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CABLE LENGTHS FOR STATIC BYPASS INPUT AND OUTPUT SHALL BE SAME SUM TOTAL TO

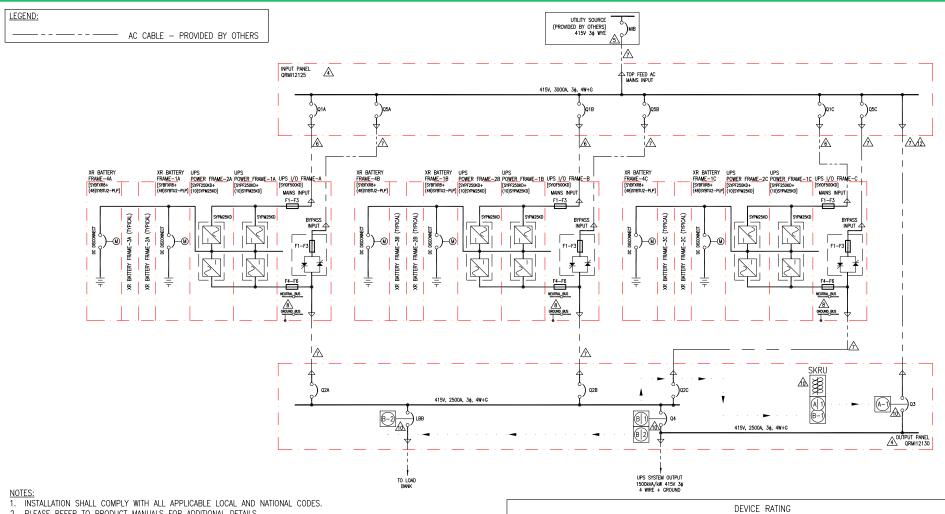
A 12. CABLE SIZE AND INSTALLATION SHALL COMPLY WITH NEC ART. 240.21. IF NOT, USE CABLES

ENSURE CORRECT LOAD SHARING IN STATIC BYPASS OPERATION.

RATED SAME AS THE MIB FEEDER.

Schneider Electric

TITLE: SYMMETRA PX
INPUT: 4159 36, SINGLE MAINS, SINGLE INPUT TO UPS
OUTPUT: 1500kWA/kW 4159 36
500kW 3 MOD N TOP FEED W/LINE-UP BATTERIES SY500K1500TH1C3-4W-SD DRAWN: BALAWURUGAN/V BUSH/R WILLER/S CUNHA 02-DEC-14 PROJ SYSTEM ONE LINE DIAGRAM ENGINEER: C FLY 02-DEC-14 ANGLE PROJECT: SUBMITTAL DRAWINGS SHEET 1 OF 7 APPROVED: B SHERIDAN 02-DEC-14 N.A



- 2. PLEASE REFER TO PRODUCT MANUALS FOR ADDITIONAL DETAILS.
- 3. DRAWING DEPICTS POWER SYSTEM CONNECTIONS AND IS NOT REPRESENTATIVE OF PHYSICAL LAYOUT, PLEASE REFER TO MECHANICAL DRAWINGS FOR PHYSICAL LAYOUT.
- △ 4. MAXIMUM RATED SHORT CIRCUIT CURRENT IS 65kAIC, FOR UPS AND INPUT/OUTPUT PANELS.
- AC UTILITY SOURCE SHALL BE 415VAC, 3φ, SOLIDLY GROUNDED WYE, 4 WIRE+GROUND (CONTACT Schneider Electric IF OTHER). SEE SHEET 4 FOR SITE PLANNING SUBMITTAL DATA.
- AC CABLING SHALL BE 600V RATED, 3 WIRE+GROUND.
- △ 7. AC CABLING SHALL BE 600V RATED, 4 WIRE+GROUND.
- △ 8. THE NEUTRAL TO GROUND SYSTEM BONDING JUMPER PROVIDED BY SCHNEIDER ELECTRIC SHALL NOT BE INSTALLED FOR 4 WIRE OUTPUT CONFIGURATION. SEE INSTALLATION MANUAL FOR DETAILS.
- 9. THIS DRAWING SHOWS MINIMUM NUMBER OF XR BATTERY FRAMES PER UPS. MAXIMUM (8) XR BATTERY FRAMES CAN BE BAYED TO EACH UPS. BAYING KIT IS SUPPLIED WITH THIS SOLUTION. XR BATTERY FRAME HAS MOTORIZED BREAKER.
- △ 10. KEY INTERLOCKS WITH SKRU, SCHEME 39, BETWEEN Q3 AND Q4, ARE OPTIONAL AND ARE NOT INCLUDED AS STANDARD WITH THE SYSTEM. (SCHEME 39 ADDER IS QCC67185) KEY INTERLOCKS WITH SKRU, SCHEME 29, BETWEEN LBB AND Q4, ARE OPTIONAL AND ARE NOT INCLUDED AS STANDARD WITH THE SYSTEM. (SCHEME 29 ADDER IS QCBA39274) LBB IS OPTIONAL AND IS NOT INCLUDED AS STANDARD WITH THE SYSTEM. (LBB ADDER IS
  - INSTALLATION OF LBB AND KEY INTERLOCKS WITH SKRU IS STRONGLY RECOMMENDED.
- 11. CABLE LENGTHS FOR STATIC BYPASS INPUT AND OUTPUT SHALL BE SAME SUM TOTAL TO ENSURE CORRECT LOAD SHARING IN STATIC BYPASS OPERATION.
- A 12. CABLE SIZE AND INSTALLATION SHALL COMPLY WITH NEC ART, 240.21, IF NOT, USE CABLES RATED SAME AS THE MIB FEEDER.
- 13. CABLE LUGS ARE NOT PROVIDED.

