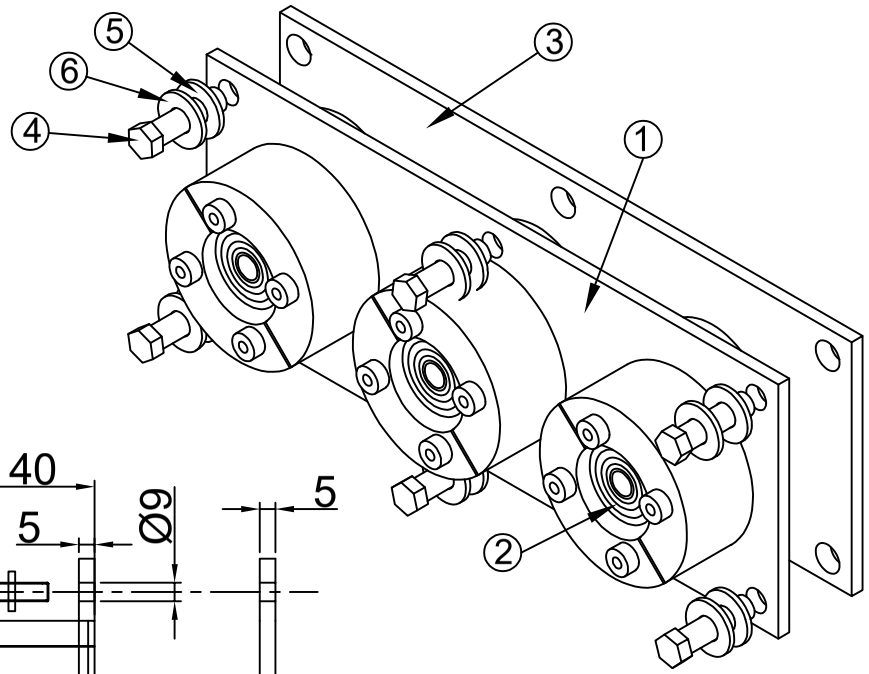
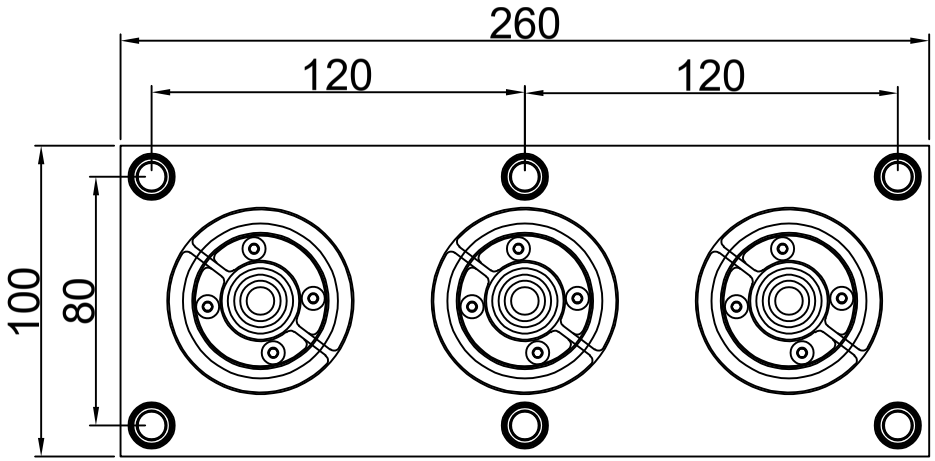
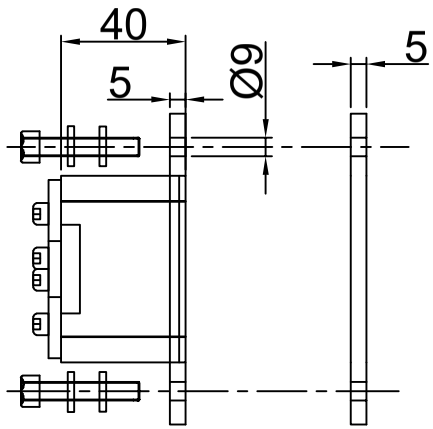






NOTE;
1. ALL DIMENSION ARE IN MM.
2. FINISH : DEBUR AND BREAK SHARP EDGES.
3. TOLERANCES : IS 2102 (PART 1) :1993 (VERY COARSE)
4. SPEC. NO. RDSO/2008/EL/SPEC/0067, REV-03 OR LATEST.
5. KIT QTY/LOCO - 1 NOS.

SL.NO	DESCRIPTION	QTY.	MATERIAL/SIZE	WEIGHT
6	M8 Spring washer	6	SS304	
5	M8 Plain washer	6	SS304	
4	M8X30 Hex Head	6	SS304	
3	EPDM Gasket	1	5mm Thk. EPDM	
2	EPDM Round Seal Module 50 (8-30mm)	3	EPDM	
1	Sleeve Assy. for CUSTOMIZED ROUND SEAL 50	1	MS GRADE Fe410 primed black	

DRAWN	
CHECKED SSE	
AEE/D-I	
APPROVED DY.CEE/D-II	
DATE	
SCALE	

CHITTARANJAN LOCOMOTIVE WORKS

EPDM MODULES FOR SEALING OF ROOF TOP CABLE NEAR RESISTOR HARMONIC FILTER FOR 3 PHASE LOCOMOTIVES (WAG9/WAP7)

