




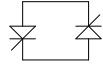


Symmetra PX 160kW 400V with PDU Package.

Sheet No.	Component /Detail	Description
1	Drawing Guide	Symmetra PX 32-160kW 400V w/ Integrated Modular Distribution Top/Bottom Feed Drawing guide
2-8	Solution	Symmetra PX 32-160kW 400V w/ Integrated Modular Distribution Top/Bottom Feed
9	UPS	Symmetra PX 32-160kW 400V UPS Internal View
10	Power Distribution Unit	Symmetra PX 32-160kW 400V PDU Internal View
11	Battery	Symmetra PX 32-160kW 400V Battery Internal View
12	MBP Interface Board	Symmetra PX 32-160kW 400V MBP Interface Board Wiring Details
13	EPO WIRING	Symmetra PX 32-160kW 400V MBP EPO Wiring Details
14	System One Line Diagram	Symmetra PX 32-160kW 400V w/ Integrated Modular Distribution One Line Diagram

LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	CIRCUIT BREAKER		CONVERTER
	SWITCH DISCONNECT		INVERTER
	BATTERY MODULE		BYPASS SSW

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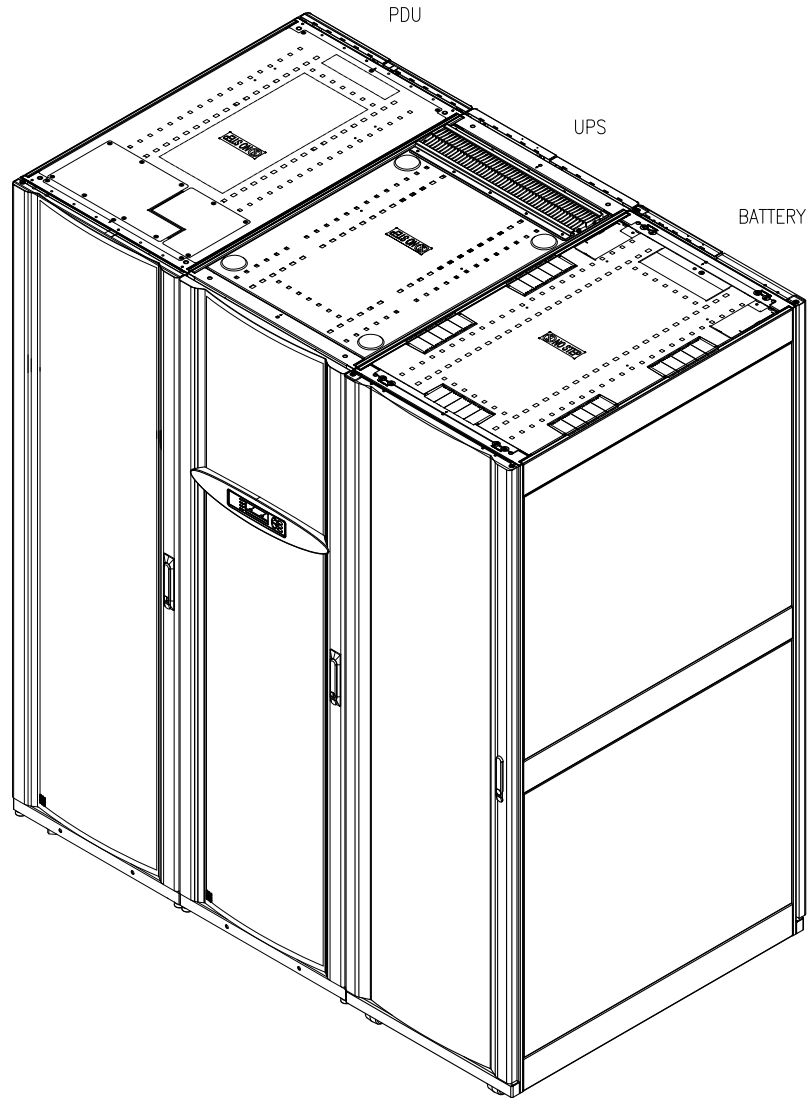
Schneider Electric

TITLE: SYMMETRA PX 160
 Input: 400V AC 3PH SINGLE/DUAL MAINS
 Output: 400/230V AC & 400V AC 3PH 32-160kW
 WITH MODULAR DISTRIBUTION
 DRAWING GUIDE

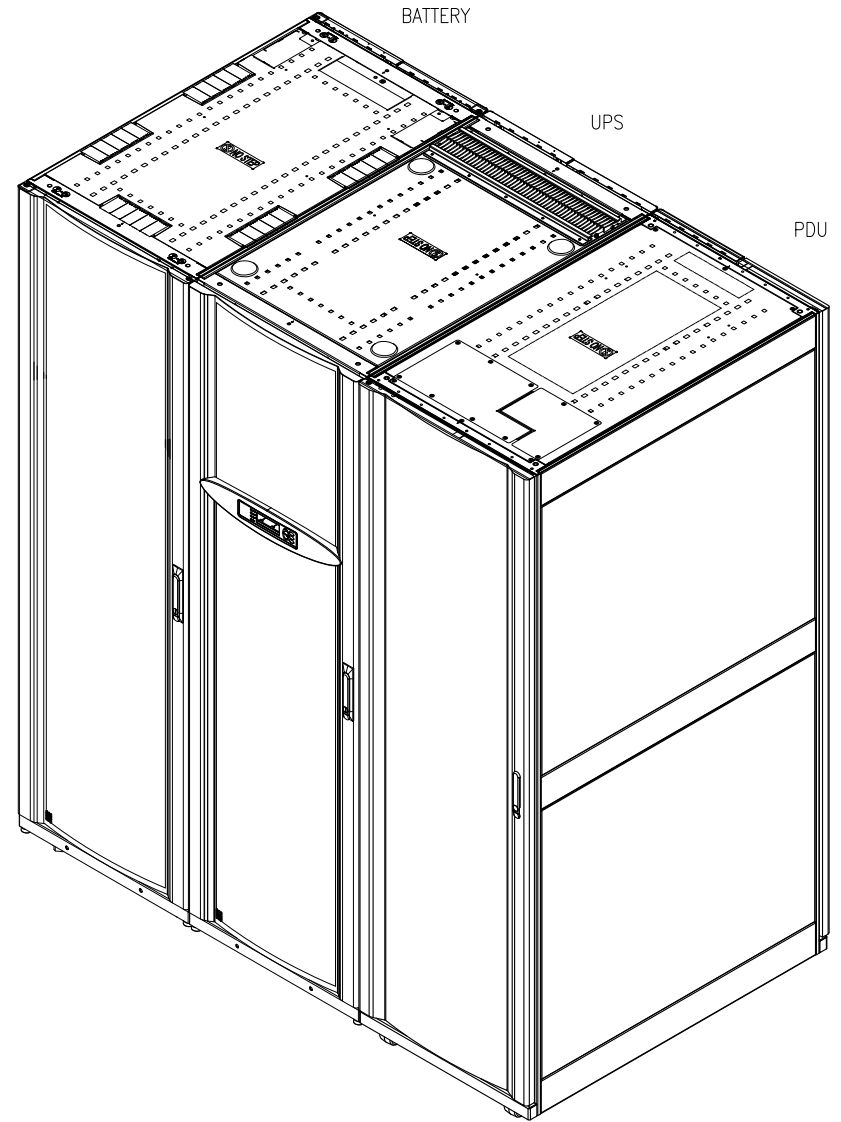
PROJECT: DRAWINGS SHEET 1 OF 15

DWG NO:	SY32K160H-PD	REV.	1
DRAWN:	RAMESH B	1-JUL-19	FIRST ANGLE PROJECTION
ENGINEER:	J WOLSKI	1-JUL-19	
APPROVED:	J WOLSKI	1-JUL-19	

ISOMETRIC VIEW WITH PDU ON LHS



ISOMETRIC VIEW WITH PDU ON RHS



- 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. CABLE ENTRY IS FROM BOTTOM OF THE UNIT.
 4. FRONT AND REAR SERVICE ACCESS IS REQUIRED.
 5. ENCLOSURE PROTECTION: IP20

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TITLE: SYMMETRA PX 160
 Input: 400V AC 3PH SINGLE/DUAL MAINS
 Output: 400/230V AC & 400V AC 3PH 32-160kW
 WITH MODULAR DISTRIBUTION
 SOLUTION ISOMETRIC VIEW

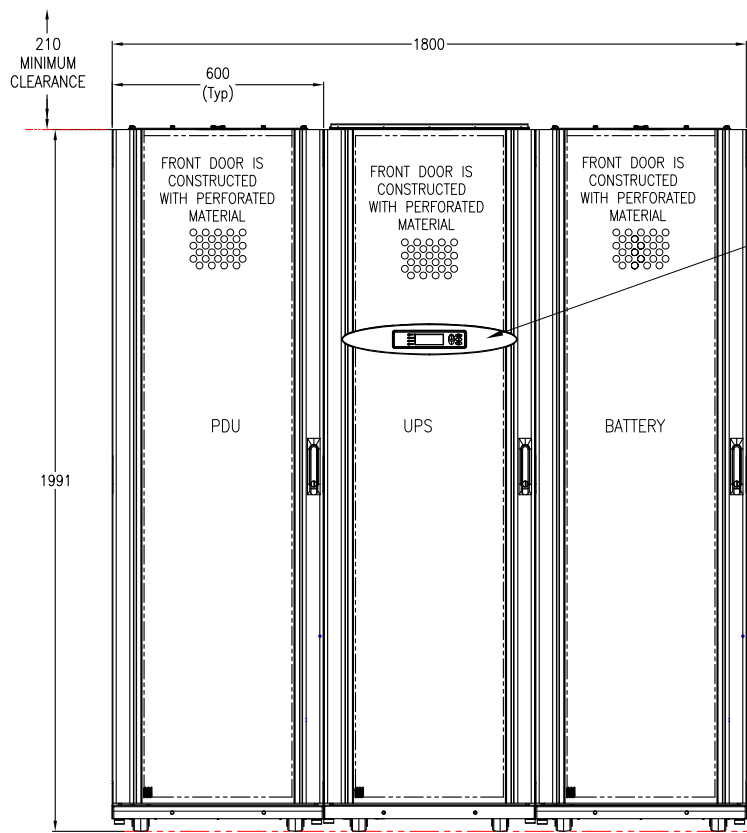
PROJECT: DRAWINGS SHEET 2 OF 15

DWG NO: SY32K160H-PD

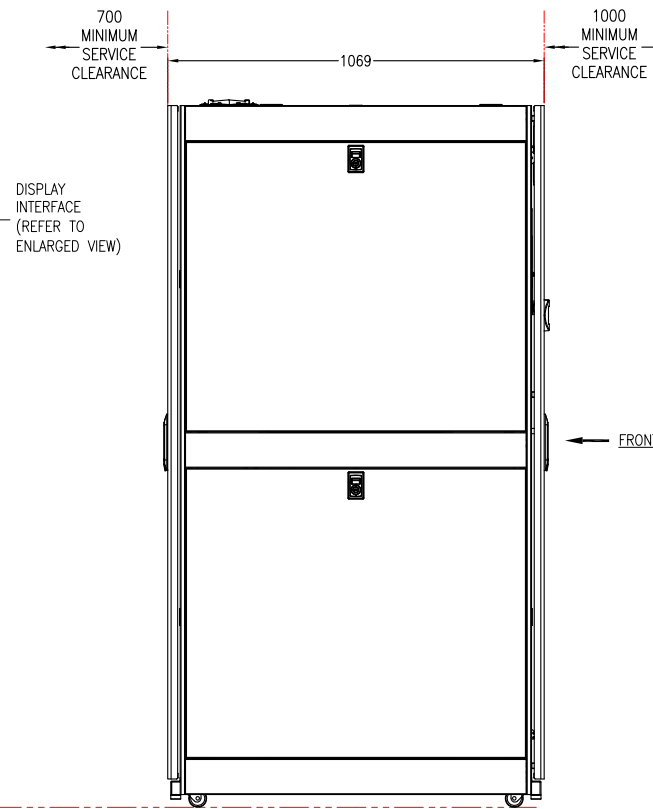
DRAWN:	RAMESH B	1-JUL-19
ENGINEER:	J WOLSKI	1-JUL-19
APPROVED:	J WOLSKI	1-JUL-19

