0	1	2	3	4	5	6	7	8	9

MAX PANEL SUPPLY PROTECTIVE DEVICE RATING:

125 AMPS

L1 MAINS
L2 MAINS
L3 MAINS

MAINS INPUT

L1 UPS OUTPUT 2.4
L2 UPS OUTPUT 2.4
L3 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

MECHANICAL INTERLOCK MODULE

Q1
UPS INPUT
125A

Q2
MANUAL BYPASS
125A

S1
INTERLOCK KEY
(TRAPPED IN NORMAL
OPERATION))

Q3
UPS OUTPUT
125A

LOAD OUTPUT

L1 UPS INPUT
L2 UPS INPUT
L3 UPS INPUT

2.4
2.4
2.4

L1 LOAD
L2 LOAD
L3 LOAD

NEUTRAL
EARTH
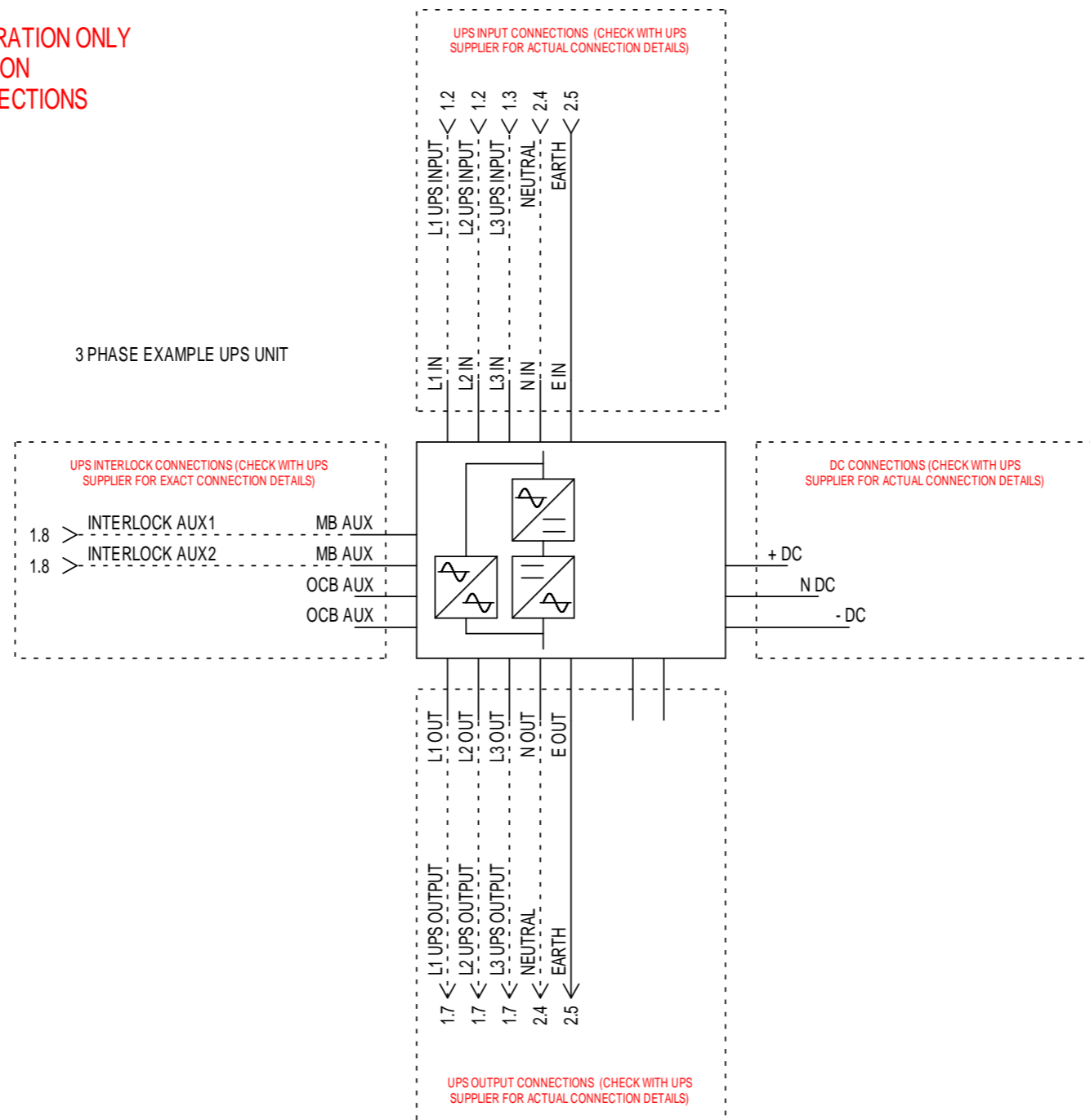
NEUTRAL 2.4
EARTH 2.5

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-125A-3P-MCB	REV NO:	1
DOCUMENT NUMBER:	RBECAD00104	CREATION DATE:	29/04/2016
PAGE DESCRIPTION:	MAIN SWITCH'S	REV DATE:	25/05/2016
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	R BARNES
PAGE TEMPLATE REF:	RBQS00075REV2	CHECKED BY:	M BRADLEY
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**

UPS INPUT CONNECTIONS (CHECK WITH UPS
SUPPLIER FOR ACTUAL CONNECTION DETAILS)

L1 UPS INPUT   1.2
L2 UPS INPUT   1.2
L3 UPS INPUT   1.3
NEUTRAL   2.4
EARTH   2.5

L1 IN
L2 IN
L3 IN
N IN
E IN