| DEVICE RATING   |                        |                       |  |  |  |  |  |  |
|---|------------------------|-----------------------|--|--|--|--|--|--|
| DEVICE RATING TYPE MAKE   |                        |                       |  | MODEL  | ACCESSORIES  |  |  |  |
| Q2A, Q2B, Q2C 700A, 600V 100% RATED ICCB, 4 POLE Schneider Electric B |                        | PJP36100CU33AACBCSKYP | 3A/3B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT |  |  |  |  |  |
|   |                        | Schneider Electric    | BL1AAV33B9CXBXXXXA   | 8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT |  |  |  |  |
|   |                        | ICCB, 4 POLE          | Schneider Electric   | BL3GGB33A9CXFXXXXA   | 8A/8B AUX CONT, BELL ALARM, 120VAC SHUNT TRIP, ML 5.0 TRIP UNI |  |  |  |
| Q4  | 2500A, 600V 100% RATED | ICCB, 4 POLE          | Schneider Electric   | BL3GGB33A9CXBXXXXA   | 8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT |  |  |  |
| Q5A, Q5B, Q5C   | 700A, 600V 100% RATED  | MCCB, 3 POLE          | Schneider Electric   | PJP36080CU33BCBCSKYP   | 3A/3B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT |  |  |  |
| LBB   | 2500A, 600V 100% RATED | ICCB, 3 POLE          | Schneider Electric   | WL3GGB44A9CXBXXXXA   | 8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT |  |  |  |
| INVERTER FUSES<br>F1-F3 / F4-F6                                       | 1250A, 700V            | HIGH SPEED FUSE       | BUSSMANN   | 170M6466   |  |  |  |  |
| SSW FUSES F1-F3   | 1100A, 700V            | HIGH SPEED FUSE       | BUSSMANN   | 170M5167   |  |  |  |  |
| DC DISCONNECT   | 400A, 600V DC          | MCCB, 4 POLE          | ABB  | T5   | 1 AUX CONT, 24VDC, SHUNT TRIP, ACTUATOR                        |  |  |  |

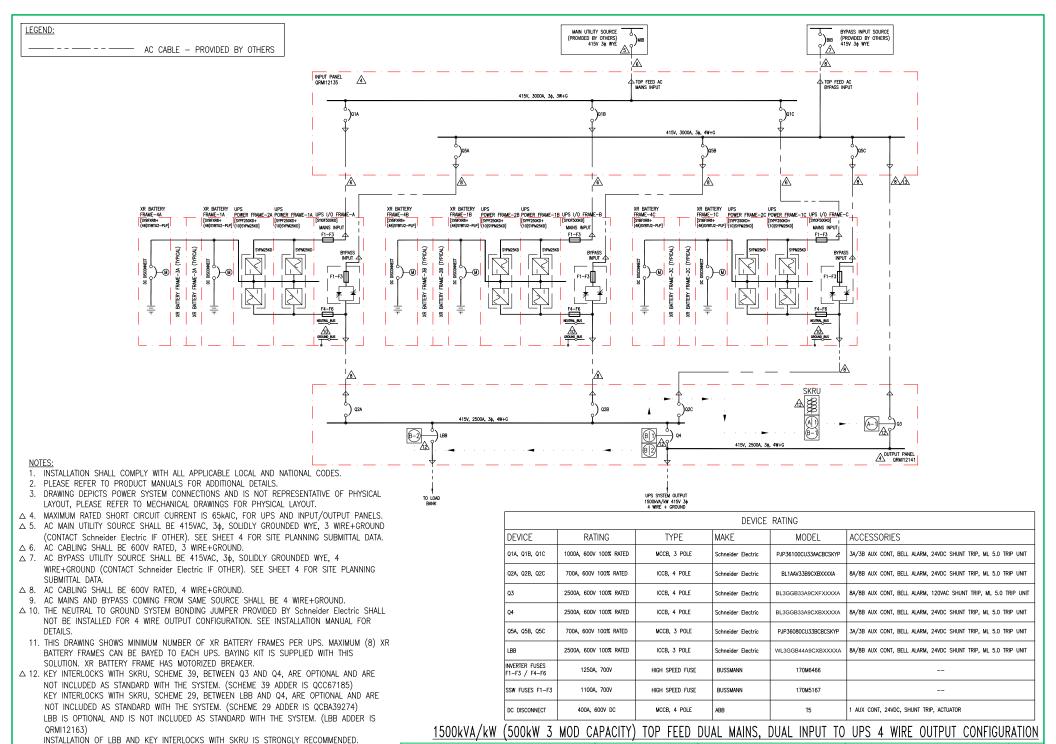
1500kVA/kW (500kW 3 MOD CAPACITY) TOP FEED SINGLE MAINS, DUAL INPUT TO UPS 4 WIRE OUTPUT CONFIGURATION

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| TITLE: SYMMETRA PX INPUT: 415V 36, SINGLE MAINS, DUAL INPUT TO UPS                                  |      |     |  |  |  |
|---|------|-----|--|--|--|
| OUTPUT: 1500kVA/kW 415V 36<br>500kW 3 MOD N TOP FEED W/LINE-UP BATTERIES<br>SYSTEM ONE LINE DIAGRAM |      |     |  |  |  |
| SYSTEM ONE LINE DIAGRAM   |      |     |  |  |  |
| PROJECT: SUBMITTAL DRAWINGS SHEET 2   | 0F 7 | APP |  |  |  |

| w <sup>© NO:</sup> SY500K1500TH1         | C3-4W-SD  | <sup>REV.</sup> 2 |  |  |  |  |
|--|-----------|-------------------|--|--|--|--|
| RAWN:BALAMURUGAN/V BUSH/R WILLER/S CUNHA | 02-DEC-14 | PROJ              |  |  |  |  |
| NGINEER: C FLY                           |           | ANGLE             |  |  |  |  |
| PPROVED:B SHERIDAN                       | 02-DEC-14 | N.A.              |  |  |  |  |



INFORMATION AND IS SUBJECT TO CHANGE WITHOUT NOTICE

A 13. CABLE SIZE AND INSTALLATION SHALL COMPLY WITH NEC ART. 240.21. IF NOT, USE CABLES SCHNEIDER ELECTRIC AND SHALL NOT BE COPIED, REPRODUCED OR JSED 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

