

TECHNICAL SPECIFICATION OF FEEDER JUNCTION BOX FOR LHB TYPE EOG DOUBLE DECKER COACHES.

1.0 SCOPE:

- 1.1. This specification covers design, manufacture, testing and supply of under frame mounted Feeder Junction Box for transmission of 3 phase , 5 wire , 750V , 50 Hz power supply from power car to rake/coaches (LHB pattern) working on End On Generation system.
- 1.2. The quality and workmanship of the subject junction boxes shall be in no way less than the LHB/international standards.
- 1.3. Firm should have adequate experience of design, development and manufacturing of similar junction boxes at least for the last 3 years with manufacturing system capable of developing desired quality of product similar to the one existing on LHB coaches, and any contract for the development shall be awarded only after inspection of products developed by their in the past.
- 1.4. The firm shall maintain date wise in house quality control records etc. for process inspection and testing and the same shall be made available to the inspecting official during type testing.

2.0 SERVICE CONDITIONS :

2.1 ENVIRONMENTAL CONDITIONS :

Ambient Temperature	: -5°C to +55°C
Maximum Relative Humidity	: Upto 98% during the rainy season.
Altitude	: Max. 1000 Metres.
Atmosphere	: Extremely dusty with fog
Coastal areas	: The equipment shall be designed to work in coastal areas in humidity salt laden & corrosive atmosphere.

2.2 WORKING SERVICE CONDITIONS :

Train speed	: 160 KMPH
Vibration and Shocks	
a) Maximum Vertical acceleration	: 1.0g
b) Maximum Lateral acceleration	: 0.5g
c) Maximum Longitudinal acceleration	: 3.0g
d) Frequency and Amplitude	

EDTS-328	C	15.06.2011				1 of 4
Spec No.	Rev.	Date	SSE/CAD	SEE/D	DY.CEE/D & D	Page

Sinusoidal form of vibration. the frequency 'f' lies between 1 Hz and 100 Hz and their amplitude 'a' expressed in mm is given as function of 'f' by the
 $a = 25/f$ for values of 'f' between 1 Hz and 10 Hz.
 $a = 250/f^2$ for values of 'f' between 10 Hz and 100 Hz.

3.0 GOVERNONG STANDERD / SPECIFICATIONS

References shall be made to following standard/specifications:

1. IEC-529-1976 : Classification of degree of protection provided by enclosures.
2. VDE-0115 , T1 : General construction and safety requirements.
3. VDE-0433 , T1 : Generation and measurement of high voltages.
4. UIC-532 : Electric power supply for trains taken from the train table
5. UIC-554-1 : Power supply to electrical equipments on stationary Railway vehicles from local mains system or another source of energy at 220 V or 380 V ,50Hz.
6. DIN 6700 : Welding of Railway vehicles.
Part-2: Qualification of manufacturer of welded rolling stock materials, Quality assurance.
7. IS:2551-82 : Danger notice plate

4.0 SCOPE OF SUPPLY :

- 4.1 The scope of supply of various sub components of junction boxes is given as under:

a.	Feeder junction box plug side	SKED614c	02 nos
b.	Feeder junction box socket side	SKED615c	02 nos.

- 4.2 The assembly shall generally confirm to the SKED's as above, however guidance can be taken from RCF drawing for the LHB EOG coaches junction boxes to drawing no LW71006 and LW71007.
- 4.3 The junction box shall be made from stainless steel to IS: 6911 with surface finish no. 6, table-8.
- 4.4 There shall be no wavering / undulations in the sheet / housing after fabrication.

EDTS-328	C	15.06.2011	<i>[Signature]</i>		<i>[Signature]</i>	2 of 4
Spec No.	Rev.	Date	SSE/CAD	SEE/D	DY.CEE/D & D	Page

- 4.5 Welding shall be done as per DIN6700, 1a with stainless steel welding electrode to DIN17997, 1, 4370.
- 4.6 Internal edges of the cut outs shall have fine surface finish to avoid damage to the cables.
- 4.7 EPDM sponge rubber provided for the sealing of the front cover shall be in single piece and shall be suitably glued with cover.
- 4.8 Degree of protection of the junction box shall be IP65.
- 4.9 Firms manufacturing the item for the first time shall get the drawings approved from CEE/RCF for its suitability to RCF requirements before taking up bulk production.
- 4.10 Terminal connectors provided shall be to WFF300 for phase(R, Y, B) and WFF120 for neutral and earth of M/s WEIDMULLER with mounting base plate.
- 4.11 Terminal connector for the control cables shall be four conductor terminals to catalogue no 281-652 of M/s WAGO/WEIDMULLER/PHOENIX make.
- 4.12 The general material list shall be as per annexure-A duly mounted on the junction box.
- 4.13 The crimping sockets provided shall be from RCF/RDSO approved sources only, however for change in makes prior approval shall be taken. Suitable heat shrinkable sleeve shall be provided at ends to cover live parts.
- 4.14 Limit switch with over travel plunger provided shall be to catalogue no 3SE100-1C of M/s Siemens make with cover bracket for mounting on the junction box to drawing no. LW71403 alt 'a'. Threading of the limit switch shall be compatible with conduit connection.
- 4.15 Suitable FRP cleats shall be provided inside the junction box for securing the cables properly.
- 4.16 Hardware used shall be of stainless steel as far as possible.
- 4.17 Danger plate conforming to IS:2551-82 for 750 volts shall be provided on the front cover
- 4.18 Manufacturing insignia, purchase order number and serial number shall be punched /screens printed on the box and cover both.

5.0 Tests :

- 5.1 Di-electrical test shall be carried out with 3.0 KV for 1 minute in accordance with IS:13947(Latest edition)

6.0 Enclosures :

- 6.1 SKED-614c : Feeder junction box plug side.
- 6.2 SKED-615c : Feeder junction box socket side.
- 6.3 SKED-609 : Connector for Feeder junction box.
- 6.4 LW71403 alt 'a': Bracket for fixing of limit switch on junction box.

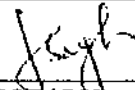

EDTS-328	C	15.06.2011	<i>[Signature]</i>		<i>[Signature]</i>	3 of 4
Spec No.	Rev.	Date	SSE/CAD	SEE/D	DY.CEE/D & D	Page

Annexure-A

SNO	DESCRIPTION	SIZE	DRG/SPEC/CAT NO	QPA
1.	Feeder junction box-plug side	-	SKED614c	2
2.	Feeder junction box-socket side	-	SKED615c	2
3.	Polyamide flexible conduit	NW 36	Table-1 , Item-9 #	16M
4.*	Flexible conduit connector complete with gasket	PG48	Table-3 , Item-9 #	2
5.*	Blank plug complete with gasket	PG48	Table-14 , Item-9 #	2
6.*	Blank plug complete with gasket	PG16	Table-14 , Item-5 #	1
7.*	Lock nut	PG16	Table-12 , Item-5 #	1
8.*	Cable gland complete with sealing ,O ring of Neoprene and flat gasket	PG21	SKED-609	4
9.*	Elbow 90° complete with gasket	PG16	Table-5 , Item-4 #	2
10.*	Lock nut	PG16	Table-12 , Item-5 #	2
11.	Polyamide flexible conduit	NW 17	Table-1 , Item-5 #	3M
12.	Adaptor for flexible conduit suitable for Pg70	-		2
13.	Crimping socket suitable for M16 stud.	185 mm ²	To suit WFF 300 of M/s Weidmuller	24
14.	Crimping socket suitable for M16 stud.	120 mm ²	To suit WFF 300 of M/s Weidmuller	10
15.	Crimping socket suitable for M16 stud.	70 mm ²	To suit WFF 120 of M/s Weidmuller	18
16.	Crimping socket suitable for M16 stud.	50 mm ²	To suit WFF 120 of M/s Weidmuller	8
17.	End fitting (Metric thread)	NW-36/40	Table-2 , Item-21 #	32
18.	Crimping Lug (R,Y,B)	-	To Drg.no.LW71327 alt-'a'	6
19.	Crimping Lug (N)	-	To Drg.no.LW71328 alt-'a'	2
20.	Crimping Lug (E)	-	To Drg.no.LW71329 alt-'a'	2

* Items to be supplied duly fitted with junction boxes.

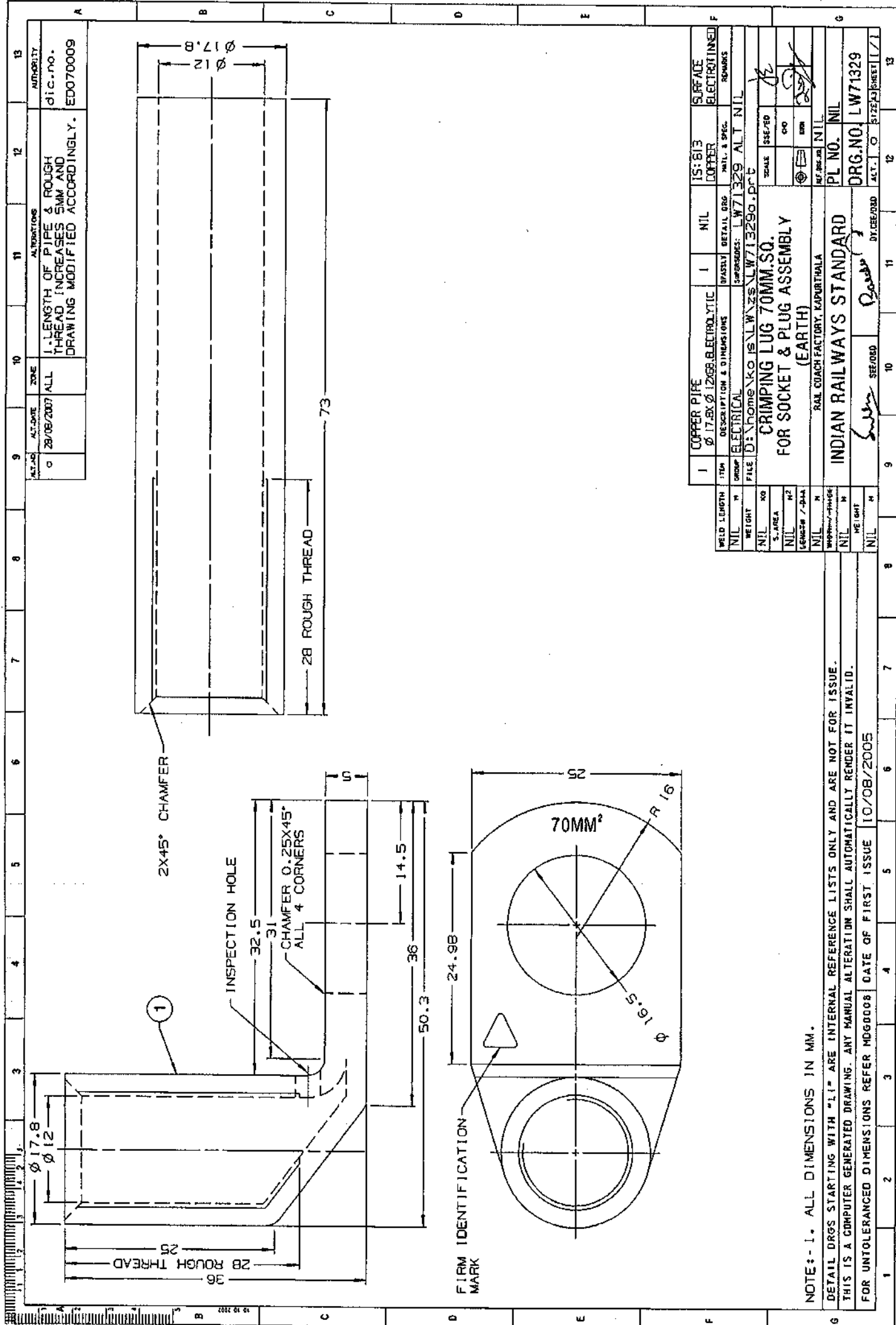
Items to be supplied as per EDTS291 (latest edition)

EDTS-328	C	15.06.2011				4 of 4
Spec No.	Rev.	Date	SSE/CAD	SEE/D	DY.CEE/D & D	Page

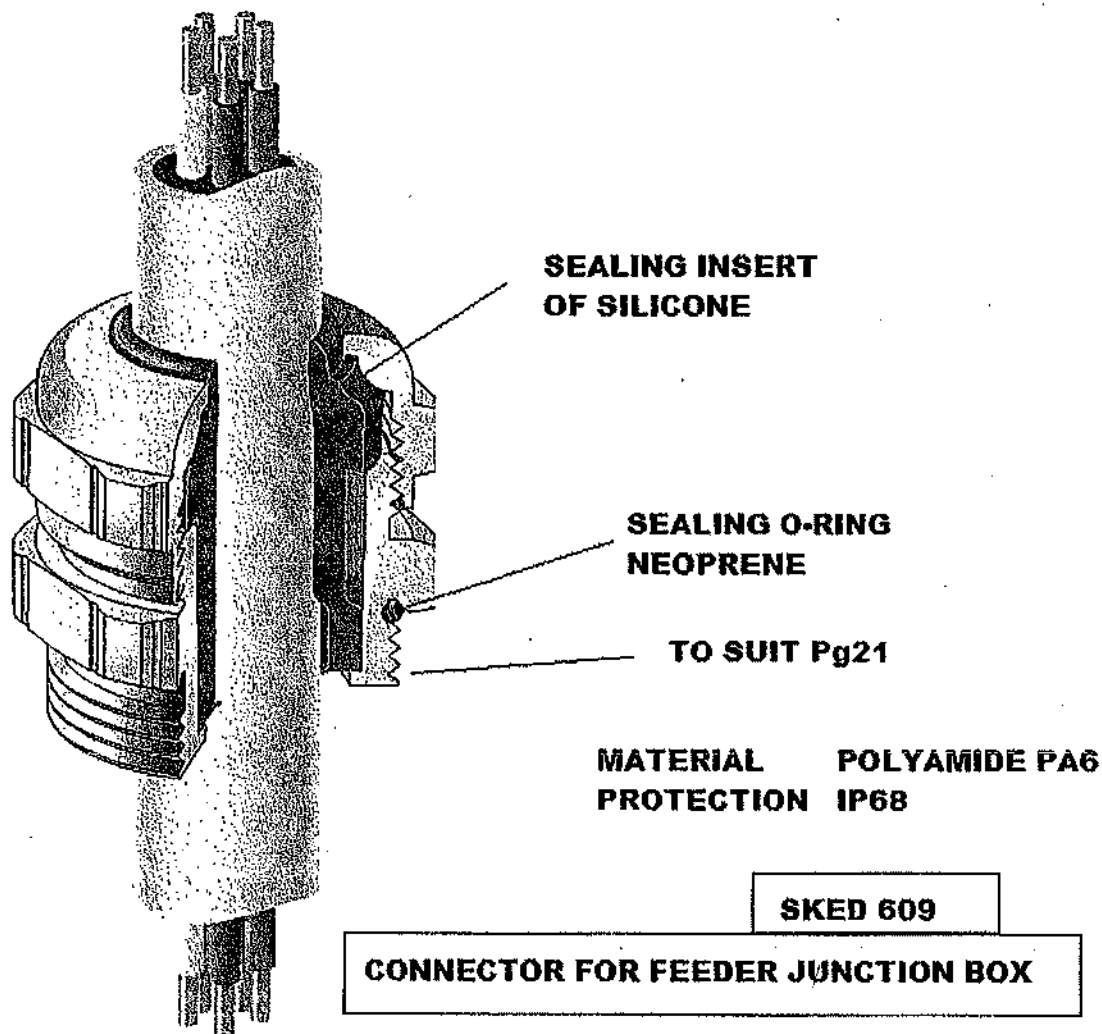
NOTE:- 1. ALL DIMENSIONS IN MM.
DETAIL DRGS. STARTING WITH "LI" ARE INTENDED FOR UNTOLERANCED DIMENSIONS REFER MDG01

NOTE:—1. ALL DIMENSIONS IN MM.