3 PHASE EXAMPLE UPS UNIT

UPS INTERLOCK CONNECTIONS (CHECK WITH UPS
SUPPLIER FOR EXACT CONNECTION DETAILS)

1.8   INTERLOCK AUX1   MB AUX
1.8   INTERLOCK AUX2   MB AUX
            OCB AUX
            OCB AUX

DC CONNECTIONS (CHECK WITH UPS
SUPPLIER FOR ACTUAL CONNECTION DETAILS)

+ DC
N DC
- DC

L1 OUT
L2 OUT
L3 OUT
N OUT
E OUT

L1 UPS OUTPUT   1.7
L2 UPS OUTPUT   1.7
L3 UPS OUTPUT   1.7
NEUTRAL   2.4
EARTH   2.5

UPS OUTPUT CONNECTIONS (CHECK WITH UPS
SUPPLIER FOR ACTUAL CONNECTION DETAILS)

NOTES:

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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-3P-MCB	REV NO:	1
DOCUMENT NUMBER:	RBECAD00104	CREATION DATE:	25/05/2016
PAGE DESCRIPTION:	UPS UNIT	REV DATE:	25/05/2016
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	R BARNES
PAGE TEMPLATE REF:	RBQS00078REV2	CHECKED BY:	M BRADLEY
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.

0	1	2	3	4	5	6	7	8	9

STEP A (NORMAL POSITION)
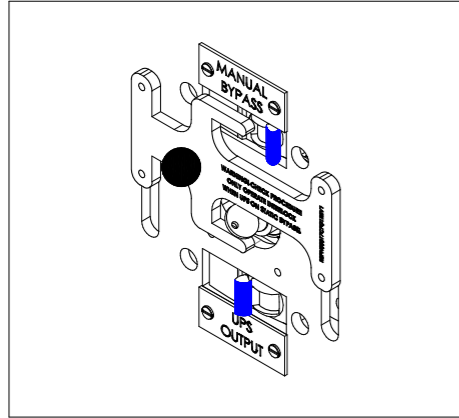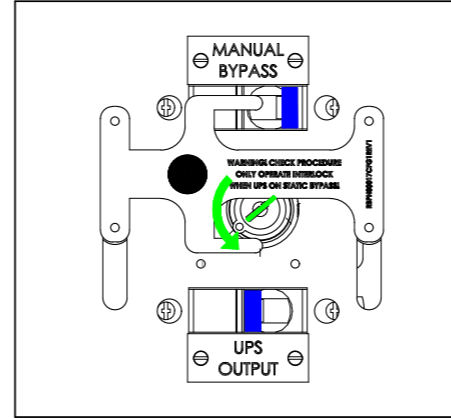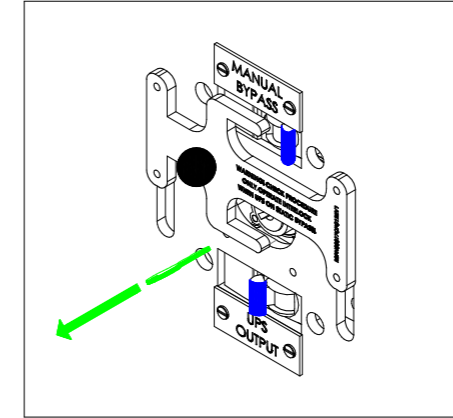

