
- The location of the service panel or electrical source
- If there is sufficient Wi-Fi signal strength.
- If there is any equipment susceptible to radio frequency and electromagnetic interference, install the charging station as far away from it as possible.

Mounting Considerations

When choosing a mounting location, consider the following:

- The mounting surface must hold the weight of the charging station and charging cable, and all other equipment mounted on the same surface.
- The mounting bracket must be installed on a flat surface to ensure proper alignment and fastening.
- The charging station must be mounted within the recommended height range.

Communication Requirements

The Schneider Charge requires an internet connection for configuration and monitoring in the Schneider Charge app. Wi-Fi is supported.

Wi-Fi

Use only a 2.4 GHz network.

Wi-Fi signal strength will depend on many factors, such as home construction, distance from the Wi-Fi router, and obstructions.

To help improve Wi-Fi signal for the charging station, consider the following recommendations:

- Where possible, reduce sources of interference, such as nearby microwaves or Bluetooth devices
- Use Wi-Fi extenders
- Reposition the router closer to the charging station
- Install the charging station closer to the signal source

Operating Temperature

The charging station actively monitors the temperature while charging to help ensure the stability of the charging session. For optimal performance, install the charging station where ambient temperatures remain between -22°F to 122°F (-30°C to 50°C).

To help prevent damage from overheating, the charging station may reduce the output current when the ambient temperature is above 95°F (35°C). Above 122°F (50°C), the charging station may stop charging and display a blinking red LED. The adjustments to amperage are automatic. The charging station returns to the set output current when the temperature is lowered.

Installation Height

Note: Follow all local codes and regulations for installation height.

The recommended installation height is 51 in. (130 cm) to the bottom of the mounting bracket. When installed, the bottom of the charging station is approximately 3 in. (7.6 cm) lower than the bottom of the mounting bracket.

Figure 7 Recommended installation height

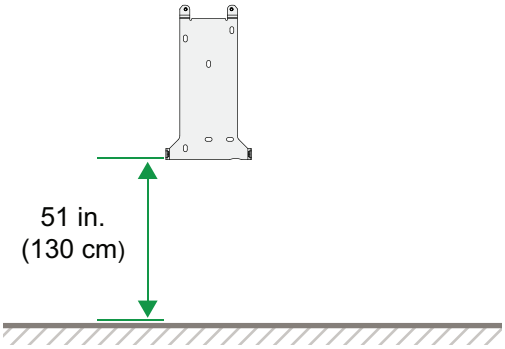


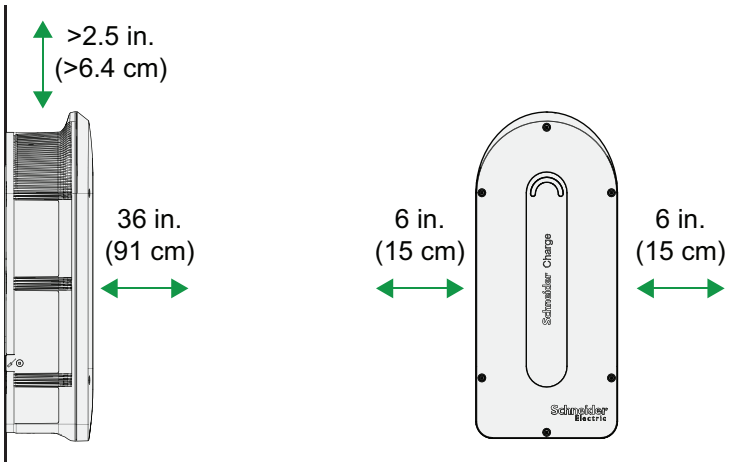
Table 2 Installation height guide

Item	Indoor Minimum Height from Ground	Outdoor Minimum Height from Ground	Recommended Height from Ground	Maximum Height from Ground
Mounting bracket	21 in. (54 cm)	27 in. (69 cm)	51 in. (130 cm)	63 in. (160 cm)
Charging Station	18 in. (46 cm)	24 in. (60 cm)	48 in. (123 cm)	60 in. (153 cm)

Clearance Requirements

The charging station must be installed with enough clearance so that all labels on the product are visible and so that the charging cable can be wound around the charging station.

Figure 8 Clearances



Using Lever Push-In Terminals

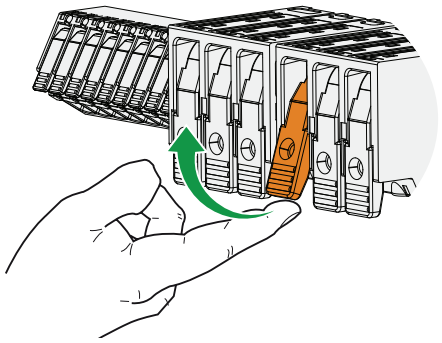
Note:

- The terminals needed for the installation are shipped in the open (lifted) position. Use the following procedure if you need to open the terminals after the initial installation.
- Only open one terminal at a time.

To open the terminals and install wiring:

1. Verify that all power sources are turned off. See "Lock-Out and Tag-Out (LOTO)" on page 40.
2. Use your finger to lift the lever until it clicks open.

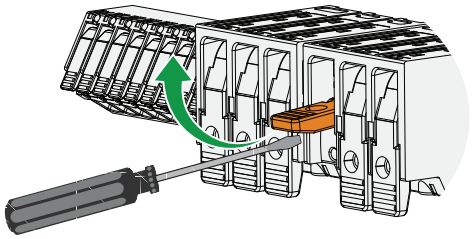
Figure 9 Lifting the terminal lever



3. Insert a flat screwdriver into the gap under the lever and pull up to open the latch.

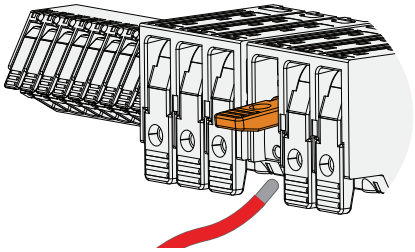
Note: The terminals are mounted on a printed circuit board (PCB). When lifting the latches, a popping sound may occur. This is normal and does not indicate a problem with the PCB or connector. If the PCB lifts out of its snap position, gently push the PCB until it snaps back into place.

Figure 10 Opening the lever using a screwdriver



4. At the bottom of the terminal, insert the wire until it reaches the back of the terminal.

Figure 11 Inserting the wire



5. Press the lever down. A snapping sound indicates the clamp is fully closed.
6. Perform a push-pull test on all wires to confirm that they are not loose.

3 Installation

What's in This Chapter?

Installation 31
Removing the Charging Station Cover 31
Selecting the Conduit Entry 32
Preparing Conduit Holes 33
Installing the Mounting Bracket and Charging Station 34
Mounting the Bracket and Charging Station 35

Installation

Follow the procedure below to install the charging station.

Removing the Charging Station Cover

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, ARC FLASH, AND FIRE

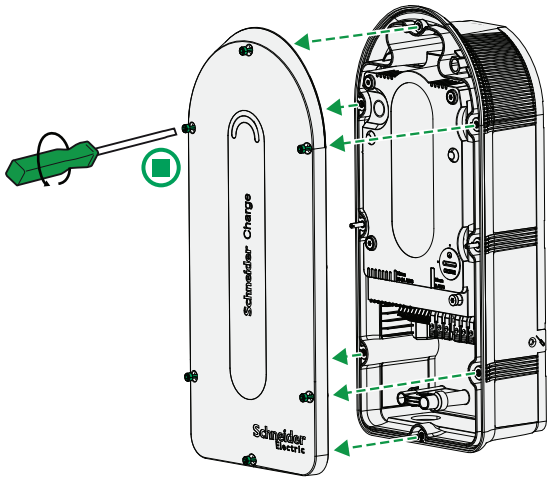
- This equipment must only be installed and serviced by qualified electrical personnel.
- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E or CSA Z462.
- Turn off all power supplying this equipment before working on or inside equipment. Before removing the cover, de-energize, lock out and tag out, and wait five minutes for circuits to discharge.
- This single source Power Control System (PCS) includes Distributed Energy Resource (DER) sources not controlled by the PCS. DER sources shall be sized in accordance with 705.12 of NFPA 70 or Canadian Electrical Code C22.1.

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

To remove the cover:

1. Verify that all power sources are turned off. See "Lock-Out and Tag-Out (LOTO)" on page 40.
2. Using a #2 square bit, loosen the six captive screws that fix the cover to the charging station enclosure.
3. Pull the cover off the charging station and set aside face-up for later reinstallation.

Figure 12 Removing the cover

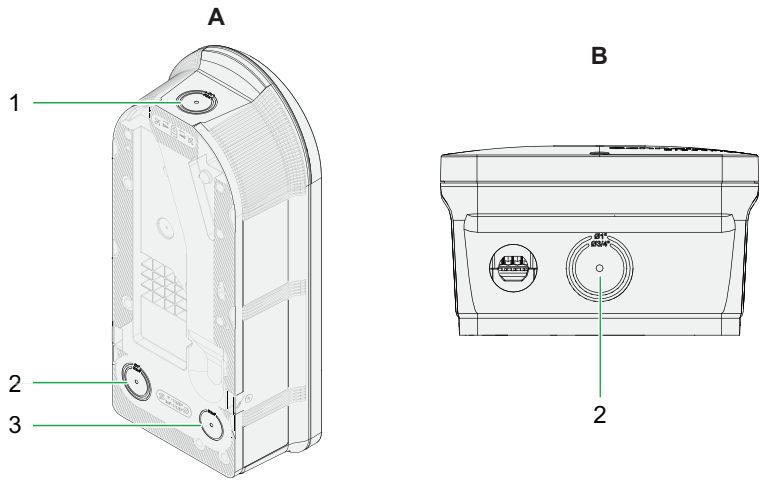


Selecting the Conduit Entry

To route AC, ground, and current transformer (CT) wires, select the conduit entries that are most appropriate for your installation. Refer to " Conduit entry locations and sizes" below for conduit sizes.

Note: CT wires can be routed through the same conduit entry as power wires, or through a different conduit entry. See "Planning the CT Installation" on page 53.

Figure 13 Conduit entry locations and sizes



A	Rear view
B	Bottom view
1	3/4 in. or 1 in. (19 mm or 25 mm) conduit entry (if available on your unit)
2	3/4 in. or 1 in. (19 mm or 25 mm) conduit entry
3	3/4 in. (19 mm) conduit entry

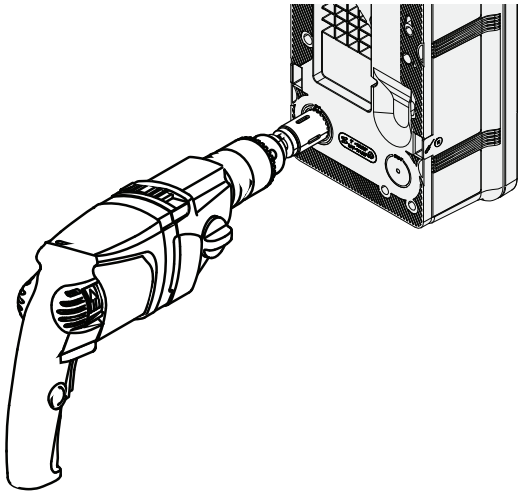
Preparing Conduit Holes

NOTICE
RISK OF EQUIPMENT DAMAGE ■ Use only the marked conduit entry points for conduit holes. ■ Do not drill, cut, or punch holes in locations other than the marked conduit entry points. ■ If using the top conduit entry (if available on your unit), drill a pilot hole at the dimpled drill guide. A hole saw is recommended. ■ Conduit fittings must be watertight and rated IP66/Type 4 or better. **Failure to follow these instructions can result in equipment damage.**

To prepare conduit holes:

1. Remove the charging station cover. See "Removing the Charging Station Cover" on page 31.
2. Select the appropriate drill bit size, and then drill a hole at the indented drill guide on the charging station enclosure. Use a hole saw or step bit.

   Figure 14 Positioning the hole saw

3. Drill the hole and clean all debris off of the charging station. Use a vacuum to clean inside the charging station, if needed.
4. Install appropriately-sized conduit fittings into the conduit hole. For outdoor installations, conduit fittings must be watertight and rated IP66/Type 4 or better.

Installing the Mounting Bracket and Charging Station

Before starting installation, see "Choosing a Location" on page 25.

