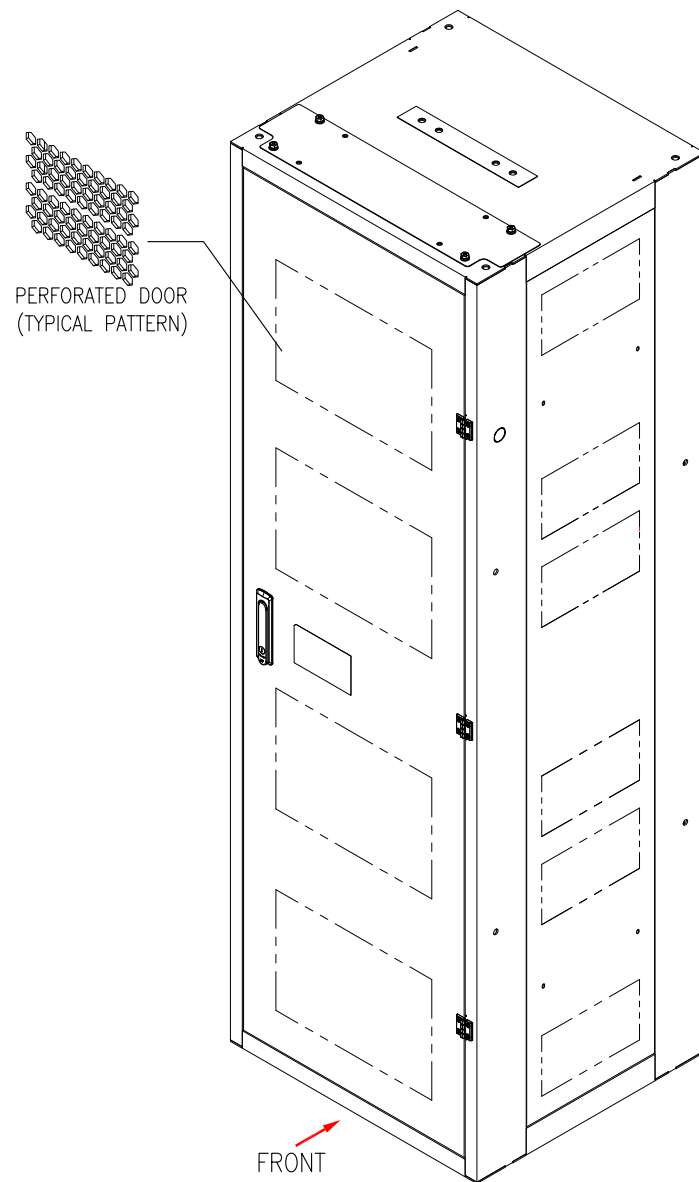
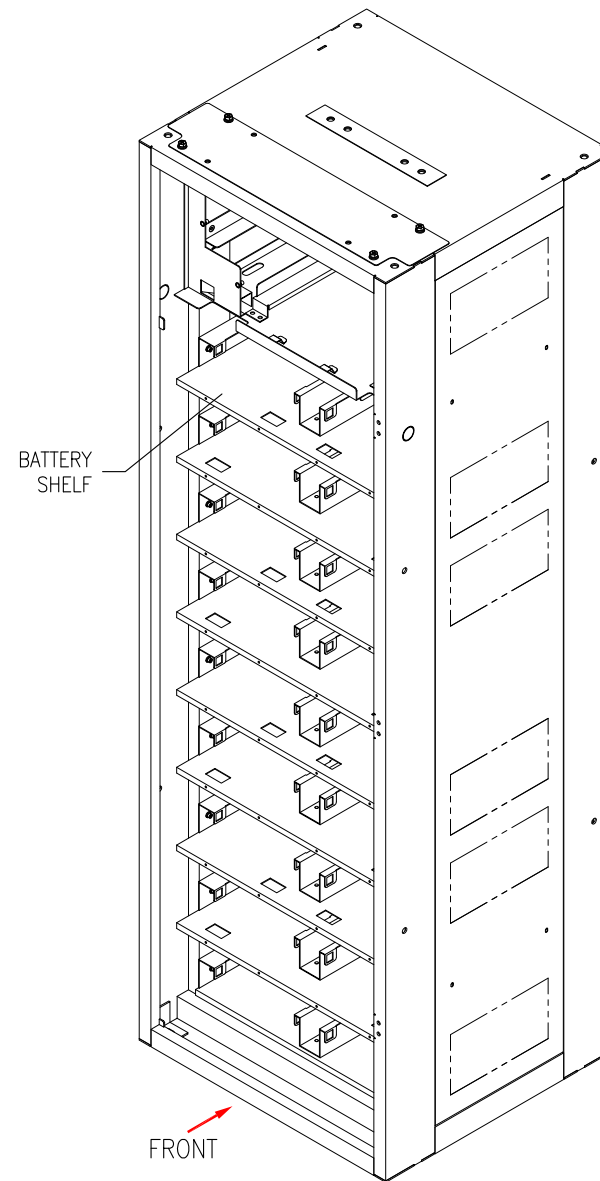




ISOMETRIC VIEW



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

Maximum number of Racks	8 (4 Positive, 4 Negative) through SYBBE
Battery Rack recommended cable size	185mm ²

NOTES:

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

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Schneider
Electric

TITLE:

Li-Ion Battery Rack Type 0-IEC
ISOMETRIC VIEWS

PROJECT: SUBMITTAL DRAWINGS SHEET 1 OF 8

DWG NO:

