AC POWER DISTRIBUTION UNIT
A3000: 8 POSITION / 13 POSITION / 19 POSITION

The AC Power Distribution units provide the boat builder with up to 8, 13 or 19 remotely controlled hydraulic-magnetic circuit breakers in one package that can be mounted virtually anywhere in the vessel. AC Circuit breakers are available from 1 to 100 amps and are remotely controlled via external solenoids. Each breaker can also be manually actuated. The AC units utilize a 16 bit microprocessor that controls the on/off function of each circuit breaker and provides interfacing to a dual CAN bus network. The AC unit enclosures are made from white, high strength, injection molded plastic that will provide years of protection in any environment.

Product Highlights (8 Position Unit):
- 50 Amps Maximum Capacity
- Remote Actuation of Breakers
- Dual CAN BUS Communication

Product Highlights (13 / 19 Position Unit):
- 100 Amps Maximum Capacity
- Remote Actuation of Breakers
- Dual CAN BUS Connection/Communication
- Three Phase Power Capability; 120/208VAC or 230/415VAC

Configuration

Configuration of an OctoPlex® AC Unit and its associated functions can be performed running G2 Analyzer on a computer with a CAN interface. Consult the G2 Analyzer User’s Guide for complete details on adjusting configurable parameters. AC box configuration settings are initially loaded and controlled with the G2 Analyzer utility and contained in Box Configuration Files (BCF). The parameters below can be modified by using the Multi-Function Display.

G2 Analyzer Configuration Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default State</td>
<td>ON, OFF, Last State</td>
<td>Circuit breaker state on network power up</td>
</tr>
<tr>
<td>Default Lock State</td>
<td>ON or OFF</td>
<td>Lock state on network power up</td>
</tr>
<tr>
<td>Default to Last State</td>
<td>ON or OFF</td>
<td>Last known state on network power up</td>
</tr>
<tr>
<td>Configuration Allowed</td>
<td>YES or NO</td>
<td>Allow user to modify Circuit Breaker via Multi-Function Display</td>
</tr>
<tr>
<td>Alarm on Trip</td>
<td>YES or NO</td>
<td>Audible alarm when breaker trips</td>
</tr>
</tbody>
</table>

*Manufacturer reserves the right to change product specification without prior notice. Please refer to our website for the latest details.*
Part Numbers

<table>
<thead>
<tr>
<th>Part Number 1</th>
<th>Description</th>
<th>Number of Positions ²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>8 13 19</td>
</tr>
<tr>
<td>A3000-X-1</td>
<td>AC Power Distribution Unit - 120V (No Main Breaker)</td>
<td>X X X</td>
</tr>
<tr>
<td>A3000-X-1M</td>
<td>AC Power Distribution Unit - 120V (With Main Breaker)</td>
<td>X X X</td>
</tr>
<tr>
<td>A3000-X-2</td>
<td>AC Power Distribution Unit - 120/240V (No Main Breaker)</td>
<td>X X X</td>
</tr>
<tr>
<td>A3000-X-2M</td>
<td>AC Power Distribution Unit - 120/240V (With Main Breaker)</td>
<td>X X X</td>
</tr>
<tr>
<td>A3000-X-3</td>
<td>AC Power Distribution Unit - 120/208V (No Main Breaker)</td>
<td>N/A X X</td>
</tr>
<tr>
<td>A3000-X-3M</td>
<td>AC Power Distribution Unit - 120/208V (With Main Breaker)</td>
<td>N/A X X</td>
</tr>
<tr>
<td>A3000-X-4</td>
<td>AC Power Distribution Unit - 230V Single Pole (No Main Breaker)</td>
<td>X X X</td>
</tr>
<tr>
<td>A3000-X-4M</td>
<td>AC Power Distribution Unit - 230V Single Pole (With Main Breaker)</td>
<td>X X X</td>
</tr>
<tr>
<td>A3000-X-5</td>
<td>AC Power Distribution Unit - 230V Double Pole (No Main Breaker)</td>
<td>X X X</td>
</tr>
<tr>
<td>A3000-X-5M</td>
<td>AC Power Distribution Unit - 230V Double Pole (With Main Breaker)</td>
<td>X X X</td>
</tr>
<tr>
<td>A3000-X-6</td>
<td>AC Power Distribution Unit - 230/415V (No Main Breaker)</td>
<td>N/A X X</td>
</tr>
<tr>
<td>A3000-X-6M</td>
<td>AC Power Distribution Unit - 230/415V (With Main Breaker)</td>
<td>N/A X X</td>
</tr>
</tbody>
</table>

