

EDML-062 =  
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


**Procurement of Switch Plate assembly complete for conventional ACCN/SG Coaches:-**

**Table-1 : Switch Plate assembly complete (FL, NL, F, C/S & Charging Socket 110VAC ) for Cabin Side.**

| S. No. | Description   | Cat/No.   | QPA   | Remarks   |
|--------|---|---|-------|---|
| 1.     | Switch Plate assembly complete with Polycarbonate cover frame & Powder coated steel plate , 4-nos. 'ON-OFF' switches & 1-no. 5 Pin socket (6Amp). | NV500219 of M/S SSK or equivalent RCF approved make | 1 Nos | Refer drawing no. AE74403 for OGA and marking of switch plate assembly. |

**Table-2 : Switch Plate assembly complete (FL, C/S & Charging Socket 110VAC ) for Corridor Side .**

| S. No. | Description   | Cat/No.   | QPA   | Remarks   |
|--------|---|---|-------|---|
| 1.     | Switch Plate assembly complete with Polycarbonate cover frame & Powder coated steel plate , 2-nos. 'ON-OFF' switches & 1-no. 5 Pin socket (6Amp). | NV300219 of M/S SSK or equivalent RCF approved make | 1 Nos | Refer drawing no. AE74403 for OGA and marking of switch plate assembly. |

|          |      |          |   |   |   |        |
|----------|------|----------|---|---|---|--------|
| EDML-062 | 0    | 10.02.05 |  |  |  | 1 of 1 |
| Doc. No. | Rev. | Date     | Prpd. By.<br>(SE/CAD)   | Checked By.<br>(SSE/CAD)  | DYCEE/D&D   | Sheet  |



**AMMENDMENT-1 TO DOCUMENT NO. EDML-062 (TAB.-1&2) FOR  
PROCUREMENT OF SWITCH PLATE ASSEMBLY COMPLETE FOR  
ACCN/SG COACHES.**




This amendment is issued to document no. **EDML-62 (TAB.-1&2)** for incorporation of following :-

1. Firm shall supply the switch plate assembly complete as per drawing no. AE74403 in pre-assembled condition in-place of supplying the material loose.
2. The loop wire of size 1.5 Sqmm e-beam cable as per specification EDTS132` Rev. B' between switch & socket shall be provided.
3. Material shall be supplied in coach sets i.e one box shall contains 8nos. switch socket assembly each as per TAB-1 & 2 of document EDML-062.
4. The packing conditions of the switches shall be as follows :

**Stage-1 :** Standard packing of switch plates assembly shall be made as per packing conditions document no. PI042.


**Stage-2:** Packing per coach set shall be as per packing conditions document no. PI021. The packing shall be legibly marked for the type of coach applicable for.

**Stage -3:** Bulk packing of the material shall be as per packing conditions document no. PI032. The packing shall be legibly marked for the type of coach.

|                     |       |          |   |  |   |        |
|---------------------|-------|----------|---|--|---|--------|
| EDML062<br>Tab.-1&2 | 1     | 18.11.05 |  |  |  | 1 of 1 |
| Spec. no.           | Amdt. | Date     | Prpd. By.<br>(SE/CAD)   | Chkd. By.<br>(SSE/CAD)   | Appvd.<br>(DYCEE/D&D)   | Sheet  |

Notes:

1. All switches and socket shall be of 'ISI' marked.
2. Power supply connections (110VAC) for Laptop/Mobile charging shall be as shown in the reference diagram of drg. No. AE74403 Alt. 'a'.
3. Wiring connections of 1.0A fuse with switch shall be done as shown in ref. Drawing no. AE74403 Alt. 'a'.
4. Red color 'LED' shall be provided on the charging switch which will glow when switched 'ON'.
5. The wire terminals for connections of wires shall be provided as per under given details:
  - 1.0A fuse in phase only & neutral shall be directly looped on the socket.
6. The loop wire of size 1.5Sqmm e-beam as per RDSO specification ELRS/SPEC/ELC/0019 (REV-2) between switch & socket shall be provided.
7. Firm shall supply the switch plate assembly complete as per reference drawing no. AE74403 Alt. 'a' in pre assembled condition.
8. Firm shall get approved prototype sample from CEE/RCF before commencing Bulk supply.
9. The Packing conditions of switch plates shall be as follows:
  - Stage 1: Standard packing of switch plates mentioned above as per packing conditions document no. PI042.
  - Stage 2: Packing per coach set as per packing conditions document no. PI021. Each packing shall be legibly marked for the type of coach applicable for.
  - Stage 3: Bulk packing coach wise as per packing conditions document no. PI032. Each packing shall be legibly marked for the type of coach/coaches applicable for.



