

Specification for Emergency Light Unit for Narrow Gauge Coaches

1. The subject document covers general guidelines for Design Manufacture, Testing Supply and after sales service of Emergency Light Unit to be used in NG Coaches.
2. The Emergency Light unit shall be switch ON automatically in case of normal battery supply system in the coach fails during unforeseen circumstances. When the normal supply fails, the ELU system shall deliver required illumination.
3. The Overall general arrangement of the emergency light unit shall be as per RCF drg. No. SKED 799, however it shall generally conforms requirements of RDSO specification no. RDSO/PE/SPEC/AC/0153-2010 (Rev.0) for manufacturing of emergency light unit.
4. Each emergency light unit will contain sealed lead acid maintenance free type (SMF) battery of capacity 12V, 4.5Ah. The use of battery older than 06 months from date of manufacture should be avoided & not permitted.
5. Overall Construction of the emergency light unit shall be of compact design & ease in accessibility shall be ensured for maintenance.
6. 2 nos. emergency light units (per Coach) shall be provided with suitable mounting arrangement.
7. Emergency light unit shall be supplied along with Male & Female type **WAGO** connectors as per Cl. 7.11 of RDSO spec.
8. The enclosure shall be given surface treatment for antirust & anti corrosion before fitting and shall be powder coated to thickness not less than 60 microns to white colour (shade 042 `IFB white of M/s Berger or similar to M/s Asian , M/s Nerolac make paint) with glossy finish from inside and outside of the ELU.
9. **Technical Parameters:-**

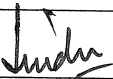
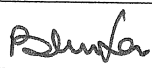

The general technical parameters of the ELU shall be as under:

SN	Description	Technical Parameters
a)	Input Voltage (For charging)	110V DC/110VAC
b)	Type of battery	Sealed lead acid maintenance free type
c)	Battery Capacity	12V, 4.5Ah
d)	Degree of Ingress Protection	IP-65 as per IEC 60529
e)	Weight	5Kg (max.)

10. Tests:-

The Type testing of the Emergency Light Unit (ELU) shall be in compliance to Cl. 8.0 of the RDSO specification no. RDSO/PE/SPEC/AC/0153-2010 (Rev.0) with battery of **12V, 4.5Ah** Capacity.

11. Firm shall take prior approval of the prototype sample along with all technical parameters & OGA drawings from office of the CEDE/RCF before commissioning in the coaches.