LIBATTSMGOIEC

DRAWN: JAYAPRAKASH 21-NOV-18

ENGINEER: DENIS MATHIEU 23-JAN-19

APPROVED: DENIS MATHIEU 23-JAN-19

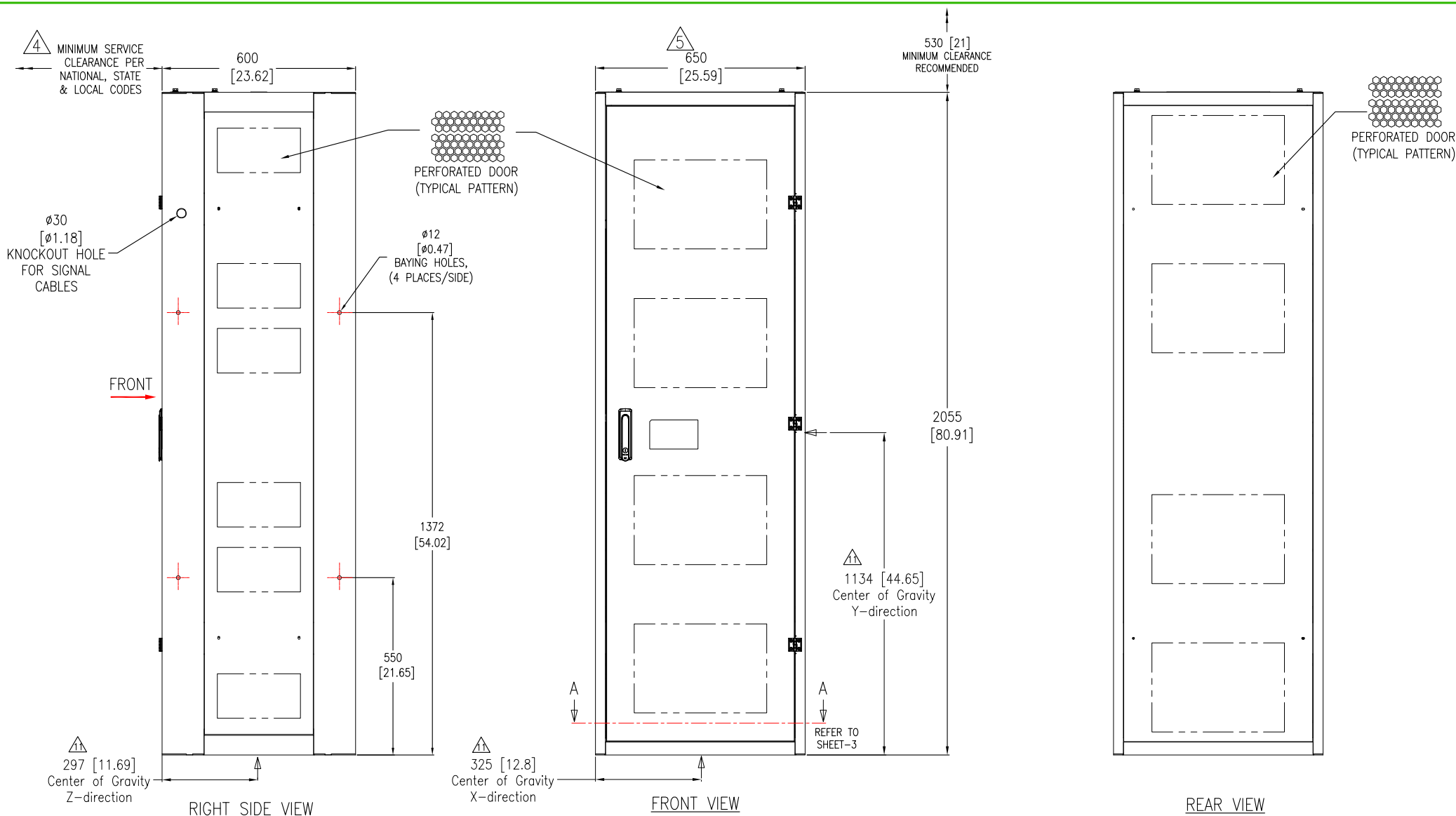
REV.

1

FIRST

ANGLE

PROJECTION



NOTES:

1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL REGULATIONS.
2. REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
3. ALL DIMENSIONS ARE IN MILLIMETERS [INCHES].
- △ 4. A MINIMUM OF 1000mm [39 Inches], 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 210 kg [463 lb].
WEIGHT OF ONE BATTERY MODULE IS 17 kg [37.5 lb], WEIGHT OF THE FULLY LOADED CABINET IS 380 kg [838 lb].
8. COLOR: WHITE:KCC-EX8816(S)-N.9.5.
9. PROTECTION CLASS: IP20.
10. RECOMMENDED OPERATING TEMPERATURE: 25±3°C [77°F±37.4].
TO OPTIMIZE THE LIFE OF BATTERY, IT IS RECOMMENDED TO MAINTAIN [25°C] [77°F].
- △ 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)]

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

Schneider Electric

TITLE:

Li-Ion Battery Rack Type 0-IEC
GENERAL ARRANGEMENT

PROJECT: SUBMITTAL DRAWINGS SHEET 2 OF 8

DWG NO:

LIBATTSMGOIEC

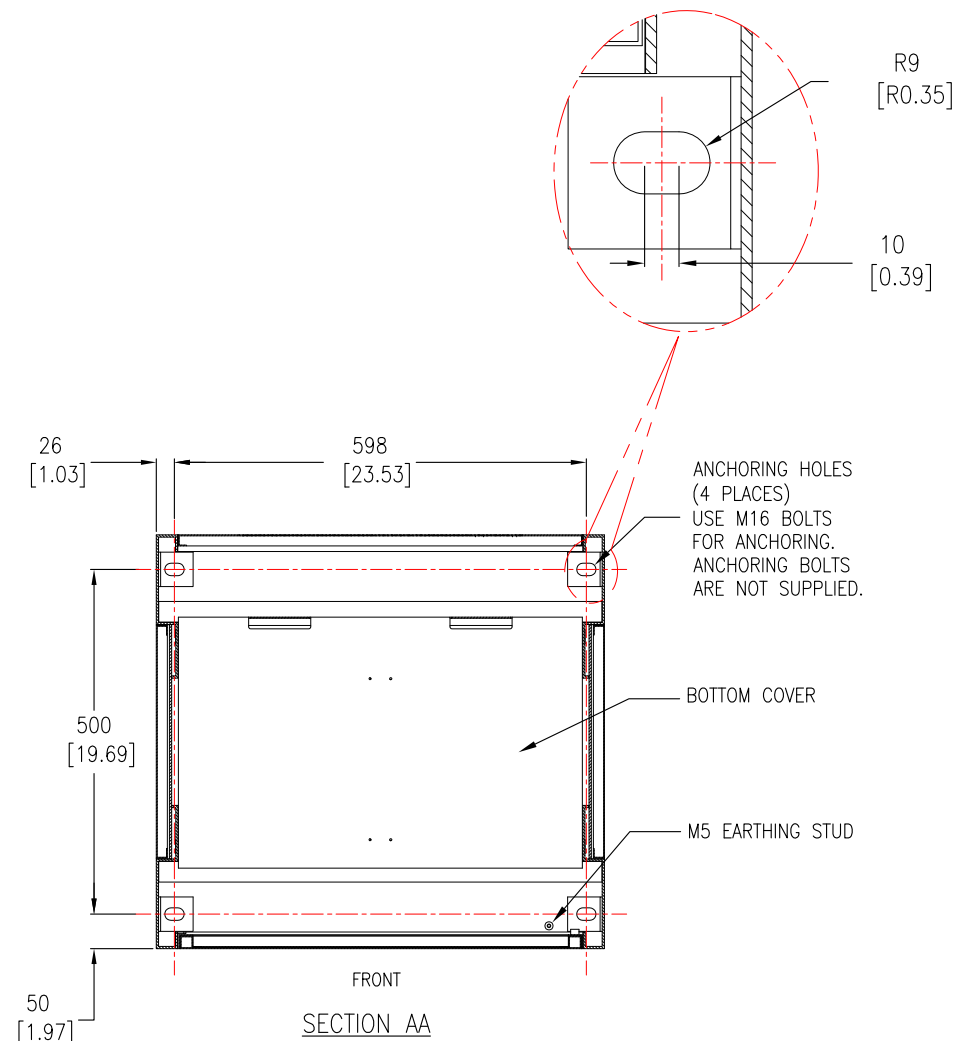
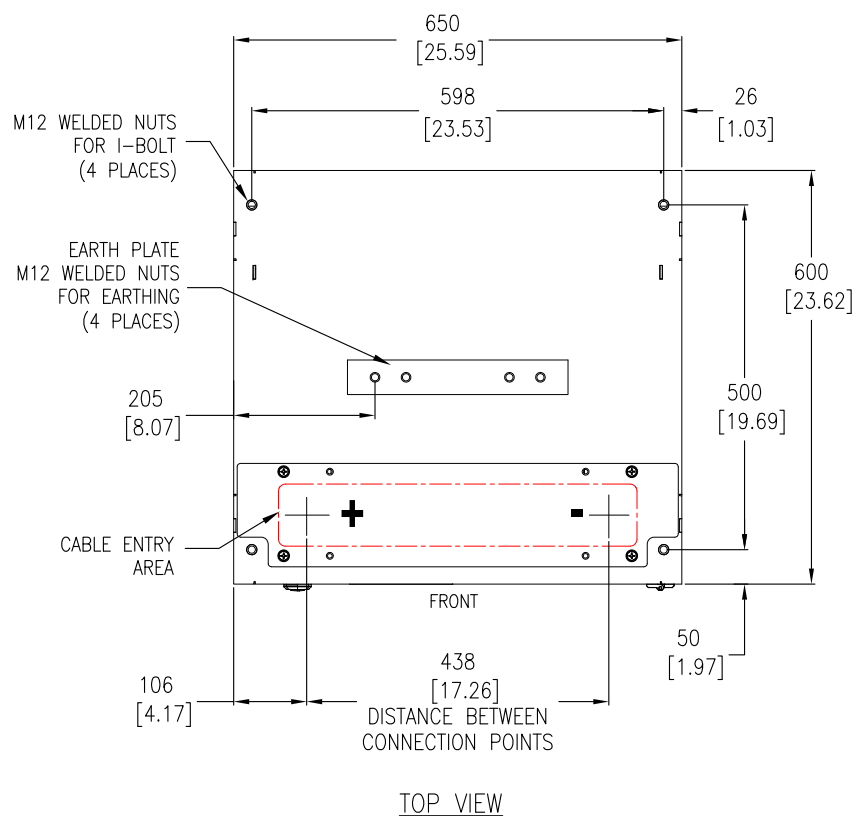
DRAWN: JAYAPRAKASH