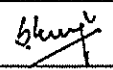
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| EDML-062 | 2   | 07.07.14 |  |  |  | 2 of 2   |
| Doc. no. | AM. | Date     | SSE/CAD   | AEE/D   | DY.CEE/D&D  | Page no. |

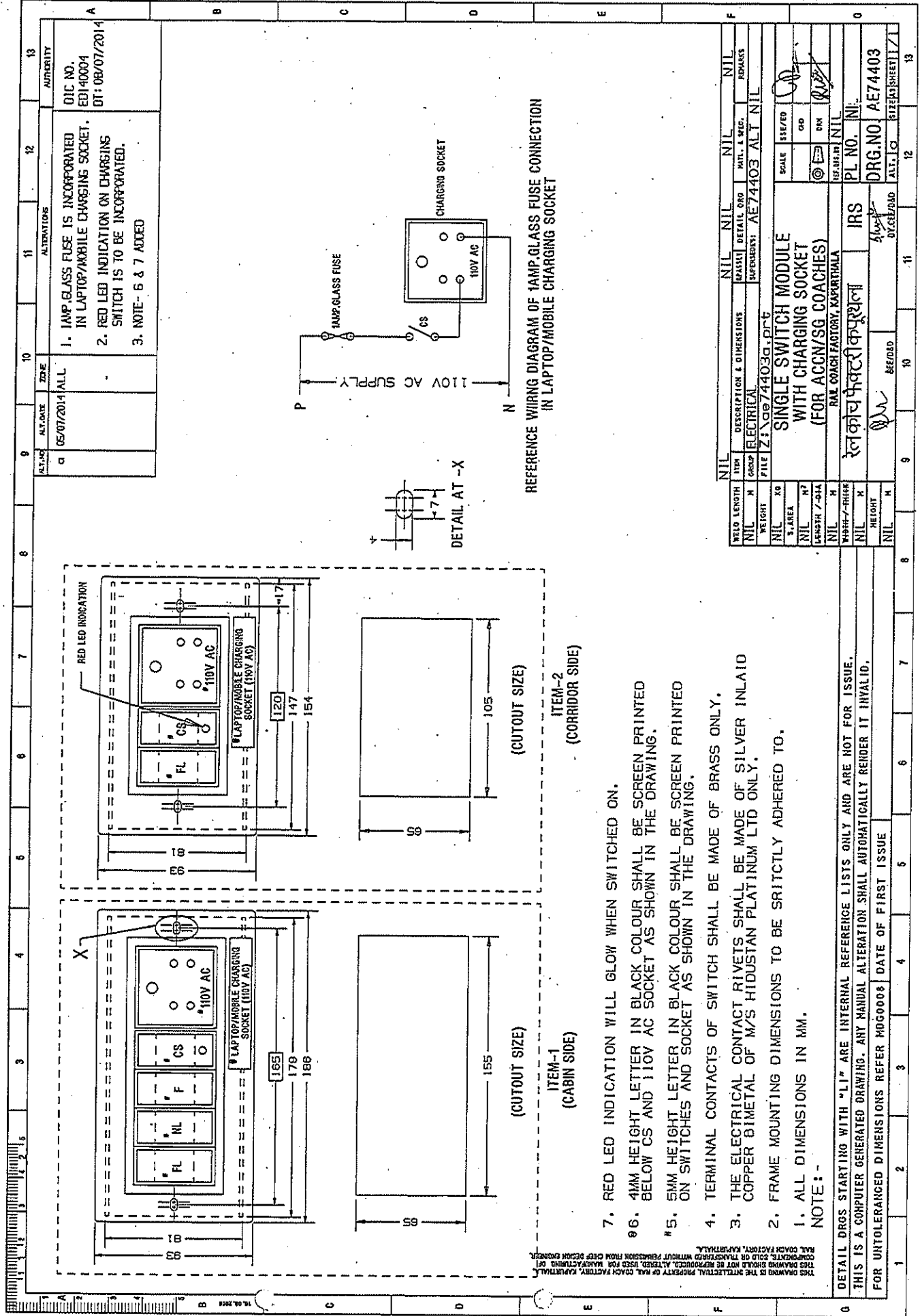
**Switch Plate assembly alongwith Mobile Sockets for Conventional ACCN/SG coaches:****Item-1 : Switch plate assembly Complete (FL, NL, F, C/S & Charging Socket 110VAC) for Cabin Side.**