MANUAL BYPASS:
-IN THE OFF POSITION

INTERLOCK KEY :
-INSERTED + TURNED CLOCKWISE

UPS OUTPUT:
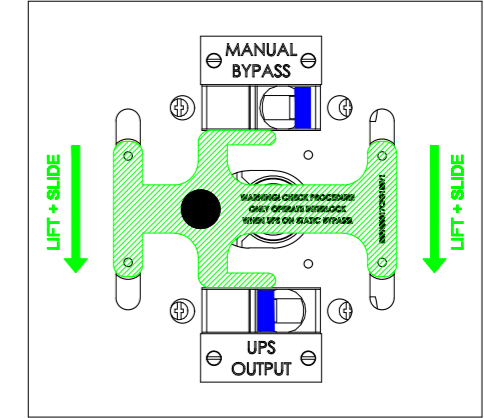-IN THE ON POSITION

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
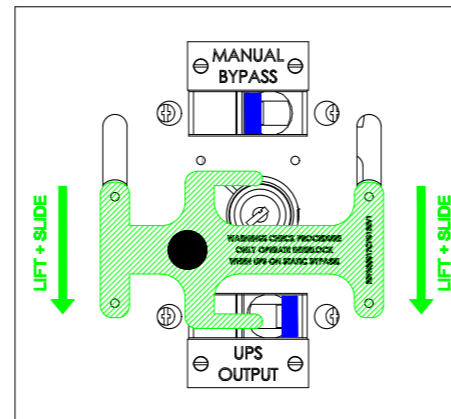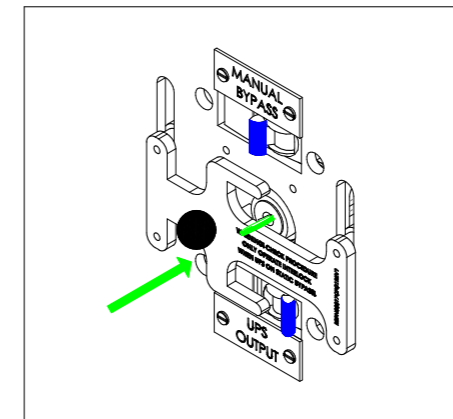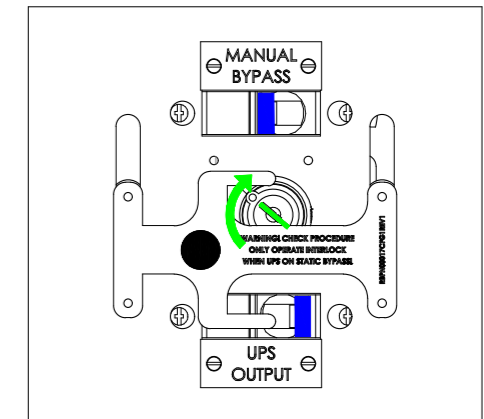
UPS UNIT:
-STATIC BYPASS - LOAD ON MAINS

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
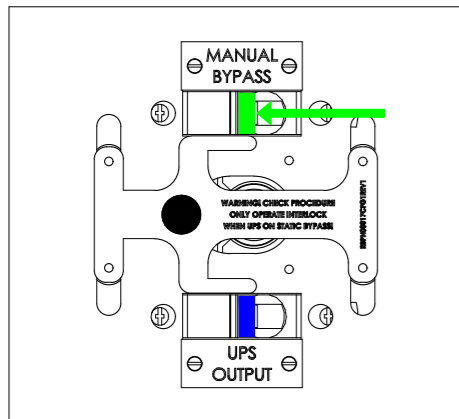
MANUAL BYPASS:
-IN THE ON POSITION

INTERLOCK KEY :
-REMOVED

UPS OUTPUT:
-IN THE ON POSITION

UPS UNIT:
-STATIC BYPASS - LOAD ON MAINS

STEP G
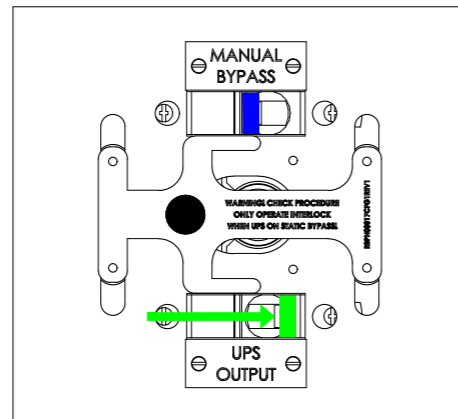
MANUAL BYPASS:
-IN THE ON POSITION

