## SYMMETRA PX 100, 100 kVA Package

<table>
<thead>
<tr>
<th>Sheet No.</th>
<th>Component /Detail</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Drawing Guide</td>
<td>SYMMETRA PX 100, 100kVA 208V - 208V, Top Feed Drawing guide</td>
</tr>
<tr>
<td>2-6</td>
<td>Solution</td>
<td>SYMMETRA PX 100, 100kVA 208V - 208V, Top Feed.</td>
</tr>
<tr>
<td>7-9</td>
<td>UPS Power Frame</td>
<td>SYMMETRA PX 100, 100kVA 208V - 208V, Top Feed.</td>
</tr>
<tr>
<td>10-11</td>
<td>Battery Cabinet</td>
<td>SYMMETRA PX 100, 100kVA 208V - 208V, Battery Cabinet.</td>
</tr>
<tr>
<td>12-14</td>
<td>Power Distribution Unit</td>
<td>SYMMETRA PX 100, 100kVA 208V - 208V, PDU.</td>
</tr>
<tr>
<td>15-16</td>
<td>System One Line Diagram</td>
<td>SYMMETRA PX 100, 100kVA 208V 208V, Top Feed, System One Line Diagram.</td>
</tr>
<tr>
<td>17</td>
<td>Site Planning Data</td>
<td>SYMMETRA PX 100, 100kVA 208V - 208V, Top Feed, Site Planning Data</td>
</tr>
</tbody>
</table>

### LEGEND

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>DESCRIPTION</th>
<th>SYMBOL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Switch Disconnect" /></td>
<td>SWITCH DISCONNECT</td>
<td><img src="image" alt="Converter" /></td>
<td>CONVERTER</td>
</tr>
<tr>
<td><img src="image" alt="Circuit Breaker" /></td>
<td>CIRCUIT BREAKER</td>
<td><img src="image" alt="Inverter" /></td>
<td>INVERTER</td>
</tr>
<tr>
<td><img src="image" alt="Battery" /></td>
<td>BATTERY</td>
<td><img src="image" alt="Bypass SSW" /></td>
<td>BYPASS SSW</td>
</tr>
<tr>
<td>SKU#</td>
<td>Runtime in Min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SY100K100F</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SY100K100F+(1)SYCFXR9</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SY100K100F+(2)SYCFXR9</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SY100K100F+(3)SYCFXR9</td>
<td>41</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NOTES:
1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
2. PLEASE REFER TO PRODUCT MANUALS FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND
   SITE PREPARATION WORK.
3. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES [MILLIMETERS].
4. TO STABILIZE ENCLOSURE IN THE FIELD, USE INCLUDED ANCHORING BRACKETS.
   ATTACH THE BRACKETS TO THE UNIT AS SHOWN.
5. USE CODE COMPLIANT FASTENERS TO SECURE THE UNIT TO THE FLOOR.
   ANCHORING BRACKETS CAN BE INSTALLED AT FRONT AND BACK OF UNIT.
   ADEQUATE FRONT AND REAR CLEARANCE SHOULD BE PROVIDED IF THE UNIT IS TO BE ANCHORED.
   USE CODE COMPLIANT FASTENERS TO SECURE UNIT TO THE FLOOR.
   BOLT DOWN KIT (SKU # AR7701) IS OPTIONAL AND HAS TO BE ORDERED SEPARATELY.

SY100K100FTPDPMP100F
DRAWN BY: JAYAPRAKASH 4-APR-12
ENGINEER: K.S./C/F/LS 4-APR-12

PROJECT: DRAWINGS SHEET 6 OF 11
APPROVED BY: 4-APR-12
NOTES:
1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
2. PLEASE REFER TO PRODUCT MANUALS FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
3. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES (MILLIMETERS).
4. SOME STRUCTURAL DETAILS HAVE BEEN OMITTED FOR THE PURPOSE OF CLARITY.
5. UPS IS DESIGNED FOR SINGLE AND DUAL MAINS.
6. CONFIGURATION SHOWN WITH "SYCF100KF + (10) SYPM10KF2" FOR 100kW.
Make contact closure connections (NO or NC) to monitor dry contacts. Up to eight connections can be made—four input contacts and four output relays.

Output Relays:
- 240V/8A
- 0.3VA/1.9kW

Input signals: Contact load: TTL
1/2 Q001 UPS Input Switch (N/O position)
3/4 Q002 UPS Output Switch (N/O position)
5/6 Q003 UPS service bypass Switch (N/C position)
7/8 OK to operate UPS Output Switch Q002
9/10 OK to operate Service Bypass Switch Q003
11/12 Not used
13/14 External Switchgear present

NOTES:
1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
2. PLEASE REFER TO PRODUCT MANUALS PRIOR TO INSTALLATION AND SITE PREPARATION WORK FOR FURTHER DETAILS.

\[ \Delta3.0.3VA = \text{MINIMUM POWER CONSUMPTION OF THE RELAY} \]
\[ 1.9kW = \text{MAXIMUM POWER THAT CAN FLOW THROUGH THE CONTACTS} \]