5092836/2026/O/o CEDE/MCF



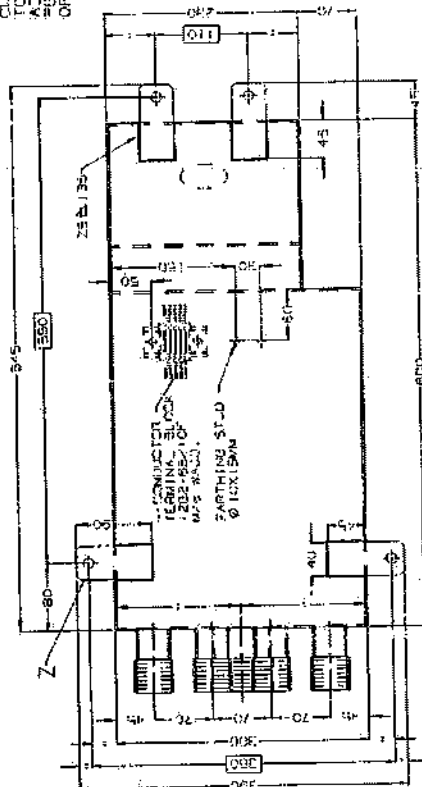
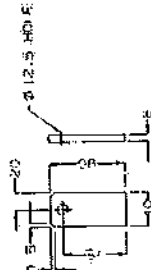
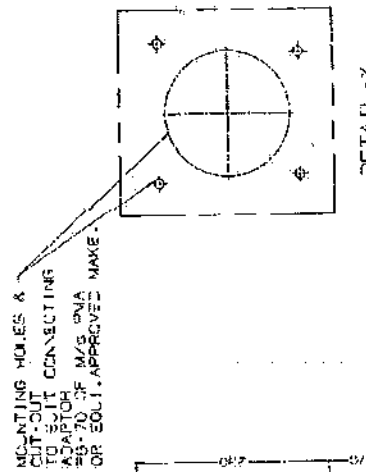
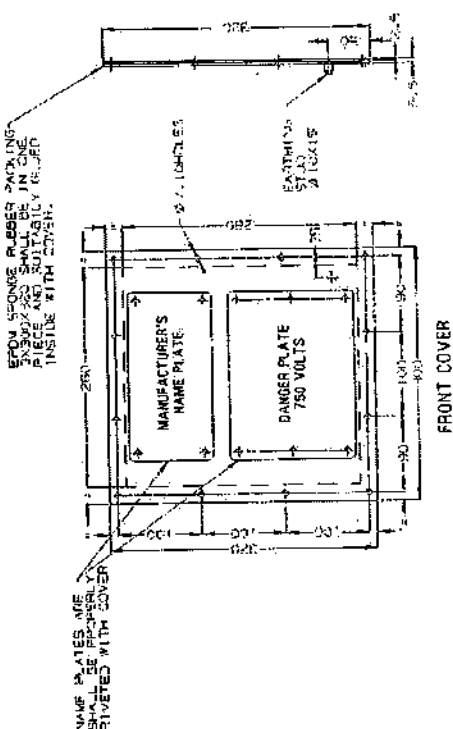
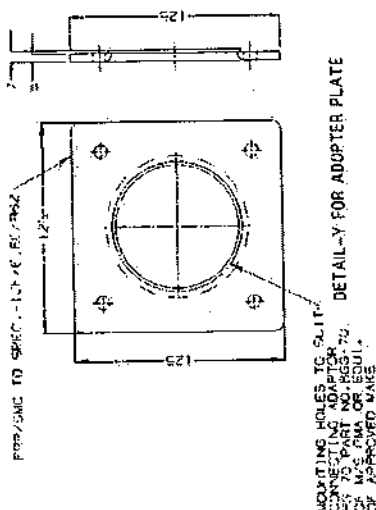
2. SURFACE FINISH NO. 3 TABLE-B.
1. ALL DIMENSIONS ARE IN MM



SE/CAD
2.12.2009

SEED

DY. CEE/D&D



7. DIAPHRAGM TEST TO BE COMPLETED AT 300 TO 350 MINUTE IN ACCORDANCE WITH 15.1.3.3.4-10.3. PART 1. INTERIM. STAGES OF THIS TEST SHALL HAVE FINE WORK AND BE TO AVOID DAMAGE TO (A) SE 11331 ACTION. BEING SHALL BE DONE AT 100 MIN. ACCORD TO 15.1.3.3.4-10.3. PART 1. MIN. 10007.4-10.3. PART 1.

4. OFFICE OF PROTECTION OF THE PATRIOT (CIVILIAN)
5. A-ITVS CHAL- BE TIME PATRIOT.
6. GRAVED MOUNTING DIMENSIONS ARE TO BE STRICTLY ADHERED TO BY ALL MOUNTING.

ALL DIMENSIONS IN INCHES -
ALL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.

ALERTANCE DIMENSION REFERENCE

DATE	TIME	NAME	ADDRESS	PHONE	DATE	TIME	NAME	ADDRESS	PHONE
10/10/54	10:30	MR. S. S. SINGH	10/10/54	10:30	10/10/54	10:30	MR. S. S. SINGH	10/10/54	10:30
<p>FOR DOUBLE DECKER LAR BUS TYPE COACHES</p> <p>FEEDER JUNCTION BOX (PLUS SIDE)</p> <p>RUE GRANDE FACTORY, COGNAC, FRANCE</p>					<p>PL. NO. NIL</p> <p>DRAG. NO. SKED-614C</p>				
<p>रैन काच फेडर जंक्शन बॉक्स</p>					<p>रैन काच फेडर जंक्शन बॉक्स</p>				

DETAIL-2 FOR MOUNTING BRACKET

REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

5/20/2011

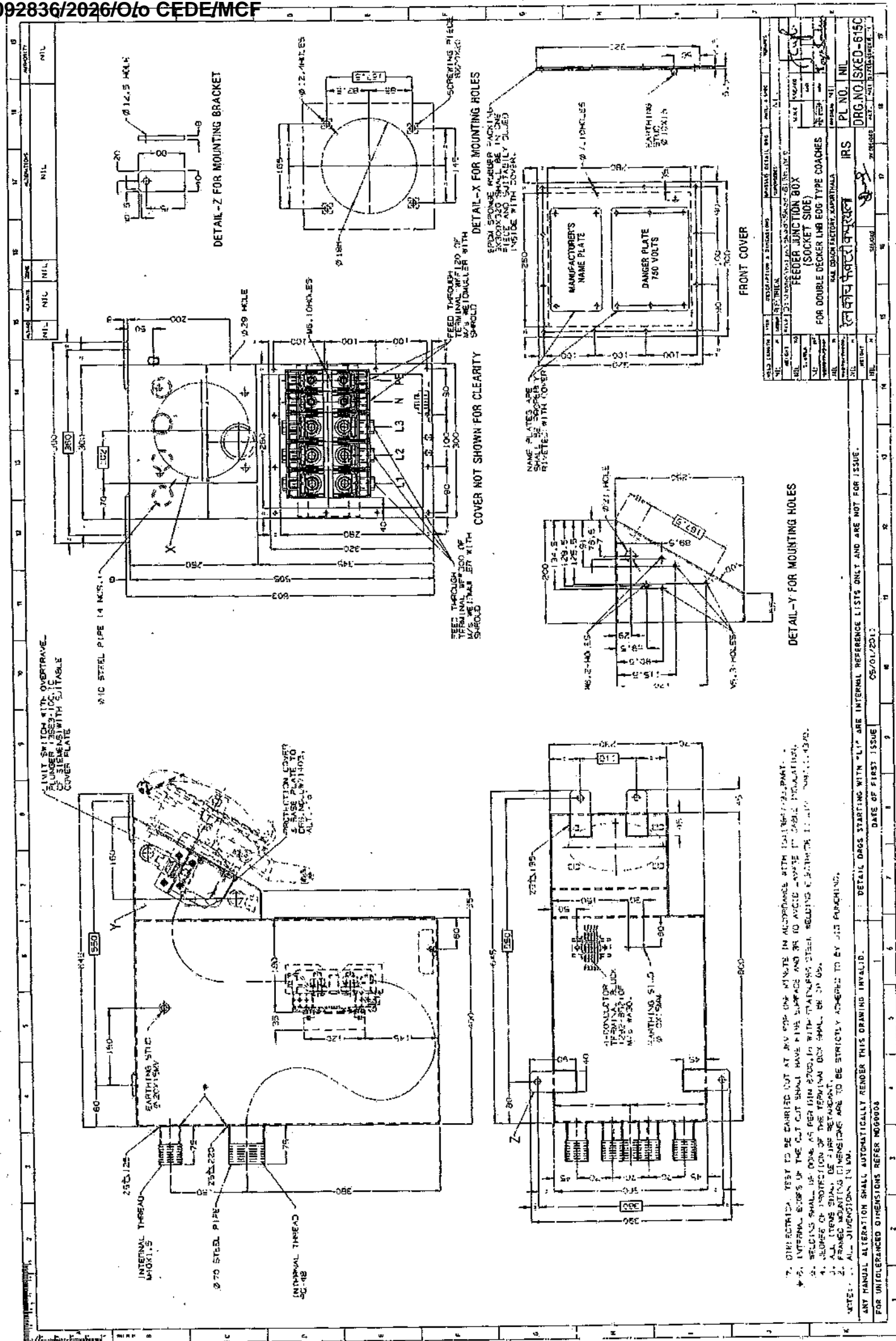
DETAIL ORGS STARTING WITH "L" A

DATE OF FIRST ISSUE		\$

RENDER THIS DRAWING INVALID.

1. ALL DIMENSIONS IN MM -

ALERTANCE DIMENSION REFERENCE



AMENDMENT NO.-1 TO SPEC. NO. EDTS328 REV. 'C'

This amendment is issued to specification no. EDTS328 Rev 'c' "FEEDER JUNCTION BOX FOR EOG LHB TYPE DOUBLE DECKER COACHES" to modify the following clauses / Annexure. Following is amended:-

Clause 6.0: This clause is amended as;

6.1 SKED-614D – Feeder junction box plug side.

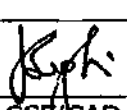
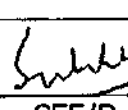

6.2 SKED-615D – Feeder junction box socket side.

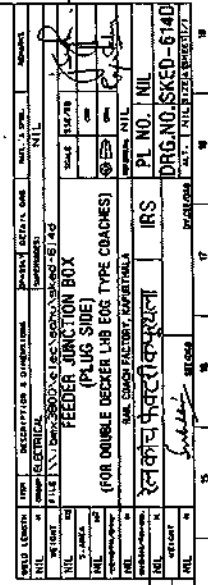
Annexure-A: This is amended as;

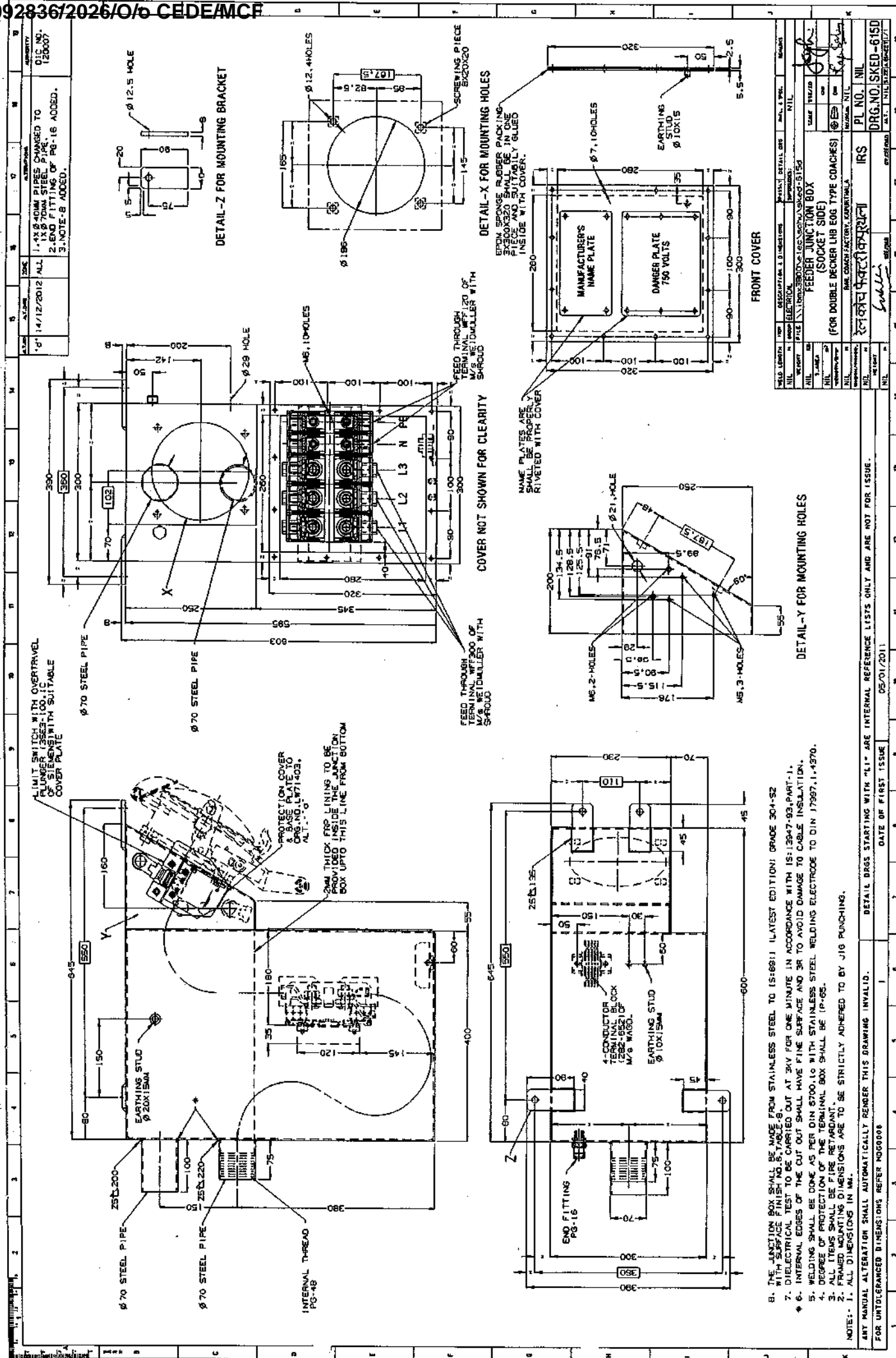
SNO	DESCRIPTION	SIZE	DRG/SPEC/CAT NO	QTY
1.	Feeder junction box-plug side	-	SKED614D alt-'d'	2
2.	Feeder junction box-socket side	-	SKED615D alt-'d'	2
3.*	End fitting	PG16	Table-3 , Item-4 #	4
4.*	Flexible conduit connector complete with gasket	PG48	Table-3 , Item-9 #	2
5.*	Blank plug complete with gasket	PG48	Table-14 , Item-9 #	2
6.*	Blank plug complete with gasket	PG16	Table-14 , Item-5 #	1
7.*	Cable gland complete with sealing ,O ring of Neoprene and flat gasket	PG21	SKED-609	4
8.*	Elbow 90° complete with gasket	PG16	Table-5 , Item-4 #	2
9.*	Lock nut	PG16	Table-12 , Item-5 #	7
10.	Polyamide flexible conduit	NW 17	Table-1 , Item-5 #	3M
11.	Adaptor for flexible conduit suitable for PG70	-		2
12.	Crimping socket suitable for M16 stud.	185 mm ²	To suit WFF 300 of M/s Weidmuller	24
13.	Crimping socket suitable for M16 stud.	120 mm ²	To suit WFF 300 of M/s Weidmuller	12
14.	Crimping socket suitable for M10 stud.	120 mm ²	To suit WFF 300 of M/s Weidmuller	8
15.	Crimping socket suitable for M10 stud.	70 mm ²	To suit WFF 120 of M/s Weidmuller	18
16.	Crimping socket suitable for M16 stud.	50 mm ²	To suit WFF 120 of M/s Weidmuller	6
17.	Crimping socket suitable for M10 stud.	50 mm ²	To suit WFF 120 of M/s Weidmuller	2

* Items to be supplied duly fitted with junction boxes.

Items to be supplied as per EDTS291 (latest edition)

EDTS328 Rev 'C'	1	19.12.2012				1 of 1
Spec. no.	Amdt.	Date	SSB/CAD	SEE/D	DY.CEE/D & D	Page





(105)

AMENDMENT NO.-2 TO SPEC..NO. EDTS328 REV. 'C'

This amendment is issued to specification no. EDTS-328 Rev 'C' , AM-1 for "FEEDER JUNCTION BOX FOR EOG LHB TYPE DOUBLE DECKER COACHES " to incorporate the requirements to manufacture LHB EOG coaches with provision of bio toilets. Accordingly 'Annexure-A' of the specification has been modified and divided into two parts i.e.

Type-1 : for Double Decker coaches
Type-2 : for LHB coaches with Bio-toilet

Also the specification for cable protection system has been changed from EDTS 291 (latest edition) to RDSO/PE/SPEC/0138-2009 (Rev-1) mentioned in the annexure .

Following amendments are incorporated:

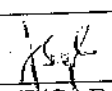

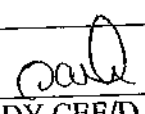
Clause 4.1 The clause is amended as under :

The scope of supply of various sub-components of junction boxes is given as under:

a	Feeder junction box plug side	SKED-614E	02 nos.
b	Feeder junction box socket side	SKED-615E	02 nos.