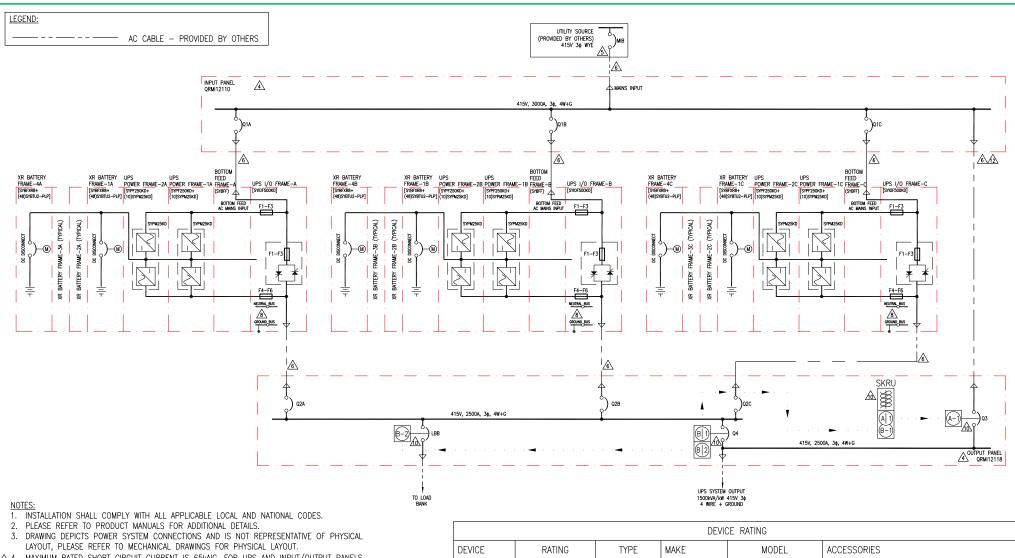
Schneider Electric

TITLE: SYMMETRA PX
INPUT: 415V 3¢, DUAL MAINS, DUAL INPUT TO UPS
OUTPUT: 1500kWA/kW 415V 3¢
500kW 3 MOD N TOP FEED W/LINE-UP BATTERIES SYSTEM ONE LINE DIAGRAM

SY500K1500TH2C3-4W-SD Drawn: Balawurugan/v Bush/r Willer/s Cunha 02-DEC-14 PROJ ENGINEER: C FLY 02-DEC-14 ANGLE PROJECT: SUBMITTAL DRAWINGS SHEET 3 OF 7 APPROVED: B SHERIDAN 02-DEC-14 N.A

RATED SAME AS THE MIB FEEDER. 14. CABLE LENGTHS FOR STATIC BYPASS INPUT AND OUTPUT SHALL BE SAME SUM TOTAL TO ENSURE CORRECT LOAD SHARING IN STATIC BYPASS OPERATION.

15. CABLE LUGS ARE NOT PROVIDED.



- △ 4. MAXIMUM RATED SHORT CIRCUIT CURRENT IS 65kAIC, FOR UPS AND INPUT/OUTPUT PANELS.
- AC UTILITY SOURCE SHALL BE 415VAC, 3¢, SOLIDLY GROUNDED WYE, 4 WIRE+GROUND (CONTACT Schneider Electric IF OTHER). SEE SHEET 4 FOR SITE PLANNING SUBMITTAL DATA.
- AC CABLING SHALL BE 600V RATED, 4 WIRE+GROUND.
- CABLE LUGS ARE NOT PROVIDED.
- THE NEUTRAL TO GROUND SYSTEM BONDING JUMPER PROVIDED BY SCHNEIDER ELECTRIC SHALL NOT BE INSTALLED FOR 4 WIRE OUTPUT CONFIGURATION. SEE INSTALLATION MANUAL
- THIS DRAWING SHOWS MINIMUM NUMBER OF XR BATTERY FRAMES PER UPS. MAXIMUM (8) XR BATTERY FRAMES CAN BE BAYED TO EACH UPS. BAYING KIT IS SUPPLIED WITH THIS SOLUTION. XR BATTERY FRAME HAS MOTORIZED BREAKER.
- A 10. KEY INTERLOCKS WITH SKRU, SCHEME 39, BETWEEN Q3 AND Q4, ARE OPTIONAL AND ARE NOT INCLUDED AS STANDARD WITH THE SYSTEM. (SCHEME 39 ADDER IS QCC67185) KEY INTERLOCKS WITH SKRU, SCHEME 29, BETWEEN LBB AND Q4, ARE OPTIONAL AND ARE NOT INCLUDED AS STANDARD WITH THE SYSTEM. (SCHEME 29 ADDER IS QCBA39274) LBB IS OPTIONAL AND IS NOT INCLUDED AS STANDARD WITH THE SYSTEM. (LBB ADDER IS QRMI12158)
- INSTALLATION OF LBB AND KEY INTERLOCKS WITH SKRU IS STRONGLY RECOMMENDED.
- CABLE LENGTHS FOR STATIC BYPASS INPUT AND OUTPUT SHALL BE SAME SUM TOTAL TO ENSURE CORRECT LOAD SHARING IN STATIC BYPASS OPERATION.
- A 12. CABLE SIZE AND INSTALLATION SHALL COMPLY WITH NEC ART. 240.21. IF NOT, USE CABLES RATED SAME AS THE MIB FEEDER.

| DEVICE RATING                   |   |                 |                    |                       |   |  |  |
|---------------------------------|---|-----------------|--------------------|-----------------------|---|--|--|
| DEVICE                          | RATING  | TYPE            | MAKE               | MODEL                 | ACCESSORIES   |  |  |
| Q1A, Q1B, Q1C                   | A, Q1B, Q1C 1000A, 600V 100% RATED MCCB, 3 POLE |                 | Schneider Electric | PJP36100CU33AACBCSKYP | 3A/3B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT  |  |  |
| Q2A, Q2B, Q2C                   | 700A, 600V 100% RATED                           | ICCB, 4 POLE    | Schneider Electric | BL1AAV33B9CXBXXXXA    | 8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT  |  |  |
| Q3                              | 4 2500A, 600V 100% RATED ICCB, 4 POLE           |                 | Schneider Electric | BL3GGB33A9CXFXXXXA    | 8A/8B AUX CONT, BELL ALARM, 120VAC SHUNT TRIP, ML 5.0 TRIP UNIT |  |  |
| Q4                              |   |                 | Schneider Electric | BL3GGB33A9CXBXXXXA    | 8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT  |  |  |
| LBB                             |   |                 | Schneider Electric | WL3GGB44A9CXBXXXXA    | 8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT  |  |  |
| INVERTER FUSES<br>F1-F3 / F4-F6 | 1250A, 700V                                     | HIGH SPEED FUSE | BUSSMANN           | 170M6466              |   |  |  |
| SSW FUSES F1-F3                 | 1100A, 700V HIGH SPEED FUSE BUSSMANN 170M5      |                 | 170M5167           |                       |   |  |  |
| DC DISCONNECT                   | 400A, 600V DC                                   | MCCB, 4 POLE    | ABB                | T5                    | 1 AUX CONT, 24VDC, SHUNT TRIP, ACTUATOR                         |  |  |

