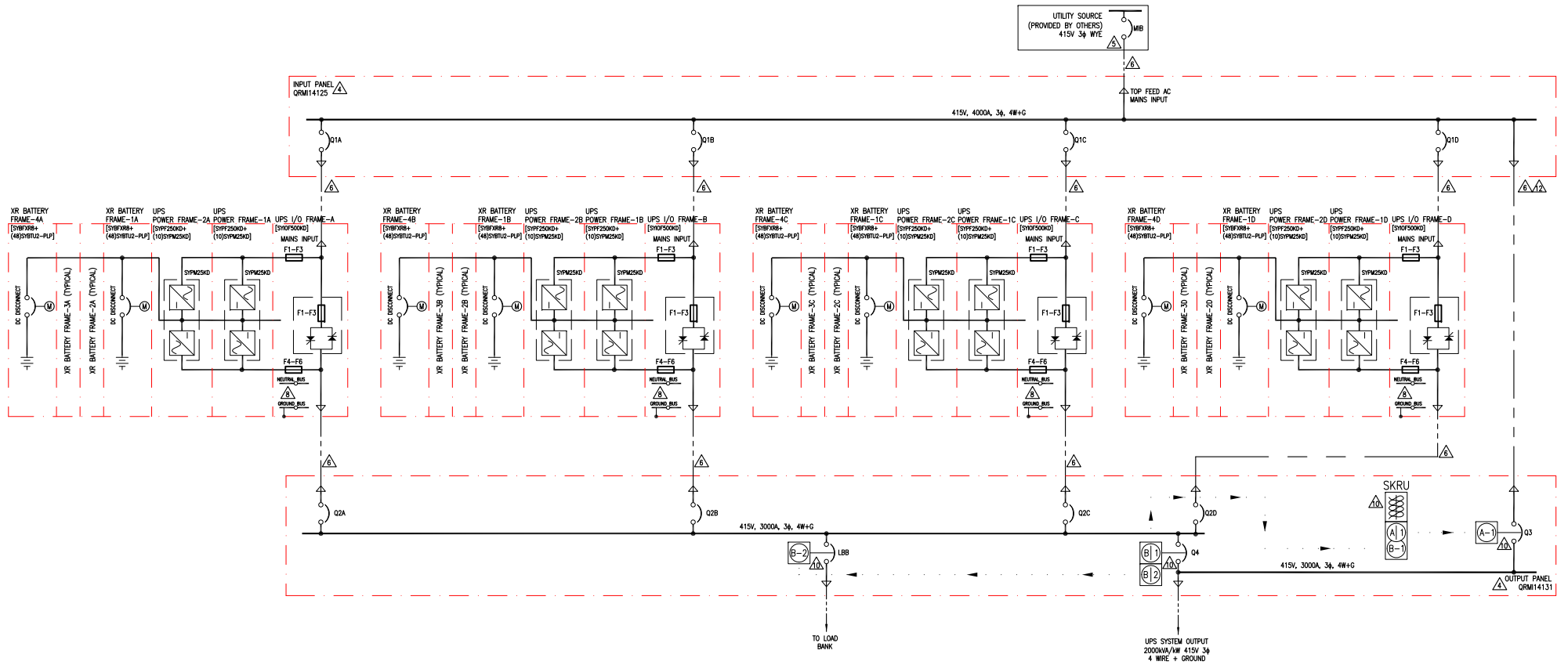


LEGEND:

AC CABLE - PROVIDED BY OTHERS



NOTES:

1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.
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.
- △ 5. AC UTILITY SOURCE SHALL BE 415VAC, 3φ, SOLIDLY GROUNDING WYE, 4 WIRE+GROUND (CONTACT Schneider Electric IF OTHER). SEE SHEET 4 FOR SITE PLANNING SUBMITTAL DATA.
- △ 6. AC CABLING SHALL BE 600V RATED, 4 WIRE+GROUND.
7. CABLE LUGS ARE NOT PROVIDED.
- △ 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 QCB39274) LBB IS OPTIONAL AND IS NOT INCLUDED AS STANDARD WITH THE SYSTEM. (LBB ADDER IS QRM14170) 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.

DEVICE RATING

DEVICE	RATING	TYPE	MAKE	MODEL	ACCESSORIES
Q1A, Q1B, Q1C, Q1D	1000A, 600V 100% RATED	MCCB, 3 POLE	Schneider Electric	PJP36100CU33ACBCSKYP	3A/3B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
Q2A, Q2B, Q2C, Q2D	700A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL1AAV33B9CBXXXXA	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
Q3	3000A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL3HHB33A9CXFXXXXA	8A/8B AUX CONT, BELL ALARM, 120VAC SHUNT TRIP, ML 5.0 TRIP UNIT
Q4	3000A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL3HHB33A9CBXXXXA	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
LBB	3000A, 600V 100% RATED	ICCB, 3 POLE	Schneider Electric	WL3HHB33A9CBXXXXA	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
INVERTER FUSES 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