| Item no. | Description  | Reference                     | Qty.  | Drawing No.  |
|----------|--|-------------------------------|-------|--|
| 1.       | Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 4- nos. ON-OFF switches and 1 no. 5-pin socket 6A,250V AC with 1 no. 1Amp Glass fuse with fuse holders. | M/s. SSK or RCF approved make | 1 No. | OGA, mounting dimensions, orientation and marking as per drawing no AE74403, Alt-'a' |

**Item-2 : Switch plate assembly Complete (FL, C/S & Charging Socket 110VAC) for Corridor Side.**

| Item no. | Description  | Reference                    | Qty.  | Drawing No.  |
|----------|--|------------------------------|-------|--|
| 1.       | Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 2- nos. ON-OFF switches and 1 no. 5-pin socket 6A,250V AC with 1 no. 1Amp Glass fuse with fuse holders. | M/s SSK or RCF approved make | 1 No. | OGA, mounting dimensions, orientation and marking as per drawing no AE74403, Alt-'a' |

|           |     |          |   |   |   |          |
|-----------|-----|----------|---|---|---|----------|
| EDML-062. | 2   | 07.07.14 |  |  |  | 1 of 2   |
| Doc. no.  | AM. | Date     | SSE/CAD   | AEE/D   | DY.CEE/D&D  | Page no. |



1. 1AMP GLASS FUSE IS INCORPORATED IN LAPTOP/MOBILE CHARGING SOCKET.  
 2. RED LED INDICATION ON CHARGING SWITCH IS TO BE INCORPORATED.  
 3. NOTE- 6 & 7 ADDED

REFERENCE WIRING DIAGRAM OF 1AMP GLASS FUSE CONNECTION IN LAPTOP/MOBILE CHARGING SOCKET

- 7. RED LED INDICATION WILL GLOW WHEN SWITCHED ON.
  - 8. 4MM HEIGHT LETTER IN BLACK COLOUR SHALL BE SCREEN PRINTED BELOW CS AND 110V AC SOCKET AS SHOWN IN THE DRAWING.
  - 5. 5MM HEIGHT LETTER IN BLACK COLOUR SHALL BE SCREEN PRINTED ON SWITCHES AND SOCKET AS SHOWN IN THE DRAWING.
  - 4. TERMINAL CONTACTS OF SWITCH SHALL BE MADE OF BRASS ONLY.
  - 3. THE ELECTRICAL CONTACT RIVETS SHALL BE MADE OF SILVER INLAID COPPER BIMETAL OF M/S HINDUSTAN PLATINUM LTD ONLY.
  - 2. FRAME MOUNTING DIMENSIONS TO BE STRICTLY ADHERED TO.
- NOTE :-  
 1. ALL DIMENSIONS IN MM.

DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.  
 THIS IS A COMPUTER GENERATED DRAWING. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER IT INVALID.  
 FOR UNTOLERANCED DIMENSIONS REFER M060008 DATE OF FIRST ISSUE

|               |               |                          |            |        |     |         |
|---------------|---------------|--------------------------|------------|--------|-----|---------|
| WELD LENGTH   | NIL           | DESCRIPTION & DIMENSIONS | NIL        | NIL    | NIL | NIL     |
| GROUP         | ELECTRICAL    | DETAIL DRG               | NIL        | NIL    | NIL | REWORKS |
| FILE Z        | X0874403a.dwg | PROJECT                  | AE74403    | ALT    | NIL |         |
| WEIGHT        |               | SCALE                    | IS: 1000   | ISSUED |     |         |
| S. AREA       |               | DATE                     | 08         | CHK    |     |         |
| LENGTH / DIA  |               | REP. BY                  | NIL        |        |     |         |
| WIDTH / THICK |               | PL. NO.                  | NIL        |        |     |         |
| HEIGHT        |               | DRG. NO                  | AE74403    |        |     |         |
|               |               | DATE                     | 08/07/2014 |        |     |         |

SINGLE SWITCH MODULE WITH CHARGING SOCKET (FOR ACCN/SG COACHES)  
 RAIL COACH FACTORY, KAPURTHALA

रेल कोच फ़ैक्टरी कपूरथला  
 IRS

|              |                   |                |
|--------------|-------------------|----------------|
| ALT. NO.     | 05/07/2014        | ALL            |
| DATE         | 05/07/2014        | ALL            |
| ZONE         |                   |                |
| ALTERNATIONS |                   |                |
| AUTHORITY    | OIC NO. EDI-40094 | DT: 08/07/2014 |

Fax : 91-0522-2465717  
 Telephone: 0522-2465738  
 Telephone: 451200(Extn. 42502)  
 Telegram : 'RAILMANAK', Lucknow



सत्यमेव जयते

भारत सरकार, रेल मंत्रालय  
 अनुसंधान, अभिकल्प और मानक संगठन  
 लखनऊ - 226011

Government of India - Ministry of Railways  
 Research, Designs & Standards Organization,  
 LUCKNOW - 226011

1400228

15.4.14

No. EL/7.1.57

Date 28.03.2014

मुख्य विद्युत इंजीनियर

Chief Electrical Engineer

|  |   |
|--|---|
| • पूर्व रेलवे फेयरली प्लेस, कोलकाता-700001   | • Eastern Railway, Fairlie Place, Kolkata - 700 001   |
| • उत्तर रेलवे, बडोदा हाउस, नई दिल्ली-110001  | • Northern Railway, Baroda House, New Delhi-110 001   |
| • मध्य रेलवे मुंबई सीएसटी-400 001  | • Central Railway, Parcel office, CST, Mumbai CST - 400 001                                   |
| • पूर्वोत्तर सीमान्त रेलवे, मालीगाँव, ग्वाहाटी-781001                                      | • Northeast Frontier Railway, Maligaon, Guwahati - 781 001                                    |
| • पूर्वोत्तर रेलवे, गोरखपुर-273001   | • North Eastern Railway, Gorakhpur -273 001   |
| • दक्षिण मध्य रेलवे, रेल निलयम सिकंदराबाद -500371  | • South Central Railway, Nilayam, Secunderabad - 500 371                                      |
| • दक्षिण रेलवे पार्क टाउन, चेन्नई-600003   | • Southern Railway, Park Town, Chennai -600 003   |
| • दक्षिण पूर्व रेलवे गार्डन रोच, कोलकाता -700043   | • South Eastern Railway, Garden Reach, Kolkata -700 043                                       |
| • पश्चिम रेलवे चर्चगट, मुंबई -400020   | • Western Railway, Churchgate, Mumbai - 400 020   |
| • उत्तर मध्य रेलवे, सुबेदरगंज, अलाहाबाद 211033   | • North Central Railway, Subedarganj, Allahabad-211033  |
| • पश्चिम मध्य रेलवे, मुख्यालय, ऐन्द्री मार्केट, इन्दिरा मार्केट, जबलपुर-482001             | • West Central Railway, HQR's Office, Annexe Building, Indra market, Jabalpur (M.P.) - 482001 |
| • पूर्व मध्य रेलवे दिही जिला वैशाली हाजीपुर बिहार -844101                                  | • East Central Railway, Dighi, Distt- Vashali, Hajipur, Bihar-844101                          |
| • उत्तर पश्चिम रेलवे, जयपुर-302006   | • North Western Railway, Jaipur 302006  |
| • दक्षिण पश्चिमी रेलवे, नया क्षेत्रीय मुख्य कार्यालय, प्रथम तल, पश्चिम ब्लॉक हुबली 580 020 | • South Western Railway, New zonal Hq. Office, First floor, west block, Hubli 580 020         |
| • दक्षिण पूर्व मध्य रेल, बिलासपुर 495 004  | • South East Central Railway, Bilaspur-495004   |
| • पूर्वोत्तर रेलवे, भुवनेश्वर उड़ीसा -751 016  | • East Coast Railway, Bhubneshwar Orissa-751 016  |
| • कोणकण रेलवे, बेलपुर भवन, सेक्टर 11, बेलपुर मुंबई-400 614                                 | • Konkan Railway, Belapur Bhawan, Sector-11, Belapur, Mumbai - 400 614                        |
| • सार्वी डिब्बा कारखाना, चेन्नई-600 038  | • Integral Coach Factory, Chennai,-600038   |
| • रेल डिब्बा कारखाना, हुसैनपुर, कपूरथला -144 602   | • Rail Coach Factory, Hussainpur, Kapurthala-144 602  |
| • रेल डिब्बा कारखाना, लालगंज, रायबरेली   | • Rail Coach Factory, Lalganj, Raibareli  |