THIS DRAWING AND SPECIFICATIONS HEREBIN ARE THE PROPERTY OF SCHNEIDER ELECTRIC AND SHALL NOT BE COPIED, REPRODUCED OR USED IN WHOLE OR IN PART, AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION FROM SCHNEIDER ELECTRIC. THIS DRAWING IS BASED UPON LATEST AVAILABLE INFORMATION AND IS SUBJECT TO CHANGE WITHOUT NOTICE.
EPO switch wiring details

EPO switch.
keep EPO wire routing isolated and use separate EPO conduits

J22
1 Internal Power +24V Supply
2/3 Relay coil 1
4 Ground

XR Battery Enclosure

1 230V AC Supply
2/3 N/A
4 Neutral

EPO with internal supply

N/O EPO Control

J25
4 Ground
3/2 Relay coil 1
1 Internal Power +24V Supply

N/C EPO Control

J24
8 Ground
7/6 Relay coil 2
5 Internal Power +24V Supply

Input/Output wiring of Ancillary Equipment

J21
1/2 Battery Breaker Present
3/4 Ext. Battery Fuse/Battery Breaker 1 (N/O position)
5/6 Ext. Battery Fuse/Battery Breaker 2 (N/O position)
7/8 Temp. Sensor, Ext. Battery
9/10 Temp. Sensor, Ext. Battery present
11/12 Isolation transformer temp. switch (N/C position)
13/14 Isolation transformer temp. switch present

NOTES
1. Installation shall comply with all applicable national, state, and local codes.
2. Please refer to product manuals prior to installation and site preparation work for further details.

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF SCHNEIDER ELECTRIC AND SHALL NOT BE COPIED, REPRODUCED OR USED IN WHOLE OR IN PART, AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION FROM SCHNEIDER ELECTRIC. THIS DRAWING IS BASED UPON LATEST AVAILABLE INFORMATION AND IS SUBJECT TO CHANGE WITHOUT NOTICE.
EPO INTERFACE FOR DC BREAKER TRIP

NOTES:
1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
2. PLEASE REFER TO PRODUCT MANUALS PRIOR TO INSTALLATION AND SITE PREPARATION WORK FOR FURTHER DETAILS.
DETAIL-A

DETAIL-B

DETAIL-C

NOTES:
1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
2. REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
3. ALL DIMENSIONS ARE IN INCHES [MILLIMETERS].
4. ALL POWER DISTRIBUTION MODULES AND EXTENDER CABLES ARE NOT PART OF THIS SKU AND ARE ORDERED SEPARATELY. CONTACT SCHNEIDER ELECTRIC.

THIS DRAWING AND SPECIFICATIONS HEREBIN ARE THE PROPERTY OF SCHNEIDER ELECTRIC AND SHALL NOT BE COPIED, REPRODUCED OR USED IN WHOLE OR IN PART, AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION FROM SCHNEIDER ELECTRIC. THIS DRAWING IS BASED UPON LATEST AVAILABLE INFORMATION AND IS SUBJECT TO CHANGE WITHOUT NOTICE.

SY100K100FTPDM100F

DRAWN BY: JAYAPRAKASH 28-JAN-16
ENGINEER: F YEP 28-JAN-16

PROJECT: DRAWINGS SHEET: 10 OF 11

APPROVED BY: E. SHER 28-JAN-16
NOTES:
1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE LOCAL AND NATIONAL CODES. THE GROUNDING SYSTEM SHALL BE INSTALLED AS A SEPARATELY DERIVED SYSTEM IN ACCORDANCE WITH LOCAL AND NATIONAL CODES.
2. REFER TO PRODUCT MANUALS PRIOR TO INSTALLATION AND SITE PREPARATION WORK FOR FURTHER DETAILS.
3. DRAWING DEFECTS POWER SYSTEM CONNECTIONS AND IS NOT REPRESENTATIVE OF PHYSICAL LAYOUT, PLEASE REFER TO MECHANICAL DRAWINGS FOR PHYSICAL LAYOUT.
4. MAXIMUM AVAILABLE FAULT CURRENT IS 654A AC.
5. AC SOURCE TO BE 208VAC 3PH 3 WIRE+GROUND (CONTACT Schneider Electric IF OTHER).
6. AC CABLE TO BE 600V RATED, 3 WIRE-GROUND.
7. THE GROUNDING ELECTRODE CONDUCTOR (GEC) SHALL BE PROVIDED BY OTHERS.
8. SINGLE MAINS CONFIGURATION IS A DEFAULT, REFER TO SHEET-16 FOR DUAL MAINS.
9. THIS DRAWING SHOWS MINIMUM NUMBER OF XR BATTERY FRAMES.
10. DISTRIBUTION MODULES ARE NOT PART OF PDPM100SF6-M, CAN BE PURCHASED SEPARATELY FROM Schneider Electric.
11. SEE INSTALLATION MANUAL FOR RECOMMENDED SETTINGS.
12. REFER TO SHEET-17 FOR RECOMMENDED OCDD RATINGS.
13. FOR PROPER INSTALLATION OF EPO, MB BREAKER MUST BE INTERRUPTED UPON OF THE EPO BUTTON. A SHUNT TRIP COIL MAY THEREFORE BE NECESSARY FOR THIS PURPOSE. FOR MORE DETAILS, SEE EPO SECTION IN THE INSTALLATION MANUAL.
### Symmetra® PX 100K UPS Frame Site Planning Data - w/ Modular PDU - w/208V Transformer

