TABLE-1
DETAILS OF TERMINAL CONNECTOR

DESCRIPTION	CAT.NO.	QTY/FITTING
MALE CONNECTOR WITH CASE CLAMP	(721-822) OF M/S WAGO AND SIMILAR IN PHOENIX MAKE	1
FEMALE CONNECTOR WITH CASE CLAMP	(721-103/028-080) OF M/S WAGO AND SIMILAR IN PHOENIX MAKE	1

11. ITEM-9 SHALL BE COLOUR ADDED TO MATCH WITH THE COLOUR SHADE OF THE FITTING AND SHALL BE SUPPLIED LOOSE FOR EACH FITTING.
12. STOPPING STOPPER TO BE PROVIDED TO LOCK CLOCK/ANTI-CLOCK ROTATION OF THE SPOT UNIT.
13. OVERHAUL MANAGEMENT SHALL BE PROVIDED WITH THE FOLLOWING:
14. LBS CIRCUIT MODULE SHALL BE THE PART OF THE L&D (INTEGRATED) TYPE OF NON-PATENTABLE PATTERIAL AND INTERNAL DESIGN
15. SUITABLE FOR HIGH AC/DC SUPPLY, THE OPERATING VOLTAGE SHALL VARY FROM 50V TO 150V WITH 10% TOL.
16. THE UNIT SHALL BE PROVIDED WITH COUPLER AND COUPLER SHALL BE ACCEPTABLE AND SECURED WITH THE HELP OF ITEM-14.
17. WIRING TO BE DONE WITH 1.0 SQ.MM. PTFE COAT 8-BIRM GAUGE 8-BIRM GAUGE OF R&D APPROVED MAKE ONLY.
18. ITEM-1 & 3 TO BE CALL ADDED TO IS-1858, GR-45.
19. THERMAL COEFFICIENT SHALL BE LESS THAN 1000 PPM/°C.
20. ALL STEEL ITEMS EXCLUDING HARDWARE SHALL BE GIVEN SURFACE TREATMENT FOR ANTI-RUST & ANTI-CORROSION BEFORE FINISHING WITH POWDER COATING. THICKNESS OF POWDER COATING SHALL NOT BE LESS THAN 60 MICRONS TO WHITE COLOUR (SHADE NO. 4) "FIVE WIT" OF MTS BARGAR OR EQUIVALENT IN MS/ALUMINUM/PTFE HARDWARE PARTS.
21. ONLY TIG WELDING SHALL BE DONE AS PER REQUIREMENT; NO OTHER WELDING IS ACCEPTABLE.
22. FRAMED HARDWARE DIMENSIONS ARE TO BE STRICTLY ADHERED TO BY JIG PUNCHING.
23. FINISHING SHALL BE:

PAGE 19

DETAIL DROS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE

ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID

FOR UNTOLERANCED DIMENSIONS REFER HQ00108	DATE OF FIRST ISSUE	20/05/2016
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AL#	AL DATE	TIME	ALTERNATES	ALTERNATE
9	01/06/2019	10L	1. (TEN NO-2 PART NO. CHANGED FROM 25-129-20011-00 TO 25-129-20021-00) 2. (TEN NO-3 PART NO. CHANGED FROM 45-3118-20-20-27-8-5-20011-00 TO 45-3118-20-20-27-8-5-20021-00) 3. (TEN NO-4 PART NO. CHANGED FROM 45-3118-20-20-27-8-5-20011-00 TO 45-3118-20-20-27-8-5-20021-00)	01C MO. 02/30/2000

