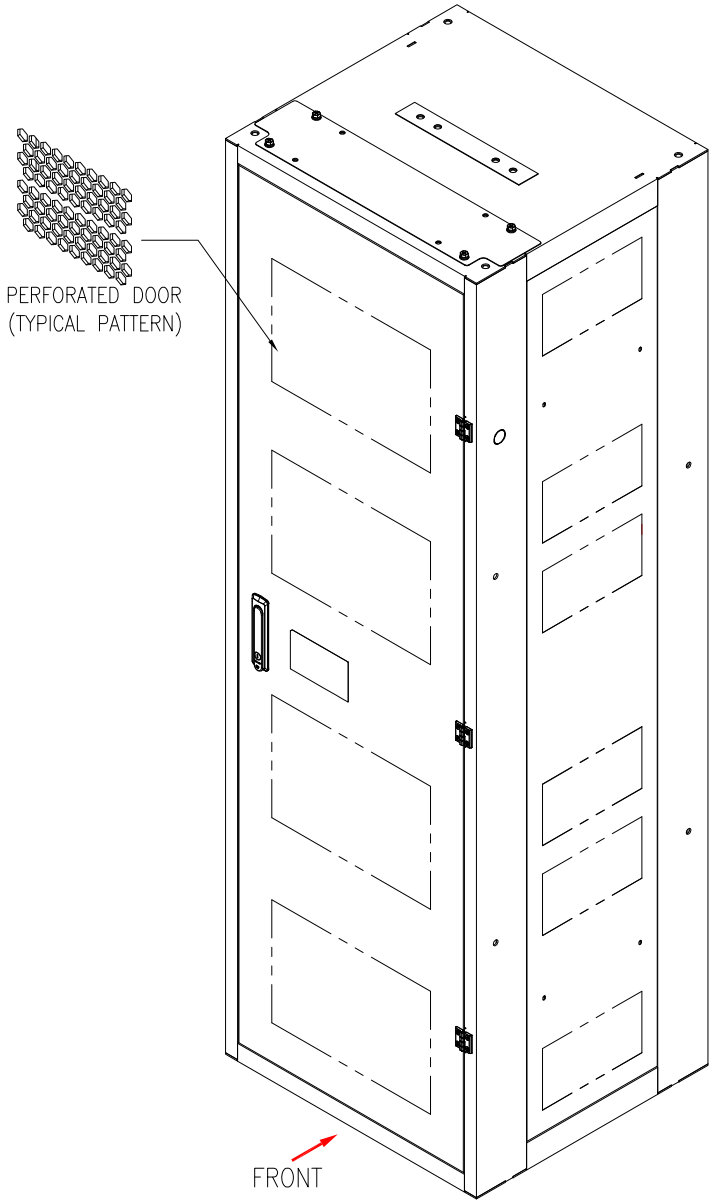
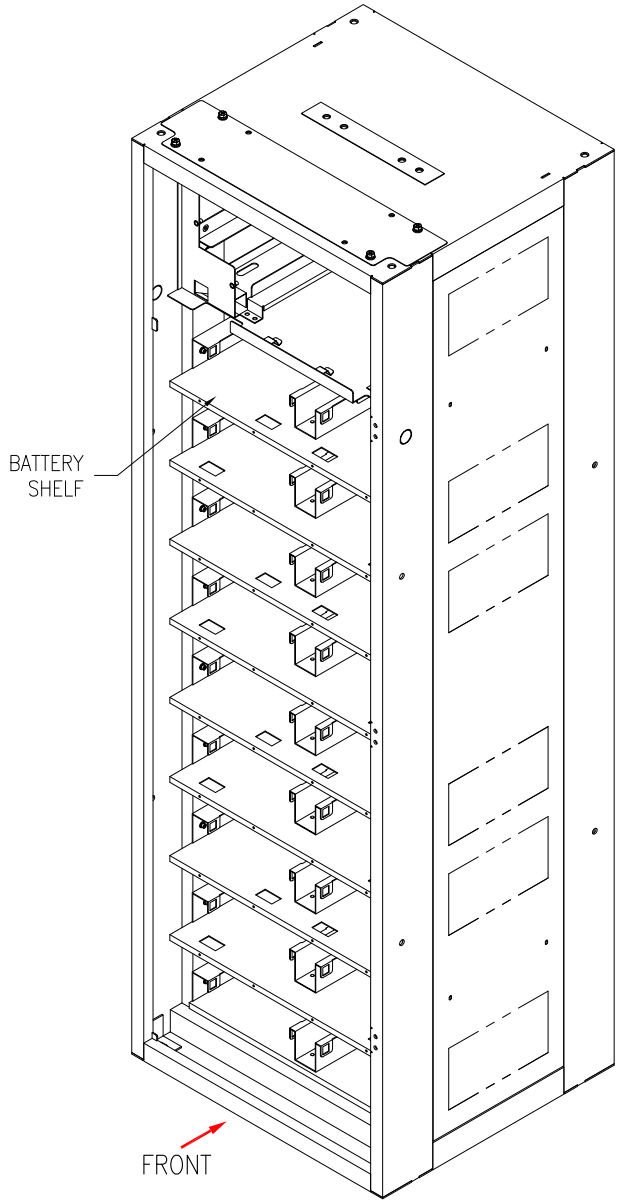


ISOMETRIC VIEW



ISOMETRIC VIEW (W/O BATTERIES)
(FRONT DOOR NOT SHOWN)

Type of installation	Cable tray	Conduit
Rack cable size	Recommended cable size:350kcmil (+/-/gnd	Cable size to be specified by electrical installer

