

**SWITCH PLATE ASSEMBLIES (WITH TYPE-A&C USB CHARGER AND 3-PIN CHARGING SOCKETS)
FOR LHB EOG TYPE AC COACHES**

TABLE-1: LHB EOG First AC Coaches

SN	Description	QPC	Marking	Reference	Remarks (Location)
1	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 01 no. Bell push, 02 nos. ON-OFF switches and 01 no. Type-A & C USB charging socket module with 01 no. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders)	04	BELL L CS	Item-5 of Drg. No. LW74412	Full Coupe
2	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 03 nos. ON-OFF switches and 01 no. Type-A & C USB charging socket module with 01 no. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders)	05	NL L CS	Item-4 of Drg. No. LW74412	Full Coupe & Attendant Room
3	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 02 nos. ON-OFF switches 6A, 250V AC	04	L NL	Item-2 of Drg. No. LW74412	Corridor Area
4	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 01 no. Bell push, 04 nos. ON-OFF switches and 01 no. Type-A & C USB charging socket module with 01 no. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders)	04	L L NL BELL CS	Item-7 of Drg. No. LW74412	Half Coupe
5	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 01 no. ON-OFF switch and 01 no. 3-pin socket 6A, 250V AC with 01 no. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders)	12	CS 110V	Item-6 of Drg. No. LW74412	Full Coupe & Half Coupe (Upper Berth)

TABLE-2: LHB EOG 2-Tier AC Coaches

SN	Description	QPC	Marking	Reference	Remarks (Location)
1	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 03 nos. ON-OFF switches and 01 no. Type-A & C USB charging socket module with 01 no. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders)	09	NL L CS	Item-4 of Drg. No. LW74412	Cabin Area
2	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 02 nos. ON-OFF switches and 01 no. Type-A & C USB charging socket module with 01 no. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders)	09	L CS	Item-3 of Drg. No. LW74412	Cabin Area

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3	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 01 no. ON-OFF switch and 01 no. Type-A & C USB charging socket module with 01 no. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders)	09	CS	Item-8 of Drg. No. LW74412	Corridor Area
4	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 01 no. ON-OFF switch and 01 no. 3-pin socket 6A, 250V AC with 01 no. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders)	25	CS 110V	Item-6 of Drg. No. LW74412	Cabin & Corridor Area (Upper Berth)

TABLE-3: LHB EOG 3-Tier AC Coaches

SN	Description	QPC	Marking	Reference	Remarks (Location)
1	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 03 nos. ON-OFF switches and 01 no. Type-A & C USB charging socket module with 01 no. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders)	09	NL L CS	Item-4 of Drg. No. LW74412	Cabin Area
2	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 02 nos. ON-OFF switches and 01 no. Type-A & C USB charging socket module with 01 no. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders)	09	L CS	Item-3 of Drg. No. LW74412	Cabin Area
3	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 01 no. ON-OFF switch and 01 no. Type-A & C USB charging socket module with 01 no. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders)	27	CS	Item-8 of Drg. No. LW74412	Cabin & Corridor Area (Lower Berth)
4	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 01 no. ON-OFF switch and 01 no. 3-pin socket 6A, 250V AC with 01 no. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders)	27	CS 110V	Item-6 of Drg. No. LW74412	Cabin & Corridor Area (Upper Berth)

TABLE-4: LHB EOG AC Hot Buffet Coaches

SN	Description	QPC	Marking	Reference	Remarks (Location)
1	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 04 nos. ON-OFF switches 6A, 250V AC	04		Item-10 of Drg. No. LW74412	Cabin & Corridor Area

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2	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 03 nos. ON-OFF switches 6A, 250V AC and 01 no. Type-A & C USB charging socket module with 01 no. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders)	03	CS	Item-4 of Drg. No. LW74412	Cabin Area
3	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 01 no. ON-OFF 16A, 250V switch (with LED indication) and 01 no. 6/16A 3-pin socket	08		Item-11 of Drg. No. LW74412	Kitchen Area

TABLE-5: LHB EOG Power Car Coaches

SN	Description	QPC	Marking	Reference	Remarks (Location)
1	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 02 nos. ON-OFF switch and 02 nos. Type-A & C USB charging socket module with 02 no. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders) and 06 module Galvanized metal box, minimum 1.0 thickness of make Legrand/Indoasian/ L&T/ Schneider/ Havells.	02	CS	Item-12 of Drg. No. LW74412	02 Nos. in Guard Room & 02 Nos. in Crew Room