Planning

Spa

Sub: Provision of 1 Amp glass fuse in mobile/laptop charging socket for AC coaches & provision of 5 pin sockets in all AC/Non AC coaches.

सीईई/जेई  
 सीईई/जेई/सीईई/डी  
 उप मुख्यालय/डी  
 Dy CEE/ED  
 सीईई/डी  
 AEE/D  
 सचिव/डी/डी  
 AEE/NG

- i) Minutes of CESE conference dtd. 03.01.2014 held at Railway Board.
- ii) Minutes of the meeting on "Measures for fire safety" held at Railway Board on 16.01.2014
- iii) Electrical scheme for provision of mobile/laptop charging points in AC coaches issued vide RDSO letter of even number dtd. 01.06.2006.
- iv) Scheme for provision of mobile charging point in Non AC coaches issued vide RDSO letters of even number dtd. 25.02.2013 & 25.11.2011.

Vide letter under reference (i) & (ii), Railway Board has advised RDSO to issue the scheme for provision of 1 Amp glass fuse in mobile/laptop charging points in all type of AC coaches and provision of 5 pin sockets for all type of AC and Non AC coaches. Accordingly, the Drawing No. RDSO/PE/SK/AC/0093-2006 (Rev.1) has been prepared for implementation of provision of 1 Amp glass fuse in mobile/laptop charging sockets of all types of AC coaches (copy enclosed).

Vide letter under reference (iv), RDSO has issued scheme for provision of 3 pin mobile charging socket with 0.5 Amp glass fuse for all types of Non AC coaches. It is advised that 5 pin sockets having ISI mark from approved sources of ICF/RCF shall be used in place of 3 pin sockets in the scheme for Non AC coaches (reference iv).

This is for your kind information and further necessary action..