Clause 6.0: The clause is amended as under :

- 6.1 SKED-614E - Feeder junction box plug side.
6.2 SKED-615E - Feeder junction box socket side

EDTS328 Rev 'C'AM-1	2	05.03.2014				1 of 3
Spec. no.	Amdt.	Date	SSE/CAD	AEE/D	DY.CEE/D &D	Page

TYPE-1 (For Double Decker coaches)

SNO	DESCRIPTION	SIZE	DRG/SPEC/CAT NO	QPA
1.	Feeder junction box-plug side	-	SKED-614E	2
2.	Feeder junction box-socket side	-	SKED-615E	2
3.	End fitting	PG-16	Table-A-2 , Item-3 #	4
4.*	Flexible conduit connector complete with gasket	PG48	Table-A-2 , Item-8 #	2
5.*	Blank plug complete with gasket	PG48	Table-A-18 , Item-8 #	2
6.*	Blank plug complete with gasket	PG16	Table-A-18 , Item-4 #	1
7.*	Cable gland complete with sealing ,O ring of Neoprene and flat gasket	PG21	SKED-609	4
8.*	Elbow 90° complete with gasket	PG16	Table-A-4 , Item-3 #	2
9.*	Lock nut	PG16	Table-A-10 , Item-4 #	2
10.	Polyamide flexible conduit	NW 17	Table-A-1 , Item-3 #	3M
11.	Adaptor for flexible conduit suitable for Pg70	-	A-12,Item-1#	2
12.\$	Crimping socket suitable for M16 stud (Feeder R,Y,B).	185 mm ²	To suit WFF 300 of M/s Weidmuller	12
13.\$	Crimping socket suitable for M16 stud(Z-S coupler R,Y,B).	120 mm ²	To suit WFF 300 of M/s Weidmuller	12
14.\$	Crimping socket suitable for M10 stud (Feeder neutral).	120 mm ²	To suit WFF 120 of M/s Weidmuller	4
15.\$	Crimping socket suitable for M10 stud (Z-S coupler neutral).	95 mm ²	To suit WFF 120 of M/s Weidmuller	4
16.\$	Crimping socket suitable for M12 stud (For earthing- coach side).	70 mm ²	-	4
17.\$	Crimping socket suitable for M10 stud (Feeder & Z-S earthing).	70 mm ²	To suit WFF 120 of M/s Weidmuller	8
18.\$	Crimping socket suitable for M16 stud (Loop R,Y,B) .	50 mm ²	To suit WFF 300 of M/s Weidmuller	6
19.\$	Crimping socket suitable for M10 stud (Loop neutral).	50 mm ²	To suit WFF 120 of M/s Weidmuller	2
20.\$	Crimping socket suitable for M12 stud (Loop SBC) .	50 mm ²	-	8
21.	Flexible hose	ID-60mm	DIN-73411	5M
22.	Flexible hose	ID-70mm	DIN-73411	5M
23.	Circlip	-	NORMA.60-80	8

* Items to be supplied duly fitted with junction boxes.

Items to be supplied as per RDSO/PE/SPEC/0138-2009 (Rev-1).

\$ Items to be supplied as per EDTS-200 (latest) .

EDTS328 Rev 'C'AM-1	2	05.03.2014	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	2 of 3
Spec. no.	Amdt.	Date	SSE/CAD	AEE/D	DY.CEE/D & D	Page

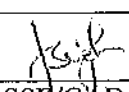
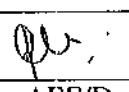
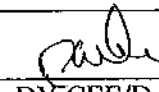
TYPE-2 (LHB coaches with Bio-toilet)

SNO	DESCRIPTION	SIZE	DRG/SPEC/CAT NO	QPA
1.	Feeder junction box-plug side	-	SKED614D alt- 'd'	2
2.	Feeder junction box-socket side	-	SKED614D alt- 'd'	2
3.	End fitting	PG-16	Table-A-2 , Item-3 #	4
4 *	Flexible conduit connector complete with gasket	PG48	Table-A-2 , Item-8 #	2
5.*	Blank plug complete with gasket	PG48	Table-A-18 , Item-8 #	2
6.*	Blank plug complete with gasket	PG16	Table-A-18 , Item-4 #	1
7.*	Cable gland complete with sealing , O ring of Neoprene and flat gasket	PG21	SKED-609	4
8.*	Elbow 90° complete with gasket	PG16	Table-A-4 , Item-3 #	2
9.*	Lock nut	PG16	Table-A-10 , Item-4 #	2
10.	Polyamide flexible conduit	NW 17	Table-A-1 , Item-3 #	3M
11.	Adaptor for flexible conduit suitable for Pg70	-	A-12,Item-1#	2
12. \$	Crimping socket suitable for M16 stud. (Feeder R,Y,B).	120 mm ²	To suit WFF 300 of M/s Weidmuller	24
13. \$	Crimping socket suitable for M10 stud (Feeder neutral)	95 mm ²	To suit WFF 120 of M/s Weidmuller	8
14. \$	Crimping socket suitable for M12 stud.(For Coach body earthing)	70 mm ²	-	4
15. \$	Crimping socket suitable for M10 stud. (Feeder & Z-S earthing)	70 mm ²	To suit WFF 120 of M/s Weidmuller	8
16. \$	Crimping socket suitable for M16 stud.(Loop R,Y,B)..	50 mm ²	To suit WFF 300 of M/s Weidmuller	6
17. \$	Crimping socket suitable for M10 stud. (Loop neutral).	50 mm ²	To suit WFF 120 of M/s Weidmuller	2
18. \$	Crimping socket suitable for M12 stud. (Loop SBC).	50 mm ²	For SBC and dis-connecting and earthing device	8
19.	Flexible hose	ID-60mm	DIN-73411	5M
20.	Flexible hose	ID-70mm	DIN-73411	5M
21.	Circlip	-	NORMA 60-80	8

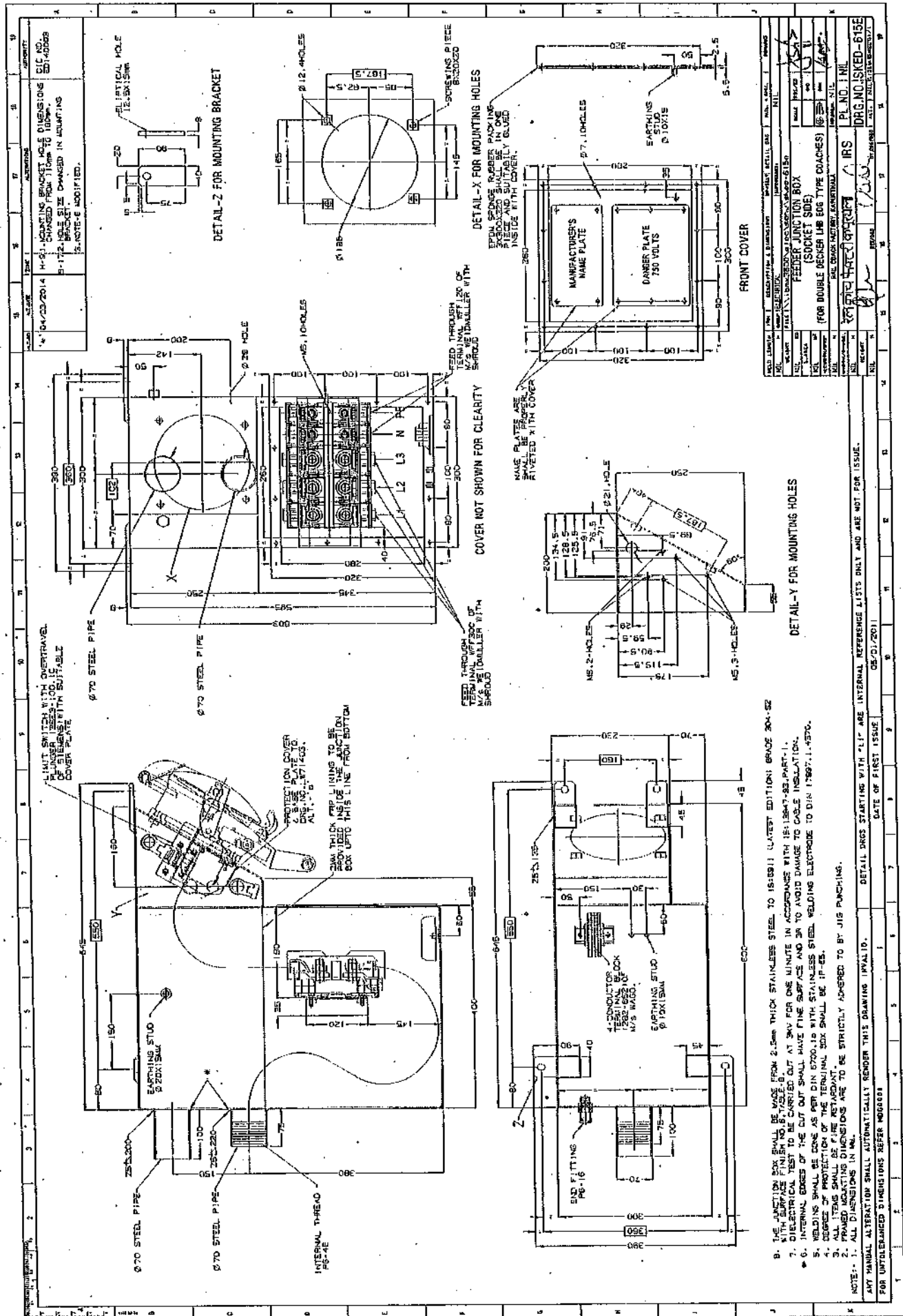
* Items to be supplied duly fitted with junction boxes.

Items to be supplied as per RDSO/PE/SPEC/0138-2009 (Rev-1).

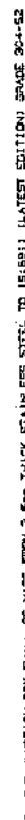
\$ Items to be supplied as per EDTS-200 (latest).

EDTS328 Rev 'C' AM-1	2	05.03.2014				3 of 3
Spec. no.	Amdt.	Date	SSE/CAD	AEE/D	DY.CEE/D & D	Page

101



102



3. ALL ITEMS SHALL BE FIRE RETARDANT.
4. DEGREE OF PROTECTION OF THE REMAINING SUB SHALL BE 1" MIN.
5. CRATED MOUNTING DIMENSIONS ARE TO BE STRICTLY ADHERED TO BY JIS PUNCHING.

NOTE: 1. ALL DIMENSIONS IN MM.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.

FOR UNTOLERANCED DIMENSIONS REFER MDG000A

Vijay

Amendment-3

This amendment is issued to specification no. EDTS-328, Rev.-C, Amdt-2 for Feeder Junction Box for LHB Double Decker Coaches and the following clauses of the specification are amended:

Clause 4.1 is amended as follows:

4.1 The scope of supply of various sub components of junction boxes is given as under:



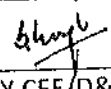
a.	Feeder junction box plus side	SKED614F	02 nos.
b.	Feeder junction box socket side	SKED615F	02 nos.

Clause 4.10 is amended as follows:

4.10 Feed through terminals provided for phases, neutral and earth wires shall be as shown in SKED-614F and SKED-615F.

Clause 6.0 is amended as follows:**6.0 Enclosures:**

- 6.1 SKED-614F : Feeder junction box plug side.
- 6.2 SKED-615F : Feeder junction socket side.
- 6.3 SKED-609 : Connector for Feeder junction box.
- 6.4 LW71403 alt. 'a' : Bracket for fixing of limit switch on junction box.
- 6.5 Annexure-A : For Type-1 and Type-2.

EDTS-328, Rev.-C, Amdt-2	3	31.7.14				1 OF 3
SPEC. NO.	Amdt.	DATE	SSE/CAD	AEE/D	DY.CEE/D&D	PAGE

100/p

Annexure-A

TYPE-1 (For Double Decker coaches)

SNO	DESCRIPTION	SIZE	DRG/SPEC/CAT NO	QPA
1.	Feeder junction box-plug side	-	SKED-614F	2
2.	Feeder junction box-socket side	-	SKED-615F	2
3.*	End fitting	PG-16	Table-A-2 , Item-3 #	4
4.*	Flexible conduit connector complete with gasket	PG48	Table-A-2 , Item-8 #	2
5.*	Blank plug complete with gasket	PG48	Table-A-18 , Item-8 #	2
6.*	Blank plug complete with gasket	PG16	Table-A-18 , Item-4 #	4
7.*	Cable gland complete with sealing ,O ring of Neoprene and flat gasket	PG21	SKED-609	4
8.*	Lock nut	PG21	Table-A-10 , Item-5 #	4
9.*	Elbow 90° complete with gasket	PG13.5	Table-A-4 , Item-4 #	2
10*	Lock Nut	PG13.5	Table-A-10, Item-3#	2
11*	Lock nut	PG16	Table-A-10 , Item-4 #	8
12*	Flexible conduit connector complete with gasket	M20	Table-A-5 , Item-5 #	2
13.*	Hex.Hd.Screw (Stainless steel to IS:1367-2002,P-14,A2-70)	M12X20	IS:1363-2002,P-2,T-1	4
14.*	Polyamide flexible conduit	NW 17	Table-A-1 , Item-3 #	1M
15. *	Adaptor for flexible conduit suitable for Pg70	-	Table-A-12,Item-1#	2
16.\$	Crimping socket suitable for M16 stud (Feeder R,Y,B).	185 mm ²	To suit WFF 300 of M/s Weidmuller	12
17.\$	Crimping socket suitable for M16 stud(Z-S coupler R,Y,B).	120 mm ²	To suit WFF 300 of M/s Weidmuller	12
18.\$	Crimping socket suitable for M10 stud (Feeder neutral).	120 mm ²	To suit WFF 120 of M/s Weidmuller	4
19.\$	Crimping socket suitable for M10 stud (Z-S coupler neutral).	95 mm ²	To suit WFF 120 of M/s Weidmuller	4
20.\$	Crimping socket suitable for M12 stud (For earthing- coach side).	70 mm ²	-	4
21.\$	Crimping socket suitable for M10 stud (Feeder & Z-S earthing).	70 mm ²	To suit WFF 120 of M/s Weidmuller	8
22.\$	Crimping socket suitable for M16 stud (Loop R,Y,B) .	50 mm ²	To suit WFF 300 of M/s Weidmuller	6
23.\$	Crimping socket suitable for M10 stud (Loop neutral).	50 mm ²	To suit WFF 120 of M/s Weidmuller	2
24.\$	Crimping socket suitable for M12 stud (Loop SBC) .	50 mm ²	-	8

* Items to be supplied duly fitted with junction boxes.

Items to be supplied as per RDSO/PE/SPEC/0138-2009 (Rev-1).

\$ Items to be supplied as per EDTS-200 (latest) .

EDTS-328 , Rev.-C, Amdt-2	3	31.7.14	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	2 OF 3
SPEC. NO.	Amdt.	DATE	SSE/CAD	AEE/D	DY.CEE/D&D	PAGE

Annexure-A

TYPE-2 (LHB coaches with Bio-toilet)

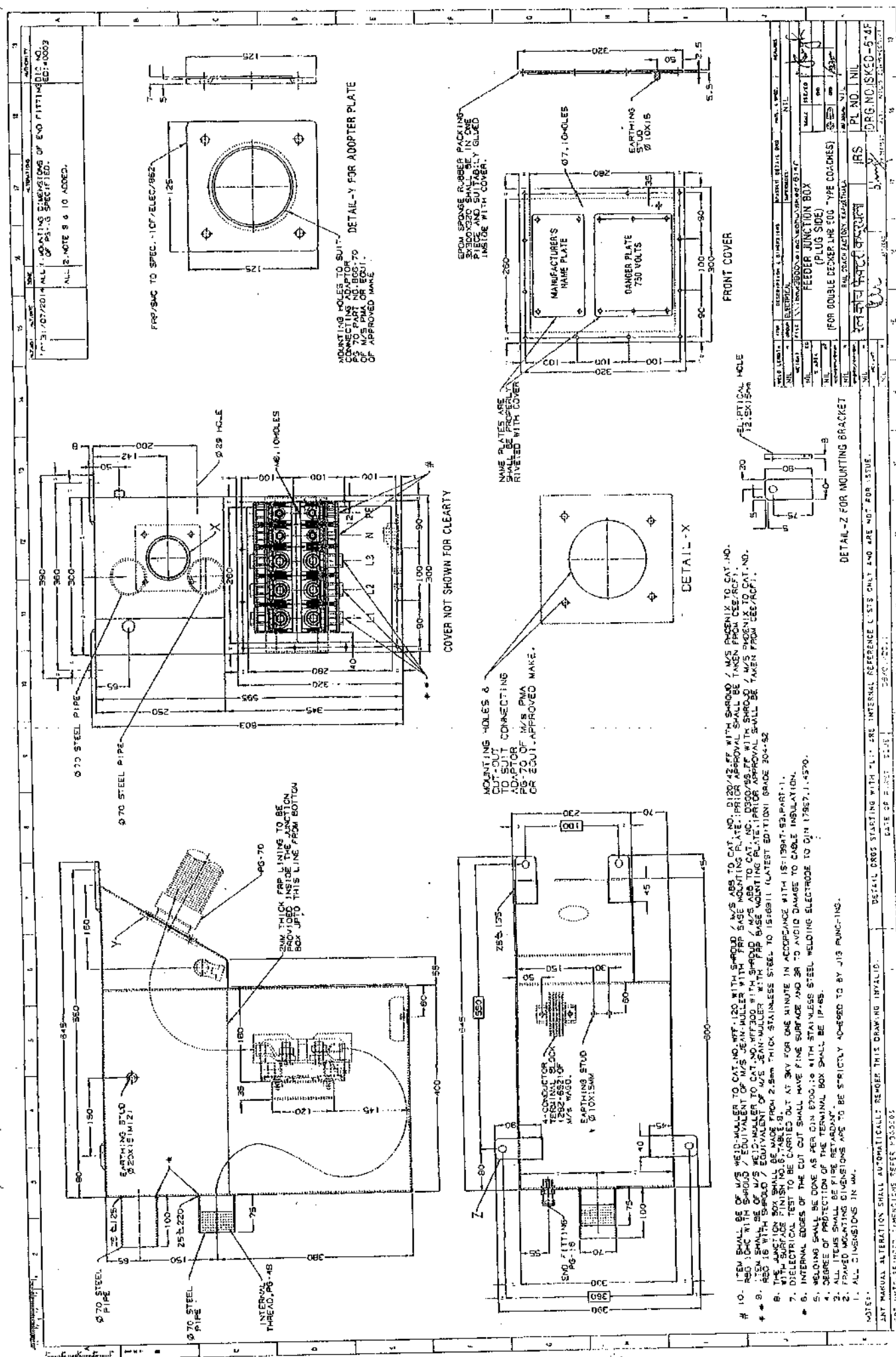
SNO	DESCRIPTION	SIZE	DRG/SPEC/CAT NO	QPA
1.	Feeder junction box-plug side	-	SKED-614F	2
2.	Feeder junction box-socket side	-	SKED-615F	2
3.*	End fitting	PG-16	Table-A-2 , Item-3 #	4
4.*	Flexible conduit connector complete with gasket	PG48	Table-A-2 , Item-8 #	2
5.*	Blank plug complete with gasket	PG48	Table-A-18 , Item-8 #	2
6.*	Blank plug complete with gasket	PG16	Table-A-18 , Item-4 #	4
7.*	Cable gland complete with sealing, O ring of Neoprene and flat gasket	PG21	SKED-609	4
8.*	Lock nut	PG21	Table-A-10 , Item-5 #	4
9.*	Elbow 90° complete with gasket	PG13.5	Table-A-4 , Item-4 #	2
10*	Lock Nut	PG13.5	Table-A-10, Item-3#	2
11*	Lock nut	PG16	Table-A-10 , Item-4 #	8
12*	Flexible conduit connector complete with gasket	M20	Table-A-5 , Item-5 #	2
13.*	Hex.Hd.Screw (Stainless steel to IS:1367-2002,P-14,A2-70)	M12X20	IS:1363-2002,P-2,T-1	4
14.*	Polyamide flexible conduit	NW 17	Table-A-1 , Item-3 #	1M
15. *	Adaptor for flexible conduit suitable for Pg70	-	Table-A-12,Item-1#	2
16. \$	Crimping socket suitable for M16 stud. (Feeder R,Y,B).	120 mm ²	To suit WFF 300 of M/s Weidmuller	24
17. \$	Crimping socket suitable for M10 stud (Feeder neutral)	95 mm ²	To suit WFF 120 of M/s Weidmuller	8
18. \$	Crimping socket suitable for M12 stud.(For Coach body earthing)	70 mm ²	-	4
19. \$	Crimping socket suitable for M10 stud. (Feeder & Z-S earthing)	70 mm ²	To suit WFF 120 of M/s Weidmuller	8
20. \$	Crimping socket suitable for M16 stud.(Loop R,Y,B).	50 mm ²	To suit WFF 300 of M/s Weidmuller	6
21. \$	Crimping socket suitable for M10 stud. (Loop neutral).	50 mm ²	To suit WFF 120 of M/s Weidmuller	2
22.\$	Crimping socket suitable for M12 stud. (Loop SBC).	50 mm ²	For SBC and dis-connecting and earthing device	8