⚠ CAUTION

RISK OF PERSONAL INJURY OR EQUIPMENT DAMAGE

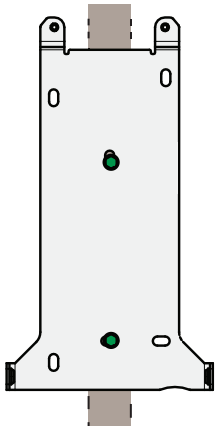
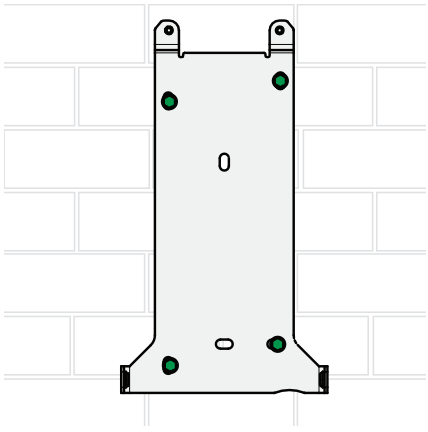
- For structural and seismic stability, the charging station must be mounted onto a vertical supporting surface strong enough to support the charging station and all other equipment that is installed on the same surface.
- Use mounting hardware that is appropriate for the mounting surface and weight of the charging station.

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

Mounting Surfaces

Note: To help ensure bracket stability and even weight distribution, avoid using only the two left or two right screw holes on the mounting bracket, unless no other installation option is possible.

Table 3 Mounting surfaces

Wood or Metal Studs	
Wood studs: Using the two center screw holes, install the two provided #10 1-1/2 in. flanged hex head stainless steel wood screws. Drill a pilot hole that is 1/8 in. (hardwood stud) or 7/64 in. (softwood stud) by 1.5 in. (38 mm) deep. The screw must embed securely in the stud. **Metal studs**: Studs must be minimum 18 gauge. Use appropriate metal stud mounting hardware (not provided) for your specific installation, in compliance with your local codes.	
Concrete or Brick	
Minimum strength must be 2500 PSI (concrete) or 1500 PSI (brick/masonry). Using either the two center or four outer screw holes, install two or four hex head screws (1/4 in. x 1-3/4 in., not provided) and appropriate masonry anchors. The fasteners must be long enough so that at least 1.5 in. (38 mm) can be embedded in the concrete or brick. All fasteners must be at least 1.5 in. (38 mm) away from the edges of masonry blocks or bricks.	

Mounting the Bracket and Charging Station

⚠ ⚠ WARNING

HAZARD OF ELECTRIC SHOCK AND EQUIPMENT DAMAGE

Do not drop the charging station. Damage to this equipment may cause water ingress. If the charging station is dropped, do not install it. Return the unit to Schneider Electric for inspection.

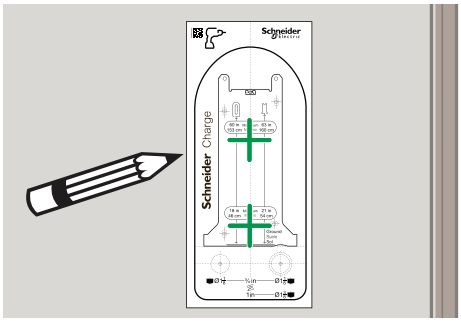
Failure to follow these instructions can result in death, serious injury, or equipment damage.

Note: Before mounting, select the appropriate conduit entry for your installation, and install a conduit fitting. For more information, see "Selecting the Conduit Entry" on page 32.

To mount the bracket and charging station:

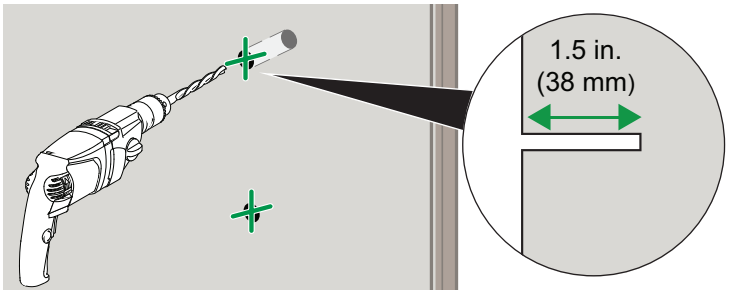
1. Using the provided drilling template, mark the mounting surface for at least two screw holes, ensuring that it is level. For installation height and clearances, see "Installation Height" on page 27.

   Figure 15 Marking the mounting surface

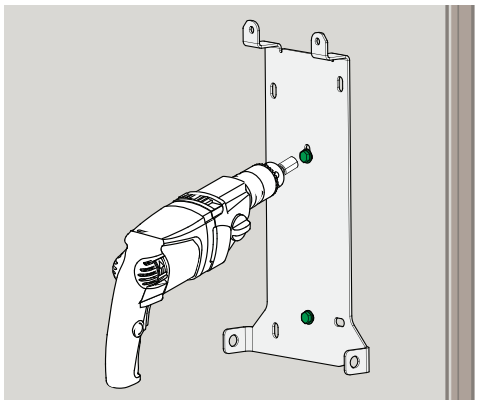
2. Using the markings from step 1, drill a 1.5 in. (38 mm) pilot hole for each fastener. Clear debris from the holes.

   Figure 16 Drilling pilot holes

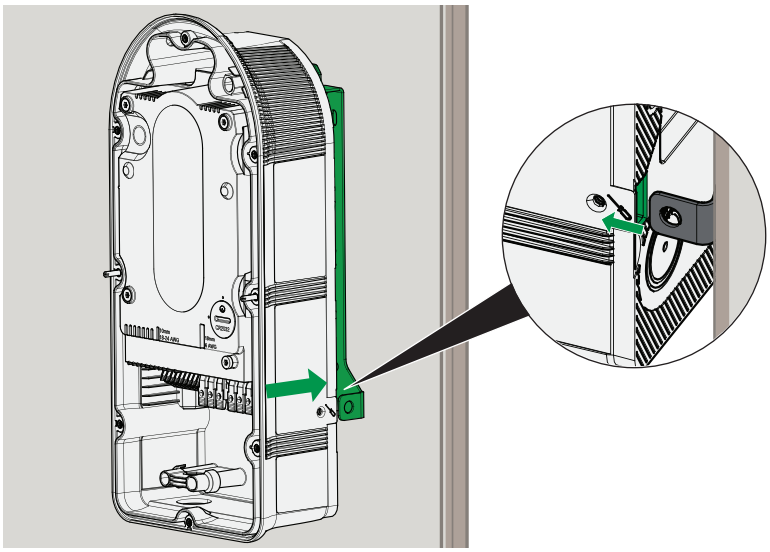
3. Using a 1/4 in. hex socket bit, install the wall mounting bracket onto the mounting surface using the two provided #10 1-1/2 in. flanged hex head stainless steel screws.

Figure 17 Installing bracket on wall



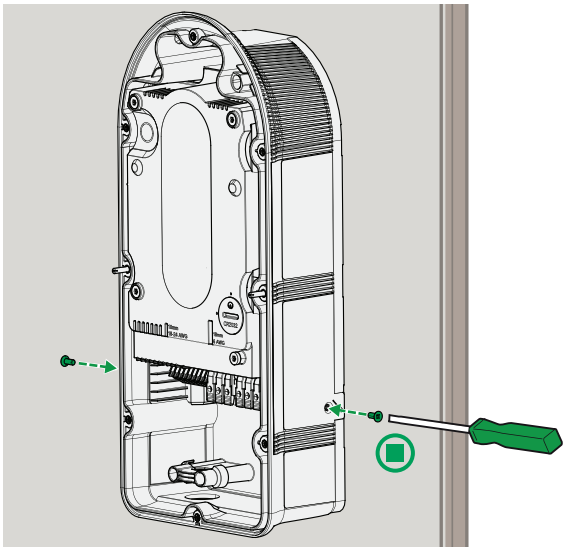
4. Slide the charging station enclosure onto the mounting bracket. The flanges slide into a recess on the back of the charging station.

Figure 18 Positioning the charging station on the mounting bracket



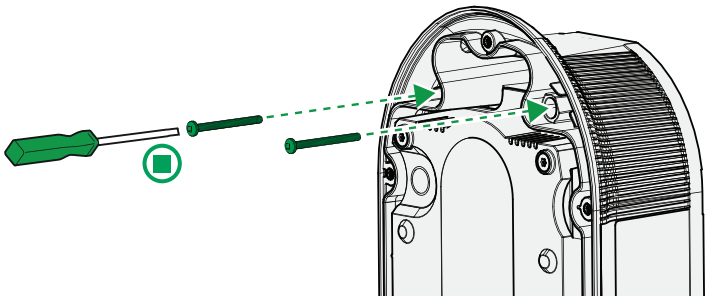
5. Using a #2 square bit, fasten the two screws at the sides of the enclosure. Torque to 25 in-lbs +/- 1 in-lbs (2.8 Nm +/- 0.1 Nm).

Figure 19 Fastening mounting bracket to enclosure



6. Using a #2 square bit, fasten the back of the enclosure to the flanges at the top of the bracket using the two provided M4 x 45 pan head screws. Torque to 25 in-lbs +/- 1 in-lbs (2.8 Nm +/- 0.1 Nm).

Figure 20 Installing the screws at the top of the enclosure



4 Wiring

What's in This Chapter?

Wiring the Charging Station 39
Guidelines for Routing Cables 39
Lock-Out and Tag-Out (LOTO) 40
Wiring Compartment Overview 41
AC Cables 42
Ground Cables 42
Installing the Charging Cable 45
Reinstalling the Charging Station Cover 49

Wiring the Charging Station

⚠⚠ WARNING

HAZARD OF ELECTRIC SHOCK AND FIRE

- Do not use this product if there is any damage to the unit.
- Do not disassemble the charging station except where noted for connecting wiring and cabling.
- Before powering on equipment, verify that all wiring is in good condition and that the wires are not undersized. Do not operate the charging station with damaged or substandard wiring.
- Use only the accessories that are recommended by the manufacturer.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

For a system diagram, see "System Diagram" on page 14.

IMPORTANT:

- Complete "Lock-Out and Tag-Out (LOTO)" on the facing page.
- Follow all local codes and standards.

Guidelines for Routing Cables

Follow these guidelines when routing the cables:

- Use enclosed conduits for routing any cables outside of the enclosure.
- Route the cables away from sharp edges that might damage the insulation. Avoid sharp bends in the cable—no less than a 4 in. (100 mm) radius.
- Allow for some slack in the cable tension.
- Keep the alignment of wire pairs inside the sheath as straight as possible.
- If possible, allow separation between power and CT cables, if using.
- Use appropriate hardware fasteners to avoid damage to the cable.

Lock-Out and Tag-Out (LOTO)

De-energize, lock-out and tag-out the Schneider Charge from all power sources.

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, ARC FLASH, AND FIRE

- This equipment must only be installed and serviced by qualified electrical personnel.
- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E or CSA Z462.
- Turn off all power supplying this equipment before working on or inside equipment. Before removing the cover, de-energize, lock out and tag out, and wait five minutes for circuits to discharge.
- This single source Power Control System (PCS) includes Distributed Energy Resource (DER) sources not controlled by the PCS. DER sources shall be sized in accordance with 705.12 of NFPA 70 or Canadian Electrical Code C22.1.

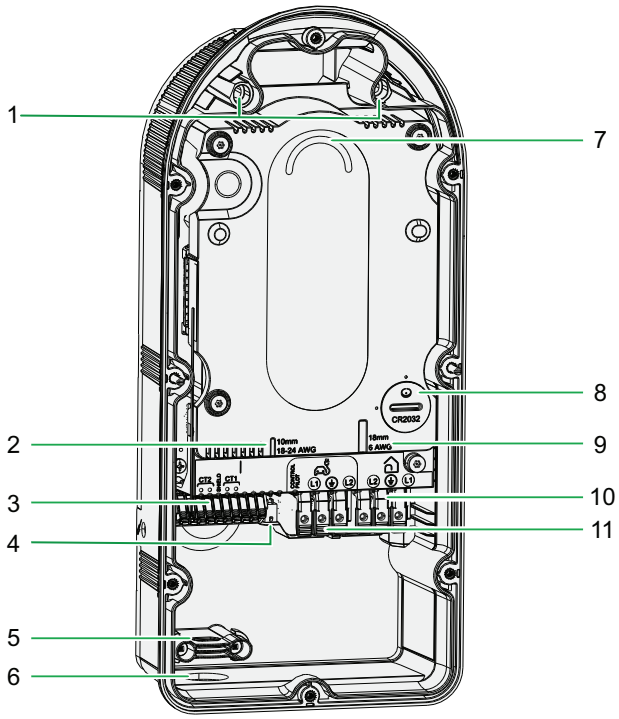
Failure to follow these instructions will result in death or serious injury.

