

SIEMENS

Installation and Operations Manual

Siemens VersiCharge™





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FCC Compliance

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 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 into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance may void the user's authority to operate the equipment and the warranty on the product.

Other Information

Product information is subject to change without notice. All trademarks are recognized as the property of their respective owners.

For Siemens VersiCharge™ Warranty Terms and Conditions, see the Appendix on page 29 of this manual.

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1 Important Safety Information

1.1 Read this First

This manual contains important instructions for use during installation and maintenance of the Siemens VersiCharge™ electric vehicle charging station.

1.2 Symbol Legend

To reduce the risk of electrical shock, and to ensure the safe installation and operation of the Siemens VersiCharge™, the following safety symbols appear throughout this document to indicate dangerous conditions and important safety instructions.



DANGER Hazardous voltage. Will cause death or serious injury. Turn off Power before working on this equipment. This indicates a situation where the present voltage could cause injury or death. Extreme caution is required when servicing or installing the equipment referenced.



DANGER Explosion hazard. This equipment has arcing or sparking parts that should not be exposed to flammable vapors. Use extreme caution and follow instructions carefully.



WARNING! This indicates a situation where failure to follow instructions may be a safety hazard or cause equipment malfunction. Use extreme caution and follow instructions carefully.



NOTE: This indicates information particularly important for optimal system operation. Follow instructions closely.



Indicates connection point for Ground conductor.

1.3 Product Labels

The following symbols appear on the **product label** and are described here:



This label indicates the risk of hazardous voltage and electric shock which will cause death, serious injury, or substantial damage. Turn off power supplying this device before working inside.



DANGER Explosion hazard. This equipment has arcing or sparking parts that should not be exposed to flammable vapors. Use extreme caution and follow instructions carefully.



Indicates connection point for Ground conductor.

1.4 Definitions

The term **EV** used in this manual refers to an electric vehicle.

The term **AC** used in this manual refers to alternating current.

The term **Universal** unit refers to any VersiCharge with a plug and chord assembly attached, i.e. part numbers VC30XXXU**** (Indoor / Outdoor Use)

The term **Hardwired** unit refers to any VersiCharge which is factory configured for hardwired installation only, i.e. part numbers VC30XXXHW**** (Indoor Use only)

The placeholder 'XXX' in the mentioned part numbers can either stand for 'GRY' which denotes that the unit is grey or 'BLK' which denotes that the unit is black.

1.5 Safety Instructions (General and Specific)



DANGER Hazardous voltage. Will cause death or serious injury. Turn off Power supplying this equipment before working inside

- Read this Installation and Operations Manual in its entirety prior to installing, maintaining, servicing or replacing a Siemens VersiCharge EV Charging System.
- **Permits:** Be aware that many areas require special permits and/or utility approvals to install EV charging equipment. Contact your local electrical inspector's office and your local utility prior to beginning work to understand local requirements.
- **Qualified person:** Because of the inherent dangers of electricity, only a qualified person should install, maintain, service, or replace electrical wiring and connected equipment. For the purpose of this manual, a qualified person is one who is familiar with the installation, construction of operation of the equipment and the hazards involved. In addition, this person should meet the definition of a qualified person pursuant to the National Electrical Code® (NEC®)¹. Failure to comply with the recommendation of having a qualified person install the unit when electrical work is required may void the warranty provided with this device.
- **Weatherproof seals:** HARDWIRED UNITS are for indoor use only. These devices have no gaskets or seals. UNIVERSAL UNITS may be used indoors and outdoors.



WARNING! Failure to properly seat seals can result in water, debris and other foreign objects entering into the device. These can cause damage to electrical components and prevent the device from functioning properly.

1.6 Instructions Pertaining to a Risk of Fire or Electric Shock



WARNING! When using electric products, basic precautions should always be followed, including the following. This manual contains important instructions for Universal and Hardwired Units that shall be followed during installation, operation and maintenance of the unit:

- Read all of the instructions before using this product.

¹ National Electrical Code and NEC are Registered Trademarks of the National Fire Protection Association (NFPA)

- Failure to follow these instructions may lead to death, serious injury or property damage.
- Any electrical wiring required to install this device shall conform to applicable codes and standards (ANSI/NFPA 70). A qualified electrician is recommended to perform these tasks.
- To reduce the risk of electric shock, never service, install or uninstall this device from service while energized.
- This equipment has arcing or sparking parts that should not be exposed to flammable vapors. This equipment should be located at least 18 inches above the floor.
- This device is equipped with an auto reset feature
 - o If this device is connected to a vehicle at the time that power is restored following an outage, charging may automatically resume.
 - o If this device is connected to a vehicle and a ground fault trip occurs, charging may automatically resume after a delay period.
- This device should be supervised when used around children.
- Do not put fingers into the electric vehicle connector.
- Do not use this product if the flexible power cord or EV cable is frayed, has broken insulation, or any other signs of damage.
- Do not use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.
- A torque driver shall be used to make power connections to ensure that adequate contact pressure is applied. See the installation section of this manual for additional details.
- A device provided with a wire connector for field installed wiring shall be provided with instructions specifying that the connector provided shall be used in making the field connection.
- When installing this device in the hard wired configuration, power connections shall be made at line terminals with 14.5in.-lbs. torque.
- An insulated grounding conductor that is identical in size, insulation material, and thickness to the grounded and ungrounded branch-circuit supply conductors, except that it is green with or without one or more yellow stripes, shall be installed as part of the branch circuit that supplies the device or system.
- The grounding conductor shall be grounded to earth at the service equipment or, when supplied by a separately derived system, at the supply transformer.
- Do not attempt to operate this device if the ambient temperature is greater than 50C(122F)
- Use 6-8 AWG, 75C copper wire to connect to supply circuit.
- CAUTION: To reduce the risk of fire, connect only to a circuit provided with 40 amperes maximum branch circuit overcurrent protection in accordance with the ANSI/NFPA 70 National Electrical Code.

1.7 Code and Standard References

- This device has been designated to meet the requirements in section 626 of the National Electric Code (NEC®).
- UL Listing with Listing Number – Siemens VersiCharge Devices are listed in UL file # E348556
- Complies with the following UL Standards: 2594, 2231-1, 2231-2
- EV interface compliant to SAE J-1772 Level II
- 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 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:

- o Reorient or relocate the receiving antenna.
- o Increase the separation between the equipment and receiver.
- o Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- o Consult the dealer or an experienced radio/TV technician for help.
- **Personal Protection Equipment:** Use of proper personal protection equipment, including, but not limited to, eye protection, shock protection, gloves and other appropriate protection, is recommended when installing or servicing any electrical equipment
- **Charging Circuit Interrupting Device (CCID):** The Siemens VersiCharge line of EV Charging Systems includes a Charging Circuit Interrupting Device (CCID). The CCID is required by UL Standard 2231 and is designed to detect grounding faults within the system, and disconnect power from the downstream conductors when a fault is detected.
- **Arcing component in contactor:** Siemens VersiCharge EV Charging Systems include a contactor that, when opened or closed, will cause a short duration arc. The contactor is enclosed in an appropriate electrical enclosure, but caution if this arc occurs in the presence of flammable vapors, the vapors could ignite, creating an explosion. Store flammable vapors away from all electrical equipment, and should vapors be present, allow sufficient time for ventilation before operating this equipment.