REV. 1

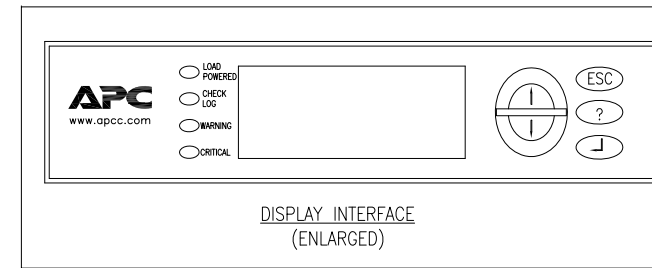
FIRST ANGLE PROJECTION



FRONT VIEW



SIDE VIEW



DISPLAY INTERFACE (ENLARGED)

Floor Loading Data			
SKU #	Dimensions HxWxD in mm	Weight in kg	Floor Loading [kg/m ²]
SYCF160KH (UPS Cabinet)	1991x600x1070	595	927
PDUM160H-B (PDU-XR)	1991x600x1070	1317	2051
SYCFXR9 (XR Batt. Cabinet)	1991x600x1070	1252	1950

NOTES:

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- PLEASE REFER TO PRODUCT MANUALS FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
- ALL DIMENSIONS ARE IN MILLIMETERS. UNLESS OTHERWISE SPECIFIED.
- CABLE ENTRY IS FROM THE TOP OR BOTTOM OF THE PANEL. BOTTOM CABLE ENTRY IS ONLY APPLICABLE FOR SYSTEMS INSTALLED IN A RAISED FLOOR.
- FOR UPS NET WEIGHT AND COG DETAILS. REFER TABLE
NET WEIGHT OF THE UNIT WITHOUT POWER MODULES IS 325 kg.
NET WEIGHT OF THE POWER MODULE IS 28.5kg.
- PDU XR NET WEIGHT.
NET WEIGHT OF THE ENCLOSURE WITHOUT BATTERY UNITS IS 411 kg
NET WEIGHT OF THE ENCLOSURE WITH 12Nos. OF BATTERIES IS 712 kg.
NET WEIGHT OF THE ENCLOSURE WITH 24Nos. OF BATTERIES IS 1015 kg.
NET WEIGHT OF THE ENCLOSURE WITH 36Nos. OF BATTERIES IS 1317 kg.
- XR BATTERY NET WEIGHT.
NET WEIGHT OF THE ENCLOSURE WITHOUT BATTERY UNITS IS 345 kg
NET WEIGHT OF THE BATTERY UNIT (SYBTU2-PLP) IS 25.2 kg
NET WEIGHT OF THE ENCLOSURE WITH BATTERY UNITS INSTALLED IS 1252 kg.
- OPERATING TEMPERATURE: 32-104°F [0-40°C]
- COLOUR: BLACK
- THIS INFORMATION PROVIDED CONSERVATIVE CENTER OF GRAVITY CALCULATION.

UPS CABINET

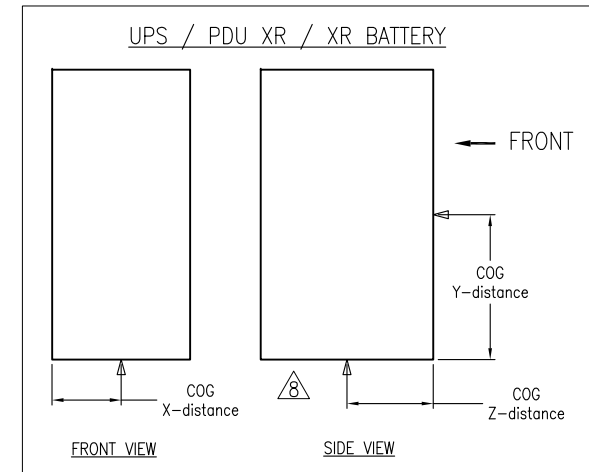
UPS Rating	Number of Powermodules	Number of Blanking plates	Total Weight	Center of Gravity with PM's			Center of Gravity without PM's		
				X DISTANCE	Y DISTANCE	Z DISTANCE	X DISTANCE	Y DISTANCE	Z DISTANCE
160kW	10	NA	610kg	294 mm	1094 mm	439 mm			
128kW	8	2	553kg	293 mm	1024 mm	448 mm			
96kW	6	4	496kg	293 mm	970 mm	460 mm	289 mm	968 mm	518 mm
64kW	4	6	439kg	292 mm	934 mm	474 mm			
32kW	2	8	382kg	290 mm	929 mm	493 mm			

PDU XR CABINET

CENTER OF GRAVITY	WITHOUT BATTERIES	WITH BATTERIES (NUMBER OF BATTERIES IN PDU-XR)		
		12 (SY32K160H-PD, SY128K160H-PD)	24 (SY64K160H-PD, SY160K160H-PD)	36 (SY96K160H-PD)
		X DISTANCE	Y DISTANCE	Z DISTANCE
	296.9 mm	299.6 mm	300.5 mm	301.3 mm
	1037.7 mm	863.0 mm	947.5 mm	1110.0 mm
	474.0 mm	561.3 mm	592.0 mm	619.0 mm

XR BATTERY CABINET

CENTER OF GRAVITY	WITH BATTERIES	WITHOUT BATTERIES
X DISTANCE	297.5 mm	299.5 mm
Y DISTANCE	1107.0 mm	1023.6 mm
Z DISTANCE	419.9 mm	545.5 mm



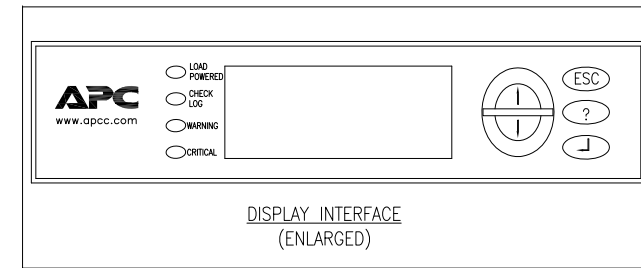
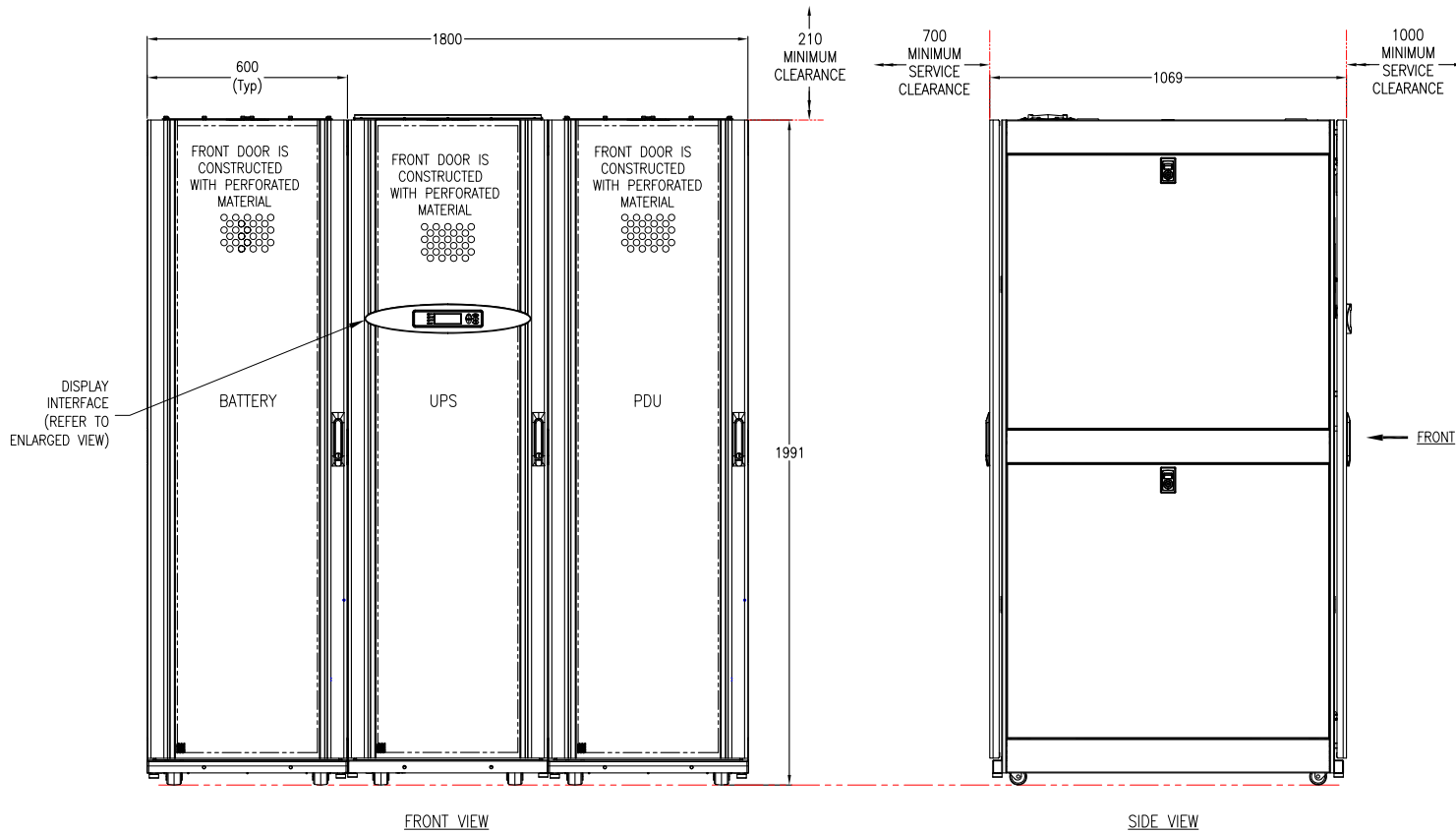
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TITLE: SYMMETRA PX 160
Input: 400V AC 3PH SINGLE/DUAL MAINS
Output: 400/230V AC & 400V AC 3PH 32-160kW
WITH MODULAR DISTRIBUTION
SOLUTION GENERAL ARRANGEMENT WITH PDU ON LHS

DWG NO: SY32K160H-PD REV. 1
DRAWN: RAMESH B 1-JUL-19
ENGINEER: J WOLSKI 1-JUL-19
APPROVED: J WOLSKI 1-JUL-19
PROJECT: DRAWINGS SHEET 3 OF 15