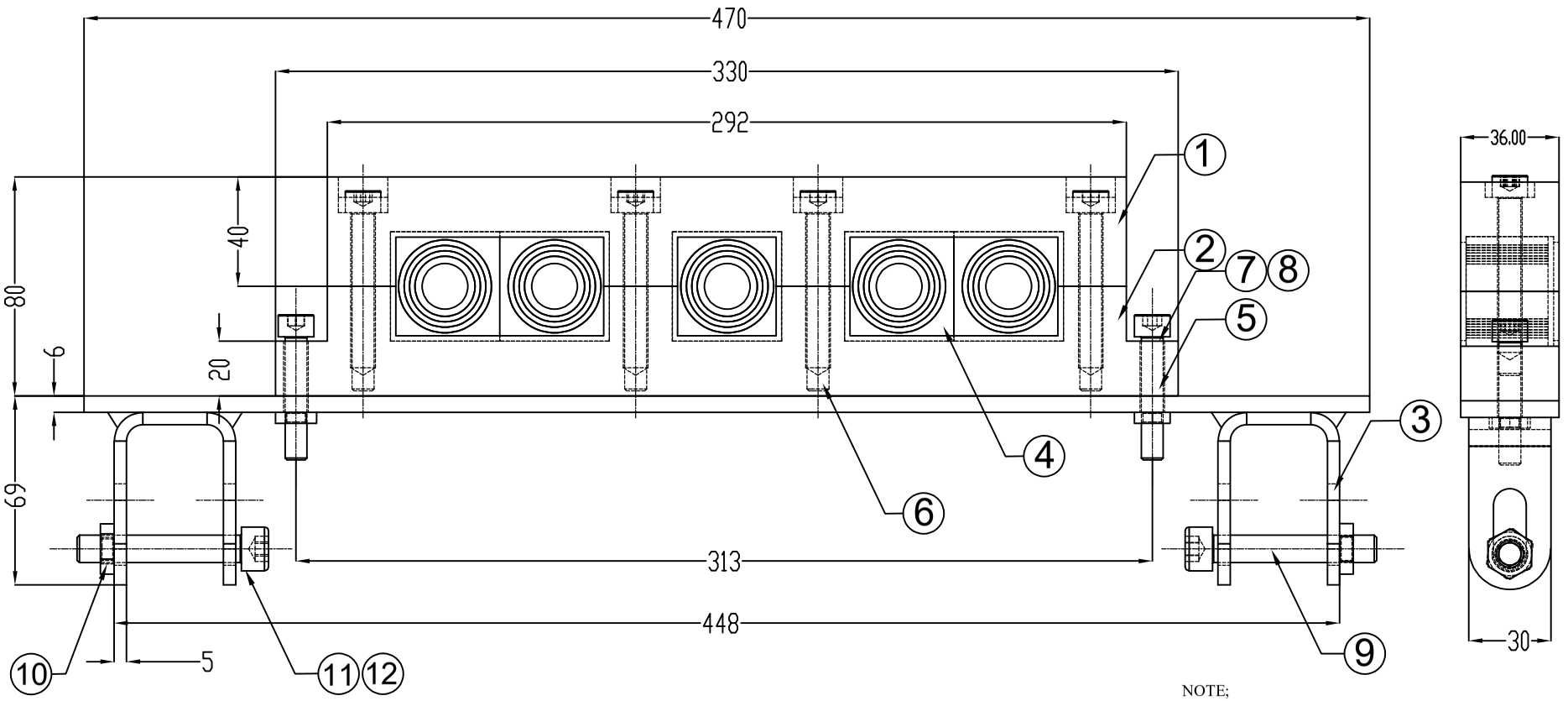
DRG. No. CLW/ES/03/C-61/SK-4/1

SHEET A3

ALTERATION NO.

3RD ANGLE PROJECTION

USED FOR LOCO



NOTE;

1. ALL DIMENSION ARE IN MM.
2. FINISH : DEBUR AND BREAK SHARP EDGES.
3. TOLERANCES : IS 2102 (PART 1) :1993 (VERY COARSE)
4. SPEC. NO. RDSO/2008/EL/SPEC/0067, REV-03 OR LATEST.
5. KIT QTY/LOCO - 6 NOS.

SL.NO	DESCRIPTION	QTY.	MATERIAL/SIZE	WEIGHT
12	SPRING WASHER FOR M10	2 NOS	SS304	
11	PLAIN WASHER FOR M10	2 NOS	SS304	
10	NUT M10	2 NOS	SS304	
9	M10X60 ALLEN HEAD BOLT	2 NOS	SS304	
8	SPRING WASHER FOR M8	6 NOS	SS304	
7	PLAIN WASHER FOR M8	6 NOS	SS304	
6	M8X65 ALLEN SOCKET HEAD	4 NOS	SS304	
5	M8X45 ALLEN SOCKET HEAD	2 NOS	SS304	
4	EPDM MODULE 40 (10-32/34MM)	5 NOS	EPDM	
3	CLAMP	1 NOS	MS (Black)	
2	BOTTOM PART	1 NOS	SRBGF UP-1	
1	TOP PART	1 NOS	SRBGF UP-1	

DRAWN	
CHECKED SSE	
AEE/D-I	
APPROVED DY.CEE/D-II	
DATE	
SCALE	

CHITTARANJAN LOCOMOTIVE WORKS

EPDM MODULES FOR UNDER FRAME AT TM, EARTHING , SENSOR CABLES FOR 3 PHASE LOCOMOTIVES (WAG9/WAP7)