Notes:
1. "X" designates the number of breaker positions available for that voltage configuration; see Number of Positions Column
2. "N/A" is not available for this number of breakers and voltage configuration

Breaker Slot / Offset Load Circuit Relationship

The number of available circuit breakers in an AC Distribution Unit for loads will vary depending on the AC input power type 120V or 230V (Euro Single Phase), 240V or three Phase.

Single Pole breakers: 120V and 230V Euro loads require a single breaker slot.
Double Pole breakers: 240V loads requires two physical breaker slots.
Three Pole breakers: 120/208V and 230/415V requires three physical breaker slots.

The AC Distribution Unit may contain different combinations of breaker; therefore, the total number of supported load circuits in a given unit will vary depending on the load type mix;

<table>
<thead>
<tr>
<th>AC Unit Type</th>
<th>120V / 230V Single Pole</th>
<th>240 Double Pole</th>
<th>3-Phase Triple Pole</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Position</td>
<td>8</td>
<td>4</td>
<td>N/A</td>
</tr>
<tr>
<td>13 Position</td>
<td>13</td>
<td>6 (plus 1 SP)</td>
<td>4 (plus 1 SP)</td>
</tr>
<tr>
<td>19 Position</td>
<td>19</td>
<td>9 (plus 1 SP)</td>
<td>6 (plus 1 SP)</td>
</tr>
</tbody>
</table>

The Panel Breaker numbers, as identified on the panel cover, start with one at the top. The main breaker (when used) will occupy slots one through three depending on the main breaker configuration, single, double or triple pole.

**NOTE**

The highest AC Breaker Rating (amps) should be installed in lowest breaker position (i.e. Position 1, 2, etc.) to ensure proper load distribution. For example: Breaker Positions 1-2 has 100A breaker installed; breaker position 3 has 70A breaker installed; etc.
AC Power Distribution Unit (A3000) - Configuration

Breaker Control by Discrete I/O Function

Analog input signals to the System Interface Unit Monitor (SIU) can trigger a Discrete I/O function in the AC processor, which can be used to control the behavior of a Circuit Breaker. Sixteen Discrete I/O’s per AC Unit can be programmed. One Discrete I/O can control multiple breakers up to the unit limit. Discrete I/O functions are configured using G2 Analyzer.

<table>
<thead>
<tr>
<th>Discrete I/O</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn On</td>
<td>Turn AC Breaker ON</td>
</tr>
<tr>
<td>Turn Off</td>
<td>Turn AC Breaker OFF</td>
</tr>
<tr>
<td>Off &amp; Lock</td>
<td>Turn AC Breaker OFF and Lock in OFF position</td>
</tr>
</tbody>
</table>

AC Breaker Assignment Considerations

The relationship between the AC units physical breaker positions, the main breaker type & the load breaker assignment (Single Pole, Double Pole, Three Pole) must be taken into consideration & assigned accordingly to the Multi-Function Display AC Unit configuration. The table below illustrates this relationship.