ENGINEER: DENIS MATHIEU

APPROVED: DENIS MATHIEU

REV. 1

FIRST
ANGLE
PROJECTION



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

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Schneider Electric

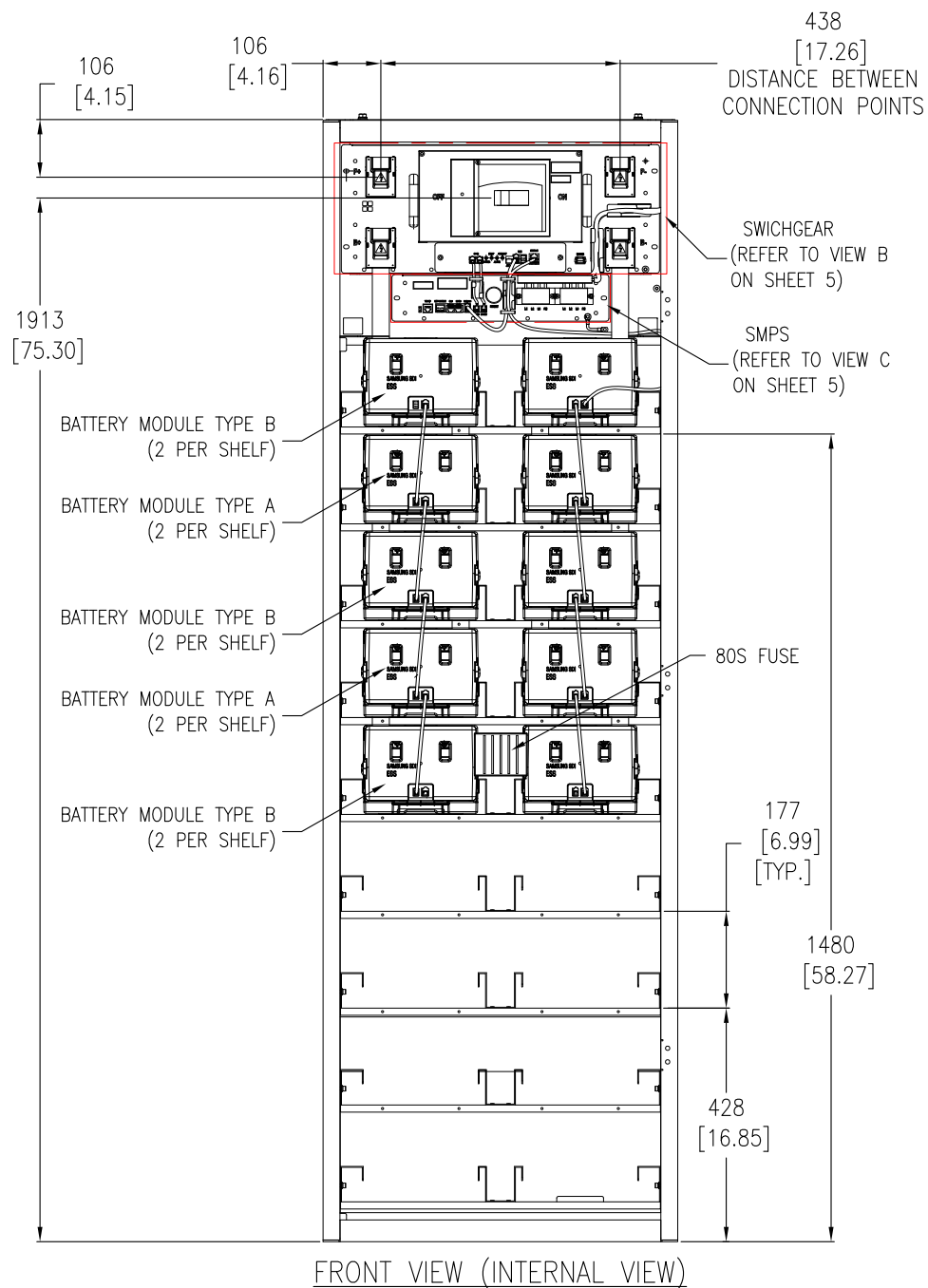
TITLE:
Li-Ion Battery Rack Type 0-IEC
TOP VIEW AND SECTION VIEW

PROJECT: SUBMITTAL DRAWINGS SHEET 3 OF 8

DWG NO: LIBATTSMGOIEC

DRAWN:	JAYAPRAKASH	06-MAR-18
ENGINEER:	DENIS MATHIEU	06-MAR-18
APPROVED:	DENIS MATHIEU	06-MAR-18

REV. 0
FIRST ANGLE PROJECTION



FRONT VIEW (INTERNAL VIEW)

NOTES:

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

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

Schneider
Electric

TITLE:

Li-Ion Battery Rack Type 0-IEC
INTERNAL VIEW

PROJECT: SUBMITTAL DRAWINGS SHEET 4 OF 8

DWG NO:

LIBATTSMGOIEC

DRAWN: JAYAPRAKASH 06-MAR-18

ENGINEER: DENIS MATHIEU 06-MAR-18

APPROVED: DENIS MATHIEU 06-MAR-18

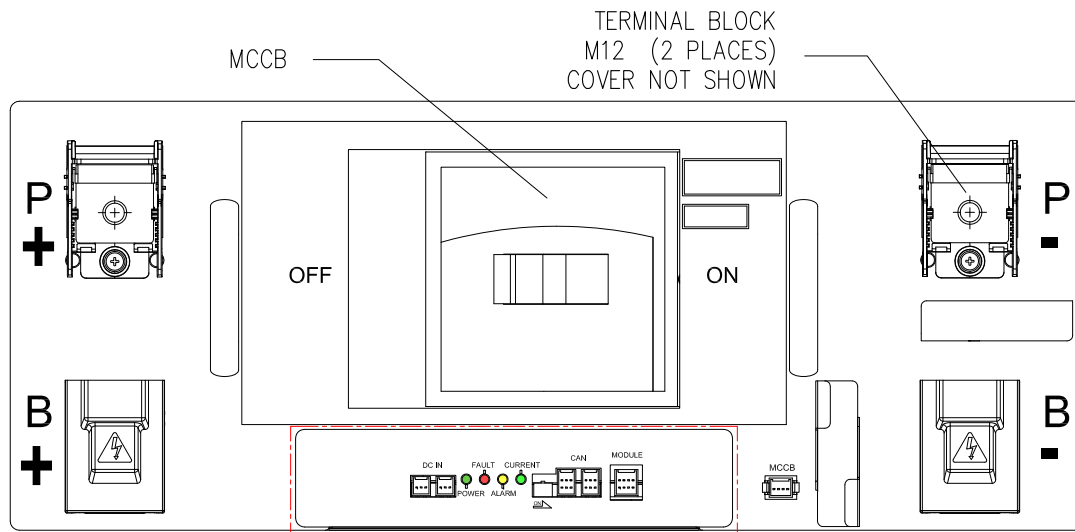
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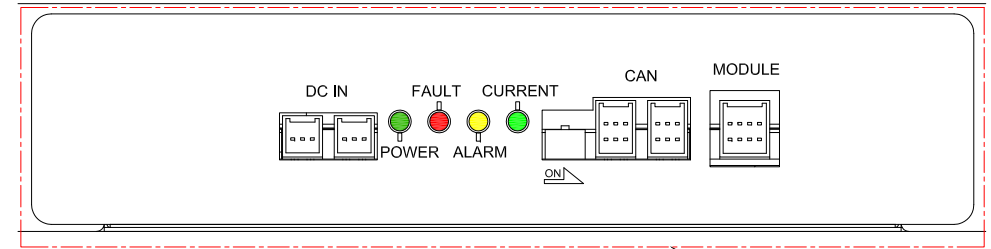
ANGLE

PROJECTION

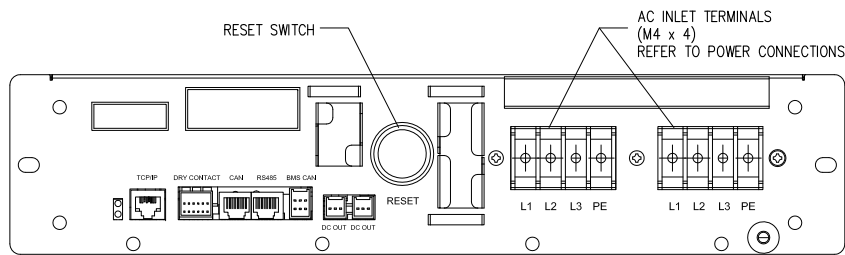


SWITCH GEAR
VIEW B

RACK BMS PORTS
(REFER TO ENLARGED VIEW)



RACK BMS PORTS
ENLARGED VIEW

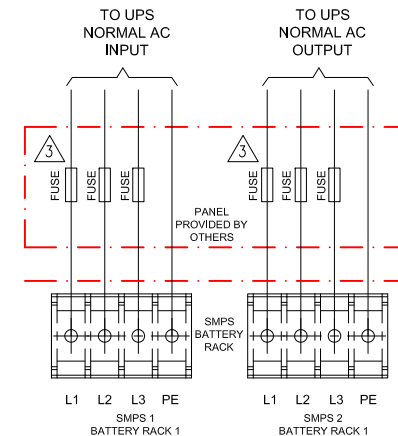


VIEW C-SMPS WITH SYSTEM BMS

MCCB SETTINGS:
 $I_m = 1500$
 $I_r = 480$
APPLY TO ALL CONFIGURATIONS.

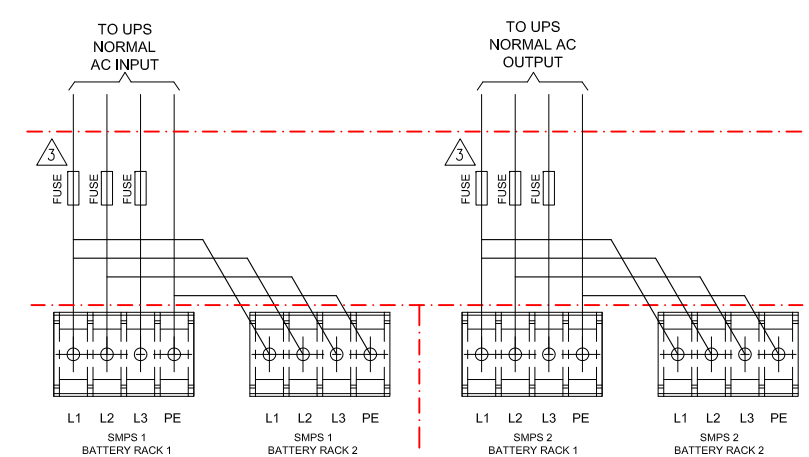
CABLING NOTES:
CANBUS COMMUNICATIONS BETWEEN RACKS IS SUPPLIED AND INSTALLED BY SCHNEIDER ELECTRIC.
1. THE ELECTRICAL 400V POWER BETWEEN CABINETS IS SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR.

