MAX PANEL SUPPLY PROTECTIVE DEVICE RATING:

125 AMPS

L1 MAINS
L2 MAINS
L3 MAINS
N MAINS

MAINS INPUT

Q1
RECTIFIER INPUT
125A

Q2
RES INPUT
125A

Q3
MANUAL BYPASS
125A

MECHANICAL INTERLOCK MODULE

S1
INTERLOCK KEY
(TRAPPED IN NORMAL
OPERATION))

Q4
UPS OUTPUT
125A

L1 UPS OUTPUT > 2.4
L2 UPS OUTPUT > 2.4
L3 UPS OUTPUT > 2.4
N UPS OUTPUT > 2.4

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

L1 UPS INPUT RECTIFIER < 2.4
L2 UPS INPUT RECTIFIER < 2.4
L3 UPS INPUT RECTIFIER < 2.4
N UPS INPUT RECTIFIER < 2.4

L1 UPS INPUT RESERVE < 2.5
L2 UPS INPUT RESERVE < 2.5
L3 UPS INPUT RESERVE < 2.5
N UPS INPUT RESERVE < 2.5

LOAD OUTPUT

L1 LOAD <
L2 LOAD <
L3 LOAD <
N LOAD <

> EARTH

EARTH > 2.5

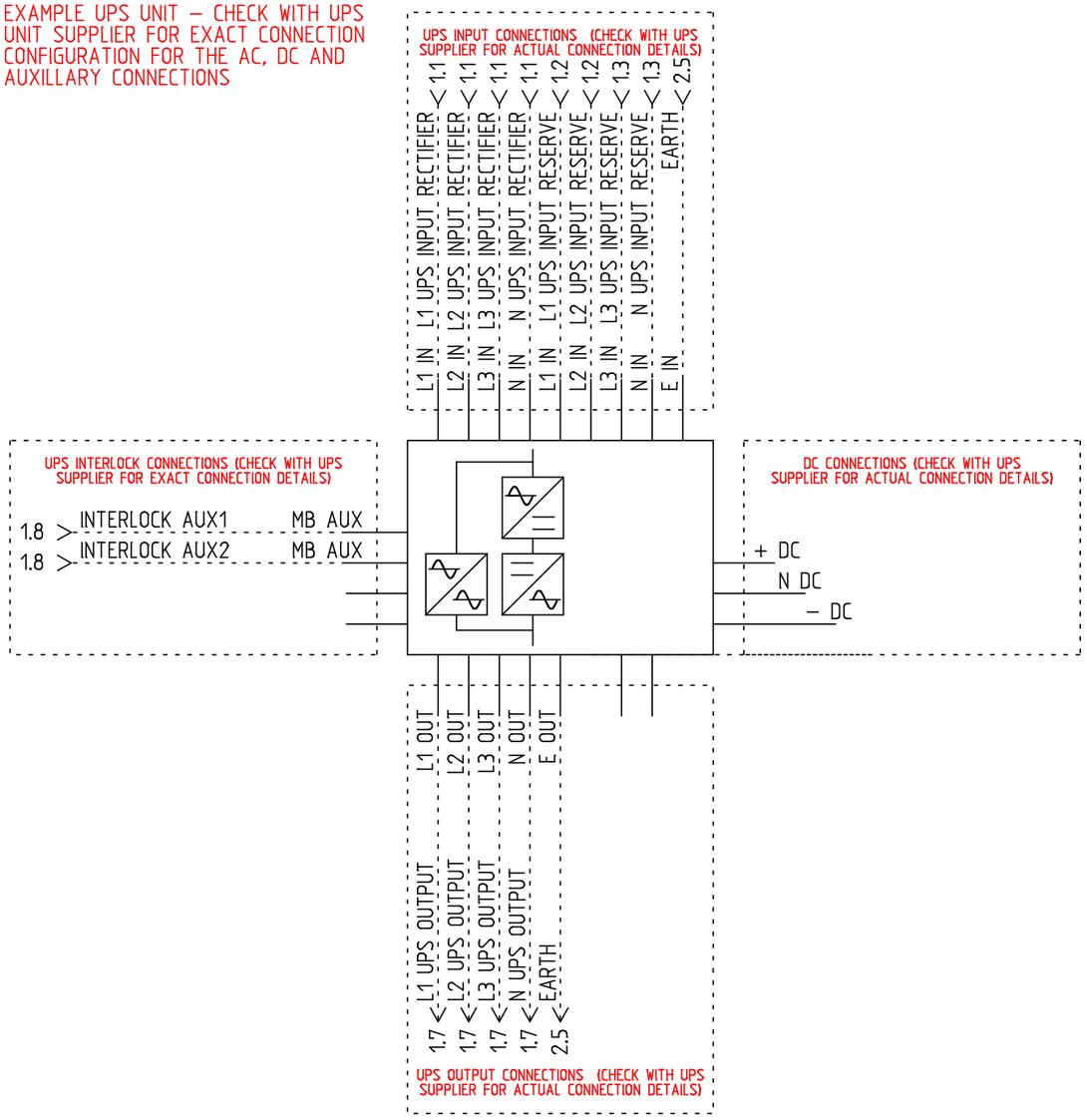
NO	NC
1.8	1.9

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–125A–4P–ISO–4444–1M	REV NO:	1
DOCUMENT NUMBER:	RBECAD00972	CREATION DATE:	29/04/2016
PAGE DESCRIPTION:	MAIN SWITCH'S	REV DATE:	19/11/2021
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	L RICHARDSON
PAGE TEMPLATE REF:	RBQS00075REV2	CHECKED BY:	R BARNES
PRODUCT WEIGHT:	25KG	SHEET NUMBER:	1 OF 5

