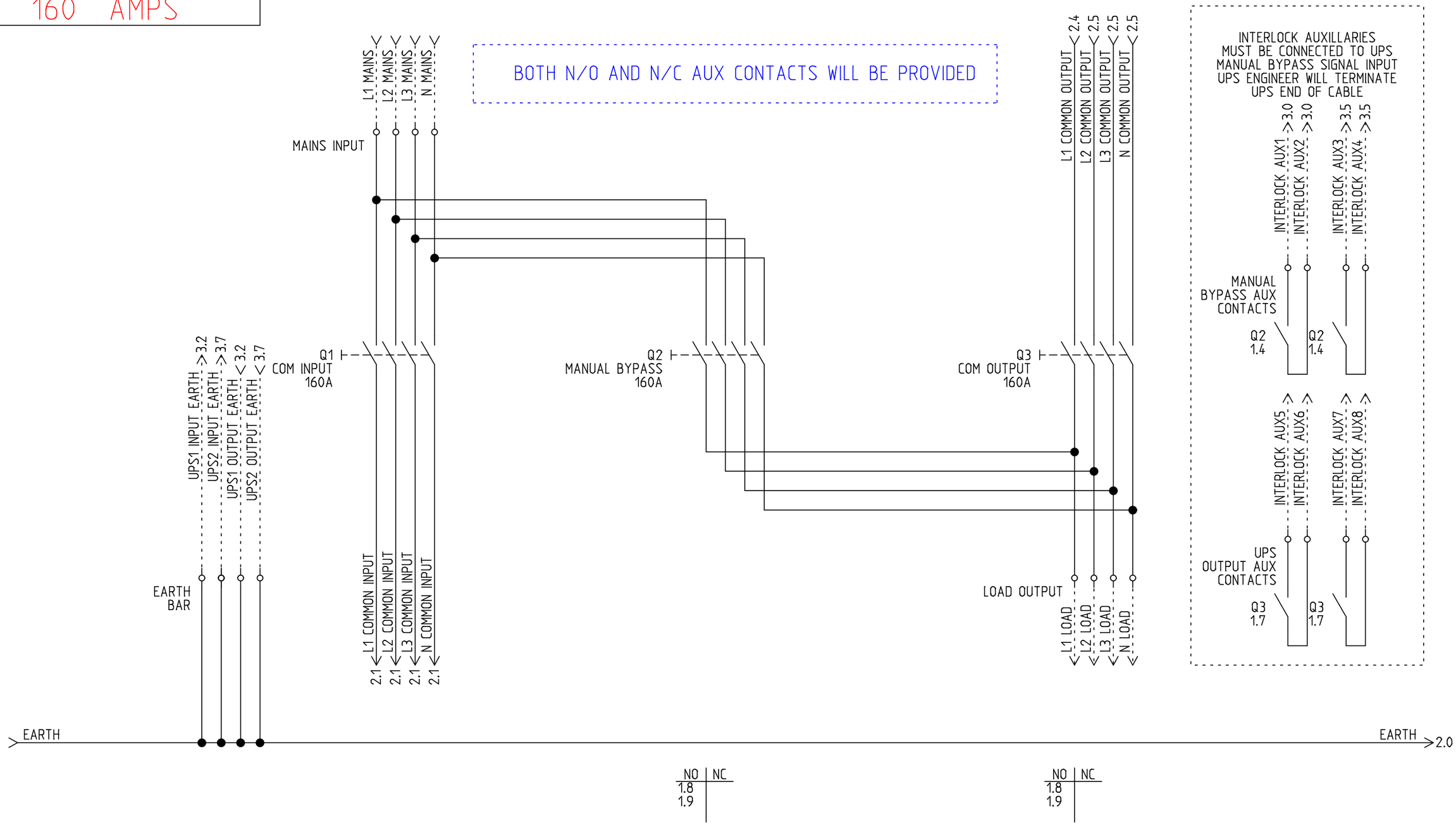
MAX PANEL SUPPLY PROTECTIVE DEVICE RATING:

160 AMPS



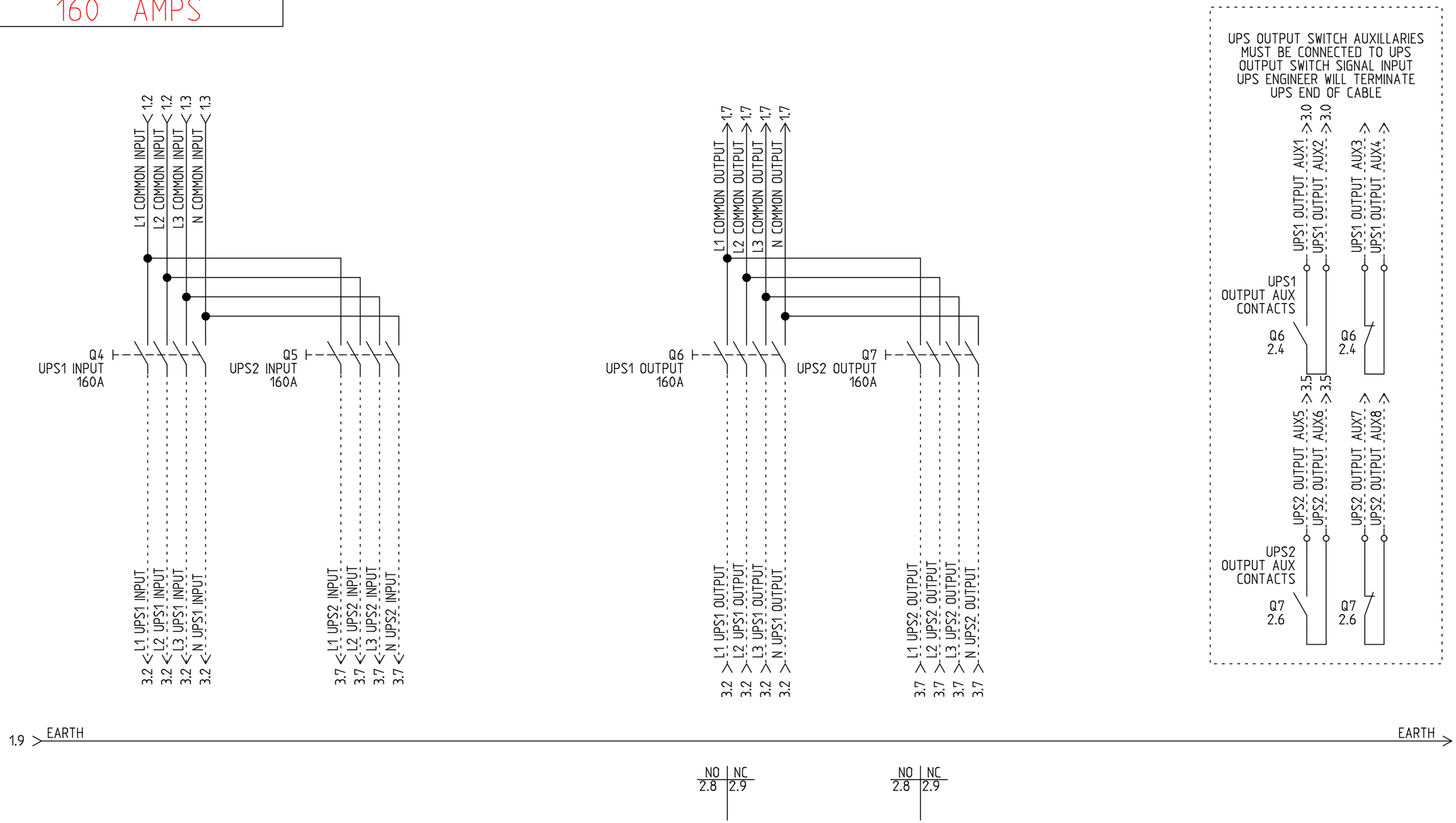
NOTES:

1) PRODUCT MUST BE INSTALLED IN COMPLIANCE WITH ALL NATIONAL AND LOCAL ELECTRICAL REGULATIONS
2) PLEASE REFER TO UPS PRODUCT MANUALS FOR ADDITIONAL INFORMATION
3) ALL DIMENSIONS IN MM UNLESS OTHERWISE SPECIFIED
4) 4 – CORE SHIELDED SIGNAL CABLE MUST BE RUN FROM EMBS TO EACH UPS UNIT
5) ALL DASHED LINES EXTERNAL TO BYPASS PANEL

PRODUCT REF:	RB1–PR2–EMBS–160A–160A–160A–444	REV NO:	
DOCUMENT NUMBER:	RBECAD–00683	CREATION DATE:	29/04/2016
PAGE DESCRIPTION:	MAIN SWITCH'S	REV DATE:	07/05/2020
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	R BARNES
PAGE TEMPLATE REF:	RBQS00075REV2	CHECKED BY:	L RICHARDSON
PRODUCT WEIGHT:	75KG	SHEET NUMBER:	1 OF 5

MAX PANEL SUPPLY PROTECTIVE DEVICE RATING:

160 AMPS



NOTES:

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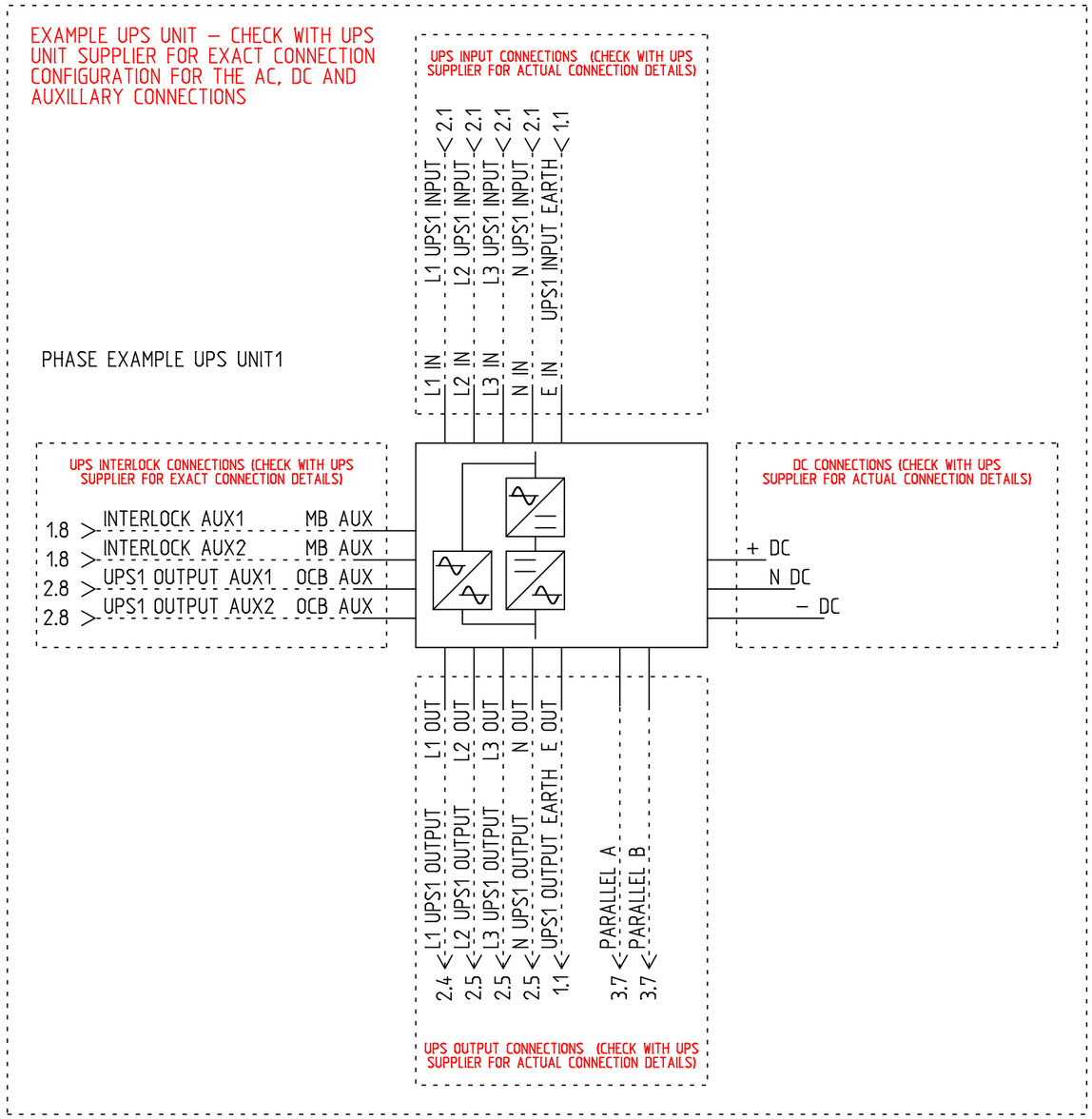
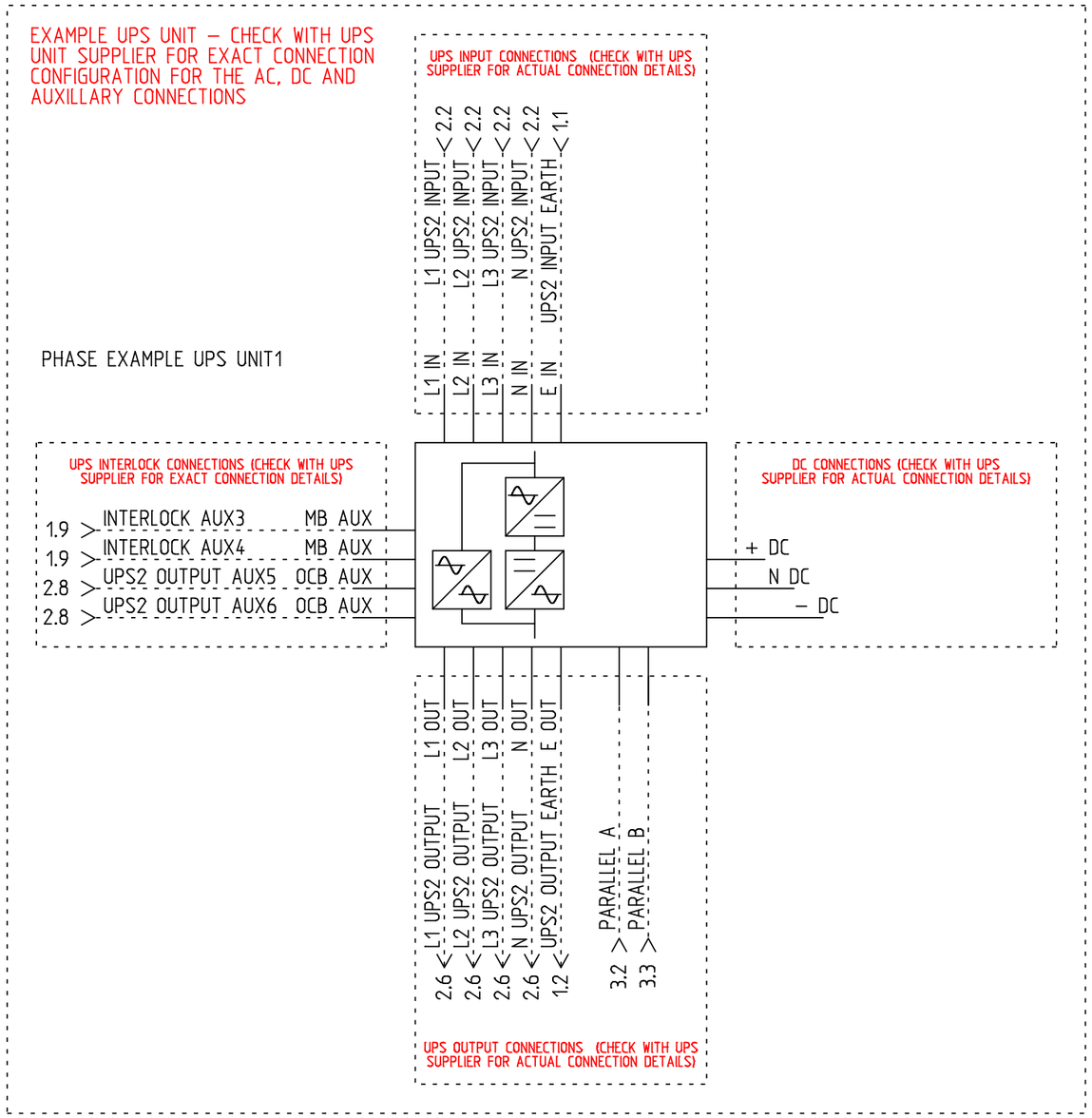
PRODUCT REF:	RB1–PR2–EMBS–160A–160A–160A–444	REV NO:	
DOCUMENT NUMBER:	RBECAD–00683	CREATION DATE:	07/05/2020
PAGE DESCRIPTION:	N+1 SECTION	REV DATE:	07/05/2020
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	R BARNES
PAGE TEMPLATE REF:	RBQS00075REV2	CHECKED BY:	L RICHARDSON
PRODUCT WEIGHT:	75KG	SHEET NUMBER:	2 OF 5