To lock-out and tag-out the Schneider Charge:

1. Identify the circuit breaker connected to the equipment and then turn the breaker to the OFF position. Lock-out and tag-out the breaker.
2. Wait five minutes for circuits to discharge.
3. Use a calibrated, properly rated voltage sensing device to confirm that all circuits are discharged before performing work.

Wiring Compartment Overview

Figure 21 Wiring compartment detail



1	Screw holes to fasten enclosure to mounting bracket	7	Main LED
2	Wire strip length guide for current transformer cables	8	CR2032 battery for internal clock
3	Current transformer terminals (and terminals for future use)	9	Wire strip length guide for charging cable and AC cables
4	Control pilot terminal	10	AC input terminals
5	Cable strain-relief clamp	11	Charging cable terminals
6	Charging cable gland hole		

AC Cables

⚠ ⚠ WARNING

HAZARD OF ELECTRIC SHOCK AND FIRE

- This system is equipped with a power control system (PCS). All PCS controlled busbars or conductors must be protected with suitably rated overcurrent devices appropriately sized for the busbar rating or conductor ampacity. Ensure that the charging station is connected to, and forms a dedicated circuit with, a proper external circuit breaker that meets local electrical requirements.
- Do not share the power source of the charging station with any other appliances.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

Note: A 60 A circuit is recommended. Select the correct wire size for the connected external circuit breaker. See the breaker ratings and manufacturer instructions, and follow all local and national electrical codes.

Table 4 AC cable specifications

Cable Type	Cable Size	Rating	Strip length
AC cables	#10-4 AWG	THWN-2 rated copper (CU) wire, rated for 194°F (90°C)	3/4 in. (18 mm)

Ground Cables

Note: Do not use Ground Fault Circuit Interrupter (GFCI) breakers with this product. This product contains integrated Ground Fault protection between the charging station and EV.

Table 5 Ground cable specifications

Cable Type	Size	Strip length
Ground	#14 - 10 AWG	3/4 in. (18 mm)

Connecting AC and Ground Cables

⚠ ⚠ WARNING

HAZARD OF ELECTRIC SHOCK, EXPLOSION, ARC FLASH, AND FIRE

- Ensure that the power wires connecting the charging station to the circuit panel are routed through an approved conduit or jacket.
- All cable entry points must be sealed. When installed outdoors, all cable entry points must be sealed to meet and maintain the requirements for Type 4 enclosure standards.
- This product must be connected to a grounded, metal, permanent wiring system, or an equipment grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the product. Follow all local and national codes and standards.

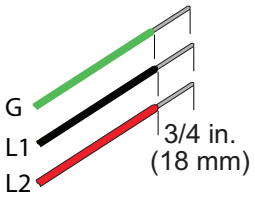
Failure to follow these instructions can result in death, serious injury, or equipment damage.

Route Ground and AC input cables from the service panel or subpanel to the charging station using the conduit entries at the back and bottom of the enclosure. For more information, see "Selecting the Conduit Entry" on page 32.

To connect the AC and Ground cables:

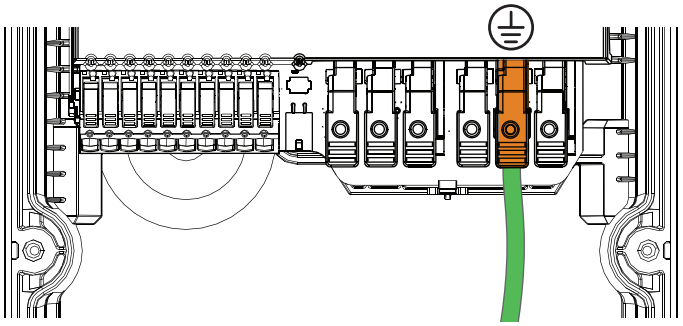
1. Verify that all power sources are turned off. See "Lock-Out and Tag-Out (LOTO)" on page 40.
2. Route the L1, L2 and Ground wires through the conduit fittings that you installed in "Preparing Conduit Holes" on page 33.
3. Strip the wires, exposing approximately 3/4 in. (18 mm) of the conductor.

Figure 22 Wire strip length



4. Connect the ground cable from the service panel to the AC ground terminal.
    a. Insert the wire until it reaches the back of the terminal. Ensure that there is an additional 1-2 in. (25 - 50 mm) of slack in the enclosure.
    b. Press the clamp down. A snapping sound indicates the clamp is fully closed.

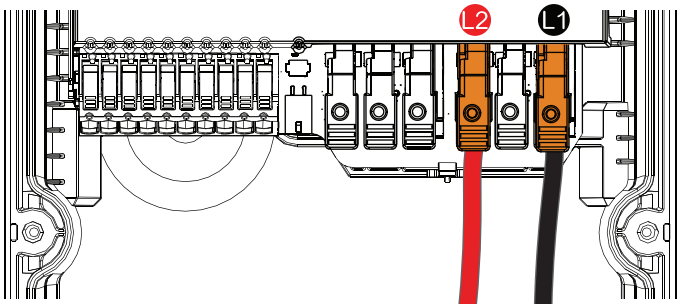
Figure 23 Ground wire terminal



⏚	Ground terminal for AC wiring

5. Using the same conduit as the Ground wire, connect the L1 and L2 wires from the service panel to the AC terminal blocks:
    a. Insert the wire until it reaches the back of the terminal. Ensure that there is an additional 1-2 in. (25 - 50 mm) of slack in the enclosure.
    b. Press the clamp down. A snapping sound indicates the clamp is fully closed.

Figure 24 AC wiring terminals



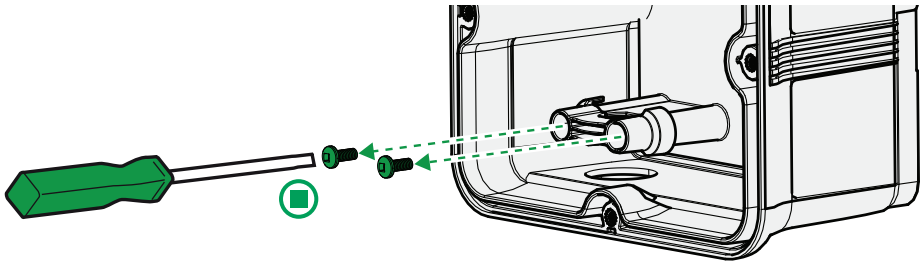
L1	L1 terminal for AC wiring
L2	L2 terminal for AC wiring

6. Perform a push-pull test on all wires to confirm that they are not loose.
7. If installed outdoors, seal the conduit hole by applying water-resistant protection.

Installing the Charging Cable

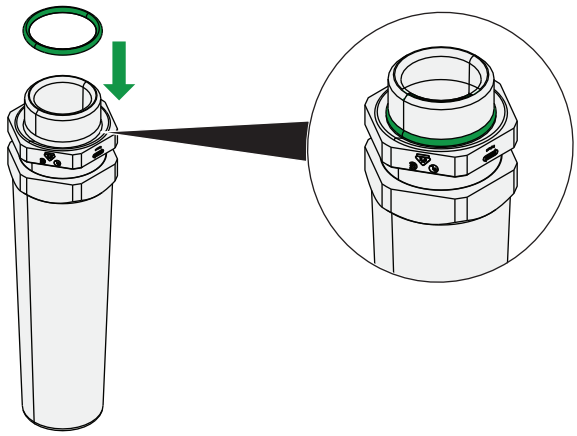
1. Verify that all power sources are turned off. See "Lock-Out and Tag-Out (LOTO)" on page 40.
2. Remove the charging station cover. See "Removing the Charging Station Cover" on page 31.
3. Peel the protective label off the cable gland hole.
4. Using a #2 square bit, loosen the two screws fastening the cable strain-relief clamp. Remove the screws and clamp and set aside for reinstallation.

   Figure 25 Loosening the clamp screws

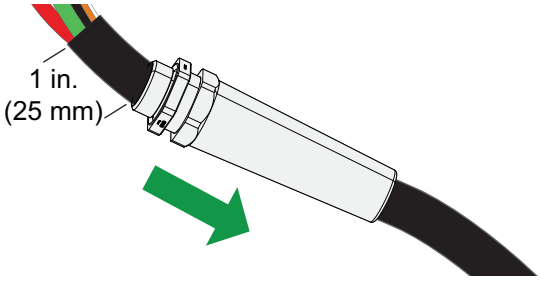
5. Install the provided cable gland on to the charging cable.
   a. Position the provided O-ring on the cable gland.

      Figure 26 O-ring position

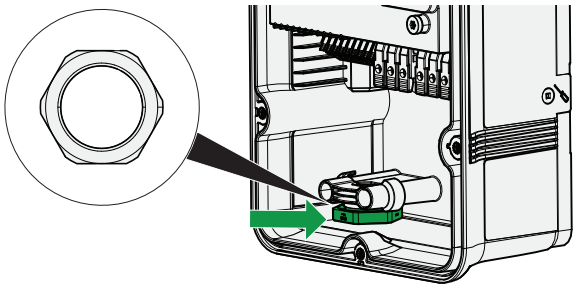
   b. Slide the cable gland onto the charging cable, leaving 1 in. (25 mm) of cable sleeve above the gland.

      Figure 27 Inserting the gland on charging cable

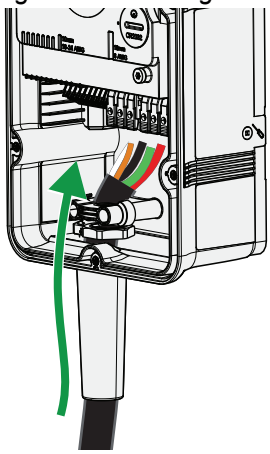
6. Position the lock nut inside the enclosure, between the cable gland hole and the strain-relief clamp.

Figure 28 Lock nut position



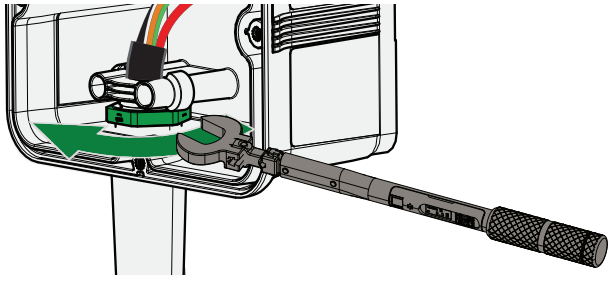
7. Feed the cable through the cable gland hole into the enclosure, passing it through the lock nut and the strain-relief clamp. Ensure that the threads of the cable gland are seated inside the enclosure.

Figure 29 Inserting the charging cable



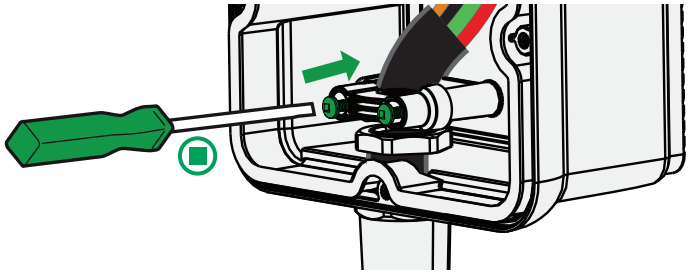
8. Using a 1 5/16 in. (33 mm) adjustable torque wrench, tighten the lock nut on to the cable gland inside the enclosure. Torque to 44 in-lbs +/- 4.5 in-lbs (5 Nm +/- 0.5 Nm).

Figure 30 Tightening the lock nut on the cable gland



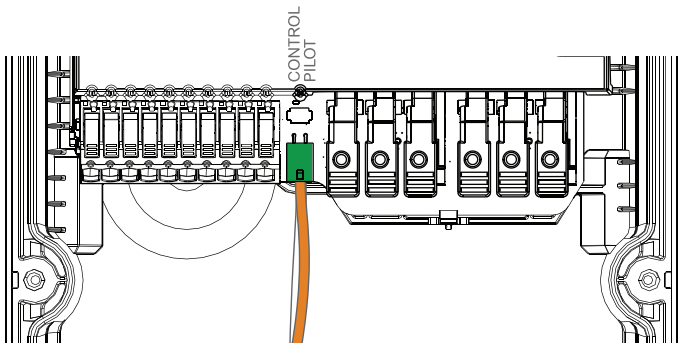
9. Push the charging cable into the enclosure to ensure there is an additional 1-2 in. (20-50 mm) of slack in the wires, then tighten the strain relief screws using a #2 square drive bit.