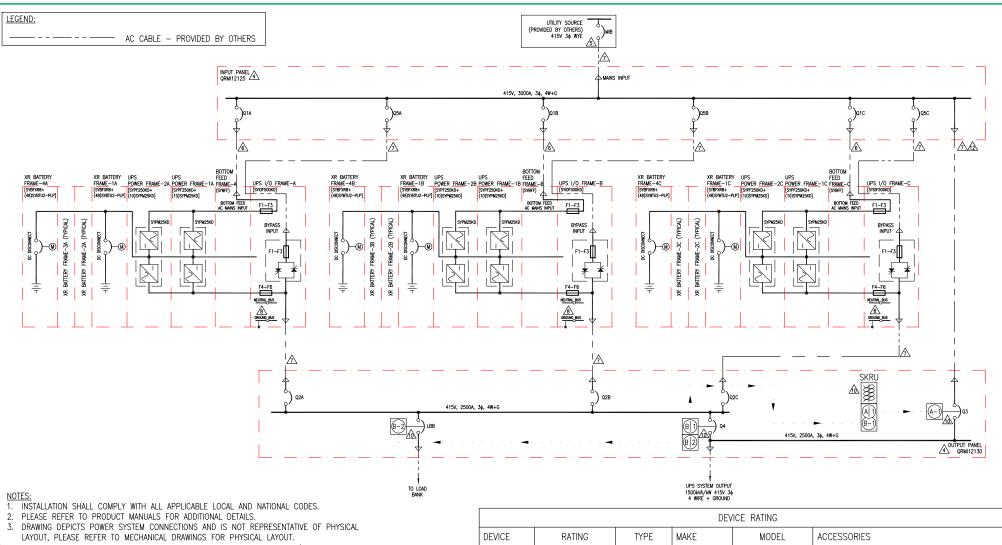
1500kVA/kW (500kW 3 MOD CAPACITY) BOTTOM FEED SINGLE MAINS SINGLE INPUT TO UPS 4 WIRE OUTPUT CONFIGURATION

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| Schneider<br>Electric |
|-----------------------|
|                       |

| TITLE: SYMMETRA PX INPUT: 415V 36, SINGLE MAINS, SINGLE INPUT TO OUTPUT: 1500kVA/kW 415V 36 |                        |                    |
|---|------------------------|--------------------|
| 500kW 3 MOD N BOTTOM FEED W/LINE-UP BATTE   | DRAWN:BALAMURUGAN/S CI |                    |
| SYSTEM ONE LINE DIAGRAM   | ENGINEER: C FLY        |                    |
| PROJECT: SUBMITTAL DRAWINGS SHEET 4 0   | F 7                    | APPROVED: B SHERID |

OBH1C3-4W-SD 02-DEC-14 PROJ 02-DEC-14 ANGLE 02-DEC-14 N.A



- riangle 4. MAXIMUM RATED SHORT CIRCUIT CURRENT IS 65kAIC, FOR UPS AND INPUT/OUTPUT PANELS.
- Δ 5. AC UTILITY SOURCE SHALL BE 415VAC, 3¢, SOLIDLY GROUNDED WYE, 4 WİRE+GROUND
  (CONTACT Schneider Electric IF OTHER). SEE SHEET 4 FOR SITE PLANNING SUBMITTAL DATA.

  Output

  Description

  Descript
- 4 6. AC CABLING SHALL BE 600V RATED, 3 WIRE+GROUND.
- △ 7. AC CABLING SHALL BE 600V RATED, 4 WIRE+GROUND.
- $\Delta$  8. THE NEUTRAL TO GROUND SYSTEM BONDING JUMPER PROVIDED BY SCHNEIDER ELECTRIC SHALL NOT BE INSTALLED FOR 4 WIRE OUTPUT CONFIGURATION. SEE INSTALLATION MANUAL FOR DETAILS.
- THIS DRAWING SHOWS MINIMUM NUMBER OF XR BATTERY FRAMES PER UPS. MAXIMUM (8) XR BATTERY FRAMES CAN BE BAYED TO EACH UPS. BAYING KIT IS SUPPLIED WITH THIS SOLUTION. XR BATTERY FRAME HAS MOTORIZED BREAKER.
- Δ 10. KEY INTERLOCKS WITH SKRU, SCHEME 39, BETWEEN Q3 AND Q4, ARE OPTIONAL AND ARE NOT INCLUDED AS STANDARD WITH THE SYSTEM. (SCHEME 39 ADDER IS QCC67185) KEY INTERLOCKS WITH SKRU, SCHEME 29, BETWEEN LBB AND Q4, ARE OPTIONAL AND ARE NOT INCLUDED AS STANDARD WITH THE SYSTEM. (SCHEME 29 ADDER IS QCBA39274) LBB IS OPTIONAL AND IS NOT INCLUDED AS STANDARD WITH THE SYSTEM. (LBB ADDER IS QCMI12163)
  - INSTALLATION OF LBB AND KEY INTERLOCKS WITH SKRU IS STRONGLY RECOMMENDED.
- 11. CABLE LENGTHS FOR STATIC BYPASS INPUT AND OUTPUT SHALL BE SAME SUM TOTAL TO ENSURE CORRECT LOAD SHARING IN STATIC BYPASS OPERATION.
- △ 12. CABLE SIZE AND INSTALLATION SHALL COMPLY WITH NEC ART. 240.21. IF NOT, USE CABLES RATED SAME AS THE MIB FEEDER.
- 13. CABLE LUGS ARE NOT PROVIDED.

