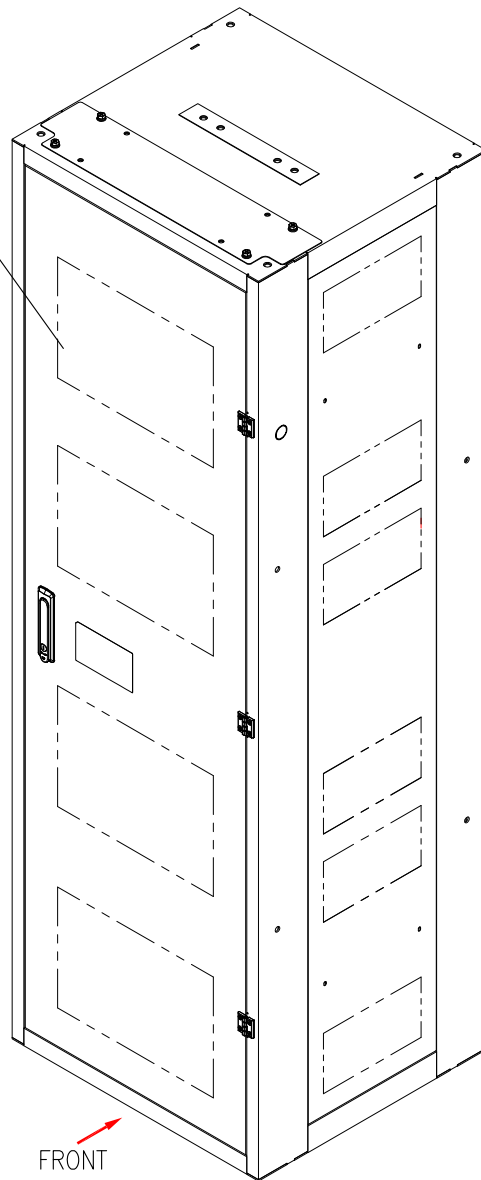
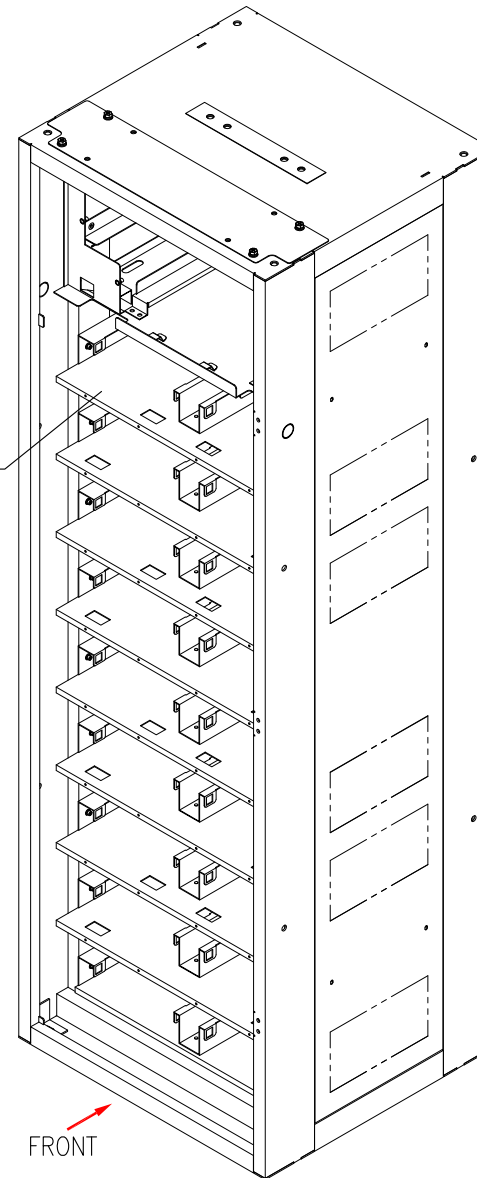


PERFORATED DOOR
(TYPICAL PATTERN)



ISOMETRIC VIEW

BATTERY
SHELF



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

Maximum number of Racks	16 (8 Positive, 8 Negative)
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.