FIRST ANGLE PJECTION



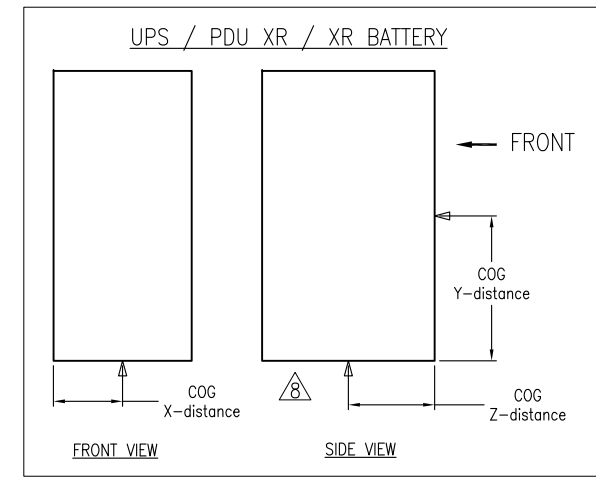
Floor Loading Data			
SKU #	Dimensions HxWxD in mm	Weight in kg	Floor Loading [kg/m ²]
SYCF160KH (UPS Cabinet)	1991x600x1070	595	927
PDUM160H-B (PDU-XR)	1991x600x1070	1317	2051
SYCFXR9 (XR Batt. Cabinet)	1991x600x1070	1252	1950

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 - CABLE ENTRY IS FROM THE TOP OR BOTTOM OF THE PANEL.
 - FOR UPS NET WEIGHT AND COG DETAILS. REFER TABLE
NET WEIGHT OF THE UNIT WITHOUT POWER MODULES IS 325 kg.
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NET WEIGHT OF THE ENCLOSURE WITH 36nos. OF BATTERIES IS 1317 kg.
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NET WEIGHT OF THE ENCLOSURE WITHOUT BATTERY UNITS IS 345 kg
NET WEIGHT OF THE BATTERY UNIT (SYBTU2-PLP) IS 25.2 kg
NET WEIGHT OF THE ENCLOSURE WITH BATTERY UNITS INSTALLED IS 1252 kg.
 - OPERATING TEMPERATURE: 32-104°F [0-40°C]
 - COLOUR: BLACK
 - THIS INFORMATION PROVIDED CONSERVATIVE CENTER OF GRAVITY CALCULATION.

UPS CABINET									
UPS Rating	Number of Powermodules	Number of Blanking plates	Total Weight	Center of Gravity with PM's			Center of Gravity without PM's		
				X DISTANCE	Y DISTANCE	Z DISTANCE	X DISTANCE	Y DISTANCE	Z DISTANCE
160kW	10	NA	610kg	294 mm	1094 mm	439 mm			
128kW	8	2	553kg	293 mm	1024 mm	448 mm			
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64kW	4	6	439kg	292 mm	934 mm	474 mm			
32kW	2	8	382kg	290 mm	929 mm	493 mm			

PDU XR CABINET				
CENTER OF GRAVITY	WITHOUT BATTERIES	WITH BATTERIES (NUMBER OF BATTERIES IN PDU-XR)		
		12 (SY32K160H-PD, SY128K160H-PD)	24 (SY64K160H-PD, SY160K160H-PD)	36 (SY96K160H-PD)
X DISTANCE	296.9 mm	299.6 mm	300.5 mm	301.3 mm
Y DISTANCE	1037.7 mm	863.0 mm	947.5 mm	1110.0 mm
Z DISTANCE	474.0 mm	561.3 mm	592.0 mm	619.0 mm

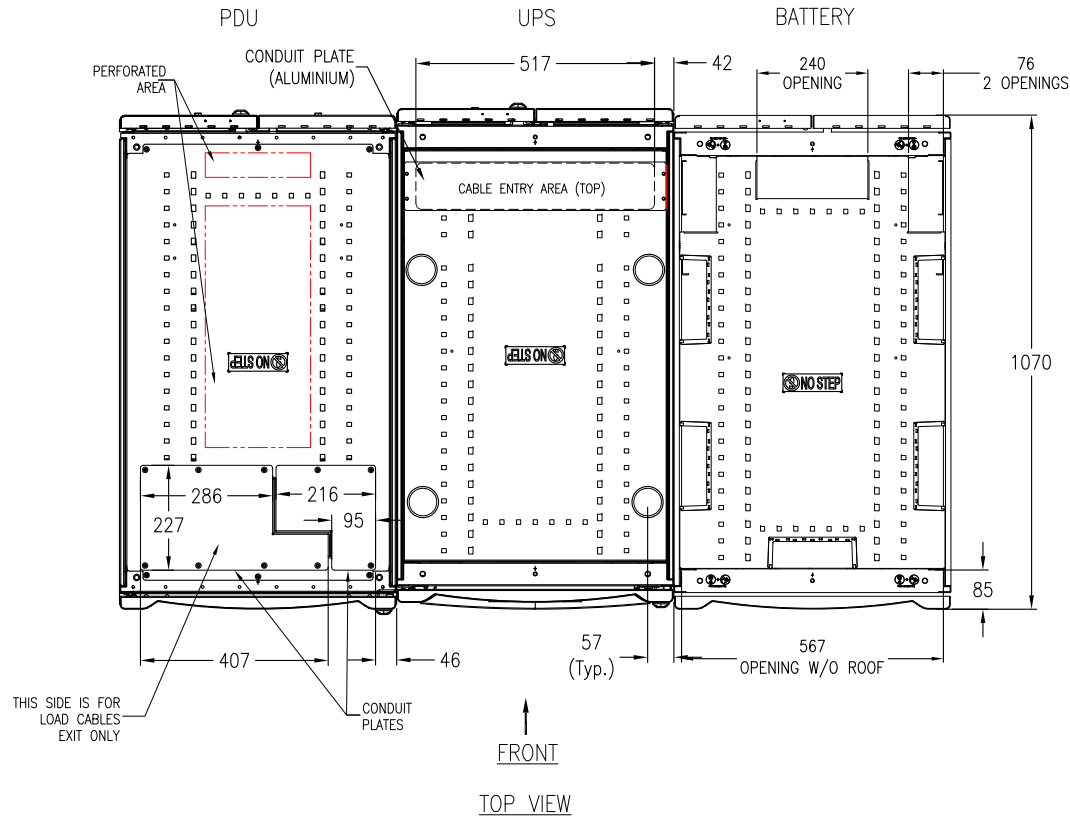
XR BATTERY CABINET		
CENTER OF GRAVITY	WITH BATTERIES	WITHOUT BATTERIES
X DISTANCE	297.5 mm	299.5 mm
Y DISTANCE	1107.0 mm	1023.6 mm
Z DISTANCE	419.9 mm	545.5 mm



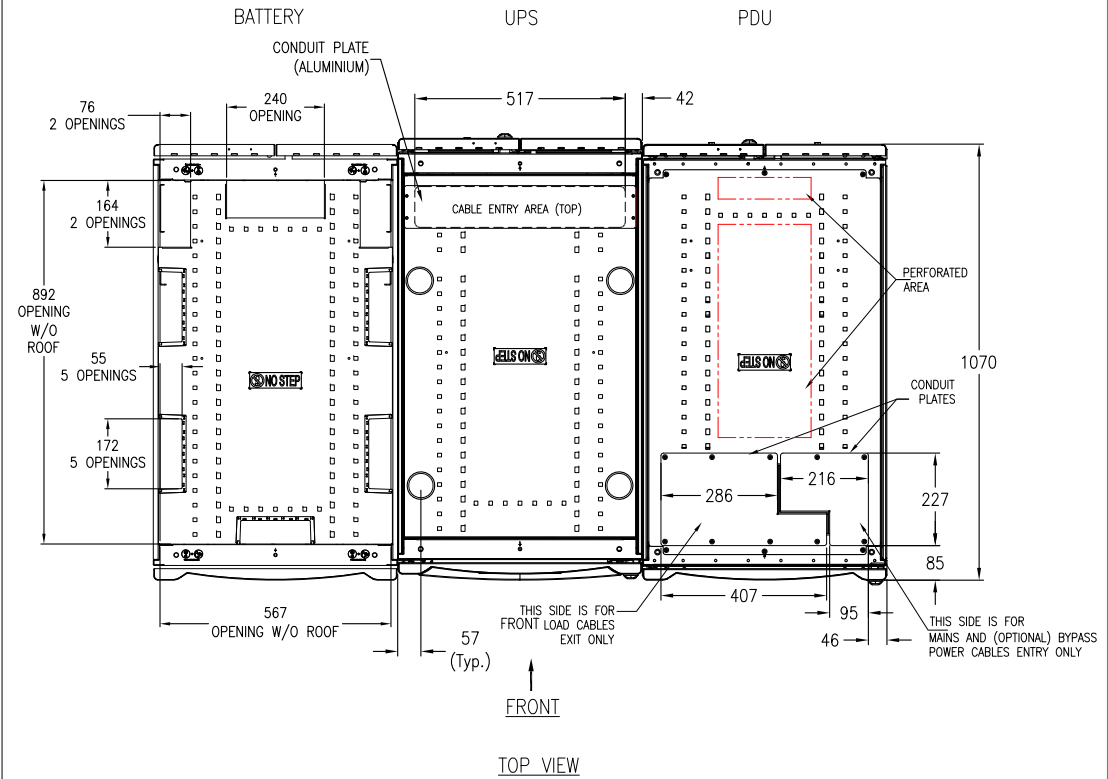
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TITLE: SYMMETRA PX 160 Input: 400V AC 3PH SINGLE/DUAL MAINS Output: 400/230V AC&400V AC 3PH 32-160kW WITH MODULAR DISTRIBUTION SOLUTION GENERAL ARRANGEMENT WITH PDU ON RHS	DWG NO: SY32K160H-PD	REV: 1
PROJECT: DRAWINGS SHEET 4 OF 15	DRAWN: RAMESH B	1-JUL-19
	ENGINEER: J WOLSKI	1-JUL-19
	APPROVED: J WOLSKI	1-JUL-19
		FIRST ANGLE PROJECTION

TOP VIEW WITH PDU ON LHS



TOP VIEW WITH PDU ON RHS



- NOTES:
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 3. ALL DIMENSIONS ARE IN MILLIMETERS. UNLESS OTHERWISE SPECIFIED.
 4. FOR TOP OR BOTTOM CABLE ENTRY REMOVE TOP OR BOTTOM CONDUIT PLATE, DRILL/PUNCH HOLES WITH-IN PROVIDED CABLE ENTRY AREA REFIT COVER AND INSTALL CONDUITS.