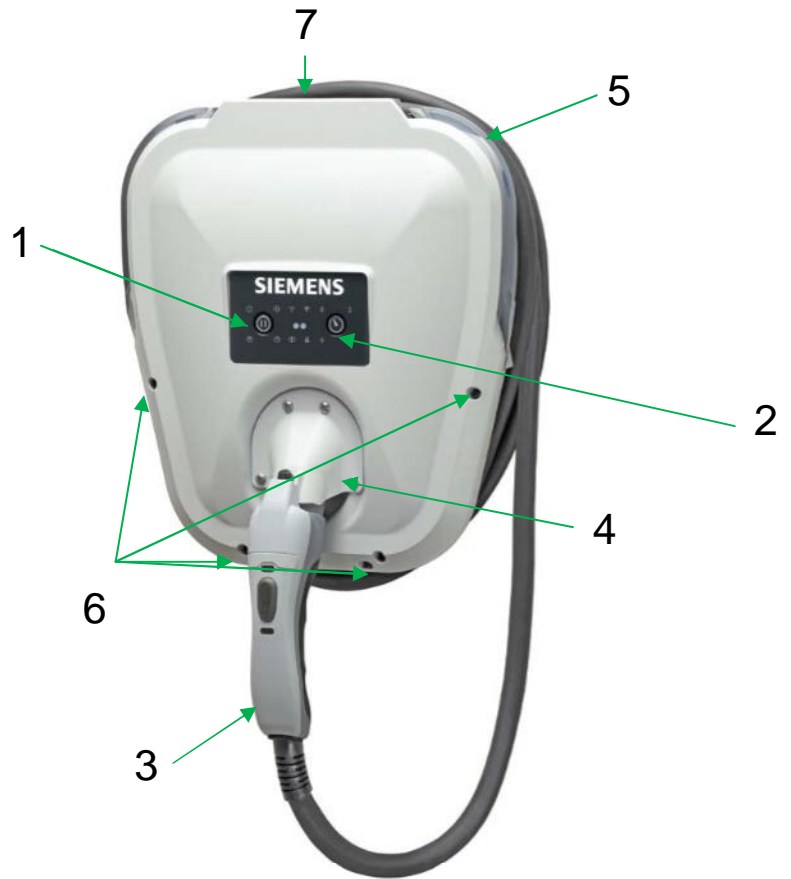


DANGER Explosion hazard. This equipment has arcing or sparking parts that should not be exposed to flammable vapors. This equipment should be installed at least 18 inches above floor or ground level. Use extreme caution and follow instructions carefully.

2: Device Layout

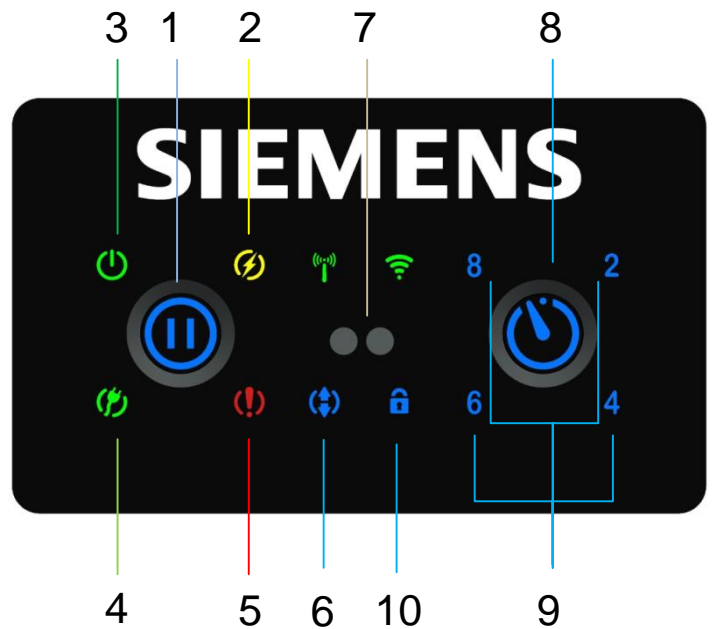
2.1 Exterior – Front

1. Pause Button
2. Delay Timer Button
3. Connector
4. Connector Holster
5. Halo Indicator
6. Closure Screws
7. Hinges



2.2 Exterior – LED Indicators

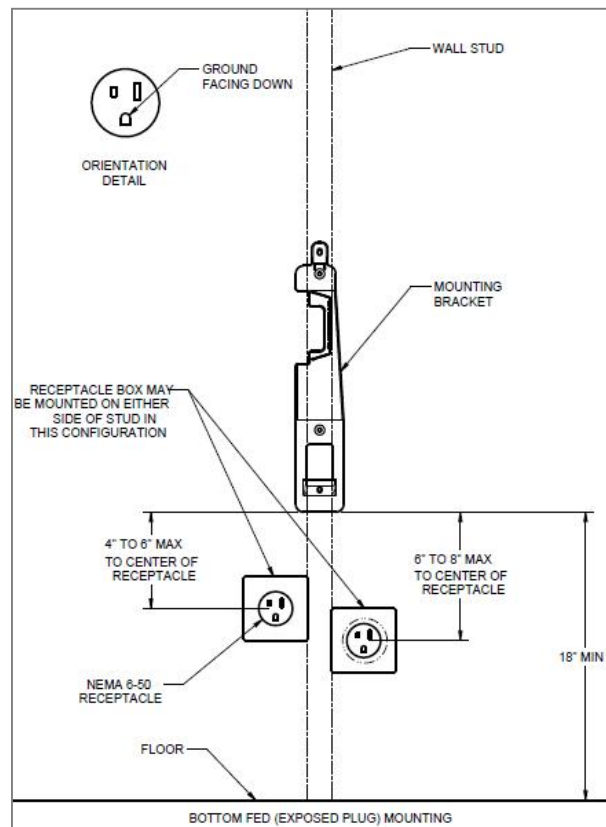
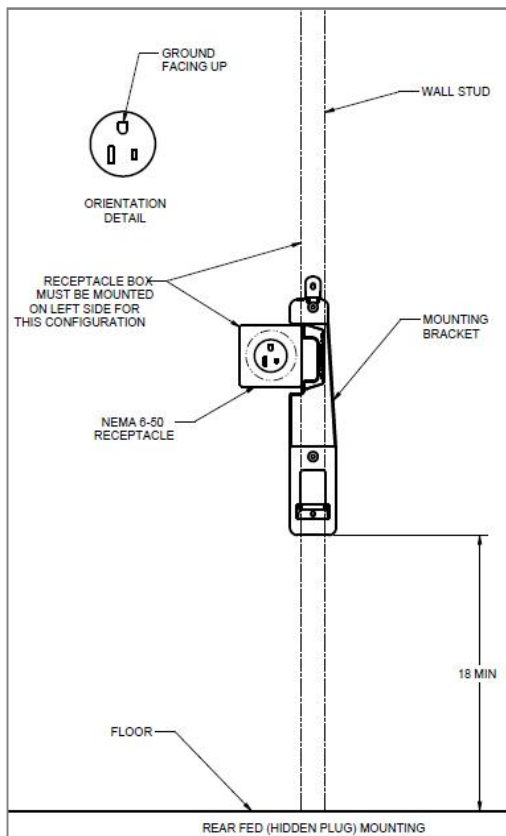
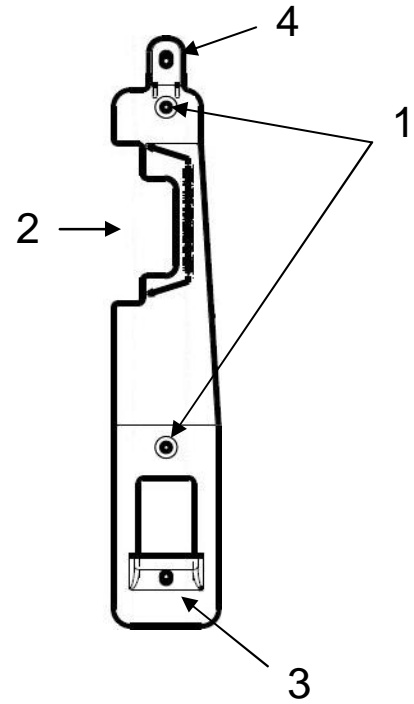
1. Pause
2. Charging
3. Power Available
4. Ready
5. Fault
6. Remote Control Activated
7. Service Portal
8. Time Delay
9. Hour Delay
10. Remote Control Lock



