MAX PANEL SUPPLY PROTECTIVE DEVICE RATING:

100 AMPS

L1 MAINS

MAINS INPUT

Q1
UPS INPUT
100A

L1 UPS INPUT >2.4

MECHANICAL INTERLOCK MODULE

Q2
MANUAL BYPASS
100A

S1
INTERLOCK KEY
(TRAPPED IN NORMAL
OPERATION))

Q3
UPS OUTPUT
100A

L1 UPS OUTPUT >2.4

LOAD OUTPUT

L1 LOAD >

INTERLOCK AUXILLARIES
MUST BE CONNECTED TO UPS
MANUAL BYPASS SIGNAL INPUT
UPS ENGINEER WILL TERMINATE
UPS END OF CABLE

INTERLOCK AUX1 >2.3
INTERLOCK AUX2 >2.3
INTERLOCK AUX3 >
INTERLOCK AUX4 >

INTERLOCK
KEY AUX
CONTACTS

S1
1.6

S1
1.6

NEUTRAL >
EARTH >

NEUTRAL >2.4
EARTH >2.5

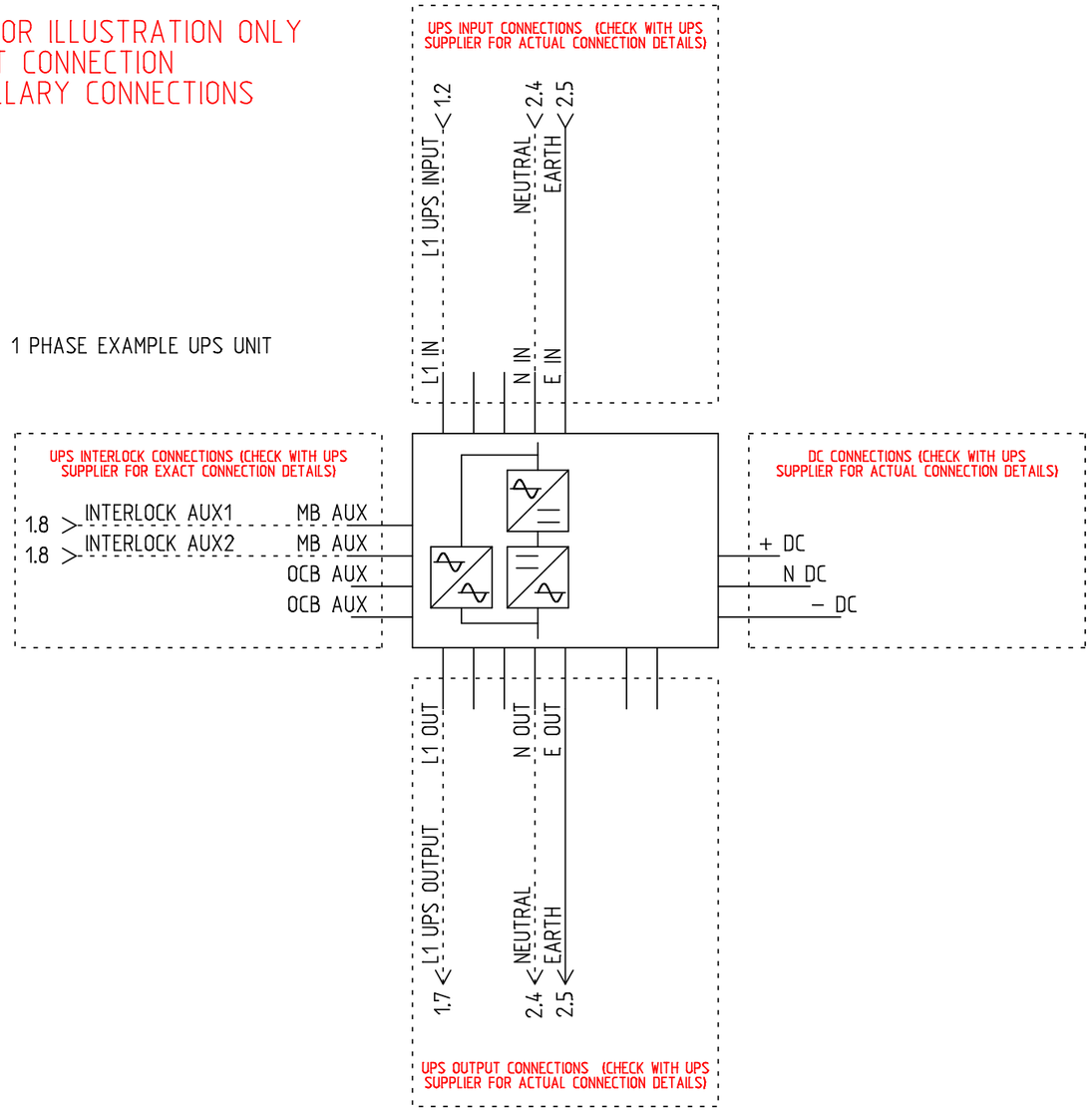
NO	NC
1.8	1.9

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–EMBS–100–1P–MCB	REV NO:	1
DOCUMENT NUMBER:	RBECAD00965	CREATION DATE:	29/04/2016
PAGE DESCRIPTION:	MAIN SWITCH'S	REV DATE:	09/11/2021
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	D WARD
PAGE TEMPLATE REF:	RBQS00075REV2	CHECKED BY:	L RICHARDSON
PRODUCT WEIGHT:	20KG	SHEET NUMBER:	1 OF 5

EXAMPLE UPS UNIT CONNECTION DIAGRAM FOR ILLUSTRATION ONLY
