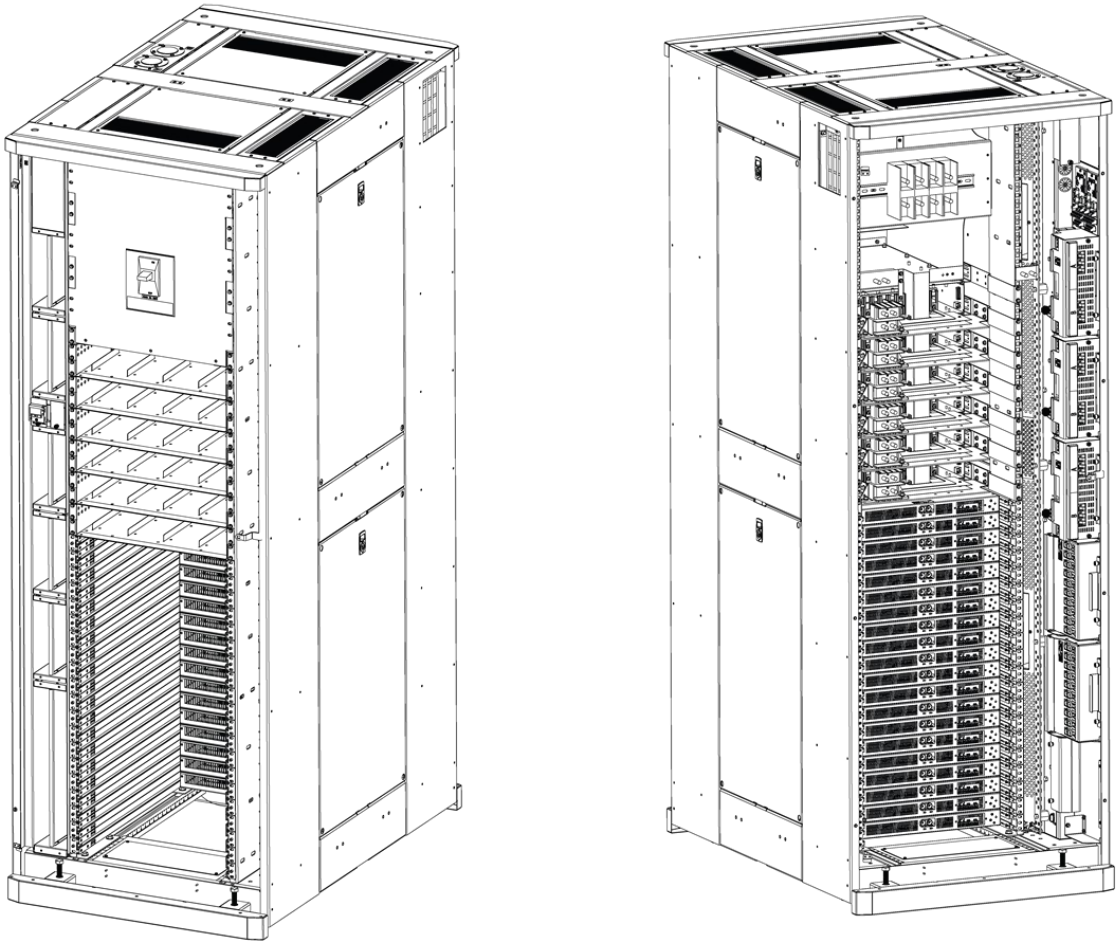
8600427678P Edge Distributed Power Architecture 48kW Inverter System

"IMPORTANT SAFETY INSTRUCTIONS" and "SAVE THESE INSTRUCTIONS"



TO BE USED IN A CONTROLLED ENVIRONMENT AND RESTRICTED ACCESS LOCATION ONLY.

Intended for use in a temperature-regulated, indoor area that is relatively free of conductive contaminants.

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Unpacking the Edge and its Components

- The Edge is shipped on its own pallet separate from rectifiers and battery modules that ship on their respective pallets.
- Inspect the shipping pallets and containers for any damage prior to accepting receipt of the system.
- If any damages are noted, make photocopies of all shipping records before reporting this to the carrier.
- If any damage or missing items are noted after accepting delivery, notify the deliverer and request an inspection. Upon leaving our facility, OmniOn is not liable for any damage that occurs during shipping and handling.
- If a unit requires repair, please contact our customer support line, +1 972 244-9288, for information on repair and return information.

Parts Checklist

- When first opening your Edge Distributed Power Architecture System, confirm the contents of your shipment matches with the shippers packing list as some items will arrive as 'Ship Loose Items'.
- Retain the original packaging until the system has been installed and fully tested.
- Visually inspect the contents for any damage or missing items. If any damage is discovered, follow the same procedure noted when receiving the unit.

Operating / Storing the Units

- The unit should be stored in its original packaging.
- Store rectifiers in a dry area with the ambient temperature between -40°C and +85°C (-40°F and +185°F).
- Operate the rectifiers within an operating temperature range between 0°C and +40°C (32°F and 104°F).
- Storage Requirements for Battery Modules is as follows:
    - BME2500/120VRLA48 (VRLA) - store in cool and dry room at temperature <25°C
    - BME2500/220NAION48 (Sodium Ion) - store in cool and dry room at temperature between 20°C - 30°C.
    - BME…. (NiMH) - store in cool and dry room at temperature between 20°C - 30°C.
- Off-Loading Enclosure from Shipping Pallet w/ Ramp purchased separately (recommend 1-2 per site).

WARNING: Care should be taken when off-loading your Edge Distributed Power Architecture enclosure from its secure packing assembly. Be sure to have two handlers and a safety spotter when removing the equipment to the mounting location. Do not populate any battery or rectifier positions before removing enclosure from pallet.

1. Slide the ramp, 8600279070P to the side of the cushioned pallet.
2. Attach Ramp 8600279070P with (4) #10X2.5" Deck Screws. Ensure deck screws are flush with the mounting surface.

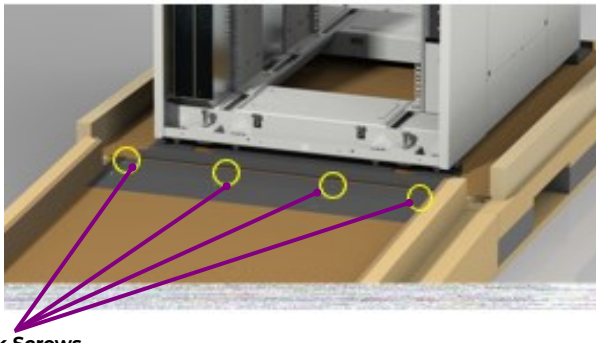


Figure 1 Ramp Deck Screws

Removing Enclosure to Pallet Anchor Bolts

Before lowering the leveling feet, remove 5/8 bolts from the bracket (8600273477P) and ten (10) 3/8" Hex Lag Screws from both front and rear sides of the enclosure.

Figure 2 Pallet Anchor Bolts

Lowering Leveling Feet

Lower (4) adjustable leveling feet screws to lift enclosure off of front and rear brackets, 8600273477P.
Remove front and rear brackets.