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

Schneider Electric

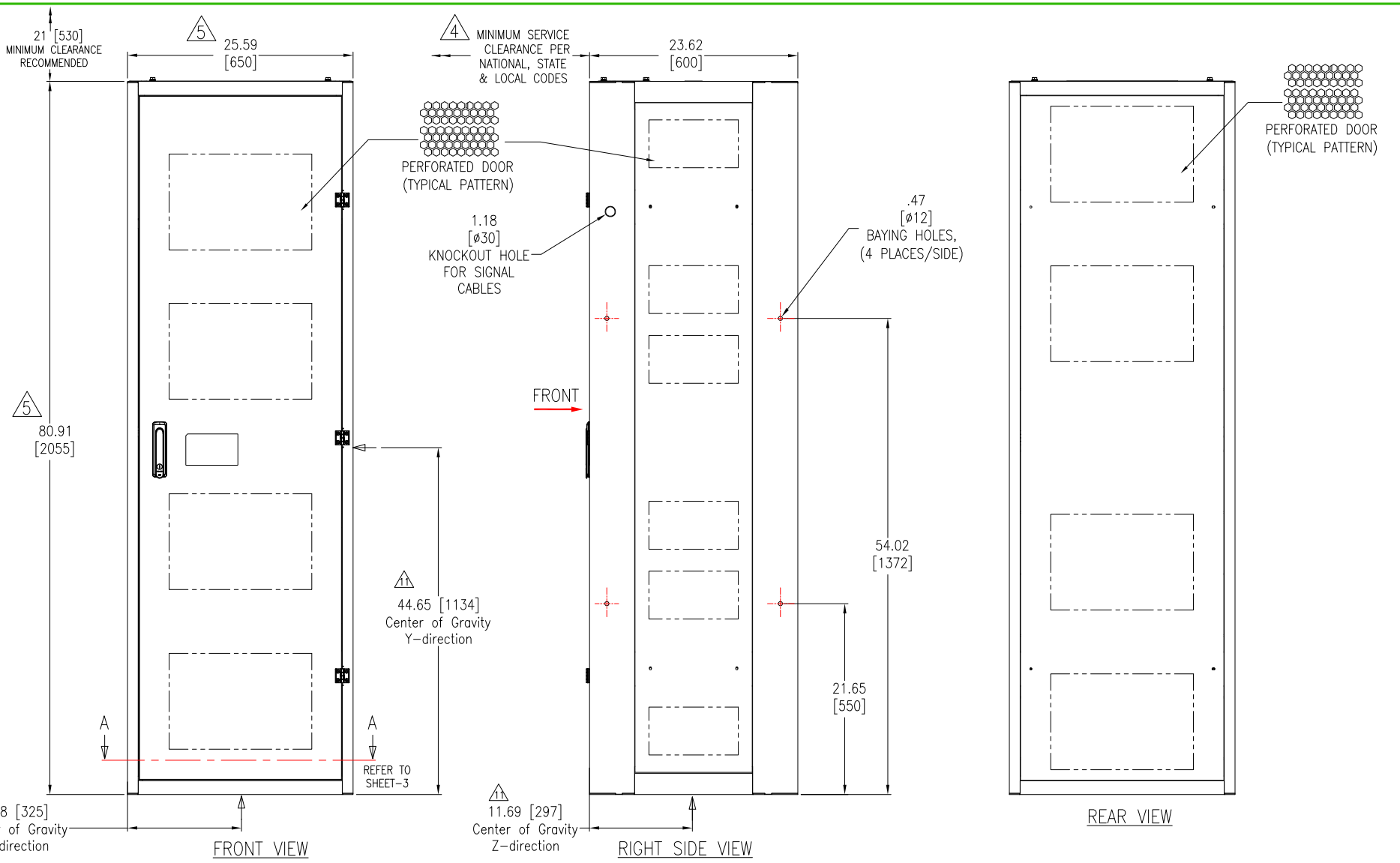
TITLE: Li-Ion Battery Rack Type O-UL ISOMETRIC VIEWS

DWG NO: LIBATTSMGOUL REV. 1

DRAWN BY:	JAYAPRAKASH	19-NOV-18
ENGINEER:	DENIS MATHIEU	23-JAN-19
APPROVED BY:	DENIS MATHIEU	23-JAN-19

PROJECT: SUBMITTAL DRAWINGS SHEET 10F 8

THIRD ANGLE PROJECTION



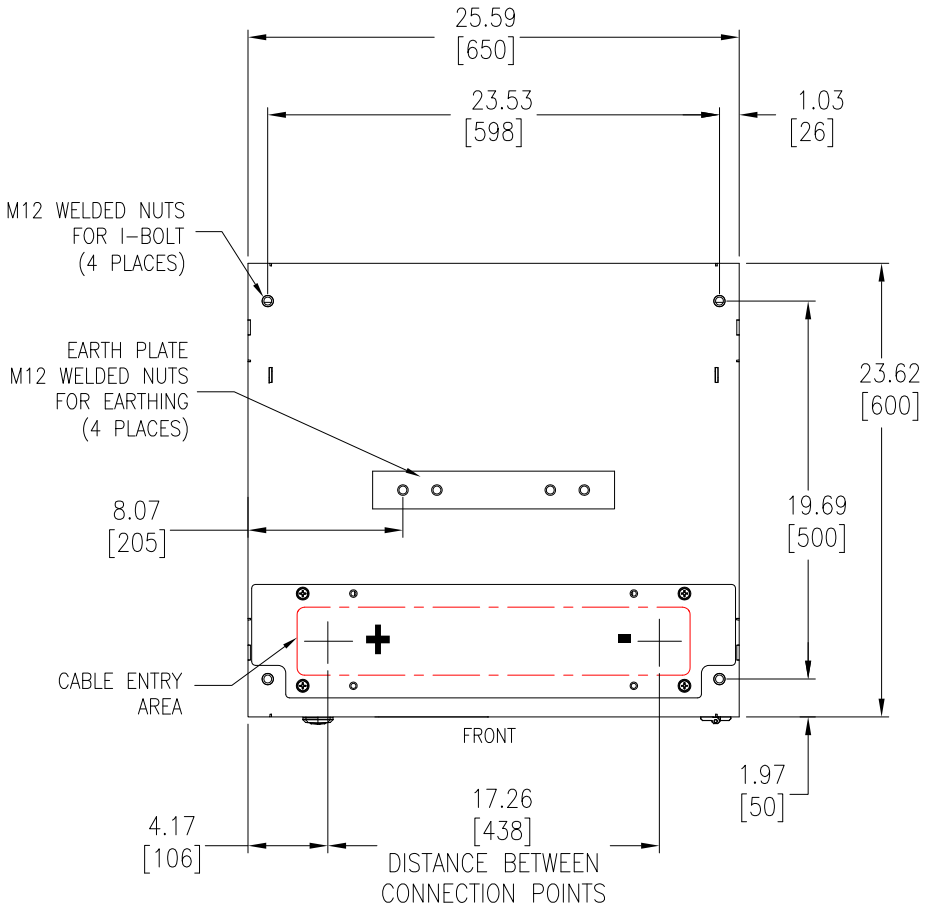
NOTES:

1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
2. REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
3. ALL DIMENSIONS ARE IN INCHES [MILLIMETERS].
△4. A MINIMUM OF 39 Inches [1000mm] FRONT ACCESS FOR SERVICE IS REQUIRED.
△5. ALL DIMENSIONS EXCLUDES SCREW PROJECTION OUTSIDE THE ENCLOSURE.
6. CABLE ENTRY IS FROM TOP OF THE UNIT.
7. THE WEIGHT OF THE UNIT (WITHOUT BATTERIES) IS 463 lb [210 kg].
   WEIGHT OF ONE BATTERY MODULE IS 37.5 lb [17 kg], WEIGHT OF THE FULLY LOADED RACK IS 838 lb [380 kg].
8. COLOR: WHITE:KCC-EX8816(S)-N.9.5.
9. PROTECTION CLASS: IP20.
10. RECOMMENDED OPERATING TEMPERATURE: 77°F±37.4 [25±3°C].
    TO OPTIMIZE THE LIFE OF BATTERY, IT IS RECOMMENDED TO MAINTAIN 77°F [25°C].
△11. THIS INFORMATION PROVIDES APPROXIMATE CENTER OF GRAVITY CALCULATION.
12. BATTERY RACKS CAN BE BAYED SIDE BY SIDE OR BACK TO BACK. REFER TO INSTALLATION MANUAL [LIB System for UPS Installation Manual (80S).

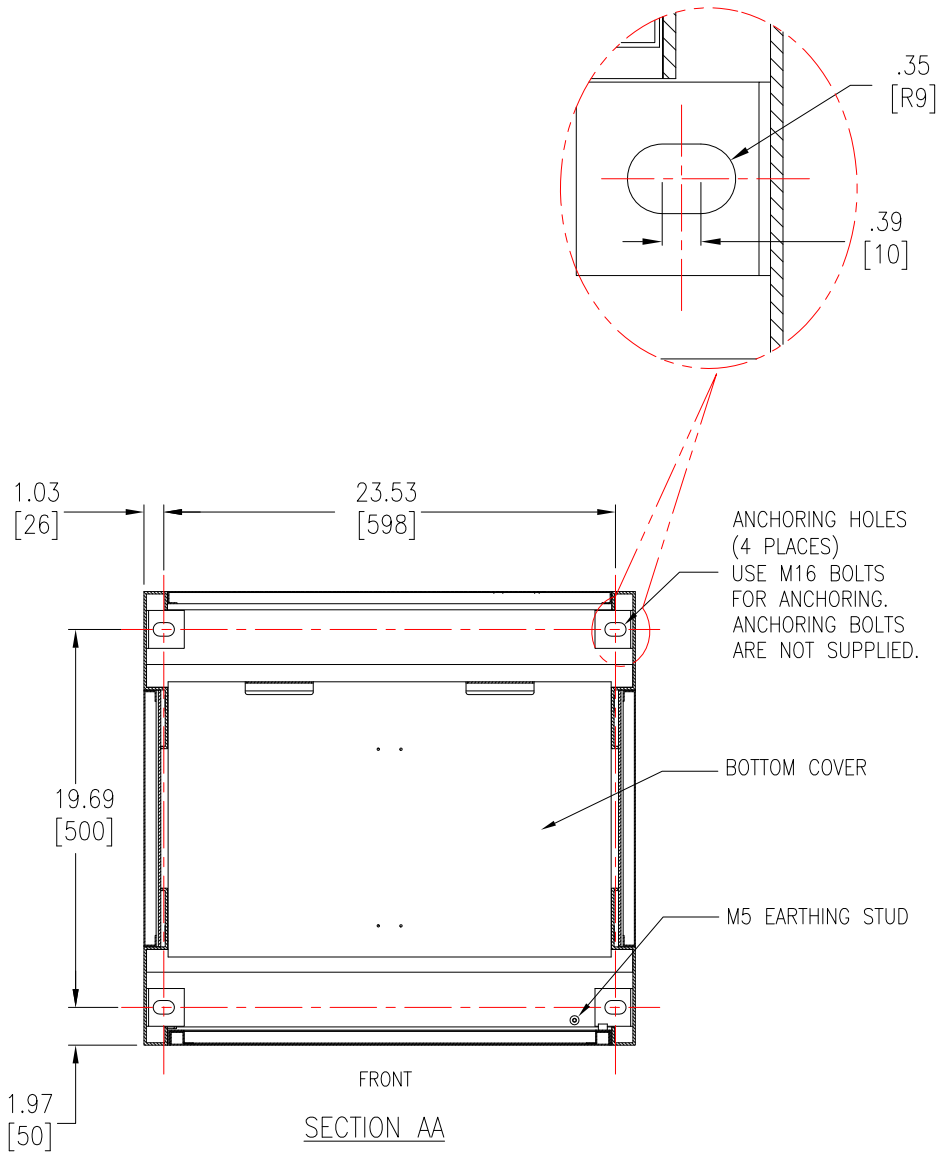
Schneider Electric

TITLE: Li-Ion Battery Rack Type O-UL GENERAL ARRANGEMENT		DWG NO: LIBATTSMGOUL	REV. 3
		DRAWN BY: JAYAPRAKASH	19-NOV-18
		ENGINEER: DENIS MATHIEU	23-JAN-19
PROJECT: SUBMITTAL DRAWINGS	SHEET 2 OF 8	APPROVED BY: DENIS MATHIEU	23-JAN-19