TABLE-6: LHB EOG Executive AC Chair Car/ LHB EOG Second AC Chair Car

SN	Description	QPC	Marking	Reference	Remarks (Location)
1	Switch plate assembly complete with polycarbonate cover frame and powder coated steel plate with 02 nos. ON-OFF switches, 01 no. Type-A & C USB charging socket module and 01 no. 3-pin socket 6A, 250V AC with 02 nos. 2.0 Amp. Glass fuse of M/s Ferraz Shawmut /Cooper Bussmann /equivalent* (with fuse holders)	18	CS 110V CS	Item-9 of Drg. No. LW74412	Between Windows

* Equivalent with the approval from the office of CEDE/RCF.

Note:-

1. Firm shall get sample approved from CEDE/RCF before commencing Bulk supply.
2. Switch shall be conforming to IS:3854-1997 or latest & Socket shall conform to IS:1293-2019 or latest. Both shall be 'ISI' marked.
3. For contact opening in switch, Normal Gap Construction shall be followed as per Clause no. 7.1.2 of IS:3854-1997.
4. Switch shall be of unenclosed type as per Clause no. 7.1.3 of IS:3854-1997.
5. Switch shall conform to Degree of Protection: IPX0 as per Clause no. 7.1.4 of IS:3854-1997.
6. Method of activation of switch shall be of Rocker type as per Clause 7.1.5 of IS:3854-1997.
7. Switch shall be flush type as per Clause 7.1.6 of IS:3854-1997.
8. Switch shall be installed as per Design A mentioned in the Clause 7.1.7 of IS:3854-1997.