SMPS INPUT/OUTPUT (POWER CONNECTIONS)



RECOMMENDED CABLE SIZE: 1.5 TO 2.5mm²

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 ELECTRICAL REGULATIONS.
 2. REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
 3. FUSE TYPE: MERSEN, REF. Y1014574 OR EQUIVALENT, 6A / 690V / 10x38 / 100ka kAIC. 6A FUSE UPTO 4 STRINGS DAISY CHAINED. 16A FUSE MERSEN, REF. D1014579 OR EQUIVALENT UP TO 8 STRINGS DAISY CHAINED. ALTERNATE SOLUTION: SCHNEIDER ELECTRIC MOTOR CIRCUIT BREAKER-TeSys GV2P10.
 4. ONE SYSTEM BMS IS LOCATED IN BATTERY RACK 1 OF POSITIVE STRING AND ANOTHER ONE IN BATTERY RACK 1 OF NEGATIVE STRING.

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Schneider Electric

TITLE:
Li-Ion Battery Rack Type 0-IEC
DETAIL VIEWS

PROJECT: SUBMITTAL DRAWINGS SHEET 5 OF 8

DWG NO: LIBATTSMGOIEC

DRAWN: JAYAPRAKASH 21-NOV-18

ENGINEER: DENIS MATHIEU 23-JAN-19

APPROVED: DENIS MATHIEU 23-JAN-19

REV. 1

FIRST

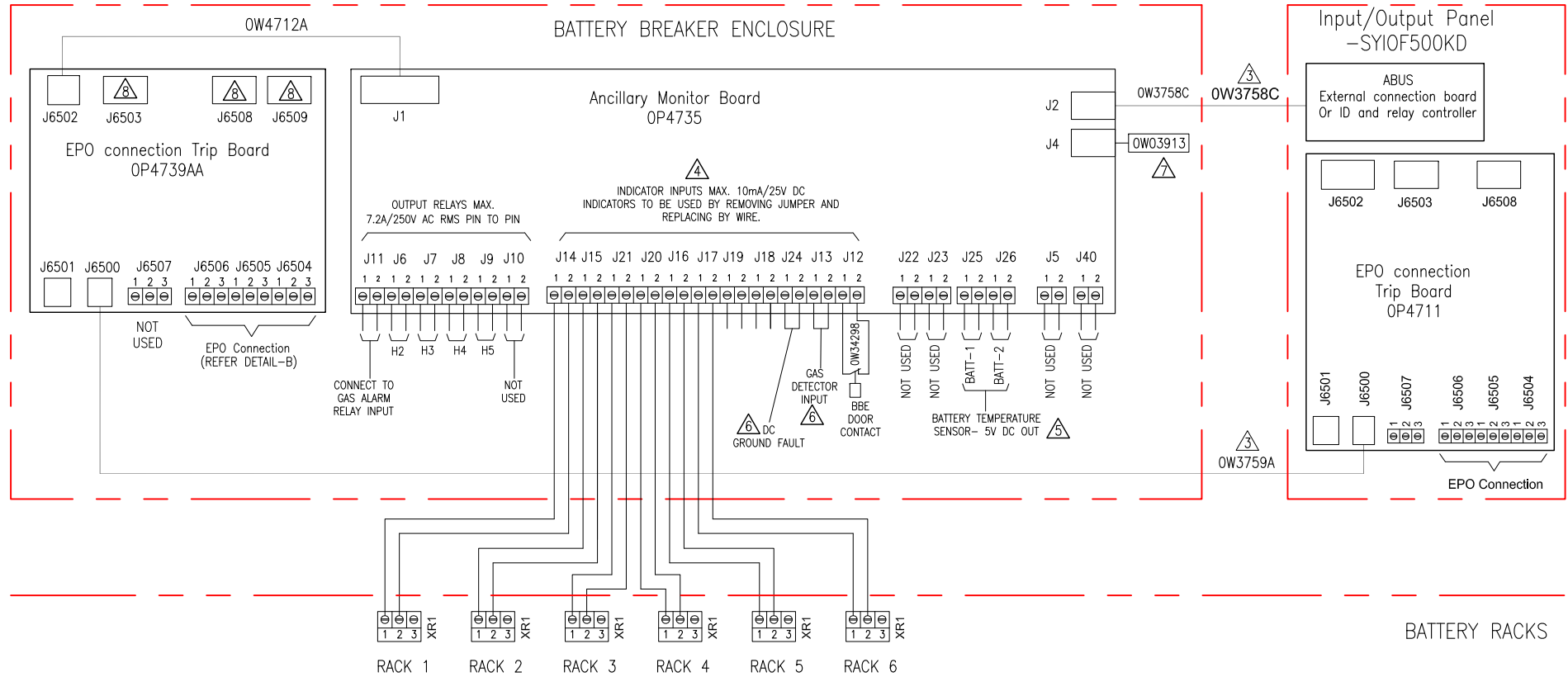
ANGLE

PROJECTION

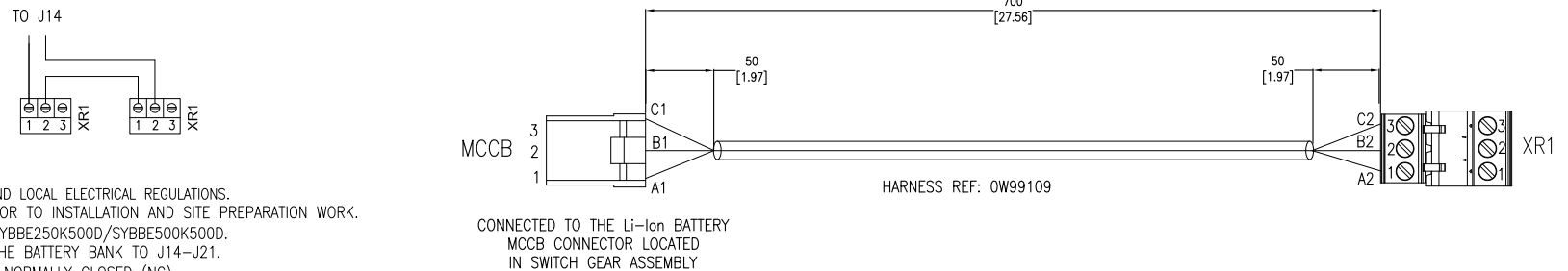
INTERFACE DETAILS WHEN BATTERY RACK BAYED WITH UPS

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