<table>
<thead>
<tr>
<th>Unit Breaker Position</th>
<th>Single Pole</th>
<th>Group</th>
<th>Line</th>
<th>Double Pole</th>
<th>Group</th>
<th>Line</th>
<th>Three Pole</th>
<th>Group</th>
<th>Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Main L1</td>
<td>32</td>
<td>L1</td>
<td>Main L1</td>
<td>32</td>
<td>L1</td>
<td>Main L1</td>
<td>32</td>
<td>L1</td>
</tr>
<tr>
<td>2</td>
<td>Load 1</td>
<td>1</td>
<td>L1</td>
<td>Main L2</td>
<td>32</td>
<td>L2</td>
<td>Main L2</td>
<td>32</td>
<td>L2</td>
</tr>
<tr>
<td>3</td>
<td>Load 2</td>
<td>2</td>
<td>L1</td>
<td>Load 1</td>
<td>1</td>
<td>L1</td>
<td>Main L3</td>
<td>32</td>
<td>L3</td>
</tr>
<tr>
<td>4</td>
<td>Load 3</td>
<td>3</td>
<td>L1</td>
<td>Load 2</td>
<td>2</td>
<td>L2</td>
<td>Load 1</td>
<td>1</td>
<td>L1</td>
</tr>
<tr>
<td>5</td>
<td>Load 4</td>
<td>4</td>
<td>L1</td>
<td>Load 3</td>
<td>3</td>
<td>L1</td>
<td>Load 2</td>
<td>2</td>
<td>L2</td>
</tr>
<tr>
<td>6</td>
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<td>7</td>
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<td>Load 5</td>
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<td>L1</td>
<td>Load 4</td>
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<td>Load 7</td>
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<td>L1</td>
<td>Load 6</td>
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<td>L2</td>
<td>Load 5</td>
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<td>L2</td>
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<td>Load 8</td>
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<td>L1</td>
<td>Load 7</td>
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<td>Load 6</td>
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<td>Load 11</td>
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<td>Load 10</td>
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<td>Load 9</td>
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<td>L3</td>
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<td>13</td>
<td>Load 12</td>
<td>12</td>
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<td>Load 11</td>
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<td>L1</td>
<td>Load 10</td>
<td>10</td>
<td>L1</td>
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<tr>
<td>14</td>
<td>Load 13</td>
<td>13</td>
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<td>15</td>
<td>Load 14</td>
<td>14</td>
<td>L1</td>
<td>Load 13</td>
<td>13</td>
<td>L1</td>
<td>Load 12</td>
<td>12</td>
<td>L3</td>
</tr>
<tr>
<td>16</td>
<td>Load 15</td>
<td>15</td>
<td>L1</td>
<td>Load 14</td>
<td>14</td>
<td>L2</td>
<td>Load 13</td>
<td>13</td>
<td>L1</td>
</tr>
<tr>
<td>17</td>
<td>Load 16</td>
<td>16</td>
<td>L1</td>
<td>Load 15</td>
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<td>18</td>
<td>Load 17</td>
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<td>L1</td>
<td>Load 16</td>
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<td>L2</td>
<td>Load 15</td>
<td>15</td>
<td>L3</td>
</tr>
<tr>
<td>19</td>
<td>Load 18</td>
<td>18</td>
<td>L1</td>
<td>Load 17</td>
<td>17</td>
<td>L1</td>
<td>Load 16</td>
<td>16</td>
<td>L1</td>
</tr>
</tbody>
</table>

18 Single Pole slots available  Double Pole uses 2 positions  Single Pole uses 1 position  Double Pole uses 2 positions  Three Pole uses 3 positions
AC Main Circuit Breaker Installed - Unit Configurations

There are three distinct AC Distribution Unit configurations depending on the type of line input; each requires different hardware options depending on the input line configuration. This configuration must be determined prior to ordering the AC Units.

1. Single Phase 120VAC or Euro 230VAC
2. Single Phase Dual Line 120/240VAC
3. Three Phase 120/208VAC or 230/415VAC

Single Phase 120VAC or Euro 230VAC: Line Bus Bars 1 and 2 are connected together at the factory using a bus bar jumper.

Single Phase Dual Line 120/240VAC: Line Bus Bars 1 and 2 are not tied together at the factory, allowing two legs of 120/240VAC to be brought into the unit for single or double pole circuit breaker installation.

Three Phase 120/208VAC or 230/415VAC: Line Bus Bars 1, 2 and 3 are brought into the box separately allowing for single, double or three pole circuit breaker installation.

AC No Main Circuit Breaker Installed - Unit Configurations

Single Phase Dual Line 120/240VAC: Line Bus Bars 1 and 2 are not tied together at the factory, allowing two legs of 120/240VAC to be brought into the unit for single or double pole circuit breaker installation. Breaker position 1 is line 1, breaker position 2 is line 2, and then they alternate.
Installation
The AC Power Distribution Unit is designed to be installed in an environmentally protected, non-explosive area of the vessel. Take precautions to mount the unit in an area that will be away from direct exposure to water, weather and combustible fumes.

Mounting
These units should be mounted in a location that is accessible for manual/override control and serviceability. These units must be mounted in vertical position only. Installations in horizontal position (flat) with breakers facing up or down can compromise the accuracy of the AC circuit breaker function.