2000kVA/kw (500kW 4 MOD CAPACITY) TOP FEED SINGLE MAINS SINGLE INPUT TO UPS 4 WIRE OUTPUT CONFIGURATION

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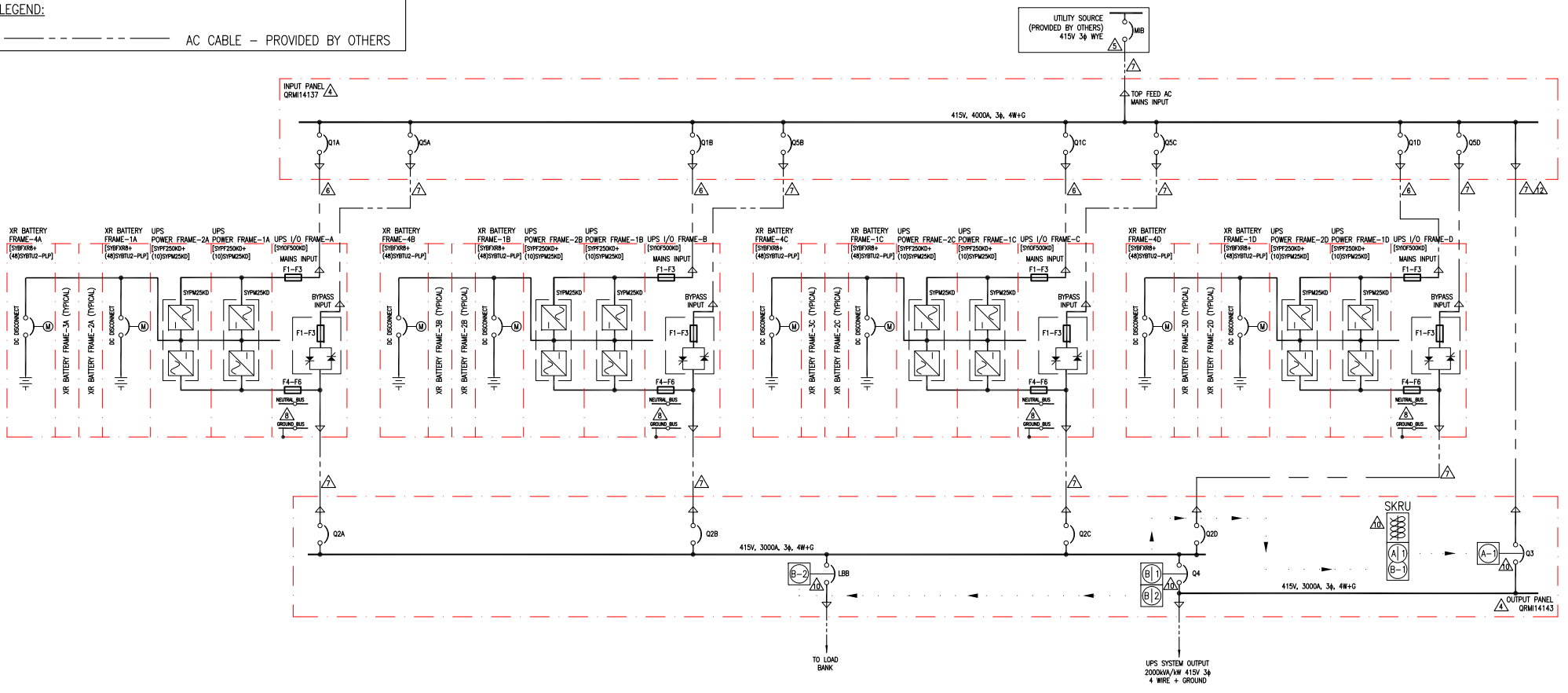


TITLE: SYMMETRA PX  
 INPUT: 415V 3φ, SINGLE MAINS, SINGLE INPUT TO UPS  
 OUTPUT: 2000kVA/kw 415V 3φ  
 500kW 4 MOD N TOP FEED W/LINE-UP BATTERIES  
 SYSTEM ONE LINE DIAGRAM  
 PROJECT: SUBMITTAL DRAWINGS SHEET 1 OF 7

DWG NO: SY500K2000TH1C4-4W-SD REV. 2  
 DRAWN: BALMURJAN/V BUSH/R MILLER/S DINHA 02-DEC-14  
 ENGINEER: C FLY 02-DEC-14  
 APPROVED: BLY SHERIDAN 02-DEC-14  
 PROJ ANGLE N.A.

LEGEND:

----- AC CABLE - PROVIDED BY OTHERS



NOTES:

1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.
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.
5. AC UTILITY SOURCE SHALL BE 415VAC, 3φ, SOLIDLY GROUND WYE, 4 WIRE+GROUND (CONTACT Schneider Electric IF OTHER). SEE SHEET 4 FOR SITE PLANNING SUBMITTAL DATA.
6. 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 QCSA39274) LBB IS OPTIONAL AND IS NOT INCLUDED AS STANDARD WITH THE SYSTEM. (LBB ADDER IS QRM114177) 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	MAKE	MODEL	ACCESSORIES
Q1A, Q1B, Q1C, Q1D	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, Q2D	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	3000A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL3HHB33A9CXFXXXXA	8A/8B AUX CONT, BELL ALARM, 120VAC SHUNT TRIP, ML 5.0 TRIP UNIT
Q4	3000A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL3HHB33A9CXBXXXXA	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
Q5A, Q5B, Q5C, Q5D	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	3000A, 600V 100% RATED	ICCB, 3 POLE	Schneider Electric	WL3HHB33A9CXBXXXXA	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
INVERTER FUSES 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