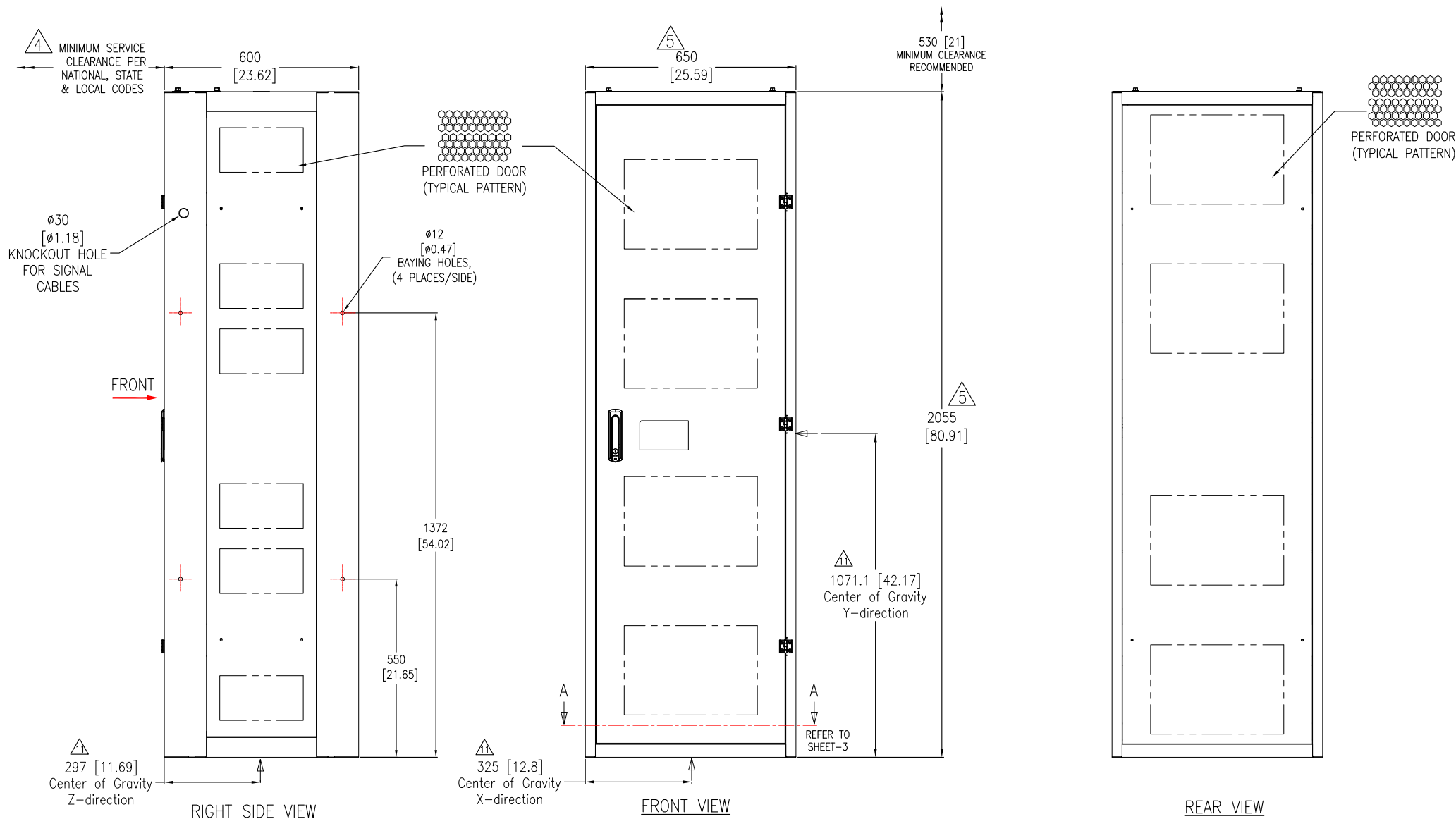
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**Schneider
Electric**

TITLE:
Li-Ion Battery Rack Type S-IEC
ISOMETRIC VIEWS

PROJECT: SUBMITTAL DRAWINGS SHEET 1 OF 7

DWG NO:	LIBATTSMGSIEC		REV. 1
DRAWN:	JAYAPRAKASH	19-NOV-18	FIRST
ENGINEER:	DENIS MATHIEU	10-DEC-18	ANGLE
APPROVED:	DENIS MATHIEU	10-DEC-18	PROJECTION