CHECK WITH UPS UNIT SUPPLIER FOR EXACT CONNECTION CONFIGURATION FOR THE AC, DC AND AUXILLARY CONNECTIONS



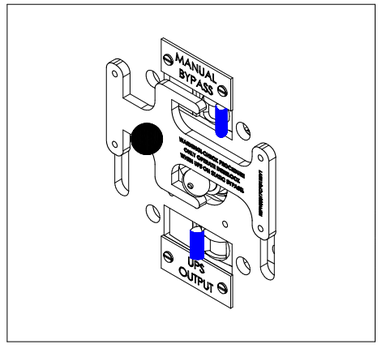
NOTES:

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–EMBS–100–1P–MCB	REV NO:	1
DOCUMENT NUMBER:	RBECAD00965	CREATION DATE:	25/05/2016
PAGE DESCRIPTION:	UPS UNIT	REV DATE:	09/11/2021
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	D WARD
PAGE TEMPLATE REF:	RBQS00078REV2	CHECKED BY:	L RICHARDSON
PRODUCT WEIGHT:	20KG	SHEET NUMBER:	2 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

INTERLOCK KEY :
–INSERTED + TURNED CLOCKWISE

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–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

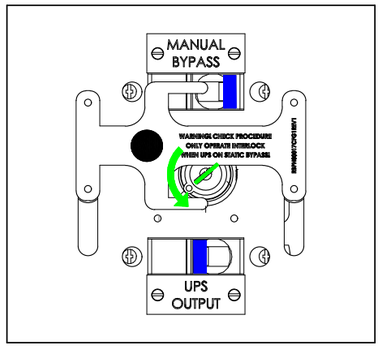
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–INSERTED + TURNED CLOCKWISE

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP C



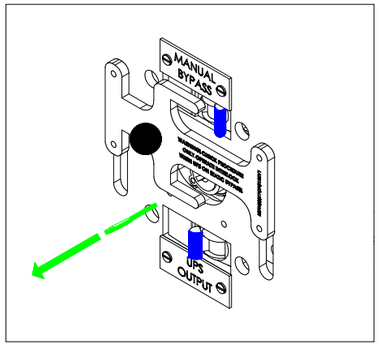
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–INSERTED + TURNED ANTI–CLOCKWISE