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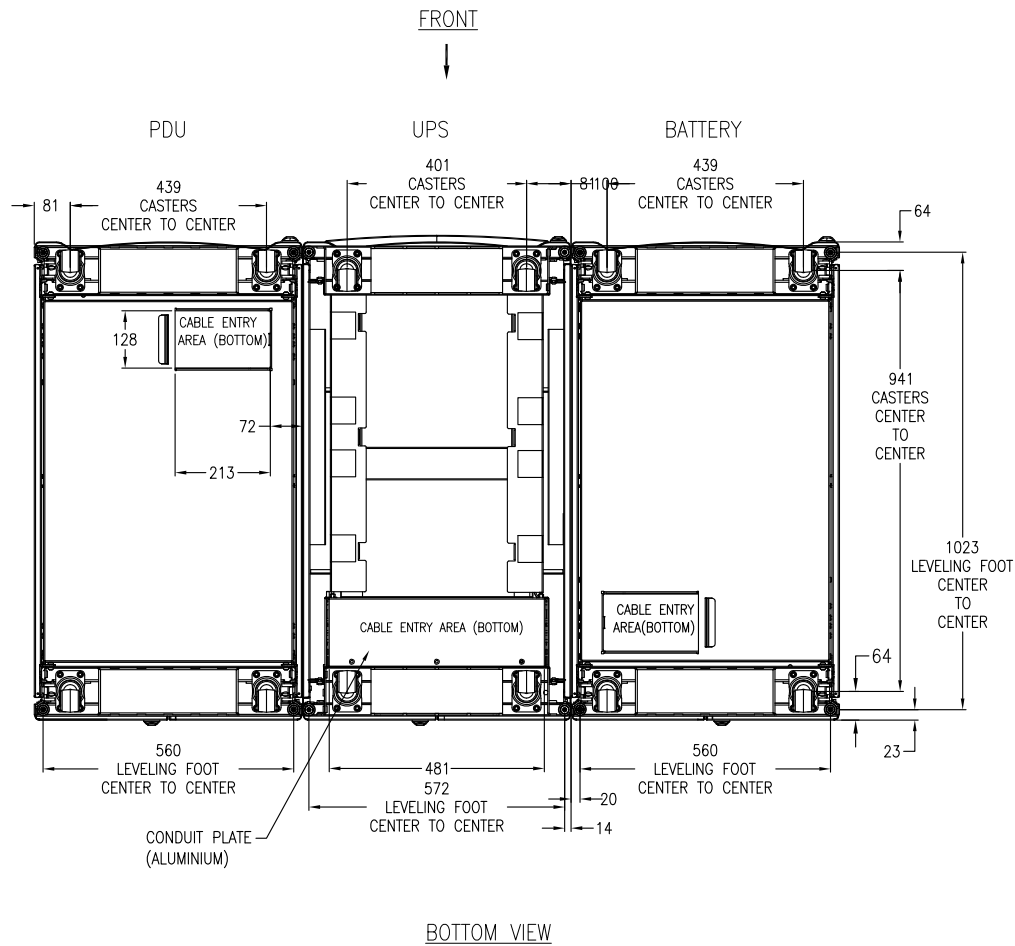


TITLE: SYMMETRA PX 160
 Input: 400V AC 3PH SINGLE/DUAL MAINS
 Output: 400/230V AC & 400V AC 3PH 32-160kW
 WITH MODULAR DISTRIBUTION SOLUTION TOP VIEW

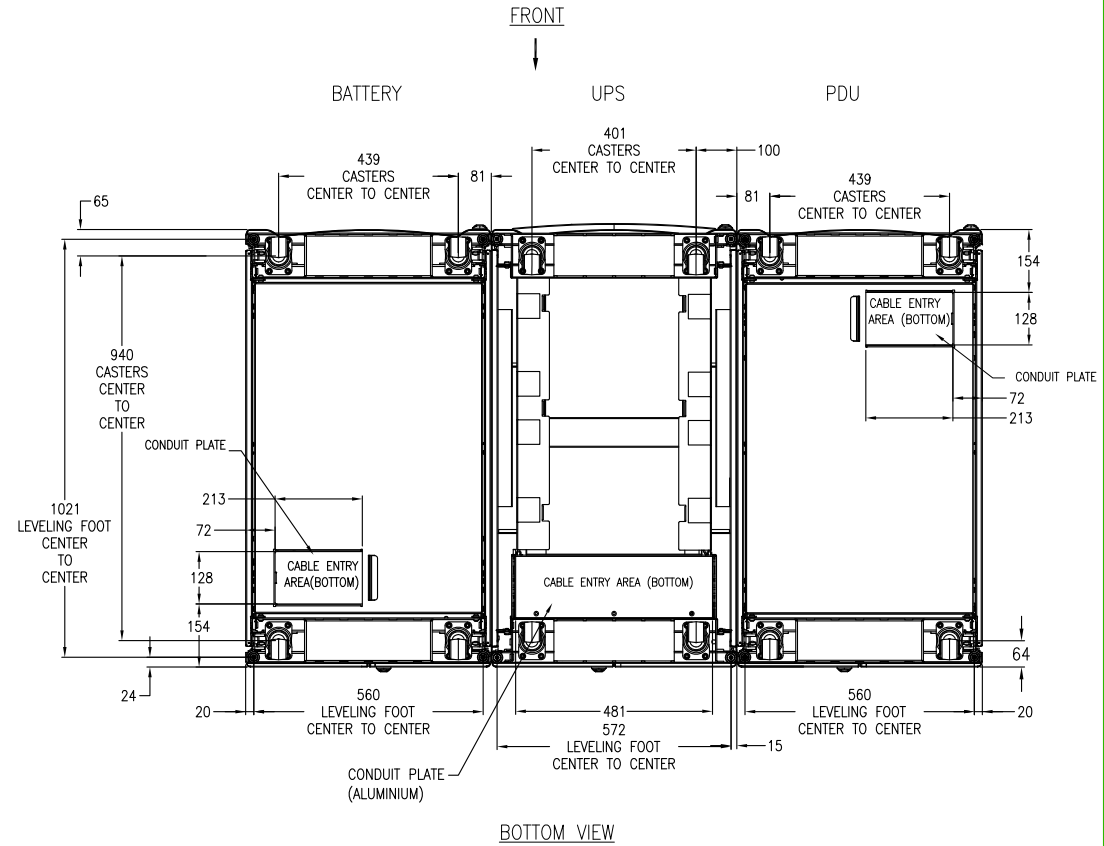
DWG NO:	SY32K160H-PD	REV.	1
DRAWN:	RAMESH B	1-JUL-19	FIRST ANGLE
ENGINEER:	J WOLSKI	1-JUL-19	PROJECTION
APPROVED:	J WOLSKI	1-JUL-19	

PROJECT: DRAWINGS SHEET 5 OF 15

BOTTOM VIEW WITH PDU ON LHS



BOTTOM VIEW WITH PDU ON RHS



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 4. FOR TOP OR BOTTOM CABLE ENTRY REMOVE TOP OR BOTTOM CONDUIT PLATE, DRILL/PUNCH HOLES WITH-IN PROVIDED CABLE ENTRY AREA REFIT COVER AND INSTALL CONDUITS.

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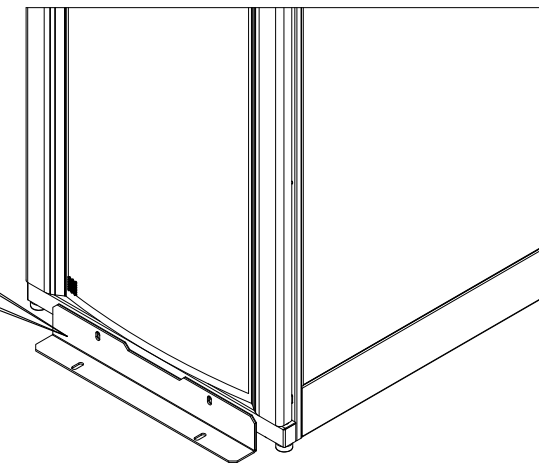
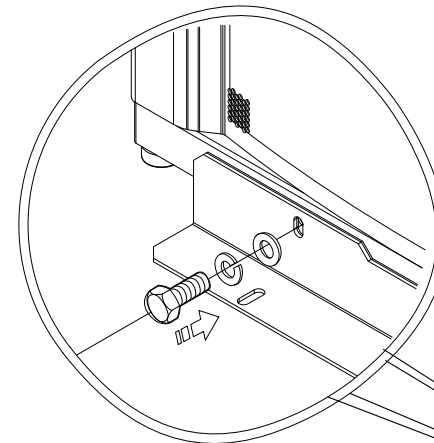
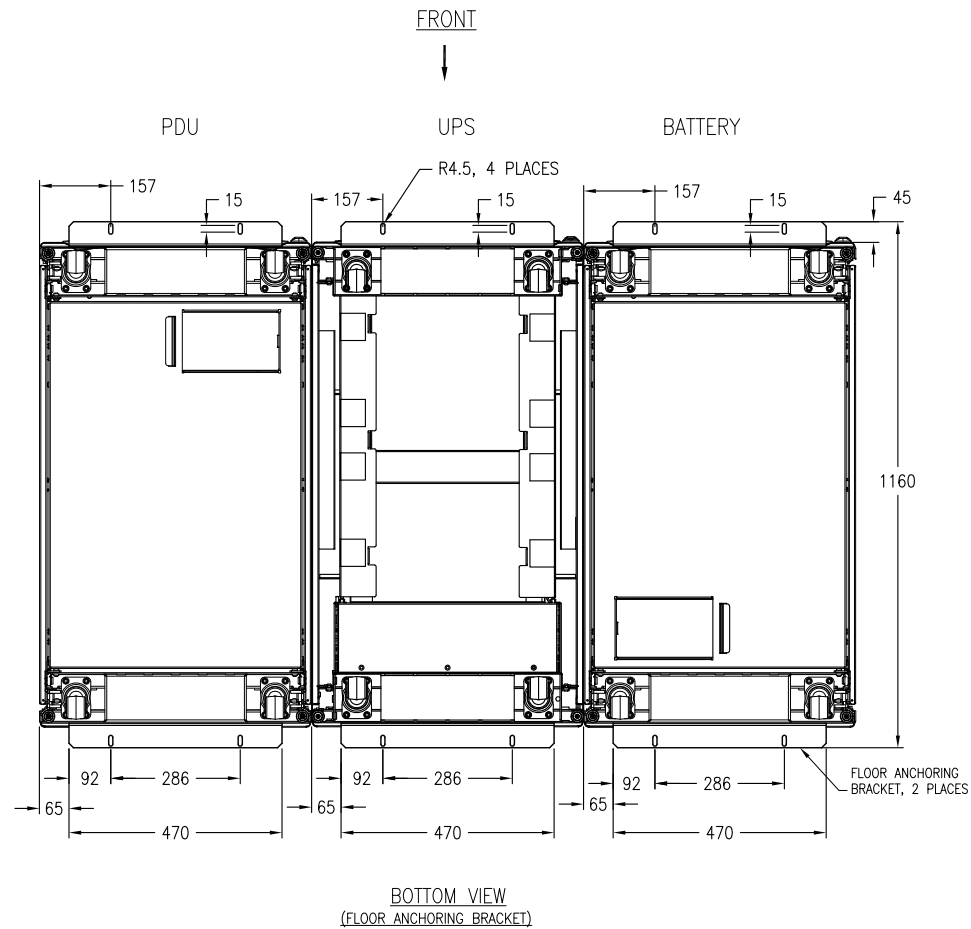


TITLE: SYMMETRA PX 160
 Input: 400V AC 3PH SINGLE/DUAL MAINS
 Output: 400/230V AC & 400V AC 3PH 32-160kW
 WITH MODULAR DISTRIBUTION SOLUTION BOTTOM VIEW

DWG NO: SY32K160H-PD REV. 1
 DRAWN: RAMESH B 1-JUL-19 FIRST ANGLE
 ENGINEER: J WOLSKI 1-JUL-19 PROJECTION
 APPROVED: J WOLSKI 1-JUL-19

PROJECT: DRAWINGS SHEET 6 OF 15

ANCHORING DETAILS WITH PDU ON LHS



NOTES:

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3. ALL DIMENSIONS ARE IN MILLIMETERS. UNLESS OTHERWISE SPECIFIED.
4. TO STABILIZE ENCLOSURE IN THE FIELD USE INCLUDED ANCHORING BRACKETS. ATTACH THE BRACKETS TO THE UNIT AS SHOWN. USE CODE COMPLIANT FASTENERS TO SECURE THE UNIT TO THE FLOOR

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TITLE: SYMMETRA PX 160
Input: 400V AC 3PH SINGLE/DUAL MAINS
Output: 400/230V AC & 400V AC 3PH 32-160kW
WITH MODULAR DISTRIBUTION
SOLUTION ANCHORING DETAILS WITH PDU ON LHS