2000kVA/kW (500kW 4 MOD CAPACITY) TOP FEED SINGLE MAINS, DUAL INPUT TO UPS 4 WIRE OUTPUT CONFIGURATION

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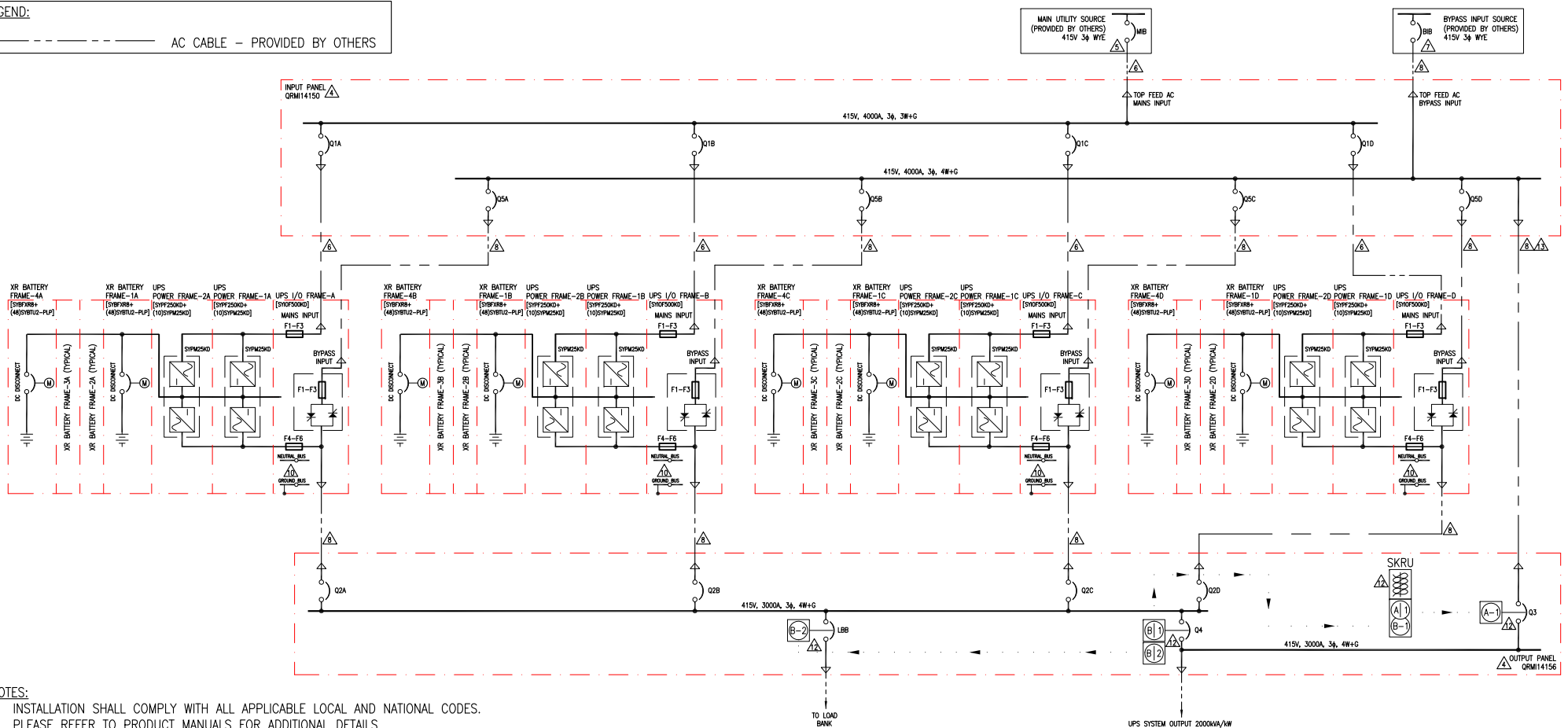


TITLE: SYMMETRA PX  
INPUT: 415V 3φ, SINGLE MAINS, DUAL INPUT TO UPS  
OUTPUT: 2000kVA/kW 415V 3φ  
500kW 4 MOD N TOP FEED W/LINE-UP BATTERIES  
SYSTEM ONE LINE DIAGRAM  
PROJECT: SUBMITTAL DRAWINGS SHEET 2 OF 7

DWG NO: SY500K2000TH1C4-4W-SD REV. 2  
DRAWN: BALMURJAN/V BUSH/R MILLER/S CONHA 02-DEC-14  
ENGINEER: C. FLY 02-DEC-14  
APPROVED: B. SHERIDAN 02-DEC-14  
PROJ ANGLE N.A.