Note: Wi-fi and zigbee communication are not enabled for these versions.

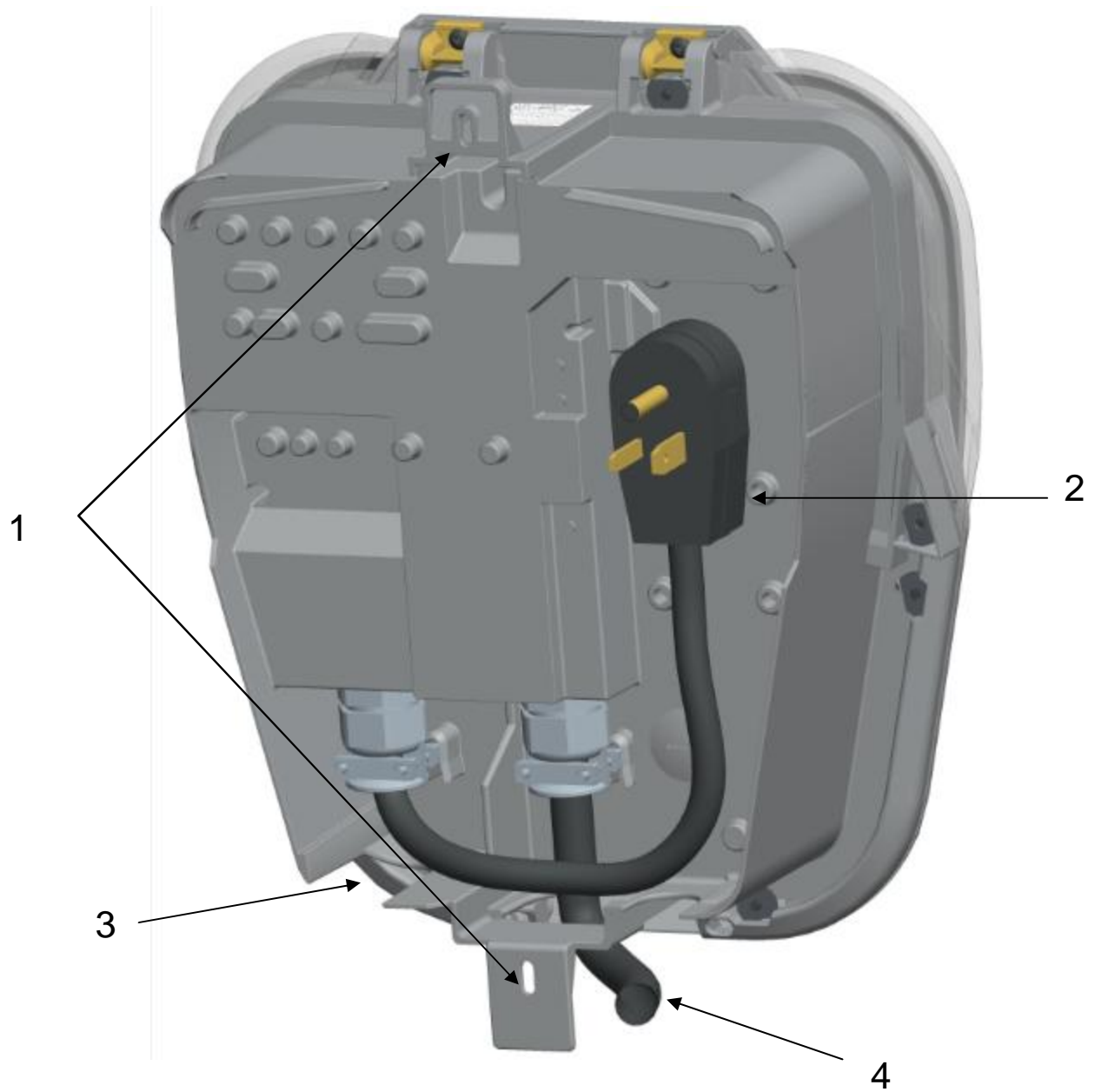
2.3 Mounting Bracket (Receptacle not Included)