Figure 31 Tightening the clamp screws

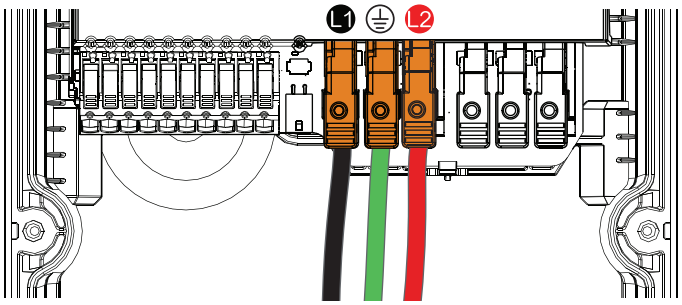


10. Connect the control pilot connector to the Control Pilot terminal.

Figure 32 Control pilot terminal



11. Connect the L1, L2, and Ground wires to the terminal block.
    a. Insert the wire until it reaches the back of the terminal. Ensure that there is an additional 1-2 in. (25 - 50 mm) of slack in the enclosure.
    b. Press the clamp down. A snapping sound indicates the clamp is fully closed.

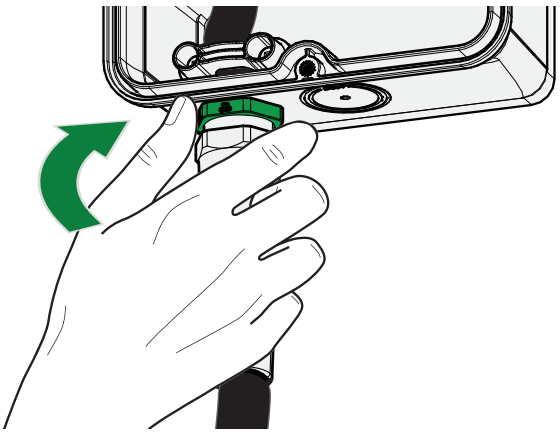


L1	L1 terminal for charging cable wiring
⏚	Ground terminal for charging cable wiring
L2	L2 terminal for charging cable wiring

12. Perform a push-pull test on all wires to confirm that they are not loose.

13. If necessary, hand-tighten the external lock nut on the cable gland.

Figure 33 Hand tightening the external lock nut



Reinstalling the Charging Station Cover

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, ARC FLASH, AND FIRE

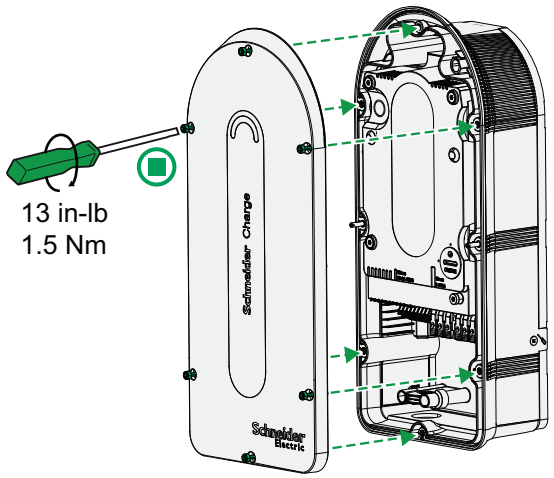
Thoroughly inspect the charging station prior to energizing. Verify that no tools or materials have inadvertently been left inside the charging station. Inspect the cover gasket for debris or damage before installing the cover.

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

To reinstall the cover:

1. Using a soft microfiber cloth, remove debris from the enclosure edge and gasket, and clean the face of the cover. Ensure there is no debris inside the unit, and clean if necessary.
2. Fit the cover over the front of the charging station enclosure.
3. Using a #2 square bit, attach the cover using the six captive screws. Torque to 13 in-lb +/- 1 in-lb (1.5 Nm +/- 0.1 Nm).

Figure 34 Reinstalling the front cover



5 Load Management with SmartAmp

What's in This Chapter?

Load Management with SmartAmp 51
Planning the CT Installation 53
SmartAmp Installation Order 54
CT Installation Locations for SmartAmp 55
Connecting Current Transformers to the Charging Station 56
Installing Current Transformers in the Service Panel 58
Apply SmartAmp PCS Label to Service Panel 62

Load Management with SmartAmp

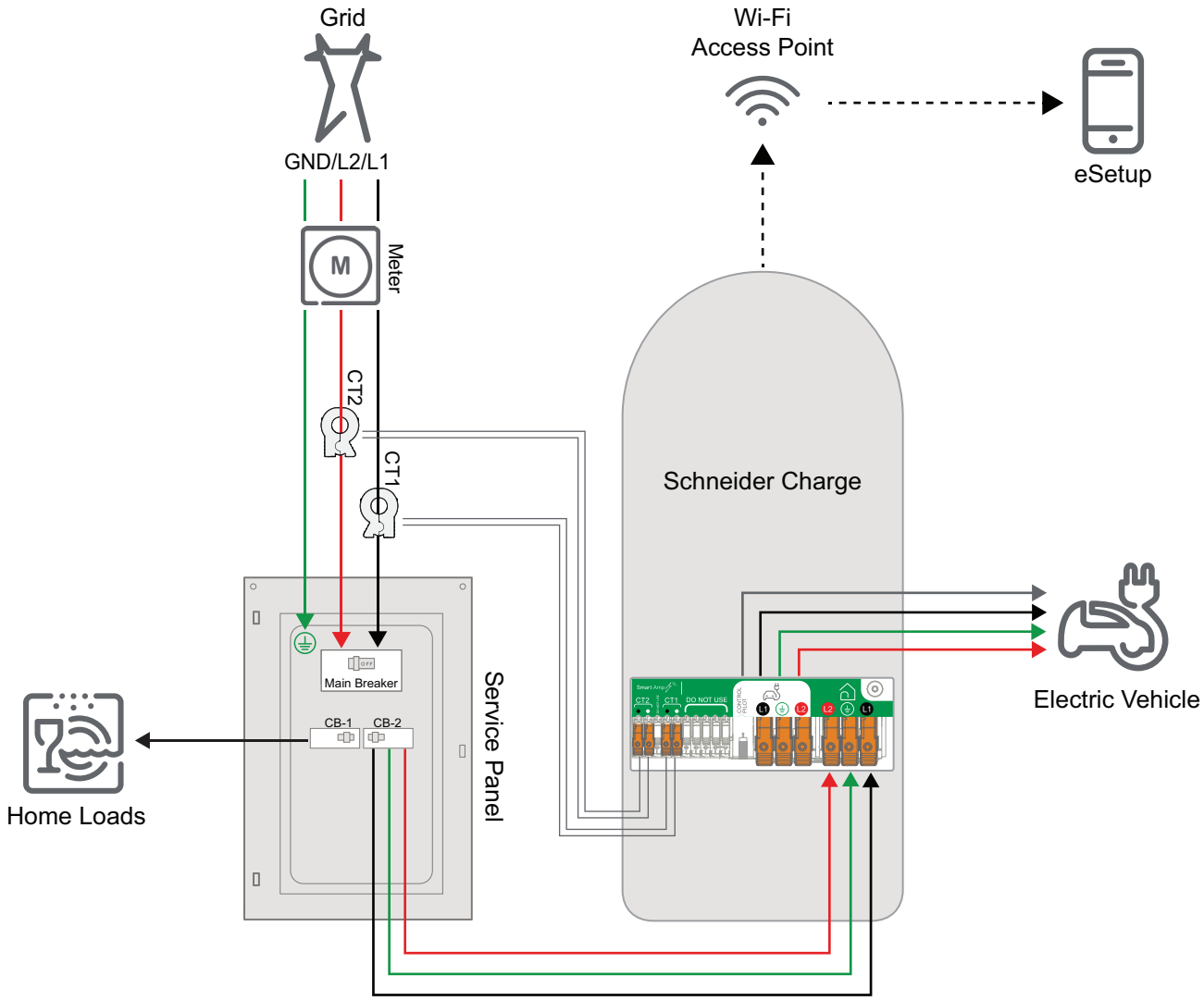
The Schneider Charge has a built-in load management feature, SmartAmp, to help manage the charging station's energy consumption when other high-power loads are active in the home. To limit the chance of an overload at the service panel, the charging station automatically reduces the charging amperage based on the total sum of monitored loads in the home.

To enable SmartAmp functionality, install two current transformers (CTs) at the home's service panel or subpanel (see Figure 35), and configure SmartAmp in eSetup. The CTs can be installed at the same time as the charging station, or after the charging station has been installed and commissioned.

IMPORTANT:

- SmartAmp is a single source Power Control System (PCS) that includes Distributed Energy Resource (DER) sources not controlled by SmartAmp. Size DER sources in accordance with local codes and standards.
- SmartAmp only controls the load drawn by the Schneider Charge to help avoid an overload at the main circuit breaker due to the Schneider Charge. SmartAmp does not control any other loads or secondary power sources.
- SmartAmp should only be installed and modified by qualified personnel.
- Use only Schneider Electric current transformers (JPT45792A) with the Schneider Charge.

Figure 35 Example system diagram with current transformers installed in main service panel



Planning the CT Installation

SmartAmp Installation Requirements

Table 6 SmartAmp installation requirements

System component	Requirements
Two external CTs	■ JPT45792A (x2). ■ Other CTs are not supported. ■ The maximum current the CTs can measure is 200 A. The CT's rated current should be greater than or equal to the maximum current of the measured circuit.
CT cables	■ Ensure the CT cables are long enough to connect the home's service panel to the charging station. It is preferred to install the CTs close to the charging station. ■ JPT45792A has a cable length of 13 ft (4 m). ■ If the service panel is more than 13 ft (4 m) from the charging station, you will need to extend the CT wiring. Ensure that the distance does not exceed 150 ft (45 m). Use only twisted flexible #18 AWG, 221°F (105°C) PVC insulated extruded wire with insulated splice for crimping, rated for a minimum of 600 V (UL 1015).
Conduit entry	CT wires can be routed through the same conduit hole as power wires, or through a different conduit entry. See "Selecting the Conduit Entry" on page 32.
Main service panel	Confirm that the home's service panel does not exceed 200 A. The maximum panel rating is 200 A.
Main breaker rating	Determine the main breaker rating.
Subpanel breaker rating	Depending on your installation, determine the subpanel feeder breaker rating.
Total uncontrollable load on main service panel or subpanel (if using subpanel configuration)	Determine the total uncontrollable load on the service panel.
eSetup app	Download eSetup to your phone. SmartAmp must be configured in eSetup after the CTs are installed. For more information, see "Required Installer Commissioning App" on page 19. **IMPORTANT**: In order for SmartAmp to operate, you must commission the charging station in eSetup. If you do not complete the commissioning process, the charging station may overload the service panel.

SmartAmp Installation Order

⚠⚠ WARNING

HAZARD OF ELECTRIC SHOCK AND EQUIPMENT DAMAGE

- The current transformers are not suitable for Class 2 (low voltage) wiring methods and should not be connected to Class 2 equipment. See NEC.
- If the current transformers are used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- Do not install, reinstall, or operate current transformers with damaged, exposed, or loose wiring.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

⚠ CAUTION

RISK OF PERSONAL INJURY OR EQUIPMENT DAMAGE

- Do not install the current transformers where they may be exposed to temperatures below -40°F (-40°C) or above 185°F (85°C).
- Do not install the current transformers where they may be exposed to or excessive moisture, dust, salt spray, or other contaminants.
- The current transformers can be damaged by impacts or by being dropped, which can result in reduced accuracy or damage to the current transformer enclosure. If the current transformer is damaged, do not install it. Return the current transformer to Schneider Electric for inspection.

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

Complete the installation in this order:

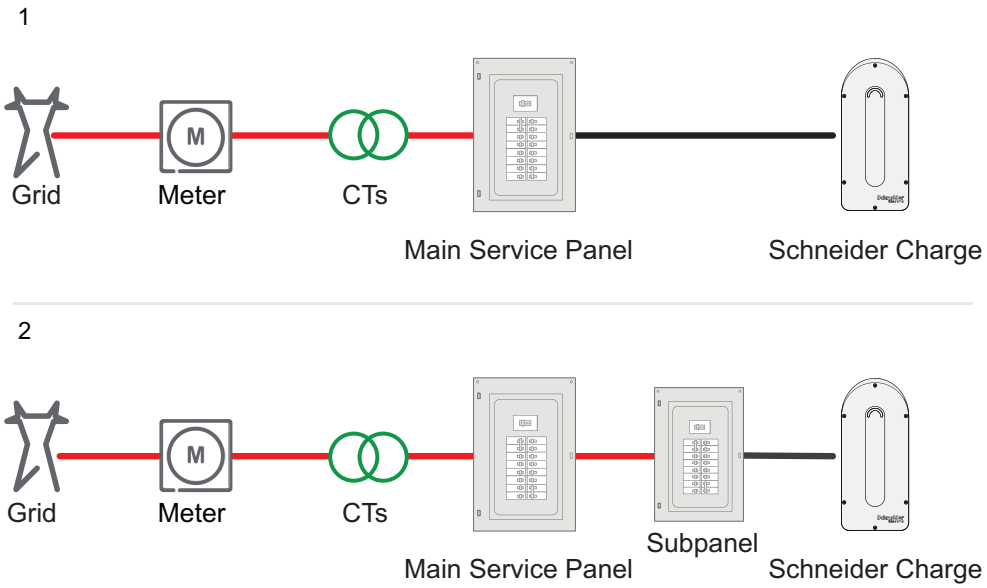
1. Determine where in the service panel the CTs should be installed. See "CT Installation Locations for SmartAmp" on the next page.
2. Confirm the main service panel breaker size and the panel rating.
3. De-energize the service panel and charging station.
4. Connect the CT cables to the charging station. See "Connecting Current Transformers to the Charging Station" on page 56.
5. Install the CTs in the service or subpanel with the correct orientation. See "Installing Current Transformers in the Service Panel" on page 58.
6. During commissioning, enable SmartAmp functionality in eSetup. See "Configuring SmartAmp in eSetup" on page 68.