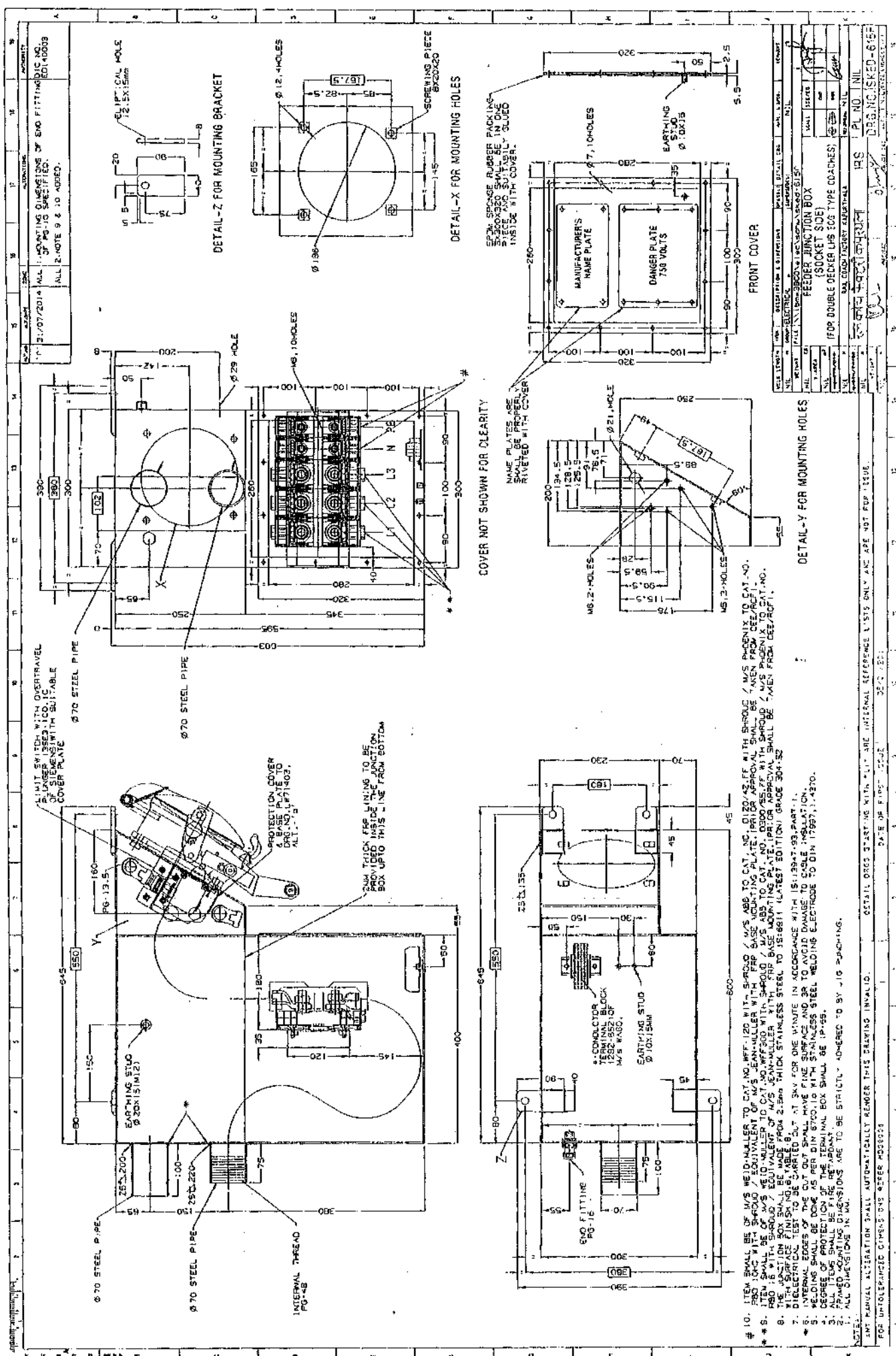
* Items to be supplied duly fitted with junction boxes.

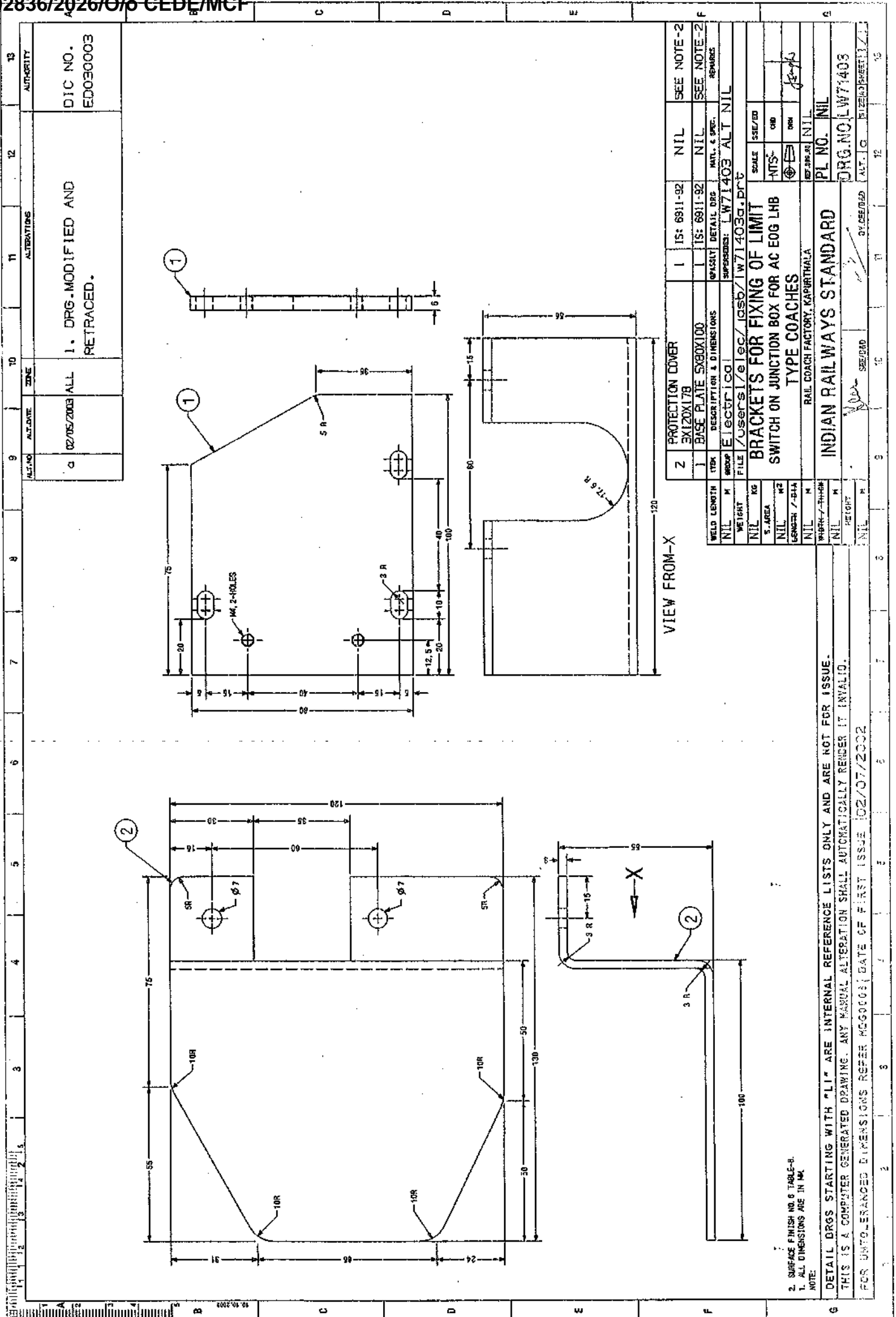
Items to be supplied as per RDSO/PE/SPEC/0138-2009 (Rev-1).

\$ Items to be supplied as per EDTS-200 (latest).

EDTS-328 , Rev.-C, Amdt-2	3	31.7.14	Kpl	Oh	Shang	3 OF 3
SPEC. NO.	Amdt.	DATE	SSE/CAD	AEE/D	DY.CEE/D&D	PAGE







1. DRG. MODIFIED AND RETRACED.

1. DRG. MODIFIED AND RETRACED.

02/05/2003 ALL

DIC NO. ED030003

02/05/2003 ALL

DIC NO. ED030003

02/05/2003 ALL

DIC NO. ED030003

02/05/2003 ALL

DIC NO. ED030003

02/05/2003 ALL

DIC NO. ED030003

02/05/2003 ALL

DIC NO. ED030003

02/05/2003 ALL

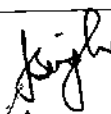
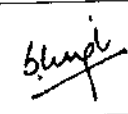
DIC NO. ED030003

Corr.-1

This corrigendum is issued to specification no. EDTS-328, Rev-'c', Am-3 to modified the clause of feeder junction box for LHB EOG Double Decker coaches.

The following clause may be read as:

S.No.	Cl. No. Of Spec.	Existing Clause	Revised Clause
1	4.10	Terminal connectors provided shall be to WFF300 for phase (R,Y,B) and WFF120 for neutral and earth of M/s Weidmuller with mounting base plate.	Terminal connectors provided shall be for phase (R,Y,B) of M/s Weidmuller to cat. no.WFF300 with shroud /M/s ABB to cat.no.0300 /55.FF with shroud / M/s Phoenix to cat.no.RBO16 with shroud and WFF120 of M/s Weidmuller for neutral and earth / equivalent of M/s ABB or M/s Phoenix with shroud & mounting base plate (Prior approval shall be taken from CEE/RCF).

EDTS 328, Rev-'c', Am-3	1	24/08/2015				1 of 1
Spec.no.	Corr.	DATE	SSE/CAD	SEE/D	DY.CEE/D&D	SHEET

92
Corr-2

CORRIGENDUM NO.-2 TO SPEC. NO. EDTS 328 Rev 'C', AM-1, 2, 3 Corr.1

This corrigendum is issued to specification no. EDTS 328 Rev 'C', AM-1, 2, 3 Corr.1 to modify the Annexure-A of Type-2 (LHB AC EOG coaches with bio-toilet) incorporating increased rating of copper crimping sockets suitable for 150 mm² feeder cables. Following changes have been made:


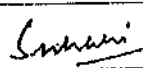
TYPE-2 (LHB coaches with Bio-Toilet)

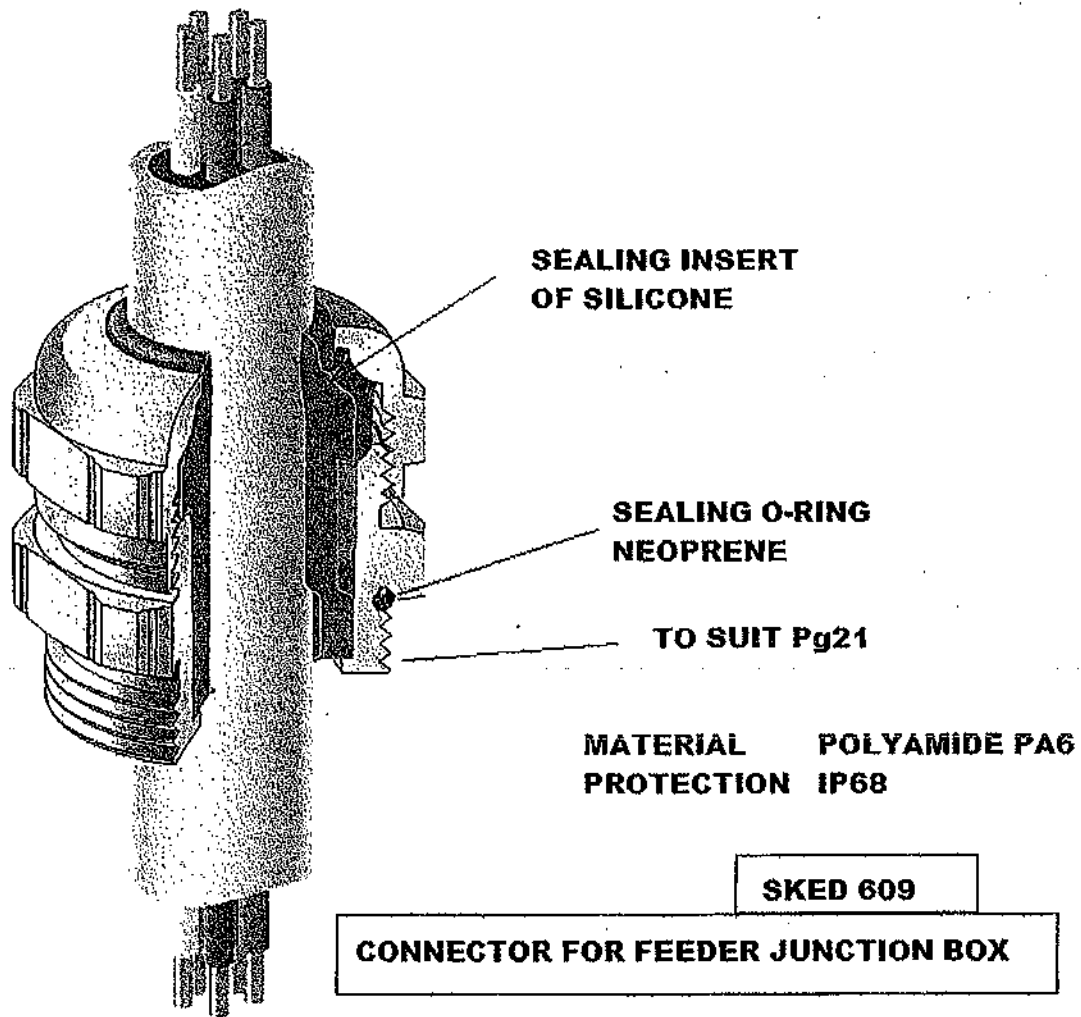
SNO	DESCRIPTION	SIZE	DRG/SPEC/CAT NO	QPA
1.	Feeder junction box-plug side	-	SKED-614F	2
2.	Feeder junction box-socket side	-	SKED-615F	2
3.*	End fitting	PG-16	Table-A-2 , Item-3 #	4
4.*	Flexible conduit connector complete with gasket	PG48	Table-A-2 , Item-8 #	2
5.*	Blank plug complete with gasket	PG48	Table-A-18 , Item-8 #	2
6.*	Blank plug complete with gasket	PG16	Table-A-18 , Item-4 #	4
7.*	Cable gland complete with sealing ,O ring of Neoprene and flat gasket	PG21	SKED-609	4
8.*	Lock nut	PG21	Table-A-10 , Item-5 #	4
9.*	Elbow 90° complete with gasket	PG13.5	Table-A-4 , Item-4 #	2
10.*	Lock nut	PG13.5	Table-A-10 , Item-3 #	2
11.*	Lock nut	PG16	Table-A-10 , Item-4 #	8
12.*	Flexible conduit connector complete with gasket	M20	Table-A-5 , Item-5 #	2
13.*	Hex. Hd. Screw (Stainless steel to IS:1367-2002,P-14,A2-70)	M12X20	IS:1363-2002,P-2,T-1	4
14.*	Polyamide flexible conduit	NW 17	Table-A-1 , Item-3 #	1M
15.*	Adaptor for flexible conduit suitable for Pg70	-	Table-A-12 , Item-1 #	2
16.\$	Crimping socket suitable for M16 stud (Feeder R,Y,B).	150 mm ²	To suit WFF 300 of M/s Weidmuller	24
17.\$	Crimping socket suitable for M10 stud (Feeder neutral).	95 mm ²	To suit WFF 120 of M/s Weidmuller	8
18.\$	Crimping socket suitable for M10 stud (Feeder & Z-S earthing).	70 mm ²	To suit WFF 120 of M/s Weidmuller	12
19.\$	Crimping socket suitable for M16 stud (Loop R,Y,B) .	50 mm ²	To suit WFF 300 of M/s Weidmuller	6
20.\$	Crimping socket suitable for M10 stud (Loop neutral).	50 mm ²	To suit WFF 120 of M/s Weidmuller	2
21.\$	Crimping socket suitable for M12 stud (Loop SBC) .	50 mm ²	For SBC & dis-connecting and earthing device	8
22	Flexible hose	ID=75mm	DIN-73411	10 meters
23	Circlip	-	NORMA 70-90	8

* Items to be supplied duly fitted with junction boxes.