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



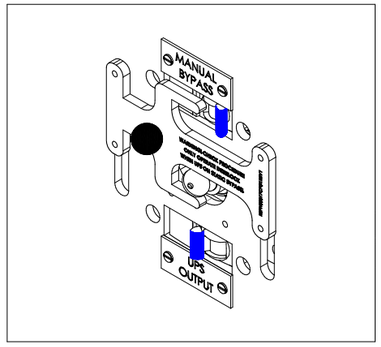
NOTES:

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–125A–4P–ISO–4444–1M	REV NO:	1
DOCUMENT NUMBER:	RBECAD00972	CREATION DATE:	11/05/2016
PAGE DESCRIPTION:	UPS UNIT	REV DATE:	19/11/2021
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	L RICHARDSON
PAGE TEMPLATE REF:	RBQS00078REV2	CHECKED BY:	R BARNES
PRODUCT WEIGHT:	25KG	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
–UPS INVERTER NOT BLOCKED

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

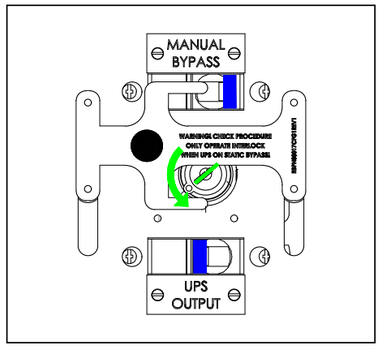
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–INSERTED + TURNED CLOCKWISE

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER NOT BLOCKED

STEP C



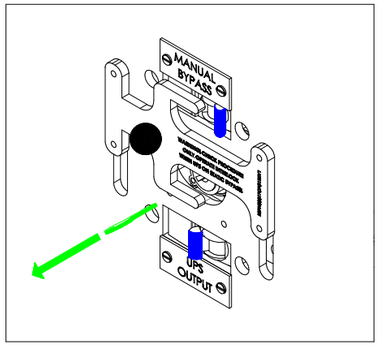
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–INSERTED + TURNED ANTI–CLOCKWISE

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER BLOCKED

STEP D



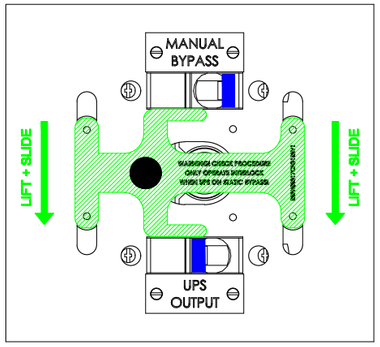
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER BLOCKED