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:

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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-3P-MCB	REV NO:	1
DOCUMENT NUMBER:	RBECAD00104	CREATION DATE:	29/04/2016
PAGE DESCRIPTION:	INTERLOCK OPERATION PAGE 1	REV DATE:	25/05/2016
PROJECT NO:	SUBMITTAL DRAWING	DRAWN BY:	R BARNES
PAGE TEMPLATE REF:	RBQS00078REV2	CHECKED BY:	M BRADLEY
PRODUCT WEIGHT:	20KG	SHEET NUMBER:	3 OF 5

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

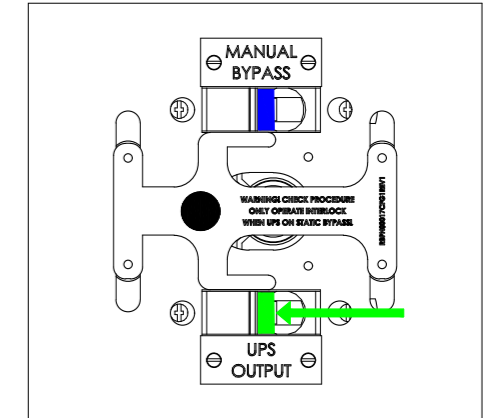IF IN ANY DOUBT CONTACT YOUR
UPS SYSTEM SERVICE PROVIDER
BEFORE PROCEDING

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
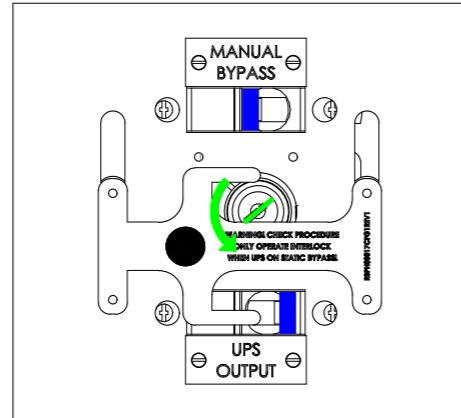
MANUAL BYPASS:
-IN THE ON POSITION

INTERLOCK KEY :
-INSERTED + TURNED ANTI-CLOCKWISE

UPS OUTPUT:
-IN THE OFF POSITION

UPS UNIT:
-STATIC BYPASS - LOAD ON MAINS

STEP M
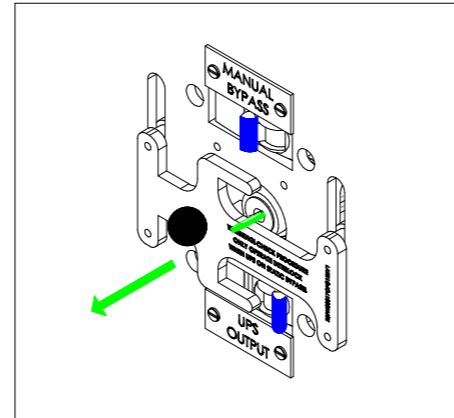
MANUAL BYPASS:
-IN THE ON POSITION

INTERLOCK KEY :
-REMOVED

UPS OUTPUT:
-IN THE OFF POSITION
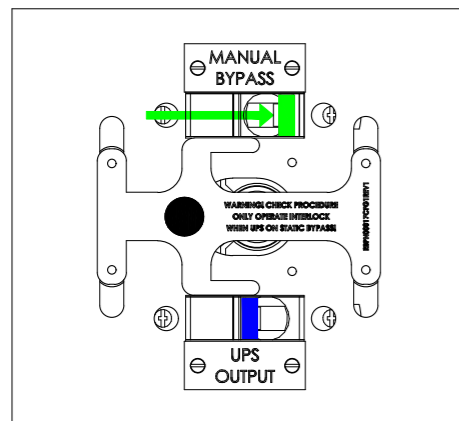
UPS UNIT:
-STATIC BYPASS - LOAD ON MAINS

STEP N
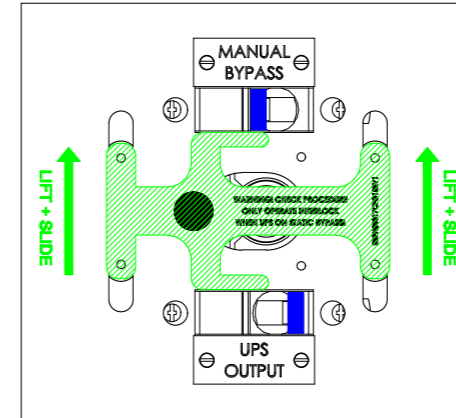
MANUAL BYPASS:
-IN THE ON POSITION