LEGEND:

AC CABLE - PROVIDED BY OTHERS



NOTES:

1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.
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.
5. AC MAIN UTILITY SOURCE SHALL BE 415VAC, 3φ, SOLIDLY GROUNDED WYE, 3 WIRE+GROUND (CONTACT Schneider Electric IF OTHER). SEE SHEET 4 FOR SITE PLANNING SUBMITTAL DATA.
6. AC CABLING SHALL BE 600V RATED, 3 WIRE+GROUND.
7. AC BYPASS 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.
8. AC CABLING SHALL BE 600V RATED, 4 WIRE+GROUND.
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 NOT BE INSTALLED FOR 4 WIRE OUTPUT CONFIGURATION. SEE INSTALLATION MANUAL FOR DETAILS.
11. 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.
12. 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 QRMI14177) INSTALLATION OF LBB AND KEY INTERLOCKS WITH SKRU IS STRONGLY RECOMMENDED.
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.

DEVICE RATING					
DEVICE	RATING	TYPE	MAKE	MODEL	ACCESSORIES
Q1A, Q1B, Q1C, Q1D	1000A, 600V 100% RATED	MCCB, 3 POLE	Schneider Electric	PJP36100CU33AACBCKSKYP	3A/3B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
Q2A, Q2B, Q2C, Q2D	700A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL1AAV339CBXBXKXXA	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
Q3	3000A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL3HHB33A9CXFXKXXA	8A/8B AUX CONT, BELL ALARM, 120VAC SHUNT TRIP, ML 5.0 TRIP UNIT
Q4	3000A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL3HHB33A9CBXKXXA	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
Q5A, Q5B, Q5C, Q5D	700A, 600V 100% RATED	MCCB, 3 POLE	Schneider Electric	PJP36080CU33BCBCKSKYP	3A/3B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
INVERTER FUSES F1-F3 / F4-F6	1250A, 700V	HIGH SPEED FUZE	BUSSMANN	170M6466	---
SSW FUSES F1-F3	1100A, 700V	HIGH SPEED FUZE	BUSSMANN	170M5167	---
LBB	3000A, 600V 100% RATED	ICCB, 3 POLE	Schneider Electric	WL3HHB33A9CBXKXXA	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
DC DISCONNECT	400A, 600V DC	MCCB, 4 POLE	ABB	T5	1 AUX CONT, 24VDC, SHUNT TRIP, ACTUATOR

2000kVA/kW (500kW 4 MOD CAPACITY) TOP FEED DUAL MAINS, DUAL INPUT TO UPS 4 WIRE OUTPUT CONFIGURATION

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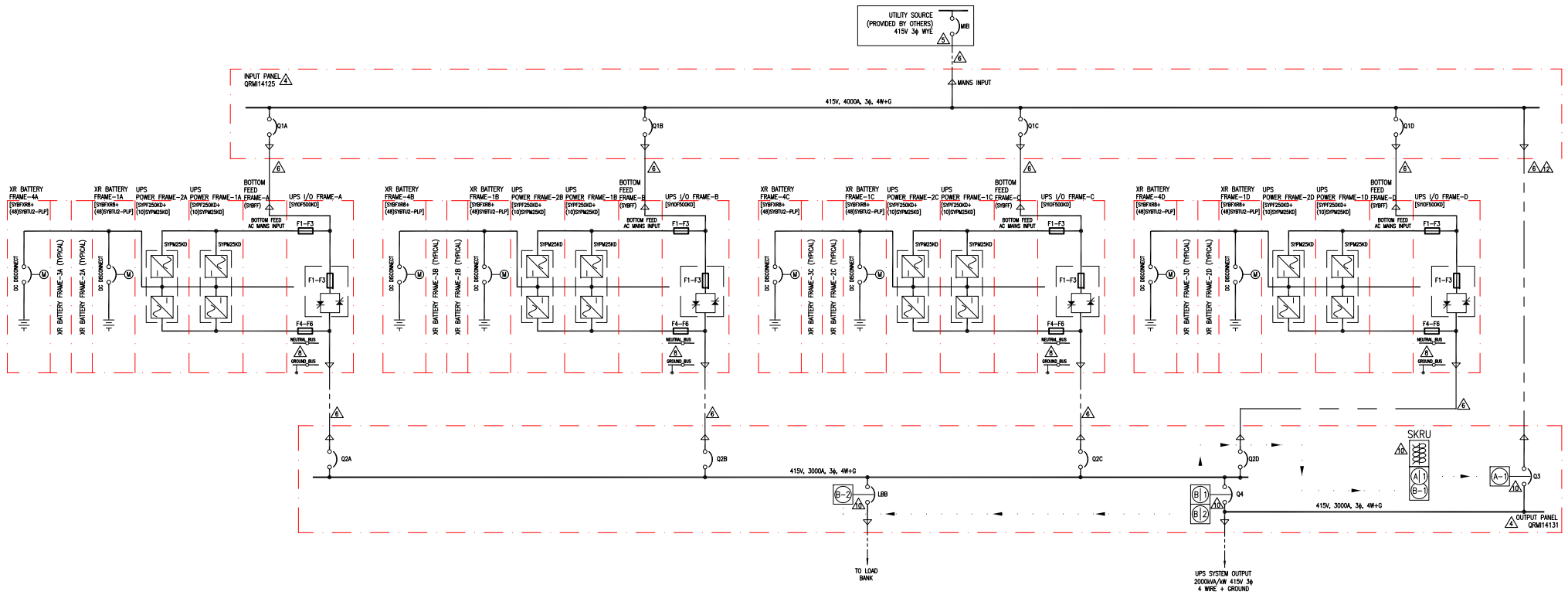
TITLE: SYMMETRA PX  
 INPUT: 415V 3φ, DUAL MAINS, DUAL INPUT TO UPS  
 OUTPUT: 2000kVA/kw 415V 3φ  
 500kW 4 MOD N TOP FEED W/LINE-UP BATTERIES  
 SYSTEM ONE LINE DIAGRAM  
 PROJECT: SUBMITTAL DRAWINGS SHEET 3 OF 7

DWG NO: SY500K2000TH2C4-4W-SD  
 DRAWN: BALMURCAN/V BUSH/R MILLER/S DINHA  
 ENGINEER: C FLY  
 APPROVED: B SHERIDAN

REV: 2  
 02-DEC-14  
 02-DEC-14  
 PROJ ANGLE  
 N.A.