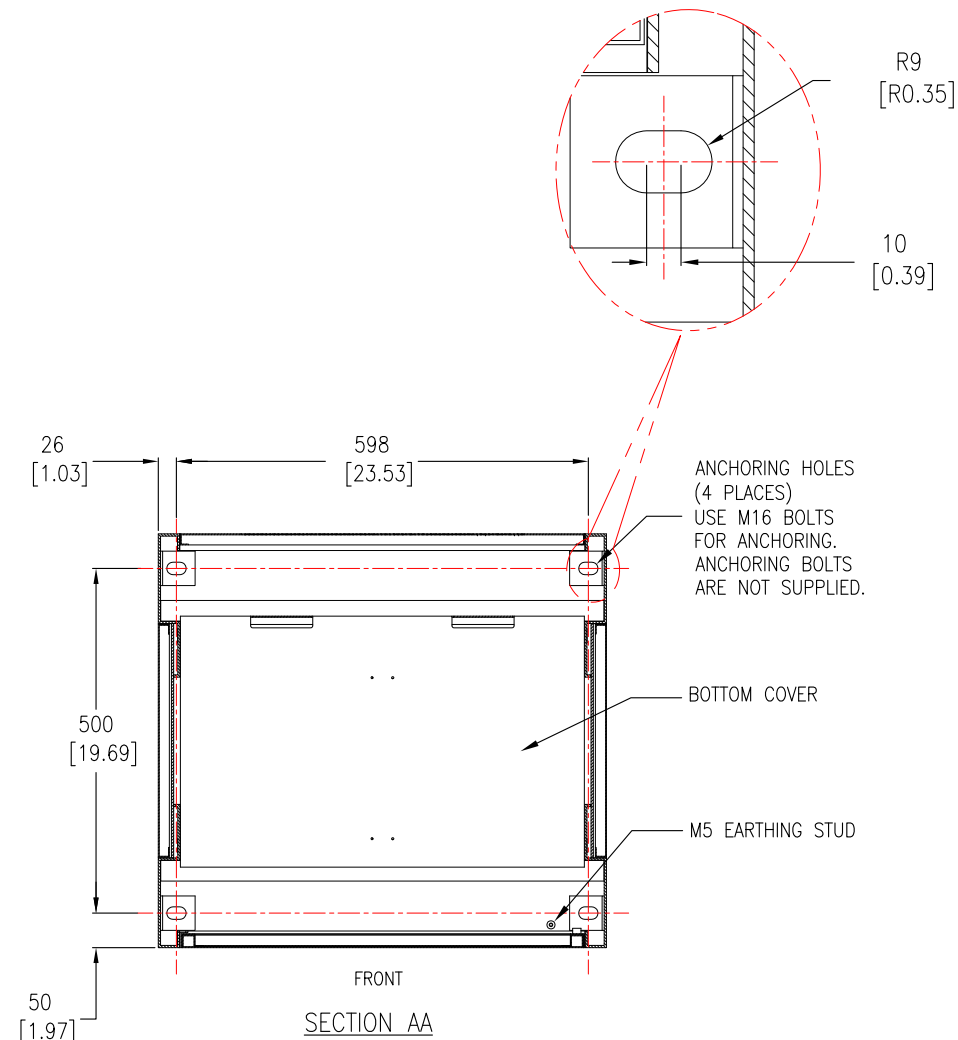
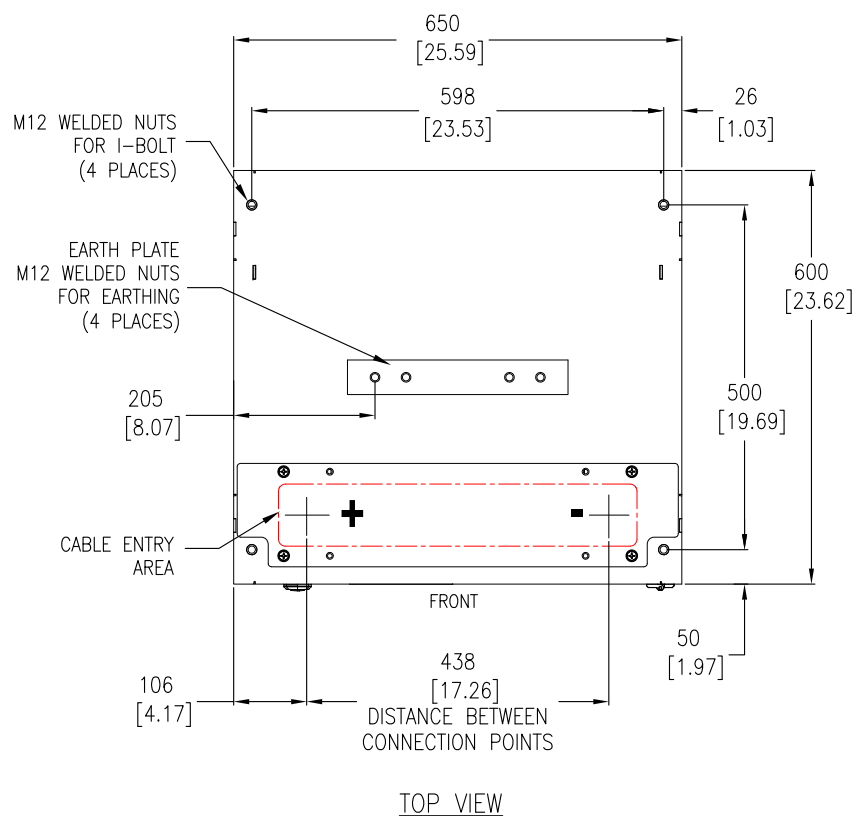


- NOTES:
1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL REGULATIONS.
 2. REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
 3. ALL DIMENSIONS ARE IN MILLIMETERS [INCHES].
 4. A MINIMUM OF 1000mm [39 Inches], FRONT 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 431 kg [950 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 (104S)].

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Schneider Electric

TITLE: Li-Ion Battery Rack Type S-IEC GENERAL ARRANGEMENT		DWG NO: LIBATTSMGSIEC		REV. 3
PROJECT: SUBMITTAL DRAWINGS		DRAWN: JAYAPRAKASH	19-NOV-18	FIRST ANGLE PROJECTION
SHEET 2 OF 7		ENGINEER: DENIS MATHIEU	10-DEC-18	
		APPROVED: DENIS MATHIEU	10-DEC-18	



- 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 AS SHOWN IN SHEET-7.