19	WELL-PIE HEAD CIRCULAR TAPPING STUD STA-2005-C	4	SP-1000(LATEST) PI-C	SP-1000(LATEST) PI-C	SEE NOTE-12
20	PLAIN WASHER Ø 3.5	3	SP-2000(LATEST) T-2, T1-A	SP-1000(LATEST) P-HA-2-70	NIL
21	PIPE RETENTION SLEEVE 13-0.5, 30H-4.0	3	NEL	NEL	KS REQUIRED
22	HEX NUT M8	1	SP-1000(LATEST) 4-B, T-1	SP-1000(LATEST) P-HA-2-70	NIL
23	CHEESE HEAD SCREW M8X5	1	SP-1000(LATEST) TAB-6	SP-1000(LATEST) P-HA-2-70	NIL
24	P-CLAMP	1	LNFS-100	NEL	ITEM-9
25	SPACNET	1	LNFS-100	NEL	ITEM-8
26	SCREWING PIECE Ø 5H	1	SP-1000(LATEST) PE-60	NEL	NIL
27	STEEL SPRING 13H-5	3	NEL	SP-1000(LATEST) P-HA-2-70	SHOULD BE SHOWN
28	CHEESE HEAD SCREW M8X5	3	SP-1000(LATEST) TAB-4	SP-1000(LATEST) P-HA-2-70	NIL
29	TERMINAL CONNECTOR CASE CLAMP TYPE	1	NEL	NEL	SEE NOTE-5
30	PUSH BUTTON (PUSH ON PUSH-OFF) WITH TERMINAL COVER	1	NEL	NEL	SEE NOTE-5
31	LED CONNECTION	1	W-1000(LATEST) W-1000(LATEST) W-1000(LATEST)	NEL	SEE NOTE-5
32	LED WITH CIRCUIT MODULE WITH 1 INTEGRATED THERMAL & HEAT SINK	1	NEL	NEL	SEE NOTE-5
33	HOLDING RING	1	W-1000(LATEST)	NEL	ITEM-4
34	TUBE ASSEMBLY	1	W-1000(LATEST)	NEL	ITEM-3
35	CLAMP HOLDING RING	1	W-1000(LATEST)	NEL	ITEM-2
36	SPOT UNIT	1	W-1000(LATEST)	NEL	ITEM-1
37	FRONT COVER	1	W-1000(LATEST)	NEL	NIL

[illegible]

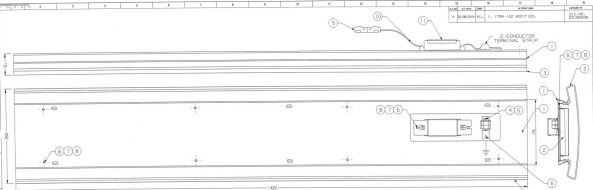


TABLE-1

DETAILS OF TERMINAL CONNECTOR

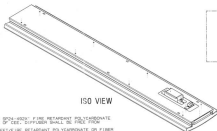
DESCRIPTION	DWG. NO.	QTY./FITTING
MALE CONNECTOR WITH CASE CLAMP	1721-0031 OF M/S W&O AND SIMILAR IN PHOENIX MAKE	1
FEMALE CONNECTOR WITH CASE CLAMP	1721-0032/0033-0001 OF M/S W&O AND SIMILAR IN PHOENIX MAKE	1
2-CONDUCTOR TERMINAL STRIP	1280-1021 OF M/S W&O AND SIMILAR IN PHOENIX MAKE	1

SPECIMEN SET

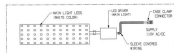
DWG. NO.	SPE.
LW76100	11
ALT-NIL	
LW76101	2
ALT-NIL	

LEGEND PLATE

1. DATE	2. DATE
3. DATE	4. DATE
5. DATE	6. DATE
7. DATE	8. DATE
9. DATE	10. DATE
11. DATE	12. DATE



ISO VIEW



SCHEMATIC DIAGRAM FOR LED LIGHT (FOR REFERENCE ONLY)

QTY./FITTING	QTY./FITTING	QTY./FITTING	QTY./FITTING
1. LED DRIVER	1	LED	NIL
2. LED STRIP	1	LED	NIL
3. LED STRIP	1	LED	NIL
4. LED STRIP	1	LED	NIL
5. LED STRIP	1	LED	NIL
6. LED STRIP	1	LED	NIL
7. LED STRIP	1	LED	NIL
8. LED STRIP	1	LED	NIL
9. LED STRIP	1	LED	NIL
10. LED STRIP	1	LED	NIL
11. LED STRIP	1	LED	NIL
12. LED STRIP	1	LED	NIL
13. LED STRIP	1	LED	NIL
14. LED STRIP	1	LED	NIL
15. LED STRIP	1	LED	NIL
16. LED STRIP	1	LED	NIL
17. LED STRIP	1	LED	NIL
18. LED STRIP	1	LED	NIL
19. LED STRIP	1	LED	NIL
20. LED STRIP	1	LED	NIL
21. LED STRIP	1	LED	NIL
22. LED STRIP	1	LED	NIL
23. LED STRIP	1	LED	NIL
24. LED STRIP	1	LED	NIL
25. LED STRIP	1	LED	NIL
26. LED STRIP	1	LED	NIL
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98. LED STRIP	1	LED	NIL
99. LED STRIP	1	LED	NIL
100. LED STRIP	1	LED	NIL