LEGEND:

----- AC CABLE - PROVIDED BY OTHERS



NOTES:

1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.
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.
- △ 5. 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.
- △ 6. AC CABLING SHALL BE 600V RATED, 4 WIRE+GROUND.
7. CABLE LUGS ARE NOT PROVIDED.
- △ 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 QRM14170)
11. INSTALLATION OF LBB AND KEY INTERLOCKS WITH SKRU IS STRONGLY RECOMMENDED.
12. CABLE LENGTHS FOR STATIC BYPASS INPUT AND OUTPUT SHALL BE SAME SUM TOTAL TO ENSURE CORRECT LOAD SHARING IN STATIC BYPASS OPERATION.
- △ 13. 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, Q1D	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, Q2D	700A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL1AAV33B9CXBX000A	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
Q3	3000A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL3HHB33A9CXFX000A	8A/8B AUX CONT, BELL ALARM, 120VAC SHUNT TRIP, ML 5.0 TRIP UNIT
Q4	3000A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL3HHB33A9CXBX000A	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
LBB	3000A, 600V 100% RATED	ICCB, 3 POLE	Schneider Electric	WL3HHB33A9CXBX000A	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
INVERTER FUSES 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

2000kVA/kW (500kW 4 MOD CAPACITY) BOTTOM FEED SINGLE MAINS SINGLE INPUT TO UPS 4 WIRE OUTPUT CONFIGURATION

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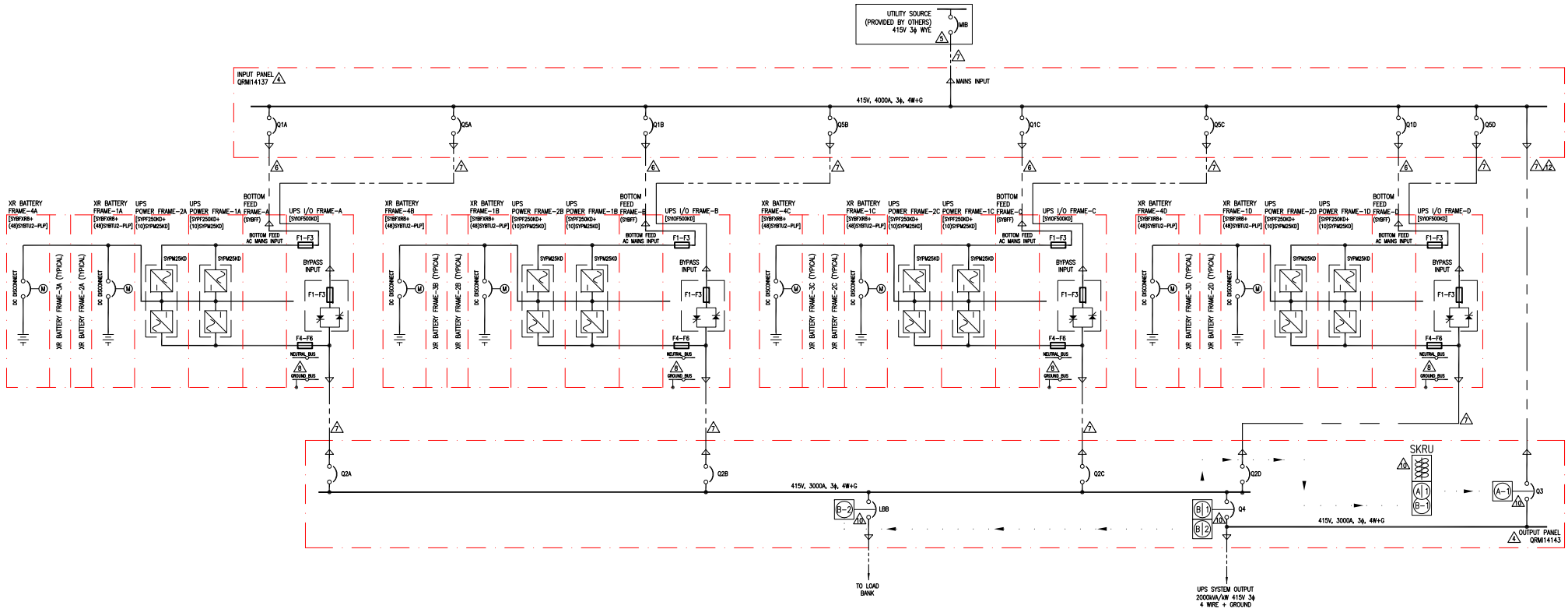
TITLE: SYMMETRA PX  
INPUT: 415V 3φ, SINGLE MAINS, SINGLE INPUT TO UPS  
OUTPUT: 2000kVA/kW 415V 3φ  
500kW 4 MOD N BOTTOM FEED W/LINE-UP BATTERIES  
SYSTEM ONE LINE DIAGRAM  
PROJECT: SUBMITTAL DRAWINGS SHEET 4 OF 7

DWG NO: SY500K2000BH1C4-4W-SD  
DRAWN: BALAMURUGAN/S CUNHA  
ENGINEER: C FLY  
APPROVED: B SHERIDAN

REV. 2  
02-DEC-14  
02-DEC-14  
PROJ ANGLE  
N.A.