INTERLOCK KEY :
-REMOVED

UPS OUTPUT:
-IN THE OFF POSITION
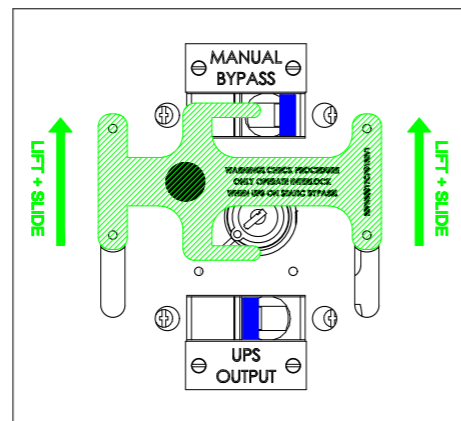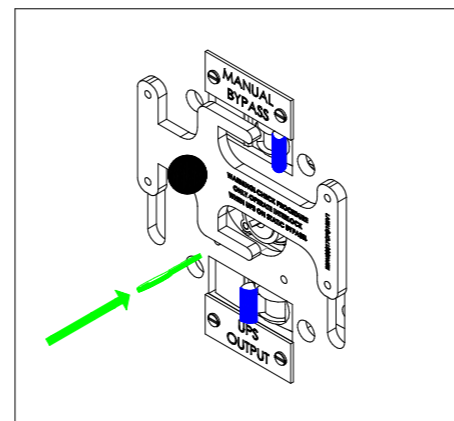
UPS UNIT:
-STATIC BYPASS - LOAD ON MAINS

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
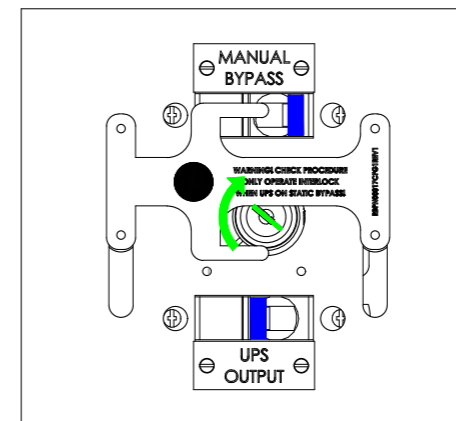
UPS UNIT:
-STATIC BYPASS - LOAD ON MAINS

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 ON POSITION

INTERLOCK KEY :
-INSERTED + TURNED CLOCKWISE

UPS OUTPUT:
-IN THE OFF 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:
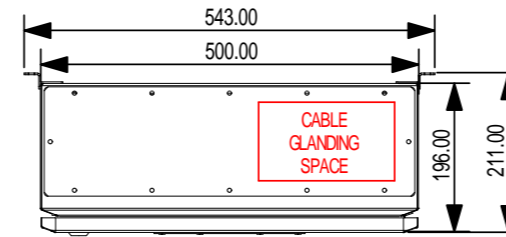-IN THE ON POSITION

UPS UNIT:
-ONLINE - LOAD ON UPS

NOTES:

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

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5) ALL DASHED LINES EXTERNAL TO BYPASS PANEL

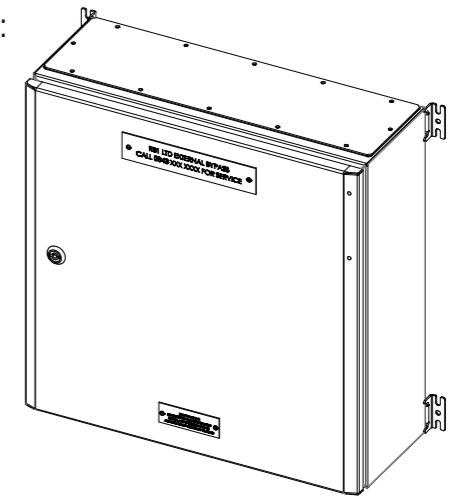|	
PRODUCT REF:	RB1-EMBS-125A-3P-MCB
DOCUMENT NUMBER:	RBECAD00104
PAGE DESCRIPTION:	INTERLOCK OPERATION PAGE 2
PROJECT NO:	SUBMITTAL DRAWING
PAGE TEMPLATE REF:	RBQS00078REV2
PRODUCT WEIGHT:	20KG