CT Installation Locations for SmartAmp

Main Service Panel Installation

To help protect the main breaker, install the CTs in the main service panel.

Figure 36 Main service panel installation



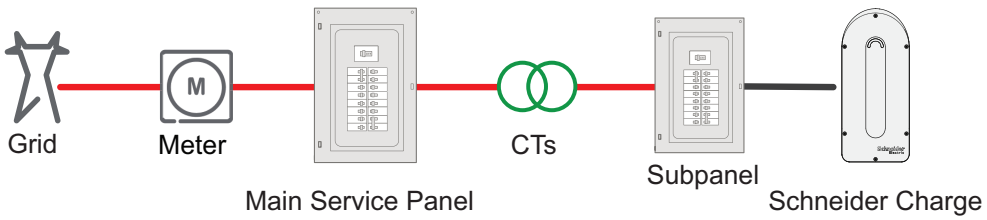
1	Single service panel
2	Main service panel and subpanel

Subpanel Installation

Typical reasons for installing the CTs in the subpanel may include:

- The main service panel cannot accommodate the CTs due to limited space or busbars
- A meter collar is installed in the main service panel
- The main service panel is too far away (CT wires can be extended up to 150 ft (45 m))
- To help protect the subpanel if the charging station is connected to it

Figure 37 Subpanel installation



Connecting Current Transformers to the Charging Station

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, ARC FLASH, AND FIRE

- Before installing or uninstalling the current transformers, de-energize, and lock-out and tag-out the charging station, and wait five minutes for circuits to discharge.
- Install current transformer wires in the charging station terminals before energizing the measured circuit.

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

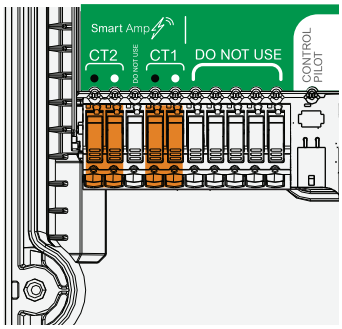
To connect the CT wires:

1. Verify that all power sources in the charging station and service panel or subpanel are turned off. See "Lock-Out and Tag-Out (LOTO)" on page 40.
2. Remove the charging station cover. See "Removing the Charging Station Cover" on page 31.
3. Select the conduit entry for the CT wires. If you are using a new conduit entry, install a conduit fitting. See "Selecting the Conduit Entry" on page 32.

   Note: CT wires can be routed through the same conduit entry as power wires, or through a different conduit entry. See "Planning the CT Installation" on page 53.

4. Locate the CT1 and CT2 terminals, below the SmartAmp label, as shown below.

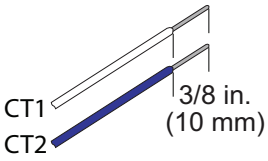
   Figure 38 Location of CT terminals in charging station

5. If the CT wires need to be extended to reach the service panel, extend the wires using only twisted flexible #18 AWG, 221°F (105°C) PVC insulated extruded wire with insulated splice for crimping, rated for a minimum of 600 V (UL 1015). The total length should not exceed 150 ft (45 m). Ensure that extended CT wires are firmly spliced with no exposed conductors, and that all wiring is in good condition.

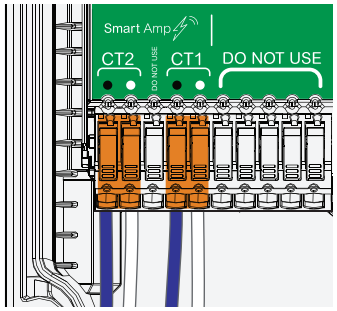
6. Prepare the CT wires with a strip length of approximately 3/8 in. (10 mm).

   Figure 39 CT wire strip length

7. Route the CT wires through the prepared conduit fittings.
8. Connect the wires to the CT terminal block in the charging station. For each CT, connect the white wire to the white terminal, and the blue wire to the black terminal. See "Using Lever Push-In Terminals" on page 28.
   a. Insert the wire until it reaches the back of the terminal. Ensure that there is an additional 1-2 in. (25 - 50 mm) of slack in the enclosure.
   b. Press the clamp down. A snapping sound indicates the clamp is fully closed.

   Figure 40 Installing wires on CT terminals

9. Perform a push-pull test on all wires to confirm that they are not loose.
10. Optional: Temporarily mark the CT clamps with tape, or label them, to help identify which CT is installed on the CT1 and CT2 terminals.

Installing Current Transformers in the Service Panel

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, ARC FLASH, AND FIRE

- Only qualified personnel should install, troubleshoot, or replace the current transformers. Follow all local codes, ANSI/NFPA 70, NEC, or Canadian Electrical Code C22.1 requirements for installations.
- Qualified personnel must use appropriate personal protective equipment (PPE) and follow safe electrical work practices as applicable in your jurisdiction.
- Always open or disconnect circuits from the power distribution system (or service) of the building before installing or servicing the current transformers.
- Secure the current transformers and route conductors so that they do not directly contact live terminals or busbars.

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

⚠⚠ WARNING

HAZARD OF FIRE AND EQUIPMENT DAMAGE

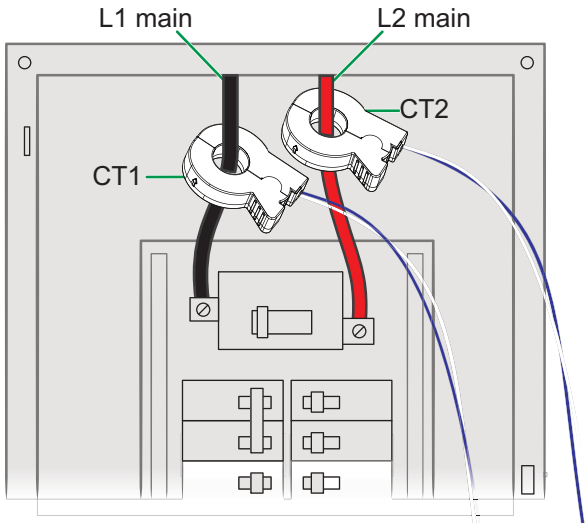
- The current transformers are a part of a Power Control System. Do not remove the current transformers. Replace only with Schneider Electric-recommended current transformers of the same type and rating as the original ones.
- The current transformers must not be installed in equipment where they exceed 75% of the wiring space of any cross-sectional area within the equipment.
- Do not install current transformers where they block ventilation openings or in the area of breaker arc venting.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

IMPORTANT: When installing CTs, confirm that the CTs are oriented correctly, with the arrow pointing to the grid, and are correctly matched to the L1 and L2 phase wires. Install CT1 to L1 and CT2 to L2 (see Figure 41).

The Schneider Charge relies on correct measurement of L1 and L2 channels coming from the different system components. The polarity of power wires to all components and the polarity and orientation of the current transformers must be correct for SmartAmp to function as expected.

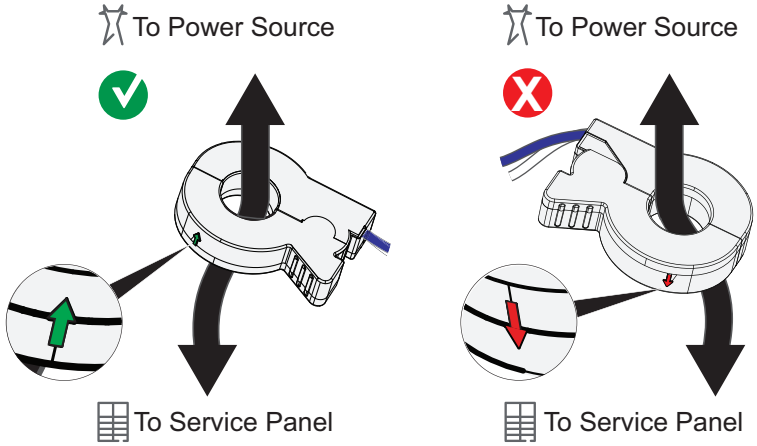
Figure 41 CT location in service panel



To install the current transformers:

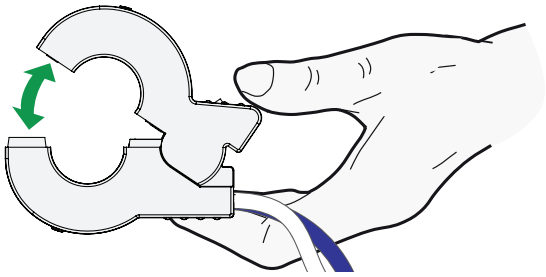
1. Determine where in the service panel the CTs should be installed. See "CT Installation Locations for SmartAmp" on page 55.
2. De-energize the Schneider Charge. See "Lock-Out and Tag-Out (LOTO)" on page 40.
3. De-energize the service panel where the CTs will be installed.
4. Determine the service panel rating and breaker size.
5. Locate and identify the L1 and L2 wires of the incoming service mains. Phase wire colors (typically black and red) may not always consistently identify L1 and L2. If in doubt, use a multimeter to check.
6. If necessary, install a conduit for the CT wires in the service panel.
7. Before installing the CTs, determine the correct orientation for installation. The arrow on the side of the CT must point to the grid, as shown in Figure 42.

Figure 42 Correct CT orientation



8. Open the CT by squeezing the thumb lever on the side of the CT.

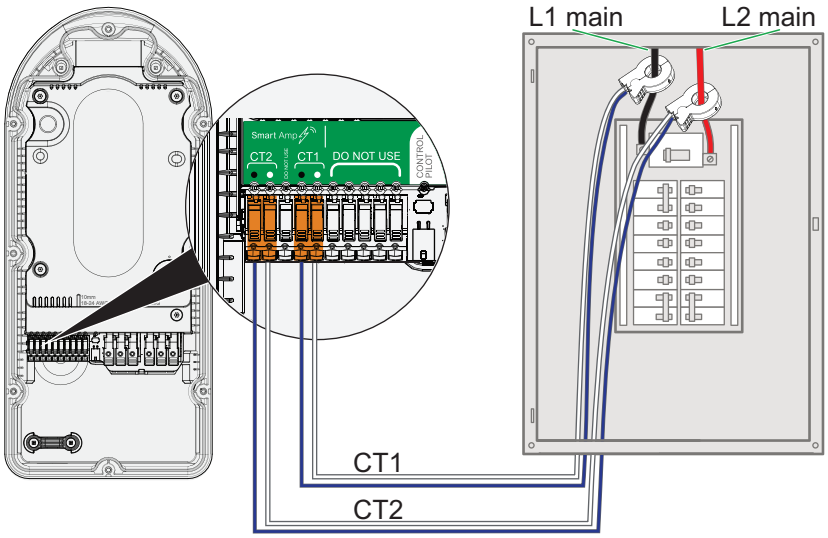
Figure 43 Opening the CT clamp



9. Ensure that the clamp surfaces are free from debris.
10. Clamp one CT to each of the L1 and L2 service mains:
    a. Connect CT1 to L1 in the service panel.
    b. Connect CT2 to L2 in the service panel.

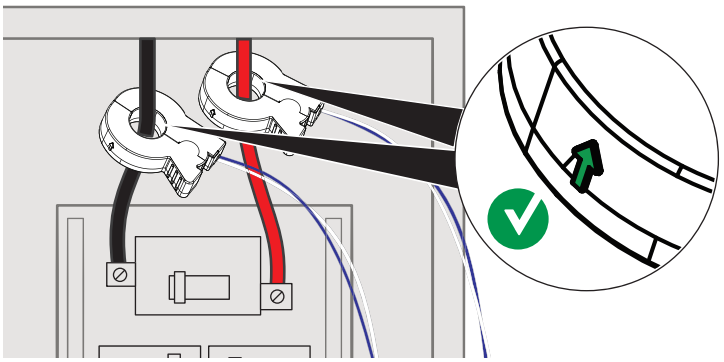
Note: Try to separate the CTs by 1 in. (25 mm) on the phase wires to help minimize magnetic interference.