| DEVICE RATING                   |   |              |                                |   |  |  |
|---------------------------------|---|--------------|--------------------------------|---|--|--|
| DEVICE RATING TYPE MAK          |   |              | MAKE                           | MODEL   | ACCESSORIES  |  |
| Q1A, Q1B, Q1C                   | 1A, Q1B, Q1C 1000A, 600V 100% RATED MCCB, 3 POLE Schneider Electric   |              | Schneider Electric             | PJP36100CU33AACBCSKYP   | 3A/3B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT |  |
| Q2A, Q2B, Q2C                   | 700A, 600V 100% RATED   | ICCB, 4 POLE | Schneider Electric             | BL1AAV33B9CXBXXXXA  | 8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT |  |
| Q3                              | 23 2500A, 600V 100% RATED ICCB, 4 POLE Schneider Electric BL3GGE  |              | BL3GGB33A9CXFXXXXA             | 8A/8B AUX CONT, BELL ALARM, 120VAC SHUNT TRIP, ML 5.0 TRIP UNIT |  |  |
| Q4                              | 2500A, 600V 100% RATED  | ICCB, 4 POLE | CCB, 4 POLE Schneider Electric | BL3GGB33A9CXBXXXXA  | 8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT |  |
| Q5A, Q5B, Q5C                   | LBB         2500A, 600V 100% RATED         ICCB, 3 POLE         Schneider Electric           NVERTER FUSES<br>1-F3 / F4-F6         1250A, 700V         HIGH SPEED FUSE         BUSSMANN |              | PJP36080CU33BCBCSKYP           | 3A/3B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT  |  |  |
| LBB                             |   |              | Schneider Electric             | WL3GGB44A9CXBXXXXA  | 8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT |  |
| INVERTER FUSES<br>F1-F3 / F4-F6 |   |              | BUSSMANN                       | 170M6466  |  |  |
| SSW FUSES F1-F3                 |   |              | 170M5167                       |   |  |  |
| DC DISCONNECT                   | 400A, 600V DC   | MCCB, 4 POLE | ABB                            | T5  | 1 AUX CONT, 24VDC, SHUNT TRIP, ACTUATOR                        |  |

1500kVA/kW (500kW 3 MOD CAPACITY) BOTTOM FEED SINGLE MAINS, DUAL INPUT TO UPS 4 WIRE OUTPUT CONFIGURATION

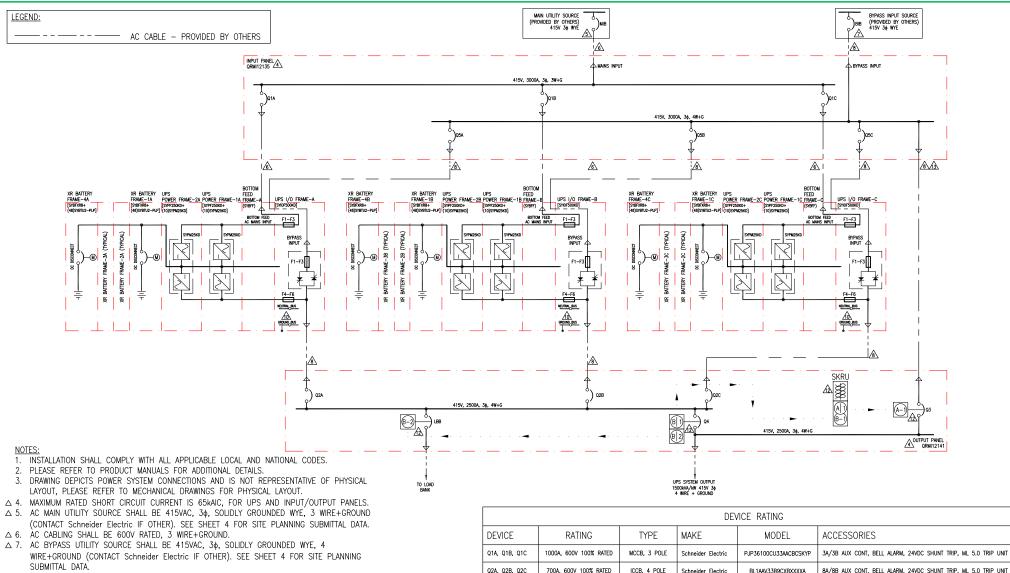
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|   | Schneider<br>Electric |   |
|---|-----------------------|---|
| ı |                       | П |

| INPUT: 415V 36, SINGLE MAINS, DU                      |                      |             |      |
|---|----------------------|-------------|------|
| OUTPUT: 1500kVA/kW 4<br>500kW 3 MOD N BOTTOM FEED W/L | DRAWN: BALAMURUGAN/S |             |      |
| SYSTEM ONE LINE DIA                                   | ENGINEER: C F        | ĽΥ          |      |
| PROJECT: SUBMITTAL DRAWINGS                           | SHEET 5 OF 7         | APPROVED: B | SHER |

DWG NO: SY500K1500BH1C3-4W-SD REV. 2

DRAWN:BALAMURUGAN/S CUNHA 02-DEC-14 PROJ
ENGINEER: C FLY 02-DEC-14 ANGLE
APPROVED: B SHERIDAN 02-DEC-14 N.A.



