MAX PANEL SUPPLY PROTECTIVE DEVICE RATING:

80 AMPS

L1 MAINS

MAINS INPUT

Q1
UPS INPUT
80A

L1 UPS INPUT >2.4

L1 UPS OUTPUT <2.4

MECHANICAL INTERLOCK MODULE

Q2
MANUAL BYPASS
80A

S1
INTERLOCK KEY
(TRAPPED IN NORMAL
OPERATION))

Q3
UPS OUTPUT
80A

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

LOAD OUTPUT

L1 LOAD <

NEUTRAL >2.4
EARTH >2.5

NEUTRAL >
EARTH >

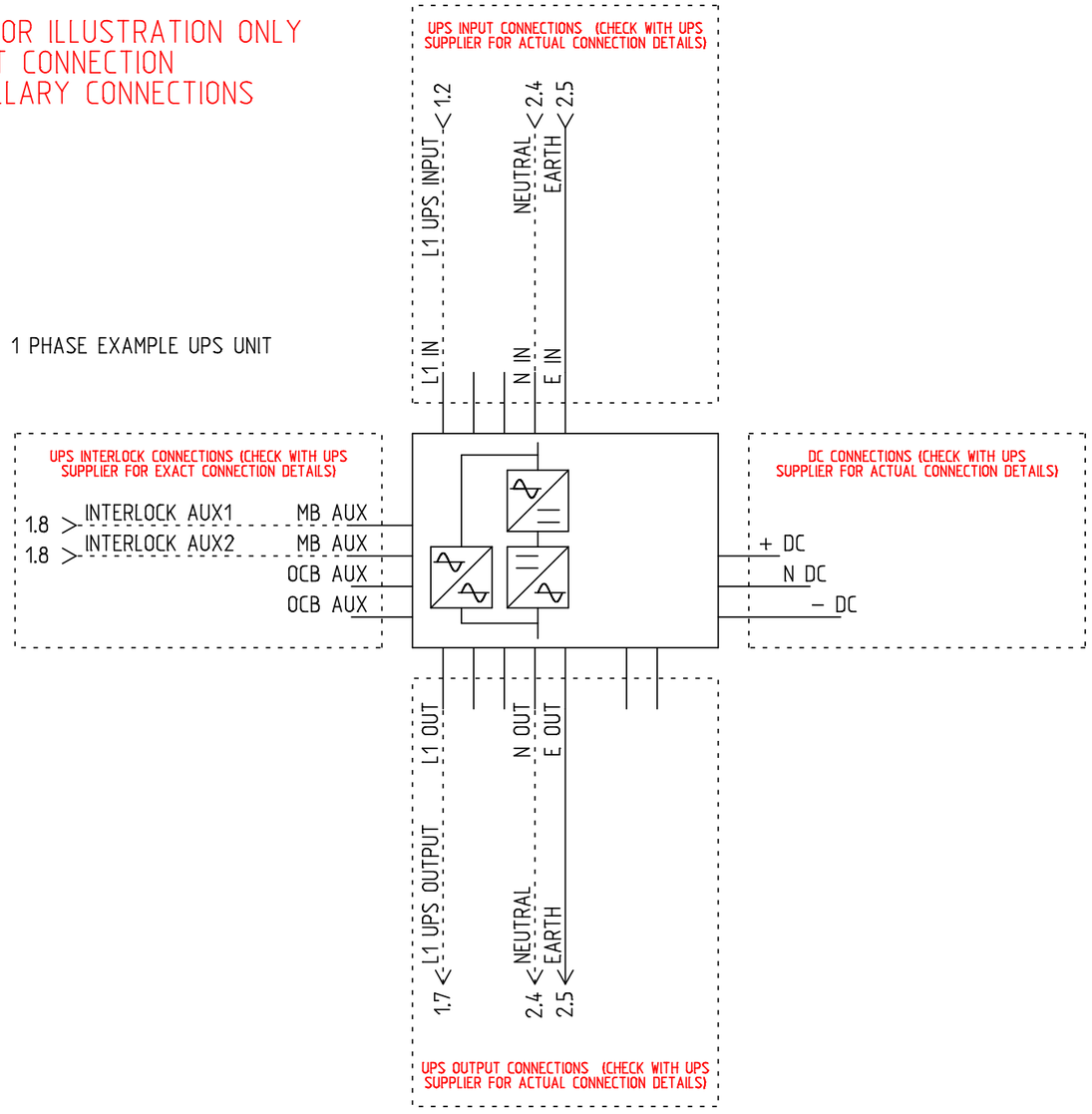
| NO | NC |
|---|---|
| 1.8 | 1.9 |

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–80A–1P–MCB | REV NO: | 1 |
| DOCUMENT NUMBER: | RBECAD00966 | 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