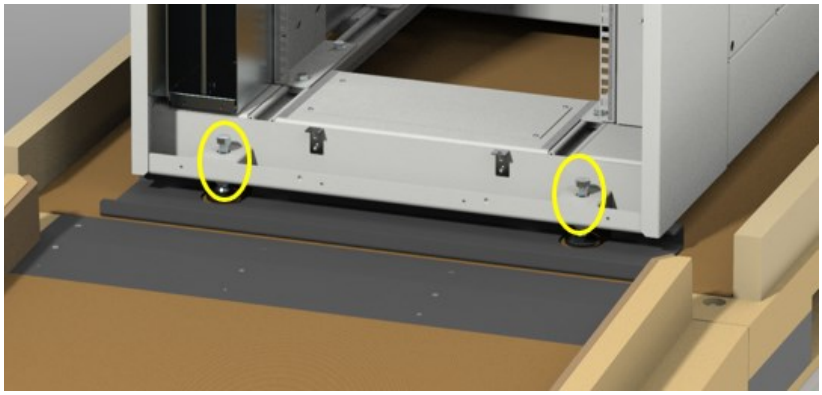


Figure 3 Lowering Leveling Feet

Raising the Leveling Feet

Once both brackets have been removed, raise the four (4) adjustable leveling feet screws to their maximum height. This will eliminate any clearance issues when rolling the enclosure off the cushioned pallet.

Figure 4 Raising Leveling Feet

Guide to Floor

Carefully guide the enclosure towards the ramp. It's recommended to have assistance on both sides and your spotter guiding and balancing the load from the front while moving slowly down the ramp. When on the floor, continue care in moving the enclosure to its' mounting area.

Step 1 – Frame Mounting

Caution Asbestos Alert: Floor tiles manufactured between 1920 and 1960 may be made with asbestos. Removal of or drilling through asbestos-containing floor tile and/or mastic is a Class III operation under the OSHA asbestos standard for construction, 29 CFR 1926.1101. If you suspect your work area to contain asbestos tiles, refer to a qualified installation group for further information.

Mise en garde: Les carreaux de sol fabriqués entre 1920 et 1960 peuvent être fabriqués avec de l'amiante. L'enlèvement ou le perçage de carreaux de sol et/ou de mastic contenant de l'amiante est une opération de classe III selon la norme de construction 29 CFR 1926.1101 de l'OSHA sur l'amiante. Si vous soupçonnez que votre zone de travail contient des carreaux d'amiante, reportez-vous à un groupe d'installaation qualifié pour plus d'informations.

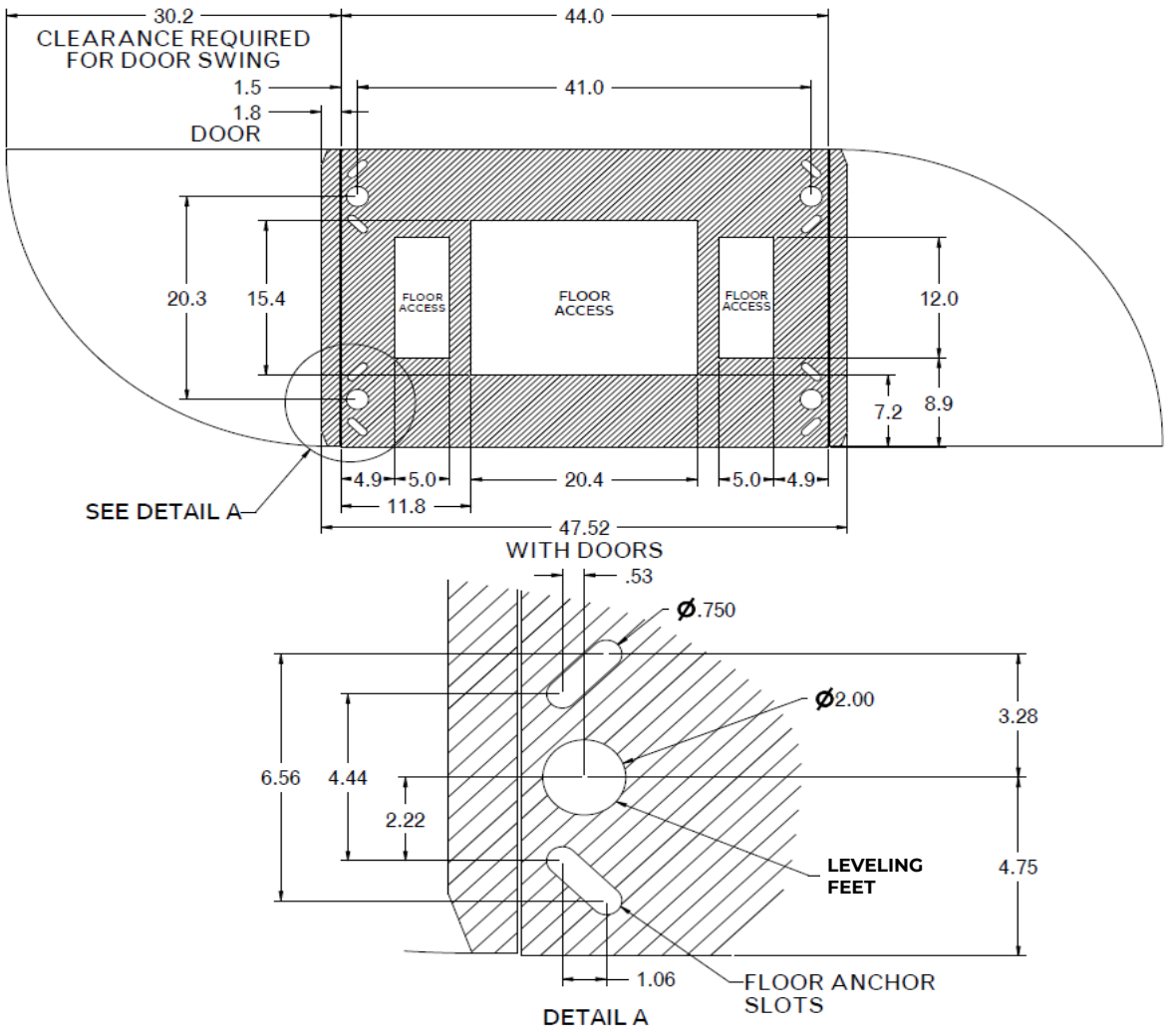


Figure 5 Mounting Dimensions

Step 1 – Frame Mounting (continued)

1. Using dimensions shown, mark anchor centers on floor.
2. Drill hole size for anchors per manufacturer's specification. Vacuum and install anchors flush to floor.
3. Place enclosure into position.
4. Add shim and isolation kits as needed.

    a. Installing Shim Kit (1600305805A) - Used to displace bay weight and level the bay in addition to the leveling feet. Place Shim kits at each corner of the cabinet (4 required).

Figure 6A EDGE without isolation pad and shim kits

Figure 6B EDGE Cabinet Shim Kit - 1600305805A

    b. Isolation Pads (1600305789A) and Shim Kits (1600305805A) - When enclosure is to be anchored to the mounting surface and your site requires an electrical isolation barrier between the enclosure and mounting surface. Place Isolation Pad below the cabinet for Electrical Isolation (one required per cabinet).

Figure 7A EDGE Isolation Plate Kit - 1600305789A

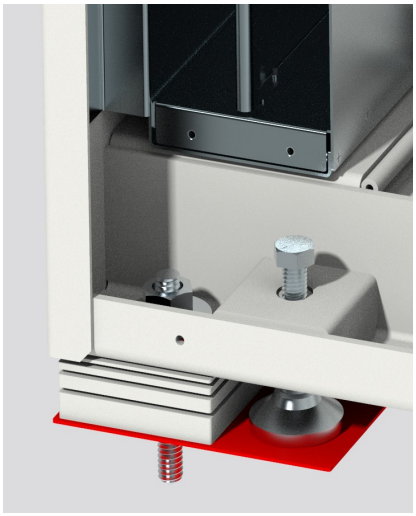


Figure 7B EDGE Cabinet with Isolation Pad and Shim Kit

Step 1 – Frame Mounting (continued)

5. Lower each of the four (4) leveling feet by turning the adjust 3/8”-16 bolt until the enclosure is flush against the shims installed above.
6. Place anchors and torque to manufacturer’s specification.
7. Attach the kick plate on front and back side with four mounting screws MCH 6-32. Torque the screw to 10 lb-in.