Figure 44 Connecting the CTs to the corresponding main in the service panel



11. Confirm that the orientation arrow is pointing to the grid.

Figure 45 Correct CT orientation



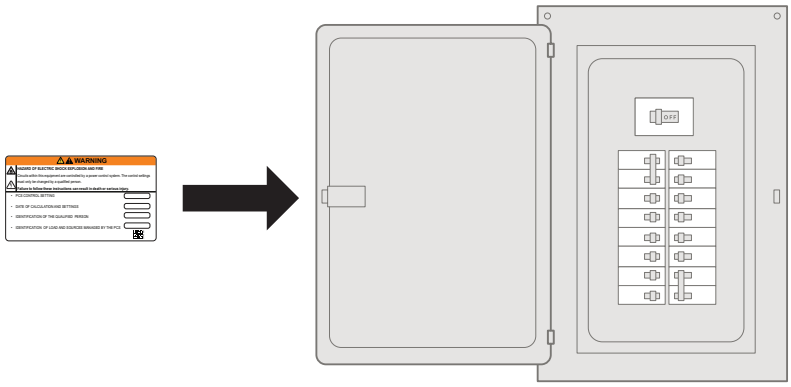
12. Close the service panel cover.
13. Reinstall the charging station cover and attach the six captive screws with a #2 square bit. Torque to 13 in-lb (1.5 Nm). See "Reinstalling the Charging Station Cover" on page 49.
14. Complete SmartAmp configuration by commissioning the charging station in eSetup. See "Configuring SmartAmp in eSetup" on page 68.

IMPORTANT: In order for SmartAmp to operate, you must commission the charging station in eSetup. If you do not complete the commissioning process, the charging station may overload the service panel.

Apply SmartAmp PCS Label to Service Panel

1. Fill out the SmartAmp PCS label:
    a. PCS control setting
    b. Date of calculation and settings
    c. Identification of the qualified person
    d. Identification of loads and sources managed by the PCS
2. Apply the label to the service panel on the conductor or in close proximity to the busbar.

Figure 46 Applying the SmartAmp label



6 Commissioning

What's in This Chapter?

Commissioning Checklist 64
Commissioning 65
Commissioning with eSetup™ 65
Connecting to the Wi-Fi Access Point 65
Selecting the Breaker Size in eSetup 67
Configuring SmartAmp in eSetup 68
Troubleshooting in eSetup 69

Commissioning Checklist

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, ARC FLASH, AND FIRE

Thoroughly inspect the charging station prior to energizing. Verify that no tools or materials have inadvertently been left inside the charging station. Inspect the cover gasket for debris or damage before installing the cover.

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

	Before powering the charging station, perform the following inspections:
Physical inspection	
❑	The charging station is mounted per the instructions in this guide.
❑	The cables are routed through cable glands or conduits and protected against potential mechanical damage and from the environment (if installed outdoors).
❑	The wires are properly and firmly connected.
❑	The charging station and cables are not damaged.
❑	If CTs are installed, they are installed between the service or subpanel and the energy meter.
❑	There are no objects, such as tools or extra screws, inside or on top of the charging station.
❑	There is no water, sand, dirt, or debris inside or on top of the charging station.
❑	The front cover is installed on the charging station, and the screws are fastened with the correct torque.
❑	The charging station is installed in a location with sufficient Wi-Fi reception.
❑	The charging cable is wound around the charging station's trough.
❑	If SmartAmp is enabled, the SmartAmp PCS label is affixed permanently inside the service or subpanel.
❑	The charging station has been tested with a UL/CSA-certified EVSE tester.
Prepare for network commissioning	
❑	Download **eSetup** to commission the Schneider Charge.
❑	Check that you have a mobile phone with a charged battery and internet connection at the commissioning site.
❑	If connectivity will be limited at the site and you are viewing this document online, download or print a copy that you can access offline.

Commissioning

Follow the procedure below to commission the charging station.

Commissioning with eSetup™

Commission the charging station using **eSetup**.

For more information or to download **eSetup™** click below or go to:

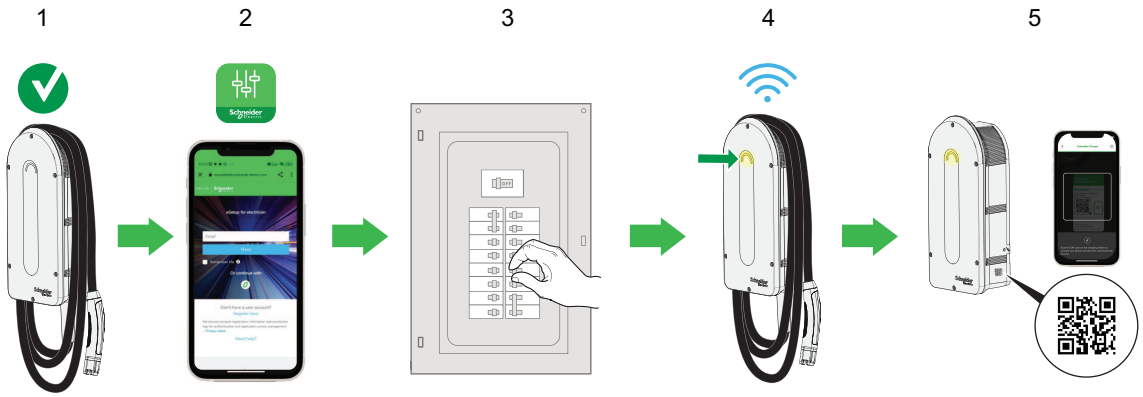
https://www.se.com/ww/en/work/solutions/software/applications/esetup-for-electricians.jsp



Connecting to the Wi-Fi Access Point

In Wi-Fi Access Point (AP) mode, the charging station creates a local Wi-Fi network that you can join on your phone to configure the charging station's settings in eSetup. The Wi-Fi access point is active after the charging station is powered on and has completed booting up, about two minutes.

Figure 47 Connecting to the Wi-Fi access point during commissioning



1	Complete the charging station installation.
2	Use eSetup to begin commissioning.
3	When prompted, turn on the power to the charging station at the branch breaker.
4	When the booting process is complete, the LED is solid yellow and the Wi-Fi access point is active.
5	To connect the charging station to eSetup, scan the QR code on the lower right side of the charging station.

Procedure continues on the next page.

To activate the Wi-Fi Access Point:

1. When prompted in eSetup, power on the charging station and wait for the booting process to finish, about two minutes. The LED blinks green and yellow during startup.
2. When the LED is solid yellow, the charging station has started a Wi-Fi Access Point for device configuration.
    a. Optional: to confirm that the access point is available, find the Wi-Fi network (SSID) called **SECharge_** followed by the unique 12 character serial number for the charging station. The SSID can be found on the label on the right side of the charging station. For example, **SSID: SECharge_XXXXXXXXXXXX**.
3. To connect to the Wi-Fi network on your device, scan the QR code on the label on the lower right side of the charging station using an iOS or Android device. Ensure that the QR code is well-lit before scanning.

Figure 48 Location of QR code



Note: The Access Point times out after 15 minutes of inactivity. If it times out, turn the breaker off and back on and repeat this procedure.

Selecting the Breaker Size in eSetup

⚠ ⚠ WARNING

HAZARD OF ELECTRIC SHOCK AND FIRE

- Follow NFPA 70 (U.S.), CSA 22.1 (Canada), and comply with all local or national codes, standards, and ordinances.
- Limit the power rating of your charging station to 80% or less of the branch circuit rating plus any further limitations required by NFPA 70 or Canadian Electrical Code C22.1.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

Select the breaker size to configure the maximum charging amperage. The Schneider Charge can operate as an 8 A to 48 A charging station.

To select the breaker size:

1. In eSetup, follow the procedure to commission the charging station.
2. On the **Charging Station Breaker Size** screen, select the charging station breaker size. To determine the setting for the desired output current, refer to the following table.

   Table 7 Breaker size for current limit

Breaker size	Maximum output current
15 A	8 A, 10 A, or 12 A
20 A	16 A
25 A	20 A
30 A	24 A
40 A	32 A
50 A	40 A
60 A	48 A

3. Click **Next**.

Configuring SmartAmp in eSetup

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, AND ARC FLASH

- Enabling Power Control System (PCS) functionality for the charging station must be performed by qualified electrical personnel, as defined by NFPA 70 or Canadian Electrical Code C22.1. Follow all local codes and NEC requirements for installations.
- Only qualified personnel are permitted to set or change the setting of the maximum operating current of the PCS. The maximum PCS operating current setting must not exceed the busbar rating or conductor ampacity of any PCS controlled busbar or conductor.

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

To configure SmartAmp functionality:

1. Ensure that the CT wires are connected to the charging station terminals and that the CTs are installed in the home's service or subpanel. For more information, see "SmartAmp Installation Order" on page 54.
2. In eSetup, follow the procedure to commission the charging station.
3. On the **Enable SmartAmp** screen, select **Yes, current transformers are installed**, and then select **Next**.
4. On the **Confirm you are a qualified electrician screen**, select the option that describes you.
5. Select the CT installation location, and then select **Next**.
6. For main service panel CT installations, select the main breaker rating.
7. For subpanel CT installations, input the following information:
    a. Main breaker rating
    b. Subpanel breaker rating
8. For all installations, select the fallback amps.

Note: Consult local regulations and codes to determine the existing load. After determining the maximum site or subpanel load, select the fallback amps setting. This setting defines the maximum current the charging station will draw if the CT readings are unavailable.

In the event of missing or invalid CT data, the charging station automatically limits itself to this value to help prevent panel/subpanel overload. If 0 amps is selected, the charging station will stop charging. This charging station will continue to function at this rate until corrective action is taken.

9. At the bottom of the screen, read and acknowledge the notice, then select the checkbox.
10. In the dialog, ensure that the total calculated uncontrollable load is less than the value shown on screen.
11. Select **Next** to complete the configuration.

Troubleshooting in eSetup

Before handing over to the homeowner, resolve any events that may have occurred during installation and commissioning.

1. On the **Ready to Operate** screen, check for alerts under the **Events** heading.
2. To view details about the event, select the **>** icon.
3. Attempt the steps for resolution.
4. If the event persists, contact Technical Support. See "Getting Support" on page 76.

7 Operation

What's in This Chapter?

Charging Station Operation 71
Powering on the Charging Station 71
Modes of Operation 71
LED Display 72
Starting a Charge 73
Storing the Charging Cable 74

Charging Station Operation

Powering on the Charging Station

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, ARC FLASH, AND FIRE

Thoroughly inspect the charging station prior to energizing. Verify that no tools or materials have inadvertently been left inside the charging station. Inspect the cover gasket for debris or damage before installing the cover.

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

To power on the Schneider Charge:

1. Turn on the branch breaker connected to the charging station.
2. The charging station completes the booting process in about two minutes. The LED blinks yellow and green during startup.
3. Confirm that the main LED is solid green, indicating that the charging station is ready to charge.

Modes of Operation

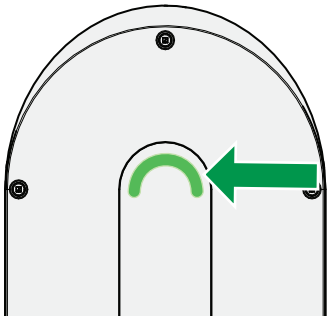
Table 8 Charging station status

Status	Mode of Operation
Available to charge	The charging station is available to charge.
Charging scheduled	A charging session is scheduled according to the schedule defined in the Schneider Charge app, and the charging connector is plugged in to the EV.
Charging	The charging station is delivering electricity to the EV.
Charging stopped	The charging session has stopped. Check the Schneider Charge app for details.
EV charger offline	The charging station is not connected to Wi-Fi or has lost connection to the cloud. Reconnect using the Schneider Charge app.
Alert - contact support	The charging station requires troubleshooting. See "General Troubleshooting Checklist" on page 76.
SmartAmp	Charging speed may be reduced or charging may be stopped due to high temperatures or limited electrical capacity available in the home.

LED Display

The arched LED on the front of the charging station displays the status.