1. Mounting Holes
2. Receptacle cutout
3. Mounting Slot
4. Mounting Tab



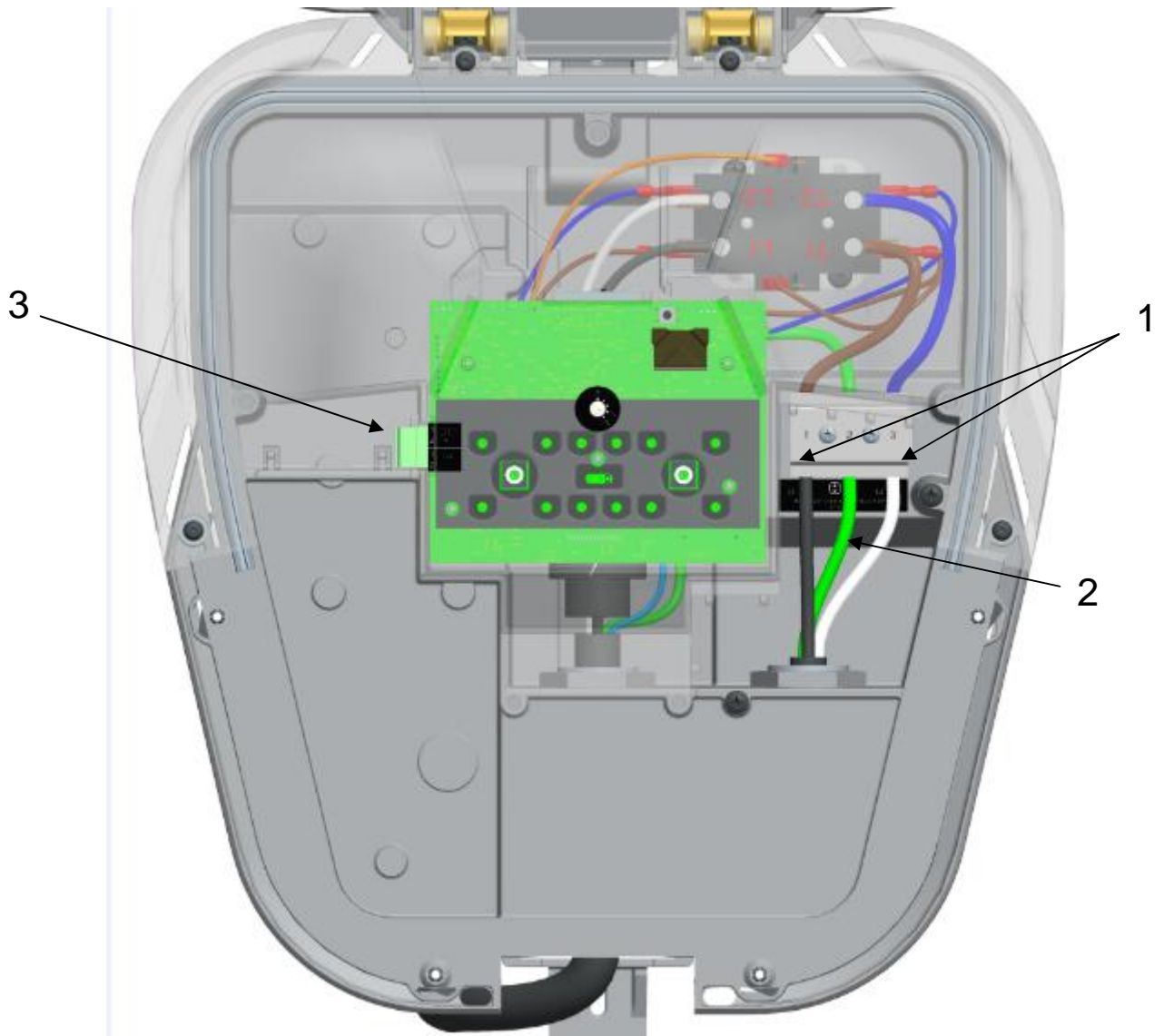
2.4 Exterior – Rear

1. Mounting Tabs
2. Fed from behind wiring option
3. Fed from the bottom wiring option
4. EV Cord



2.5 Interior – Connection Area

1. Line Conductor Connections
2. Ground Connection
3. Remote Control Interface



2.6 Device States

EVSE's do not have the capability to determine whether your car has been charged or not, refer to car manual for indication of car battery status.

State Name	Description	Indicator(s)	Halo Status Indicator
Power Available	240V or 208V Power Present	'Power Available'	Off
Ready to Charge	EV detected, waiting for charging command from EV	'Power Available' and "Ready"	Green - Solid
Charging	Charging EV	'Power Available' and 'Charging'	Green - Fading in and out
Pause*	Operation paused	'Power Available" and "Pause"	Off
Delay Timer	Operation awaiting delay timer	'Power Available' and 'Hour(s) Delay'	Off
Remote	System is controlled via remote control interface	'Power Available' and 'Remote Control Lock'	Off

* Some EV's may initiate a delay of charge when exiting out of the 'Pause' state before the EV starts telling the VersiCharge to start charging again. Please refer to the user manual for the EV for further information.

Further combinations of indicators on the unit are described in the Fault code section 4.3.

Section 3: Installation

3.1 Building Survey

- **Available voltage, current and frequency:**
 - VersiCharge EV charging stations can draw up to 30A at 240 VAC, 50/60 Hz (7.2kW of power). The complete electrical structure of the building must be adequately sized to handle the entire building energy load, under peak conditions, as well as the charging station load under operation.
 - Checking for adequate power includes all the connections from the utility through the entire circuit structure to the branch circuit position and connected wiring.
 - Utility connection and transformer capacity - check with utility service provider to ensure enough power is available for the building and the VersiCharge under full loading.
- **Available breaker positions and amperage**
 - Verify the panel has an open position for a two pole breaker.
 - Verify that the additional 30 A draw from the VersiCharge will not exceed the total loading for the Main Breaker of the structure.
- **Breaker selection**
 - A 2-pole, 40 A dedicated branch breaker is required for both cord-and-plug installation and hard wired installations. *Siemens Part numbers: Q240 (plug-in type), B240 (bolt-on type).*
 - The VersiCharge must be wired on a dedicated circuit, with no other loads wired on that circuit.

3.2 Site Selection



NOTE: To ensure optimal functionality, we don't recommend installing the VersiCharge unit in the direct sunlight.



NOTE: UNIVERSAL UNITS may be installed in environments in which NEMA 3R ratings are required, while HARDWIRED UNITS may only be installed in environments where NEMA 1 ratings are required.

Accessibility

- When selecting a mounting site, ensure that the connector can reach the EV before starting installation.

- The VersiCharge will mount on the surface of the wall, protruding at least 15 inches, and a location for installation should be chosen where there is sufficient space to park an EV, walk past the device, open nearby doors, etc., without obstruction.
- If the installation location is not already wired for installation, installation of the VersiCharge unit should be planned with an electrician and then the electrician should bring in the electricity according to those guidelines.



DANGER Explosion hazard. This equipment has arcing or sparking parts that should not be exposed to flammable vapors. This equipment should be installed at least 18 inches above floor or ground level. Use extreme caution and follow instructions carefully.

3.3 Cord-and-plug installation (UNIVERSAL UNITS)

The standard VersiCharge unit (UNIVERSAL UNIT) arrives factory-configured for rear fed and bottom fed cord-and-plug installations. Do not remove the cord as it should not be reinstalled once removed.