| △ 6. AC CABLING SHALL BE 600V RATED, 3 WIRE+GROUND.   | DEVICE                          | RATING                 | TYPE            | MAKE               | MODEL                 | ACCESSORIES   |
|---|---------------------------------|------------------------|-----------------|--------------------|-----------------------|---|
| △ 7. AC BYPASS UTILITY SOURCE SHALL BE 415VAC, 3¢, SOLIDLY GROUNDED WYE, 4 WIRE+GROUND (CONTACT Schneider Electric IF OTHER). SEE SHEET 4 FOR SITE PLANNING   | Q1A, Q1B, Q1C                   | 1000A, 600V 100% RATED | MCCB, 3 POLE    | Schneider Electric | PJP36100CU33AACBCSKYP | 3A/3B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT  |
| SUBMITTAL DATA. △ 8. AC CABLING SHALL BE 600V RATED, 4 WIRE+GROUND.   | Q2A, Q2B, Q2C                   | 700A, 600V 100% RATED  | ICCB, 4 POLE    | Schneider Electric | BL1AAV33B9CXBXXXXA    | 8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT  |
| 9. AC MAINS AND BYPASS COMING FROM SAME SOURCE SHALL BE 4 WIRE+GROUND. △ 10. THE NEUTRAL TO GROUND SYSTEM BONDING JUMPER PROVIDED BY Schneider Electric SHALL | Q3                              | 2500A, 600V 100% RATED | ICCB, 4 POLE    | Schneider Electric | BL3GGB33A9CXFXXXXA    | 8A/8B AUX CONT, BELL ALARM, 120VAC SHUNT TRIP, ML 5.0 TRIP UNIT |
| NOT BE INSTALLED FOR 4 WIRE OUTPUT CONFIGURATION. SEE INSTALLATION MANUAL FOR   | Q4                              | 2500A, 600V 100% RATED | ICCB, 4 POLE    | Schneider Electric | BL3GGB33A9CXBXXXXA    | 8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT  |
| DETAILS.  11. THIS DRAWING SHOWS MINIMUM NUMBER OF XR BATTERY FRAMES PER UPS. MAXIMUM (8) XR  | Q5A, Q5B, Q5C                   | 700A, 600V 100% RATED  | MCCB, 3 POLE    | Schneider Electric | PJP36080CU33BCBCSKYP  | 3A/3B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT  |
| BATTERY FRAMES CAN BE BAYED TO EACH UPS. BAYING KIT IS SUPPLIED WITH THIS SOLUTION, XR BATTERY FRAME HAS MOTORIZED BREAKER.                                   | LBB                             | 2500A, 600V 100% RATED | ICCB, 3 POLE    | Schneider Electric | WL3GGB44A9CXBXXXXA    | 8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT  |
| △ 12. KEY INTERLOCKS WITH SKRU. SCHEME 39. BETWEEN Q3 AND Q4. ARE OPTIONAL AND ARE  | INVERTER FUSES<br>F1-F3 / F4-F6 | 1250A, 700V            | HIGH SPEED FUSE | BUSSMANN           | 170M6466              |   |
| KEY INTERLOCKS WITH SKRU, SCHEME 29, BETWEÈN LBB AND Q4, ARE OPTIONAL ÁND ARE   | SSW FUSES F1-F3                 | 1100A, 700V            | HIGH SPEED FUSE | BUSSMANN           | 170M5167              |   |
| NOT INCLUDED AS STANDARD WITH THE SYSTEM. (SCHEME 29 ADDER IS QCBA39274)  | DC DISCONNECT                   | 400A, 600V DC          | MCCB, 4 POLE    | ABB                | T5                    | 1 AUX CONT. 24VDC, SHUNT TRIP, ACTUATOR                         |

NOT INCLUDED AS STANDARD WITH THE SYSTEM. (SCHEME 29 ADDER IS QCBA39274)

LBB IS OPTIONAL AND IS NOT INCLUDED AS STANDARD WITH THE SYSTEM. (LBB ADDER IS

QRMI12163)

1500kVA/kW (500kW 3 MOD CAPACITY) BOTTOM FEED DUAL MAINS, DUAL INPUT TO UPS 4 WIRE OUTPUT CONFIGURATION

INSTALLATION OF LBB AND KEY INTERLOCKS WITH SKRU IS STRONGLY RECOMMENDED.  $\Delta$  13. CABLE SIZE AND INSTALLATION SHALL COMPLY WITH NEC ART. 240.21. IF NOT, USE CABLES RATED SAME AS THE MIB FEEDER.

14. CABLE LENGTHS FOR STATIC BYPASS INPUT AND OUTPUT SHALL BE SAME SUM TOTAL TO ENSURE CORRECT LOAD SHARING IN STATIC BYPASS OPERATION.

15. CABLE LUGS ARE NOT PROVIDED.

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| ! .!                | INPUT |
|---------------------|-------|
| Pneider<br>Electric | 500kW |
| 2 Electric          |       |

| TITLE: SYMMETRA PX INPUT: 415V 36, DUAL MAIN, DUAL INPUT TO UPS OUTPUT: 1500kW, JWW 415V 36 500kW 3 MOD N BOTTOM FEED W/LINE-UP BATTERIES SYSTEM ONE LINE DIAGRAM | ŀ |
|---|---|
| PROJECT: SUBMITTAL DRAWINGS SHEET 6 OF 7  | ľ |

| DWG NO: SY500K1500BH2     | C3-4W-SD  | REV. 2 |
|---------------------------|-----------|--------|
| DRAWN:BALAMURUGAN/S CUNHA | 02-DEC-14 | PROJ   |
| ENGINEER: C FLY           | 02-DEC-14 | ANGLE  |
| APPROVED: B SHERIDAN      | 02-DEC-14 | N.A.   |