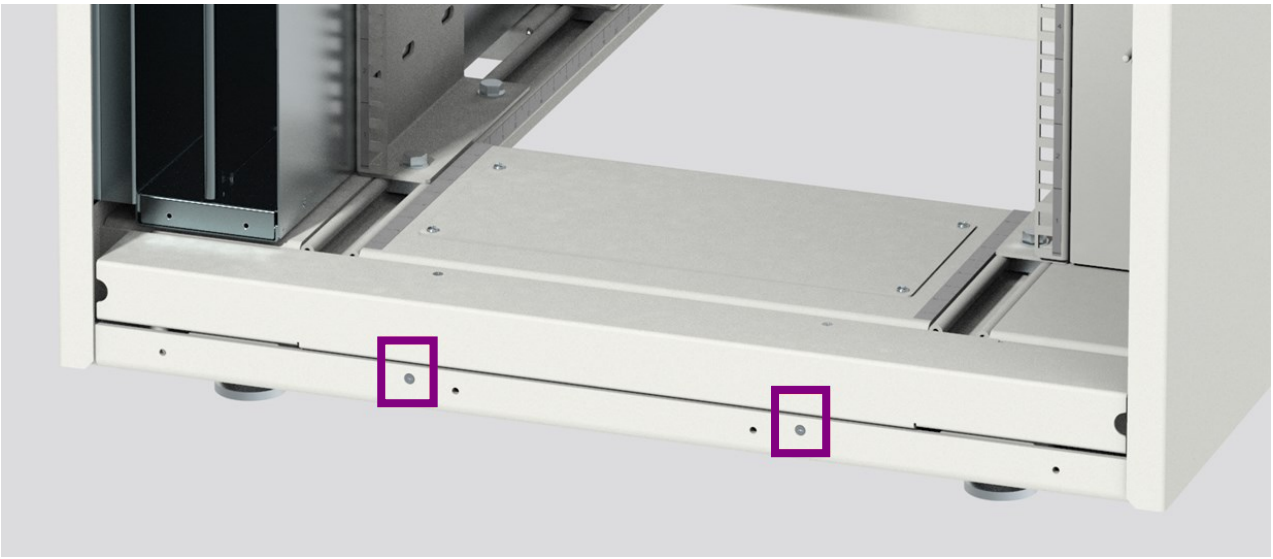


Figure 8 Kick Plate Screws

Note: Where required, an isolation pad barrier must be place between the base of the enclosure and the floor. Anchor bolts are inserted through pre-cut holes to secure the enclosure to the floor mounting surface. Review the site requirements for your installation for information regarding isolation pads. (See Figure 7A and 7B regarding shim and isolation pad materials)

Step 2A – Ground Electrode Terminal Connections

1. Connect a ground electrode terminal conductor at one of two locations at the top of the enclosure.
2. Recommended minimum wire size is 2 AWG.
3. Recommended lug is two-hole, 1/4-20 bolt with a 0.625” hole spacing.
4. Torque hardware to 65 lb-in.

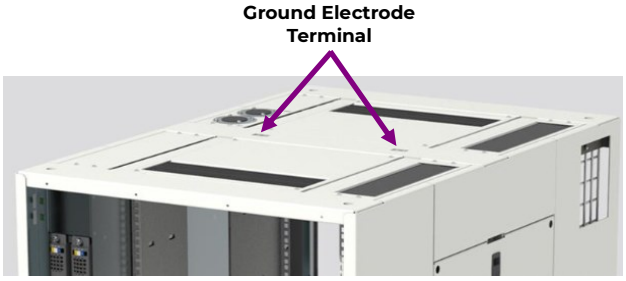


Figure 9 Ground Electrode Terminal Connections

Step 2B – DC Bus Grounding (*)

1. The enclosure is designed with the DC+ connected to the internal Ground Bar as shown in figure 10.
2. The internal Ground Bar needs to be attached to the site MGB (Master Ground Bus).
3. Using a digital multi-meter set to the ohms (resistance) scale, verify continuity between the enclosures' chassis ground connection and the internal ground bar.

(*) – Refer to your individual site's grounding requirements for the required ground connections to be deployed.

Figure 10 Internal Ground Bar

Step 3 – Connect AC output breaker to End Users' Equipment

1. Turn off the 300A output breaker. Lock-out Tag-out Bracket is available (4600271618P).
2. Recommended minimum conductor size 400 kcmils.
3. Connect the Equipment/load cables to the line 1 and line 2 - 120/240V_{AC} terminal of the terminal block provided at the rear side of the panel.
4. Line to Line (L1 to L2) provides 240V_{AC} output and Line to Neutral (L1/L2 to N) provides 120V_{AC} output.
5. Connect the Neutral and Equipment Ground cable to the respective terminals of the Terminal block.
6. Place the Flat washer and Lock washer provided on the connected terminals.
7. Tighten all connected terminals with Hex M12 nut and torque to 265 lb.-in (30N-m).