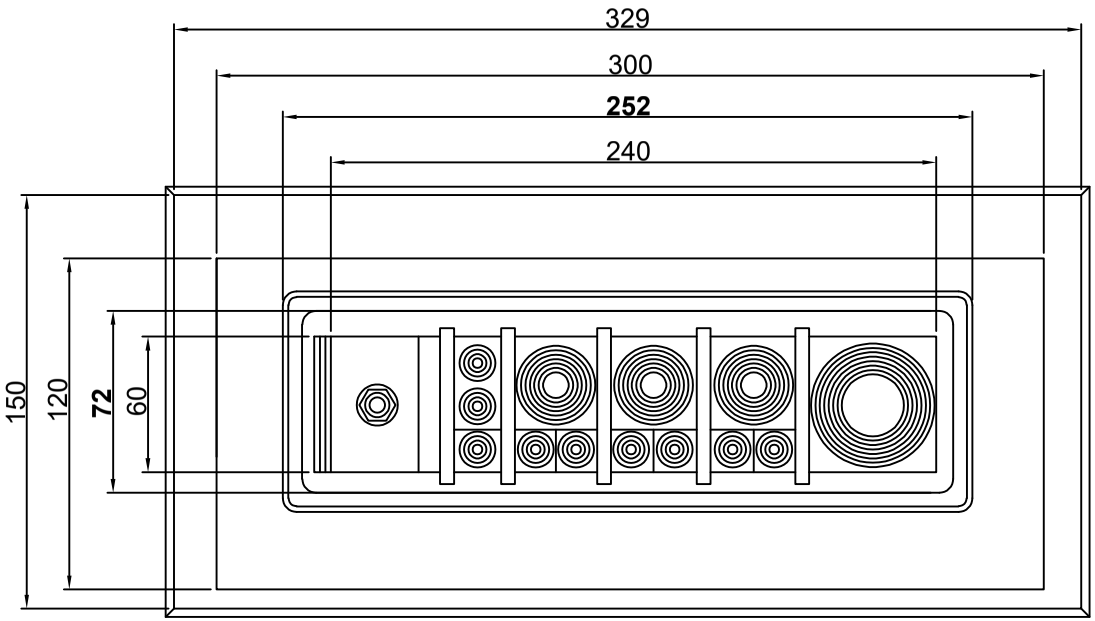
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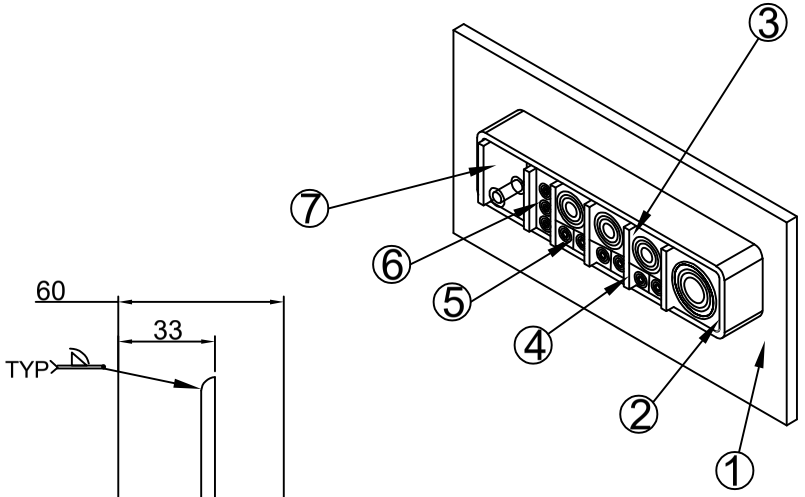
SHEET A3

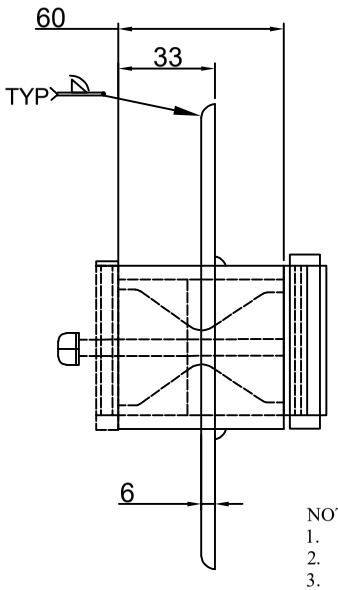
ALTERATION NO.

3RD ANGLE PROJECTION

USED FOR LOCO







NOTE;
1. ALL DIMENSION ARE IN MM.
2. FINISH : DEBUR AND BREAK SHARP EDGES.
3. TOLERANCES : IS 2102 (PART 1) :1993 (VERY COARSE)
4. SPEC. NO. RDSO/2008/EL/SPEC/0067, REV-03 OR LATEST.
5. KIT QTY/LOCO - 2 NOS.