STEP E



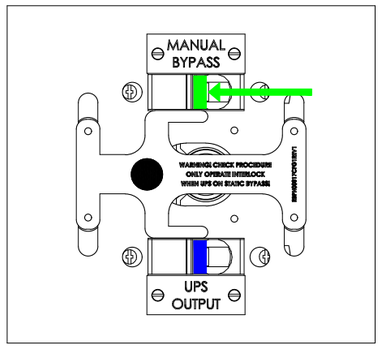
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER BLOCKED

STEP F



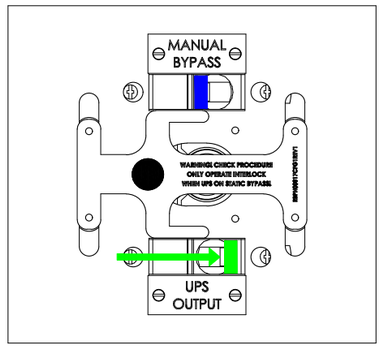
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER BLOCKED

STEP G



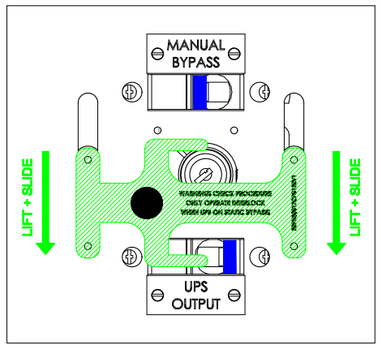
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER BLOCKED

STEP H



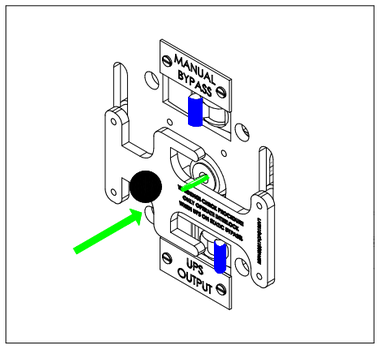
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER BLOCKED

STEP I



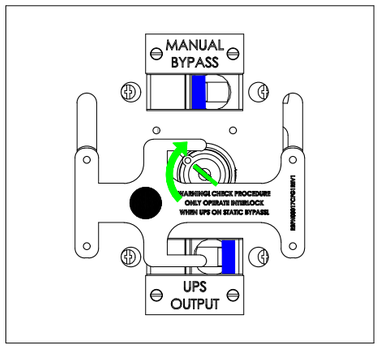
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–INSERTED + TURNED ANTI–CLOCKWISE

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER BLOCKED

STEP J



MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–INSERTED + TURNED CLOCKWISE

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER NOT BLOCKED

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–125A–4P–ISO–4444–1M	REV NO:	1
DOCUMENT NUMBER:	RBECAD00972	CREATION DATE:	29/04/2016
PAGE DESCRIPTION:	INTERLOCK OPERATION PAGE 1	REV DATE:	19/11/2021
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	L RICHARDSON
PAGE TEMPLATE REF:	RBQS00078REV2	CHECKED BY:	R BARNES
PRODUCT WEIGHT:	25KG	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

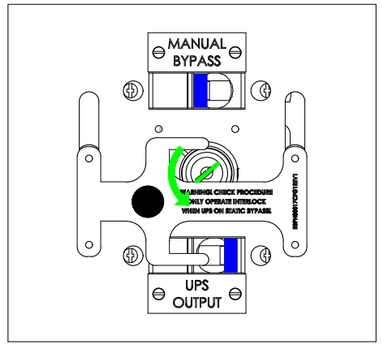
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–INSERTED + TURNED CLOCKWISE

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER NOT BLOCKED

STEP L



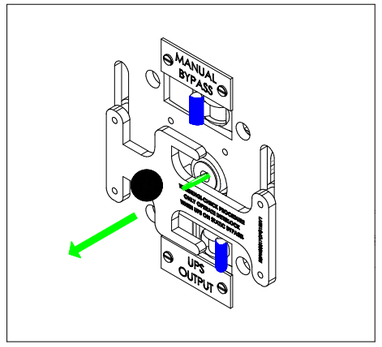
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–INSERTED + TURNED ANTI–CLOCKWISE