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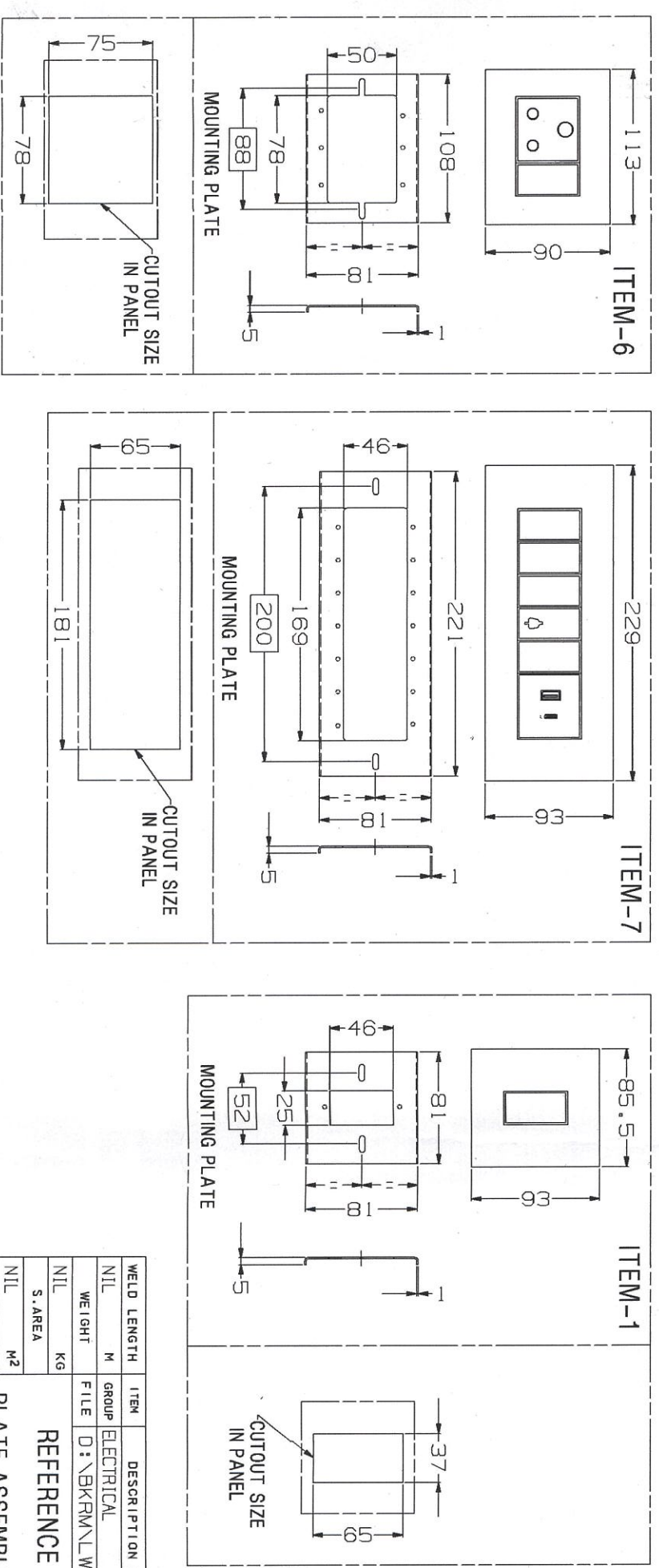
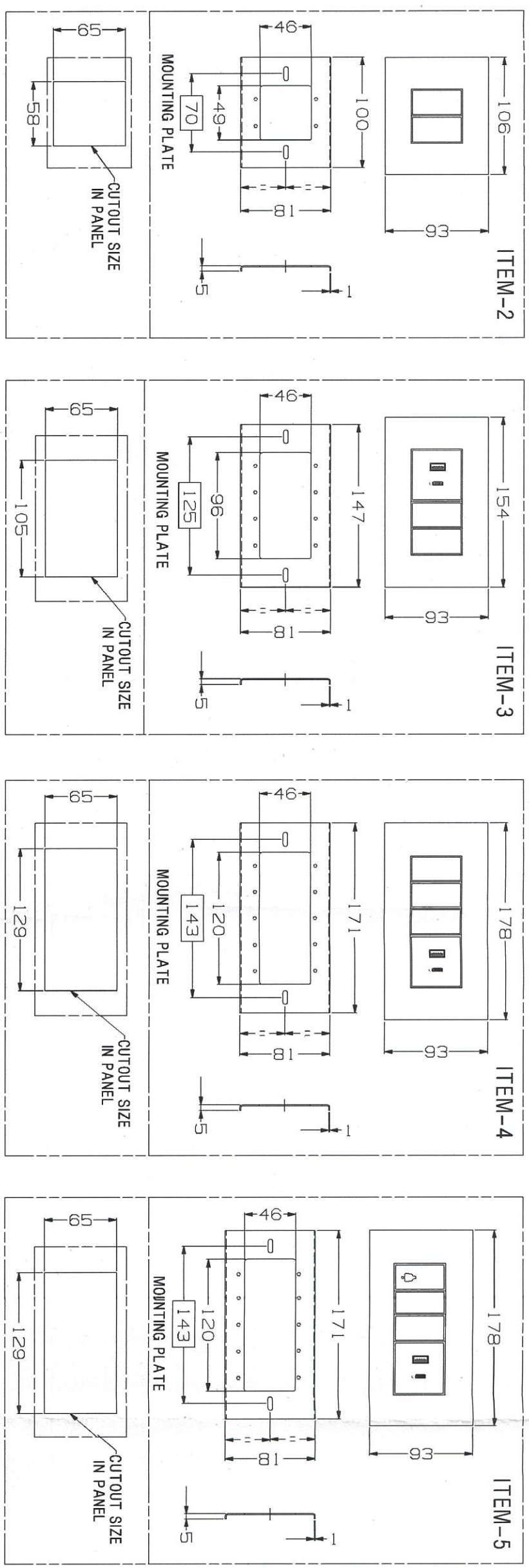
9. Switch and socket shall be screwed on powder coated steel/GI without powder coated base plate of minimum thickness 1.0mm with M3 screw with nut and spring washer/snap fit modular type with insert moulded metal frame in fire retardant polycarbonate plate.
10. The module with Type-A & C USB charger shall conform to spec no. EDTS-455(latest revision). The USB module shall be suitable for fitment in existing switch plates provided in LHB Type coaches.
11. Dimensions are shown for reference only. Supplier shall get prior approval of drawings before prototype/bulk supplies.
12. The details of composition of contact material used in switch and socket to be provided by the firm.
13. Following test shall be conducted from Govt./NABL accredited lab:-
 - i. Test for polymer identification of FR Polycarbonate material.
 - ii. Fire retardant test to grade UL-94 V0 from the OEM of the raw material.

Packing condition of switch plates shall be as follows:-

- Stage 1: Standard packing of switch plates mentioned above as per packing conditions document no. P1042.
- Stage 2: Packing per coach set as per packing conditions document no. P1021. 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. P1032. Each packing shall be legibly marked for the type of coach/coaches applicable for.