SL.NO	DESCRIPTION	QTY.	MATERIAL/SIZE	WEIGHT
7	Wedge (60mm)	1	EPDM + MS GALV.	
6	EPDM MODULE 20w40 (Ø3.5/4 - 14.5/16 MM)	1	EPDM	
5	EPDM MODULE 20 (Ø3.5/4 - 14.5/16 MM)	7	EPDM	
4	Stayplate (60mm)	5	MS GALV.	
3	EPDM MODULE 40 (Ø20/21.5 - 34 MM)	3	EPDM	
2	EPDM MODULE 60 (Ø28/30- 54 MM)	1	EPDM	
1	S FRAME 60MM WIDE WITH FLANGE	1	MS primed black GRADE Fe410	

DRAWN	
CHECKED SSE	
AEE/D-I	
APPROVED DY.CEE/D-II	
DATE	
SCALE	

CHITTARANJAN LOCOMOTIVE WORKS

EPDM MODULES FOR COPPER PIPES TRANSIT FROM ENGINE ROOM TO DRIVER CAB (LHS & RHS) FOR 3 PHASE LOCOMOTIVES (WAG9/WAP7)

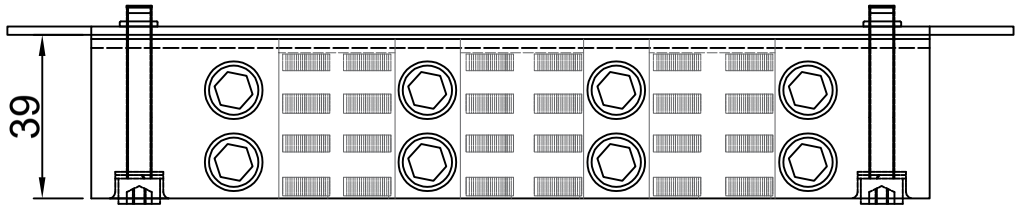
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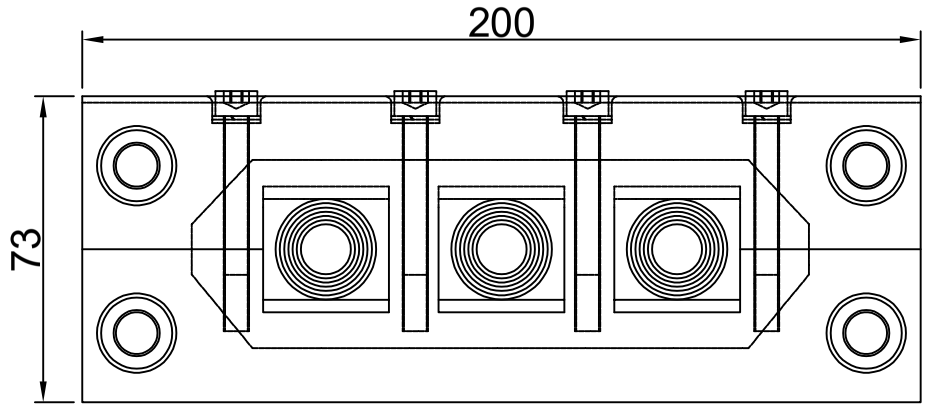
SHEET A3

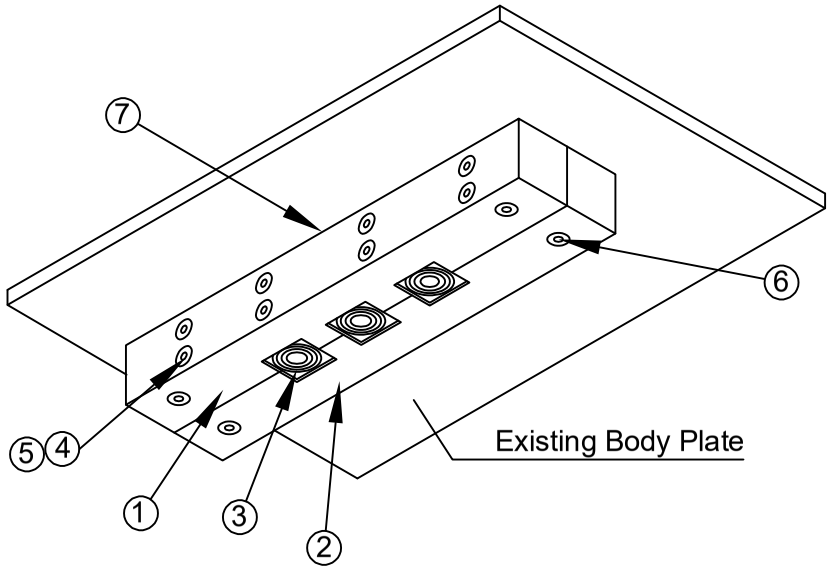
ALTERATION NO.

3RD ANGLE PROJECTION

USED FOR LOCO







NOTE;
1. ALL DIMENSION ARE IN MM.
2. FINISH : DEBUR AND BREAK SHARP EDGES.
3. TOLERANCES : IS 2102 (PART 1) :1993 (VERY COARSE)
4. SPEC. NO. RDSO/2008/EL/SPEC/0067, REV-03 OR LATEST.
5. KIT QTY/LOCO - 6 NOS.

SL.NO	DESCRIPTION	QTY	MATERIAL/SIZE	WEIGHT
6	EPDM Gasket	1	EPDM	
5	M6X50 Allen Head Bolt, Spring washer + Nut	4	MILD STEEL	
4	M6X50 Allen Head Bolt with Plain Washer	8	MILD STEEL	
3	EPDM Module 30 (Ø10 - 25 MM)	3	EPDM	
2	TM Bottom Plate (Inside to Outside)	1	SRBGF UP-1	
1	TM Top Plate (Inside to Outside)	1	SRBGF UP-1	

DRAWN	
CHECKED SSE	
AEE/D-I	
APPROVED DY.CEE/D-II	
DATE	
SCALE	

CHITTARANJAN LOCOMOTIVE WORKS

EPDM MODULES FOR CABLES TRANSIT FROM INSIDE TO OUTSIDE FOR TM (JUNCTION BOX) FOR 3 PHASE LOCOMOTIVE (WAG9/WAP7).