DWG NO: SY32K160H-PD
DRAWN: RAMESH B
ENGINEER: J WOLSKI

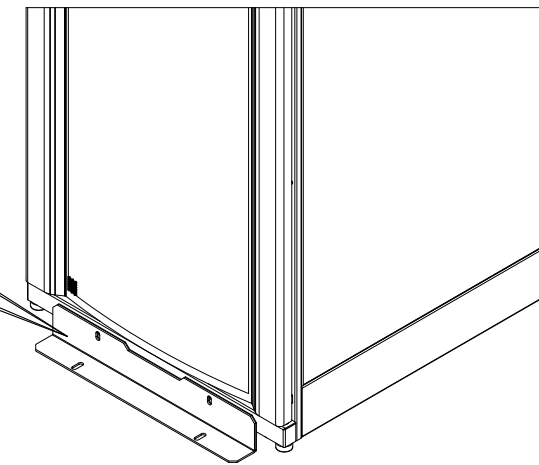
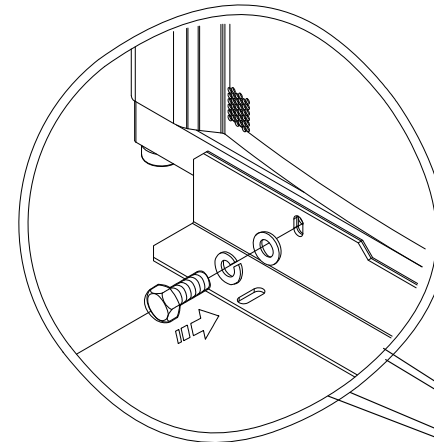
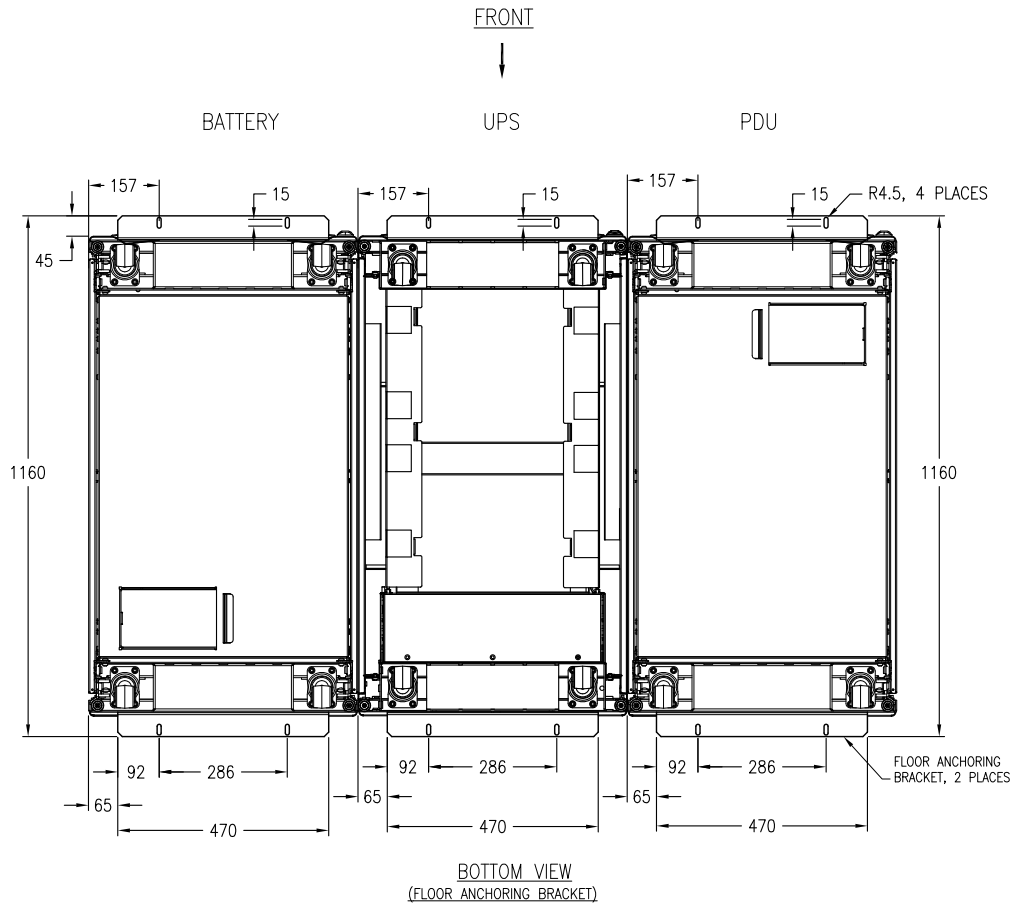
REV. 1
1-JUL-19
1-JUL-19
1-JUL-19

PROJECT: DRAWINGS SHEET 7 OF 15

APPROVED: J WOLSKI

FIRST ANGLE PROJECTION

ANCHORING DETAILS WITH PDU ON RHS



NOTES:

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4. TO STABILIZE ENCLOSURE IN THE FIELD USE INCLUDED ANCHORING BRACKETS. ATTACH THE BRACKETS TO THE UNIT AS SHOWN. USE CODE COMPLIANT FASTENERS TO SECURE THE UNIT TO THE FLOOR

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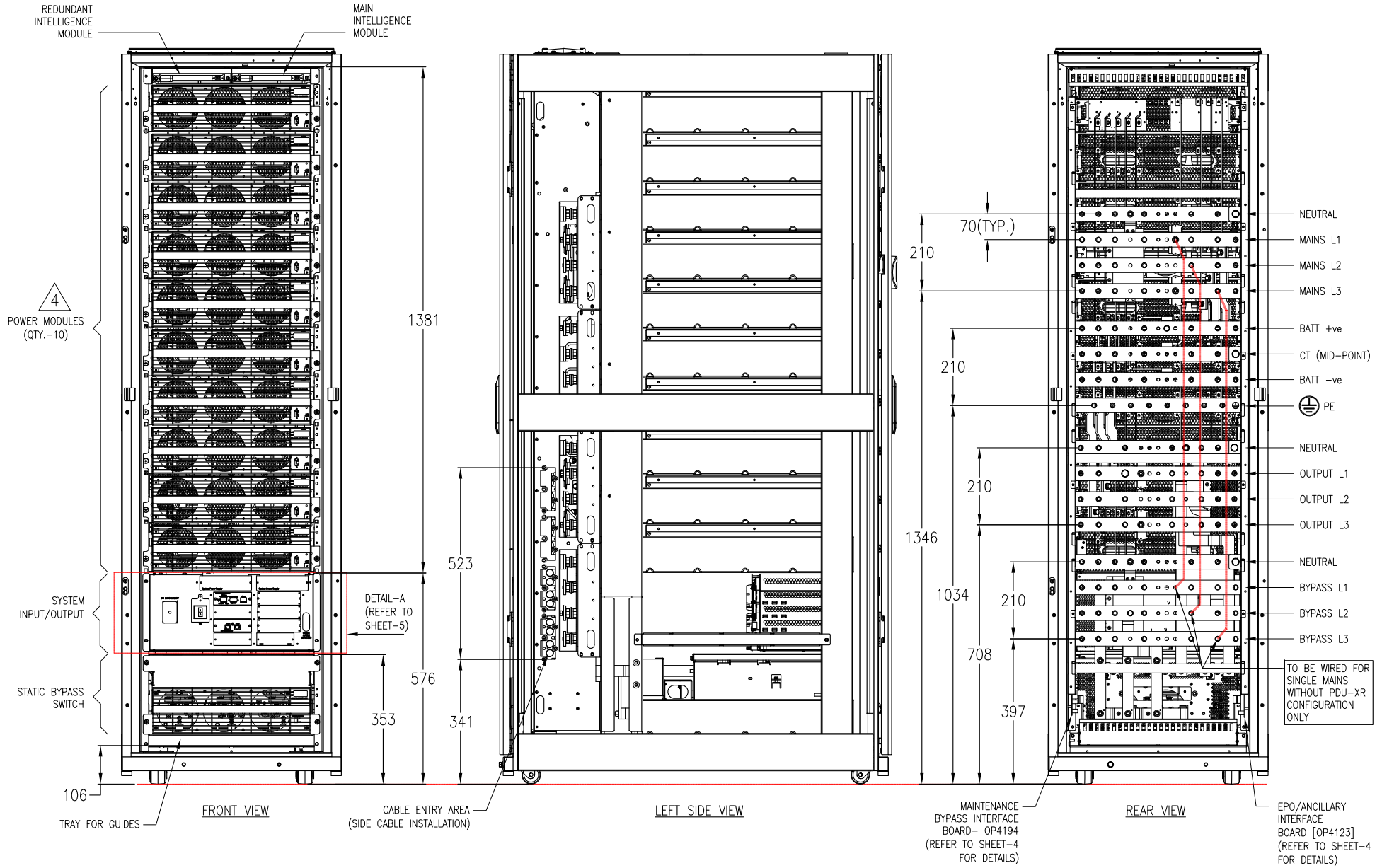


TITLE: SYMMETRA PX 160
 Input: 400V AC 3PH SINGLE/DUAL MAINS
 Output: 400/230V AC & 400V AC 3PH 32-160kW
 WITH MODULAR DISTRIBUTION
 SOLUTION ANCHORING DETAILS WITH PDU ON RHS

DWG NO:	SY32K160H-PD	REV:	1
DRAWN:	RAMESH B	1-JUL-19	FIRST ANGLE PROJECTION
ENGINEER:	J WOLSKI	1-JUL-19	
APPROVED:	J WOLSKI	1-JUL-19	

PROJECT: DRAWINGS SHEET 8 OF 15

Rating = 160kW



NOTES:

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△4. CONFIGURATION SHOWN WITH "SYCF160KH + (10) SYPM10K16H" FOR 160kW

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TITLE: SYMMETRA PX 160
 Input: 400V AC 3PH SINGLE/DUAL MAINS
 Output: 400/230V AC & 400V AC 3PH 32-160kW
 WITH MODULAR DISTRIBUTION
 UPS INTERNAL VIEW