AC Main Connections
Depending on configuration, connection points are provided for single 120VAC, Single 240VAC (Euro), dual 120/240VAC or three phase (120/208VAC or 230/415VAC) AC line inputs. Bus bars are provided for AC neutral (White or Blue) and grounding (Green or Green-Yellow) conductors. Main feed wires entering the panel are secured to prevent strain using a screw down “clamp” provided at the opening on the outside of the panel.

Lethal voltages are present inside the AC unit. Verify that all AC power is shut off or disconnected before working inside the unit. Required Torque for each AC breaker terminal screw is 35 inch-lbs. This torque requirement must be applied to all circuit breaker terminal screws, no exceptions. Failure to properly torque each connection may result in damage to the AC Unit or vessel.

WARNING!
The installer is responsible for verifying that the wire gauge used for the main power feed is appropriately sized for the loads being fed from the AC unit. The unit is designed to accept up to #1 gauge wire for the main power feed. All personnel performing installation or maintenance work on the AC Unit will need to have a calibrated torque screwdriver in order to verify proper installation of the circuit breakers and associated connections.

CAUTION!
The installer must ensure that the wire gauge used for the main power feed is appropriately sized for the loads being fed from the AC unit. The unit is designed to accept up to #1 gauge wire for the main power feed. All personnel performing installation or maintenance work on the AC Unit will need to have a calibrated torque screwdriver in order to verify proper installation of the circuit breakers and associated connections.

AC Branch Circuit Connections
Branch circuit wires enter the AC Power Distribution Unit through the openings at the bottom of the panel. Line conductors are connected to their respective circuit breaker. Neutral and grounding conductors are connected to bus bars provided. Branch wires entering the panel are secured to prevent strain using a screw down “clamp” provided inside of the panel. Circuit breakers are in sequential order from top to bottom. “Tie bars” connecting circuit breaker handles for double and triple pole breakers must be used.

CAN Connections
Two male Micro-C connectors are provided at the bottom left side of the 8 Position or at the top left side of the 13/19 Position unit for connection to the primary and secondary CAN bus via drop cables.

NOTE
Use the shortest drop length possible when connecting the AC Unit to the CAN backbone. NMEA 2000 spec is maximum 6 meters for drop cables.
Operation

Depending on the AC Unit power configuration, 120VAC, Single 240VAC (Euro), dual 120/240VAC or three phase (120/208VAC or 230/415VAC), there are two groups of up to three LED's visible through the cover of the AC Power Distribution Unit. These LEDs signify that AC power is present inside the unit (“Power In”) and after the Main breaker (“Power Out”). As long as AC power is present, the AC Unit will be recognized by the Multi-Function Display (MFD). When AC power is not present, you will not be able to control the AC circuit breakers.

Standard AC Power Distribution Unit Screen Layouts

The AC Distribution Power Unit screen shows the AC Breaker Label and the current state of the AC Breakers. State of the breaker options include: ON, OFF, Trip, Group Control (ON or OFF), Load Shedding (ON or OFF) or Locked Status (Locked ON or Locked OFF). The user can also scroll forward or backwards to select a specific AC Distribution Power Unit (Example AC Panel #3).
CAN LEDs
The two LEDs labeled “BUS A” and “BUS B” indicate the status of their respective CAN buses, flashing approximately once a second which also serves as a “Heartbeat” indicator from the onboard processor. The possible colors, and their meaning are:

<table>
<thead>
<tr>
<th>LED Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashing Green</td>
<td>Bus is healthy</td>
</tr>
<tr>
<td>Flashing Orange</td>
<td>Bus has transmit or receive data errors, but is still usable</td>
</tr>
<tr>
<td>Flashing Red</td>
<td>“Bus Off”: Bus is unusable (check CAN cable is connected)</td>
</tr>
</tbody>
</table>

AC Processor Protection Circuit
The AC Distribution Unit contains electronics (TVSS) that protect the AC Processor Board from transient voltages and surges; it does not protect the Line Voltages supplied by the AC breakers. The TVSS is mounted inside the AC Distribution Unit near the AC Processor Board. Two (2) keyed connectors connect the TVSS to the input voltage and to the AC Processor Board. A green indicator LED inside the TVSS is lit when all line voltages are present and the TVSS is operating and protecting the AC Processor Board; the case of the TVSS is clear plastic so that the indicator LED can be seen from any angle. The Indicator LED will turn off if the TVSS is at the end of life (provided that all line voltages are present). A TVSS that is at end of life will not compromise the protection of the AC Unit electronics, but could cut off AC power to the electronics if not replaced before exposure to more transients and surges. It is highly recommended to replace the TVSS as soon as possible when end of life is reached.