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER BLOCKED

STEP M



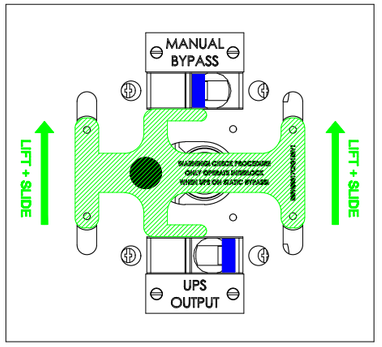
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER BLOCKED

STEP N



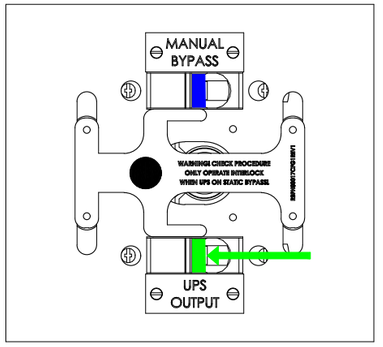
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE OFF POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER BLOCKED

STEP O



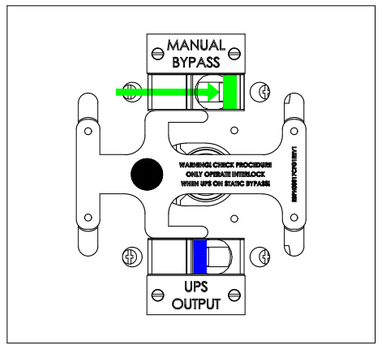
MANUAL BYPASS:
–IN THE ON POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER BLOCKED

STEP P



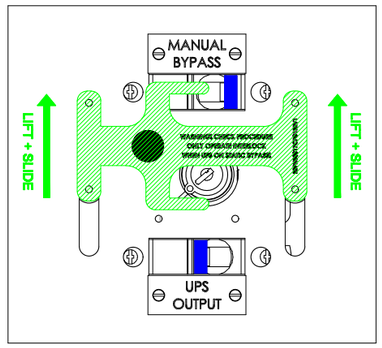
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER BLOCKED

STEP Q



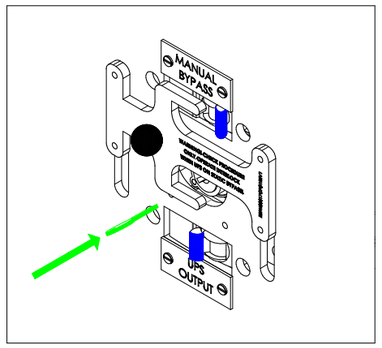
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–REMOVED

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER BLOCKED

STEP R



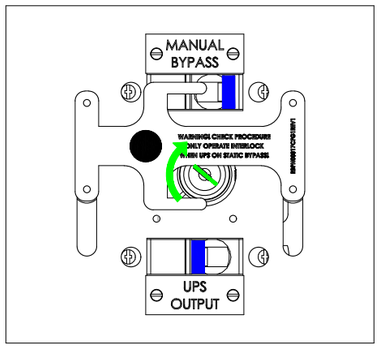
MANUAL BYPASS:
–IN THE OFF POSITION

INTERLOCK KEY :
–INSERTED + TURNED ANTI–CLOCKWISE

UPS OUTPUT:
–IN THE ON POSITION

UPS UNIT:
–STATIC BYPASS – LOAD ON MAINS
–UPS INVERTER BLOCKED

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
–UPS INVERTER NOT BLOCKED

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

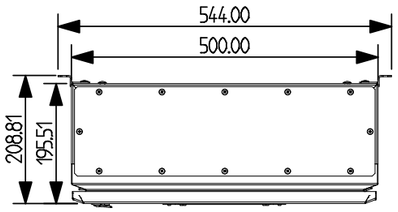
UPS UNIT:
–ONLINE – LOAD ON UPS
–UPS INVERTER NOT BLOCKED

NOTES:
1) PRODUCT MUST BE INSTALLED IN COMPLIANCE WITH ALL NATIONAL AND LOCAL ELECTRICAL REGULATIONS
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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