NOTES:

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2) PLEASE REFER TO UPS PRODUCT MANUALS FOR ADDITIONAL INFORMATION
3) ALL DIMENSIONS IN MM UNLESS OTHERWISE SPECIFIED
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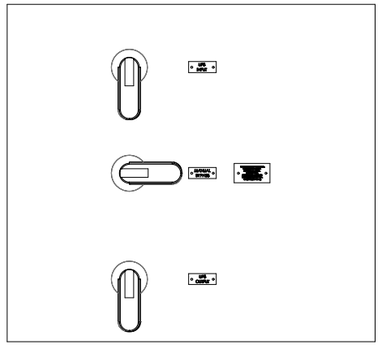
5) ALL DASHED LINES EXTERNAL TO BYPASS PANEL

PRODUCT REF:	RB1–PR2–EMBS–160A–160A–160A–444	REV NO:	
DOCUMENT NUMBER:	RBECAD–00683	CREATION DATE:	25/05/2016
PAGE DESCRIPTION:	UPS UNIT	REV DATE:	07/05/2020
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	R BARNES
PAGE TEMPLATE REF:	RBQS00078REV2	CHECKED BY:	L RICHARDSON
PRODUCT WEIGHT:	75KG	SHEET NUMBER:	3 OF 5

DO NOT USE THIS PROCEDURE IF THE MAINS IS NOT AVAILABLE. IF IN ANY DOUBT CONTACT YOUR UPS SERVICE PROVIDER.

STEP A (NORMAL POSITION)



MANUAL BYPASS:
–IN THE OFF POSITION

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–NORMAL MODE – ONLINE – LOAD ON UPS

STEP B

REFER TO UPS USER MANUAL TO SWITCH THE UPS UNIT (OR UNITS) TO STATIC BYPASS

ONCE UPS UNIT (OR UNITS) ARE IN STATIC BYPASS CONTINUE THE SWITCHING SEQUENCE

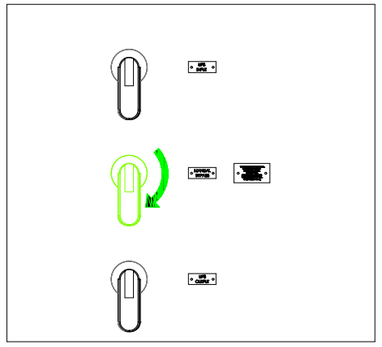
MANUAL BYPASS:
–IN THE OFF POSITION

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

THE UPS MUST BE IN STATIC BYPASS BEFORE CONTINUING OR MAJOR DAMAGE TO THE UPS AND LOSS OF POWER TO THE LOAD WILL OCCUR!