Manual Operation
All AC Circuit Breakers can be controlled directly from the AC Power Distribution Unit (bypassing control from the Multi-Function Display(s)). Follow the instructions below to manually control an AC Circuit Breaker:

Step #1:
Remove the cover to the AC Power Distribution Unit by unscrewing the four screws located at each corner of the unit.

Step #2:
Operate the toggle lever for the desired circuit breaker.
Replace the cover when done.

WARNING!
When manually controlling AC circuit breakers, any time you turn one to the “OFF” position, the system will consider this a tripped breaker and activate the audible alarm if configured to do so. The system sees this as a trip because the system did not command the breaker “OFF”.

CAUTION!
Lethal voltages are present inside the AC Unit. Verify that all AC power is shut off or disconnected before working inside the unit. When a circuit breaker is turned off manually, it can still be controlled via the Multi-Function Display (MFD). This could present a hazard when performing maintenance on a circuit. It is good practice to “lock” a breaker in the “OFF” position from the Multi-Function Display (MFD) when performing any required maintenance on a circuit. Refer to page 11 for Locking Function.
**Maintenance**

The AC Unit was designed to require minimal, if any, maintenance. The only field serviceable parts in the AC Unit are the Circuit Breakers and Solenoids.

**Breaker Replacement**

The AC circuit breakers are not interchangeable like the breakers in the DC Units. If an AC breaker value/rating needs to be changed, the AC Power Distribution Unit will need to be disassembled. Below are the steps required for replacing an AC breaker:

**WARNING!**

Lethal voltages are present inside the AC Unit. Verify that all AC power is shut off or disconnected before working inside the unit.

**Electric Shock RISK**

**Step #1:**

Turn off the main power feeding the AC Power Distribution Unit at the source. Turn all breakers to OFF position. Do not remove the front panel if the LED's are lit (indicating that AC power is being provided to the panel).

**Step #2:**

Remove front cover by unscrewing the four slotted-head screws located at the corners. Once the screws are removed, the front cover can be lifted straight up and away.

**Step #3:**

Turn the main AC breaker to the OFF position, if configured. Remove sub-cover by unscrewing the four slotted-head screws located at the corners. Once the screws are removed, the sub-cover can be lifted straight up and away.

**Step #4 (For 8 Position):**

Remove the circuit breaker hold down bar by unscrewing the phillips-head screw at the top of the bar. Once the screw is loosened, the hold down bar can be lifted straight up and away.

**Step #4 (For 13 & 19 Position):**

Remove the circuit breaker hold down bar by unscrewing the phillips-head screw at the bottom of the bar. Once the screw is loosened, lift the bottom of the bar straight up and pull the bar out of the slot at the top.
Breaker Replacement (continued)

Step #5:
Locate and pull up on the red colored solenoid lock.
Remove load terminal connection by unscrewing the load terminal screw.

Step #6:
Slide the solenoid away from the circuit breaker as shown.

Step #7:
Position the Removal Tool and insert hook into circuit breaker slot as shown.

Step #8:
Once the Removal Tool hook is inserted in the circuit breaker slot, snap the other side down to secure the connection to the circuit breaker.

Step #9:
The circuit breaker can now by removed by pulling the Removal Tool straight up and away from the AC enclosure.
Note: The Removal Tool is only used to remove the circuit breaker. You cannot install the breaker with the Removal Tool.

Step #10:
Ensure that the replacement circuit breaker actuator is in the OFF position with solenoid installed and the solenoid tab in the locked position. Position breaker above slot, push straight down until the circuit breaker is in its full seated position.

**WARNING!**
Make sure main power feeding the AC Power Distribution Unit at the source is **OFF**.
Required Torque for each AC breaker terminal screw is 35 inch-lbs. This torque requirement must be applied to all circuit breaker terminal screws, no exceptions. Failure to properly torque each connection may result in damage to the AC Unit or vessel.