QTY./FITTING	QTY./FITTING	QTY./FITTING	QTY./FITTING
1. LED DRIVER	1	LED	NIL
2. LED STRIP	1	LED	NIL
3. LED STRIP	1	LED	NIL
4. LED STRIP	1	LED	NIL
5. LED STRIP	1	LED	NIL
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100. LED STRIP	1	LED	NIL

NOTE: 1

ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.

DETAILS STARTING WITH 'P' ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

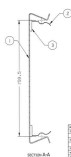
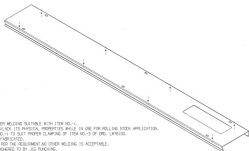
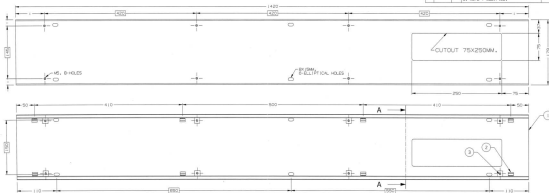
FOR DIMENSIONED DIMENSIONS REFER PORTER

DATE OF FIRST ISSUE

20/06/2016

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

REV.	DATE	BY	CHKD.	DESCRIPTION
1	20/05/2019	ALL		1. TYPE - 2 - 100% DEPTER. 2. CUTOUT OF 75X250MM. 3. NOTE - 3 MUST BE.
2	20/05/2019	ALL		2. TYPE - 2 - 100% DEPTER. 3. NOTE - 3 MUST BE.



1. TAPPING IN ITEM NO.-3 SHALL BE DONE AFTER WELDING IS DONE WITH ITEM NO.-1.
2. ITEM NO.-2 SHALL NOT GET LOOSE/DISTORTED/LACK ITS PHYSICAL PROPERTIES WHILE IN USE FOR ROLLING STOCK APPLICATION.
3. ITEM NO.-2 SHALL BE WELDED WITH ITEM NO.-1 TO SURE PROPER CLAMPING OF ITEM NO.-3 OF END. LENGTH.
4. ITEM NO.-1 SHALL BE DEEP DRAWN AND NOT FABRICATED.
5. ONLY TIG WELDING SHALL BE DONE AS PER THE REQUIREMENT NO OTHER WELDING IS ACCEPTABLE.
6. FINISH DIMENSIONS ARE TO BE STRICTLY ADHERED TO BY JIG FIXING.
7. ALL DIMENSIONS IN MM.

NOTES

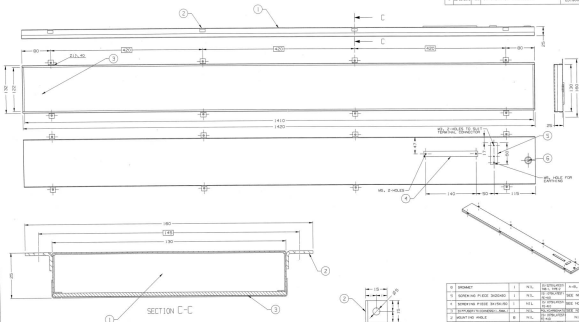
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.