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ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY



DETAIL DRGS 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 MDG0008				DATE OF FIRST ISSUE 18/10/2024							

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	ELECTRICAL	FILE	D:\BKRML\W\w74412.prt	SUPERSEDES: NIL	
WEIGHT	KG					
S. AREA	M2					
LENGTH / DIA	M					
NIL	M					
W/BTH / THTH	M					
HEIGHT	M					

REFERENCE DIAGRAM FOR SWITCH

PLATE ASSEMBLY FOR LHB TYPE AC COACHES

RAIL COACH FACTORY, KAPURTHALA

IRS

DRG.NO. LW74412

SEWD

Suvedi

DY.CEE/DP

ALT.

NIL

SIZE

A2 SHEET

1/2

15. BOTH USB MODULE & 3-PIN SOCKETS SHALL BE INTERCHANGEABLE WITH SIMILAR FITMENT USB MODULES & 3-PIN SOCKETS OF OTHER MAKES.
(FOR ALL PERMUTATIONS AND COMBINATIONS)

14. THE TYPE-A & C USB MODULE SHALL BE AS PER SPEC. NO. EDITS-455, REV-NIL, AM-1, CORR-1 OR LATEST.

13. DEPTH OF SWITCH PLATE ASSEMBLY SHALL NOT EXCEED 50 MM. SUPPLIER SHALL GET PRIOR APPROVAL OF DRAWING WITH FUSE ARRANGEMENT BEHIND THE SWITCH PLATE ASSEMBLY BEFORE PROTOTYPE/BULK SUPPLIES. THE DIMENSIONS OF MODULE FOR USB TYPE-A&C SHALL BE MATCHING WITH 3-PIN SOCKET MODULE FOR INTERCHANGEABILITY.

12. 3-PIN MOBILE CHARGING SOCKET WITHOUT LOCKING ARRANGEMENT/WITHOUT SHUTTER SHALL BE PROVIDED.

11. FUSE HOLDER WITH GLASS FUSE OF REPUTED MAKE (2.0A) TO BE PROVIDED IN CHARGING SOCKET.

10. FRAME DIMENSIONS SHALL BE STRICTLY ADHERED BY JIG PUNCHING.

9. SWITCH SHALL CONFORM TO IS:3854-1997 OR LATEST & SOCKET SHALL CONFORM TO IS:1293-2005 OR LATEST AND BOTH SHALL BE ISI MARKED.

8. COVER FRAME OF THE SWITCH PLATE ASSEMBLY SHALL BE OF WHITE COLOUR ONLY.

7. PROTOTYPE SHALL BE GOT VALIDATED BEFORE COMMENCING BULK SUPPLY.

6. MANUFACTURER'S INSIGNIA SHALL BE EMBOSSED.

5. SWITCH, SOCKET & USB MODULE SHALL BE SCREWED ON POWDER COATED STEEL/6I (WITHOUT POWDER COATED) BASE PLATE OF MINIMUM THICKNESS 1.0MM. WITH M3 SCREWS, HEX. NUT & SPRING WASHER OR SNAP FIT TYPE INSERT MOULDED METAL FRAME IN FIRE RETARDANT POLYCARBONATE PLATE.

4. WIRING FOR SWITCH, SOCKET AND FUSE CONNECTIVITY TO BE PROVIDED WITH 1.5 SQ.MM. E-BEAM CABLE TO SPECIFICATION NO. ELRS/SPEC/ELC/0019(LATEST) & PROCURED FROM RDSO APPROVED SOURCES.

3. SHROUD TO BE PROVIDED AROUND THE REAR OF THE LIVE TERMINALS OF THE SWITCH & SOCKET.

2. ALL MOUNTING HOLES SHOULD BE ELLIPTICAL OF SIZE 12MM.X4MM. AND SUITABLE FOR M3 SCREW.

1. ALL DIMENSIONS IN MM.

NOTE:-

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008

DATE OF FIRST ISSUE

18/10/2024

ITEM-8

ITEM-9

ITEM-10

ITEM-11

ITEM-12

CUTOUT SIZE IN PANEL

MOUNTING PLATE

BASE PLATE WITH INSERT MOULDED SNAP-FIT ARRANGEMENT

STEEL PLATE (1MM.)

FOR REFERENCE ONLY

3-PIN CHARGING SOCKET CIRCUIT

USB CHARGING SOCKET CIRCUIT

WIRING DIAGRAM

REFERENCE DIAGRAM FOR SWITCH

PLATE ASSEMBLY FOR LHB TYPE AC COACHES

RAIL COACH FACTORY, KAPURTHALA

IRS

DRG.NO. LW74412

PL NO. NIL

SCALE

SSE/ED

CHD

DRN

BKRM

100MM

REF.DRG. NO. NIL

12

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