THIRD ANGLE PROJECTION



TOP VIEW



SECTION AA

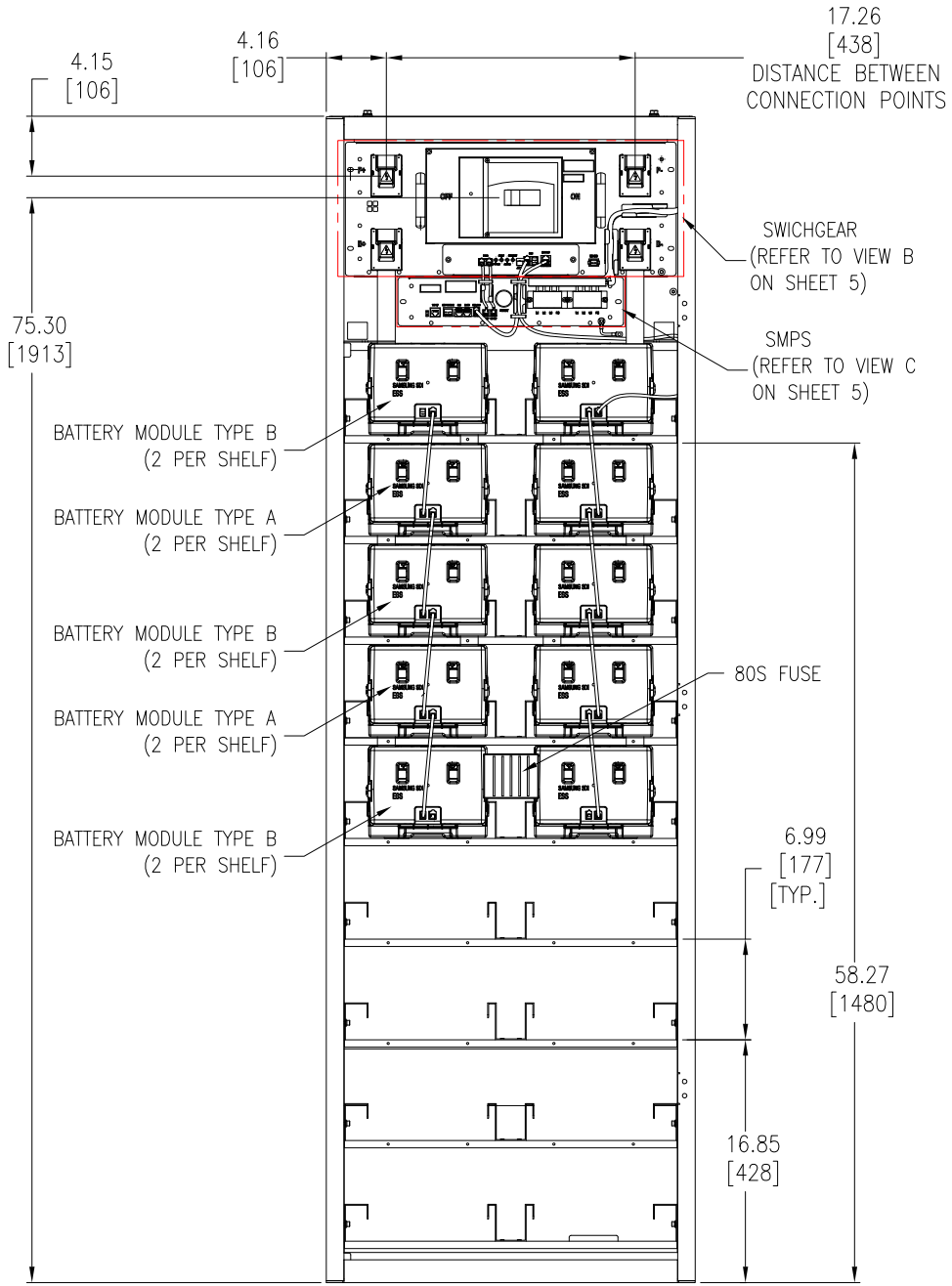
NOTES:
1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
2. REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
3. ALL DIMENSIONS ARE IN INCHES [MILLIMETERS].
4. ALL THE EARTH PLATES SHOULD BE CONNECTED.

Schneider Electric

TITLE: Li-Ion Battery Rack Type O-UL
TOP VIEW & ANCHORING DETAILS

PROJECT: SUBMITTAL DRAWINGS | SHEET 3 OF 8

DWG NO:	LIBATTSMGOUL		REV. 0
DRAWN BY:	JAYAPRAKASH	05-MAR-18	THIRD
ENGINEER:	DENIS MATHIEU	06-MAR-18	ANGLE
APPROVED BY:	DENIS MATHIEU	06-MAR-18	PROJECTION



FRONT VIEW (INTERNAL VIEW)

NOTES:

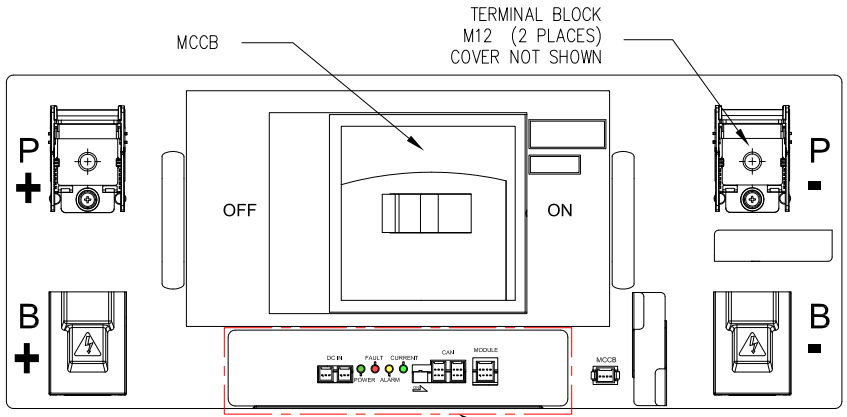
1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
2. REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
3. ALL DIMENSIONS ARE IN INCHES [MILLIMETERS].
4. USE M10 SCREWS FOR MOUNTING MULTIPLE RACKS SIDE BY SIDE.
5. SOME STRUCTURAL DETAILS HAVE BEEN OMITTED FOR THE PURPOSE OF CLARITY.