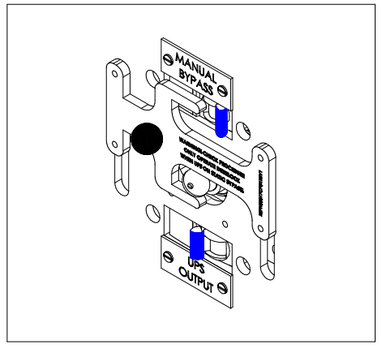

NOTES:

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–80A–1P–MCB | REV NO: | 1 |
| DOCUMENT NUMBER: | RBECAD00966 | 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

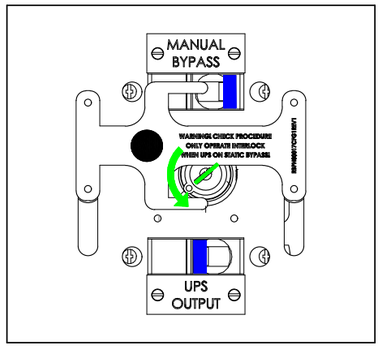
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–INSERTED + TURNED CLOCKWISE

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

## STEP C



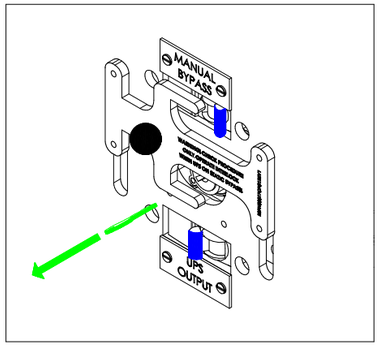

MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–INSERTED + TURNED ANTI–CLOCKWISE