Items to be supplied as per RDSO/PE/SPEC/0138-2009 (Rev-1).

\$ Items to be supplied as per EDTS-200 (latest).

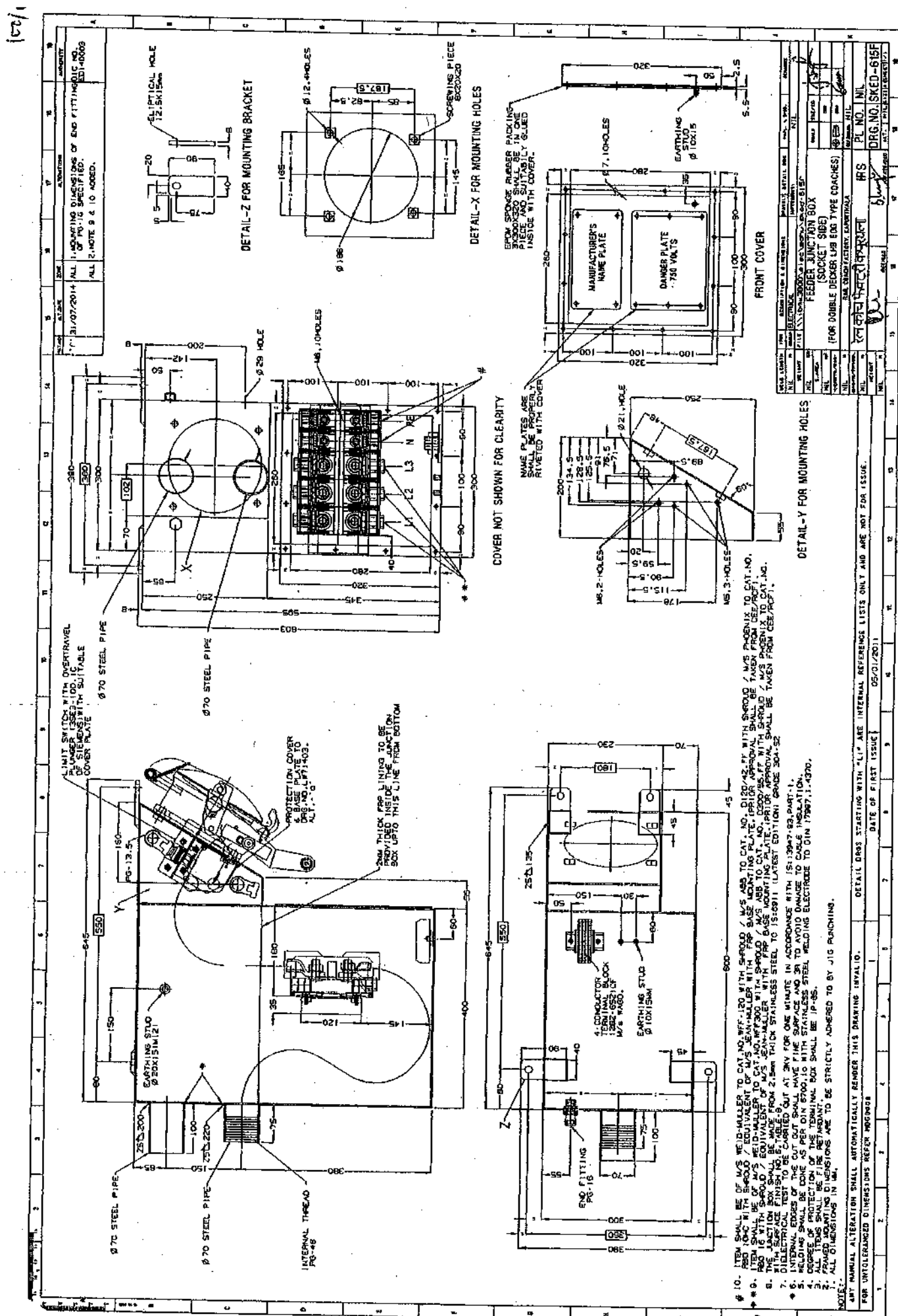
EDTS328 Rev 'C'AM-1,2,3,Corr.1	2	16.09.2016		-		1 of 1
Spec. no.	Corr.	Date	SSE/CAD	SEE/D	DY.CEE/D &D	Page

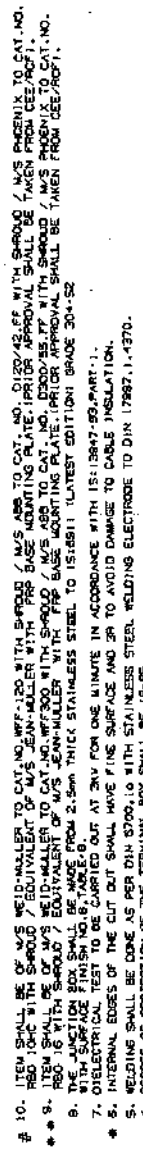


SE/CAD
2.12.2009

SEE D

DY. CEE/D&D





(B)

Amendment-4

This amendment is issued to specification no. EDTS-328, Rev-C, Am-1,2 & 3 with Corr-1 & 2 for Feeder Junction Box for LHB Double Decker Coaches and the following clauses of the specification has been amended:



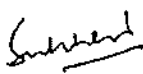
Clause 4.1 is amended as follows:

4.1 The scope of supply of various sub components of junction box is given as under:

a.	Feeder Junction Box Plug side	SKED-614G	02 nos.
b.	Feeder Junction Box Socket side	SKED-615G	02 nos.

Clause 6.0 is amended as follows:**6.0 Enclosures:**

- 6.1 SKED-614G : Feeder junction box Plug side.
 6.2 SKED-615G : Feeder junction box Socket side.
 6.3 SKED-609 : Connector for Feeder junction box.
 6.4 LW71403 Alt 'a' : Bracket for fixing of limit switch on junction box.
 6.5 Annexure A : For Type-1 and Type-2

EDTS328 Rev-C, AM-1,2 & 3, Corr-1 & 2	4	02.01.2018				1 of 3
Spec. No.	AM.	Date	SSE/CAD	SEE/D	DY.CEE/D&D	Page

(7)

Annexure-A



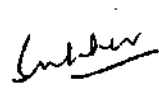
TYPE-1 (For Double Decker coaches)

S.No.	Description	Size	Drg./Spec./Cat. No.	QPC
1.	Feeder junction box plug side	-	SKED-614G	2
2.	Feeder junction box socket side	-	SKED-615G	2
3.*	End fitting	PG16	Table-A-2, item-3 #	4
4.*	Flexible conduit connector complete with gasket	PG48	Table-A-2, item-8 #	2
5.*	Blank plug complete with gasket	PG48	Table-A-18, item-8 #	2
6.*	Blank plug complete with gasket	PG16	Table-A-18, item-4 #	4
7.*	Cable gland complete with sealing, O ring of Neoprene and flat gasket	PG21	SKED-609	4
8.*	Lock nut	PG21	Table-A-10, item-5 #	4
9.*	Elbow 90° complete with gasket	PG13.5	Table-A-4, item-4 #	2
10.*	Lock nut	PG13.5	Table-A-10, item-3 #	2
11.*	Lock nut	PG16	Table-A-10, item-4 #	8
12.*	Flexible conduit connector complete with gasket	M20	Table-A-5, item-5 #	2
13.*	Hex. Hd. Screw (Stainless steel to IS:1367-2002, P-14, A2-70)	M12X20	IS:1363-2002, P-2, T-1	4
14.*	Polyamide flexible conduit	NW17	Table-A-1, item-3 #	0.3Meter
15.*	Adaptor for flexible conduit suitable for PG70	-	Table-A-12, item-1 #	2
16.\$	Crimping socket suitable for M16 stud (Feeder R,Y,B)	185mm ²	To suit WFF300 of M/s Weidmuller	24
17.\$	Crimping socket suitable for M10 stud (Feeder neutral)	120mm ²	To suit WFF120 of M/s Weidmuller	8
18.\$	Crimping socket suitable for M10 stud (Feeder & Z-S earthing)	70mm ²	To suit WFF120 of M/s Weidmuller	12
19.\$	Crimping socket suitable for M16 stud (Loop R,Y,B)	50mm ²	To suit WFF300 of M/s Weidmuller	6
20.\$	Crimping socket suitable for M10 stud (Loop neutral)	50mm ²	To suit WFF120 of M/s Weidmuller	2
21\$	Crimping socket suitable for M12 stud (Loop SBC)	50mm ²	-	8
22.	Flexible hose	ID=75mm	IS:444-87, Type-1, T-1	10 Meters
23.	Circlip	-	NORMA 70-90	8

* Items to be supplied duly fitted with junction boxes.

Items to be supplied as per RDSO/PE/SPEC/0138-2009 (Rev-1).

\$ Items to be supplied as per EDTS-200 (latest).

EDTS328 Rev-C, AM-1,2 & 3, Corr-1 & 2	4	02.01.2018				2 of 3
Spec. No.	AM.	Date	SSE/CAD	SEE/D	DY.CEE/D&D	Page

(6)



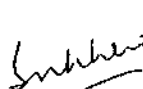
TYPE-2 (LHB coaches with Bio-toilet)

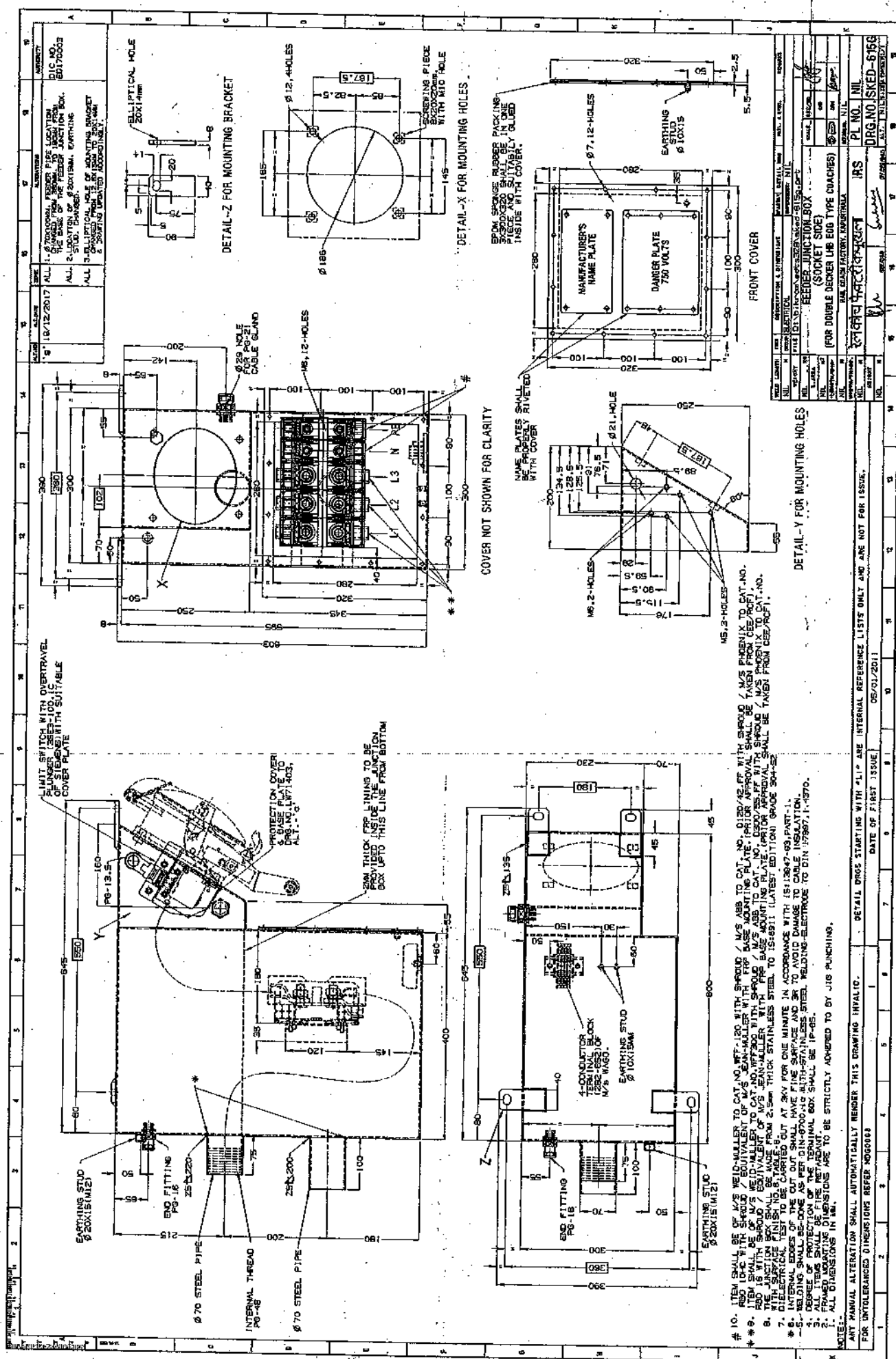
S.No.	Description	Size	Drg./Spec./Cat. No.	QPC
1.	Feeder junction box plug side	-	SKED-614G	2
2.	Feeder junction box socket side	-	SKED-615G	2
3.*	End fitting	PG16	Table-A-2, item-3 #	4
4.*	Flexible conduit connector complete with gasket	PG48	Table-A-2, item-8 #	2
5.*	Blank plug complete with gasket	PG48	Table-A-18, item-8 #	2
6.*	Blank plug complete with gasket	PG16	Table-A-18, item-4 #	4
7.*	Cable gland complete with sealing, O ring of Neoprene and flat gasket	PG21	SKED-609	4
8.*	Lock nut	PG21	Table-A-10, item-5 #	4
9.*	Elbow 90° complete with gasket	PG13.5	Table-A-4, item-4 #	2
10.*	Lock nut	PG13.5	Table-A-10, item-3 #	2
11.*	Lock nut	PG16	Table-A-10, item-4 #	8
12.*	Flexible conduit connector complete with gasket	M20	Table-A-5, item-5 #	2
13.*	Hex. Hd. Screw (Stainless steel to IS:1367-2002, P-14, A2-70)	M12X20	IS:1363-2002, P-2, T-1	4
14.*	Polyamide flexible conduit	NW17	Table-A-1, item-3 #	0.3Meter
15.*	Adaptor for flexible conduit suitable for PG70	-	Table-A-12, item-1 #	2
16.\$	Crimping socket suitable for M16 stud (Feeder R,Y,B)	150mm ²	To suit WFF300 of M/s Weidmuller	24
17.\$	Crimping socket suitable for M10 stud (Feeder neutral)	95mm ²	To suit WFF120 of M/s Weidmuller	8
18.\$	Crimping socket suitable for M10 stud (Feeder & Z-S earthing)	70mm ²	To suit WFF120 of M/s Weidmuller	12
19.\$	Crimping socket suitable for M16 stud (Loop R,Y,B)	50mm ²	To suit WFF300 of M/s Weidmuller	6
20.\$	Crimping socket suitable for M10 stud (Loop neutral)	50mm ²	To suit WFF120 of M/s Weidmuller	2
21.\$	Crimping socket suitable for M12 stud (Loop SBC)	50mm ²	-	8
22.	Flexible hose	ID=75mm	IS:444-87, Type-1, T-1	10 Meters
23.	Circlip	-	NORMA 70-90	8

* Items to be supplied duly fitted with junction boxes.

Items to be supplied as per RDSO/PE/SPEC/0138-2009 (Rev-1).

\$ Items to be supplied as per EDTS-200 (latest).

EDTS328 Rev-C, AM-1,2 & 3, Corr-1 & 2	4	02.01.2018				3 of 3
Spec. No.	AM.	Date	SSE/CAD	SEE/D	DY.CEE/D&D	Page



18/6
52

This amendment is issued to specification no. EDTS-328, Rev 'C', Am-1, 2, 3 & 4 with Corr- 1 & 2 for "Feeder Junction Box for LHB Double Decker Coaches" and the following clauses of the specification has been amended:

Clause 4.1: The clause is amended as follows:

The scope of supply of various sub-components of junction boxes is given as under:

TYPE-1 (For Double Decker Coaches) & TYPE-2 (For LHB Coaches with Bio-Toilet)

a.	Feeder junction box plug side	SKED-614G	02 nos.
b.	Feeder junction box socket side	SKED-615H	02 nos.