DETAILS DASH STARTING WITH 'P' ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

FOR UNTERLINED DIMENSIONS REFER REGIONS

DATE OF FIRST ISSUE 20/05/2019

1. DRAWING FILE NO.	2. REV.	3. APPROVED	4. SEE NOTE-1
5. TITLE	6. DATE	7. BY	8. CHKD.
9. SCALE	10. PROJECT	11. SHEET NO.	12. TOTAL SHEETS
13. MATERIAL	14. QUANTITY	15. UNIT	16. REMARKS
FRAME FOR LED LIGHT FITTING			
FOR LHB TYPE AC CHAIR CAR			
REV. NO. 01			
DATE 20/05/2019			
BY: [Signature]			
CHKD: [Signature]			
DRG NO. 11/178106			
REV. NO. 01			



8. TAPPING IN STEEL NO. 4 & SMALLER SHALL BE DONE AFTER WELDING SUITABLE WITH ITEM NO. 10-1.
9. DIFFUSER MANHOLE SHALL BE CONFORMING TO UL 540 & MADE FROM ULXAN 990-480X FIRE RETARDANT POLYCARBONATE MATERIAL OF 3/8" PLASTIC/GRABIC MAKE OR EQUIVALENT WITH PRIOR APPROVAL OF CEE. DIFFUSER W/THROUGHS SHALL NOT BE LESS THAN 1/2" SMALL AND SHALL BE 1/2" RADIUS. HOLE IN RIBBON SHALL BE 1/2" HOLE IN 1/2" TO 1/2" SIZED.
10. ONLY TIG/SPOT WELDING SHALL BE DONE AS PER THE REQUIREMENT, NO OTHER WELDING IS ACCEPTABLE.
11. PEAMED CONNECTIONS SHALL BE STRICTLY ADHERED TO BY ITS PURCHASING.
12. ALL DIMENSIONS IN MM.

AND NUMBER ALTERATIONS SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.

URLS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSU

2016 年 12 月 26 日 星期一 12:00:00 PM CST

[illegible]
$$242 = 2 \times 121 = 2 \times 11^2 = 2 \times 11 \times 11$$




4-1-44	4-1-45	1988	SLIPPER	4-1-46
0	00/00/00	ALL	1. ITEM-4, S T R ADDED.	SLIPPER 0-1-46 0-1-46

[illegible][illegible]

RCF Annexure-2 to RDSO Specification no. RDSO/PE/SPEC/TL/0091-2016, Rev-1

This RCF annexure is issued to Drg. No. CC76457, Alt-Nil for LED Light fitting for SLR coaches, Type-J (9W) as per specification no. RDSO/PE/SPEC/TL/0091-2016, Rev-1 to incorporate following changes for the inclusion of fire proof measures in the LED light fittings:-

1. Material of Frame, Cover and Diffuser cover (thickness 1 mm) shall be Stainless steel to grade SS-304 L/SS-304 S2 (Deep-drawn) instead of CRCA to IS-513 Grade-DD. The light fitting shall be supplied without paint and accordingly Note-3 deleted.
2. Material for Housing of LED Driver shall be Stainless steel to grade SS-304 L/SS-304 S2 instead of Aluminium/Fire retardant Polycarbonate material mentioned in Note-12. All components of PCB shall be embedded in fire retardant EP3 epoxy base.
3. The diffuser shall comprise of plain diffuser of toughened glass of thickness 3-4 mm of Saint-Gobain / Asahi India / Borosil or equivalent make (prior approval shall be taken from RCF/KXH) on the outside and polycarbonate sheet (as per Note-13 of the drawing) on the inside of the light fitting of thickness to achieve 80% transparency and complete diffusion of light so that light source/spot is not visible.
4. Wire mesh guard 3 mm G.I. Wire, Item No.-20 deleted.
5. Wire mesh guard 6 mm G.I. Wire, Item No.-21 shall be of SS-304 L/SS-304 S2 grade and height shall be reduced to 75 mm instead of 150mm.
6. All hardware's shall be of Stainless steel of TVS/Unbrako/LPS or equivalent approved make.
7. The driver and the cover shall be covered with SS sheet cover of 1 mm thickness and cable inlet shall be provided with fire proofing connectors/grommets.
8. Degree of protection of the light fitting shall be IP-54.

RDSO/PE/SPEC/TL/0091-2016, Rev-1, RCF Anx-1	2	22.11.2019				1 of 1
Spec. No.	RCF Annexure	Date	SSE/CAD	SEE/D	Dy.CEE/D&D	Page