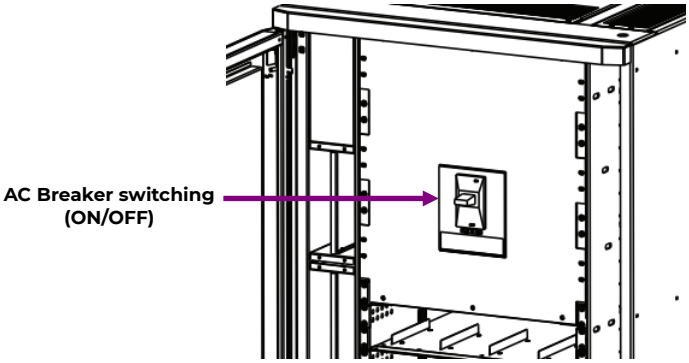


Figure 11 AC Breaker Switching - Front

Figure 12 4600271618P Lock-out Tag-out Bracket

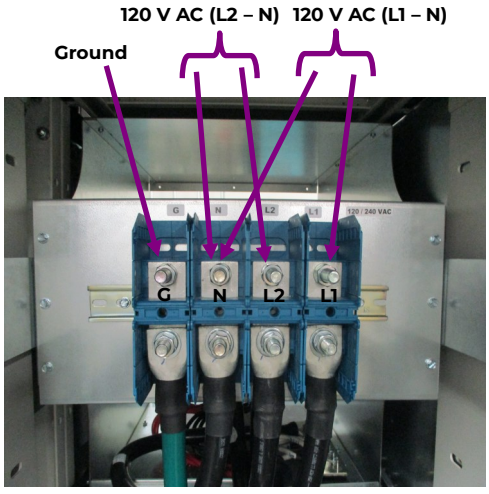


Figure 13 AC Breaker output – split phase connections

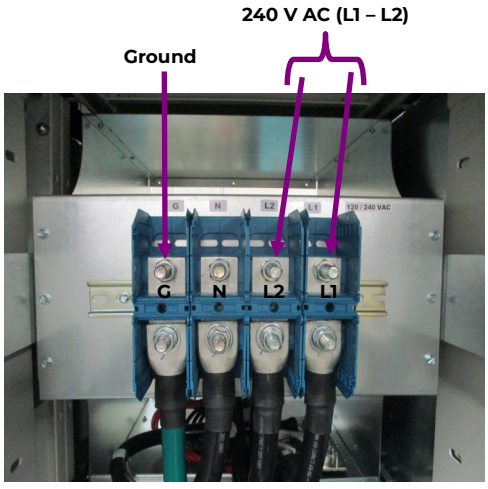


Figure 14 AC Breaker output – phase to phase connection

8. Flip top cover over to provide cable routing space.

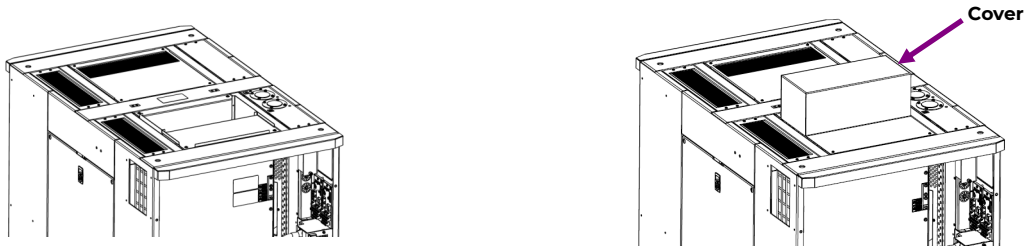


Figure 15 AC Top Cover

Step 4 – Connect AC Input

1. Connect 480V_{AC} Input provided through two (2) 50A_{AC} California Style Twist-Lock Inlets at the top of the enclosure.
2. Two 4 conductor, 6 AWG, 10' long cords provided. One end terminated w/CS8164C plug, opposite end unterminated with CS8165C connector shipped loose.
3. Mating Part number for the Twist-Lock Inlets, CS8164C.

Enclosure Connector: CS8175, Mating Cable Connector: CS8164C

External Required Input AC Protectors: 50A_{AC} minimum for (5) rectifiers on a 480V_{AC} feed.

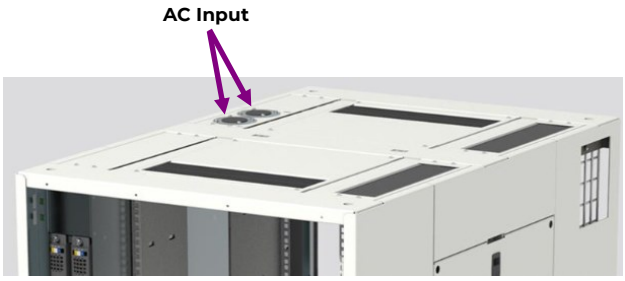


Figure 16 AC Input Connection

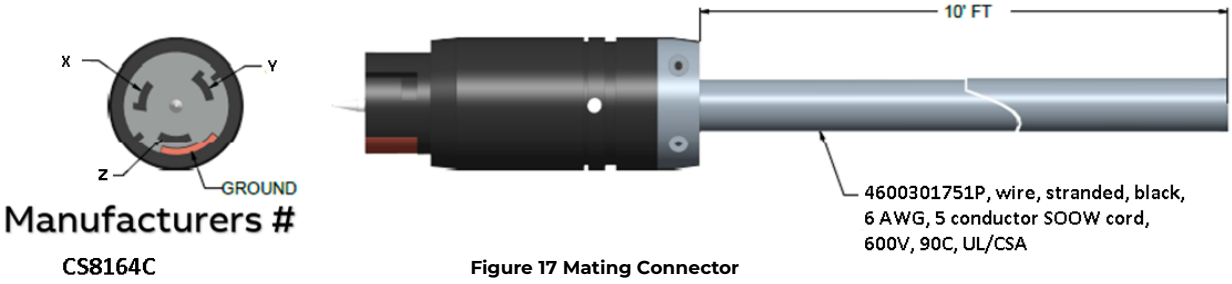


Figure 17 Mating Connector

Danger: Ensure AC power is OFF and use lock-out tagout procedures before connecting AC wiring. Follow all national wiring rules when connecting to AC mains. Turn off external disconnect or unplug AC service prior servicing.

Caution: Route AC cords to avoid contact with sharp or rough surfaces that may damage insulation and cause a short circuit.

Note: The rectifier modules in the left power stick (A1 Side) are fed by the front inlet and the rectifiers in the right power stick (A2 Side) are fed by the back inlet, when viewed from the front Top of the enclosure.

CABLE PART NUMBER	WIRE #1		WIRE #2		WIRE #3		WIRE #4		WIRE #5	
	LINE #1		LINE #2		LINE #3		LINE #4		LINE #5	
	CONNECTOR POSITION	WIRE COLOR	CONNECTOR POSITION	WIRE COLOR	CONNECTOR POSITION	WIRE COLOR	CONNECTOR POSITION	WIRE COLOR	CONNECTOR POSITION	WIRE COLOR
8600301807P	X	BLACK	Y	RED	Z	ORANGE	GND	GREEN	No Connect	WHITE

Table 1 AC Wiring Chart

Step 5 – Set Jumper – LAN Port per Galaxy Pulsar Edge Controller

One Galaxy Pulsar Edge Controller is shipped installed in one A1 Edge power stick slot. Before installing the controller, configure output alarm contact type and/or LAN Port operating mode by using the jumpers on the side of the controller. See view below for jumper locations.

<table>
<tr><th colspan="3">Controller Jumper Settings</th></tr>
<tr><td rowspan="2">LAN Port</td><td colspan="2">Configure and view system parameters using EasyView2 software or a web browser. Default IP address is 192.168.2.1 In server mode.
CAUTION: Do not connect LAN port to a network when jumper is set to Local.</td></tr>
<tr><td>Local (Server): LAN connects to a laptop.
Local (Server) is a temporary setting. Once configuration is complete move the jumper back to Network (Client) mode.</td><td>Network (Client) LAN connects to a network. (Default).</td></tr>
<tr><td>Alarm Relays</td><td colspan="2">Alarm Relays can be set to operate as Close on Alarm or
Open on Alarm. Open on Alarm is the Factory Default setting. Move Alarm jumpers to Close on Alarm when required.
The number of alarm relays in this controller is 6 alarm relays - PMJ, PMN, 1, 2, 3, and 4.
Relays 1 - 4 are assigned specific functions as described
in equipment documentation.</td></tr>
</table>

Relay defaults	
Relay 6	Power Major Alarm (PMJ)
Relay 5	Power Minor Alarm (PMN)
Relay 4	Fuse Alarm Major (External FAJ)
Relay 3	AC Fail (ACF)
Relay 2	Rectifier Fail alarm (RFA)
Relay 1	Battery on Discharge alarm (BD)

Table 2 – Controller Jumper Settings

Note: Additional Galaxy Pulsar Edge Controller information is available in the controllers' quick start guide, 850035894.

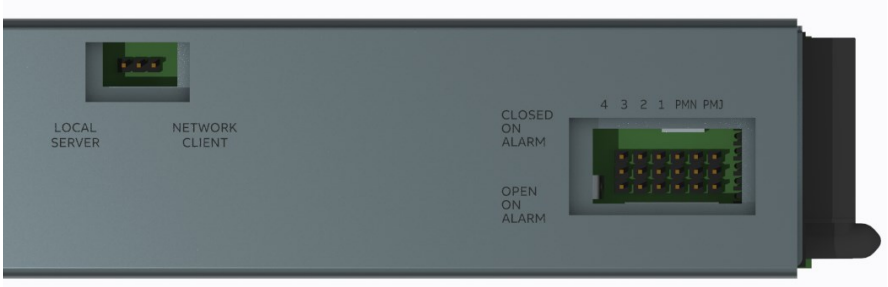


Figure 18 Controller Settings

Alarm Relay Jumper Examples	
Controller Type	Factory Settings
016R (6 Relays)	 Close on Alarm Open on Alarm

Step 6 – Install Controllers per Galaxy Pulsar Edge Controller Quick Start Guide

The Edge Distributed Power Architecture Enclosure has its' controller's factory pre - installed and tested. If it's necessary to install a controller, follow the next steps.