NOTES:

1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL REGULATIONS.
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 SCHNEIDER-ELECTRIC 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, 0.52 - 2.08mm² (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, 0.52 - 2.08mm² (NOT SUPPLIED).

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Schneider Electric

TITLE:

Li-Ion Battery Rack Type 0-IEC
INTERFACE DETAILS

PROJECT: SUBMITTAL DRAWINGS SHEET 6 OF 8

DWG NO:

LIBATTSMGOIEC

DRAWN: JAYAPRAKASH 21-NOV-18

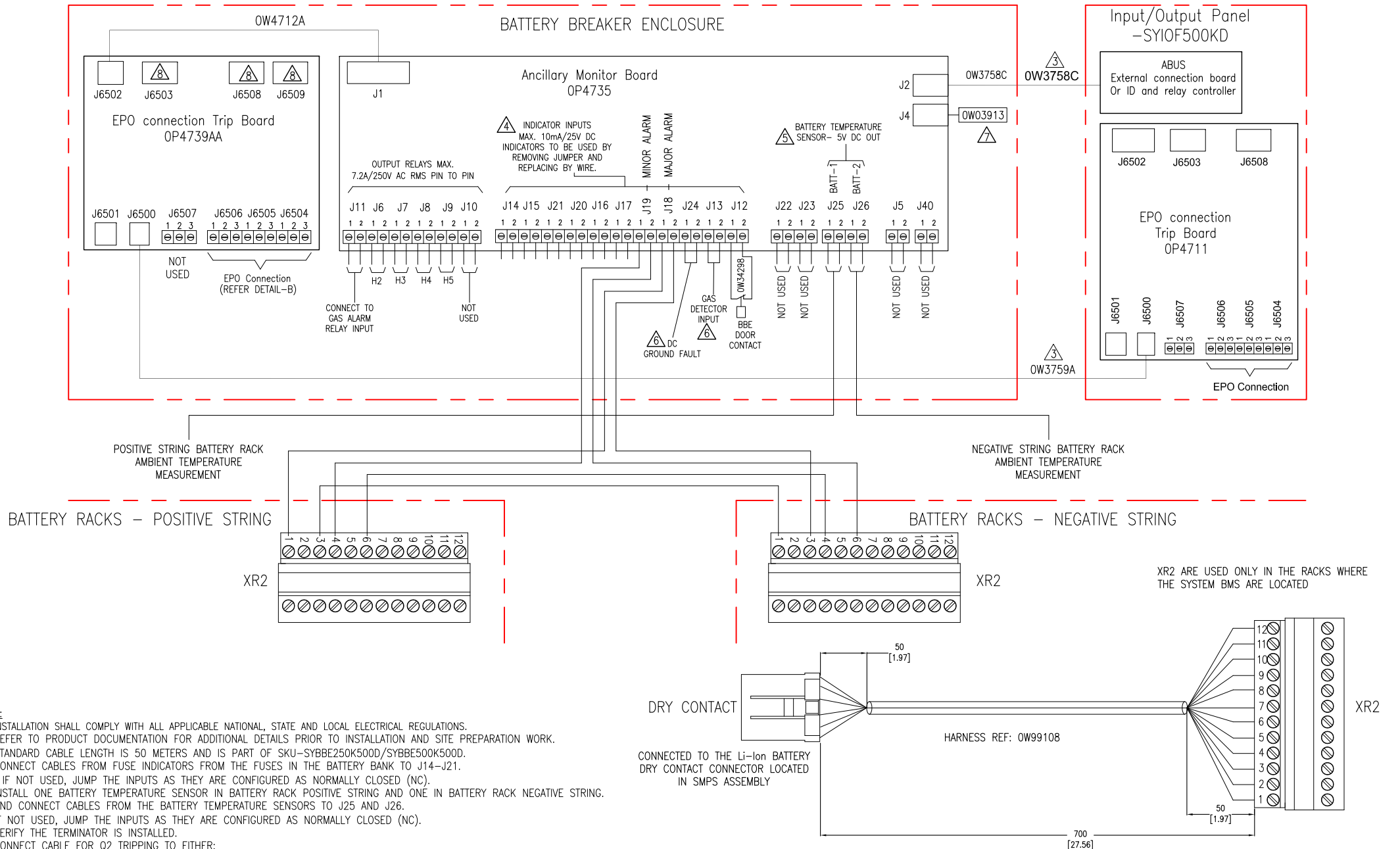
ENGINEER: DENIS MATHIEU 23-JAN-19

APPROVED: DENIS MATHIEU 23-JAN-19

REV. 1

FIRST
ANGLE
PROJECTION

INTERFACE DETAILS WHEN BATTERY RACK BAYED WITH UPS
DRY CONTACT AND TEMPERATURE MANAGEMENT



NOTES:

1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL REGULATIONS.
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 SCHNEIDER-ELECTRIC 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, 0.52 - 2.08mm² (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, 0.52 - 2.08mm² (NOT SUPPLIED).

