## MGE Galaxy 7000, 400 kVA 2+1 Parallel Module UPS With 800kVA SSC Package

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### LEGEND

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<th>DESCRIPTION</th>
<th>SYMBOL</th>
<th>DESCRIPTION</th>
<th>SYMBOL</th>
<th>DESCRIPTION</th>
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<tr>
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<td><img src="image2.png" alt="Symbol" /></td>
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<td><img src="image3.png" alt="Symbol" /></td>
<td>CONVERTER</td>
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<td>BATTERY MODULE</td>
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<td>SWITCH FUSE DISCONNECT</td>
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<td><img src="image10.png" alt="Symbol" /></td>
<td>FUSE</td>
<td><img src="image11.png" alt="Symbol" /></td>
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<td><img src="image14.png" alt="Symbol" /></td>
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<td><img src="image15.png" alt="Symbol" /></td>
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<td><img src="image16.png" alt="Symbol" /></td>
<td>PROTECTIVE EARTHING</td>
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</table>
NOTES:
1. INSTALLATION SHALL Comply WITH ALL APPLICABLE NATIONAL STATE AND LOCAL ELECTRICAL REGULATIONS.
2. PLEASE REFER TO PRODUCT MANUALS FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
3. ALL Dimensions ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
4. COLOR: DARK GRAY (RAL-9003).
5. RECOMMENDED CLEARANCE IS SUBJECT TO NATIONAL AND LOCAL CODES.
6. 600mm RECOMMENDED FRONT CLEARANCE FOR VENTILATION.
7. OPERATING TEMPERATURE: 0°C MIN. TO 35°C MAX.
   RECOMMENDED OPERATING RANGE: 20°C TO 25°C.
8. POWER CABLES SHALL BE IN SEPARATE CONDUITS FROM CONTROL AND COMMUNICATION CABLES.
9. UPS AC Cabling ARE EQUAL IN TERMS OF LOAD SHARING IN BYPASS OPERATION, FOR DC Cabling IN TERMS OF DC VOLTAGE DROP BEING EQUAL.
10. THIS INFORMATION PROVIDES CONSERVATIVE CENTER OF GRAVITY CALCULATION.
COMmUNICATION BOARD
(ENLARGE VIEW)

XM2
XM3
XM4
XM5
XM6
XM7

COMMUNICATION BOARD
(REFER ENLARGED VIEW
FOR DETAILS)

SEE DETAIL "D"
FOR ENLARGED VIEW
REFER SHEET No."6"

SEE DETAIL "E"
FOR ENLARGED VIEW
REFER SHEET No."6"

RIGHT SIDE VIEW
OPENING FOR CONTROL & COMMUNICATION CABLES

350
255
498
144

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2. PLEASE REFER TO PRODUCT MANUALS FOR ADDITIONAL DETAILS.
3. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.
4. FOLLOW CONTROL AND COMMUNICATION CABLES ROUTING PATH SHOWN.
5. SOME STRUCTURAL DETAILS HAVE BEEN OMITTED FOR THE PURPOSE OF CLARITY.
6. FOR COMMUNICATION CABLES USE ONLY 1-1.5 SWG COPPER WIRE RATED MINIMUM 250V.

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NOTES:

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2. PLEASE REFER TO PRODUCT MANUALS FOR ADDITIONAL DETAILS.
3. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
4. FOR N-1 OR TT SYSTEM DISCONNECT AND REMOVE THE JUMPER ON THE EARTHING BAR.
5. FOR N-1 OR IT SYSTEM DISCONNECT THE JUMPER ON THE EARTHING BAR AND INSTALL THE JUMPER AS SHOWN.

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PROJECT DRAWINGS SHEET 6 OF 113

Version: G7T100K8005SCR3

Date: 16-SEP-12

First

Approval:

Fabrication:

Voucher:

Drawn:

Checked:

Printed:

Printed by: Schneider Electric

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NOTES:
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3. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.
4. SOME STRUCTURAL DETAILS HAVE BEEN Omitted FOR THE PURPOSE OF CLARITY.
5. FOR T/N, T/S OR T/E UPSTREAM SYSTEM, DISCONNECT AND REMOVE THE JUMPER ON THE EARTHING BAR.
6. FOR T/N (NPN) UPSTREAM, T/N OR T/E DOWNSTREAM SYSTEM, DISCONNECT AND REMOVE THE JUMPER ON THE EARTHING BAR AND INSTALL THE JUMPER AS SHOWN.
NOTES:
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3. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
4. SOME STRUCTURAL DETAILS HAVE BEEN OMITTED FOR THE PURPOSE OF CLARITY.
5. BATTERIES SHOWN ARE TYPICAL.