1. Install the controller in left slot A1 or B1. Unused controller position on right is already installed with slot filler 860024270P.
2. Secure controller using thumbscrew. Hand tight.
3. The controller is hot swappable and can be removed/installed with the system running.

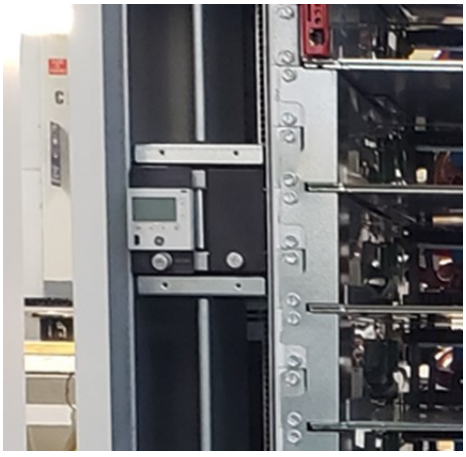


Figure 19 Controller Installation

Step 7 – Controller I/O Access

Connectors are on right side rear near the enclosure ceiling - See Inset view.

1. Connect LAN to Ethernet network. (10/100 Base-T).
2. Connect P15 or P16: RS485 to serial comm. connection P15 or P16 connector of next enclosure, when applicable.
3. If desired, connect TB10-TB15: Alarm Outputs to alarm relay monitoring equipment. TB10-TB15 position. information shown in table below.
4. If desired, TB26: Remote Interlock may be used to place rectifiers in standby-by mode. To use remote interlock, the factory installed jumper must be removed and replaced with field wiring to whatever device will control the interlock function. Interlock shorted equals rectifiers on. Interlock open equals rectifiers in standby.
5. If desired, TB25: Emergency Power Off. (EPO) may be used to place rectifiers in standby mode and open output devices on the batteries. This will kill all sources of DC output. To use EPO, the factory installed jumper must be removed and replaced with field wiring to the device that will control EPO. EPO shorted equals rectifiers on, batteries on the bus. EPO open equals rectifiers in standby, batteries removed from DC output bus.

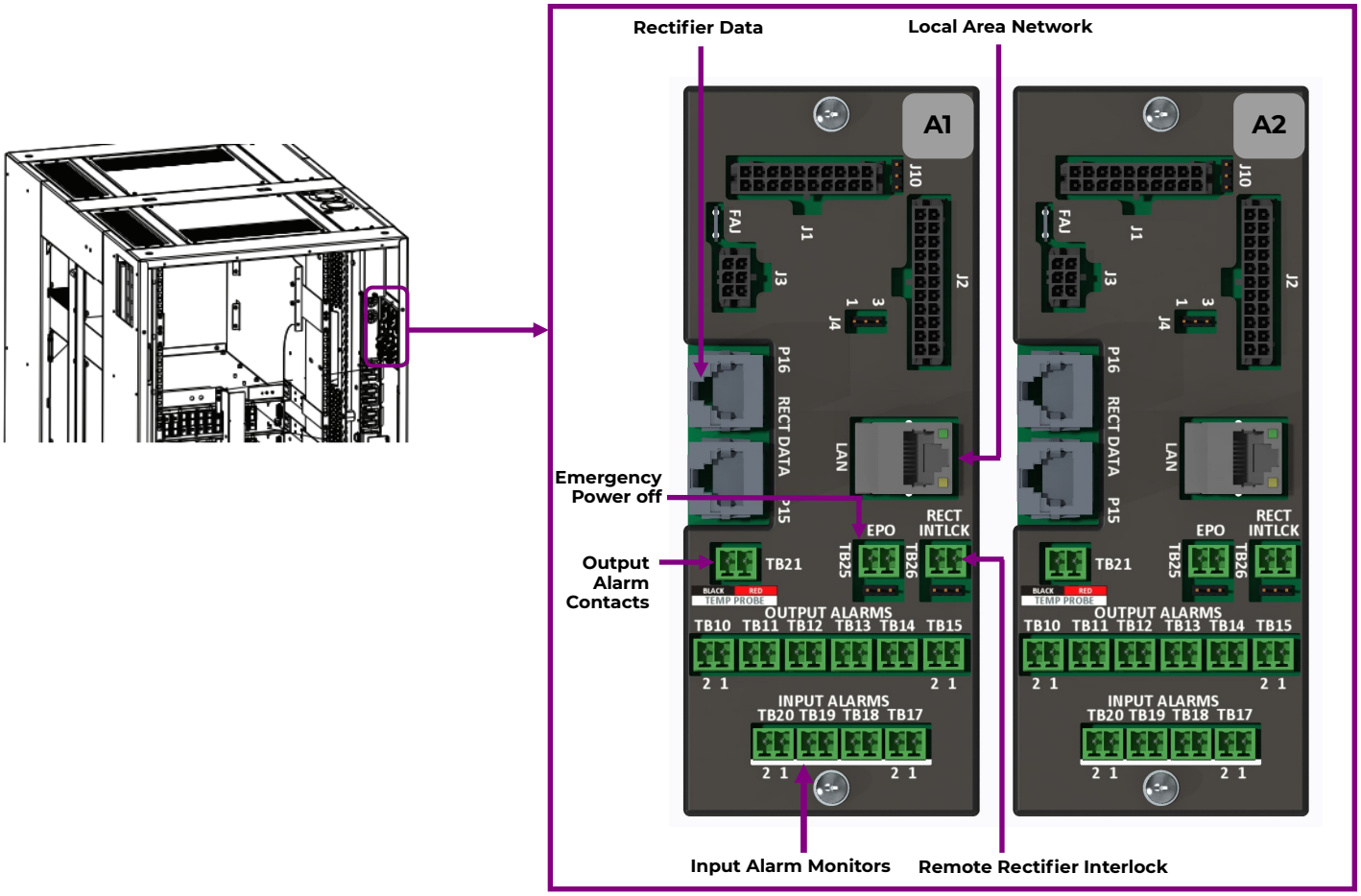


Figure 20 I / O Interface Board

OUTPUT ALARMS (RATED 60VDC @ 0.5A; DEFAULT AS "OPEN ON ALARM")			INPUTS ("HOT" DC BUS VOLTAGE CONTACT MONITORS)		
REF	FACTORY DEFAULT ASSIGNMENT (SIGNAL-PIN 1; RETURN – PIN 2)	FIELD ASSIGNMENT/ NOTES (USERCONFIGURABLE)	REF	FACTORY DEFAULT ASSIGNMENT (SIGNAL-PIN 1; RETURN – PIN 2)	FIELD ASSIGNMENT/ NOTES (USER CONFIGURABLE)
TB10	R4		TB17	AMJ (AUXILIARY MAJOR)	
TB11	R3		TB18	AUX1 (COOLING SYSTEM FAIL)	
TB12	R2		TB19	Inverter Minor	
TB13	R1		TB20	Inverter Major	
TB14	PMN – POWER MINOR		INPUTS (NORMALLY CLOSED "DRY", NO VOLTAGE, BINARY CONTACT MONITORS)		
TB15	PMJ – POWER MAJOR		TB25	EMERGENCY POWER OFF (REMOTE BATTERY OPEN)	
			TB26	RECTIFIER INTERLOCK (REMOTE RECTIFIER OFF)	
DIGITAL PORTS					
REF	**DESCRIPTION**		**REF**	**DESCRIPTION**	
TB21	1-WIRE TEMPERAURE PROBE FOR ENCLOSURE inlet and REAR EXHAUST (1-WIRE SIGNAL ON PIN 1; RETURN ON PIN 2)		P15/P16 RECT DATA	RS485 / GALAXY PROTOCOL RECTIFIER SEREIAL BUS	
LAN	10/100 BASE-T ETHERNET				

Table 3 Input / Output Alarms / Digital Ports

Note: Factory Defaults can be re-configured.