Clause 4.14: The clause is amended as follows:




Limit switch with over travel plunger provided shall be to catalogue no. 3SE100-1C of M/s Siemens make or catalogue no. GPX11 of M/s Bohmen make and to drawing no. CC71516 with cover bracket for mounting on the junction box to drawing no. LW71403 alt 'a'. Threading of the limit switch shall be compatible with conduit connection.

Clause 4.15: The clause is deleted.

Clause 6.0: The clause is amended as follows:

6.0 Enclosures:

- 6.1 SKED-614G : Feeder junction box plug side.
- 6.2 SKED-615H : Feeder junction box socket side.
- 6.3 SKED-609 : Connector for Feeder junction box.
- 6.4 LW71403 Alt 'a' : Bracket for fixing of limit switch on junction box.
- 6.5 Annexure A : For Type-1 and Type-2

EDTS-328, Rev-'C', Amdt-1,2,3 & 4, Corr- 1&2.	5	19.06.2020				1 of 3
SPEC. No.	Amdt.	DATE	SSE/CAD	SEE/D	DY.CEE/D&D	PAGE

TYPE-1 (For Double Decker coaches)




Annexure-A

S.NO.	DESCRIPTION	SIZE	DRG/SPEC/CAT NO.	QTY
1.	Feeder junction box Plug side	-	SKED-614G	2
2.	Feeder junction box Socket side	-	SKED-615H	2
3. *	End fitting	PG16	Table-A-2, item-3 #	4
4. *	Flexible conduit connector complete with gasket	PG48	Table-A-2, Item-8 #	2
5. *	Blank plug complete with gasket	PG48	Table-A-18, Item-8 #	2
6. *	Cable gland complete with sealing, O ring of Neoprene and flat gasket	PG21	SKED-609	4
7. *	Lock nut	PG21	Table-A-10, Item-5 #	4
8. *	Elbow 90° complete with gasket	PG13.5	Table-A-4, Item-4 #	2
9. *	Lock nut	PG13.5	Table-A-10, Item-3 #	2
10. *	Lock nut	PG16	Table-A-10, Item-4 #	8
11. *	Flexible conduit connector complete with gasket	M20	Table-A-5, item-5 #	2
12. *	Hex. Hd. Screw (Stainless steel to IS:1367-2002, P-14, A2-70)	M12x20	IS:1363-2002, P-2, T-1	4
13. *	Polyamide flexible conduit	NW 17	Table-A-1, item-3 #	0.3 Meter
14. *	Adaptor for flexible conduit suitable for PG70	-	Table-A-12, Item-1 #	2
15. \$	Crimping socket for M16 stud (Feeder R,Y,B)	185 mm ²	To suit WFF 300 of M/s Weidmuller	24
16. \$	Crimping socket for M10 stud (Feeder Neutral)	120 mm ²	To suit WFF 120 of M/s Weidmuller	8
17. \$	Crimping socket for M10 stud (Feeder & Z-S earthing)	70 mm ²	To suit WFF 120 of M/s Weidmuller	12
18. \$	Crimping socket for M16 stud (Loop R,Y,B)	50 mm ²	To suit WFF 300 of M/s Weidmuller	6
19. \$	Crimping socket for M10 stud (Loop Neutral)	50 mm ²	To suit WFF 120 of M/s Weidmuller	2
20. \$	Crimping socket for M12 stud (Loop SBC)	50 mm ²	-	8
21.	Flexible hose	ID=75mm	IS:444-87, Type-1, T-1	8 Meters
22.	Circlip	-	NORMA 70-90	8

* Items to be supplied duly fitted with junction boxes.

Items to be supplied as per spec no. RDSO/PE/SPEC/AC-0138-2009 (Rev-1).

\$ Items to be supplied as per EDTS-200(latest).

EDTS-328, Rev-'C', Amdt-1,2,3 & 4, Corr- 1&2.	5	19.06.2020				2 of 3
SPEC. No.	Amdt.	DATE	SSE/CAD	SEE/D	DY.CEE/D&D	PAGE

TYPE-2 (LHB coaches with Bio-toilet)




Annexure-A

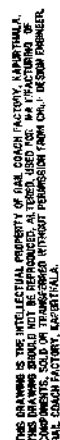
S.NO.	DESCRIPTION	SIZE	DRG/SPEC/CAT NO.	QTY
1.	Feeder junction box Plug side	-	SKED-614G	2
2.	Feeder junction box Socket side	-	SKED-615H	2
3. *	End fitting	PG16	Table-A-2, item-3 #	4
4. *	Flexible conduit connector complete with gasket	PG48	Table-A-2, Item-8 #	2
5. *	Blank plug complete with gasket	PG48	Table-A-18, Item-8 #	2
6. *	Cable gland complete with sealing, O ring of Neoprene and flat gasket	PG21	SKED-609	4
7. *	Lock nut	PG21	Table-A-10, Item-5 #	4
8. *	Elbow 90° complete with gasket	PG13.5	Table-A-4, Item-4 #	2
9. *	Lock nut	PG13.5	Table-A-10, Item-3 #	2
10. *	Lock nut	PG16	Table-A-10, Item-4 #	8
11. *	Flexible conduit connector complete with gasket	M20	Table-A-5, item-5 #	2
12. *	Hex. Hd. Screw (Stainless steel to IS:1367-2002, P-14, A2-70)	M12x20	IS:1363-2002, P-2, T-1	4
13. *	Polyamide flexible conduit	NW 17	Table-A-1, item-3 #	0.3 Meter
14. *	Adaptor for flexible conduit suitable for PG70	-	Table-A-12, Item-1 #	2
15. \$	Crimping socket for M16 stud (Feeder R,Y,B)	150 mm ²	To suit WFF 300 of M/s Weidmuller	24
16. \$	Crimping socket for M10 stud (Feeder Neutral)	95 mm ²	To suit WFF 120 of M/s Weidmuller	8
17. \$	Crimping socket for M10 stud (Feeder & Z-S earthing)	70 mm ²	To suit WFF 120 of M/s Weidmuller	12
18. \$	Crimping socket for M16 stud (Loop R,Y,B)	50 mm ²	To suit WFF 300 of M/s Weidmuller	6
19. \$	Crimping socket for M10 stud (Loop Neutral)	50 mm ²	To suit WFF 120 of M/s Weidmuller	2
20. \$	Crimping socket for M12 stud (Loop SBC)	50 mm ²	-	8
21.	Flexible hose	ID=75mm	IS:444-87, Type-1, T-1	8 Meters
22.	Circlip	-	NORMA 70-90	8

* Items to be supplied duly fitted with junction boxes.

Items to be supplied as per spec no. RDSO/PE/SPEC/AC-0138-2009 (Rev-1).

\$ Items to be supplied as per EDTS-200(latest).

EDTS-328, Rev-'C', Amdt-1,2,3 & 4, Corr- 1&2.	5	19.06.2020				3 of 3
SPEC. No.	Amdt.	DATE	SSE/CAD	SEE/D	DY.CEE/D&D	PAGE

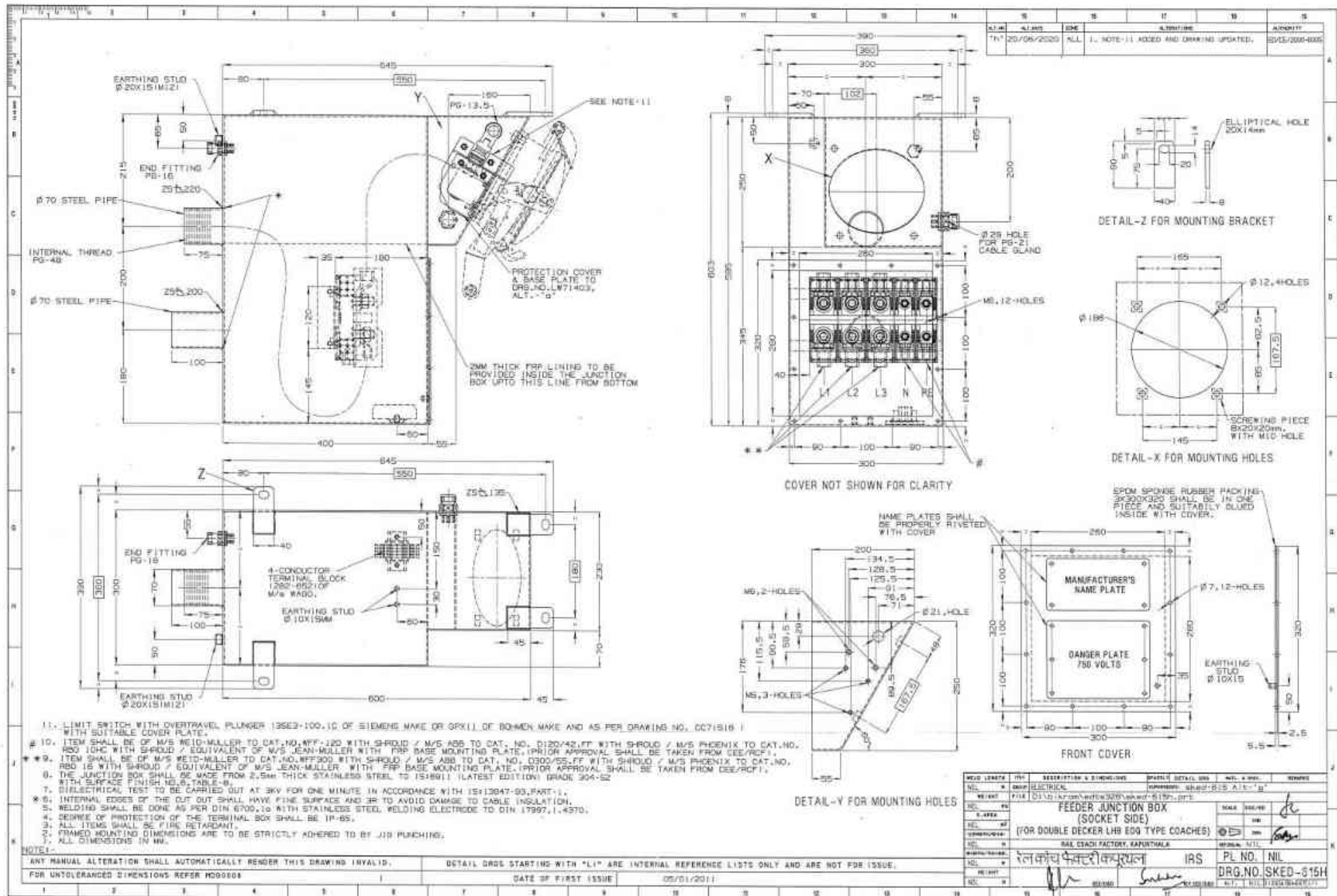


- NOTE- 1. ALL DIMENSION IN MM.

THIS IS A COMPUTER GENERATED DRAWING. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER IT INVALID.

FOR UNTOLERANCED DIMENSIONS REFER MDG00006	DATE OF FIRST ISSUE	06/03/2020
--	---------------------	------------

NIL		NIL		NIL		NIL	
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	SPACING	DETAIL DRG	MATL. & SPEC.	REMARKS	
NIL	N	ELECTRICAL	SPARSEDES: NIL				
WEIGHT	FILE	C:\Users\pand\Desktop\CC71516 prt					
NIL	KG	LIMIT SWITCH FOR FEEDER JUNCTION BOX OF LHB COACHES				SCALE	SS/ED
S. AREA							CHD
NIL	M ²						DEN
LENGTH		RAIL COACH FACTORY, KAPURTHALA				REF. DRG. NO. NIL	
NIL	N	रेल कोच फैक्टरी कपूरथला	IRS		PL NO.	NIL	
WEIGHT	H				DRG. NO.	CC71516	
NIL	M	SEE/D&D	DY.CEE/D&D		ALT. NIL	SIZE A3 SHEET 1/1	



This amendment is issued to specification no. EDTS-328, Rev 'C', Am-1, 2, 3, 4 & 5 with Corr- 1 & 2 for "Feeder Junction Box for LHB Double Decker Coaches".




The description/specification of following item has been changed:

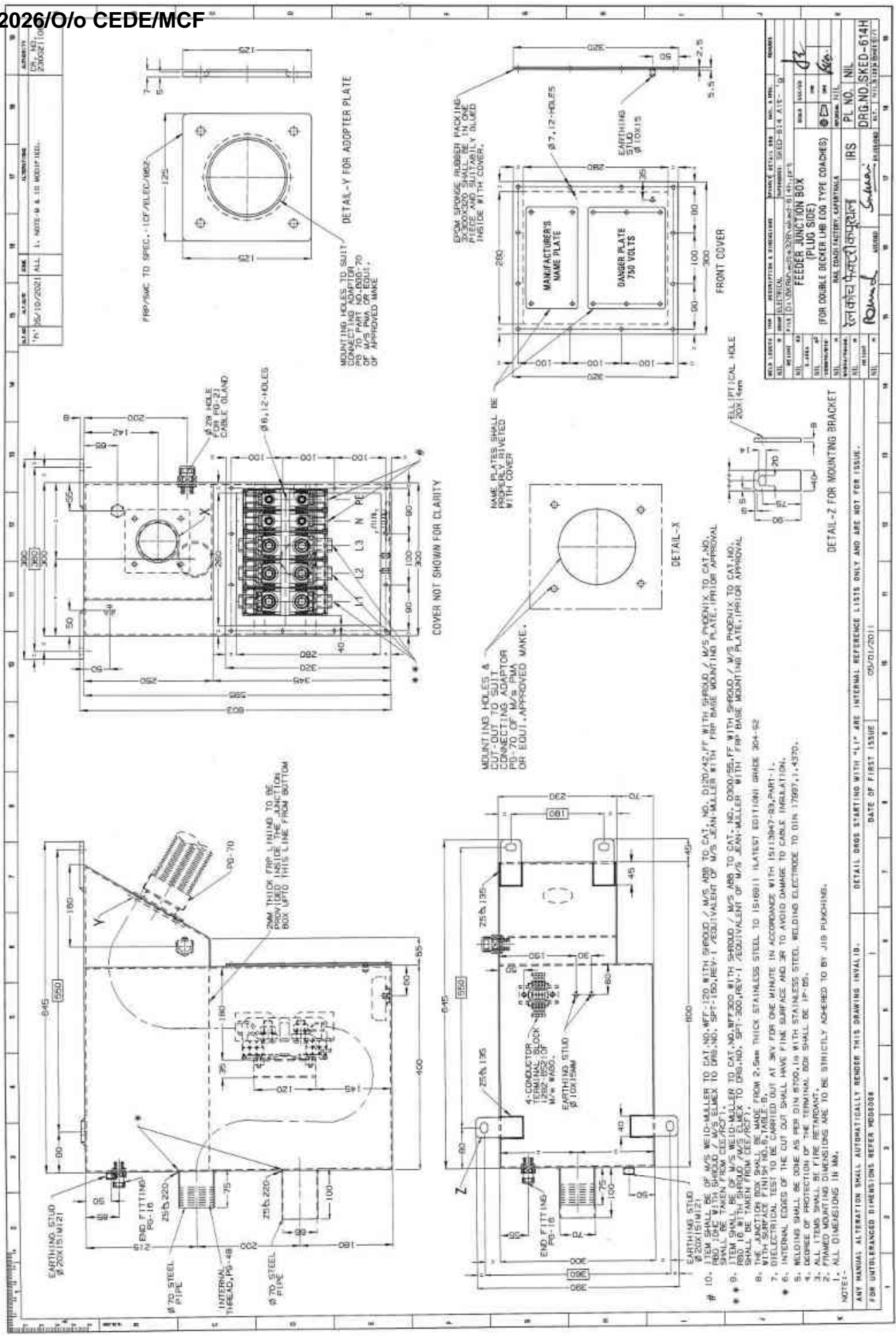
S.No. 22 of TYPE-1 (For Double Decker Coaches) of Annexure-A:

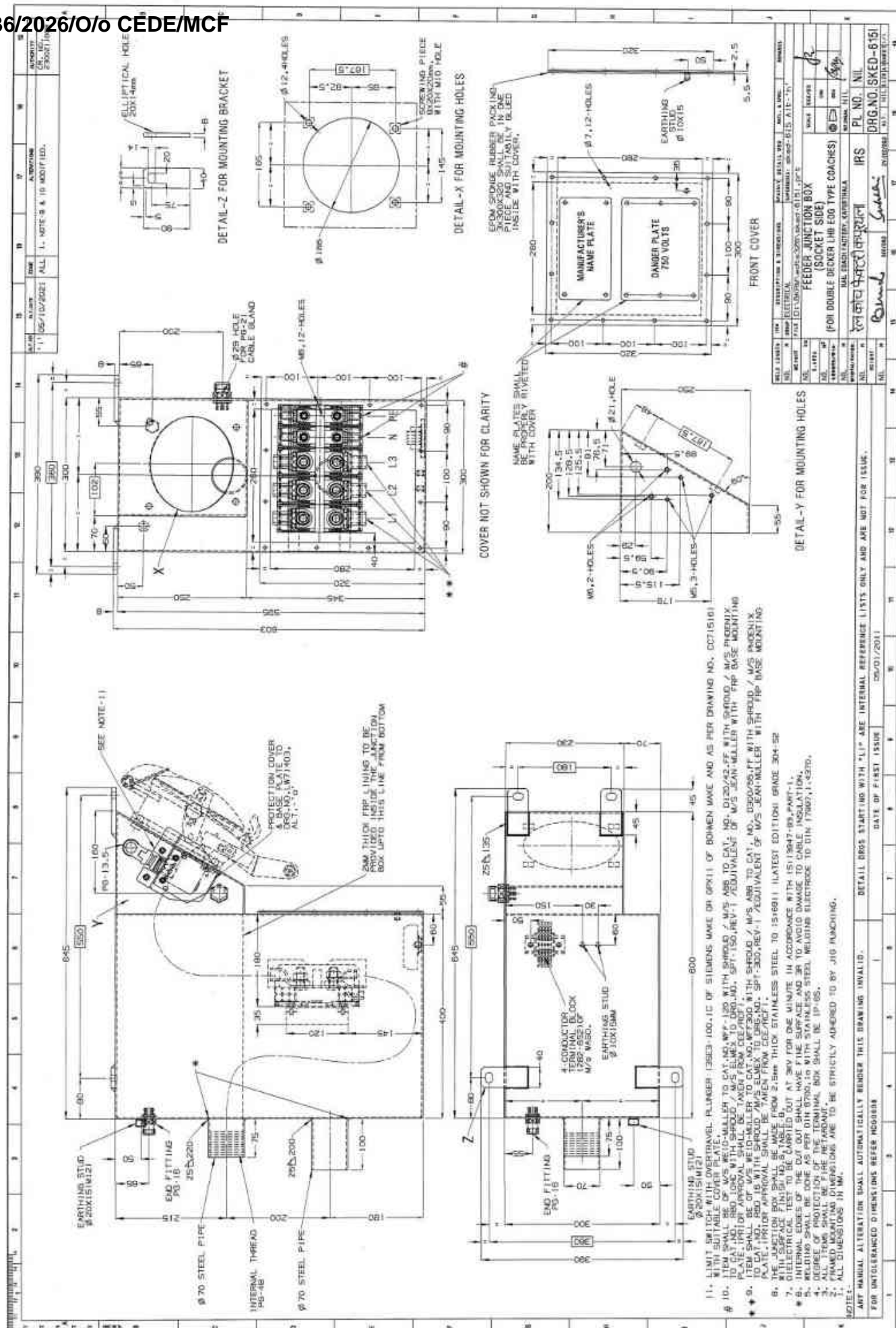
S.NO.	DESCRIPTION	SIZE	DRG/SPEC/CAT NO.	QTY
1.	Feeder junction box Plug side	-	SKED-614H	2
2.	Feeder junction box Socket side	-	SKED-615I	2
22.	Hose Clamp of M/s NORMA/KLIPCO	AL70-90	DIN3017 W4 IS:4672-2002, Table-1	8

S.No. 22 of TYPE-2 (LHB coaches with Bio-toilet) of Annexure-A:

S.NO.	DESCRIPTION	SIZE	DRG/SPEC/CAT NO.	QTY
1.	Feeder junction box Plug side	-	SKED-614H	2
2.	Feeder junction box Socket side	-	SKED-615I	2
22.	Hose Clamp of M/s NORMA/KLIPCO	AL70-90	DIN3017 W4 IS:4672-2002, Table-1	8

EDTS-328, Rev-'C', Amdt-1,2,3, 4&5, Corr- 1&2.	6	05.10.2021				1 of 1
SPEC. No.	Amdt.	DATE	SSE/CAD	SEE/D	DY.CEE/D&D	PAGE





Amendment-7

This amendment is issued to specification no.EDTS-328, Rev-'C', Am-1,2,3,4,5 & 6 with corr-1 & 2 for "Feeder junction box for Double Decker coaches" and the following clauses of the specification has been amended:

Claus 4.1: The clause is amended as follows:

The scope of supply of various sub-components of junction boxes is given as under:




a.	Feeder junction box plug side	SKED-614 H	02 nos.
b.	Feeder junction box socket side	SKED-615 J	02 nos.

Clause 4.14: The clause is amended as follows:

Limit switch with over travel plunger provided shall be to catalogue no.3SE100-1C of M/s Siemens make or catalogue no.GP11X of M/s Bohmen make and to drawing no.CC71516 with cover bracket for mounting on the junction box to drawing no.LW71403 alt'a'. Threading of the limit switch shall be compatible with conduit connection.

Clause 6.0: The clause is amended as follows:**6.0 Enclosures:**

- 6.1 SKED-614 H : Feeder junction box Plug side.
- 6.2 SKED-615 J : Feeder junction box Socket side.
- 6.3 SKED-609 : Connector for Feeder junction box.
- 6.4 LW71403, Alt-'a' : Bracket for fixing of limit switch on junction box.
- 6.5 Annexure-A : For Type-1 and Type-2.

EDTS-328,Rev-C, Am-1,2,3,4,5,6, Corr-1,2	7	18.07.22				1 of 3
Spec. No.	Amdt.	DATE	SSE/CAD	SEE/D&D	DY.CEE/D&D	PAGE

TYPE-1 (For Double Decker Coaches)




Annexure-A

S.No.	DESCRIPTION	SIZE	DRG/SPEC/CAT NO	QTY
1.	Feeder junction box Plug side	-	SKED-614 H	2
2.	Feeder junction box socket side	-	SKED-615 J	2
3.*	End fitting	PG16	Table-A-2,Item-3#	4
4.*	Flexible conduit connector complete with gasket	PG48	Table-A-2,Item-8#	2
5.*	Blank plug complete with gasket	PG48	Table-A-18,Item-8#	2
6.*	Cable gland complete with sealing, O ring of Neoprene and flat gasket	PG21	SKED-609	4
7.*	Lock nut	PG21	Table-A-10,Item-5#	4
8.*	Elbow 90° complete with gasket	PG13.5	Table-A-4,Item-4#	2
9.*	Lock nut	PG13.5	Table-A-10,Item-3#	2
10.*	Lock nut	PG16	Table-A-10,Item-4#	8
11.*	Flexible conduit connector complete with gasket	M20	Table-A-5,Item-5#	2
12.*	Hex. Hd. Screw (Stainless steel to IS:1367-2002,P-14,A2-70)	M12x20	IS:1363-2002,P-2,T-1	4
13.*	Polyamide flexible conduit	NW17	Table-A-1, item-3 #	0.3Meter
14.*	Adaptor for flexible conduit suitable for PG70	-	Table-A-12, item-1 #	2
15.\$	Crimping socket for M16 stud (Feeder R,Y,B)	185mm ²	To suit WFF 300 of M/s Weidmuller	24
16.\$	Crimping socket for M10 stud (Feeder neutral)	120mm ²	To suit WFF 120 of M/s Weidmuller	8
17.\$	Crimping socket for M10 stud (Feeder & Z-S earthing)	70mm ²	To suit WFF 120 of M/s Weidmuller	12
18.\$	Crimping socket for M16 stud (Loop R,Y,B)	50mm ²	To suit WFF 300 of M/s Weidmuller	6
19.\$	Crimping socket for M10 stud (Loop neutral)	50mm ²	To suit WFF 120 of M/s Weidmuller	2
20.\$	Crimping socket for M12 stud (Loop SBC)	50mm ²	-	8
21.	Flexible hose	ID=75mm	IS:444-87,Type-1,T-1	8 Meters
22.	Hose Clamp of M/s NORMA/KILPCO	AL70-90	DIN3017 W4 IS:4672-2002,Table-1	8

* Items to be supplied duly fitted with junction boxes.

Items to be supplied as per RDSO/PE/SPEC/0138-2009 (Rev-1).

\$ Items to be supplied as per EDTS-200 (latest).

EDTS-328,Rev-C, Am-1,2,3,4,5,6, Corr-1,2	7	18.07.22				2 of 3
Spec. No.	Amdt.	DATE	SSE/CAD	SEE/D&D	DY.CEE/D&D	PAGE

TYPE-2 (LHB Coaches with Bio-Toilet)


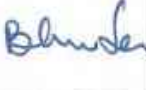

Annexure-A

S.No.	DESCRIPTION	SIZE	DRG/SPEC/CAT NO	QTY
1.	Feeder junction box Plug side	-	SKED-614 H	2
2.	Feeder junction box socket side	-	SKED-615 J	2
3.*	End fitting	PG16	Table-A-2,Item-3#	4
4.*	Flexible conduit connector complete with gasket	PG48	Table-A-2,Item-8#	2
5.*	Blank plug complete with gasket	PG48	Table-A-18,Item-8#	2
6.*	Cable gland complete with sealing, O ring of Neoprene and flat gasket	PG21	SKED-609	4
7.*	Lock nut	PG21	Table-A-10,Item-5#	4
8.*	Elbow 90° complete with gasket	PG13.5	Table-A-4,Item-4#	2
9.*	Lock nut	PG13.5	Table-A-10,Item-3#	2
10.*	Lock nut	PG16	Table-A-10,Item-4#	8
11.*	Flexible conduit connector complete with gasket	M20	Table-A-5,Item-5#	2
12.*	Hex. Hd. Screw (Stainless steel to IS:1367-2002,P-14,A2-70)	M12x20	IS:1363-2002,P-2,T-1	4
13.*	Polyamide flexible conduit	NW17	Table-A-1, item-3 #	0.3Meter
14.*	Adaptor for flexible conduit suitable for PG70	-	Table-A-12, item-1 #	2
15.\$	Crimping socket for M16 stud (Feeder R,Y,B)	150mm ²	To suit WFF 300 of M/s Weidmuller	24
16.\$	Crimping socket for M10 stud (Feeder neutral)	95mm ²	To suit WFF 120 of M/s Weidmuller	8
17.\$	Crimping socket for M10 stud (Feeder & Z-S earthing)	70mm ²	To suit WFF 120 of M/s Weidmuller	12
18.\$	Crimping socket for M16 stud (Loop R,Y,B)	50mm ²	To suit WFF 300 of M/s Weidmuller	6
19.\$	Crimping socket for M10 stud (Loop neutral)	50mm ²	To suit WFF 120 of M/s Weidmuller	2
20.\$	Crimping socket for M12 stud (Loop SBC)	50mm ²	-	8
21.	Flexible hose	ID=75mm	IS:444-87,Type-1,T-1	8 Meters
22.	Hose Clamp of M/s NORMA/KILPCO	AL70-90	DIN3017 W4 IS:4672-2002,Table-1	8

* Items to be supplied duly fitted with junction boxes.

Items to be supplied as per RDSO/PE/SPEC/0138-2009 (Rev-1).

\$ Items to be supplied as per EDTS-200 (latest).

EDTS-328,Rev-C, Am-1,2,3,4,5,6, Corr-1,2	7	18.07.22				3 of 3
Spec. No.	Amdt.	DATE	SSE/CAD	SEE/D&D	DY.CEE/D&D	PAGE

Corrigendum-3

This corrigendum is issued to specification no.EDTS-328, Rev-'C', Am-7 for "Feeder junction box for Double Decker coaches". In this corrigendum the quantity of crimping sockets to s.no.-15,16 & 17 has been modified in the B.O.M. of Annexure-A for Type-1 & Type- 2.

TYPE-1 (For Double Decker Coaches)**Annexure-A**

S.No.	DESCRIPTION	SIZE	DRG/SPEC/CAT NO	QTY
1.	Feeder junction box Plug side	-	SKED-614 H	2
2.	Feeder junction box socket side	-	SKED-615 J	2
3.*	End fitting	PG16	Table-A-2,Item-3#	4
4.*	Flexible conduit connector complete with gasket	PG48	Table-A-2,Item-8#	2
5.*	Blank plug complete with gasket	PG48	Table-A-18,Item-8#	2
6.*	Cable gland complete with sealing, O ring of Neoprene and flat gasket	PG21	SKED-609	4
7.*	Lock nut	PG21	Table-A-10,Item-5#	4
8.*	Elbow 90° complete with gasket	PG13.5	Table-A-4,Item-4#	2
9.*	Lock nut	PG13.5	Table-A-10,Item-3#	2
10.*	Lock nut	PG16	Table-A-10,Item-4#	8
11.*	Flexible conduit connector complete with gasket	M20	Table-A-5,Item-5#	2
12.*	Hex. Hd. Screw (Stainless steel to IS:1367-2002,P-14,A2-70)	M12x20	IS:1363-2002,P-2,T-1	4
13.*	Polyamide flexible conduit	NW17	Table-A-1, item-3 #	0.3Meter
14.*	Adaptor for flexible conduit suitable for PG70	-	Table-A-12, item-1 #	2
15.\$	Crimping socket for M16 stud (Feeder R,Y,B)	185mm ²	To suit WFF 300 of M/s Weidmuller	12
16.\$	Crimping socket for M10 stud (Feeder neutral)	120mm ²	To suit WFF 120 of M/s Weidmuller	4
17.\$	Crimping socket for M10 stud (Feeder earthing)	70mm ²	To suit WFF 120 of M/s Weidmuller	8
18.\$	Crimping socket for M16 stud (Loop R,Y,B)	50mm ²	To suit WFF 300 of M/s Weidmuller	6
19.\$	Crimping socket for M10 stud (Loop neutral)	50mm ²	To suit WFF 120 of M/s Weidmuller	2

EDTS-328,Rev-C,Am-7	3	09.08.23	<i>Ja</i>	<i>Revised</i>	<i>Checked</i>	1 of 3
Spec. No.	Corr.	DATE	SSE/CAD	SEE/D&D	DY.CEE/D&D	PAGE

20.\$	Crimping socket for M12 stud (Loop SBC)	50mm ²	-	8
21.	Flexible hose	ID=75mm	IS:444-87, Type-1, T-1	8 Meters
22.	Hose Clamp of M/s NORMA/KILPCO	AL70-90	DIN3017 W4 IS:4672-2002, Table-1	8

* Items to be supplied duly fitted with junction boxes.

Items to be supplied as per RDSO/PE/SPEC/0138-2009 (Rev-1).

\$ Items to be supplied as per EDTS-200 (latest).

EDTS-328, Rev-C, Am-7	3	09.08.23	<i>Ja</i>	<i>Blind</i>	<i>Subbar</i>	2 of 3
Spec. No.	Corr.	DATE	SSE/CAD	SEE/D&D	DY.CEE/D&D	PAGE

TYPE-2 (LHB Coaches with Bio-Toilet)

Annexure-A

S.No.	DESCRIPTION	SIZE	DRG/SPEC/CAT NO	QTY
1.	Feeder junction box Plug side	-	SKED-614 H	2
2.	Feeder junction box socket side	-	SKED-615 J	2
3.*	End fitting	PG16	Table-A-2,Item-3#	4
4.*	Flexible conduit connector complete with gasket	PG48	Table-A-2,Item-8#	2
5.*	Blank plug complete with gasket	PG48	Table-A-18,Item-8#	2
6.*	Cable gland complete with sealing, O ring of Neoprene and flat gasket	PG21	SKED-609	4
7.*	Lock nut	PG21	Table-A-10,Item-5#	4
8.*	Elbow 90° complete with gasket	PG13.5	Table-A-4,Item-4#	2
9.*	Lock nut	PG13.5	Table-A-10,Item-3#	2
10.*	Lock nut	PG16	Table-A-10,Item-4#	8
11.*	Flexible conduit connector complete with gasket	M20	Table-A-5,Item-5#	2
12.*	Hex. Hd. Screw (Stainless steel to IS:1367-2002,P-14,A2-70)	M12x20	IS:1363-2002,P-2,T-1	4
13.*	Polyamide flexible conduit	NW17	Table-A-1, Item-3 #	0.3Meter
14.*	Adaptor for flexible conduit suitable for PG70	-	Table-A-12, item-1 #	2
15.\$	Crimping socket for M16 stud (Feeder R,Y,B)	150mm ²	To suit WFF 300 of M/s Weidmuller	12
16.\$	Crimping socket for M10 stud (Feeder neutral)	95mm ²	To suit WFF 120 of M/s Weidmuller	4
17.\$	Crimping socket for M10 stud (Feeder earthing)	70mm ²	To suit WFF 120 of M/s Weidmuller	8
18.\$	Crimping socket for M16 stud (Loop R,Y,B)	50mm ²	To suit WFF 300 of M/s Weidmuller	6
19.\$	Crimping socket for M10 stud (Loop neutral)	50mm ²	To suit WFF 120 of M/s Weidmuller	2
20.\$	Crimping socket for M12 stud (Loop SBC)	50mm ²	-	8
21.	Flexible hose	ID=75mm	IS:444-87,Type-1,T-1	8 Meters
22.	Hose Clamp of M/s NORMA/KILPCO	AL70-90	DIN3017 W4 IS:4672-2002,Table-1	8

* Items to be supplied duly fitted with junction boxes.

Items to be supplied as per RDSO/PE/SPEC/0138-2009 (Rev-1).

\$ Items to be supplied as per EDTS-200 (latest).