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.

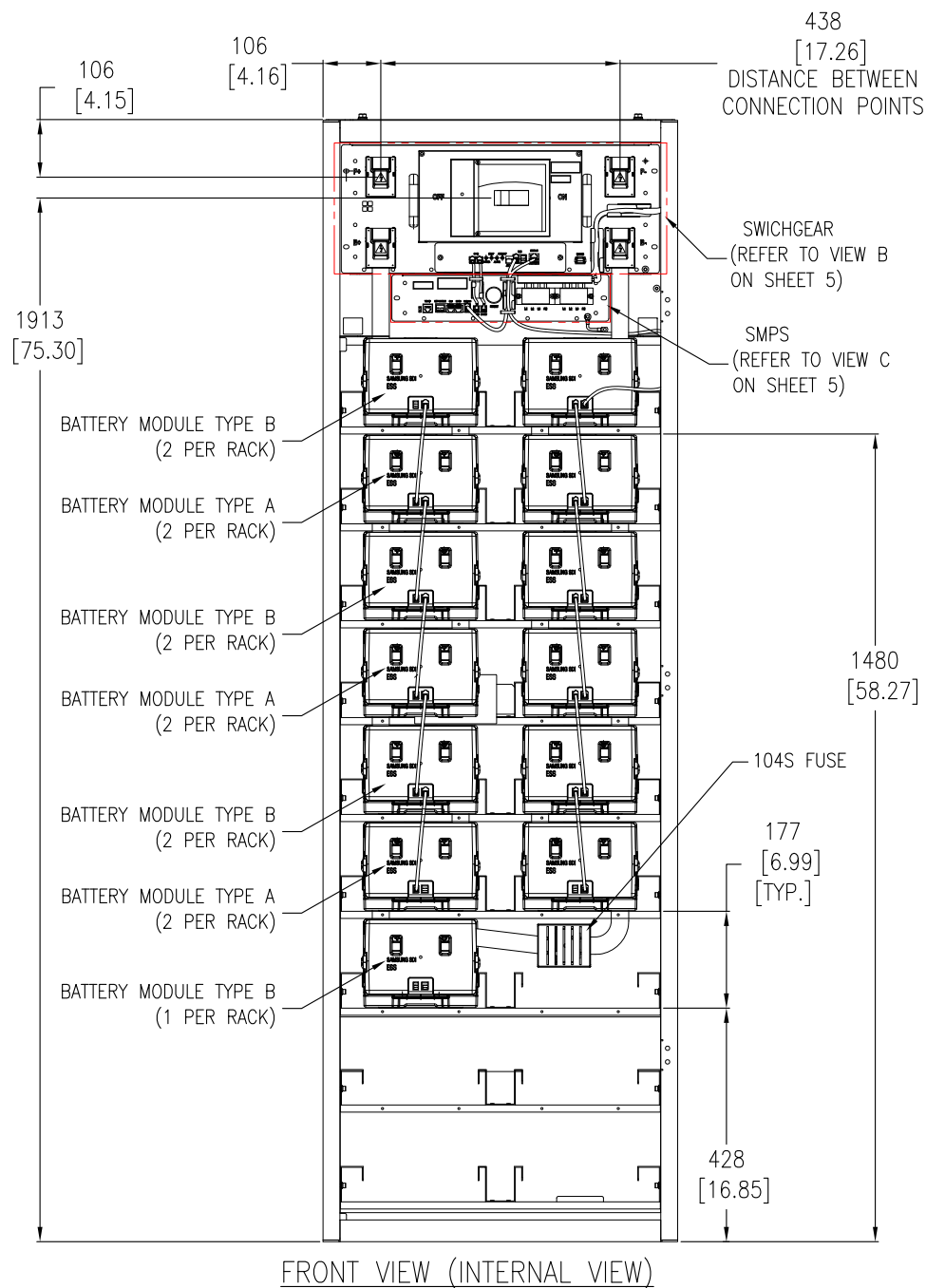
Schneider Electric

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

PROJECT: SUBMITTAL DRAWINGS SHEET 3 OF 7

DWG NO: LIBATTSMGSIEC
DRAWN: JAYAPRAKASH 07-FEB-17
ENGINEER: DENIS MATHIEU 07-FEB-17
APPROVED: THIERRY2 THOMAS 07-FEB-17

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.

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Schneider
Electric

TITLE:

Li-Ion Battery Rack Type S-IEC
INTERNAL VIEW

DWG NO:

LIBATTSMGSIEC

REV.