<table>
<thead>
<tr>
<th>UPS Frame Rating</th>
<th>Qty of 10 kW Modules</th>
<th>UPS Rating</th>
<th>Voltage</th>
<th>Transformer AC Input</th>
<th>MIB Dual Feed 1</th>
<th>Input</th>
<th>Current</th>
<th>Recommendations 3, 9, 10</th>
<th>OCPD</th>
<th>Cable</th>
<th>NOM. Max.</th>
<th>Current</th>
<th>Recommendations 3, 9, 10</th>
<th>OCPD</th>
<th>Cable</th>
<th>NOM. Max.</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>100kVA / 100kW 100kA Frame</td>
<td>1</td>
<td>10</td>
<td>208</td>
<td>208</td>
<td>33</td>
<td>36</td>
<td>40A</td>
<td>1x8</td>
<td>45A</td>
<td>1x8</td>
<td>208</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>2x192</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>208</td>
<td>208</td>
<td>66</td>
<td>72</td>
<td>80A</td>
<td>1x4</td>
<td>90A</td>
<td>1x4</td>
<td>208</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>2x192</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>208</td>
<td>208</td>
<td>100</td>
<td>108</td>
<td>110A</td>
<td>1x2</td>
<td>125A</td>
<td>1x1</td>
<td>208</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>2x192</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
<td>208</td>
<td>208</td>
<td>133</td>
<td>144</td>
<td>150A</td>
<td>1x1/0</td>
<td>175A</td>
<td>1x2/0</td>
<td>208</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>2x192</td>
</tr>
<tr>
<td>5</td>
<td>50</td>
<td>208</td>
<td>208</td>
<td>166</td>
<td>180</td>
<td>200A</td>
<td>1x3/0</td>
<td>225A</td>
<td>1x4/0</td>
<td>208</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>2x192</td>
</tr>
<tr>
<td>6</td>
<td>60</td>
<td>208</td>
<td>208</td>
<td>199</td>
<td>216</td>
<td>225A</td>
<td>1x4/0</td>
<td>250A</td>
<td>1x250</td>
<td>208</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>2x192</td>
</tr>
<tr>
<td>7</td>
<td>70</td>
<td>208</td>
<td>208</td>
<td>232</td>
<td>252</td>
<td>300A</td>
<td>1x25</td>
<td>300A</td>
<td>1x350</td>
<td>208</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>2x192</td>
</tr>
<tr>
<td>8</td>
<td>80</td>
<td>208</td>
<td>208</td>
<td>266</td>
<td>288</td>
<td>300A</td>
<td>1x350</td>
<td>350A</td>
<td>1x400</td>
<td>208</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>2x192</td>
</tr>
<tr>
<td>9</td>
<td>90</td>
<td>208</td>
<td>208</td>
<td>299</td>
<td>324</td>
<td>350A</td>
<td>1x400</td>
<td>400A</td>
<td>1x500</td>
<td>208</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>2x192</td>
</tr>
<tr>
<td>10</td>
<td>100</td>
<td>208</td>
<td>208</td>
<td>332</td>
<td>360</td>
<td>400A</td>
<td>1x500</td>
<td>450A</td>
<td>2x4/0</td>
<td>208</td>
<td>366A</td>
<td>N/A</td>
<td>N/A</td>
<td>450A</td>
<td>2x4/0</td>
<td>500A</td>
<td>2x4/0</td>
</tr>
</tbody>
</table>

Symmetra® PX

Notes: 208V Modular PDU: PDMP100F6F-M

1. The Rectifier Input source for dual feed must be 208V Wye 3-wire + Ground. Contact Schneider Electric if other.

2. Output is either 208V Wye 3-wire + Ground or 4-wire + GROUND.

3. Recommended cables are THHN AWG/kcmil minimum requirement in raceway, sized for 30°C environment, 75°C terminations, PFC load, and three (3) current carrying conductors per circuit. All Cabling must comply with installation site conditions and any applicable Local or National Codes.

4. The Transformer input source must be 208V 3-wire + Ground and the OCPD must be capable of supporting a inrush current of 4500A.

5. Contact Schneider Electric for assistance with all external battery designs. Maximum allowed DC Cabling voltage drop is 1 VDC.

6. Electronic Input current Limit.

7. This is the UPS short time rating of 125% Overload for 10 minutes. Actual short time performance may be limited by the overcurrent protective device selected.

8. For maximum scalability or future expansion it is recommended that the UPS frames be installed at their full ratings - see bold highlighted data.

9. All OCPD's and cabling are by others.

10. Dual feed only for mains 1 input. See Bypass AC Input for mains 2 input.


12. Final selections are responsibility of Engineer of record based on installed conditions and SCC/ Selective co-ordination/ arc-flash analysis.