LEGEND:

----- AC CABLE - PROVIDED BY OTHERS



NOTES:

1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.
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.
5. AC UTILITY SOURCE SHALL BE 415VAC, 3φ, SOLIDLY GROUND WYE, 4 WIRE+GROUND (CONTACT Schneider Electric IF OTHER). SEE SHEET 4 FOR SITE PLANNING SUBMITTAL DATA.
6. 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 QCB39274) LBB IS OPTIONAL AND IS NOT INCLUDED AS STANDARD WITH THE SYSTEM. (LBB ADDER IS QRM14177) 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	MAKE	MODEL	ACCESSORIES
Q1A, Q1B, Q1C, Q1D	1000A, 600V 100% RATED	MCCB, 3 POLE	Schneider Electric	PJP36100CU33AACBCKSPY	3A/3B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
Q2A, Q2B, Q2C, Q2D	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	3000A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL3HHB33A9CFFXXXXA	8A/8B AUX CONT, BELL ALARM, 120VAC SHUNT TRIP, ML 5.0 TRIP UNIT
Q4	3000A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL3HHB33A9CXBXXXXA	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
Q5A, Q5B, Q5C, Q5D	700A, 600V 100% RATED	MCCB, 3 POLE	Schneider Electric	PJP36080CU33BCBCKSPY	3A/3B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
LBB	3000A, 600V 100% RATED	ICCB, 3 POLE	Schneider Electric	WL3HHB33A9CXBXXXXA	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT
INVERTER FUSES 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

2000kVA/kW (500kW 4 MOD CAPACITY) BOTTOM FEED SINGLE MAINS, DUAL INPUT TO UPS 4 WIRE OUTPUT CONFIGURATION

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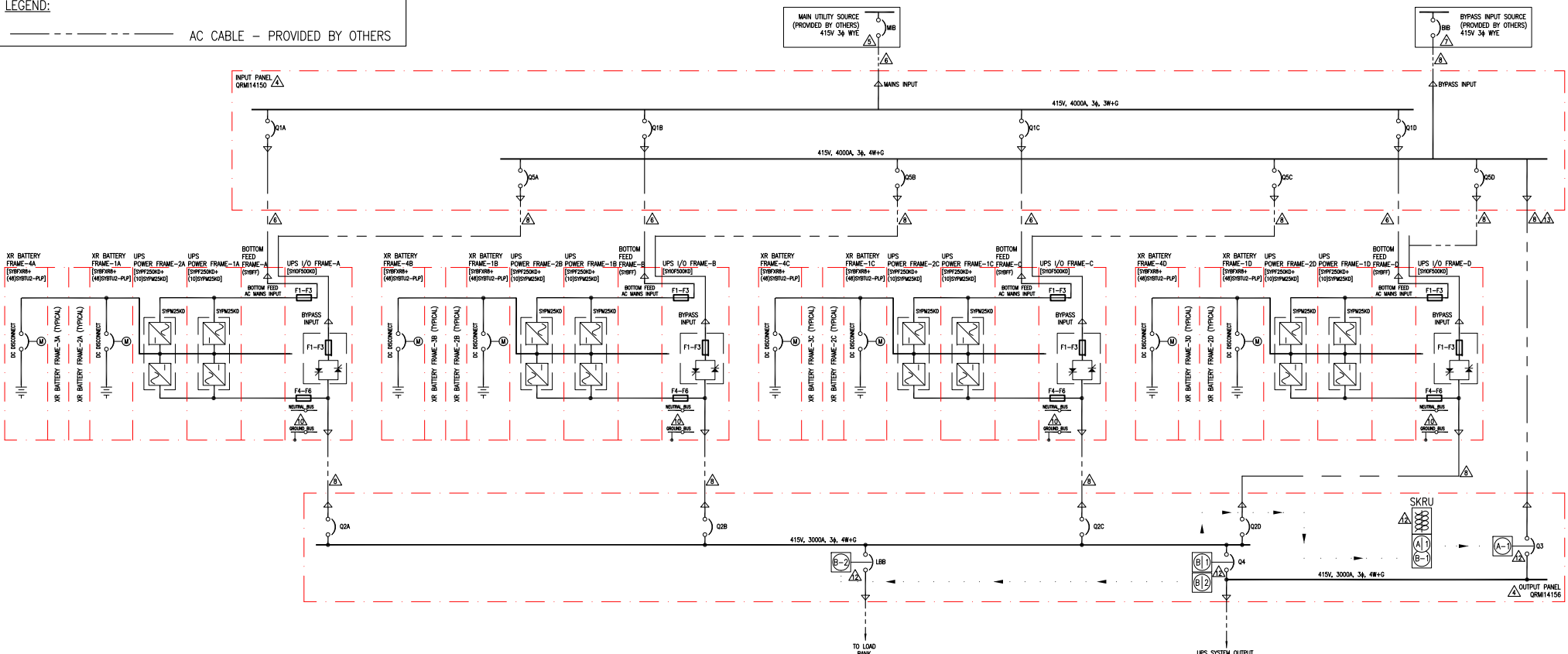
TITLE: SYMMETRA PX  
INPUT: 415V 3φ, SINGLE MAINS, DUAL INPUT TO UPS  
OUTPUT: 2000kVA/kW 415V 3φ  
500kW 4 MOD N BOTTOM FEED W/LINE-UP BATTERIES  
SYSTEM ONE LINE DIAGRAM  
PROJECT: SUBMITTAL DRAWINGS SHEET 5 OF 7