Schneider Electric

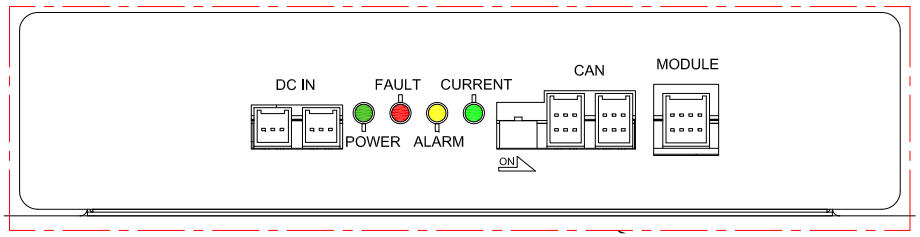
TITLE: Li-Ion Battery Rack Type O-UL INTERNAL VIEWS

DWG NO:	LIBATTSMGOUL		REV. 0
DRAWN BY:	JAYAPRAKASH	06-MAR-18	THIRD ANGLE PROJECTION
ENGINEER:	DENIS MATHIEU	06-MAR-18	
APPROVED BY:	DENIS MATHIEU	06-MAR-18	

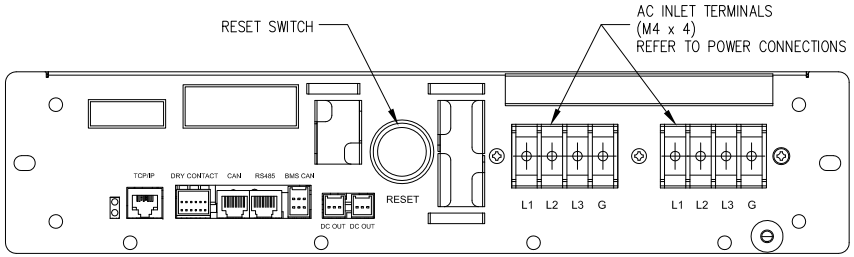
PROJECT: SUBMITTAL DRAWINGS SHEET 4OF 8



SWITCH GEAR
VIEW B



RACK BMS PORTS
ENLARGED VIEW

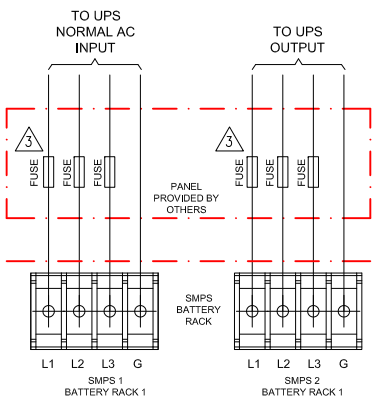


VIEW C–SMPS WITH SYSTEM BMS

MCCB SETTING: Im = 1500.
APPLY TO ALL CONFIGURATIONS.

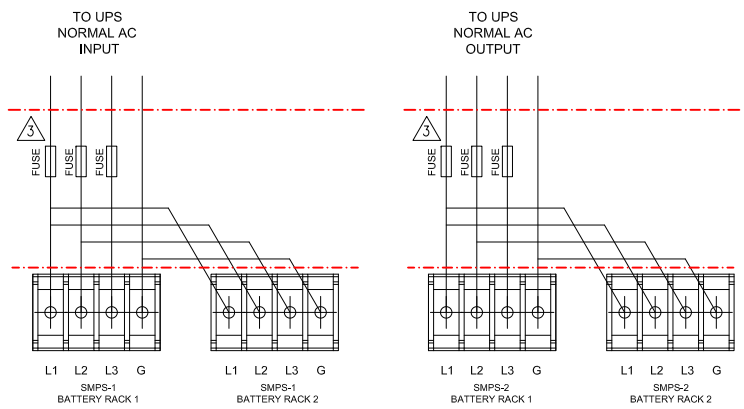
CABLING NOTES:
1. CANBUS COMMUNICATIONS BETWEEN RACKS IS SUPPLIED AND INSTALLED BY SCHNEIDER ELECTRIC.
2. THE ELECTRICAL 480V POWER BETWEEN CABINETS IS SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR.

SMPS INPUT/OUTPUT (POWER CONNECTIONS)



RECOMMENDED CABLE SIZE: 18 TO 12 AWG

AC INPUT CAN BE DAISY CHAINED



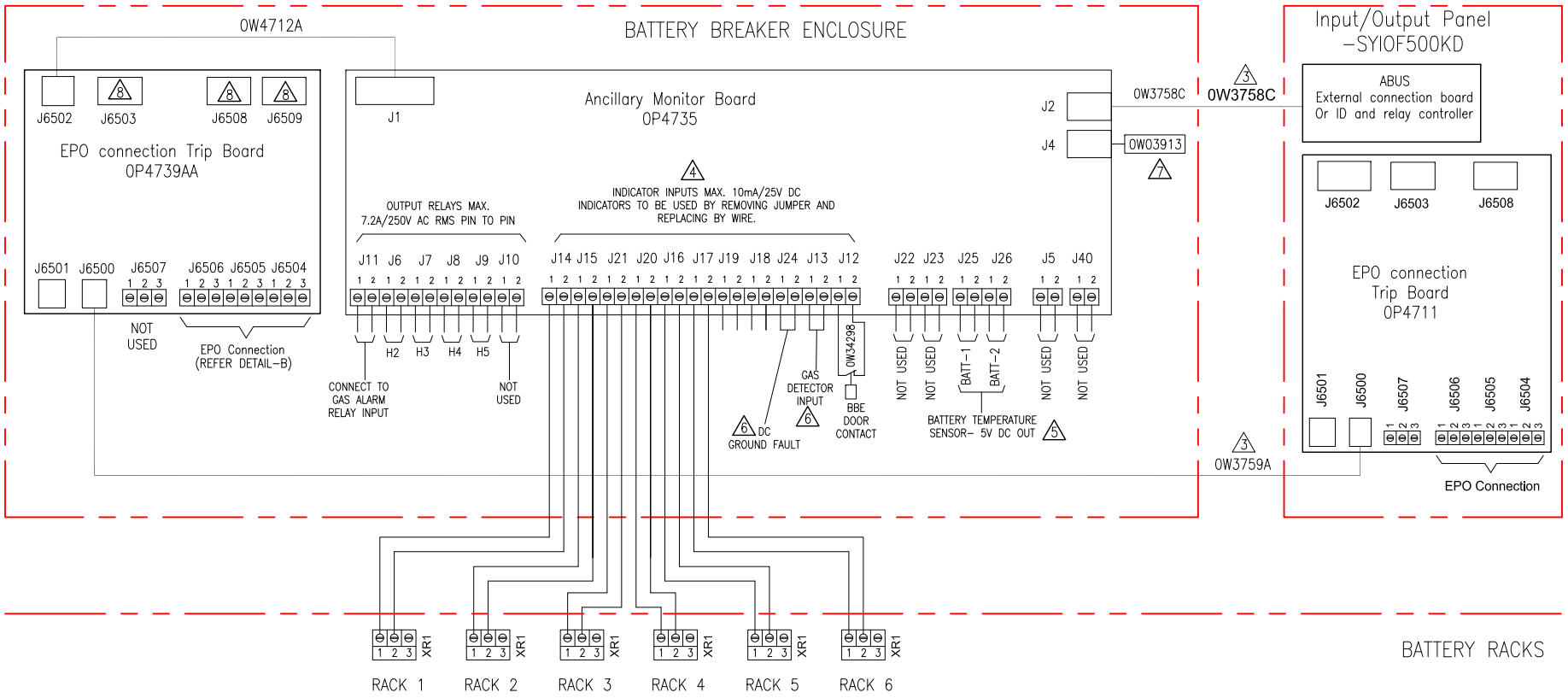
IF DAISY CHAINED, ALL RACKS POWERED BY THE SET OF FUSE WILL LOSE PSU SUPPLY IN CASE OF FUSE BLOWN.