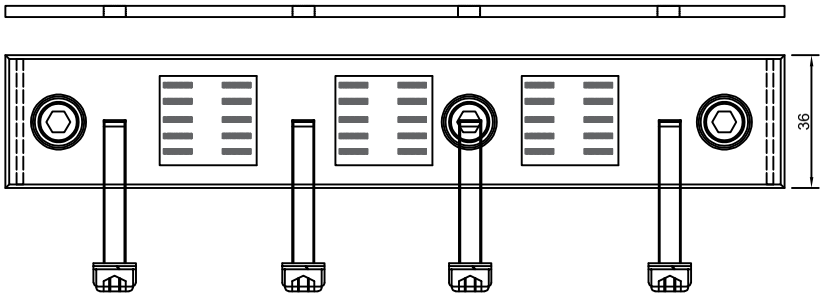
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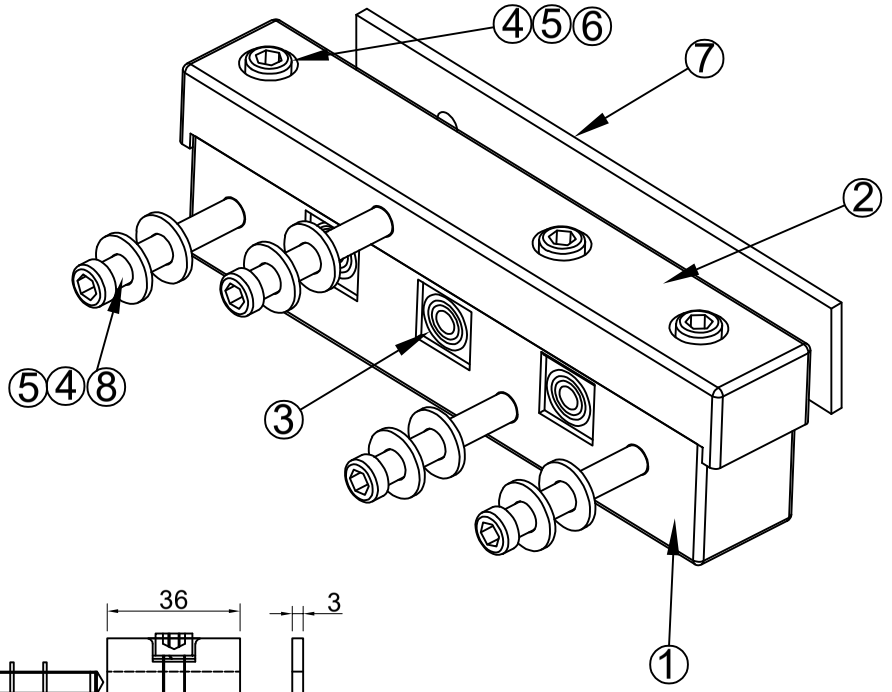
SHEET A3

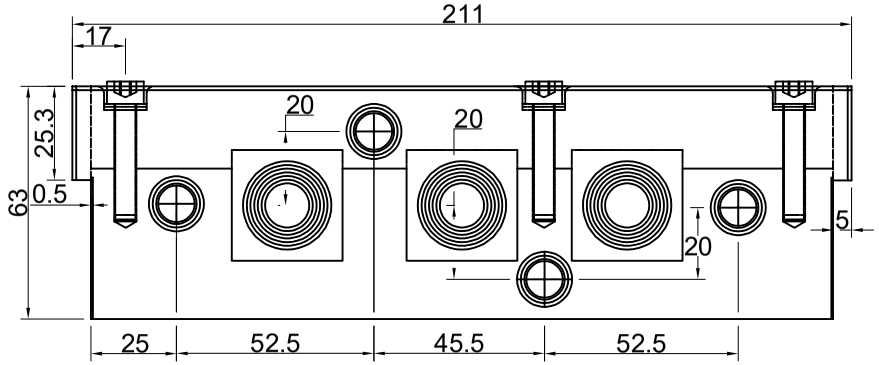
ALTERATION NO.

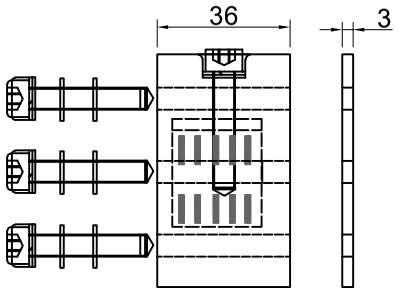
3RD ANGLE PROJECTION

USED FOR LOCO









NOTE;
1. ALL DIMENSION ARE IN MM.
2. FINISH : DEBUR AND BREAK SHARP EDGES.
3. TOLERANCES : IS 2102 (PART 1) :1993 (VERY COARSE)
4. SPEC. NO. RDSO/2008/EL/SPEC/0067, REV-03 OR LATEST.
5. KIT QTY/LOCO - 6 NOS.

SL.NO	DESCRIPTION	QTY	MATERIAL/SIZE	WEIGHT
8	M8X55 Allen Head Bolt	4	Mild Steel(Black coated)	
7	EPDM Gasket	1	EPDM	
6	M8X30 Allen Head Bolt	3	Mild Steel(Black coated)	
5	M8 Spring washer	7	Mild Steel(Black coated)	
4	M8 Plain washer	7	Mild Steel(Black coated)	
3	EPDM module 30 (10-25MM)	3	EPDM	
2	TOP PART	1	SRBGF UP-1	
1	BOTTOM PART	1	SRBGF UP-1	

DRAWN	
CHECKED SSE	
AEE/D-I	
APPROVED DY.CEE/D-II	
DATE	
SCALE	

CHITTARANJAN LOCOMOTIVE WORKS

EPDM MODULES FOR TRACTION MOTOR CABLE TERMINAL BOX FOR 3 PHASE LOCOMOTIVE (WAG9/WAP7).