STEP C

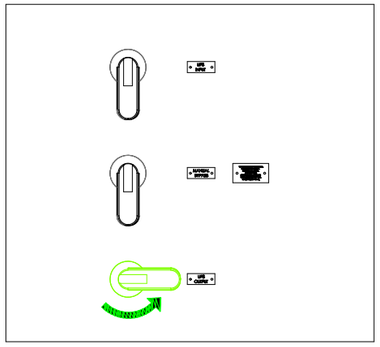


MANUAL BYPASS:
–IN THE ON POSITION

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP D



MANUAL BYPASS:
–IN THE ON POSITION

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP E (ON BYPASS POSITION)

UPS SYSTEM IS NOW ON EXTERNAL BYPASS

TO RETURN TO NORMAL MODE ONLINE UPS OPERATION FOLLOW THE NEXT SEQUENCE

MANUAL BYPASS:
–IN THE ON POSITION

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP F

THIS PROCEDURE ASSUMES:

ALL SWITCH'S ON THE EMBS AND ON THE UPS UNIT SHOULD STILL BE AS PER STEP E ON THE PREVIOUS LINE PRIOR TO PROCEDING

THE UPS UNIT SHOULD BE IN STATIC BYPASS AND SHOULD BE READY TO ACCEPT THE SYSTEM LOAD

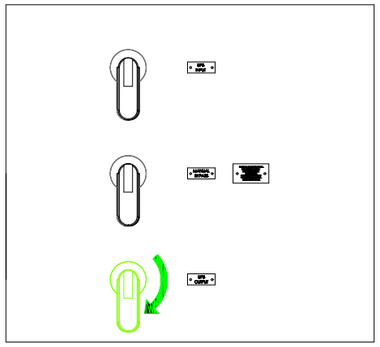
IF IN ANY DOUBT CONTACT YOUR UPS SYSTEM SERVICE PROVIDER BEFORE PROCEDING

MANUAL BYPASS:
–IN THE ON POSITION

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP G

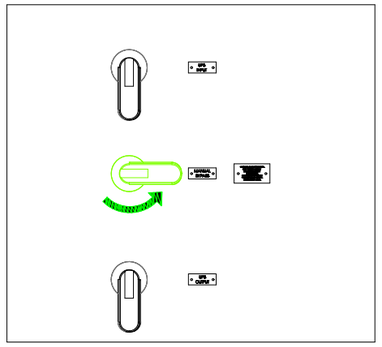


MANUAL BYPASS:
–IN THE ON POSITION

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP H



MANUAL BYPASS:
–IN THE OFF POSITION

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP I

REFER TO UPS USER MANUAL TO SWITCH THE UPS UNIT (OR UNITS) TO ONLINE MODE

ONCE UPS UNIT (OR UNITS) ARE ONLINE THE SEQUENCE IS COMPLETE AND THE LOAD IS NOW BACKED UP BY UPS

IF IN ANY DOUBT CONTACT YOUR UPS SERVICE PROVIDER

MANUAL BYPASS:
–IN THE OFF POSITION

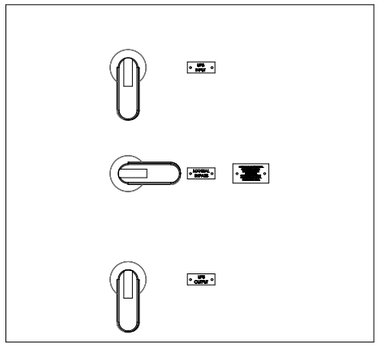
UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–ONLINE – LOAD ON UPS

THE UPS MUST BE IN ONLINE IN NORMAL OPERATION (INVERTER RUNNING) OR LOAD WILL NOT BE PROTECTED.

IF UNSURE CONTACT YOUR UPS SERVICE PROVIDER.