Figure 49 LED location



LED Indicator Key

The LED can display the following states:

Table 9 LED status

LED Pattern	Color	Description
	Blinking Green and Yellow	The charging station is starting up
	Solid Green	Available, ready to use
	Solid Yellow	▪ Wi-Fi Access Point available ▪ Available, ready to use
	Blinking Blue and Yellow	Initiating charge
	Pulsing Blue	Charging in progress
	Solid Blue	▪ EV is plugged in; charging station standby or charging complete ▪ Charging is scheduled. See Schneider Charge app for details. ▪ If SmartAmp is enabled, there may be no available charging capacity
	Blinking Blue and Green	Charging suspended by the EV
	Blinking Red	Troubleshooting required. See "General Troubleshooting Checklist" on page 76.
	Pulsing Yellow	Firmware update in progress

Starting a Charge

⚠ ⚠ WARNING

HAZARD OF ELECTRIC SHOCK, EXPLOSION, AND FIRE

This equipment is intended only for charging vehicles not requiring ventilation during charging.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

⚠ ⚠ WARNING

HAZARD OF ELECTRIC SHOCK AND FIRE

- Do not use the charging station if the enclosure, power cord, charging cable or connector are broken, frayed, or show any signs of damage.
- Do not use a converter, extension cable or extension cord to connect the charging cable to the electric vehicle.
- Do not insert foreign objects into any part of the charging station.
- Do not leave children unsupervised around the charging station.
- Do not put fingers into the charging cable connector.
- Do not touch the charging cable connector with wet hands.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

To charge an electric vehicle:

1. Confirm that the charging station LED is solid green or solid yellow, which indicates that it is ready to charge.
2. Unwind the cable from the charging station.
3. Open the charging socket cover on your EV and insert the charging connector into the charging socket.
4. Confirm that the main LED on the charging station is pulsing blue, which indicates that the vehicle is charging.
5. When charging is complete, disconnect the charging connector from the EV.
6. Carefully wind the cable around the charging station.
7. Close the charging socket cover on your EV.

Storing the Charging Cable

⚠ ⚠ WARNING

HAZARD OF ELECTRIC SHOCK

Do not allow the charging cable or connector to rest on the ground where it may come in contact with water. When not in use, wind the charging cable around the charging station, ensuring that the charging cable connector does not touch the ground.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

NOTICE

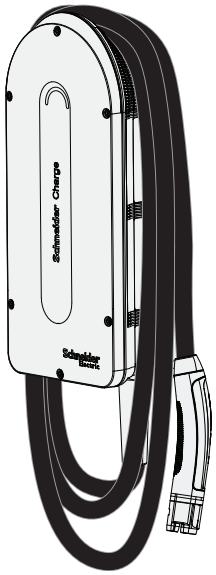
RISK OF EQUIPMENT DAMAGE

Do not step on or forcefully pull the charging cable.

Failure to follow these instructions can result in equipment damage.

When not in use, wind the charging cable around the charging station's enclosure to help prevent tangling, damage, or tripping hazards. Ensure that the charging cable connector does not touch the ground.

Figure 50 Charging cable storage



8 Troubleshooting

What's in This Chapter?

General Troubleshooting Checklist 76
Getting Support 76

General Troubleshooting Checklist

Before contacting Technical Support, qualified personnel can perform the following troubleshooting steps:

1. Ask the homeowner to share the alert notification from the Schneider Charge app and attempt the provided solution.
2. If the charging station LED is not lit, check the following to confirm that the current state of the installation allows the device to operate properly:
    a. The charging station is located in a clean, dry, and well-ventilated location.
    b. The AC input cable size is appropriate.
    c. The input wires and charging cable are connected correctly and are in good condition.
    d. The configuration settings are correct for your specific installation.
    e. There is power flowing to the charging station.
3. If the charging station LED displays an event indicator, reference the event code in Schneider Charge (homeowner app) or eSetup for additional information.

Getting Support

If all of the checks above are complete and the event persists, contact Schneider Electric Technical Support for further assistance. Call (877) 342 5173 (USA) or 1 (800) 565 6699 (Canada) or go to https://www.se.com/ww/en/work/support/.

Note: You will need to provide the event name (if applicable), device installation details, and the model and serial number (see the labels on your charging station).

9 Maintenance and Disposal

What's in This Chapter?

Maintenance 78
Routine Maintenance 78
Decommissioning 79
Recycling and Disposal 79

Maintenance

⚠ CAUTION
HOT SURFACE Allow time to cool before servicing. **Failure to follow these instructions can result in injury.**

Before performing maintenance, turn off the charging station. For more information, see "Lock-Out and Tag-Out (LOTO)" on page 40.

Routine Maintenance

The surface of the charging station can be cleaned by using a lint-free soft cloth.

NOTICE
RISK OF EQUIPMENT DAMAGE ▪ Use only a soft cloth to clean the charging station. ▪ Do not use solvents or chemicals that are corrosive or flammable. **Failure to follow these instructions can result in equipment damage.**

Qualified personnel should regularly inspect the charging station. See the table below for required maintenance:

Table 10 Routine maintenance

Description	Frequency
Check the charging station for dust and dirt accumulation, and clean the charging station if necessary.	Every 1-2 months
Check that the indicator lights on the charging station are normal.	Every 1-2 months
Check the input and charging cables for damage or aging.	Every 6 months
Clean the charging station's front panel.	Every 6 months

Decommissioning

Before a device is permanently removed from the home network, ask the homeowner to remove the charging station from the Schneider Charge (homeowner) app to erase all data.

Recycling and Disposal

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, ARC FLASH, AND FIRE

Do not dispose of the charging station equipment in a fire or with general household waste. Always follow local guidelines for recycling and disposal.

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



Electric appliances marked with the symbol shown must be professionally treated to recover, reuse, and recycle materials in order to reduce negative environmental impact. When the product is no longer usable, the consumer is legally obligated to ensure that it is collected separately under the local electronics recycling and treatment scheme.

10 Specifications

What's in This Chapter?

Specifications 81
Free and Open Source Software (FOSS) Declaration 83
Radio Frequency Interference Notices 90
Industry Canada (IC) Notices 92

Specifications

Note: Specifications are subject to change without notice.

Specification	EVRBA48ANAMJ3400	EVRBA48ANAMJ1772
Electrical		
Connection Type	J3400 (NACS)	J1772 (Type 1)
Power Cord	Hardwired	
Power Output	11.5 kW	
AC Input Voltage	208 - 240 VAC (split phase)	
AC maximum current @ 240 VAC	48 A (adjustable by installer)	
Maximum breaker rating	60 A	
Nominal Frequency	60 Hz ± 1%	
Wiring (VAC IN)	L1 - L2- PE	
Cable length	25 ft (7.5 m)	
General		
Mounting	Wall-mounted	
Operating Temperature	-22°F to 122°F (-30°C to 50°C)	
Storage Temperature	-58°F to +158°F (-50°C to +70°C)	
Humidity	Up to 95%	
Altitude	6562 ft (2000 m)	
Enclosure Type	Outdoor, Indoor	
Enclosure Rating	Type 4	
Warranty	3 years	
Certifications	UL 2594, UL 2231-1, UL 2231-2, UL 3141, ULC 3141[1], UL 5500, CSA C22.2 No. 280-22, CSA C22.2 No. 281.1-12, C22.2 No. 281.2-12, Energy Star	
EMC	FCC Part 15 Class B, ICES	
FCC ID	2AODL-EVRBA48ANAM	
IC ID	24209-EVRBA48ANAM	
Communication Protocols		
Communication	Wi-Fi (2.4 GHz)	
OCPP Communication	OCPP 1.6 compliant	
Status LED	Charging status	
Dimensions		
Dimensions (HxWxD)	15.4 in. x 6.83 in. x 4.06 in. (392 mm x 174 mm x 104 mm)	

Specification	EVRBA48ANAMJ3400	EVRBA48ANAMJ1772
Weight (with cable)	12.8 lb (5.8 kg)	
Environmental		
Environmental Standards	REACh, EU RoHS, California Prop 65	
Accessories		
Compatible Current Transformer (CT)	JPT45792A (included in the package)	
[1] LoA type compliance.		

Current Transformer Specifications

Specification	JPT45792A
Electrical	
Maximum Current Rating	200 A
Maximum Secondary Current Rating	83.3 mA
CAT IV (service entrance)	250 VAC
Line Frequency	50 to 60 Hz
Cable Length	13.12 ft (4 m)
Pollution Degree	3
Current Ratio	2400 ± 1%
Type	Current output, no integral burden resistor
Polarity	The primary conductor polarity is marked on the CT with a red arrow, in phase with the white lead wire
Protection	When the CT is connected to the Schneider Charge, the charging station provides 8.00 Ohms of burden resistance
Accuracy error rate	<1%
UL Listing	E472657, T162G7, UL 2808, XOBA/7
Environmental	
Operating Temperature	-40°F to +185°F (-40°C to +85°C)
Operating Humidity	Non-condensing, 5-95% relative humidity
Indoor Use	Yes
Maximum Altitude	6562 ft (2000 m)
Mechanical	
Weight	0.4 lbs (0.18 kg)
Dimensions (HxWXD)	2.75 x 2.12 x 0.61 in. (70 x 52 x 15.5 mm)
Aperture	0.87 in. (22.2 mm)

Free and Open Source Software (FOSS) Declaration

This product includes the following Free and Open Source Software (FOSS) components.

Open Source Component	Version	License	Licensing Information
acl	2.3.1-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300794/
apm	3.2.2-15-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300707/
apmd	3.2.2-15-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300707/
attr	2.5.1-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300793/
base-files	3.0.14-r89.senux0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300948/
boost	1.84.0-r0.0	BSL-1.0 & MIT &Python-2.0	https://layers.openembedded.org/layerindex/recipe/397630/
bsdcat	3.7.9-r0.0	BSD-2-Clause	https://layers.openembedded.org/layerindex/recipe/397740/
bsdtar	3.7.9-r0.0	BSD-2-Clause	https://layers.openembedded.org/layerindex/recipe/397740/
busybox	1.35.0-r0.0	GPL-2.0-only & bzip2-1.0.4	https://layers.openembedded.org/layerindex/recipe/300840/
bzip2	1.0.8-r0.0	bzip2-1.0.6	https://layers.openembedded.org/layerindex/recipe/300437/
ca-certificates	20211016-r0.0	GPL-2.0-only & MPL-2.0	https://layers.openembedded.org/layerindex/recipe/300769/
civetweb	1.16-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/400987/
cppzmq	4.8.1-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/301921/
cracklib	2.9.8-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300414/
cryptodev-module	1.12-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300489/
curl	7.82.0-r0.0	curl	https://layers.openembedded.org/layerindex/recipe/300818/
czmq	4.2.1-r0.0	MPL-2.0	https://layers.openembedded.org/layerindex/recipe/301920/
dbus	1.14.8-r0.0	AFL-2.1 OR GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300946/
devmem2	2.0-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/301561/
dnsmasq	2.90-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/304520/
e2fsprogs	1.46.5-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300345/
file	5.41-r0.0	BSD-2-Clause	https://layers.openembedded.org/layerindex/recipe/300199/
fuser	23.4-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300451/
glibc-binary-localedata	2.35-r0.0	GPL-2.0-only & LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300933/
icu	70.1-r0.0	ICU	https://layers.openembedded.org/layerindex/recipe/300780/
iotop	1.21-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/301244/

Open Source Component	Version	License	Licensing Information
iproute2	5.17.0-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/301000/
iptables	1.8.7-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300425/
iw	5.16-r0.0	ISC	https://layers.openembedded.org/layerindex/recipe/301006/
jq	1.6+git0+a9f97e9e61-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/301146/
jwt-cpp	0.7.1-r0.0	MIT	https://github.com/Thalhammer/jwt-cpp.git
kbd	2.4.0-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300867/
kernel	6.1.158+git0+958afffbec-r0.0	GPL-2.0-only	https://github.schneider-electric.com/senux-platform/senux-linux.git
killall	23.4-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300451/
kmod	29-r0.0	GPL-2.0-only & LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300502/
ldconfig	2.35-r0.0	GPL-2.0-only & LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300933/
less	600-r0.0	BSD-2-Clause	https://layers.openembedded.org/layerindex/recipe/300464/
libacl1	2.3.1-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300794/
libapm1	3.2.2-15-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300707/
libarchive	3.7.9-r0.0	BSD-2-Clause	https://layers.openembedded.org/layerindex/recipe/397740/
libattr1	2.5.1-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300793/
libblkid1	2.37.4-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300834/
libbz2-1	1.0.8-r0.0	bzip2-1.0.6	https://layers.openembedded.org/layerindex/recipe/300437/
libc6	2.35-r0.0	GPL-2.0-only & LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300933/
libcap	2.66-r0.0	BSD-3-Clause OR GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300733/
libcap-ng	0.8.2-r0.0	GPL-2.0-only & LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300823/
libcom-err2	1.46.5-r0.0	GPL-2.0-only & LGPL-2.0-only & BSD-3-Clause & MIT	https://layers.openembedded.org/layerindex/recipe/300345/
libconfig	1.7.3-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/301250/
libcrypt2	4.4.33-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300924/
libcrypto3	3.0.18-r0.0	Apache-2.0	https://layers.openembedded.org/layerindex/recipe/301009/
libcurl4	7.82.0-r0.0	curl	https://layers.openembedded.org/layerindex/recipe/300818/
libczmq4	4.2.1-r0.0	MPL-2.0	https://layers.openembedded.org/layerindex/recipe/301920/