|                               |                                    |      | -   |       |                     |              | AP              | C Sym                             | metra@     | 3 P  | X 2                          | 50K a                             | nd 500ł    | ( UP  | S Fr    | ame             | Site P    | lannin     | g D       | ata    | - w/o                          | MBPw       | D                                |         |                   |                                       |  |
|-------------------------------|------------------------------------|------|-----|-------|---------------------|--------------|-----------------|-----------------------------------|------------|------|------------------------------|-----------------------------------|------------|---|---------|-----------------|-----------|------------|-----------|--------|--------------------------------|------------|----------------------------------|---------|-------------------|---------------------------------------|--|
|                               |                                    |      |     |       |                     | Main         | s Inpu          | it-Single or<br>(Q1) <sup>1</sup> | Dual Feed  | Sta  | tic By                       | oass Input -<br>(Q5) <sup>2</sup> | Dual Feed  | External Battery System <sup>3, 6, 14</sup> |         |                 |           |            |           |        | AC Output<br>(Q2) <sup>2</sup> | :          | Mechanical Data <sup>5. 11</sup> |         |                   |                                       |  |
| UPS                           | Module                             | Katı | ng  |       |                     |              |                 |                                   |            |      |                              |                                   |            |   |         |                 |           |            |           |        |                                |            | Typical                          | Average | Floor             |                                       | 1  |
|                               |                                    |      | Vo  | ltage | Cui                 | rrent        | Recommendations |                                   | Currents   |      | Recommendations <sup>4</sup> |                                   | Nominal    | Datta vii                                   | Current | Recommendations |           | Current    |           | Recomm | endations                      | Dimensions | Weight                           | Loading | Heat<br>Rejection | Heat                                  |  |
| UPS<br>Frame<br>Rating        | Qty of<br>25kW<br>Power<br>Modules | kVA  | kW  | Input | Output <sup>2</sup> | Full<br>Load | Max.7           | 100% OCPD                         | 100% Cable | NOM. | Max.8                        | 100% OCPD                         | 100% Cable | VDC   | kW      | @ Nom.<br>VDC   | 100% OCPD | 100% Cable | NOM. Max. |        | 100%<br>OCPD                   | 100% Cable | WxHxD                            | Lbs     | Lbs/Ft2           | Battery<br>Fully<br>Charged<br>BTU/HR | Rejection<br>Battery<br>Charging<br>BTU/Hr |
|                               | 4                                  |      | 100 | 415   | 415                 | 160          | 179             |                                   |            | 139  |                              |                                   |            | 2x 288                                      | 104     | 181             |           |            | 139       | 174    |                                |            |                                  |         |                   |                                       | 2.0,                                       |
| ĕŞ                            | 5                                  | 125  | 125 | 415   | 415                 | 200          | 223             |                                   |            | 174  | 217                          |                                   |            | 2x 288                                      | 130     | 226             |           |            | 174       | 217    |                                |            |                                  |         |                   |                                       |  |
| 250kVA/250kW<br>1x 250K Frame | 6                                  | 150  | 150 | 415   | 415                 | 240          | 268             |                                   |            | 209  | 261                          |                                   |            | 2x 288                                      | 156     | 271             |           |            | 209       | 261    |                                |            |                                  |         |                   |                                       |  |
| Α <del>Υ</del>                | 7                                  | 175  | 175 | 415   | 415                 | 280          | 313             |                                   |            | 243  | 304                          |                                   |            | 2x 288                                      | 182     | 316             |           |            | 243       | 304    |                                |            |                                  |         |                   |                                       |  |
| 20 €                          | 8                                  | 200  | 200 | 415   | 415                 | 320          | 357             |                                   |            | 278  | 348                          |                                   |            | 2x 288                                      | 208     | 362             |           |            | 278       | 348    |                                |            |                                  |         |                   |                                       |  |
| × 2                           | 9                                  | 225  | 225 | 415   | 415                 | 360          | 402             |                                   |            | 313  | 391                          |                                   |            | 2x 288                                      | 234     | 407             |           |            | 313       | 391    |                                |            |                                  |         |                   |                                       |  |
| W -                           | 10                                 | 250  | 250 | 415   | 415                 | 401          | 447             | 450A                              | 2x 4/0     | 348  | 435                          | 350A                              | 2x 2/0     | 2x 288                                      | 260     | 452             | 500A      | 2x 4/0     | 348       | 435    | 350A                           | 1x 500     | 47x79x42                         | 2,330   | 170               | 35,542                                | 42,759                                     |
|                               | 11                                 | 275  | 275 | 415   | 415                 | 441          | 491             |                                   |            | 383  | 478                          |                                   |            | 2x 288                                      | 286     | 497             |           |            | 383       | 478    |                                |            |                                  |         |                   |                                       |  |
|                               | 12                                 | 300  | 300 | 415   | 415                 | 481          | 536             |                                   |            | 417  | 522                          |                                   |            | 2x 288                                      | 312     | 543             |           |            | 417       | 522    |                                |            |                                  |         |                   |                                       |  |
| ≥ ē                           | 13                                 | 325  | 325 | 415   | 415                 | 521          | 581             |                                   |            | 452  | 565                          |                                   |            | 2x 288                                      | 339     | 588             |           |            | 452       | 565    |                                |            |                                  |         |                   |                                       |  |
| a S                           | 14                                 | 350  | 350 | 415   | 415                 | 561          | 626             |                                   |            | 487  | 609                          |                                   |            | 2x 288                                      | 365     | 633             |           |            | 487       | 609    |                                |            |                                  |         |                   |                                       |  |
| 500kVA/500kW<br>2x 250K Frame | 15                                 |      | 375 | 415   | 415                 | 601          | 670             |                                   |            | 522  | 652                          |                                   |            | 2x 288                                      | 391     | 678             |           |            | 522       | 652    |                                |            |                                  |         |                   |                                       |  |
| Şδ                            | 16                                 |      | 400 | 415   | 415                 | 641          | 715             |                                   |            | 556  | 696                          |                                   |            | 2x 288                                      | 417     | 723             |           |            | 556       | 696    |                                |            |                                  |         |                   |                                       |  |
| , g                           | 17                                 |      | 425 | 415   | 415                 | 681          | 760             |                                   |            | 591  | 739                          |                                   |            | 2x 288                                      | 443     | 769             |           |            | 591       | 739    |                                |            |                                  |         |                   |                                       |  |
| ū G                           | 18                                 | 450  | 450 | 415   | 415                 | 721          | 804             |                                   |            | 626  | 783                          |                                   |            | 2x 288                                      | 469     | 814             |           |            | 626       | 783    |                                |            |                                  |         |                   | igspace                               |  |
|                               | 19                                 |      | 475 | 415   | 415                 | 761          | 849             |                                   |            | 661  | 826                          |                                   |            | 2x 288                                      | 495     | 859             |           |            | 661       | 826    |                                |            |                                  |         |                   |                                       |  |
|                               | 20                                 | 500  | 500 | 415   | 415                 | 801          | 894             | 1000A                             | 3x 400     | 696  | 870                          | 700A                              | 3x 250     | 2x 288                                      | 521     | 904             | 1000A     | 3x 400     | 696       | 870    | 700A                           | 2x 500     | 71x79x42                         | 3,797   | 183               | 71,083                                | 85,517                                     |