STEP J (NORMAL POSITION)



MANUAL BYPASS:
–IN THE OFF POSITION

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–ONLINE – LOAD ON UPS

NOTES:
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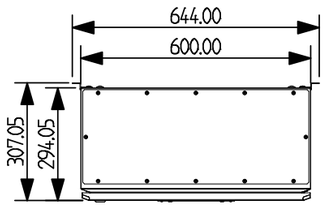
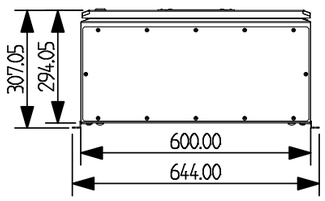
PRODUCT REF:	RB1–PR2–EMBS–160A–160A–160A–444	REV NO:	
DOCUMENT NUMBER:	RBECAD–00683	CREATION DATE:	29/04/2016
PAGE DESCRIPTION:	INTERLOCK OPERATION PAGE	REV DATE:	07/05/2020
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	R BARNES
PAGE TEMPLATE REF:	RBQS00078REV2	CHECKED BY:	L RICHARDSON
PRODUCT WEIGHT:	75KG	SHEET NUMBER:	4 OF 5

ENCLOSURE LAYOUT

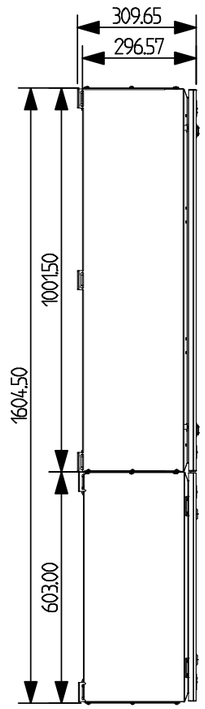
TOP VIEW



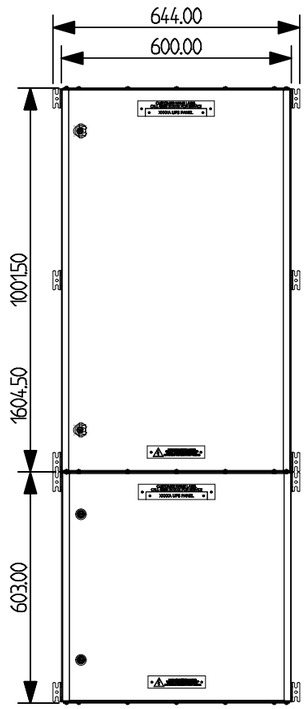
BOTTOM VIEW



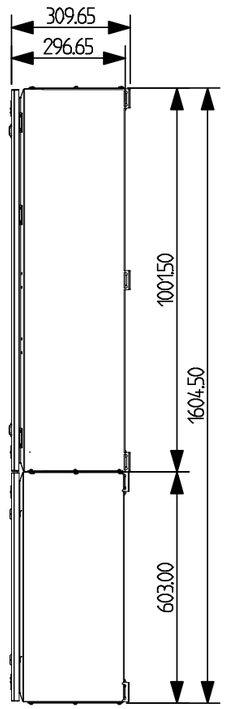
LEFT VIEW



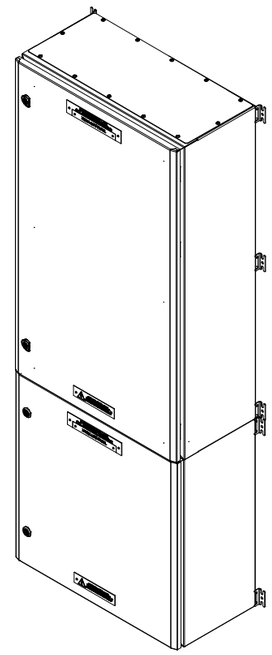
FRONT/REAR VIEW



RIGHT VIEW



ISOMETRIC VIEW



NOTES ON MECHANICAL LAYOUT:

1. ENCLOSURE CAN BE INSTALLED WITHOUT MOUNTING FEET IF PREFERRED
2. DOOR CAN BE HUNG ON OPPOSITE SIDE ON REQUEST

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DOCUMENT NUMBER:	RBECAD–00683	CREATION DATE:	29/04/2016
PAGE DESCRIPTION:	MECHANICAL LAYOUT	REV DATE:	07/05/2020
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	R BARNES
PAGE TEMPLATE REF:	RBQS00078REV2	CHECKED BY:	L RICHARDSON
PRODUCT WEIGHT:	75KG	SHEET NUMBER:	5 OF 5