DWG NO: SY32K160H-PD

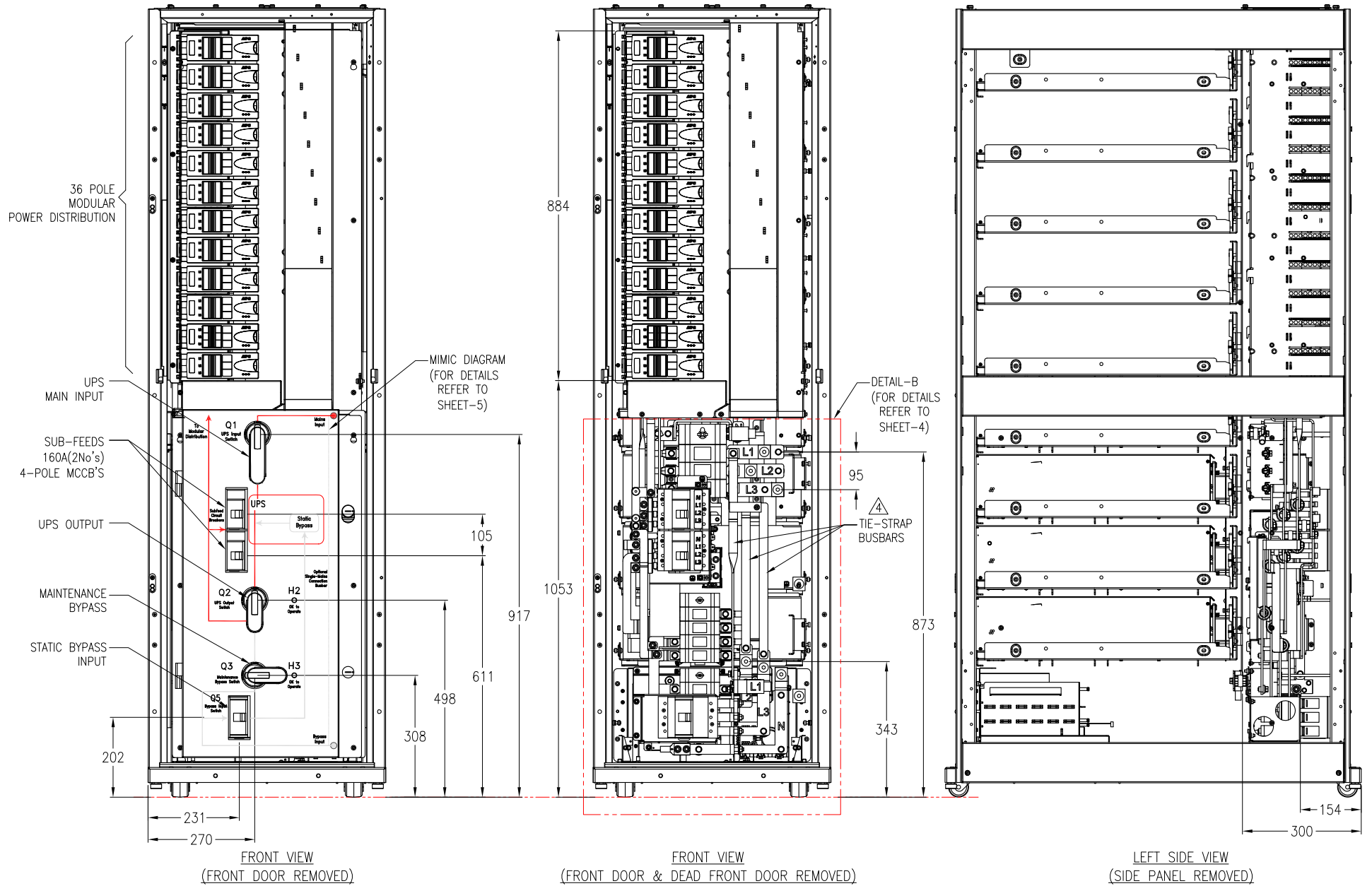
REV. 1

DRAWN: RAMESH B 1-JUL-19
 ENGINEER: J WOLSKI 1-JUL-19

FIRST ANGLE PROJECTION

PROJECT: DRAWINGS SHEET 9 OF 15

APPROVED: J WOLSKI 1-JUL-19



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4. SINGLE MAINS INSTALLATION IS DEFAULT.
FOR DUAL MAINS INSTALLATION REMOVE TIE-STRAP BUSBARS (3-BUSBARS).
5. ONLY MAINS AND BYPASS INPUT FEED CABLES ENTERS BOTTOM OF THE PANEL,
ONLY LOAD CABLES (MODULAR DISTRIBUTION AND SUB-FEED OUTPUT)
EXIT FROM TOP OF THE PANEL

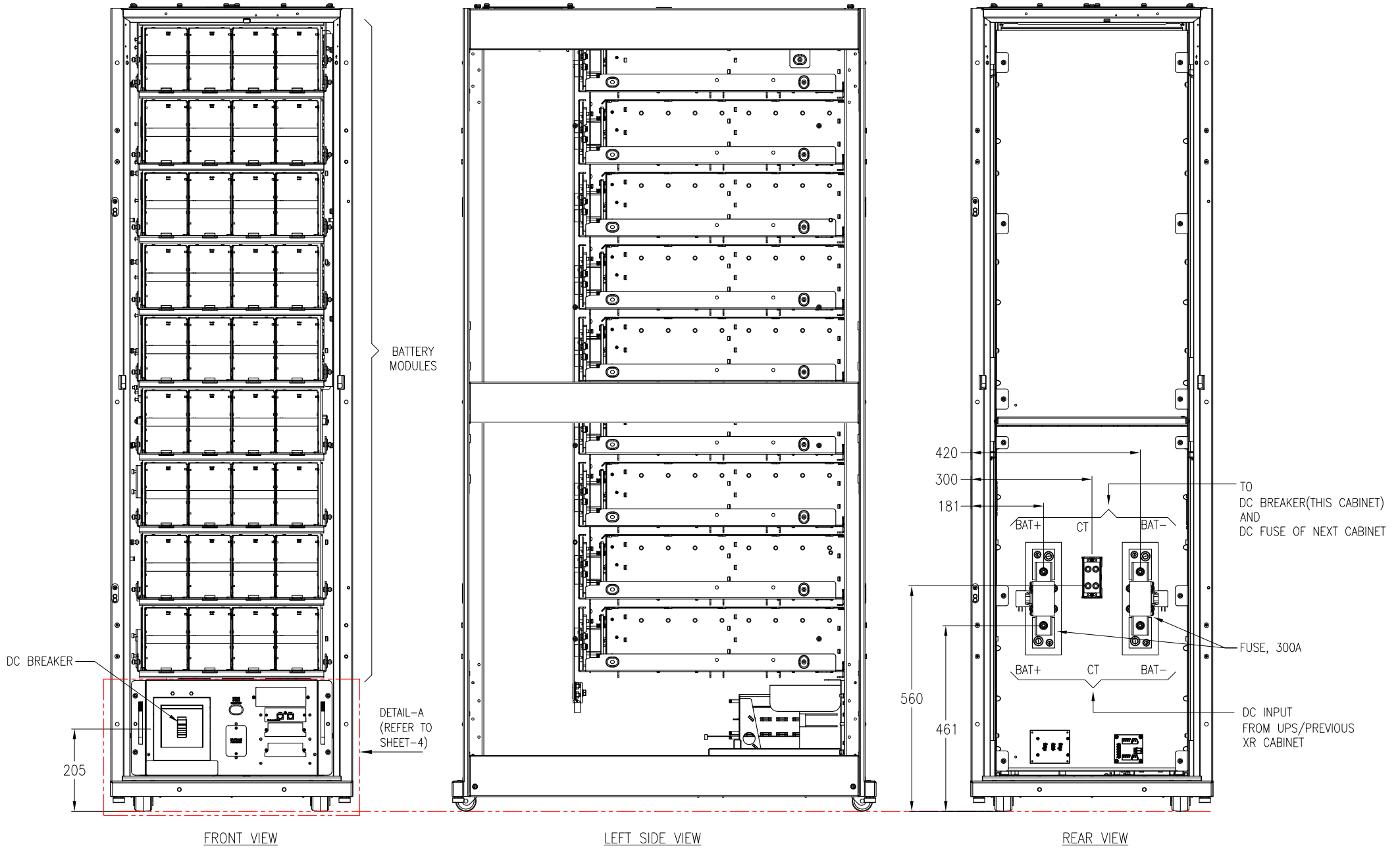
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Schneider Electric

TITLE: SYMMETRA PX 160
Input: 400V AC 3PH SINGLE/DUAL MAINS
Output: 400/230V AC & 400V AC 3PH 32-160kW
WITH MODULAR DISTRIBUTION
PDU INTERNAL VIEW

DWG NO:	SY32K160H-PD	REV:	1
DRAWN:	RAMESH B	1-JUL-19	FIRST ANGLE
ENGINEER:	J WOLSKI	1-JUL-19	PROJECTION
APPROVED:	J WOLSKI	1-JUL-19	

PROJECT: DRAWINGS SHEET 10 OF 15



- 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.

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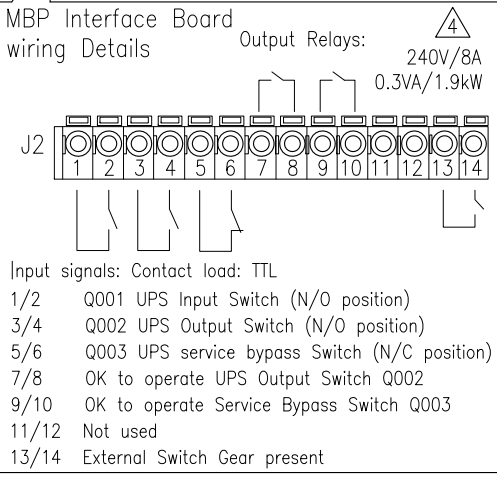
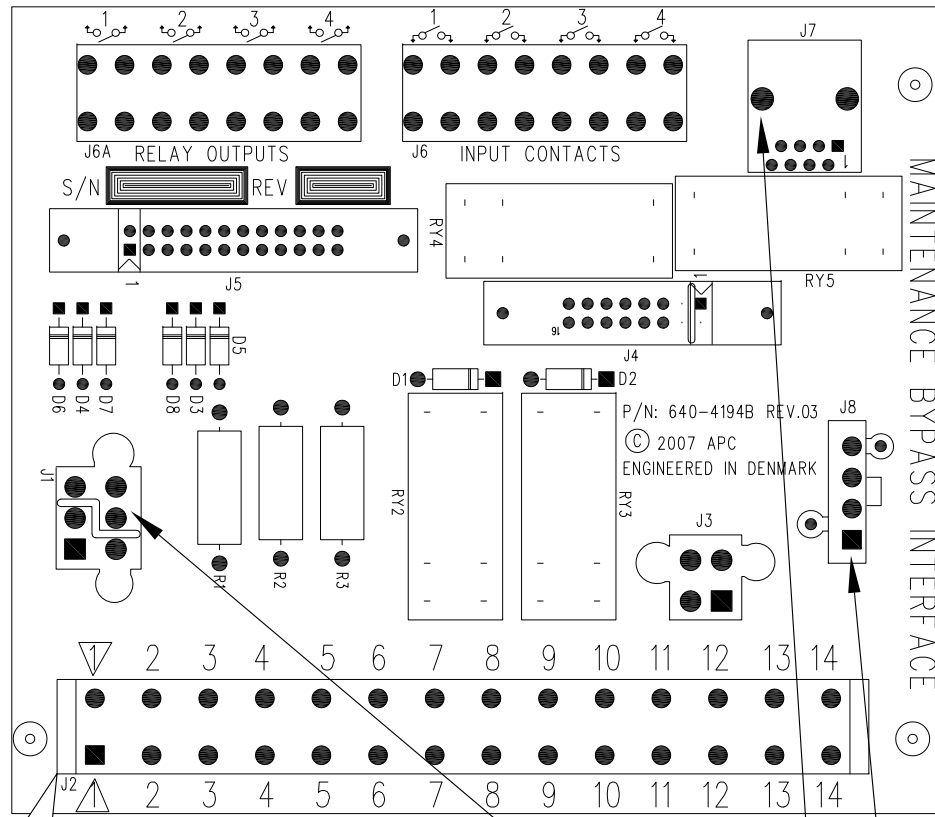
Schneider Electric

TITLE: SYMMETRA PX 160
 Input: 400V AC 3PH SINGLE/DUAL MAINS
 Output: 400/230V AC & 400V AC 3PH 32-160kW
 WITH MODULAR DISTRIBUTION
 BATTERY INTERNAL VIEW

DWG NO:	SY32K160H-PD	REV:	1
DRAWN:	RAMESH B	1-JUL-19	FIRST ANGLE
ENGINEER:	J WOLSKI	1-JUL-19	PROJECTION
APPROVED:	J WOLSKI	1-JUL-19	