0

DRAWN:

JAYAPRAKASH

07-FEB-17

ENGINEER:

DENIS MATHIEU

07-FEB-17

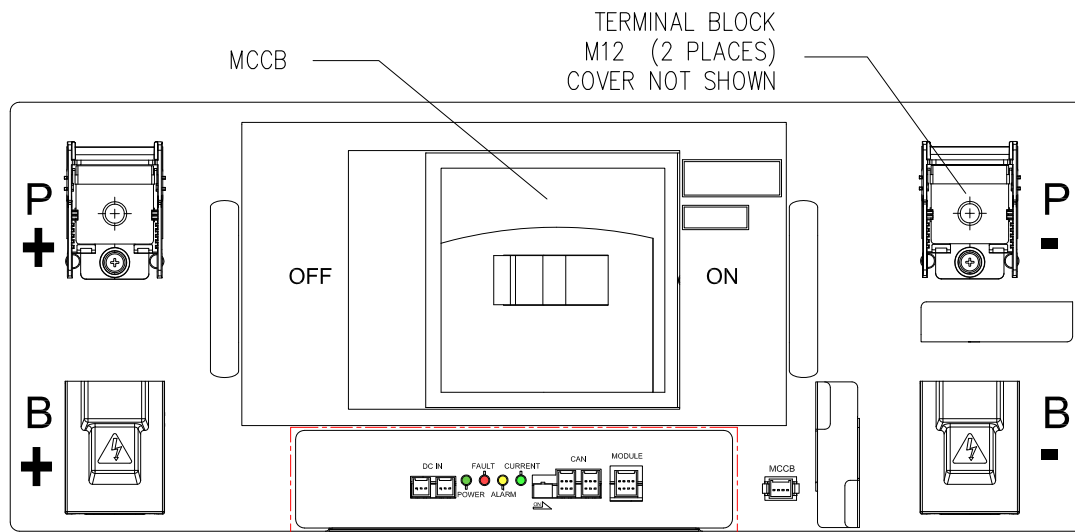
PROJECT: SUBMITTAL DRAWINGS SHEET 4 OF 7

APPROVED:

THIERRY2 THOMAS

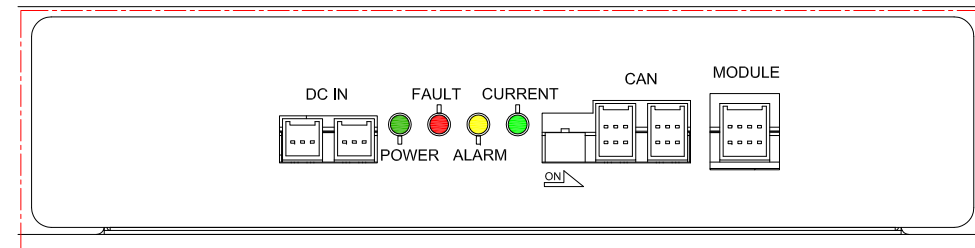
07-FEB-17

FIRST ANGLE PROJECTION

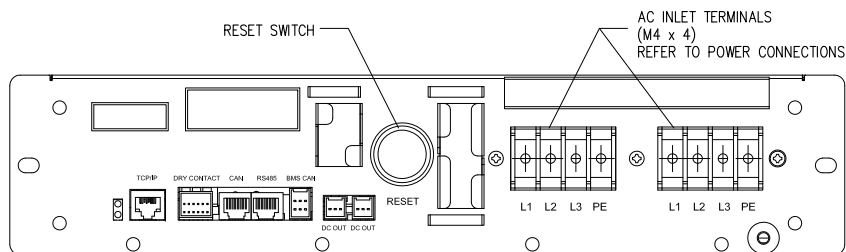


SWITCH GEAR
VIEW B

RACK BMS PORTS
(REFER TO ENLARGED VIEW)



RACK BMS PORTS
ENLARGED VIEW

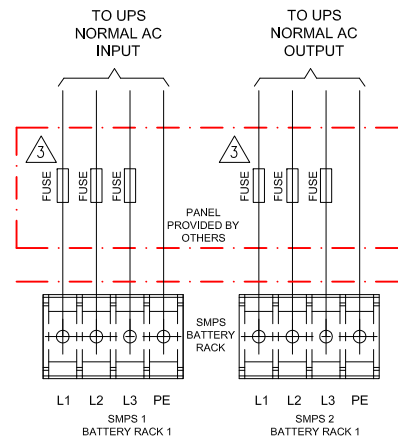


VIEW C-SMPS WITH SYSTEM BMS

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

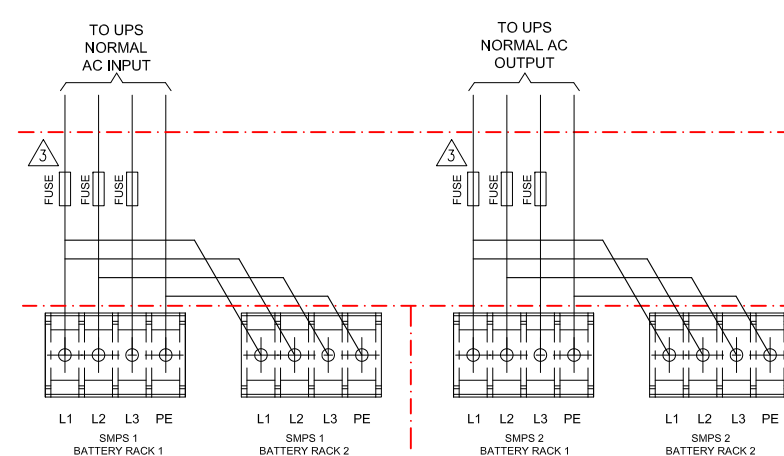
MCCB SETTINGS:
Im = 1500
Ir = 480
APPLY TO ALL CONFIGURATIONS