NOTES:
1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
2. REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
△3. FUSE TYPE: MERSEN, MERSEN, REF. ATQR6 OR EQUIVALENT 6A 600V 200kA kAIC. ALTERNATE SOLUTION: SCHNEIDER ELECTRIC MOTOR CIRCUIT BREAKER–TeSys GV2P10. MAXIMUM 8 STRINGS DAISY CHAINED.
4. ONE SYSTEM BMS IS LOCATED IN BATTERY RACK 1 OF POSITIVE STRING AND ANOTHER ONE IN BATTERY RACK 1 OF NEGATIVE STRING.

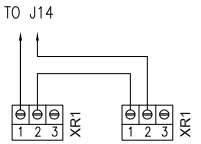
Schneider Electric

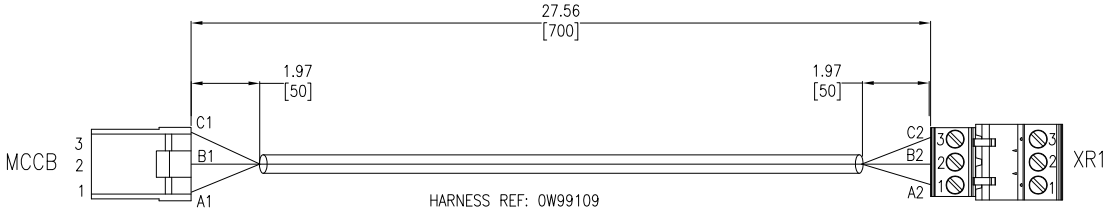
TITLE: Li-Ion Battery Rack Type O-UL DETAIL VIEWS		DWG NO: LIBATTSMGOUL	REV. 1
		DRAWN BY: JAYAPRAKASH	19-NOV-18
		ENGINEER: DENIS MATHIEU	23-JAN-19
PROJECT: SUBMITTAL DRAWINGS	SHEET 5 OF 8	APPROVED BY: DENIS MATHIEU	23-JAN-19
			THIRD ANGLE PROJECTION

INTERFACE DETAILS WHEN BATTERY RACK BAYED WITH UPS
CB AUXILIARY CONTACT MANAGEMENT
CONNECTION DETAILS WHEN 6 BATTERY RACKS ARE CONNECTED TO SYPX BATTERY BREAKER ENCLOSURE



CONNECTION DETAILS WHEN MORE THAN 6 BATTERY RACKS ARE CONNECTED





CONNECTED TO THE Li-Ion BATTERY MCCB CONNECTOR LOCATED IN SWITCH GEAR ASSEMBLY

NOTES:
1. INSTALLATION MUST COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
2. REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
△3. STANDARD CABLE LENGTH IS 50 METERS AND IS PART OF SKU-SYBBE250K500D/SYBBE500K500D.
△4. CONNECT CABLES FROM FUSE INDICATORS FROM THE FUSES IN THE BATTERY BANK TO J14-J21.
IF NOT USED, JUMP THE INPUTS AS THEY ARE CONFIGURED AS NORMALLY CLOSED (NC).
△5. INSTALL ONE BATTERY TEMPERATURE SENSOR IN BATTERY RACK POSITIVE STRING AND ONE IN BATTERY RACK NEGATIVE STRING AND CONNECT CABLES FROM THE BATTERY TEMPERATURE SENSORS TO J25 AND J26.
△6. IF NOT USED, JUMP THE INPUTS AS THEY ARE CONFIGURED AS NORMALLY CLOSED (NC).
△7. VERIFY THE TERMINATOR IS INSTALLED.
△8. CONNECT CABLE FOR Q2 TRIPPING TO EITHER:
J6503 (UVR). WHEN USING SQUARE D UVR OR ABB S8 UVR, AN EXTERNAL 24V DC SELV SUPPLY SHOULD BE CONNECTED TO J6507. FOR THE UVR, THE FOLLOWING PARTS ARE NEEDED TO CONNECT TO J6503 PIN2 AND PIN3:
1 TYCO 1-48700-0, M&L 3-POSITION PLUG HOUSING AND
2 TYCO 350218-3 M&L PIN, AWG 20-14 (NOT SUPPLIED). OR
J6508 (SOR1) J6509 (SOR2). FOR THE SHUNT TRIP, THE FOLLOWING PARTS ARE NEEDED TO CONNECT TO J6508/J6509:
1 TYCO 1-480698-0. M&L 2-POSITION PLUG HOUSING
AND 2 TYCO 350218-3 M&L PIN, AWG 20-14 (NOT SUPPLIED).