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

## STEP D



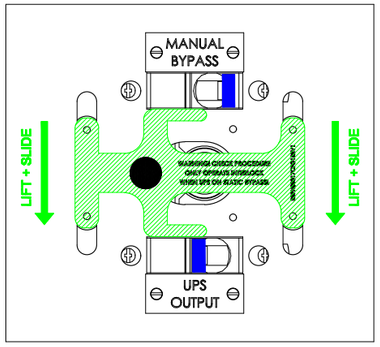

MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

## STEP E



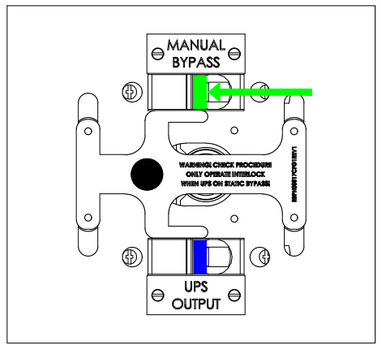

MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

## STEP F



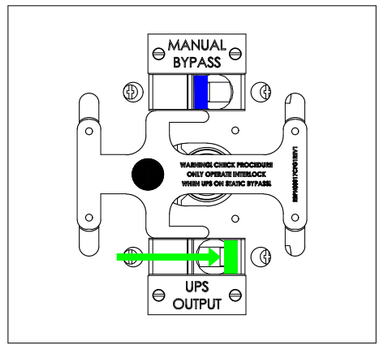

MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

## STEP G



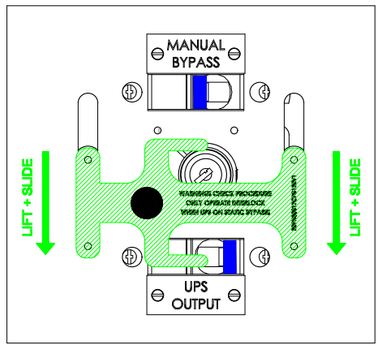

MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

## STEP H



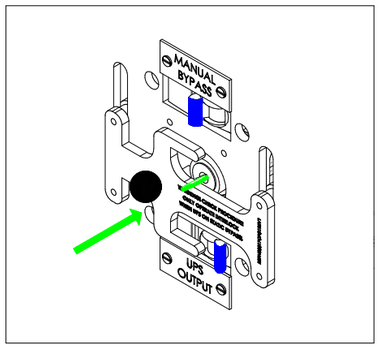

MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

## STEP I



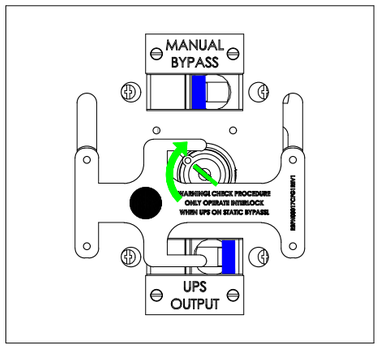

MANUAL BYPASS:
–IN THE ON POSITION

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–80A–1P–MCB | REV NO: | 1 |
| DOCUMENT NUMBER: | RBECAD00966 | 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

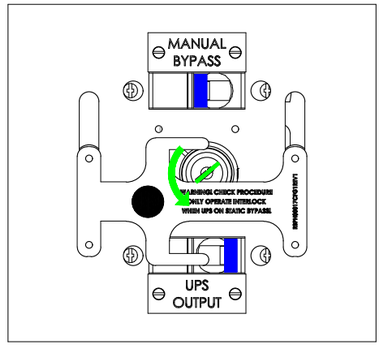
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–INSERTED + TURNED CLOCKWISE

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–INVERTER RUNNING – LOAD ON MAINS

## STEP L



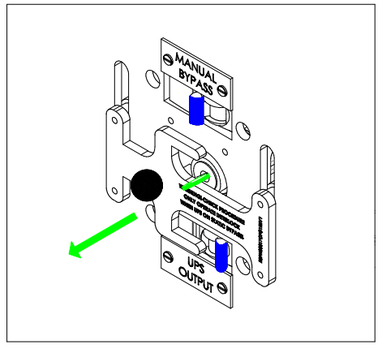

MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–INSERTED + TURNED ANTI–CLOCKWISE