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 S-IEC
DETAIL VIEWS

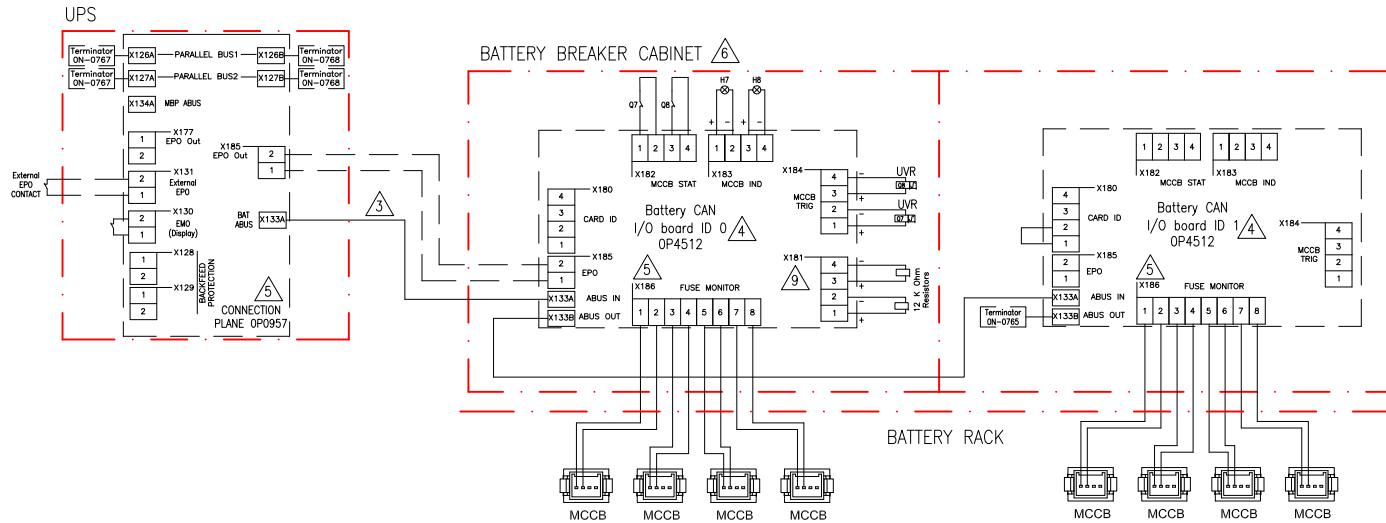
PROJECT: SUBMITTAL DRAWINGS SHEET 5 OF 7

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

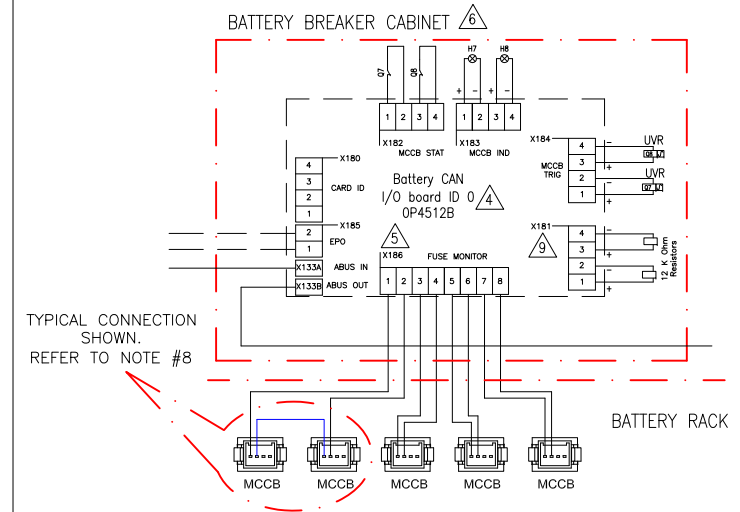
REV. 2
22-JAN-19
22-JAN-19
22-JAN-19
FIRST ANGLE PROJECTION