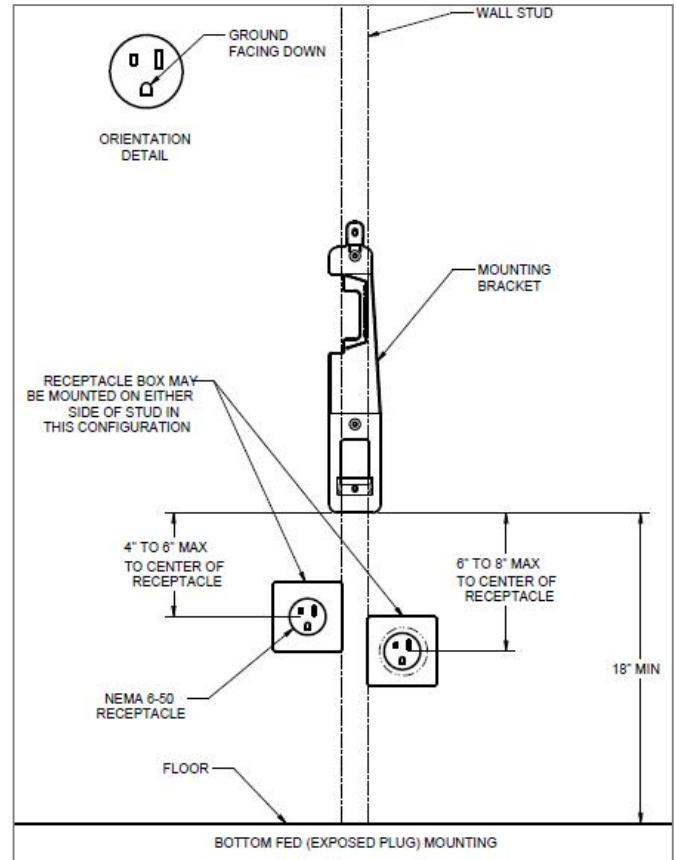
WARNING! Due to risk of moisture, cord-and-plug installations require a NEMA outdoor rated receptacle and enclosure, when installed outdoors. Installing outdoors without properly rated outdoor receptacles and enclosures will violate listings and void the device warranty. Outdoor cord-and-plug installations must be bottom fed only.

Bottom-fed, Cord-and-Plug Installation

Mounting

- Measure the plug in cord of the unit first since the mounting bracket and the receptacle need to be located within this distance of each other.
- Locate a stud within the wall to attach the mounting bracket.
 - For concrete or masonry walls, install appropriate anchors.
 - Verify that the stud or anchor and surrounding materials can handle the 20+ lbs load of the VersiCharge.

- Receptacle will be located below VersiCharge mounting bracket, either to the left or the right of the stud to which the mounting bracket will be attached. Verify receptacle location complies with local code requirements.
 - NEC® 2011 specifies: Indoor (NEC® Article 625.29B) = installation 18 – 48 inches above ground level.
 - Verify local code with respect to installation height.
- Wire a standard NEMA 6-50 receptacle using appropriate wire.



- Using 7/16 inch socket head and drill, attach the mounting bracket to the wall using two lag screws provided. Verify that lag screws are going into the stud.
- Hang the VersiCharge on the Mounting Bracket by first hooking the bottom of the unit into the mounting slot and then hooking the top into the mounting tab.
- Secure VersiCharge to wall and mounting bracket using provided screws.
- Plug the VersiCharge into the receptacle.



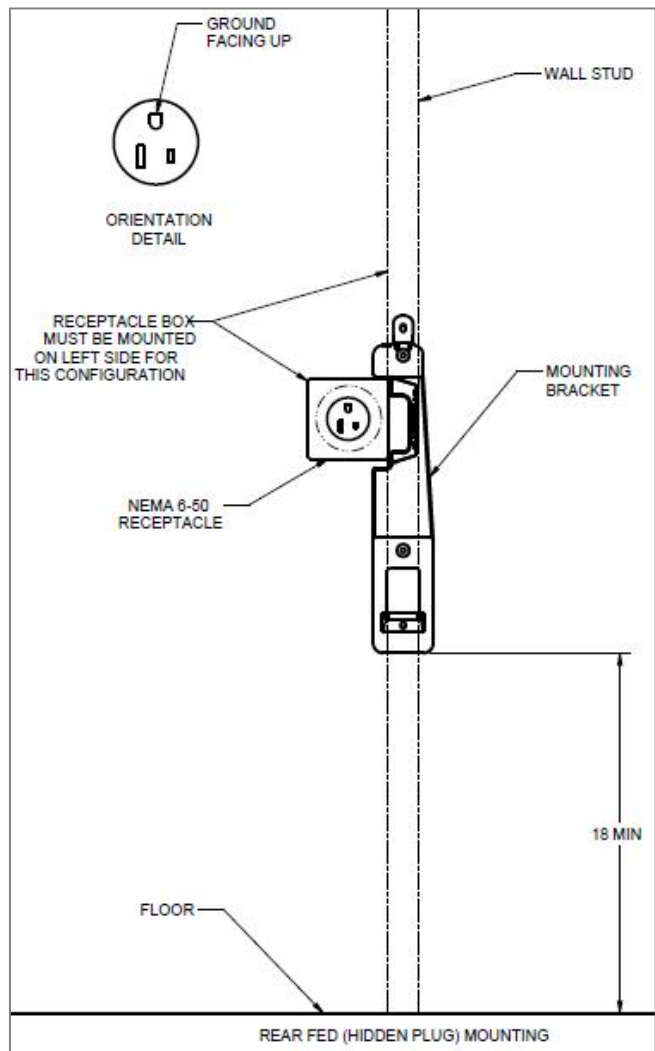
Rear-fed, Cord-and-Plug Installation

Mounting



NOTE: Flush mount installations only, meaning the receptacle is even with wall in which it is installed.

- Locate a stud within the wall to attach the mounting bracket.
 - For concrete or masonry walls, install appropriate anchors.
 - Verify that the stud or anchor and surrounding materials can handle the 20+ lbs load of the VersiCharge.
- Ensure that receptacle can be flush mount installed to the left side of the mounting bracket.
 - Receptacle should be installed prior to mounting the VersiCharge to the wall.
 - Verify local code with respect to installation height.
 - NEC® 2011 specifies: Indoor (NEC® Article 625.29B) states installation 18 – 48 inches above ground level.
- Wire a standard NEMA 6 (above it is NEMA 6-50) receptacle using appropriate wire.
- Using 7/16 inch socket head and drill, attach the Mounting Bracket to the wall using two lag screws provided. Verify that lag screws are going into the stud.