DWG NO: SY500K2000BH1C4-4W-SD  
DRAWN: BALAMURUGAN/S CUNHA  
ENGINEER: C FLY  
APPROVED: B SHERIDAN

REV. 2  
02-DEC-14  
02-DEC-14  
02-DEC-14  
PROJ ANGLE  
N.A.

**LEGEND:**

----- AC CABLE - PROVIDED BY OTHERS



**NOTES:**

1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.
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.
- △ 5. AC MAIN UTILITY SOURCE SHALL BE 415VAC, 3Φ, SOLIDLY GROUNDED WYE, 3 WIRE+GROUND (CONTACT Schneider Electric IF OTHER). SEE SHEET 4 FOR SITE PLANNING SUBMITTAL DATA.
- △ 6. AC CABLING SHALL BE 600V RATED, 3 WIRE+GROUND.
- △ 7. AC BYPASS 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.
- △ 8. AC CABLING SHALL BE 600V RATED, 4 WIRE+GROUND.
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 NOT BE INSTALLED FOR 4 WIRE OUTPUT CONFIGURATION. SEE INSTALLATION MANUAL FOR DETAILS.
11. 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.
- △ 12. 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 QCB39274) LBB IS OPTIONAL AND IS NOT INCLUDED AS STANDARD WITH THE SYSTEM. (LBB ADDER IS QRM14177) INSTALLATION OF LBB AND KEY INTERLOCKS WITH SKRU IS STRONGLY RECOMMENDED.
- △ 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.

DEVICE RATING						
DEVICE	RATING	TYPE	MAKE	MODEL	ACCESSORIES	
Q1A, Q1B, Q1C, Q1D	1000A, 600V 100% RATED	MCCB, 3 POLE	Schneider Electric	PJP36100C33AACBCSKYP	3A/3B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT	
Q2A, Q2B, Q2C, Q2D	700A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL1AAV33B9CXBXKXXA	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT	
Q3	3000A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL3HHB33A9CXFXKXXA	8A/8B AUX CONT, BELL ALARM, 120VAC SHUNT TRIP, ML 5.0 TRIP UNIT	
Q4	3000A, 600V 100% RATED	ICCB, 4 POLE	Schneider Electric	BL3HHB33A9CXBXKXXA	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT	
Q5A, Q5B, Q5C, Q5D	700A, 600V 100% RATED	MCCB, 3 POLE	Schneider Electric	PJP36080C33B3CBCSKYP	3A/3B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT	
LBB	3000A, 600V 100% RATED	ICCB, 3 POLE	Schneider Electric	WL3HHB33A9CXBXKXXA	8A/8B AUX CONT, BELL ALARM, 24VDC SHUNT TRIP, ML 5.0 TRIP UNIT	
INVERTER FUSES 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	

**2000kVA/kW (500kW 4 MOD CAPACITY) BOTTOM FEED DUAL MAINS, DUAL INPUT TO UPS 4 WIRE OUTPUT CONFIGURATION**

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TITLE: SYMMETRA PX INPUT: 415V 3Φ, DUAL MAINS, DUAL INPUT TO UPS OUTPUT: 2000kVA/kw 415V 3Φ 500kW 4 MOD N BOTTOM FEED W/LINE-UP BATTERIES SYSTEM ONE LINE DIAGRAM	DWG NO: SY500K2000BH2C4-4W-SD	REV: 2
PROJECT: SUBMITTAL DRAWINGS SHEET 6 OF 7	DRAWN: BALAMURUGAN/S CUNHA ENGINEER: C FLY	02-DEC-14 02-DEC-14
	APPROVED: B SHERIDAN	02-DEC-14 N.A.