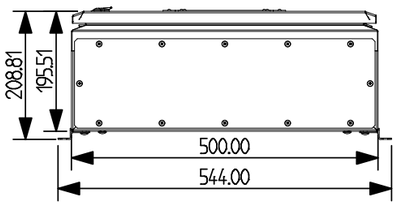
PRODUCT REF:	RB1–EMBS–125A–4P–ISO–4444–1M	REV NO:	1
DOCUMENT NUMBER:	RBECAD00972	CREATION DATE:	29/04/2016
PAGE DESCRIPTION:	INTERLOCK OPERATION PAGE 2	REV DATE:	19/11/2021
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	L RICHARDSON
PAGE TEMPLATE REF:	RBQS00078REV2	CHECKED BY:	R BARNES
PRODUCT WEIGHT:	25KG	SHEET NUMBER:	4 OF 5

MECHANICAL LAYOUT

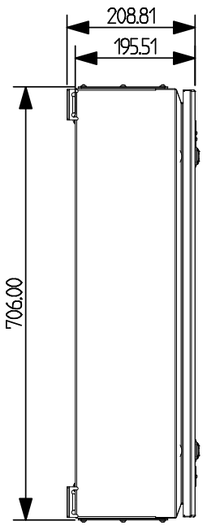
TOP VIEW



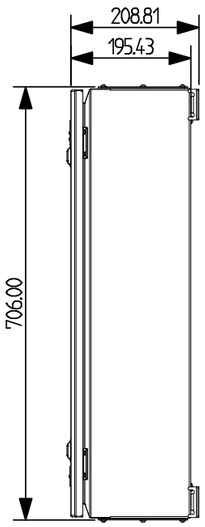
BOTTOM VIEW



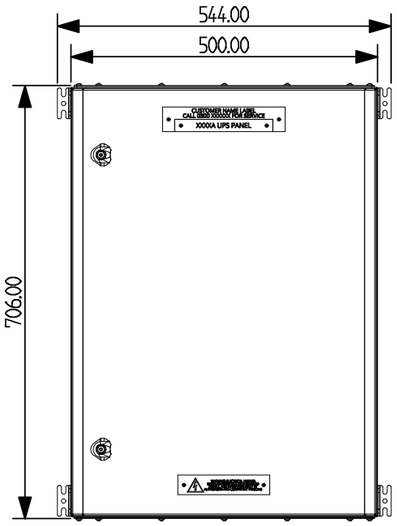
LEFT VIEW

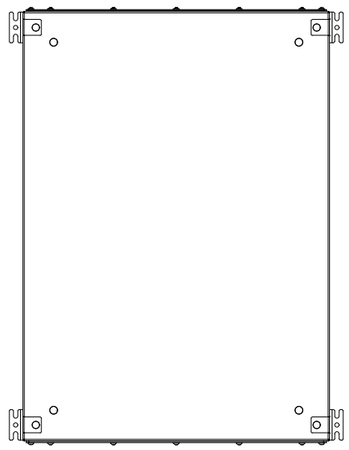


RIGHT VIEW

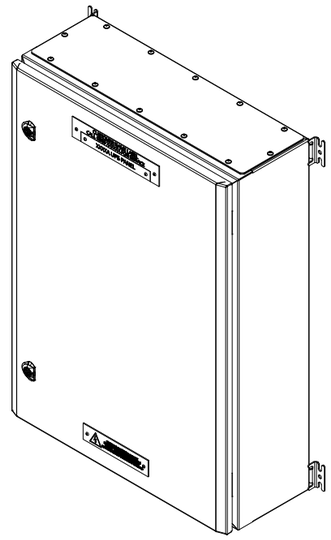


FRONT/REAR VIEW





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
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4) 4 – CORE SHIELDED SIGNAL CABLE MUST BE RUN FROM EMBS TO EACH UPS UNIT
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PRODUCT REF:	RB1–EMBS–125A–4P–ISO–4444–1M	REV NO:	1
DOCUMENT NUMBER:	RBECAD00972	CREATION DATE:	29/04/2016
PAGE DESCRIPTION:	MECHANICAL LAYOUT	REV DATE:	19/11/2021
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	L RICHARDSON
PAGE TEMPLATE REF:	RBQS00078REV2	CHECKED BY:	R BARNES
PRODUCT WEIGHT:	25KG	SHEET NUMBER:	5 OF 5