- To hang the unit onto the mounting bracket, place bottom mounting tab into corresponding slot in mounting bracket. Plug cord into receptacle. Rotate the unit towards the wall so that the hook on the unit goes over the top mounting bracket.
- Secure VersiCharge to wall and mounting bracket

3.4 Hard-wired installation (UNIVERSAL/HARDWIRED UNITS)

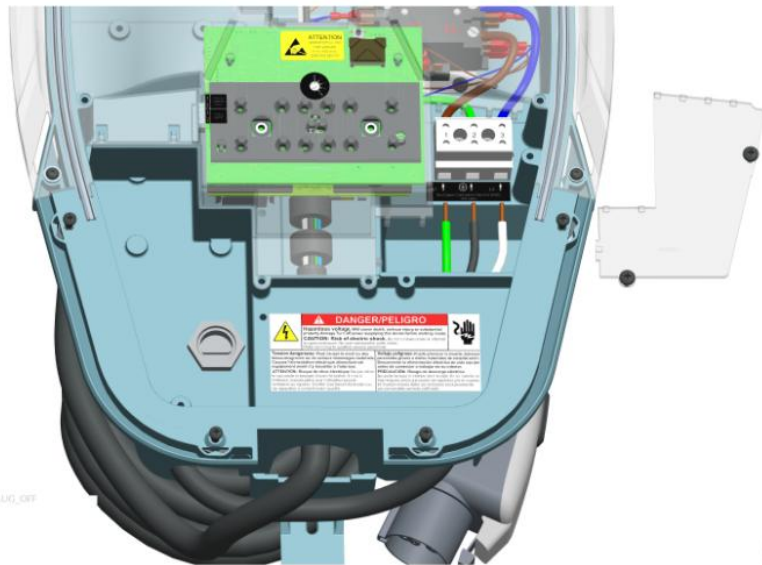


NOTE: UNIVERSAL UNITS may be installed outdoors, while HARDWIRED UNITS cannot be installed outside

This section describes the hard-wired installation for the hardwired units, but also includes the step of removing the cord-and-plug assembly in case the universal VersiCharge units need to be hard-wired during installation.

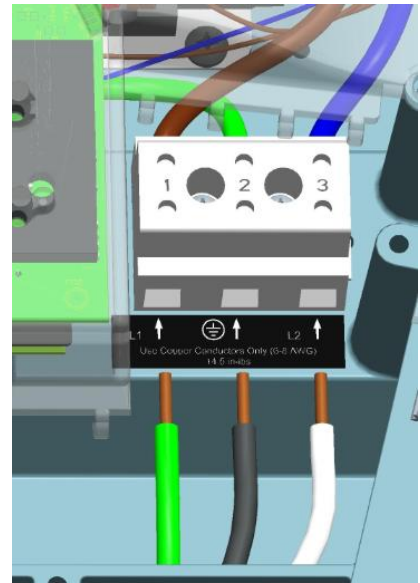
Removing the Cord-and-Plug Assembly (only required for UNIVERSAL UNITS)

- Open hinged cover by loosening four cover Phillips closure screws.
- Remove barrier by removing the two securing screws.



- Remove the cord-and-plug assembly from the conductor opening

- Disconnect the attachment plug wires from the terminal block by loosening screws in position 1, 2, and 3.
- Do not adjust the two screws on top of the terminal block unit. These are for factory use only.
- Disconnect and remove strain relief and entire cord-and-plug assembly
- Continue with directions in 'Wiring Steps for Hard-Wired Installation' starting at 'Proper strain relief is required for conduit connection'



Wiring Steps for Hard-Wired Installation

- Open hinged cover by loosening four cover Phillips closure screws.
- Remove barrier by removing the two securing screws.



DANGER Hazardous voltage. Will cause death or serious injury. Turn off Power before working on this equipment by turning the circuit breaker to which this circuit is wired to the off position.

- Chose appropriate conduit hub depending on whether your installation is inside or outside. Outdoor installations must be completed with a water tight conduit hub. We recommend flexible conduit for easier use during installation.
- Locate a stud within the wall to attach the mounting bracket and receptacle. For concrete or masonry walls, install appropriate anchors.
- Verify that the stud or anchor and surrounding materials can handle the 20+ lbs load of the VersiCharge.
- Verify local code with respect to installation height:
 - Installation height is regulated by NEC®; however this can vary based on local jurisdiction.
 - NEC® 2011 specifies:
 - Indoor (NEC® Article 625.29B) = installation 18-48 inches above ground level
 - Outdoor (NEC® Article 625.30B) = installation 24-48 inches above ground level

- Using 7/16 inch socket head and drill, attach the Mounting Bracket to the wall using the two lag screws, ensuring that the cutout lines up with the conduit and that the two lag screws are going into the stud.
- Route conduit to the opening of the unit and terminate appropriately.
- Route conductors, with proper strain relief, into the VersiCharge from the conductor opening
 - Pull 3-6 inches of slack through the conductor opening
- Place bottom mounting tab into corresponding slot in mounting bracket. Secure VersiCharge to wall and mounting bracket
- Wire conductors (copper only) into device (L1, L2 and Ground) from connected conduit. Using torque screw driver, torque all lugs to 14.5 lb-in.
- Replace barrier and secure with the two screws which were removed in the beginning.
- Rotate the unit towards the wall so that the hook on the unit goes over the top mounting bracket.
- Replace hinged cover, securing with four Phillips head screws
- Secure VersiCharge to wall and mounting bracket

3.5 Amperage Adjustment

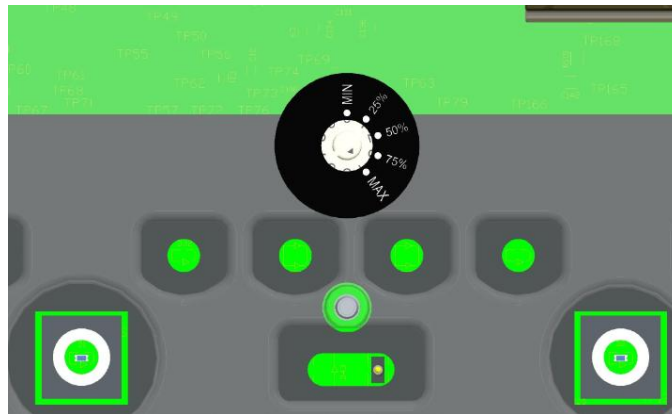
The Siemens VersiCharge has the option to set the maximum amperage/power that can be delivered to the car using the Amperage adjustment switch. Note that VersiCharge cannot control the power draw to the EV, it can only communicate the current capacity of the device to the EV.

Note: The EV controls the power draw. the VersiCharge only communicates the maximum available power to EV.

Dial Settings

- Amperage adjustment dial is for use by a qualified technician only
- Purpose of the amperage adjustment dial is to limit the max power that can be delivered by the charging station.
- The dial has 10 settings
 - 0-4 are for amperage adjustments

- Settings 5-9 are for factory use only. These settings will result in a fault if used.
- Verify that the VersiCharge is disconnected from power when changing the amperage adjustment dial



Setting	0	1	2	3	4
Label	MIN	25%	50%	75%	MAX
Current (A)	6	7.5	15	22.5	30
Power (kW)	1.44	1.8	3.6	5.4	7.2

Circuit Requirements

- Circuit must be sized for the max ampere requirement. Do not de-rate breakers or conductors based on amperage adjustment

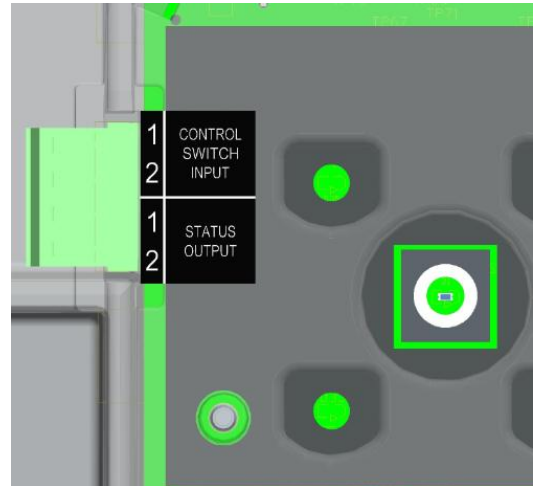
3.6 Remote Control Interface

The Siemens VersiCharge has a Remote Control Interface that allows charging to be controlled by an external device. This interface could be used to respond to a demand response event from a utility.