## APC Symmetra® PX 250K and 500K UPS Frame Site Planning Data - w/o MBPwD

UPS Module Rating		Voltage		Mains Input-Single or Dual Feed (Q1) <sup>1</sup>				Static Bypass Input - Dual Feed (Q5) <sup>2</sup>				External Battery System <sup>3, 6, 14</sup>				AC Output (Q2) <sup>2</sup>				Mechanical Data <sup>5, 11</sup>							
				Current		Recommendations		Currents		Recommendations <sup>4</sup>		Nominal VDC	Battery kW	Current @ Nom. VDC	Recommendations		Current		Recommendations		Typical Dimensions WxHxD	Average Weight Lbs	Floor Loading Lbs/Ft2	Heat Rejection Battery Fully Charged BTU/HR	Heat Rejection Battery Charging BTU/HR		
UPS Frame Rating	Qty of 25kW Power Modules	kVA	kW	Input <sup>1</sup>	Output <sup>2</sup>	Full Load	Max. <sup>7</sup>	100% OCPD	100% Cable	NOM.	Max. <sup>8</sup>				100% OCPD	100% Cable			NOM.	Max. <sup>8</sup>						100% OCPD	100% Cable
250kVA/250kW 1x 250K Frame	4	100	100	415	415	160	179			139	174			2x 288	104	181			139	174							
	5	125	125	415	415	200	223			174	217			2x 288	130	226			174	217							
	6	150	150	415	415	240	268			209	261			2x 288	156	271			209	261							
	7	175	175	415	415	280	313			243	304			2x 288	182	316			243	304							
	8	200	200	415	415	320	357			278	348			2x 288	208	362			278	348							
	9	225	225	415	415	360	402			313	391			2x 288	234	407			313	391							
	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
500kVA/500kW 2x 250K Frame	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							
	13	325	325	415	415	521	581			452	565			2x 288	339	588			452	565							
	14	350	350	415	415	561	626			487	609			2x 288	365	633			487	609							
	15	375	375	415	415	601	670			522	652			2x 288	391	678			522	652							
	16	400	400	415	415	641	715			556	696			2x 288	417	723			556	696							
	17	425	425	415	415	681	760			591	739			2x 288	443	769			591	739							
	18	450	450	415	415	721	804			626	783			2x 288	469	814			626	783							
	19	475	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

## APC Symmetra® PX 250K and 500K UPS Parallel SWBD Site Planning Data <sup>15</sup>

UPS Rating		Voltage		Mains AC Input Single or Dual Feed (MIB) <sup>1</sup>				Bypass AC Input - Dual Feed (BIB - Q3) <sup>2</sup>				AC Output (Q4 -LBB) <sup>2</sup>				Mechanical Data <sup>5, 11</sup>											
				Current		Recommendations <sup>3</sup>		Currents		Recommendations		Current		Recommendations		Typical Dimensions WxHxD	Average Weight Lbs	Floor Loading Lbs/Ft2	Heat Rejection Battery Fully Charged BTU/HR	Heat Rejection Battery Charging BTU/HR							
UPS Frame Rating	Qty in Parallel	kVA	kW	Input <sup>1</sup>	Output <sup>2</sup>	Full Load	Max. <sup>7</sup>	100% OCPD	100% Cable	NOM.	Max. <sup>8</sup>	100% OCPD	100% Cable	NOM.	Max. <sup>8</sup>						100% OCPD	100% Cable					
250kVA 250kW	2	500	500	415	415	801	894	1000A	3x 400	696	870	700A	2x 500			696	870	700A	2x 350							71,083	85,517
	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
	4	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 500kW	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
	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
	4	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.

- 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.
- Output is 415Y/240V 4-wire + GROUND. The bypass AC input source must be 415Y/240V 4-wire + ground.
- Recommended cables are AWG/kcmil minimum requirement for three (3) current carrying conductors in raceway, sized for 30°C environment and 75°C terminations. All cabling must comply with installation site conditions and any applicable Local and or Natio
- Dual Feed static bypass input feeder is limited to maximum size of 250kcmil conductor.
- 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.
- Contact Schneider Electric for assistance with all external battery designs. Maximum allowed DC cabling voltage drop is 1 VDC. Schneider Electric Standard external DCDs are rated 500A (PX 250kVA) or 1000A (PX 500kVA).
- Electronic Input Current Limit.
- 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.
- For maximum scalability or future expansion it is recommended that the UPS frames be installed at their full ratings - see green highlighted data.
- All OCPDs and cabling are by others.
- Heat rejection calculations are based on watt to BTU/HR conversion factor of 1 watt = 3.412 BTU/HR.
- Not Applicable - Maximum input OCPD rating is 1000A.
- OCPD = Over Current Protective Device
- Common battery system is not allowed or supported for this product
- See applicable submittal drawings for additional details.

## 2000kVA/kW (500kW 4 MOD CAPACITY) SINGLE/DUAL INPUT TOP/BOTTOM FEED 4 WIRE OUTPUT CONFIGURATION

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TITLE: SYMMETRA PX  
 INPUT: 415V 3ø, DUAL & SINGLE MAINS  
 OUTPUT: 2000kVA/kW 415V 3ø  
 500kW 4 MOD N TOP/BOTTOM FEED W/LINE-UP BATTERIES  
 SITE PLANNING DATA  
 PROJECT: SUBMITTAL DRAWINGS | SHEET 7 OF 7

DWG NO: SY500K2000HC4-4W-SD REV. 0  
 DRAWN: BALAMURUGAN/V BUSH 28-JUL-11  
 ENGINEER: A WARNER/C BARBOZA 28-JUL-11  
 APPROVED: B SHERIDAN/S VOOCD/M DESHPANDE 28-JUL-11  
 PROJ ANGLE N.A.