*(Signature)*  
 (R.A. Jangli)

DSE(TL-AC System Design)  
 for Director General/PS & EMU

DA : As above  
 Copy to:

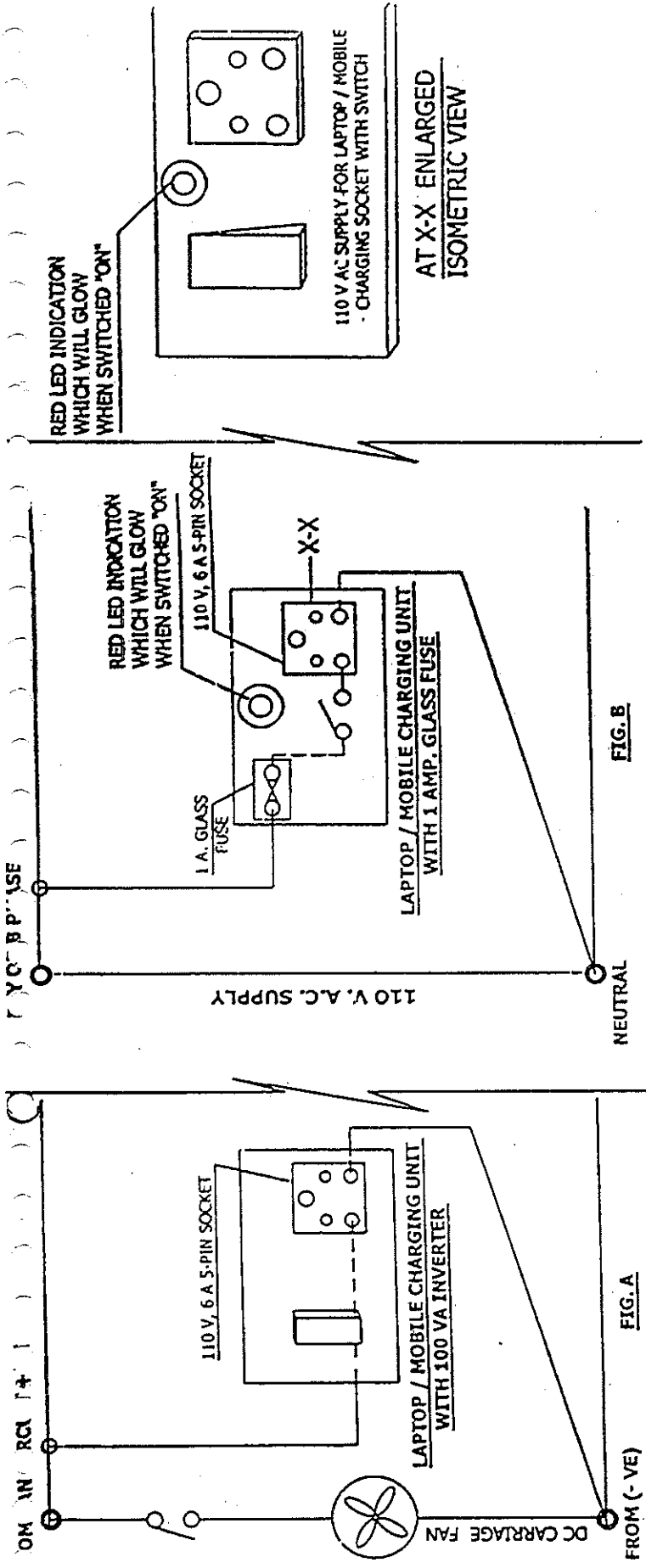
सचिव/विद्युत/जी, रेलवे बोर्ड, रेल भवन :  
 रेल मंत्रालय, नई दिल्ली-110 001 :

ध्यानाकर्षण श्री जयदीप डीईई (जी)  
 for information please.

Imp

All SSC's to note for Compliance.