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP D



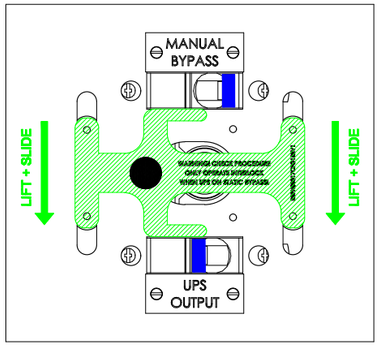
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP E



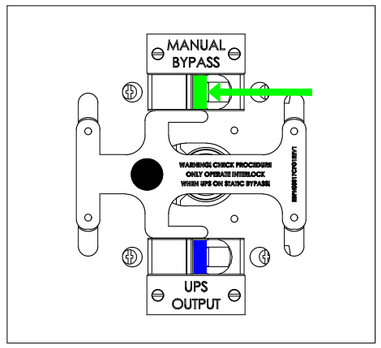
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP F



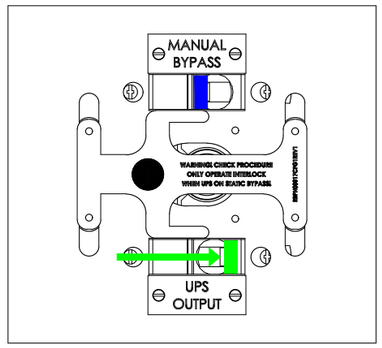
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP G



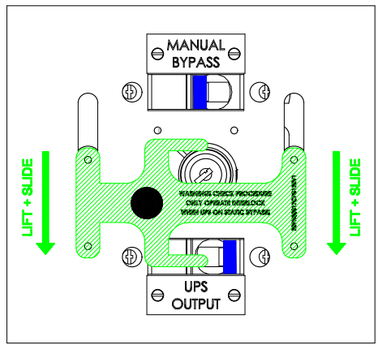
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP H



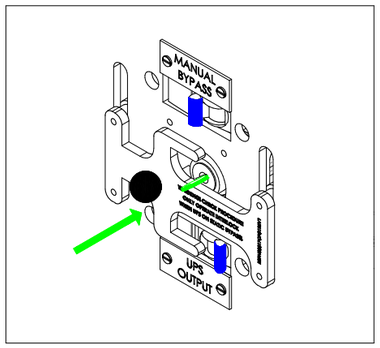
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP I



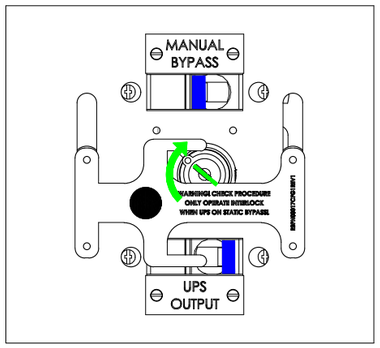
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–INSERTED + TURNED ANTI–CLOCKWISE

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP J



MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–INSERTED + TURNED CLOCKWISE

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–INVERTER RUNNING – LOAD ON MAINS

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–EMBS–100–1P–MCB	REV NO:	1
DOCUMENT NUMBER:	RBECAD00965	CREATION DATE:	29/04/2016
PAGE DESCRIPTION:	INTERLOCK OPERATION PAGE 1	REV DATE:	09/11/2021
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	D WARD
PAGE TEMPLATE REF:	RBQS00078REV2	CHECKED BY:	L RICHARDSON
PRODUCT WEIGHT:	20KG	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 K (ON BYPASS POSITION)

THIS PROCEDURE ASSUMES:

ALL SWITCH'S ON THE EMBS AND ON THE UPS UNIT SHOULD STILL BE AS PER STEP J ON THE PREVIOUS PAGE 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

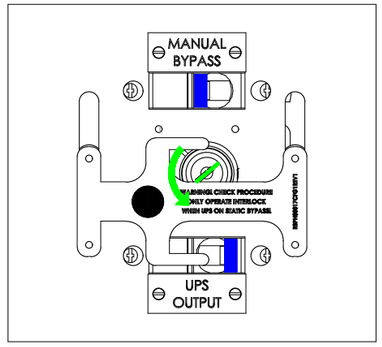
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–INSERTED + TURNED CLOCKWISE