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Schneider Electric

TITLE:
Li-Ion Battery Rack Type 0-IEC
INTERFACE DETAILS

PROJECT: SUBMITTAL DRAWINGS **SHEET 7 OF 8**

DWG NO: LIBATTSMGOIEC

DRAWN: JAYAPRAKASH 21-NOV-18

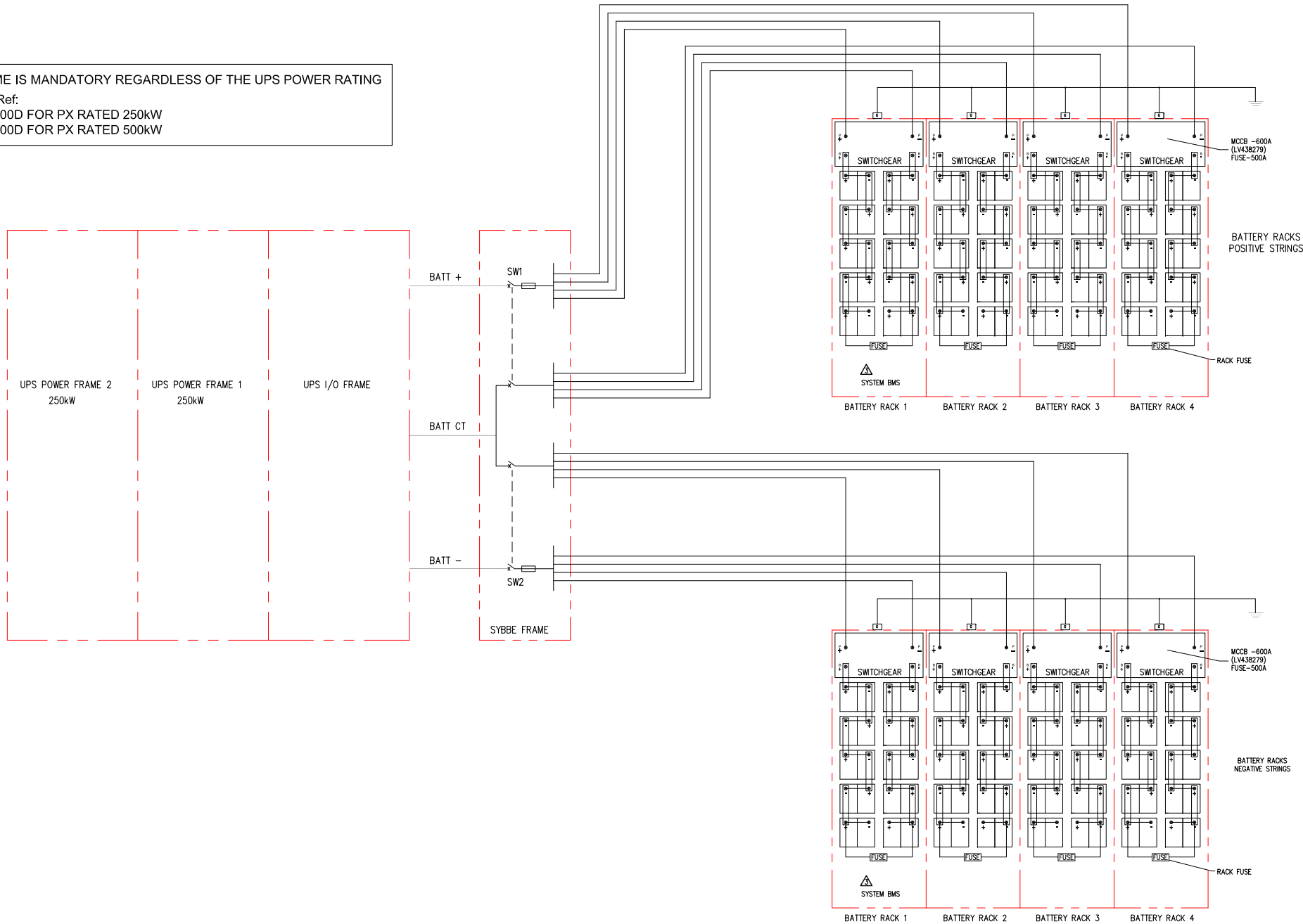
ENGINEER: DENIS MATHIEU 23-JAN-19

APPROVED: DENIS MATHIEU 23-JAN-19

REV. 1
FIRST ANGLE PROJECTION

SCHEMATIC DIAGRAM - POWER (500kW) FOR ILLUSTRATION

SYBBE FRAME IS MANDATORY REGARDLESS OF THE UPS POWER RATING
SYBBE SKU Ref:
SYBBE250K500D FOR PX RATED 250kW
SYBBE500K500D FOR PX RATED 500kW



- NOTES:
1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL REGULATIONS.
 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.

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



TITLE:
Li-Ion Battery Rack Type 0-IEC
CABLING DIAGRAM
PROJECT: SUBMITTAL DRAWINGS SHEET 8 OF 8

DWG NO: LIBATTSMGOIEC
DRAWN: JAYAPRAKASH
ENGINEER: DENIS MATHIEU
APPROVED: DENIS MATHIEU

REV. 1
FIRST ANGLE PROJECTION