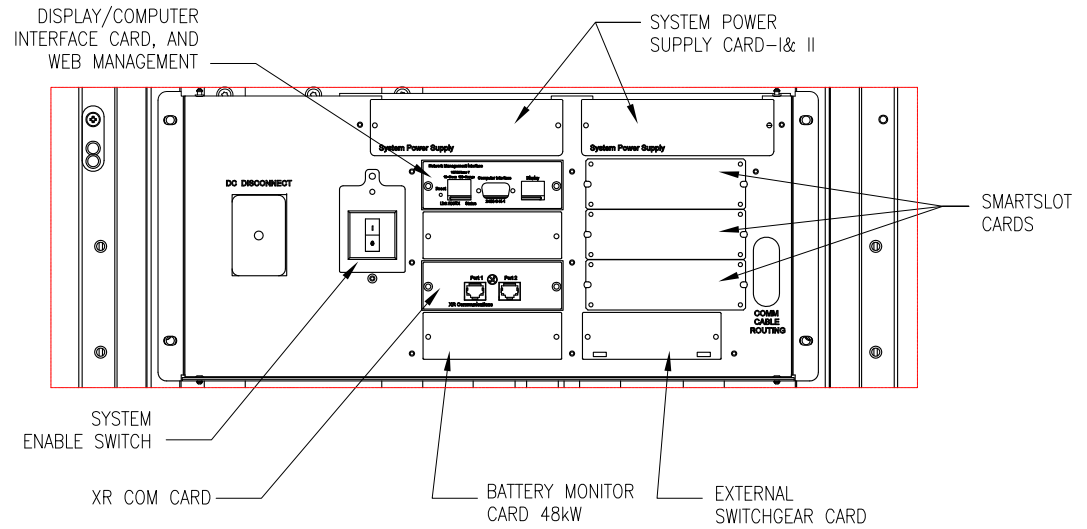
PROJECT: DRAWINGS SHEET 11 OF 15

MBP Interface Board



J7, J1 AND J8 FOR USE ONLY WITH PX2 SOLUTIONS

DETAIL-A (SYSTEM INPUT/OUTPUT)



NOTES:

- INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL REGULATIONS.
 - PLEASE REFER TO PRODUCT MANUALS FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
 - ALL DIMENSIONS ARE IN MILLIMETERS. UNLESS OTHERWISE SPECIFIED..
- Δ 4. 0.3VA - MINIMUM POWER CONSUMPTION OF THE RELAY.
1.9kW - MAXIMUM POWER THAT CAN FLOW THROUGH THE CONTACTS

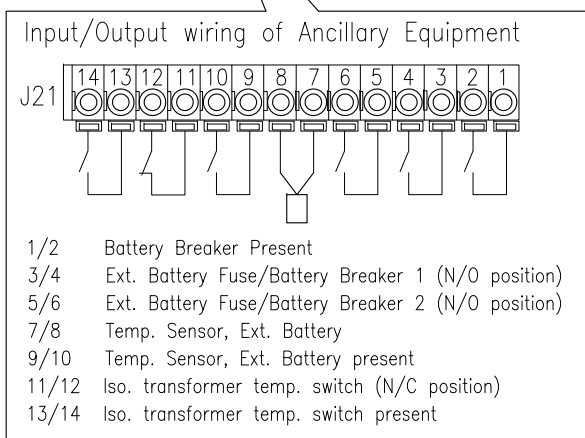
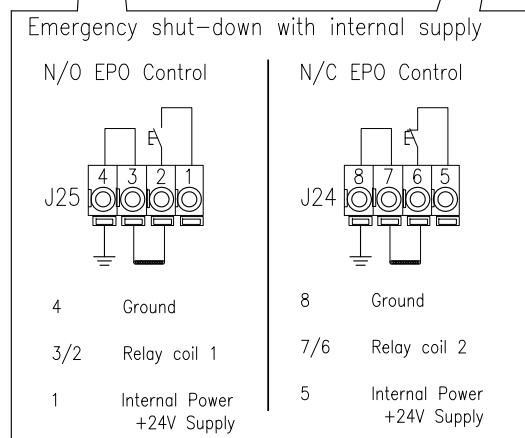
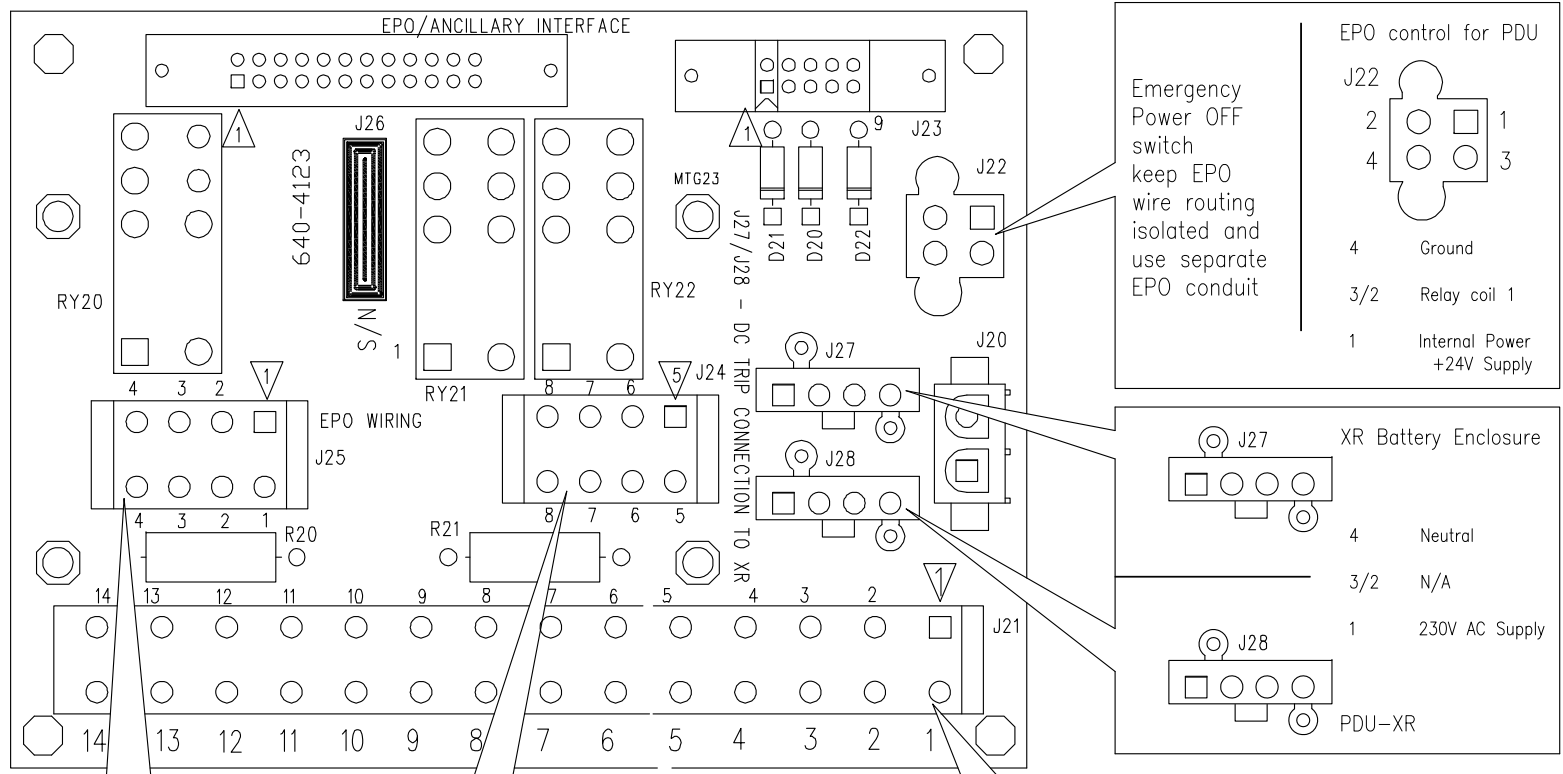
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TITLE: SYMMETRA PX 160
Output: 400V AC AND 400V AC 3PH 160kW
Output: 400/230V AC & 400V AC 3PH 32-160kW
WITH MODULAR DISTRIBUTION
MBP INTERFACE BOARD WIRING DETAIL

DWG NO: SY32K160H-PD REV. 1
DRAWN: RAMESH B 1-JUL-19
ENGINEER: J WOLSKI 1-JUL-19
APPROVED: J WOLSKI 1-JUL-19
PROJECT: DRAWINGS SHEET 12 OF 15
FIRST ANGLE PROJECTION

EPO Wiring options



- NOTES:**
1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL REGULATIONS.
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TITLE: SYMMETRA PX 160
 Input: 400V AC 3PH SINGLE/DUAL MAINS
 Output: 400/230V AC & 400V AC 3PH 32-160kW
 WITH MODULAR DISTRIBUTION
 EPO/ANCILLARY INTERFACE DETAILS