Step 8 – Initial Start up

System warranty is based upon the system being properly installed qualified individuals and Authorized OmniOn Representatives. If Authorized installers are not used for Initial Start-Up and Commissioning, various components of the system will not be covered by a warranty, up to and including Inverter Modules, Inverter Controller, Inverter Shelves, and other Inverter Components.

For Startup and Commissioning, please contact your local sales representative or OmniOn Tech Support Services :

1-877-546-3243 or epis.IDCP-techsupport@omnion.com

Reference 1 – Install Rectifiers

Rectifiers only install in Rectifier positions.

1. Starting with the lowest open position, slide each Rectifier module firmly into a Rectifier position - oriented as shown.
2. Tighten thumb screws using #2 Phillips screwdrive Hand tight.
3. Install all 10 rectifiers into the rectifier positions.
4. Install rectifier slot filler - 8600234137P for all unused positions.

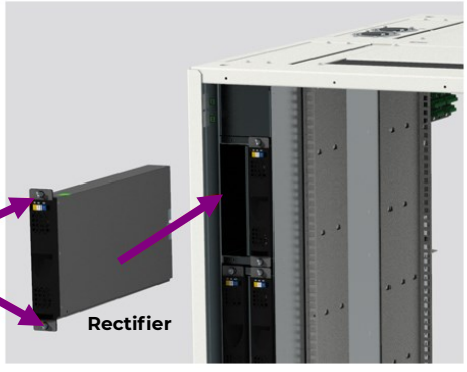


Figure 21 Rectifier Module Installation

Reference 2 – Unpacking Battery Modules

Servicing of batteries should be performed or supervised by personnel knowledgeable about batteries and the required precautions. When replacing batteries, replace with the same type and number of batteries or battery packs.

Caution: Modules are heavy**.** Handle with care.

Caution: Batteries are a potential source of HIGH ENERGY. Use caution to prevent electric shock and burns.

Caution: Do not dispose of batteries in a fire. The batteries may explode.

Caution: Do not open or mutilate batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.

Caution: A battery can present a risk of electrical shock and high short-circuit current. Contact with any part of a grounded battery can result in electrical shock. The following precautions should be observed when working on batteries:

- Remove watches, rings, or other metal objects.
- Use tools with insulated handles.
- Wear rubber gloves and boots.
- Do not lay tools or metal parts on top of batteries.
- Disconnect charging source and load prior to installing or maintaining the battery.
- Remove battery grounds during installation and maintenance to reduce likelihood of shock. Remove the connection from ground if any part of the battery is determined to be grounded.

With the battery package in the up-right position, carefully cut or remove the packing tape that's securing the top cover. Open the box top cover flaps and remove any packing material. If the battery is wrapped or secured in a poly bag, removed and set aside.

Note: It's not necessary to remove the battery fully from the package prior to performing this battery voltage test.

The VRLA battery includes a means to pre-test the battery voltage before it's installed in the enclosure. Using a multi -meter set for DC voltage, insure the meter is an auto-ranging style or the device is set with on a range with a maximum voltage of 100Vdc. Insert the Red (+) positive and Black (-) negative leads into the corresponding test openings found on the top cover of the battery.

If reading voltages below 42V, please contact OmniOn's Technical Field support for further assistance. Set aside the original container and all packing materials until conversation with Technical Support occurs. The battery may or may not need to be returned to OmniOn.

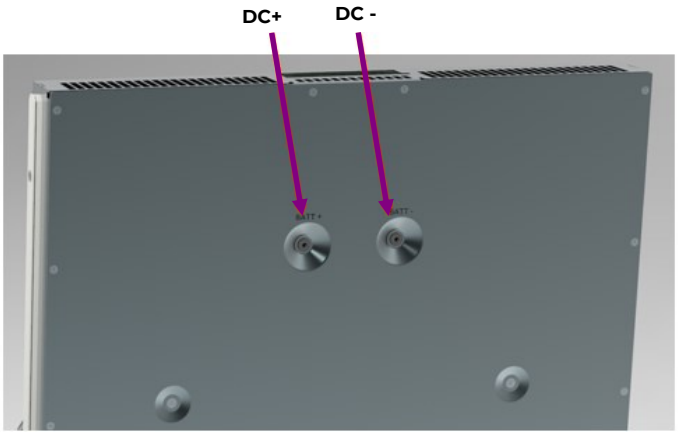
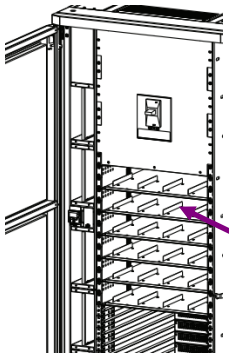
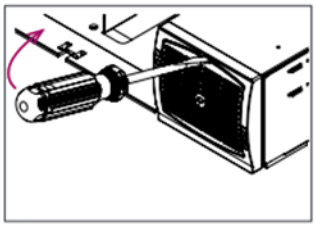


Figure 22 VRLA Battery Module Test Points

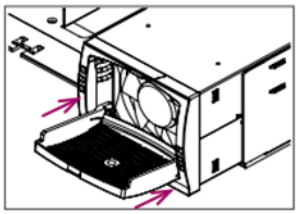
Reference 3 – Install Inverter

1. Check module compatibility (DC Voltage to be 48V) .
2. Use a screw driver to release the latch of the handle.
3. Open the handle and Push firmly until the unit is properly connected.
4. Close the cover and latch in position.

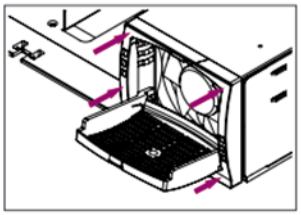




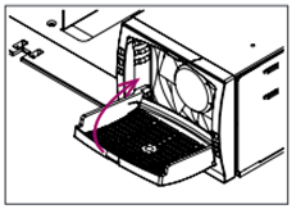
Release the latch



Open Cover completely and Slide the module in



Push firmly till the connection is properly engaged



Close the cover and latch the module in place if too hard redo previous step

Figure 23 Inverter Installation

Reference 4 – Install Battery Modules

Battery Modules only install in Battery Module positions.

Caution:

Modules are heavy. Handle with care.
If necessary, use two persons.

Batteries may be installed into, removed, or replaced in an operating system.

Vertical Oriented Battery Modules

1. Starting with the lowest open slots, slide Modules firmly into A1- side and A2-side Battery Module positions.
2. Secure with thumb screw using #2 Phillips screwdriver. Hand tight.
3. Use battery slot filler part number, 8600297168P, to cover any unused positions.