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

## STEP M



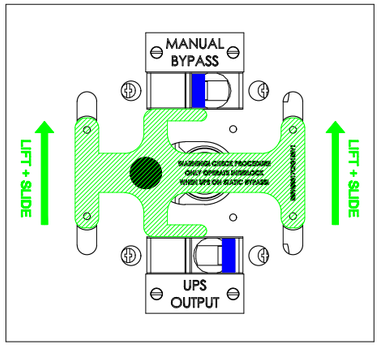

MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

## STEP N



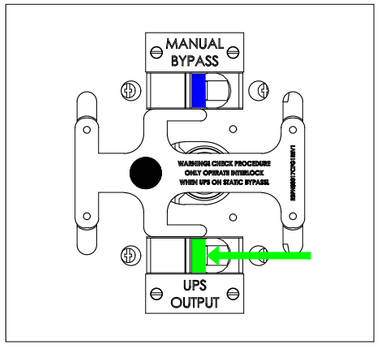

MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

## STEP O



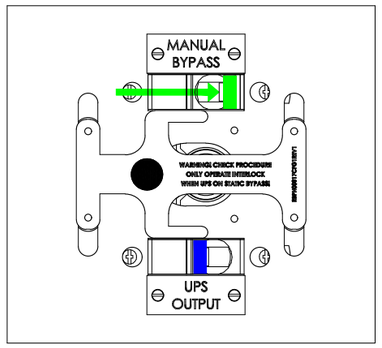

MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

## STEP P



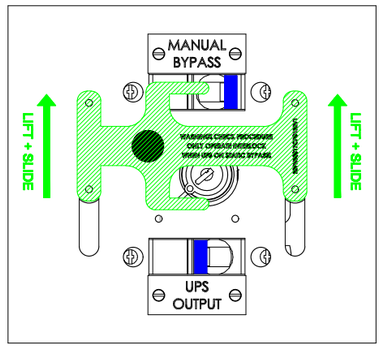

MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

## STEP Q



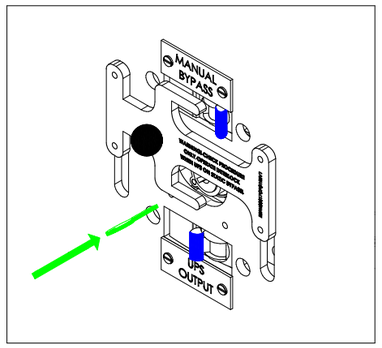

MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS

## STEP R



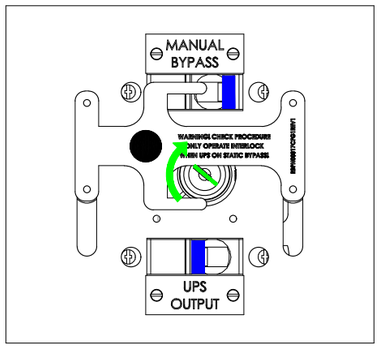

MANUAL BYPASS:
–IN THE OFF POSITION

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

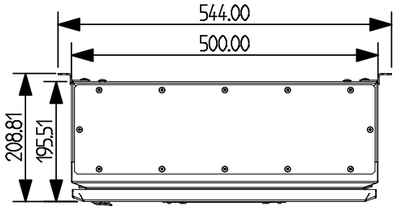
UPS UNIT:
–ONLINE – LOAD ON UPS

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–80A–1P–MCB | REV NO: | 1 |
| DOCUMENT NUMBER: | RBECAD00966 | 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

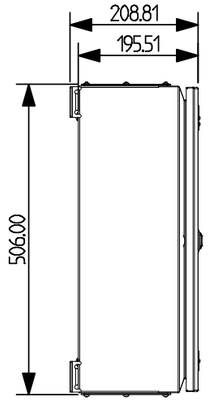
## TOP VIEW



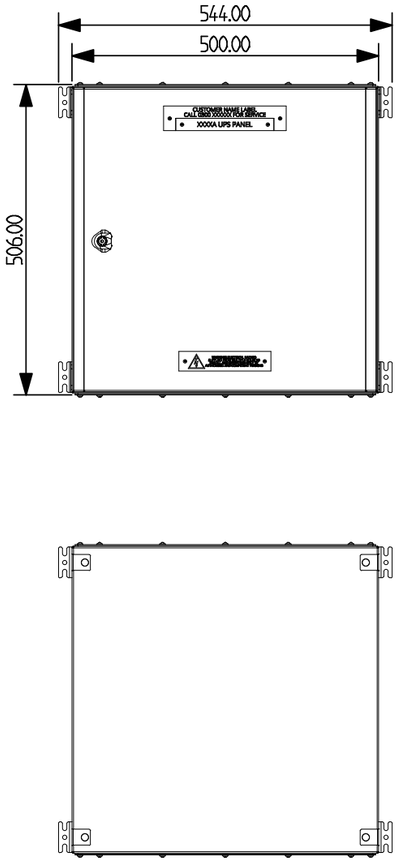

## BOTTOM VIEW



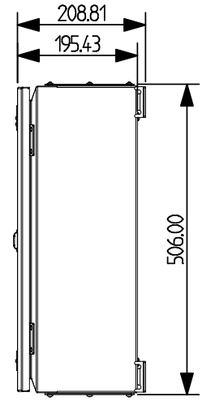

# LEFT VIEW



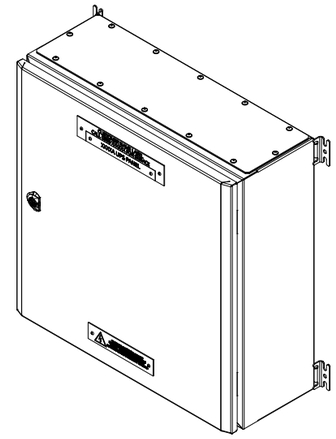

# FRONT/REAR VIEW




# 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–80A–1P–MCB | REV NO: | 1 |
| DOCUMENT NUMBER: | RBECAD00966 | 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 |