Schneider Electric

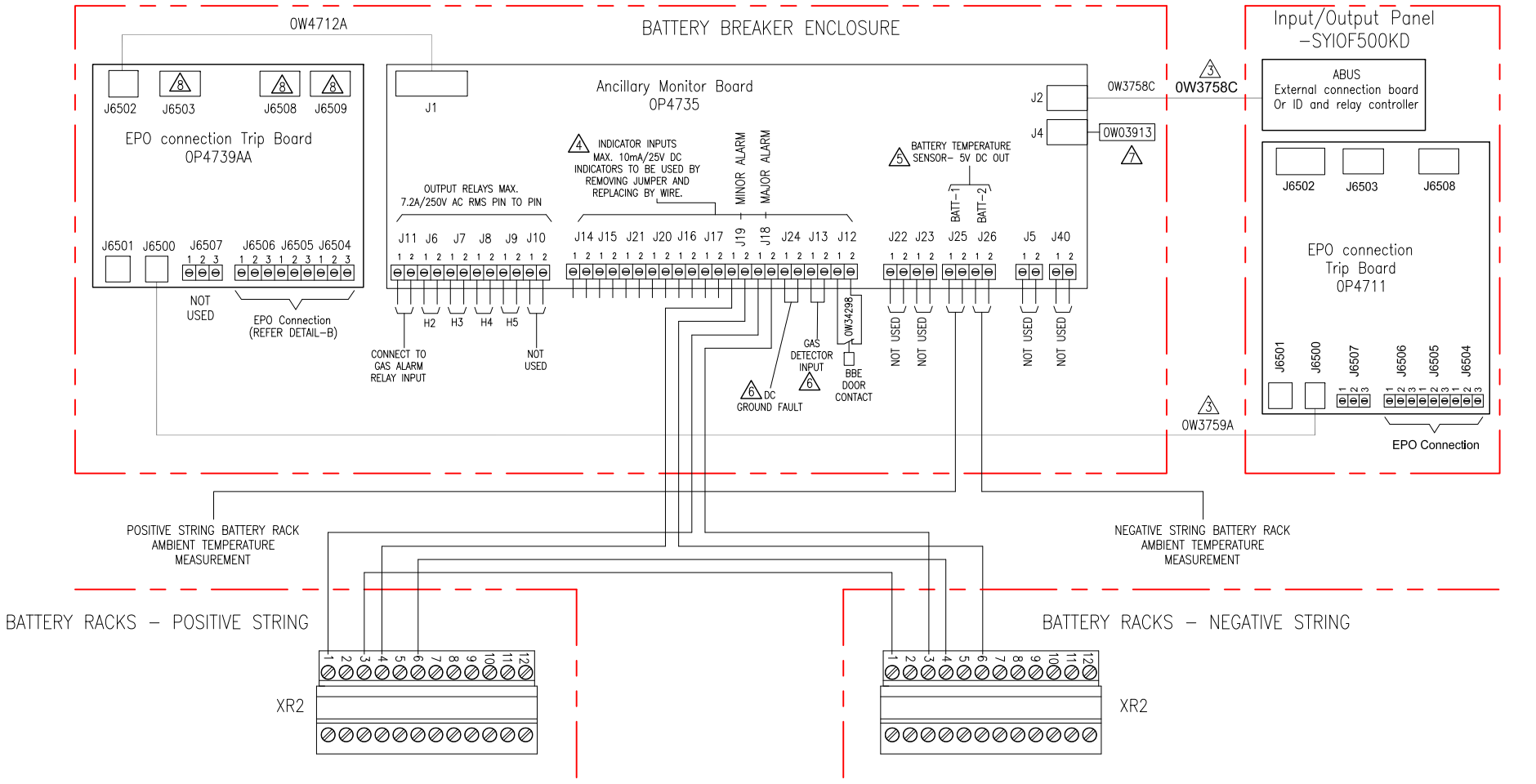
TITLE: Li-Ion Battery Rack Type O-UL INTERFACE DETAILS

PROJECT: SUBMITTAL DRAWINGS | SHEET 6 OF 8

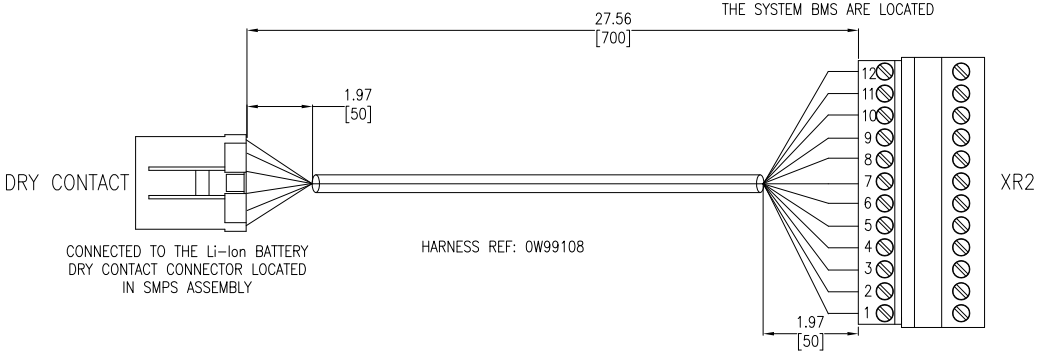
DWG NO:	LIBATTSMGOUL		REV. 1
DRAWN BY:	JAYAPRAKASH	19-NOV-18	THIRD
ENGINEER:	DENIS MATHIEU	23-JAN-19	ANGLE
APPROVED BY:	DENIS MATHIEU	23-JAN-19	PROJECTION

INTERFACE DETAILS WHEN BATTERY RACK BAYED WITH UPS

DRY CONTACT AND TEMPERATURE MANAGEMENT



XR2 ARE USED ONLY IN THE RACKS WHERE THE SYSTEM BMS ARE LOCATED



NOTES:

1. INSTALLATION MUST COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
2. REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.

△3. STANDARD CABLE LENGTH IS 50 METERS AND IS PART OF SKU–SYBBE250K500D/SYBBE500K500D.

△4. CONNECT CABLES FROM FUSE INDICATORS FROM THE FUSES IN THE BATTERY BANK TO J14–J21. IF NOT USED, JUMP THE INPUTS AS THEY ARE CONFIGURED AS NORMALLY CLOSED (NC).

△5. INSTALL ONE BATTERY TEMPERATURE SENSOR IN BATTERY RACK POSITIVE STRING AND ONE IN BATTERY RACK NEGATIVE STRING. AND CONNECT CABLES FROM THE BATTERY TEMPERATURE SENSORS TO J25 AND J26.

△6. IF NOT USED, JUMP THE INPUTS AS THEY ARE CONFIGURED AS NORMALLY CLOSED (NC).

△7. VERIFY THE TERMINATOR IS INSTALLED.