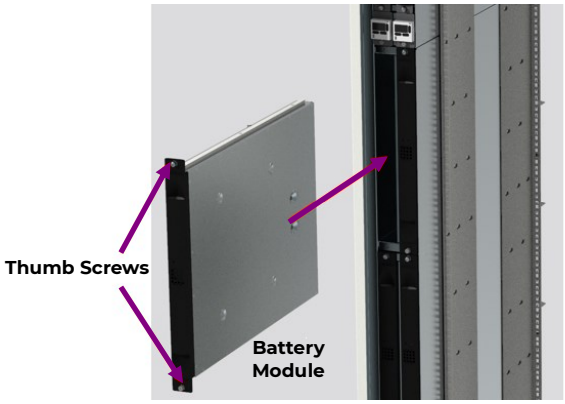


Figure 24 Vertical Battery Module Installation

Horizontal Oriented Battery Installation

1. Starting with the lowest open slots, slide Modules firmly into shelf.
2. Secure with thumb screw using #2 Phillips screwdriver. Hand tight.
3. Use battery slot filler part number, 8600297168P, to cover any unused positions.

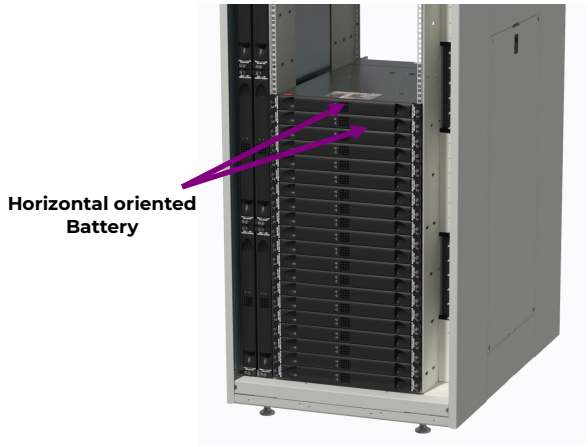


Figure 25 Horizontal Battery Module Installation

Reference 5 – Configure Controller per Galaxy Pulsar Edge Controller Quick Start Guide (# CC848815341)

Verify and edit these controller basic configuration parameters per site engineering instructions.

1. System Date, System Time
2. Site ID, Site Description
3. DHCP / Static IP Address

Information – Rectifier Basic Information

Rectifier		Input AC		Output DC		
Ordering Code	**Description**	**Voltage**	**Current**	**Voltage**	**Maximum Current**	**Maximum Power**
1600092584A	True three-phase 380-480 V_{AC} to 48 V_{DC} 6kW rectifier for data centres	380V	10A	42-58V	125A	6000W
		480V	8A	42-58V	125A	6000W

Information – Inverter Basic Information

Inverter		Input DC		Output AC		
Ordering Code	**Description**	**Voltage**	**Current**	**Voltage**	**Current**	**Maximum Power**
450041032	INV BRAVO MODULE 2.5KVA $48V_{DC}$ $120V_{AC}$	48V	48A	120V	21A	2000W/2500VA

Controller	Description
1600092582A	Galaxy Pulsar Edge Controller

Table 4 Rectifier/Invertor Basic Information

Spare Parts List

Ordering code	Description	Notes
8600234137P	Blank Slot Filler – Rectifier Module	
8600297168P	Blank Slot Filler – Battery Module	
8600242701P	Blank Slot filler – Controller Module	
1600274230A	EDGECABG710 A Battery Shelf RED	
1600274231A	EDGECABG711 B Battery Shelf BLUE	
1600274228A	EDGECABG421 A Battery Bus panel RED	10 Position Pluggable Distribution Panel
1600274229A	EDGECABG422 B Battery Bus panel BLUE	10 Position pluggable Distribution Panel
1600250697A	EDGECABG410 A PDU Module RED	2 Position Distribution Panel
1600361457A	EDGECABG412 B PDU Module BLUE	2 Position Distribution Panel

Table 5 Spare Parts List

Safety Statements

- Do not install this equipment within combustible areas.
- Rules and Regulations - Follow all national and local rules and regulations when making field connections.
- Compression Connectors
- U. S. or Canada installations - use Listed/Certified compression connectors to terminate Listed/Certified field-wire conductors.
- All installations - apply the appropriate connector to the correct size conductor as specified by the connector manufacturer, using only the connector manufacturer's recommended or approved tooling for that connector.
- Electrical Connection Securing: Torque to the values specified on labels or in the product documentation.
- Cable Dress - dress to avoid damage to the conductors and undue stress on the connectors.
- Circuit Breakers and Fuses
- Use only those specified in the equipment ordering guide.
- Size as required by the National Electric Code (NEC) and/or local codes.
  Safety Tested Limits - Refer to the equipment ratings to assure current does not exceed:
  Maximum Load - 80% of protector rating except for 50A (max load 70%).
- GMT Style Fuses - Use only fuses provided with safety caps.
- Field-wired Conductors - Follow all National Electric Code (NEC) and local rules and regulations.
- Insulation rating: 90°C minimum; 105°C (minimum) if internal to enclosed equipment enclosures.
- Size AC field-wired conductors with 75°C ampacity (NEC) equal to or greater than their panel board circuit breaker rating.
- Size DC field-wired conductors with 90°C ampacity (NEC) equal to or greater than circuit breaker/fuse rating.
- AC, DC input and AC output disconnects/protection - Provide accessible devices to remove input power in an emergency.
- Alarm Signals - Provide external current limiting protection. Rating 60V, 0.5A unless otherwise noted.
  Grounding - Connect the equipment chassis directly to ground. In enclosed equipment enclosures connect to the enclosure AC service ground bus. In huts, vaults, and central offices connect to the system bonding network.
- Field-wired Conductors - Follow all National Electric Code (NEC) and local rules and regulations.
- Insulation rating: 90°C minimum; 105°C (minimum) if internal to enclosed equipment enclosures.
- Size AC field-wired conductors with 75°C ampacity (NEC) equal to or greater than their panel board circuit breaker rating.

Precautions

- Install, service, and operate equipment only by professional, skilled and qualified personnel who have the necessary knowledge and practical experience with electrical equipment and who understand the hazards that can arise when working on this type of equipment.
- Disconnect batteries from outputs and/or follow safety procedures while working on equipment. Batteries may be connected in parallel with the output of the rectifiers. Turning off the rectifiers will not necessarily remove power from the bus.
- Do not disconnect permanent bonding connections unless all power inputs are disconnected.
- Verify that equipment is properly safety earth grounded before connecting power. High leakage currents may be possible.
- Exercise care and follow all safety warnings and practices when servicing this equipment. Hazardous energy and voltages are present in the unit and on the interface cables that can shock or cause serious injury. When equipped with ringer modules, hazardous voltages will be present on the ringer output connectors.

Precautions (Continued)

- Follow all warning and precautionary battery instructions, including proper replacement and disposal procedures, to minimize risk of injury. External batteries, if applicable, are to be installed in accordance with all national and local rules and regulations, including CEC, part 1.
- Use the following precautions in addition to proper job training and safety procedures:
- Use only properly insulated tools.
- Remove all metallic objects (key chains, glasses, rings, watches, or other jewelry).
- Follow Lock Out Tag Out (LOTO) procedures: customer specified, site specific, or general as appropriate. Disconnect all power input before servicing the equipment. Check for multiple power inputs.
- Wear safety glasses.
- Follow Personal Protective Equipment requirements: customer specified, site specific, or general as appropriate.
- Test circuits before touching.
- Be aware of potential hazards before servicing equipment.
- Identify exposed hazardous electrical potentials on connectors, wiring, etc.
- Avoid contacting circuits when removing or replacing covers.
- Use a personal ESD strap when accessing or removing electronic components.
- Personnel with electronic medical devices need to be aware that proximity to DC power and distribution systems, including batteries and cables, typically found in telecommunications utility rooms, can affect medical electronic devices, such as pacemakers. Effects decrease with distance.