WARNING! Remote Control Interface should be low voltage control wiring. Installing higher voltage on this interface can cause damage to unit, preventing it from functioning properly. **Do not hook up 120/240 V to these connections.**

- Control Switch input is a dry contact input from an external source.
- Status Output indicates the charging status of the VersiCharge.
- The Remote Control Interface is located inside the unit so to connect a device, the unit has to be opened by taking the following steps:
 - Open hinged cover by loosening four cover Phillips closure screws.
 - Remove barrier by removing the two securing screws.
- Remove connector to run wire
 - Route control wiring, with proper protection and strain relief, through the low voltage wire opening. Do not route the wiring along with any high voltage connections
 - Install external control source according to the instructions provided with that device



Note: See section 4.7 for more details on this interface

Section 4: Operation

4.1 Overview

The VersiCharge EV Charging Stations incorporate industry accepted operating standards for EV charging. These include the operation and communication protocols between the VersiCharge and the EV, as well as the required safety features. This section explains in detail the steps of operation.

4.2 Typical Operation

The VersiCharge is primarily a 'plug-and-play' device.

- Descriptions of various device states can be found in Section 2.6
 - Verify that the VersiCharge is in the 'Power Available' state by ensuring that the 'Power Available' indicator is illuminated.
 - Remove the connector from the connector holster by pressing the button on the connector handle and pulling the handle away from the VersiCharge holster
 - Plug the connector into the corresponding receiver on the EV. Feel for a positive connection with a click.



WARNING! Do not force the connector into the receiver on the EV. Forcing the connection can cause damage to the EV and/or the VersiCharge. If the connection between the receiver and the connector shows any resistance, inspect the pins in each, and if damage is found, call a qualified service person.

- If the EV does not require a charge, the VersiCharge will go into the 'Ready to Charge' state.
- If the EV does require a charge, the VersiCharge will automatically switch to the 'Charging' state. An audible click is present when the VersiCharge goes into and out of the 'Charging' state.
- Once the charge is complete, or the EV sends a signal to stop charging, the VersiCharge will automatically return to the 'Ready to Charge' state.

4.3 Faults



A fault is indicated by a solid red halo, a blinking red halo, and/or the fault LED being illuminated. In any of these conditions, please press the 'Pause' button twice to reset the device. If the condition persists, please turn the circuit breaker feeding the device off, then turn it back on. If the condition still persists, please contact customer support at **1-800-241-4453**.

The VersiCharge will automatically disconnect power in the event of a fault.

- If a fault occurs during charging, the VersiCharge will disconnect power from the EV, with an audible click, and change to the 'Fault' state. The VersiCharge will automatically self-recover when all faults clear, with the exception of grounding faults.
- For grounding faults, after 15 minutes, the VersiCharge will attempt to continue charging, and if no faults are present, will return to the 'Charging' state. During this 15 minute delay, the 'Fault' indicator on the unit will blink, the '2 Hour Delay' indicator is illuminated, and the Halo on the unit will blink red simultaneously.
- If a fault is still present immediately after the VersiCharge re-enters the 'Charging' state, the VersiCharge will return to the 'Fault' state, and remain in that state until it is manually reset. During this time the 'Fault' indicator will be illuminated in red, the '4 Hour Delay' indicator will be illuminated, and the Halo on the unit will be illuminated in a constant red color.
 - To reset the device, press the 'Pause' button, which will take the device to the 'Pause' state.
 - Pressing the 'Pause' button again will move the VersiCharge to the 'Ready to Charge' state, and if a charge is required, the VersiCharge will automatically begin charging and move to the 'Charging' state.



NOTE: To reset the device you can turn the circuit breaker feeding the device off, then turn it back on.



NOTE: Some cars may delay the command to start charging again when coming out of the 'Pause' state. Please refer to user manual of the EV if this is happening on your unit.

- If the device continues to experience immediate faults, contact a qualified person for assistance.

Delay timer LEDs in combination with fault LEDs give more information on fault type. Please call customer support for more details.

4.4 Cord Management

The VersiCharge has a built in cord management system.

- When not in use, the connector cord should be looped over the top of the VersiCharge unit to prevent accidental damage
- The connector should be plugged into the connector holster on the front of the VersiCharge to prevent accidental damage

- While in use, the cord can be unwrapped, loop by loop, to allow sufficient length of cord to be unwound to reach the EV receiver



WARNING! Failure to properly protect the connector and the cord could result in damaged components, which could prevent the VersiCharge from functioning properly or create a hazardous situation.

4.5 Delay Timer

The VersiCharge has a built in delay timer to allow users to select the time that they would like for their EV to charge. The delay timer will prevent the VersiCharge from entering the 'Charging' state for the selected length of time (2/4/6/8 hours).

- From either the 'Charging' state or the 'Ready to Charge' state, press the 'Delay Timer' button
 - Pressing the button once, will delay charging to 2 hours
 - Pressing the button twice, will delay charging to 4 hours
 - Pressing the button three times, will delay charging to 6 hours
 - Pressing the button four times, will delay charging to 8 hours
 - Pressing the button a fifth time will deactivate the timer and return the VersiCharge to the 'ready to Charge' state, and if the EV requires a charge, to the 'Charging' state
- Every two hours, the next 'hour Delay' indicator will turn off, so you can tell how much delay time is remaining by looking at the remaining illuminated 'Hour Delay' indicators
 - For example: If only the '2 Hour Delay' indicator is illuminated, the delay has less than 2 hours remaining
 - When the delay timer runs out, the VersiCharge unit will automatically return to 'ready to Charge' state, and if the EV requires a charge, to the 'Charging' state

4.6 Halo Operation

Halo States

Halo indicator on VersiCharge indicates the status of charging session.

State Name	Description	Halo Status Indicator
Power Available	240V or 208V Power Present	Off
Ready to Charge	EV detected, waiting for charging command from EV	Green - Solid
Charging	Charging EV	Green - Fading in and out
Pause	Operation paused	Off
Delay Timer	Operation awaiting delay timer	Off
Remote	System is controlled via remote control interface	Off

Halo Deactivation

The Halo indicator on the versiCharge can be deactivated to marginally lower power consumption of your device during normal operation. This will prevent the Halo from illuminating in all states, except the 'Fault' state.

- To de/re-activate the Halo:
 - Remove the connector from the EV and place in the connector holster
 - Verify that the VersiCharge is in the 'Power Available' state by ensuring that only the 'Power Available' indicator is illuminated
 - Press and hold both the 'Pause' and the 'Delay Timer' buttons for 5 seconds. The Halo will blink green three times, and then fade out to off

4.7 Remote Control Interface

The Siemens VersiCharge has a Remote Control Interface that allows charging to be controlled by an external device. Examples include demand response switches, building automation systems, digital sensors, etc.