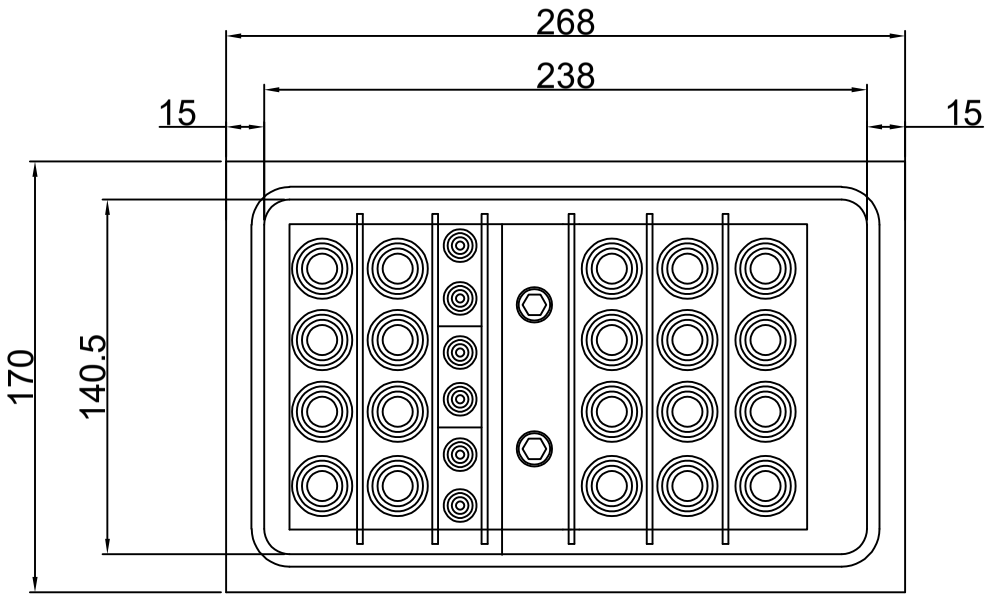
DRG. No. CLW/ES/03/C-61/SK-4/5

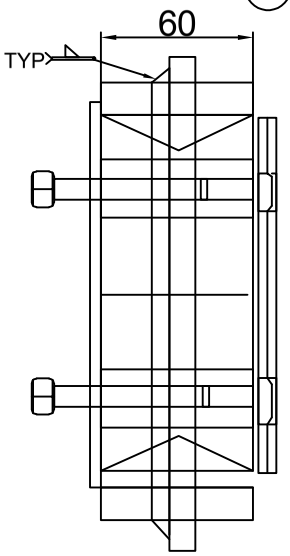
SHEET A3

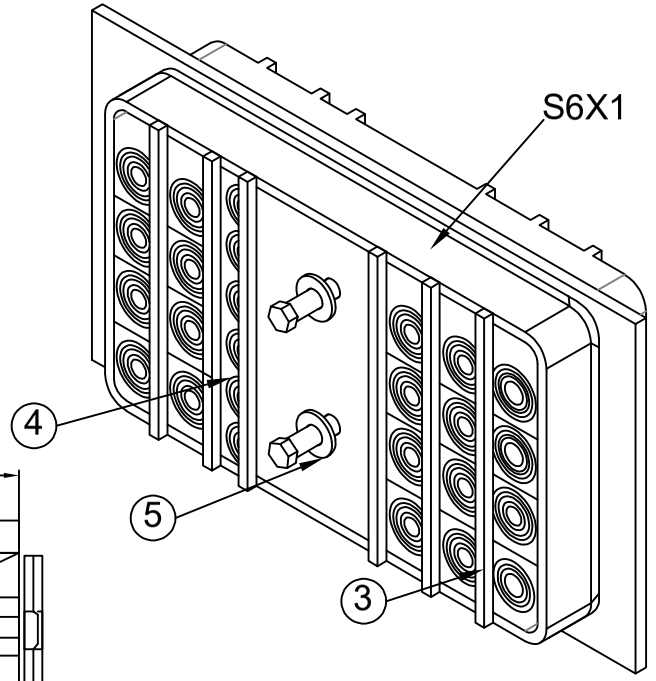
ALTERATION NO.

3RD ANGLE PROJECTION

USED FOR LOCO







NOTE;
1. ALL DIMENSION ARE IN MM.
2. FINISH : DEBUR AND BREAK SHARP EDGES.
3. TOLERANCES : IS 2102 (PART 1) :1993 (VERY COARSE)
4. SPEC. NO. RDSO/2008/EL/SPEC/0067, REV-03 OR LATEST.
5. KIT QTY/LOCO - 2 NOS.