Front View

Battery Typical

Side View

Rear View

166
169
344

1894
375
309

9

1400
Galaxy 7000® UPS 400kVA 3Module (N+1) Site Planning Data, Parallel UPSs with Static-Switch Cabinet (SSC)

### Input and Output Voltage
- **400V AC**

<table>
<thead>
<tr>
<th>UPS Rating</th>
<th>kVA</th>
<th>kW</th>
<th>Input (V)</th>
<th>Nominal Current (A)</th>
<th>Maximum Current (A)</th>
<th>Recommended Over current Protection Device Ratings</th>
<th>Individual UPS (A)</th>
<th>Battery Current (A)</th>
<th>(in UPS Cabinet)</th>
<th>Output (V)</th>
<th>Nominal Current (A)</th>
<th>Individual UPS (A)</th>
<th>Recommended Over current Protection Device Ratings</th>
<th>Individual UPS (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPS AC Input</td>
<td>400</td>
<td>360</td>
<td>400</td>
<td>558</td>
<td>587</td>
<td>800</td>
<td>528 / 576</td>
<td>380.6</td>
<td>912</td>
<td>400</td>
<td>577</td>
<td>800</td>
<td>800</td>
<td>1154</td>
</tr>
<tr>
<td>System</td>
<td></td>
<td>1154</td>
<td>1900x1412x855</td>
<td>1140</td>
<td>944</td>
<td>11.3</td>
<td>22.6</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

1. Input current based on full rated output load.
2. Maximum (Max.) current is for duration of battery recharge.
3. Input and bypass cables must be run in separate conduits from output cables. Not more than three conductors in raceway assumed; ambient temperature of 30°C assumed.
4. If initial load is less than UPS’ rated output, it is recommended that AC input, battery, and AC output wiring and over current protection be sized to UPS’ full load rating to accommodate possible future expansion.
5. Nominal battery voltage is shown at 2.0 volts/cell.
6. DC cables should be sized for a total maximum of less than 1% of CB rating.
7. Wiring requirements:
   - AC Input/Output: 3Ø, 3 or 4 wire + ground, depending on UPS configuration.
   - DC Input: 2 wire (positive and negative) + ground
8. All wiring to be in accordance with all applicable national and/or local electrical codes.
9. Minimum access clearance per UPS drawings.
10. Top or bottom cable entry through removable access plates. Punch plates to suit conduit size, then replace.
11. Control wiring and power wiring must be run in separate conduit.
12. Weights and dimensions shown do not include battery cabinet(s), distribution cabinet(s), or other options.
13. Backup emergency generator must be properly sized for UPS application and equipped with an isochronous governor for frequency regulation, and a UPS-compatible voltage regulator for voltage stability.
14. If site configuration requires an external maintenance bypass, phase parity between UPS input and UPS bypass must be ensured. Consult Schneider Electric applications engineer.
15. The UPS must be installed in a room with restricted access, in compliance with standard IEC 60364-4-42.
16. Cable installation to comply with EN60364-5-52, max ambient 30 deg C, cable sizes shown refer to 600V rated,90 degree C multicores with thermosetting insulation
17. Input I THD < 5% at Full Load
18. Output V THD < 2% Linear Load, <5% Non Linear Load
19. Input power-factor is > 0.99 for > 50% loading.

### Efficiency Details

<table>
<thead>
<tr>
<th>System</th>
<th>25% load</th>
<th>50% load</th>
<th>75% load</th>
<th>100% load</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 kVA 400 V</td>
<td>92.2</td>
<td>94.1</td>
<td>94.3</td>
<td>94.1</td>
</tr>
</tbody>
</table>
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3. THE SUPPLIED CABLES ARE 10M OR 20M LONG. THE MAXIMUM TOTAL LENGTH MUST NOT EXCEED 18M.
4. AUXILIARY WIRES (EXCHANGE, CAN AND BYPASS CABINET) AND POWER CABLES MUST BE SEPARATED TO ENSURE SUFFICIENT INSULATION FOR THE AUXILIARY WIRES.
5. CONTROL WIRING (0.5-1.5 mm²) CABLES PROVIDED BY OTHERS.
6. THE SENSORS MAY BE LOCATED IN A BATTERY CABINET OR IN A BATTERY ROOM FOR BATTERIES.