|                        | APC Symmetra® PX 250K and 500K UPS Parallel SWBD Site Planning Data 15 |       |      |      |                                 |                     |   |        |           |                        |                                       |       |                            |            |  |  |  |  |  |      |       |                                    |            |                                  |                   |                  |                                       |  |
|------------------------|--|-------|------|------|---------------------------------|---------------------|---|--------|-----------|------------------------|---------------------------------------|-------|----------------------------|------------|--|--|--|--|--|------|-------|------------------------------------|------------|----------------------------------|-------------------|------------------|---------------------------------------|--|
| U                      | PS R   | Ratir | ng   |      |                                 |                     | Mains AC Input<br>Single or Dual Feed<br>(MIB) <sup>1</sup> |        |           |                        |                                       | •     | AC Input - [<br>(BIB - Q3) |            |  |  |  |  |  |      |       | AC Output<br>Q4 -LBB) <sup>2</sup> |            | Mechanical Data <sup>5. 11</sup> |                   |                  |                                       |  |
|                        |  |       |      |      | Voltage Current Recommendations |                     |   |        |           | endations <sup>3</sup> | <sup>3</sup> Currents Recommendations |       |                            |            |  |  |  |  |  | Cur  | rent  | Recommendations                    |            | Typical<br>Dimensions            | Average<br>Weight | Floor<br>Loading | Heat<br>Rejection                     | Heat                                       |
| UPS<br>Frame<br>Rating |  |       | kVA  | kW   | Input <sup>1</sup>              | Output <sup>2</sup> | Full<br>Load  | Max. 7 | 100% OCPD | 100% Cable             | NOM.                                  | Max.8 | 100% OCPD                  | 100% Cable |  |  |  |  |  | NOM. | Max.8 | 100%<br>OCPD                       | 100% Cable | WxHxD                            | Lbs               | Lbs/Ft2          | Battery<br>Fully<br>Charged<br>BTU/HR | Rejection<br>Battery<br>Charging<br>BTU/Hr |
| 250kVA                 | 2  |       | 500  |      |                                 | 415                 | 801   | 894    | 1000A     | 3x 400                 | 696                                   |       | 700A                       | 2x 500     |  |  |  |  |  | 696  | 870   | 700A                               | 2x 350     |                                  |                   |                  | 71,083                                | 85,517                                     |
| 250kW                  | 3  |       | 750  | 750  | 415                             | 415                 | 1202  | 1341   | 1600A     | 4x 600                 | 1044                                  | 1305  | 1200A                      | 3x 600     |  |  |  |  |  | 1044 | 1305  | 1200A                              | 3x 600     |                                  |                   |                  | 1,06,626                              | 1,28,276                                   |
| 250KW                  | 4  | ı     | 1000 | 1000 | 415                             | 415                 | 1602  | 1788   | 2000A     | 5x 600                 | 1392                                  | 1740  | 1600A                      | 4x 600     |  |  |  |  |  | 1392 | 1740  | 1600A                              | 4x 600     |                                  |                   |                  | 1,42,166                              | 1,71,034                                   |
| 500kVA                 | 2  | 2.    | 1000 | 1000 | 415                             | 415                 | 1602  | 1788   | 2000A     | 5x 600                 | 1392                                  | 1740  | 1600A                      | 4x 600     |  |  |  |  |  | 1392 | 1740  | 1600A                              | 4x 600     |                                  |                   |                  | 142, 166                              | 1,71,034                                   |
| 500kW                  | 3  | -     | 1500 | 1500 | 415                             | 415                 | 2403  | 2682   | 3000A     | 8x 500                 | 2088                                  | 2610  | 2500A                      | 6x 600     |  |  |  |  |  | 2088 | 2610  | 2500A                              | 6x 600     |                                  |                   |                  | 2,13,249                              | 2,56,551                                   |
| JOURAN                 | 4  | 1     | 2000 | 2000 | 415                             | 415                 | 3204  | 3576   | 4000A     | 10x 600                | 2784                                  | 3480  | 3000A                      | 8x 500     |  |  |  |  |  | 2784 | 3480  | 3000A                              | 8x 500     |                                  |                   |                  | 2,84,332                              | 3,42,068                                   |

## APC Symmetra® PX

## Notes.

- 1. Mains Input source must be 415Y/240V 4-wire + Ground for single feed or 3-wire + Ground for dual feed. Contact Schneider Electric if other.
- 2. Output is 415Y/240V 4-w ire + GROUND. The bypass AC input source must be 415Y/240V 4-w ire + ground..
- 3. Recommended cables are AWG/kcmil minimum requirement for three (3) current carrying conductors in racew ay, sized for 30°C environment and 75°C terminations. All cabling must comply with installation site conditions and any applicable Local and or Natio
- 4. Dual Feed static bypass input feeder is limited to maximum size of 250kcmil conductor.
- 5. Mechanical Data is approximate and does not include the battery system or maintenance bypass switchgear or external DC Disconnects. For precise mechanical data on your planned system configuration contact Schneider Electric.
- 6.Contact Schneider Electric for assistance with all external battery designs. Maximum allow ed DC cabling voltage drop is 1 VDC. Schneider Electric Standard external DCD's are rated 500A (PX 250kVA) or 1000A (PX 500kVA).
- 7. Electronic Input Current Limit.
- 8. This is the UPS short time rating of 125% Overload for 10 minutes. Actual short time performance may be limited by the over current protective device selected.
- 9. For maximum scalability or future expansion it is recommended that the UPS frames be installed at their full ratings see green highlighted data.
- 10. All OCPD's and cabling are by others.
- 11. Heat rejection calculations are based on watt to BTU/HR conversion factor of 1 watt = 3.412 BTU/HR.
- 12. Not Applicable Maximum input OCPD rating is 1000A.
- 13. OCPD = Over Current Protective Device
- 14. Common battery system is not allow ed or supported for this product
- 15. See applicable submittal drawings for additional details.

1500kVA/kW (500kW 3 MODULE CAPACITY) SINGLE/DUAL INPUT TOP/BOTTOM FEED 4WIRE OUTPUT CONFIGURATION

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| TITLE: SYMMETRA PX  |
|---|
| INPUT: 415V 3¢, DUAL & SINGLE MAINS<br>OUTPUT: 1500kVA/kW 415V 3¢<br>500kW 3 MOD N TOP FEED W/LINE-UP BATTERIES |
| OUTPUT: 1500kVA/kW 415V 36  |
| 500kW 3 MOD N TOP FEED W/LINE-UP BATTERIES  |
| SITE PLANNING DATA  |

DWG NO: SY500K1500HC3-4W-SD DRAWN: BALAMURUGAN /V BUSH 20-MAY-11 PROJ ENGINEER: A WARNER/C BARBOZA 28-JUL-11 ANGLE PROJECT: SUBMITTAL DRAWINGS SHEET 4 OF 4 APPROVED: B SHERDAN/S VOCCO/N DESHPANDE 28-JUL-11 N.A.