INTERFACE DETAILS WHEN BATTERY RACK BAYED WITH UPS

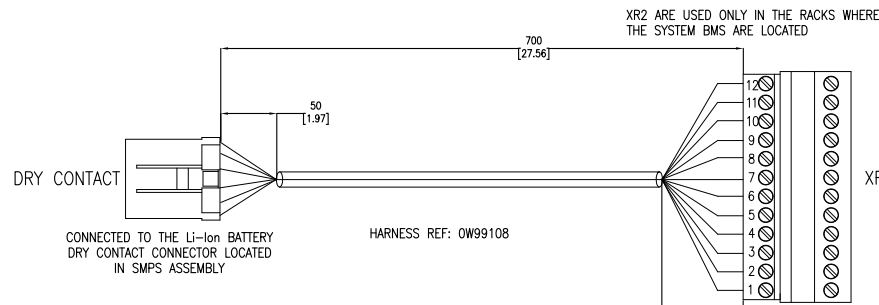
CONNECTION DETAILS WHEN 8 MCCBs ARE CONNECTED TO THE SYMW BAT-CAN BOARDS (REFER TO NOTE # 7)



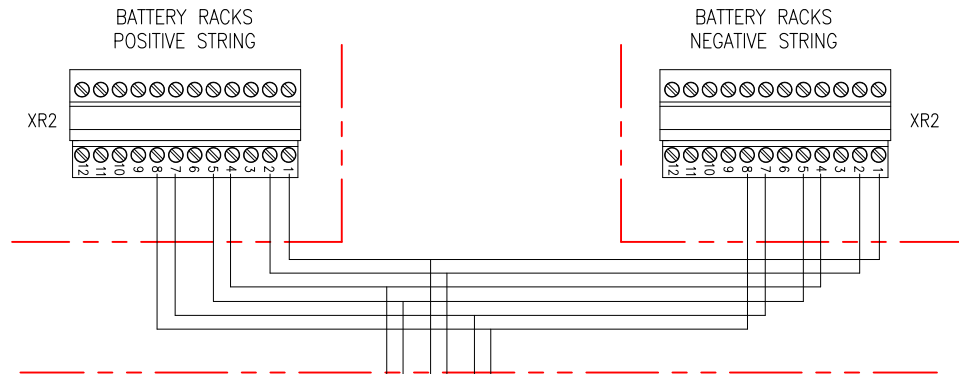
CONNECTION DETAILS WHEN MORE THAN 8 MCCBs ARE CONNECTED TO THE SYMW BAT-CAN BOARDS (REFER TO NOTE # 8)



DRY CONTACT MANAGEMENT



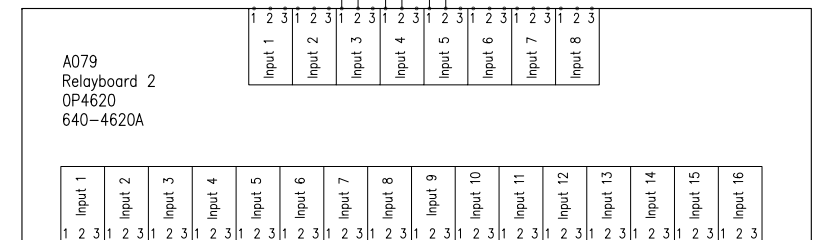
XR2 ARE USED ONLY IN THE RACKS WHERE THE SYSTEM BMS ARE LOCATED



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. 15 CONDUCTOR IS SHIELDED TWISTED PAIR PROVIDED BY Schneider Electric.
4. FOR LATEST BOARD PART NUMBER, REFER LATEST REVISION/CONTACT Schneider Electric.
5. UNUSED FUSE TERMINALS SHOULD BE FITTED WITH JUMPERS.
6. BATTERY BREAKER CABINET, NOT PART OF THIS SOLUTION.
7. CONNECT PINS 1 & 2 OF BATTERY FRAME MCCB AUX. CONNECTOR TO FUSE INDICATOR INPUT OF THE SYMW BATT-CAN BOARDS. USE THE CABLE AND CONNECTOR (OW99109) PROVIDED TO CONNECT BETWEEN THE MCCB AUX. CONNECTOR AND SYMW BATT-CAN BOARDS.
8. IF IT IS REQUIRED TO MONITOR MORE THAN 8 MCCBs, THE MCCB AUX. CONTACTS CAN BE WIRED IN SERIES AS SHOWN ABOVE.
9. X181 CONNECTION IS APPLICABLE FOR FIRMWARE VERSION 24.87 ONLY. FOR LATER VERSION OF FIRMWARE, THESE TERMINAL CAN BE USED FOR TEMPERATURE SENSOR.

Pin No.	Dry contactor name	XR2	Relay board 2
B1	Major Common	XR2-1	Input 4-1
A1	Major Normally Closed	XR2-2	Input 4-2
B2	Minor Common	XR2-3	Input 3-1
A2	Minor Normally Closed	XR2-4	Input 3-2
B3	Charge Common	XR2-5	Input 5-1
A3	Charge Normally Closed	XR2-6	Input 5-2
B4	Charge Common	XR2-7	Input 5-1
A4	Charge Normally Closed	XR2-8	Input 5-2
B5		XR2-9	