SL.NO	DESCRIPTION	QTY.	MATERIAL/SIZE	WEIGHT
5	Wedge 120	1	EPDM + MS GALV.	
4	EPDM MODULE 20w40 (3.5/4 - 14.5/16MM)	3	EPDM	
3	Stayplate	6	MS GALV.	
2	EPDM MODULE 30 (10-25MM)	20	EPDM	
1	Frame Assy.	1	Primed black GRADE Fe410	

DRAWN	
CHECKED SSE	
AEE/D-I	
APPROVED DY.CEE/D-II	
DATE	
SCALE	

CHITTARANJAN LOCOMOTIVE WORKS

EPDM MODULES FOR CABLE TRANSIT THRU TRENCHES FROM ENGINE ROOM TO DRIVER CAB 1 & 2 (CAB DOOR BOTTOM), FOR 3 PHASE LOCOMOTIVES (WAG9/WAP7)

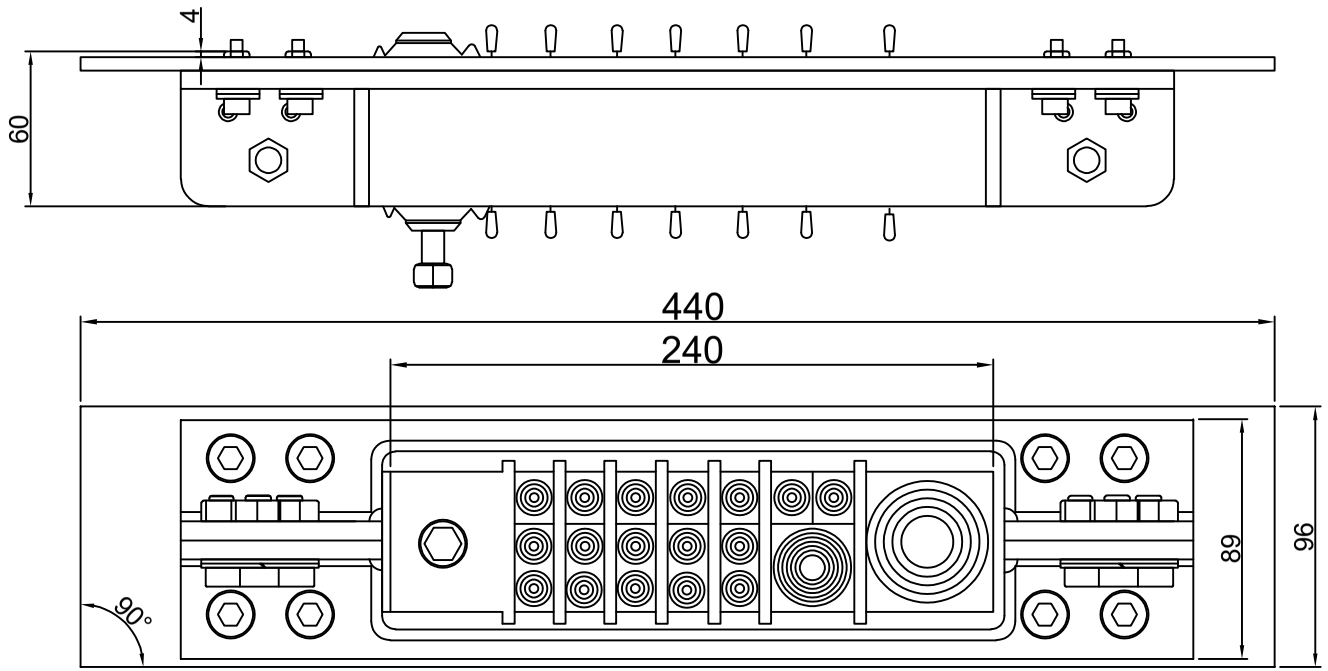
DRG. No. CLW/ES/03/C-61/SK-4/6

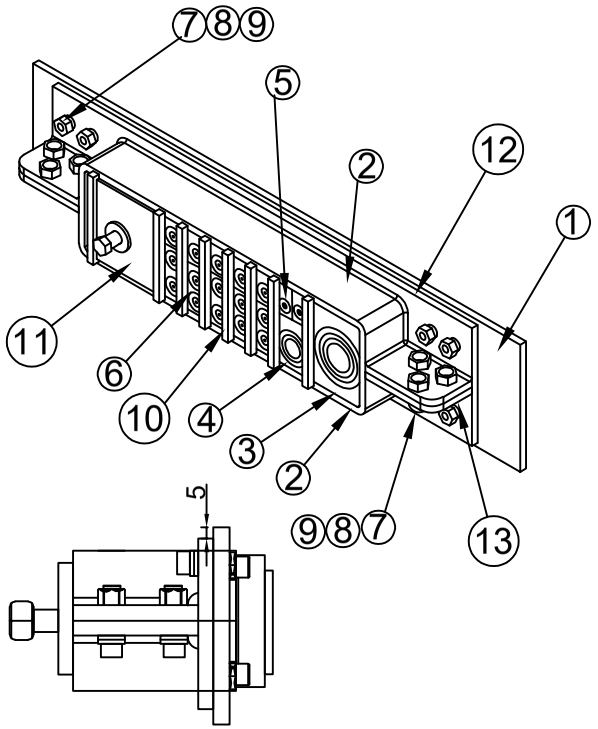
SHEET A3

ALTERATION NO.

3RD ANGLE PROJECTION

USED FOR LOCO





NOTE;
1. ALL DIMENSION ARE IN MM.
2. FINISH : DEBUR AND BREAK SHARP EDGES.
3. TOLERANCES : IS 2102 (PART 1) :1993 (VERY COARSE)
4. SPEC. NO. RDSO/2008/EL/SPEC/0067, REV-03 OR LATEST.
5. KIT QTY/LOCO - 2 NOS.