EDTS-328,Rev-C,Am-7	3	09.08.23	<i>JS</i>	<i>Blind</i>	<i>Subbar</i>	3 of 3
Spec. No.	Corr.	DATE	SSE/CAD	SEE/D&D	DY.CEE/D&D	PAGE

This Corrigendum is issued to EDTS-328, Rev-C, Corr-3, Am-7, to incorporate the following modifications:

Clause 4.1: The clause is amended as follows:

The scope of supply of various sub-components of junction box is given as under:

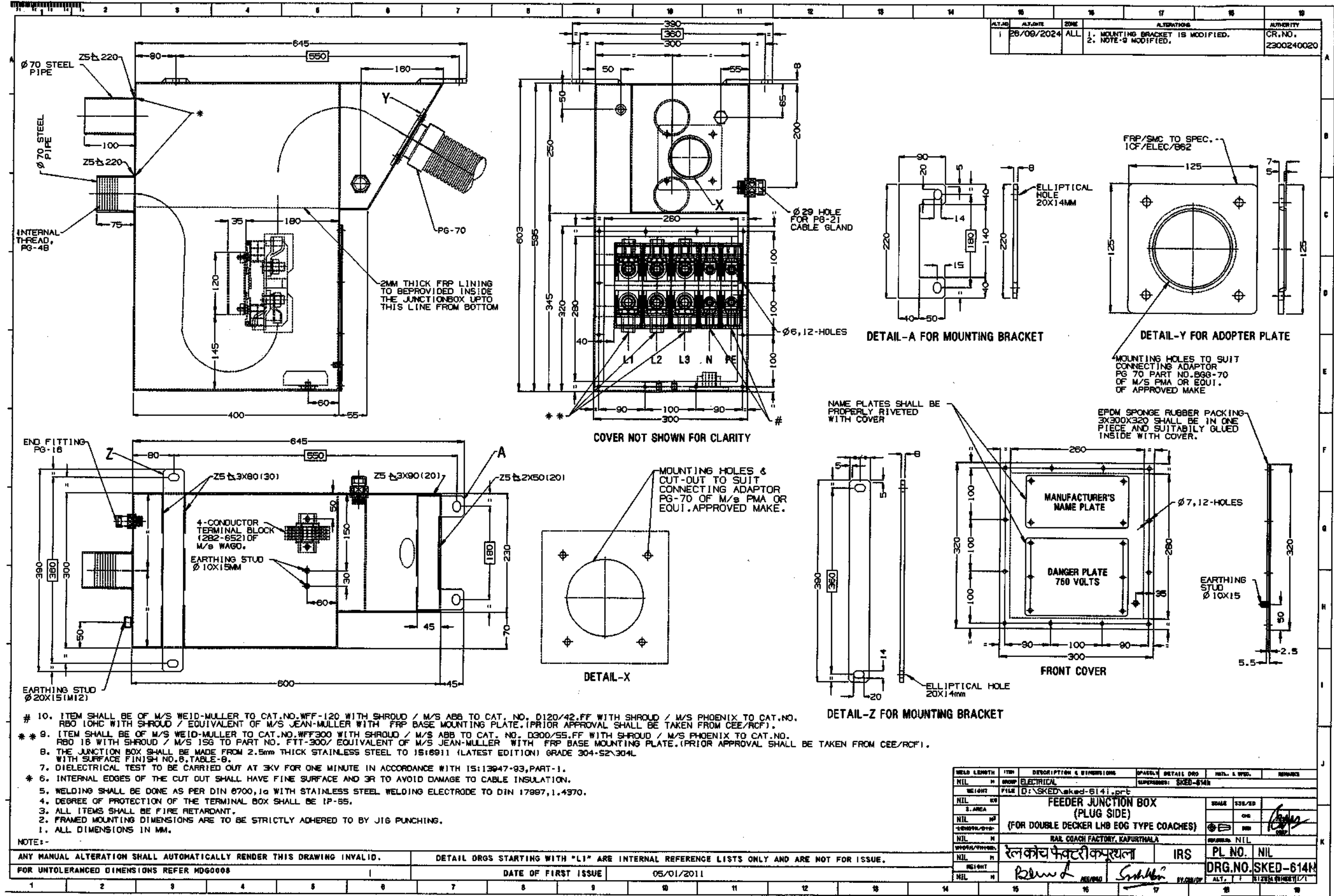
a.	Feeder junction box plug side	SKED-614I	02 nos.
b.	Feeder junction box socket side	SKED-615K	02 nos.

Clause 6.0: The clause is amended as follows:

6.0 Enclosures:

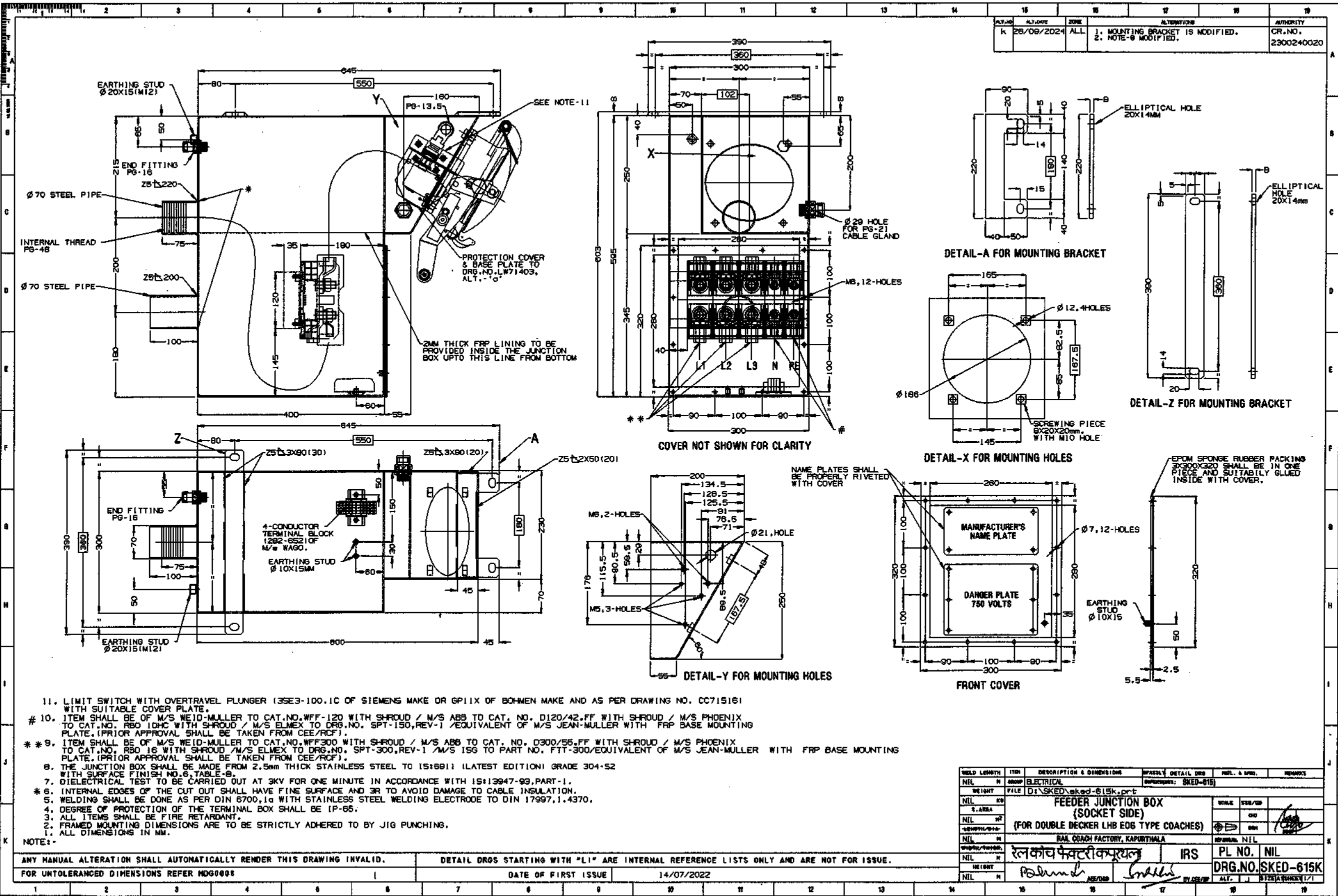
- 6.1 SKED-614I : Feeder junction box Plug side.
- 6.2 SKED-615K : Feeder junction box Socket side.
- 6.3 SKED-609 : Connector for Feeder junction box.
- 6.4 LW71403, Alt-'a' : Bracket for fixing of limit switch on junction box.
- 6.5 Annexure-A : For Type-1, Type-2 and Type-3.

EDTS-328, Rev-C, Corr-3, Am-7	4	03.10.24	Ben.	Belminder	Sunder	1 of 1
Document No.	Corr.	Date	SSE/CAD	SEE/VD	Dy.CEE/DP	Page



ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
1	26/09/2024	ALL	1. MOUNTING BRACKET IS MODIFIED. 2. NOTE-9 MODIFIED.	CR.NO. Z300240020

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	DETAIL DRG	INTL. & WFL.	REMARKS
NIL	GROUP	ELECTRICAL	SKED-614H		
WEIGHT	FILE	D:\SKED\sked-6141.prp			
NIL	NO	FEEDER JUNCTION BOX (PLUG SIDE)			
S.AREA	NO	(FOR DOUBLE DECKER LHD EOG TYPE COACHES)			
NIL	NO	RAIL COACH FACTORY, KAPURTHALA			
WFOH/THICK	NO	रेल कोच फैक्टरी कपूरथला	IRS	PL NO.	NIL
NIL	NO			DRG.NO.	SKED-614H
RIGHT	NO			ALT.	1
NIL	NO			DATE	05/01/2011



ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
K	26/08/2024	ALL	1. MOUNTING BRACKET IS MODIFIED. 2. NOTE-8 MODIFIED.	CR.NO. 2300240020

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	DETAIL DRG	REL. & DRG.	REMARKS
NIL	N	GROUP ELECTRICAL	DRG:SKED-615K.prt	DRG:SKED-615	
WEIGHT	FILE	FEEDER JUNCTION BOX (SOCKET SIDE)			
NIL	CO	(FOR DOUBLE DECKER LHB EOG TYPE COACHES)			
NIL	CO	RAJ COACH FACTORY, KAPURTHALA			
NIL	CO	रलकोच फैक्ट्री कपूरथला			
NIL	CO	IRS			
NIL	CO	PL NO. NIL			
NIL	CO	DRG.NO.SKED-615K			
NIL	CO	ALT. J			

This Corrigendum is issued to EDTS-328, Rev-C, Corr-4, Am-7, to incorporate the corrections in drawing:

Clause 4.1: The clause is amended as follows:

The scope of supply of various sub-components of junction box is given as under:

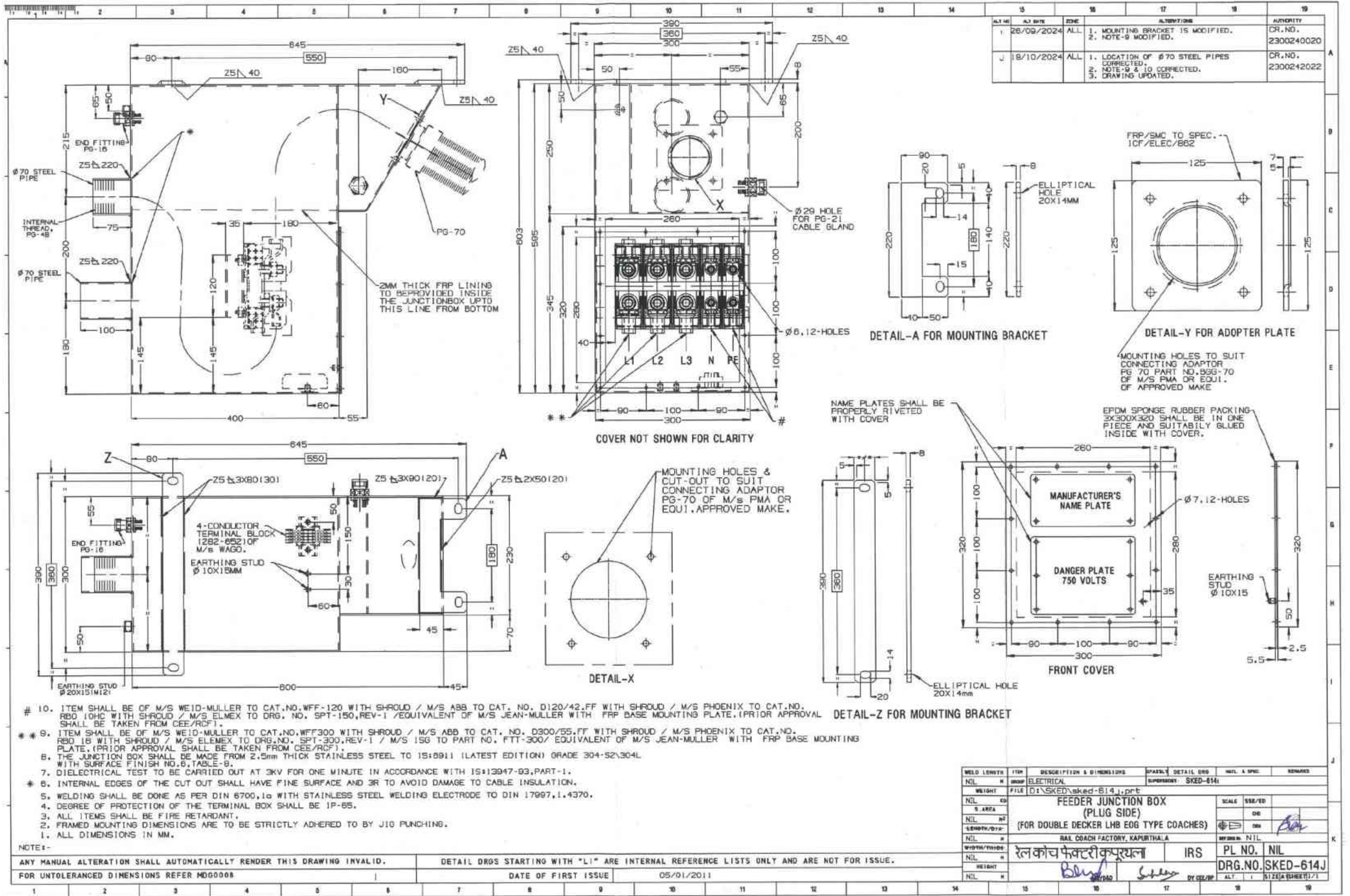
a.	Feeder junction box plug side	SKED-614J	02 nos.
b.	Feeder junction box socket side	SKED-615L	02 nos.

Clause 6.0: The clause is amended as follows:

6.0 Enclosures:

- 6.1 SKED-614J : Feeder junction box Plug side.
- 6.2 SKED-615L : Feeder junction box Socket side.
- 6.3 SKED-609 : Connector for Feeder junction box.
- 6.4 LW71403, Alt-'a' : Bracket for fixing of limit switch on junction box.
- 6.5 Annexure-A : For Type-1, Type-2 and Type-3.

EDTS-328, Rev-C, Corr-4, Am-7	5	09.11.24	<i>(Sny.)</i>	<i>Blund</i>	<i>Sussein</i>	1 of 1
Document No.	Corr.	Date	SSE/CAD	SEE/VD	Dy.CEE/DP	Page



- # 10. ITEM SHALL BE OF M/S WEID-MULLER TO CAT.NO.WFF-120 WITH SHROUD / M/S ABB TO CAT. NO. D120/42.FF WITH SHROUD / M/S PHOENIX TO CAT.NO. RBO 10HC WITH SHROUD / M/S ELMEX TO DRG. NO. SPT-150,REV-1 /EQUIVALENT OF M/S JEAN-MULLER WITH FRP BASE MOUNTING PLATE.(PRIOR APPROVAL SHALL BE TAKEN FROM CEE/RCF).
- * 9. ITEM SHALL BE OF M/S WEID-MULLER TO CAT.NO.WFF300 WITH SHROUD / M/S ABB TO CAT. NO. D300/55.FF WITH SHROUD / M/S PHOENIX TO CAT.NO. RBO 16 WITH SHROUD / M/S ELMEX TO DRG.NO. SPT-300,REV-1 / M/S 15G TO PART NO. FTT-300/ EQUIVALENT OF M/S JEAN-MULLER WITH FRP BASE MOUNTING PLATE.(PRIOR APPROVAL SHALL BE TAKEN FROM CEE/RCF).
8. THE JUNCTION BOX SHALL BE MADE FROM 2.5mm THICK STAINLESS STEEL TO IS:6911 (LATEST EDITION) GRADE 304-S2\304L WITH SURFACE FINISH NO.8, TABLE-8.
7. DIELECTRICAL TEST TO BE CARRIED OUT AT 3KV FOR ONE MINUTE IN ACCORDANCE WITH IS:13947-93,PART-1.
- * 6. INTERNAL EDGES OF THE CUT OUT SHALL HAVE FINE SURFACE AND 3R TO AVOID DAMAGE TO CABLE INSULATION.
5. WELDING SHALL BE DONE AS PER DIN 6700,1a WITH STAINLESS STEEL WELDING ELECTRODE TO DIN 17997,1.4370.
4. DEGREE OF PROTECTION OF THE TERMINAL BOX SHALL BE IP-65.
3. ALL ITEMS SHALL BE FIRE RETARDANT.
2. FRAMED MOUNTING DIMENSIONS ARE TO BE STRICTLY ADHERED TO BY J10 PUNCHING.
1. ALL DIMENSIONS IN MM.

NOTES:-

ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. DETAIL DRGS STARTING WITH "L1" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

FOR UNTOLERANCED DIMENSIONS REFER MDG0008

DATE OF FIRST ISSUE 05/01/2011