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–INVERTER RUNNING – LOAD ON MAINS

STEP L



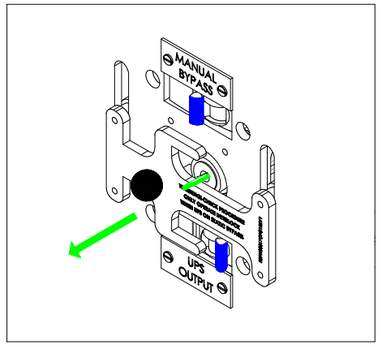
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–INSERTED + TURNED ANTI–CLOCKWISE

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP M



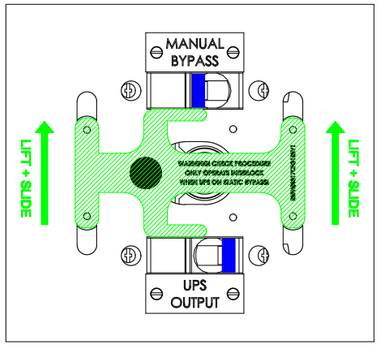
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP N



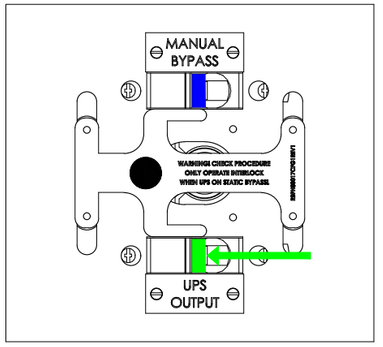
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP O



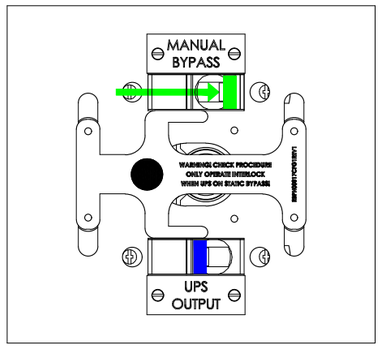
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP P



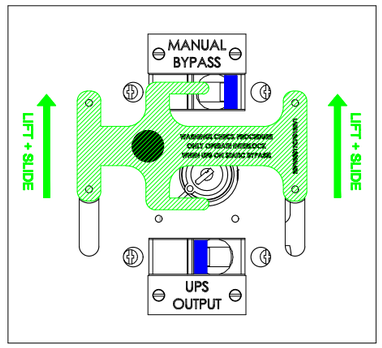
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP Q



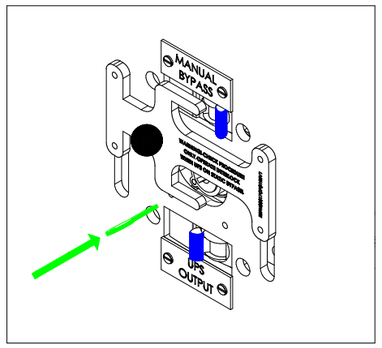
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP R



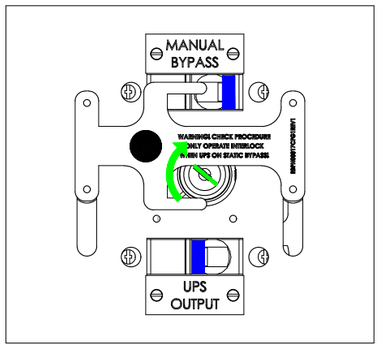
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–INSERTED + TURNED ANTI–CLOCKWISE

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP S



MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–INSERTED + TURNED CLOCKWISE