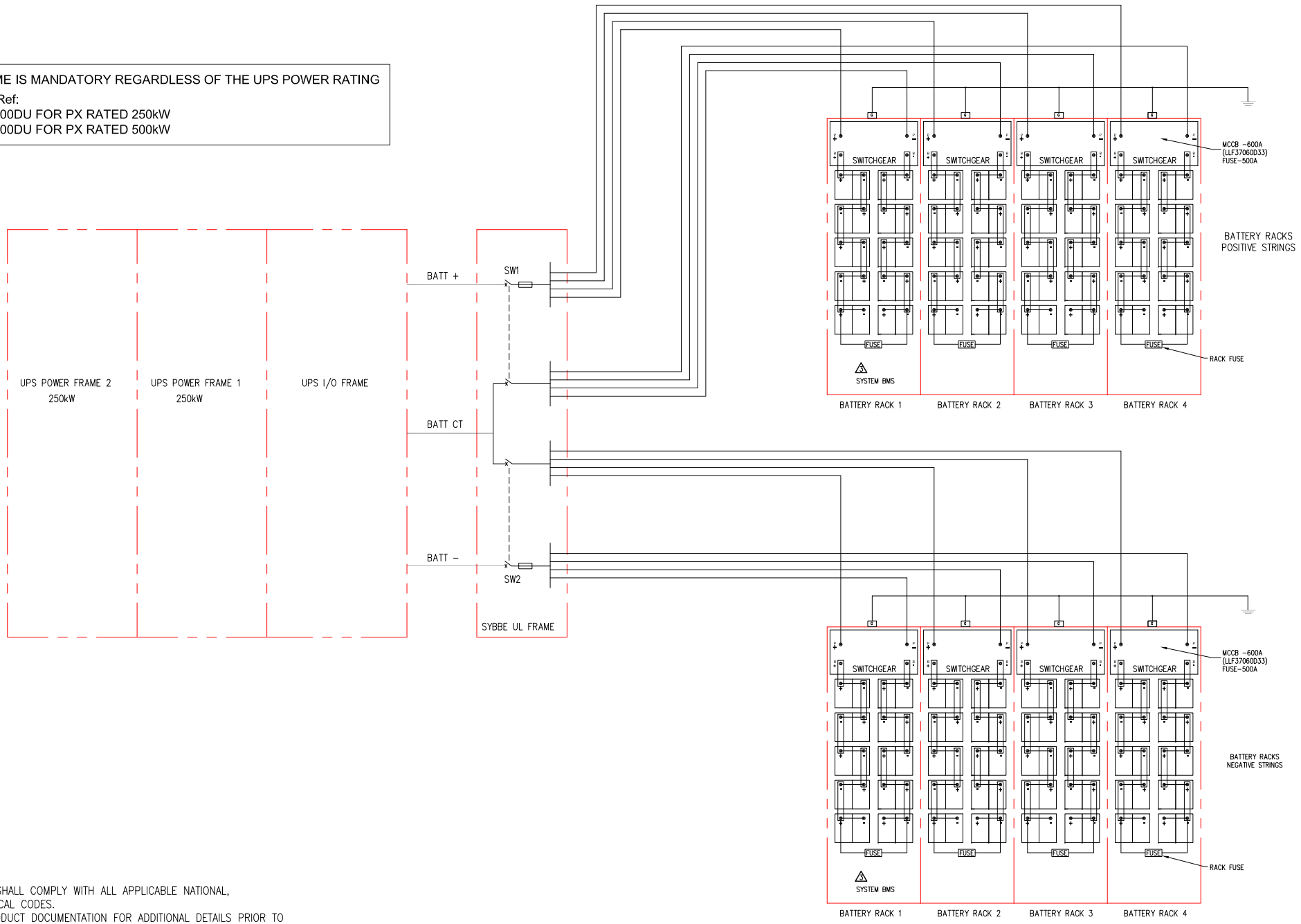
△8. CONNECT CABLE FOR Q2 TRIPPING TO EITHER:
J6503 (UVR). WHEN USING SQUARE D UVR OR ABB S8 UVR, AN EXTERNAL 24V DC SELV SUPPLY SHOULD BE CONNECTED TO J6507. FOR THE UVR, THE FOLLOWING PARTS ARE NEEDED TO CONNECT TO J6503 PIN2 AND PIN3:
1 TYCO 1–48700–0, M&L 3–POSITION PLUG HOUSING AND 2 TYCO 350218–3 M&L PIN, AWG 20–14 (NOT SUPPLIED).
OR
J6508 (SOR1) J6509 (SOR2). FOR THE SHUNT TRIP, THE FOLLOWING PARTS ARE NEEDED TO CONNECT TO J6508/J6509:
1 TYCO 1–480698–0. M&L 2–POSITION PLUG HOUSING
AND 2 TYCO 350218–3 M&L PIN, AWG 20–14 (NOT SUPPLIED).

Schneider Electric

TITLE: Li–Ion Battery Rack Type O–UL INTERFACE DETAILS	DWG NO: LIBATTSMGOUL		REV. 1
	DRAWN BY: JAYAPRAKASH	19–NOV–18	THIRD ANGLE PROJECTION
	ENGINEER: DENIS MATHIEU	23–JAN–19	
PROJECT: SUBMITTAL DRAWINGS SHEET 7 OF 8	APPROVED BY: DENIS MATHIEU	23–JAN–19	

SCHEMATIC DIAGRAM - POWER (500kW) FOR ILLUSTRATION

SYBBE FRAME IS MANDATORY REGARDLESS OF THE UPS POWER RATING
SYBBE SKU Ref:
SYBBE250K500DU FOR PX RATED 250kW
SYBBE500K500DU FOR PX RATED 500kW



NOTES:

1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
2. REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
3. △ ONE SYSTEM BMS IS LOCATED IN BATTERY RACK 1 OF POSITIVE STRING AND ANOTHER ONE IN BATTERY RACK 1 OF NEGATIVE STRING.
4. FOR Symmetra PX SOLUTIONS WITH 80S (10 BATTERY MODULES/RACK), A MAXIMUM OF 4 RACKS OF POSITIVE STRING AND 4 RACKS OF NEGATIVE STRINGS CAN BE CONNECTED DEPENDING UPON POWER AND RUNTIME REQUIREMENTS.

Schneider Electric

TITLE: Li–Ion Battery Rack Type O–UL SCHEMATIC DIAGRAM – POWER	DWG NO:	LIBATTSMGOUL	REV. 1
	DRAWN BY:	JAYAPRAKASH	19–NOV–18
	ENGINEER:	DENIS MATHIEU	23–JAN–19
PROJECT: SUBMITTAL DRAWINGS SHEET 8 OF 8	APPROVED BY:	DENIS MATHIEU	23–JAN–19
	ANGLE PROJECTION		N.A