Open Source Component	Version	License	Licensing Information
libdate-tz3	3.0.4-r0.0	MIT	https://github.com/HowardHinnant/date/tree/v3.0.4
libdbus-1-3	1.14.8-r0.0	AFL-2.1 OR GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300946/
libe2p2	1.46.5-r0.0	GPL-2.0-only & LGPL-2.0-only & BSD-3-Clause & MIT	https://layers.openembedded.org/layerindex/recipe/300345/
libedit0	20210910-3.1-r1.0	BSD-3-Clause	https://layers.openembedded.org/layerindex/recipe/300175/
libelf1	0.186-r0.0	GPL-2.0-only	https://sourceware.org/elfutils/
libexpat1	2.6.4-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/300866/
libext2fs2	1.46.5-r0.0	GPL-2.0-only & LGPL-2.0-only & BSD-3-Clause & MIT	https://layers.openembedded.org/layerindex/recipe/300345/
libfdisk1	2.37.4-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300834/
libffi8	3.4.4-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/300787/
libgcc1	11.5.0-r0.0	GPL-3.0-with-GCC-exception	https://layers.openembedded.org/layerindex/recipe/300384/
libglib-2.0	1:2.72.3-r0.0	LGPL-2.1-only & BSD-3-Clause & PD	https://layers.openembedded.org/layerindex/recipe/300887/
libgmp10	6.2.1-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300798/
libgpiod2	1.6.3-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/301616/
libjson-c5	0.15-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/300336/
libjson-glib	1.6.6-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300535/
libkmod2	29-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300502/
liblzma5	5.2.6-r0.0	PD	https://tukaani.org/xz/#_licensing
liblzo2-2	2.10-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300446/
libmnl0	1.0.4-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300445/
libmodbus5	3.1.7-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/301217/
libmount1	2.37.4-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300834/
libndp	1.8-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/301932/
libnl	1:3.5.0-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300771/
libnlohmann-json-schema-validator2	2.2.0-r0.0	MIT	https://github.com/pboettch/json-schema-validator/tree/2.2.0

Open Source Component	Version	License	Licensing Information
libnsl3	2.0.0-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300482/
libnss-myhostname2	1:250.14-r0.0	GPL-2.0-only & LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300915/
libonig5	6.9.4-r0.0	BSD-2-Clause	https://layers.openembedded.org/layerindex/recipe/301662/
liboping0	1.10.0-tano0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/332499/
libpanelw5	6.3+20220423-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/300862/
libpcre1	8.45-r0.0	BSD-3-Clause	https://layers.openembedded.org/layerindex/recipe/300744/
libpopt0	1.18-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/300808/
libprocps8	3.3.17-r0.0	GPL-2.0-only & LGPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300393/
libpwquality	1.4.4-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/301266/
libpython3.10-1.0	3.10.19-r0.0	PSF-2.0	https://layers.openembedded.org/layerindex/recipe/300253/
libsdbus-c++1	1.0.0-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/301808/
libseccomp	2.5.3-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300815/
libsmartcols1	2.37.4-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300834/
libsodium23	1.0.18-r0.0	ISC	https://layers.openembedded.org/layerindex/recipe/301330/
libsqlite3-0	3:3.45.3-r0.0	PD	https://layers.openembedded.org/layerindex/recipe/397595/
libssl3	3.0.18-r0.0	Apache-2.0	https://layers.openembedded.org/layerindex/recipe/301009/
libstatgrab10	0.92.1-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/301276/
libstdc++6	11.5.0-r0.0	GPL-3.0-with-GCC-exception	https://layers.openembedded.org/layerindex/recipe/300384/
libsyslog-ng-3.36-0	3.36.1-r0.0	GPL-2.0-only & LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/301580/
libtinfo5	6.3+20220423-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/300862/
libtinyxml2-9	9.0.0-r0.0	Zlib	https://layers.openembedded.org/layerindex/recipe/301672/
libtirpc3	1.3.2-r0.0	BSD-3-Clause	https://layers.openembedded.org/layerindex/recipe/300477/
libubootenv	0.3.2-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300692/
libudev1	1:250.14-r0.0	GPL-2.0-only & LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300915/
libuev3	2.4.1-r0.0	MIT	https://github.com/troglobit/libuev
liburcu	0.13.2-r0.0	LGPL-2.1-only & MIT	https://layers.openembedded.org/layerindex/recipe/300825/
libuuid1	2.37.4-r0.0	BSD-3-Clause	https://layers.openembedded.org/layerindex/recipe/300834/
libuv1	1.44.2-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/301005/

Open Source Component	Version	License	Licensing Information
libwebsockets	4.2.2-r0.0	MIT & Zlib & BSD-3-Clause & Apache-2.0	https://layers.openembedded.org/layerindex/recipe/301924/
libwrap0	7.6-r10.0	BSD-1-Clause	https://layers.openembedded.org/layerindex/recipe/300436/
libxml2	2.9.14-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/300949/
libyaml-cpp0.7	0.7.0-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/301617/
libz1	1.2.11-r0.0	Zlib	https://layers.openembedded.org/layerindex/recipe/300864/
libzip	1.8.0-r0.0	BSD-3-Clause	https://layers.openembedded.org/layerindex/recipe/301286/
libzstd1	1.5.2-r0.0	BSD-3-Clause OR GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300435/
linuxptp	3.1.1-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/301912/
locale-base	2.35-r0.0	GPL-2.0-only & LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300933/
logrotate	3.20.1-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300438/
lttng	2.13.14-r0.0	LGPL-2.1-only & GPL-2.0-only & MIT	https://layers.openembedded.org/layerindex/recipe/300498/
lz4	1:1.9.4-r0.0	BSD-2-Clause OR GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300760/
minicoredumper	2.0.7-r0+gitAUTOINC+ 42a3609f80.0	LGPL-2.1-only & BSD-2-Clause	https://layers.openembedded.org/layerindex/recipe/301356/
mmc-utils	0.1+git0+b5ca140312-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300349/
mosquitto	2.0.22-r0.0	EPL-2.0 OR EDL-1.0	https://layers.openembedded.org/layerindex/recipe/304568/
mtd-utils	2.1.5-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300307/
ncurses	6.3+20220423-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/300862/
netbase	1:6.3-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300888/
net-tools	2.10-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300446/
networkmanager	1.36.2-r0.0	GPL-2.0-only & LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/304592/
nlohmann-json	3.11.3-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/399879/
nspr	4.35-r0.0	GPL-2.0-only OR MPL-2.0 OR LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/301665/

Open Source Component	Version	License	Licensing Information
nss	3.98-r0.0	(MPL-2.0 & MIT) OR (MPL-2.0 & GPL-2.0-only & MIT) OR (MPL-2.0 & LGPL-2.1-only & MIT)	https://layers.openembedded.org/layerindex/recipe/301706/
openssh	8.9p1-r0.0	BSD-2-Clause & BSD-3-Clause & ISC & MIT	https://layers.openembedded.org/layerindex/recipe/301002/
openssl	3.0.18-r0.0	Apache-2.0	https://layers.openembedded.org/layerindex/recipe/301009/
openvpn	2.5.11-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/304488/
optee-client	4.1.0+git0+f7e4ced15d-r0.0	BSD-2-Clause	https://layers.openembedded.org/layerindex/recipe/405632/
os-release	1.0-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/300899/
pam	1.5.2-r0.0	GPL-2.0-only OR BSD-3-Clause	https://layers.openembedded.org/layerindex/recipe/300411/
pigz	2.7-r0.0	Zlib & Apache-2.0	https://layers.openembedded.org/layerindex/recipe/300447/
plctools	1.0-r0.0	MIT	https://github.com/qca/open-plc-utils/blob/master/LICENSE
procps	3.3.17-r0.0	GPL-2.0-only & LGPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300393/
psmisc	23.4-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300451/
pstree	23.4-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300451/
python3	3.10.19-r0.0	PSF-2.0	https://layers.openembedded.org/layerindex/recipe/300253/
rauc	1.11.1-r0.0	LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/379725/
shadow	4.11.1-r0.0	BSD-3-Clause	https://layers.openembedded.org/layerindex/recipe/300409/
shared-mime-info	2.1-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300800/
sqlite3	3:3.45.3-r0.0	PD	https://layers.openembedded.org/layerindex/recipe/397595/
sqlitecpp	3.3.2-r0.0	MIT	https://github.com/SRombauts/SQLiteCpp/tree/3.3.2
squashfs-tools	4.5-r0.0	GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300197/
syslog-ng	3.36.1-r0.0	GPL-2.0-only & LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/301580/
systemd	1:250.14-r0.0	GPL-2.0-only & LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300915/
tcp-wrappers	7.6-r10.0	BSD-1-Clause	https://layers.openembedded.org/layerindex/recipe/300436/

Open Source Component	Version	License	Licensing Information
tzdata	2025b-r0.0	PD & BSD-3-Clause	https://layers.openembedded.org/layerindex/recipe/300430/
udev	1:250.14-r0.0	GPL-2.0-only & LGPL-2.1-only	https://layers.openembedded.org/layerindex/recipe/300915/
util-linux	2.37.4-r0.0	GPL-2.0-only & LGPL-2.1-only & BSD-3-Clause & BSD-4-Clause	https://layers.openembedded.org/layerindex/recipe/300834/
volatile-binds	1.0-r0.0	MIT	https://layers.openembedded.org/layerindex/recipe/300902/
wireless-regdb-static	2024.10.07-r0.0	ISC	https://layers.openembedded.org/layerindex/recipe/300494/
wpa-supplicant	2.11-r0.0	BSD-3-Clause	https://layers.openembedded.org/layerindex/recipe/421408/
zeromq	4.3.4-r0.0	LGPL-3.0-with-zeromq-exception	https://layers.openembedded.org/layerindex/recipe/301919/
zstd	1.5.2-r0.0	BSD-3-Clause OR GPL-2.0-only	https://layers.openembedded.org/layerindex/recipe/300435/

Radio Frequency Interference Notices

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to help provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 8 in. (20 cm) between the radiator and your body.

Information FCC

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet appareil a été testé et été déterminé qu'il se conforme aux normes pour les appareils numériques de classe B, en accord avec l'article 15 des règlements de la FCC. Ces normes sont conçues pour offrir une protection raisonnable contre l'interférence nuisable dans une installation résidentielle. Cet appareil génère, utilise et peut émettre une énergie radiofréquence, et s'il n'est pas installé et utilisé selon les instructions, peut causer de l'interférance nuisable aux communications radio.

Par contre, rien ne garantit que de l'interférence ne peut se produire dans une installation en particulier. Si cet appareil cause de l'interférence nuisant à la réception radio ou télévision, ce que l'on peut déterminer en fermant puis en redémarrant l'appareil, l'utilisateur peut tenter de corriger l'interférence en utilisant l'une des mesures suivants:

- Réorienter ou déplacer l'antenne réceptrice
- Éloigner l'appareil du récepteur.
- Brancher l'appareil dane une prise connectée à un circuit différent de celui sur lequel est branché le récepteur.
- Consulter le détaillant ou un technicien expérimenté en radio/télévision pour obetenir de l'aide.

Avertissement: Tout changement ou toute modification non expressément approuvé par les responsables de la conformité peut fair perdre à l'utilisateur son droit d'utiliser l'equipment.

Industry Canada (IC) Notices

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) This device may not cause interference, and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF Exposure

This device has been evaluated and shown compliant with the RF exposure requirements listed in RSS-102 - Radio Frequency (RF) Exposure Compliance of Radio communication Apparatus limits under fixed exposure conditions (antennas are greater than 20cm from a person’s body) when installed in certain specific OEM configurations.

Cet appareil a été évalué et montré conforme aux exigences d'exposition RF énumérées dans RSS-102 - Exposition aux fréquences radio (RF) Conformité des limites des appareils de communication radio dans des conditions d'exposition fixes (les antennes sont à plus de 20 cm du corps d'une personne) lorsqu'elles sont installées dans certains configurations OEM spécifiques.

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As standards, specifications, and designs change from time to time, please ask for confirmation of the information given in this publication.

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