*(Signature)*  
 22/4/14



**FIG. A**

**FIG. B**

**NOTE :-**

1. **FIGURE-A IS TO BE FOLLOWED FOR ALL UNDER SLUNG TYPE SG AC COACHES AND RMPU TYPE SG AC COACHES WITH DC FANS.**
2. **FIGURE-B IS TO BE FOLLOWED FOR ALL RMPU TYPE SG AC COACHES AND EOG TYPE (CONVENTIONAL / LHB) COACHES, HAVING AVAILABILITY OF 110 V AC SUPPLY.**
3. **POWER SUPPLY CONNECTION OF 110 V, DC / AC FOR LAPTOP / MOBILE CHARGING POINTS AS SHOWN IN FIG. A & B SHALL BE TAKEN FROM SUPPLY CONNECTION POINTS IN THE INDIVIDUAL BAYS.**
4. **5-PIN SOCKET SWITCH WITH 1 AMP. GLASS FUSE SHALL BE PROVIDED. THE SWITCH & SOCKET SHALL BE ISI MARKED PROCURED FROM ICF / RCF APPROVED SOURCES. IT SHOULD ALSO HAVE 1AMP. GLASS FUSE IN A FUSE HOLDER ALONG WITH LED INDICATION.**
5. **110 V, D.C. SUPPLY SHALL BE TAKEN FROM (+) VE FAN CIRCUIT FUSE LINK IN CABIN SIDE FDB AND (-) VE FAN CIRCUIT FUSE LINK IN SEPARATE FLEXIBLE POLYAMIDE CONDUITS AS PER RDSO/PEJ SPEC/AC/ 38-2009(REV."0"). AND (+) VE & (-)VE WIRES SHALL RUN IN SEPARATE FLEXIBLE POLYAMIDE CONDUITS AS PER RDSO SPEC/ELC/0019 (REV. '2' ), OR LATEST.**
6. **CABLE USED FOR CHARGING CIRCUIT WIRING SHALL BE 1.5 SQ. mm E-BEAM COPPER CABLE AS PER RDSO SPECIFICATION NO. RDSO/PEC/008-2005 (REV. "0") FOR FIG.-A & FIG.-B RESPECTIVELY TO BE FOLLOWED.**
7. **CODE OF PRACTICE FOR ELECTRICAL WIRING AS PER RDSO SPECIFICATION NO. EL/ TL/ 48-2005 (REV.'1') AND RDSO/PEJ/008-2005 (REV. "0") FOR FIG.-A & FIG.-B RESPECTIVELY TO BE FOLLOWED.**
8. **WHEREVER 2.5 AMP. MCB'S ARE PROVIDED IN THE INDIVIDUAL FAN CIRCUITS, IT SHOULD BE REPLACED WITH 4 AMP, MCB'S AFTER PROVISION OF CHARGING POINTS.**
9. **NUMBER'S OF LAPTOP / MOBILE CHARGING UNIT IN THE DIFFERENT TYPES OF AC COACHES SHALL BE PROVIDED AS PER SCHEME ISSUED VIDE RDSO LETTER NO. EL/ 7.1.57 DTD. 01-06-2006 .**

| REF. NO.  | PART NO. | DESCRIPTION | DETAIL DRG. NO. | NO. OF CD/CH | MATL. | SPECN. NO. |
|---|----------|-------------|-----------------|--------------|-------|------------|
| EL/7.1.57   |          |             |                 |              |       |            |
| SCALE :- NTS APPROVED BY :-   |          |             |                 |              |       |            |
| SCHEMATIC WIRING DIAGRAM FOR PROVISION OF SOCKET FOR CHARGING OF MOBILE / LAPTOP TO BE FOLLOWED BY RAILWAYS FOR ALL THE EXISTING AC COACHES |          |             |                 |              |       |            |
| RDSO/ PE/ SK/ AC/ 0093-2005 (REV. '1')  |          |             |                 |              |       |            |

|     |            |
|-----|------------|
| DT. | 12-05-2005 |
| 0   | M. B. PHOS |
| C   |            |
| AKS |            |

| STATUS | REV./ACT.  | REF. NO. | DESCRIPTION   | APPR. BY | DATE       |
|--------|------------|----------|---|----------|------------|
|        | (REV. '1') |          | 1 AMP. GLASS FUSE FOR LAPTOP / MOBILE CHARGING SOCKET <td></td> <td>24-03-2014</td> |          | 24-03-2014 |
|        |            |          | DIR. TL & ACSO  |          |            |

FIRST ISSUED 12-05-2004  
 SUPPLEMENT (REV. '1')  
 SUPERSEDED (REV. '1')