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

STEP T

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

INTERLOCK KEY :
–INSERTED + TURNED CLOCKWISE

UPS OUTPUT:
–IN THE ON POSITION

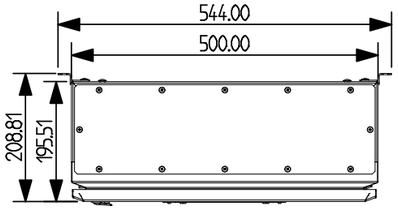
UPS UNIT:
–ONLINE – LOAD ON UPS

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

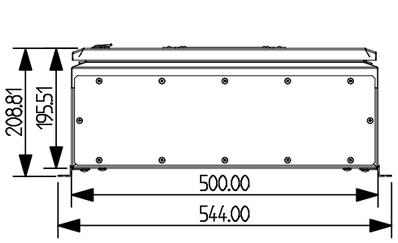
PRODUCT REF:	RB1–EMBS–100–1P–MCB	REV NO:	1
DOCUMENT NUMBER:	RBECAD00965	CREATION DATE:	29/04/2016
PAGE DESCRIPTION:	INTERLOCK OPERATION PAGE 2	REV DATE:	09/11/2021
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	D WARD
PAGE TEMPLATE REF:	RBQS00078REV2	CHECKED BY:	L RICHARDSON
PRODUCT WEIGHT:	20KG	SHEET NUMBER:	4 OF 5

MECHANICAL LAYOUT

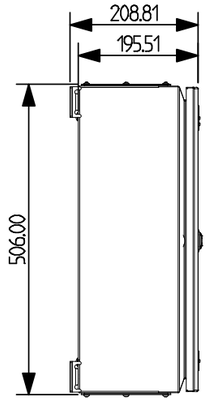
TOP VIEW



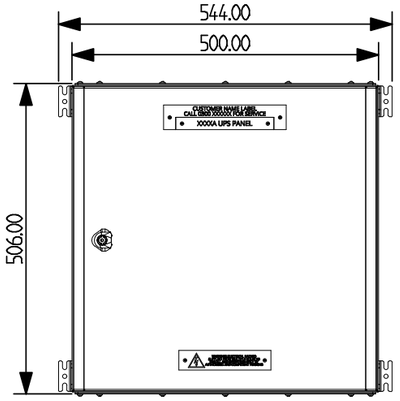
BOTTOM VIEW

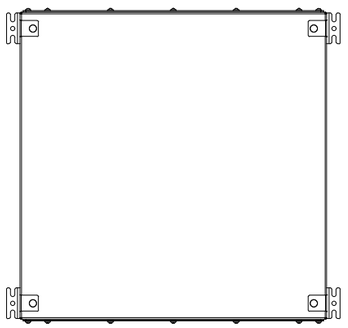


LEFT VIEW

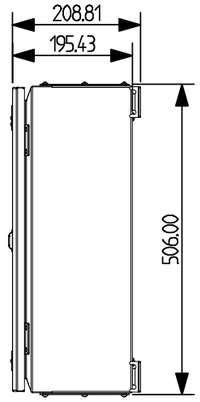


FRONT/REAR VIEW

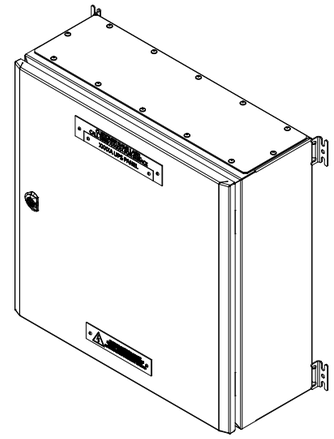




RIGHT VIEW



ISOMETRIC VIEW



NOTES ON MECHANICAL LAYOUT:

1. ENCLOSURE CAN BE INSTALLED WITHOUT MOUNTING FEET IF PREFERRED
2. MOUNTING FEET SUPPLIED LOOSE FOR INSTALLER TO FIT
3. DOOR CAN BE HUNG ON OPPOSITE SIDE ON REQUEST

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–EMBS–100–1P–MCB	REV NO:	1
DOCUMENT NUMBER:	RBECAD00965	CREATION DATE:	29/04/2016
PAGE DESCRIPTION:	MECHANICAL LAYOUT	REV DATE:	09/11/2021
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	D WARD
PAGE TEMPLATE REF:	RBQS00078REV2	CHECKED BY:	L RICHARDSON
PRODUCT WEIGHT:	20KG	SHEET NUMBER:	5 OF 5