SL.NO	DESCRIPTION	QTY.	MATERIAL/SIZE	WEIGHT
13	EPDM Gasket	2	EPDM	
12	EPDM Gasket	1	EPDM	
11	Wedge (60mm)	1	EPDM + MS GALV.	
10	Stayplate (60mm)	7	MS GALV.	
9	M8 Hex Nut	14	SS304	
8	M8 Spring Washer	14	SS304	
7	M8X30 Allen Bolt	14	SS304	
6	EPDM module 20w40 (3.5/ 4-14.5/ 16 MM)	5	EPDM	
5	EPDM module 20 (3.5/ 4-14.5/ 16 MM)	7	EPDM	
4	EPDM module 40 (20/ 21.5-34 MM)	1	EPDM	
3	EPDM module 60 (28/ 30 -54MM)	1	EPDM	
2	S-Frame Part Assy.	2	MS primed (Black) Grade Fe410	
1	Bottom Plate	1	MILD STEEL primed (Black) Grade Fe410	

DRAWN	
CHECKED SSE	
AEE/D-I	
APPROVED DY.CEE/D-II	
DATE	
SCALE	

CHITTARANJAN LOCOMOTIVE WORKS

EPDM MODULES FOR CABLE TRANSIT FROM ENGINE ROOM TO DRIVER CAB 1 & 2 (CAB DOOR TOP) FOR 3 PHASE LOCOMOTIVES (WAG9/WAP7)

DRG. No. CLW/ES/03/C-61/SK-4/7

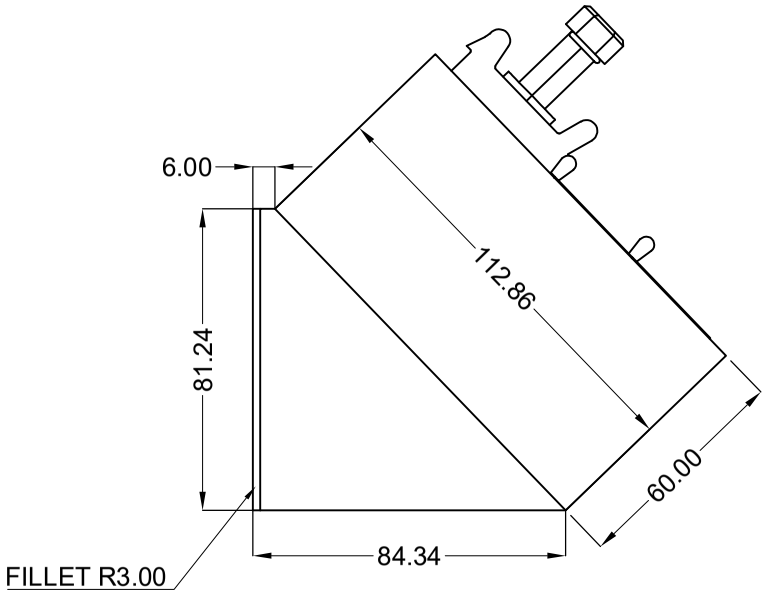
SHEET A3

ALTERATION NO.

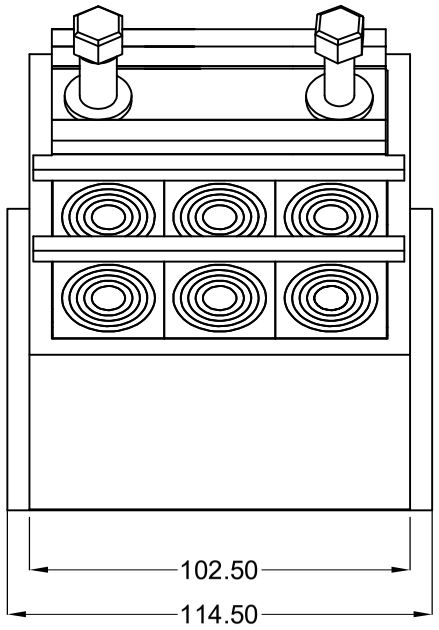
3RD ANGLE PROJECTION

USED FOR LOCO

TM CABLE TRANSIT DETAILS			
SR. NO.	OD (mm)	QTY.	MODULE TYPE
1	21.5 mm	6 nos	EPDM MODULE-30 (Ø10.0-25.0mm)



FRONT VIEW



SIDE VIEW

NOTE;
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2. FINISH : DEBUR AND BREAK SHARP EDGES.
3. TOLERANCES : IS 2102 (PART 1) :1993 (VERY COARSE)
4. SPEC. NO. RDSO/2008/EL/SPEC/0067, REV-03 OR LATEST.
5. KIT QTY/LOCO - 6 NOS.

SL.NO	DESCRIPTION	QTY.	MATERIAL/SIZE	WEIGHT
5	FRAME PS (60X90) MM	1 NOS	MS. PRIMED (BLACK)	
4	WEDGE-W90	1 NOS	EPDM + MS GALV.	
3	STAYPLATE-S90	2 NOS	GALV.	
2	EPDM MODULE 30 (Ø10.0 - 25.0 MM)	6 NOS	EPDM	
1	LUBRICANT 25G PACK	1 NOS	STD.	

DRAWN	
CHECKED SSE	
AEE/D-I	
APPROVED DY.CEE/D-II	
DATE	
SCALE	

CHITTARANJAN LOCOMOTIVE WORKS

TM CABLE TRANSIT LOCATION - MACHINE ROOM TRENCH TO JUNCTION BOX AT UNDER FRAME FOR WAG9/WAP7 LOCOMOTIVE

DRG. No. CLW/ES/03/C-61/SK-4/8

SHEET A3

ALTERATION NO.

3RD ANGLE PROJECTION

USED FOR LOCO