All personnel performing installation or maintenance work on the AC Unit will need to have a calibrated torque screwdriver in order to verify proper installation of the circuit breakers and associated connections.
AC Processor Protection Circuit Replacement

Step #1:
Turn off the main power feeding the AC Power Distribution Unit at the source. Turn all breakers to OFF position. Do not remove the front panel if the LED’s are lit (indicating that AC power is being provided to the panel).

Step #2:
Remove front cover by unscrewing the four slotted-head screws located at the corners. Once the screws are removed, the front cover can be lifted straight up and away.

Step #3:
Turn the main AC breaker to the OFF position, if configured. Remove sub-cover by unscrewing the four slotted-head screws located at the corners. Once the screws are removed, the sub-cover can be lifted straight up and away.

Step #4:
Locate the input and output connectors of the TVSS and pull them apart.

Step #5:
Remove the two (2) screws holding the TVSS to the AC Unit case and remove the old TVSS.
AC Processor Protection Circuit Replacement (continued)

Step #6:
Install new TVSS connecting the input and output connectors and reinstall the two (2) screws.

Step #7:
Re-Install the sub-cover by screwing the four slotted-head screws located at the corners. Turn the main AC breaker to the ON position.

Step #8:
Re-Install the front cover by screwing the four slotted-head screws located at the corners. Turn the main power feeding the AC Power Distribution Unit at the source to the ON position.

CAUTION!
All personnel performing installation or maintenance work on the AC Unit will need to have a calibrated torque screwdriver in order to verify proper installation of the circuit breakers and associated connections.
General Specifications

Electrical
Operating Voltage, Power Input
(Single Phase) 120VAC; Euro 230VAC
(Double Phase) 120/240VAC
(Three Phase) 120/208VAC; 230/415 VAC
CAN Bus Operating Voltage 9 VDC – 16 VDC, 15 VDC Nominal
Load Equivalence Number (LEN) 1

Mechanical
Dimensions 12.36” X 11.63” X 4.98”
Dimensions 20.66” X 13.39” X 4.98”
CAN Bus Connectors Two (2) Micro-C Male
CAN A Bus LED Indicator Green / Red
CAN B Bus LED Indicator Green / Red
MAIN Power In Indicator Green (3)
MAIN Power Out Indicator Green (3)
8 Position Mounting 4 each
19 Position Mounting 10 each
Orientation Vertical Position (not flat)

Certifications
NMEA 2000 Category B
Lloyd’s Register Lloyd’s Type Approved, Test Specification #1, Env 2
CE IEC 60533 Electrical and Electronic Installations in Ships
IEC 60945 Maritime Navigation and Radio Communication Equipment and Systems

Environmental
Radiated, RF Field Immunity IEC-61000-4-3
Electrical Fast IEC 61000-4-4
Transient/Burst Immunity IEC 61000-4-5
Voltage Surge Immunity IEC 61000-4-6
Conducted Emissions IEC 60945
Voltage Variation Immunity IEC 61000-4-11
Conducted LF Immunity IEC 61000-4-16
ESD Immunity IEC-61000-4-2
Insulation Resistance IEC-60092-504
Operating Temperature -40°C to +55°C
Storage Temperature -40°C to +55°C
Vibration IEC-60068-2-6 Test Fc
Temperature Cycle IEC 60945
Humidity IEC-60068-2-30 Test Db
Corrosion IEC 60945
Weight with breakers A3000-08: 16 lbs. (7.25 kg)
A3000-13: 22 lbs. (9.98 kg)
A3000-19: 29 lbs. (13.15 kg)
**AC Power Distribution Unit (A3000) - Dimensional Specifications**

**Dimensional Specifications:** in. [mm]

**8 Circuit DC Power Distribution Unit**

*A3000-08-*

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**Mounting Dimensions shown in Blue represented underneath cover.**
**Dimensional Specifications:** in. [mm]

13 Circuit DC Power Distribution Unit
A3000-13-[ ]
Dimensional Specifications: in. [mm]

19 Circuit DC Power Distribution Unit
A3000-19-[

[ Diagram with dimensions listed in inches and millimeters. ]