SYMW UPS

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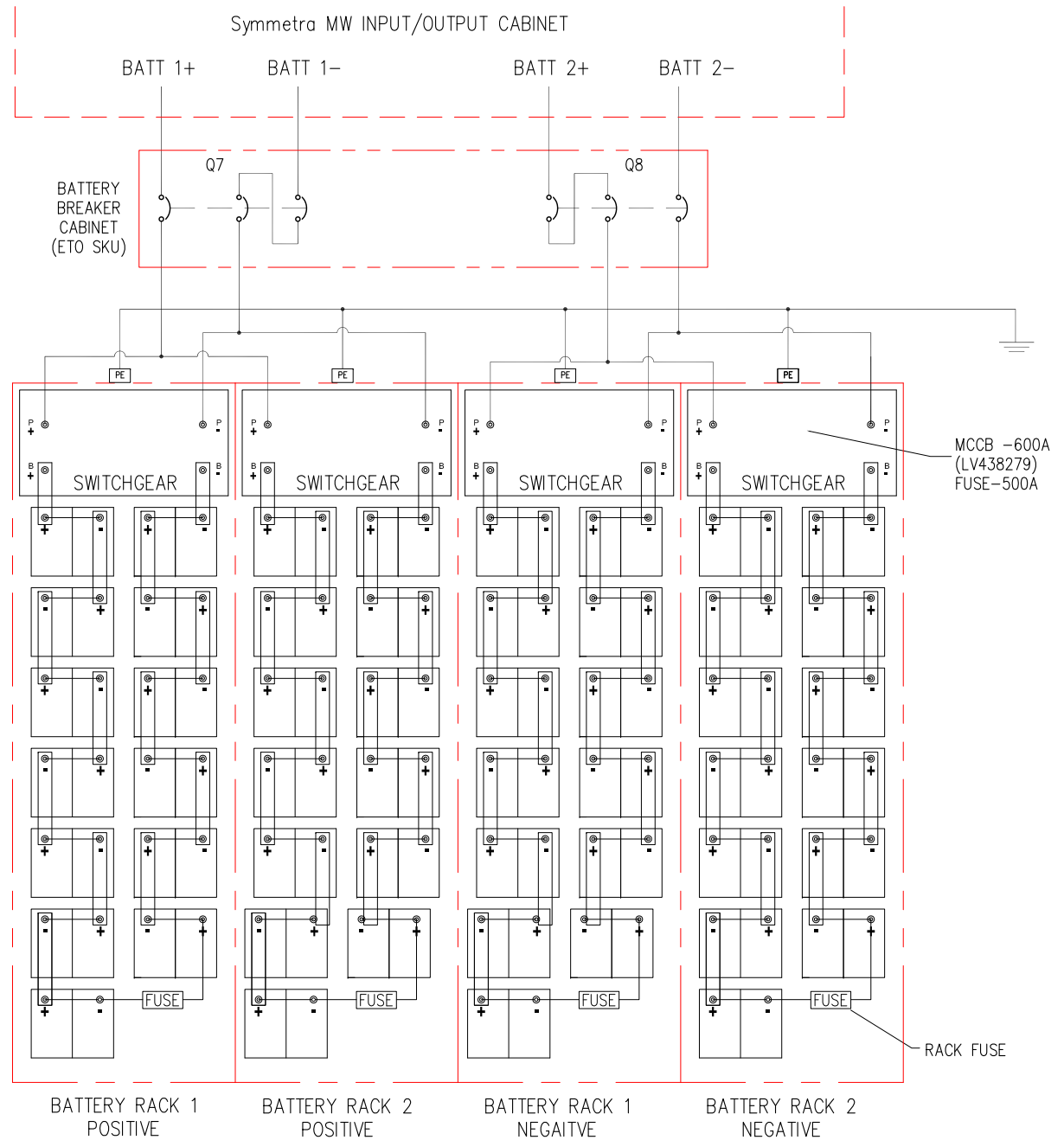
Schneider Electric

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

PROJECT: SUBMITTAL DRAWINGS SHEET 6 OF 7

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

REV: 2
22-JAN-19
22-JAN-19
22-JAN-19
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. THE SYSTEM BMS IS LOCATED IN BATTERY RACK 1 OF POSITIVE AND NEGATIVE STRING.
4. Symmetra MW SOLUTIONS WITH 104S (13 BATTERY MODULES/RACK) REQUIRE A MINIMUM OF 1 POSITIVE AND 1 NEGATIVE STRING.
5. 4 BATTERY RACKS SHOWN FOR ILLUSTRATION. UPTO 16 BATTERY RACKS (8 STRINGS) CAN BE CONNECTED DEPENDING UPON POWER AND RUNTIME REQUIREMENTS.

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Schneider Electric

TITLE:
Li-Ion Battery Rack Type S-IEC
CABLING DIAGRAM

PROJECT: SUBMITTAL DRAWINGS SHEET 7 OF 7

DWG NO: LIBATTSMGSIEC
DRAWN: JAYAPRAKASH 19-NOV-18
ENGINEER: DENIS MATHIEU 10-DEC-18
APPROVED: DENIS MATHIEU 10-DEC-18

REV. 1
FIRST ANGLE PROJECTION