- To wire a digital input into the dry contact in the connection area located inside of the VersiCharge, please refer to the installation section 3.6 of this manual.

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- When the external contact is closed, the alternate input will control the VersiCharge, preventing it from entering the 'Charging' state
- The status output is a switch that indicates charging status. When the contacts are closed, the unit is in charging state

Section 5: Troubleshooting

5.1 General Settings

Some of the errors that occur are not caused by the VersiCharge, but by the EV compatibility or by settings which are turned on in the EV itself.

- If the unit is going into fault, please check the settings in the EV to ensure that these are not causing the VersiCharge to stop charging. Many EVs have a setting for time of charge for example in which the user defines a preference of charging only in certain hours of the day/night. Settings such as these will override all commands within the VersiCharge for safety reasons and will thus stop charging your EV. Adjusting the settings in the car would be the suggested action to take in order to be compatible with the VersiCharge.
- Nuisance fault: As a leader in electrical technology, Siemens has made the decision to install 5 mA grounding protection in all VersiCharge devices. This is the same level of protection that is required in kitchens and bathrooms of residential dwellings. Some other manufacturers (EVSE and Auto manufacturers) have selected 20 mA protection levels. Because Siemens units measure to a more sensitive level, occasional charging interruption may occur under certain circumstances. See section 4.3 for reset instructions.

5.2 Specific Errors and Actions

The VersiCharge has been designed to self indicate which type of fault has occurred.



A fault is indicated by a solid red halo, a blinking red halo, and/or the fault LED being illuminated. In any of these conditions, please press the 'Pause' button twice to reset the device. If the condition persists, please turn the circuit breaker feeding the device off, then turn it back on. If the condition still persists, please contact customer support at **1-800-241-4453**.



WARNING! Before taking any of the actions which suggest opening the unit for adjustment, turn off the power supplying the VersiCharge.

Section 6: Warranty

Limited Warranty

Siemens Industry Inc. ("**Siemens**") has developed a highly reliable EV Supply Equipment (EVSE), branded as VersiCharge ("**VersiCharge EVSE**"), that is designed to withstand normal operating conditions when used in compliance with the Siemens Installation and Operations Manual supplied with system as originally shipped by Siemens. The Siemens limited warranty ("**Limited Warranty**") covers defects in workmanship and materials of the VersiCharge EVSE ("**Defective Product**") for a period of three (3) years (the "**Warranty Period**") from the date of original purchase of such VersiCharge EVSE.

The Limited Warranty does not apply to, and Siemens will not be responsible for, any defect in or damage to any Siemens VersiCharge EVSE: (1) that has been misused, neglected, tampered with, altered, or otherwise damaged, either internally or externally; (2) that has been improperly installed, operated, handled or used, including use under conditions for which the product was not designed, use in an unsuitable environment, or use in a manner contrary to the Siemens Installation and Operations Manual or applicable laws or regulations; (3) that has been subjected to fire, water, generalized corrosion, biological infestations, acts of God, or input voltage that creates operating conditions beyond the maximum or minimum limits listed in the Siemens VersiCharge EVSE specifications, including high input voltage from generators or lightning strikes; (4) that has been subjected to incidental or consequential damage caused by defects of other components of the electrical system; or (5) if the original identification markings (including trademark or serial number) of such VersiCharge EVSE have been defaced, altered, or removed. The Limited Warranty does not cover costs related to the removal, installation or troubleshooting of the customer's electrical systems. The Limited Warranty does not extend beyond the original cost of the Siemens VersiCharge EVSE.

During the Warranty Period, Siemens will, at its option, repair or replace the Defective Product free of charge, provided that Siemens through inspection establishes the existence of a defect that is covered by the Limited Warranty. Siemens will, at its option, use new and/or reconditioned parts in repairing or replacing the Defective Product. Siemens reserves the right to use parts or products of original or improved design in the repair or replacement of Defective Product. If Siemens repairs or replaces a Defective Product, the Limited Warranty continues on the repaired or replacement product for the remainder of the original Warranty Period or ninety (90) days from the date of Siemens's return shipment of the repaired or replacement product, whichever is later.

The Limited Warranty covers both parts and labor necessary to repair the Defective Product, but does not include labor costs related to un-installing the Defective Product or re-installing the repaired or replacement product. The Limited Warranty also covers the costs of shipping repaired or replacement

product from Siemens, via a non-expedited freight carrier selected by Siemens, to locations within the United States (including Alaska and Hawaii) and Canada, but not to other locations outside the United States or Canada. The Limited Warranty does not cover shipping damage or damage resulting from mishandling by the freight carrier. Any such damage is the responsibility of the freight carrier.

To obtain repair or replacement service under this Limited Warranty, the customer must comply with the following policy and procedure:

- All Defective Product must be returned with a Return Merchandise Authorization Number (RMA) which customer must request from Siemens.
- RMA request must include the following information:
 - Proof-of-purchase of the Defective Product in the form of (1) the dated purchase receipt from the original purchase of the product at point of sale to the end user, or (2) the dated dealer invoice or purchase receipt showing original equipment manufacturer (OEM) status, or (3) the dated invoice or purchase receipt showing the product exchanged under warranty.
 - Model number of the Defective Product
 - Serial number of the Defective Product
 - Detailed description of the defect
 - Shipping address for return of the repaired or replacement product
- All Defective Product authorized for return must be returned in the original shipping container or other packaging that is equally protective of the product
- The returned Defective Product must not have been disassembled or modified without the prior written authorization of Siemens

THE LIMITED WARRANTY IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY SIEMENS AND, WHERE PERMITTED BY LAW, IS MADE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF TITLE, QUALITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OR WARRANTIES AS TO THE ACCURACY, SUFFICIENCY OR SUITABILITY OF ANY TECHNICAL OR OTHER INFORMATION PROVIDED IN MANUALS OR OTHER DOCUMENTATION. IN NO EVENT WILL SIEMENS BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSSES, COSTS OR EXPENSES HOWEVER ARISING, WHETHER IN CONTRACT OR TORT, INCLUDING WITHOUT LIMITATION ANY ECONOMIC LOSSES OF ANY KIND, ANY LOSS OR DAMAGE TO PROPERTY, OR ANY PERSONAL INJURY.

To the extent any implied warranties are required under applicable law to apply to the Siemens VersiCharge EVSE, such implied warranties shall, to the extent permitted by applicable law, be limited in duration to the Warranty Period. In states and provinces which do not allow limitations or exclusions on implied warranties or on the duration of an implied warranty or on the limitation or exclusion of incidental or consequential damages, the above limitation(s) or

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exclusion(s) may not apply. This Limited Warranty gives the customer specific legal rights. The customer may have other rights that vary from state to state or province to province.

Section 7: Wiring Diagrams