DWG NO: SY32K160H-PD **REV.** 1

DRAWN: RAMESH B 1-JUL-19 **FIRST ANGLE**

ENGINEER: J WOLSKI 1-JUL-19 **PROJECTION**

APPROVED: J WOLSKI 1-JUL-19

PROJECT: DRAWINGS **SHEET 13 OF 15**

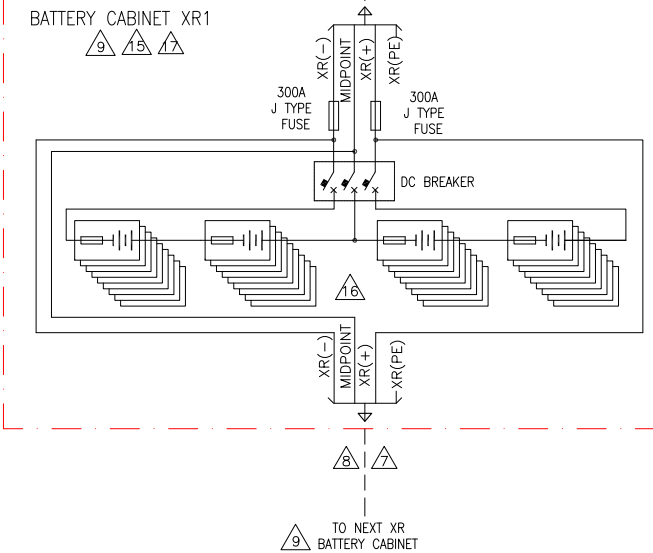
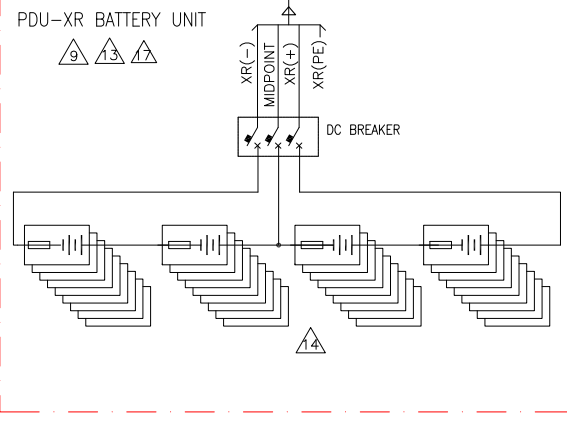
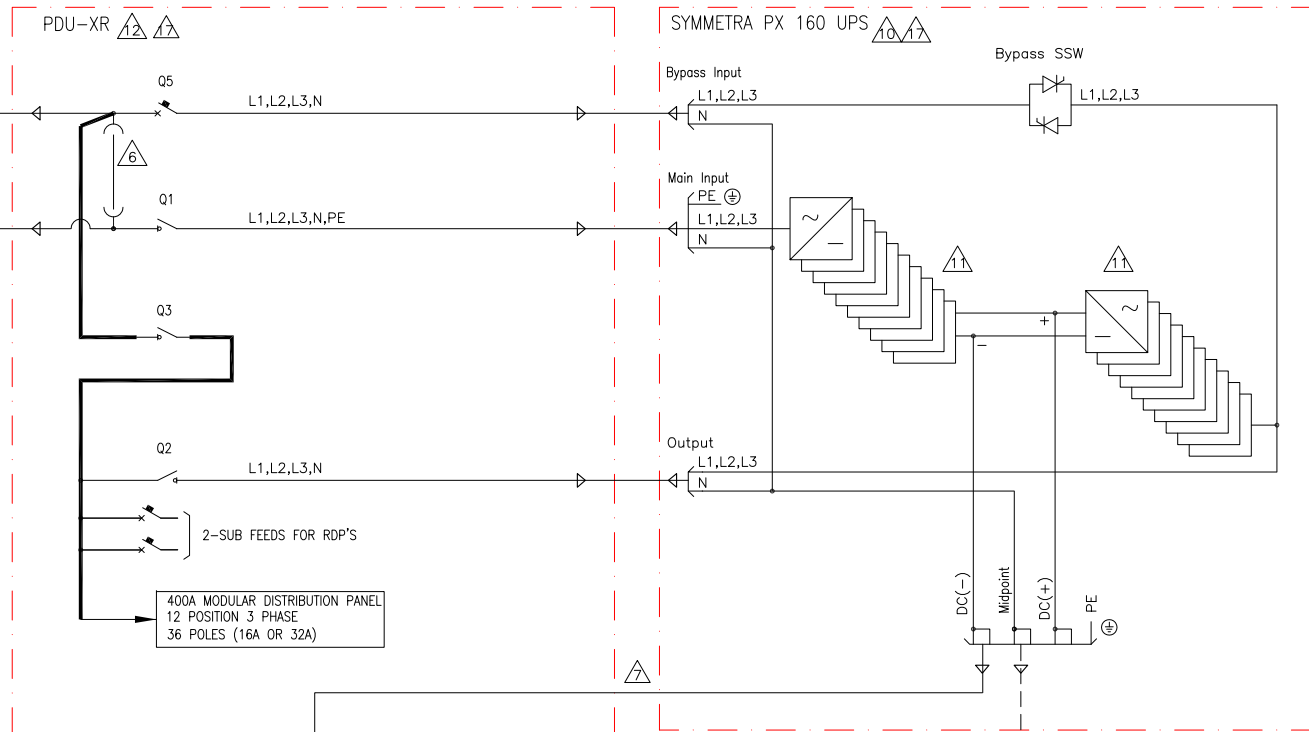
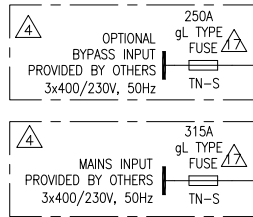
RATED SHORT CIRCUIT CURRENT		
DEVICE	WITH INPUT FUSES	WITHOUT INPUT FUSES
UPS AC IN	30KA SYMMETRICAL	10KA SYMMETRICAL
UPS AC OUT	30KA SYMMETRICAL	10KA SYMMETRICAL
PDU-XR	30KA SYMMETRICAL	10KA SYMMETRICAL
PDU-XR BATT/ XR1 BATT CAB	25KA SYMMETRICAL	25KA SYMMETRICAL

UPS RATING AND APPLICABLE SKU NUMBERS								
UPS RATING (KW)	MAXIMUM EXPANDABLE UPS RATING (KW)	APPLICABLE UPS SKU NUMBER	APPLICABLE NUMBER OF UPS POWER MODULES	PDU-XR SKU NUMBER	PDU-XR BATTERY UNIT		BATTERY CABINET XR1	
					APPLICABLE BATTERY SKU NUMBER	APPLICABLE NUMBER OF BATTERY MODULES (TOTAL IN 4 BAYS)	APPLICABLE BATTERY SKU NUMBER	APPLICABLE NUMBER OF BATTERY MODULES (TOTAL IN 4 BAYS)
32	160	SYCF160KH+ SYPM10K16H(2)	2	PDUM160H-B+ SYBTU2-PLP(12)	SYCFXR9+ SYBTU2-PLP(12)	12	NA	NA
64		SYCF160KH+ SYPM10K16H(4)	4	PDUM160H-B+ SYBTU2-PLP(24)	SYCFXR9+ SYBTU2-PLP(24)	24	NA	NA
96		SYCF160KH+ SYPM10K16H(6)	6	PDUM160H-B+ SYBTU2-PLP(36)	SYCFXR9+ SYBTU2-PLP(36)	36	NA	NA
128		SYCF160KH+ SYPM10K16H(8)	8	PDUM160H-B+ SYBTU2-PLP(12)	SYCFXR9+ SYBTU2-PLP(12)	12	SYCFXR9+ SYBTU2-PLP(12)	36
160	SYCF160KH+ SYPM10K16H(10)	10	PDUM160H-B+ SYBTU2-PLP(24)	SYCFXR9+ SYBTU2-PLP(24)	24	SYCFXR9+ SYBTU2-PLP(24)	36	
32	96	SYCF160KH+ SYPM10K16H(2)	2	PDUM160H-B+ SYBTU2-PLP(12)	SYCFXR9+ SYBTU2-PLP(12)	12	NA	NA
64		SYCF160KH+ SYPM10K16H(4)	4	PDUM160H-B+ SYBTU2-PLP(24)	SYCFXR9+ SYBTU2-PLP(24)	24	NA	NA
96		SYCF160KH+ SYPM10K16H(6)	6	PDUM160H-B+ SYBTU2-PLP(36)	SYCFXR9+ SYBTU2-PLP(36)	36	NA	NA

LEGEND:
 - - - - - AC CABLE - PROVIDED BY OTHERS.
 - - - - - DC CABLE - PROVIDED BY OTHERS.
 _____ AC BUS

NOTES:

- INSTALLATION MUST COMPLY WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.
- PLEASE REFER TO SCHNEIDER ELECTRIC PRODUCT MANUALS FOR DETAILS.
- DRAWING DEPICTS POWER SYSTEM CONNECTIONS AND IS NOT REPRESENTATIVE OF PHYSICAL LAYOUT, PLEASE REFER TO MECHANICAL DRAWINGS FOR PHYSICAL LAYOUT.
- 3x400/230V TN-S (PROVIDED BY OTHERS). FOR OTHER EARTHING PRINCIPLES, PLEASE CONTACT SCHNEIDER ELECTRIC. RECOMMENDED UPSTREAM PROTECTION IS A MINIMUM RATING TO SUPPORT MAXIMUM CURRENT, WITHOUT SELECTIVITY. IF SELECTIVITY IS REQUIRED, PLEASE CONTACT SCHNEIDER ELECTRIC.
- ALL AC POWER CABLING IS L1, L2, L3, N, PE.
- SINGLE MAINS CONFIGURATION IS DEFAULT. DO NOT REMOVE THE STRAP BUS BARS AND NEUTRAL CABLE FOR SINGLE MAINS CONFIGURATION. FOR SINGLE MAINS CONFIGURATION CONNECT INPUT CABLES TO EITHER MAINS OR BYPASS TERMINALS. FOR DUAL MAINS CONFIGURATION REMOVE THE 3 STRAP BUS BARS AND ONE NEUTRAL CABLE.
- DC CABLING TO BE 600V RATED, 2 WIRE + GROUND, EACH CIRCUIT TO BE RUN IN SEPARATE CONDUITS, POSITIVE, NEGATIVE + GROUND.
- CABLING PROVIDED BY OTHERS IF UPS AND BATTERY CABINETS ARE INSTALLED REMOTELY, FOR LINE-UP SOLUTION CABLING PROVIDED BY SCHNEIDER ELECTRIC.
- NUMBER OF BATTERIES AND DC NOMINAL CURRENT SHOWN IN THIS DIAGRAM PROVIDES 5 MINUTES RUN TIME. MAXIMUM 4 BATTERY ENCLOSURES MAY BE USED WITH THE SYSTEM (THIS NUMBER INCLUDES BATT. MODULES IN PDU-XR).



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TITLE: SYMMETRA PX 160
 Input: 400V AC 3PH SINGLE/DUAL MAINS
 Output: 400/230V AC 400V AC 3PH 32-160KW
 WITH MODULAR DISTRIBUTION
 SYSTEM ONE LINE DIAGRAM

PROJECT: DRAWINGS SHEET 14 OF 15

DWG NO: SY32K160H-PD

DRAWN: BALA 1-JUL-19
 ENGINEER: J WOLSKI 1-JUL-19
 APPROVED: J WOLSKI 1-JUL-19

REV: 2
 FIRST ANGLE
 PROJECTION

INFRASTRUXURE PLANNING GUIDE SYMMETRA PX96 / PX160 (400V)

UPS FRAME	UPS RATING KVA / KW			AC INPUT (400V)						BATTERY SYSTEM			AC OUTPUT CURRENT @400V (A)	DC BREAKER - 3POLE FRAME (A)	PDU-XR BREAKER RATINGS (A)					
	QTY OF POWER MODULE (16KW)	[P] KW NOMINAL	POWER FACTOR	POWER (KW)		UTILITY SOURCE		CURRENT I (A)		*Q1 PROTECTION BREAKER (A)	NOMINAL VOLTAGE (V DC)	FULL LOAD POWER P (KW)			IMAX DC DISCHARGE (A)	Q1- 3POLE FRAME (A)	Q2- 4POLE FRAME (A)	Q3- 4POLE FRAME (A)	Q5- 3POLE (FRAME/TRIP) (A)	SUB FEED BREAKERS - 4POLE (FRAME/TRIP) (A)
				NOMINAL	NOMINAL + CHARGING	FREQUENCY (HZ)	VOLTAGE (V)	NOMINAL	NOMINAL + CHARGING											
96KVA/160KVA / 96KW/160KW	1	16	1	17	19	50	400	24	27	63	2X192	17	55	23	320	315	250	250	250/250	160/160
	2	32		34	37			49	53	80		34	110	46						
	3	48		51	56			73	80	100		51	165	69						
	4	64		67	74			97	107	160		68	220	92						
	5	80		84	93			122	134	160		85	275	115						
	6	96		101	111			146	160	225		102	330	139						
160KVA / 160KW	7	112		118	130			170	187	225		119	385	162						
	8	128		135	148			194	214	250		135	440	185						
	9	144		152	167			219	241	400		152	495	208						
	10	160		168	185			243	267	400		169	550	231						

NOTES:

SYMMETRA PX96 CONTAINS 2 FRAMES 1 X POWER FRAME AND 1 X BATTERY FRAME.
 SYMMETRA PX160 CONTAINS 3 FRAMES 1 X POWER FRAME AND 2 BATTERY FRAMES.
 THE SYMMETRA PX96 IS UPGRADABLE TO 160kW BY ADDING POWER MODULES AND BATTERY FRAME.

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TITLE: SYMMETRA PX 160
 Input: 400V AC 3PH SINGLE/DUAL MAINS
 Output: 400/230V AC & 400V AC 3PH 32-160kW
 WITH MODULAR DISTRIBUTION
 SITE PLANNING GUIDE

DWG NO: SY32K160H-PD REV. 0
 DRAWN: BALA 1-JUL-19 FIRST ANGLE
 ENGINEER: J WOLSKI 1-JUL-19 PROJECTION
 APPROVED: J WOLSKI 1-JUL-19

PROJECT: DRAWINGS SHEET 15 OF 15