REV NO:	1
CREATION DATE:	29/04/2016
REV DATE:	25/05/2016
DRAWN BY:	R BARNES
CHECKED BY:	M BRADLEY
SHEET NUMBER:	4 OF 5

MECHANICAL LAYOUT

TOP VIEW:

543.00
500.00
196.00
211.00

CABLE GLANDING SPACE

ISO VIEW:

LEFT VIEW:

FRONT VIEW:

505.00
450.00

RIGHT VIEW:

BOTTOM VIEW:

500.00
196.00
211.00
543.00

CABLE GLANDING SPACE
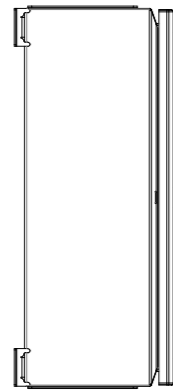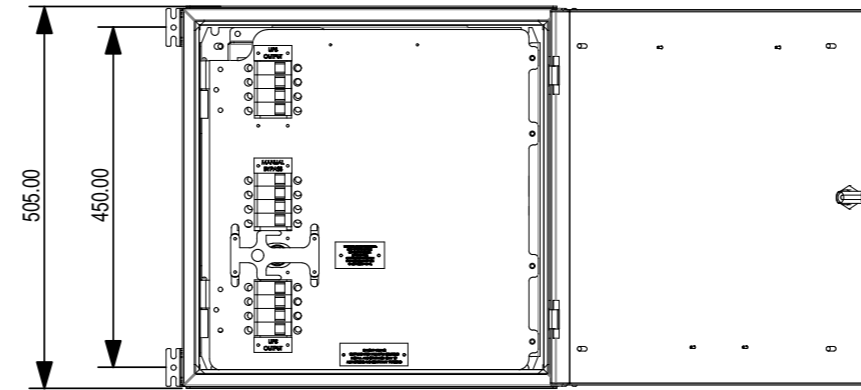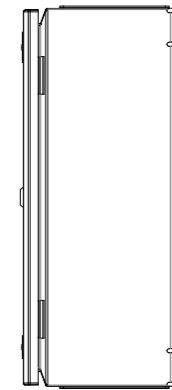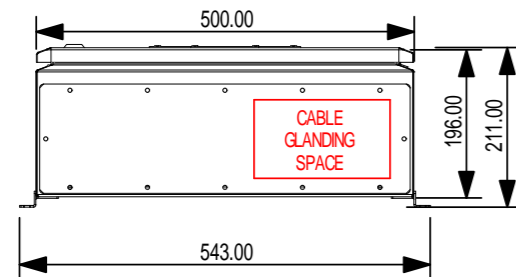
INTERNAL TERMINAL VIEW:

CABLE ACCESS SPACE
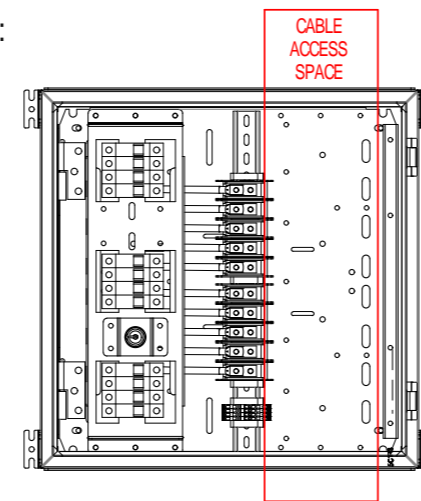
TERMINATION DETAILS:

MAINS INPUT: 6MM STUD (ACCESS TOP/BOTTOM)
LOAD OUTPUT: 6MM STUD (ACCESS TOP/BOTTOM)
NEUTRAL: 6MM STUD (ACCESS TOP/BOTTOM)
EARTH: 6MM STUD (ACCESS TOP/BOTTOM)
UPS IN/OUT: DIRECT TO DEVICE (ACCESS TOP/BOTTOM)

NOTES:

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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-3P-MCB
DOCUMENT NUMBER:	RBECAD00104
PAGE DESCRIPTION:	MECHANICAL LAYOUT
PROJECT NO:	SUBMITTAL DRAWING
PAGE TEMPLATE REF:	RBQS00078REV2
PRODUCT WEIGHT:	20KG

REV NO:	1
CREATION DATE:	29/04/2016
REV DATE:	25/05/2016
DRAWN BY:	R BARNES
CHECKED BY:	M BRADLEY
SHEET NUMBER:	5 OF 5