Warning Label Definitions

Hazards

Explosion Hazard

Battery module(s) ambient temperature not to exceed 40°C.
The maximum battery voltage (float or boost) cannot exceed 58Vdc.
Risk of explosion if battery module is replaced by incorrect type.
Dispose of used battery modules according to manufacturer's instructions.

Shock Hazard

Multiple sources are present: Disconnect all AC and DC external connections and remove battery modules prior to servicing.

Énoncés de sécurité

- N'installez pas cet équipement dans des zones combustibles.
- Règles et règlements - Suivez toutes les règles et règlements nationaux et locaux lors de l'établir des connexions sur le terrain.
- Connecteurs de compression
- Installations américaines ou canadiennes - utilisez des connecteurs de compression répertoriés/certifiés pour mettre fin aux conducteurs de câbles de campagne énumérés/certifiés.
- Toutes les installations - appliquer le connecteur approprié au conducteur de taille correcte tel que spécifié par le fabricant de connecteur, en utilisant uniquement l'outillage recommandé ou approuvé du fabricant de connecteur pour ce connecteur.
- Sécurisation de la connexion électrique : couple aux valeurs spécifiées sur les étiquettes ou dans la documentation du produit.
- Robe de câble - robe pour éviter des dommages aux conducteurs et le stress indu sur les connecteurs.
- Disjoncteurs et fusibles
- N'utilisez que ceux spécifiés dans le guide de commande de l'équipement.
- Taille exigée par le Code National Électrique (NEC) et/ou les codes locaux.
- Limites d'essai de sécurité - Se référer aux cotes d'équipement pour s'assurer que le courant ne dépasse pas :
- Charge maximale - 80% de la cote de protection à l'exception de 50A (charge maximale 70%).
- Fuses de style GMT - Utilisez uniquement les fusibles munis de bouchons de sécurité.
- Conducteurs câblés sur le terrain - Suivez tous les codes nationaux électriques (NeC) ainsi que les règles et règlements locaux.
- Note d'isolation : 90 oC minimum; 105 oC (minimum) si interne à des armoires d'équipement fermées.
- Conducteurs câblés sur le terrain de taille AC avec une amacité de 75 oC (NEC) égale ou supérieure à leur cote de disjoncteur de panneau.
- Conducteurs câblés sur le terrain de taille DC avec une amacité de 90 oC (NEC) égale ou supérieure à la cote disjoncteur/fusible.
- Déconnexion/protection des entrées AC et DC - Fournir des dispositifs accessibles pour supprimer la puissance d'entrée en cas d'urgence.
- Signaux d'alarme - Fournir une protection externe limitant le courant. Note 60V, 0.5A sauf indication contraire.
- Mise à la terre - Connectez le châssis de l'équipement directement au sol. Dans les armoires d'équipement fermées se connectent à l'autobus au sol de service de l'armoire AC. Dans les huttes, les voûtes et les bureaux centraux se connectent au réseau de liaison du système.
- Conducteurs câblés sur le terrain - Suivez tous les codes nationaux électriques (NeC) ainsi que les règles et règlements locaux.
- Note d'isolation : 90°C minimum; 105°C (minimum) si interne à des armoires d'équipement fermées.
- Conducteurs câblés sur le terrain de taille AC avec une amacité de 75°C (NEC) égale ou supérieure à leur cote de disjoncteur de panneau.
- Conducteurs câblés sur le terrain de taille DC avec une amacité de 90°C (NEC) égale ou supérieure à la cote de disjoncteur.

Précautions

- Installer, entretenir et faire fonctionner l'équipement uniquement par du personnel professionnel, qualifié et qualifié qui possède les connaissances et l'expérience pratique nécessaires avec l'équipement électrique et qui comprend les dangers qui peuvent survenir lorsqu'on travaille sur ce type de équipement.
- Débranchez les piles des sorties et/ou suivez les procédures de sécurité pendant le travail sur l'équipement. Les batteries peuvent être connectées en parallèle avec la sortie des rectifiers. L'arrêt des rectificateurs ne supprimera pas nécessairement l'alimentation de l'autobus.
- Ne déconnectez pas les connexions de liaison permanentes à moins que toutes les entrées d'alimentation ne soient déconnectées.
- Vérifier que l'équipement est correctement la terre de sécurité mise à la terre avant de connecter la puissance. Des courants de fuite élevés peuvent être possibles.
- Faites preuve de prudence et suivez tous les avertissements et pratiques de sécurité lors de l'entretien de cet équipement. L'énergie et les tensions dangereuses sont présentes dans l'unité et sur les câbles d'interface qui peuvent choquer ou causer des blessures graves. Lorsqu'elles sont équipées de modules de sonnerie, des tensions dangereuses seront présentes sur les connecteurs de sortie de la sonnerie.
- Suivez toutes les instructions d'avertissement et de précaution relatives à la batterie, y compris les procédures de remplacement et d'élimination appropriées, afin de minimiser les risques de blessures. Les batteries externes, le cas échéant, doivent être installées conformément à toutes les règles et réglementations nationales et locales, y compris CEC, partie 1.
- Prendre les précautions suivantes en plus de la formation professionnelle et des procédures de sécurité appropriées :
- N'utilisez que des outils correctement isolés.
- Enlever tous les objets métalliques (porte-clés, lunettes, bagues, montres ou autres bijoux).
- Suivre les procédures de Lock Out Tag Out (LOTO) : spécifiée par le client, spécifique au site ou générale, le cas échéant.
- Débranchez toutes les entrées de puissance avant d'entretenir l'équipement. Vérifiez s'il y a plusieurs entrées d'alimentation.
- Portez des lunettes de sécurité.
- Respecter les exigences relatives à l'équipement de protection personnelle : spécifiée par le client, spécifique au site ou générale, le cas échéant.
- Testez les circuits avant de toucher.
- Soyez conscient des dangers potentiels avant d'entretenir l'équipement.
- Identifier les potentiels électriques dangereux exposés sur les connecteurs, le câblage, etc.
- Éviter de contacter les circuits lors de l'enlèvement ou du remplacement des couvercles.
- Utilisez une sangle PERSONNELLE DEO lorsque vous accédez ou retirez des composants électroniques.
- Le personnel muni d'appareils médicaux électroniques doit être conscient que la proximité des systèmes d'alimentation et de distribution DeC, y compris les piles et les câbles, généralement présents dans les salles de services publics de télécommunications, peut affecter les appareils électroniques médicaux, comme les stimulateurs cardiaques. Les effets diminuent avec la distance.

Définitions des étiquettes d'avertissement

Risques

Explosion

- La température ambiante des modules de batterie ne doit pas dépasser 40°C.
- La tension maximale de la batterie (flotteur ou boost) ne peut pas dépasser 58Vdc.
- Risque d'explosion si le module de batterie est remplacé par un type incorrect.
- Disposer des modules de batterie usagés selon les instructions du fabricant.

Choc

Plusieurs sources sont présentes : Déconnecter toutes les connexions externes AC et DC et supprimer les modules de batterie avant l'entretien.

Customer Service and Technical Support Contact Information

Email: epis.IDCP-techsupport@omnion.com

Web site: https://electrification.us.omnion.com/products/dc-power-systems

For material availability, order status, shipping info, missing or damaged materials, please contact Customer Service.

For equipment failures, troubleshooting or other technical issues, contact Technical Support24/7

Phone: 1.877.546.3243 option 1, 2 for Customer Service.

Change History (excludes grammar & clarifications)

Revision	Date	Description of the change
1.0	01/27/2021	Initial Release
1.1	05/10/2024	Updated as per OmniOn template

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