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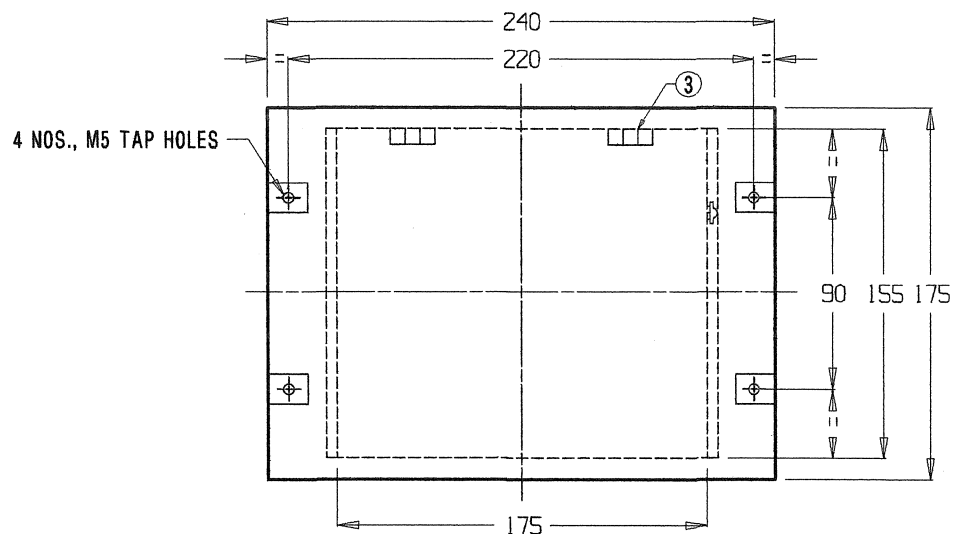
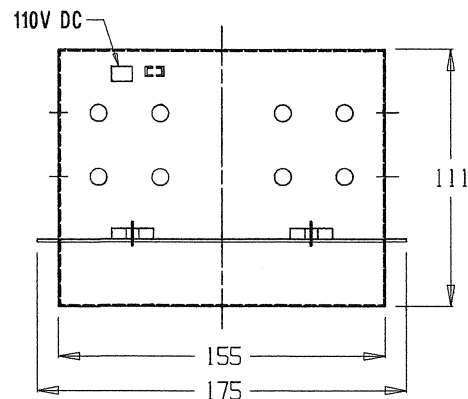
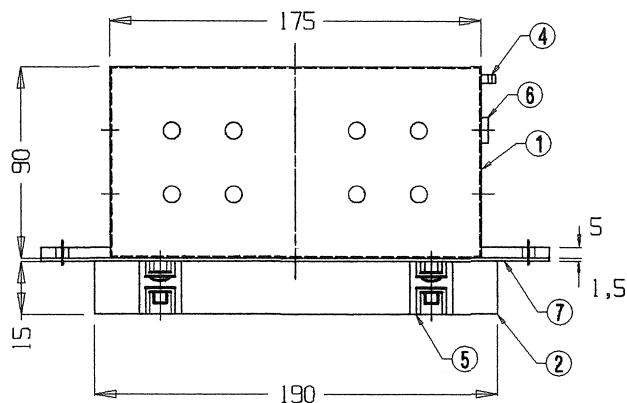
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- NOTE:-
- 7.RESISTOR FOR HEAT DISSIPATION UNDER 20% DISCHARGE SHALL BE INSIDE UNIT.
 - 6.FOR 110V DC WAGO MAKE BLUE CONNECTOR FOR 1.5 SQ.MM CABLE SHALL BE PROVIDED.
 - 5.DOME KEY SHALL BE SUPPLIED 1NOS. FOR TWO LIGHTS.
 - 4.HOUSING & COVER SHALL BE GIVEN SURFACE TREATMENT FOR ANTIRUST & ANTI CORROSION BEFORE FITTING POWDER COATING.
 - 3.VENTILATING HOLES TO BE PROVIDED ON THE BATTERY SIDE OF THE FITTING.
 - 2.ITEM-1&2 SHOULD BE DRAWN & NOT FABRICATED.
 - 1.ALL DIMENSION IN MM. TOERANCE SHALL BE AS PER IS:2010 UNLESS SPECIFIED.

8	12V 4.5AH SEALED LEAD ACID MAINTENANCE FREE TYPE (SMF) BATTERY	1	NIL	NIL	NIL
7	FELT (3MM)	1	NIL	WOOL IS: 1719-2000	NIL
6	GROMMET	1	NIL	RUBBER IS: 5270-69	NIL
5	CAPTIVE SCREW (M5)	2	NIL	M.S. ROD IS: 2062-99	NIL
4	CONNECTOR (261-102)	1	NIL	WAGO MAKE	NIL
3	HINGE (40MM)	2	NIL	M.S. SHEET IS: 1341-B1	NIL
2	COVER (0.8MM THICKNESS)	1	NIL	M.S. SHEET IS: 513-94, BR-00	NIL
1	HOUSING (0.8MM THICKNESS)	1	NIL	M.S. SHEET IS: 513-94 BR-00	NIL

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASPLY	DETAIL DRG	SUPERSEDES	MATL. & SPEC.	REMARKS
NIL	M	GROUP ELECTRICAL			NIL		
WEIGHT	FILE	D:\shyam\Coach drg\SKED-799.prt					
NIL	KG						
S. AREA							
NIL	M ²						
LENGTH / DIA							
NIL	M						
WIDTH / THICK							
NIL	M						
HEIGHT							
NIL	M						

OGA OF EMERGENCY LIGHT UNIT
HOUSING FOR NARROW GAUGE KSR COACHES

RAIL COACH FACTORY, KAPURTHALA

रेल कोच फैक्टरी कपूरथला

SEE/D&D

SCALE	SSE/ED	CHD	DRN
REF.DRG.No.	NIL		
PL NO.	NIL		
DRG.NO.	SKED-799		
ALT.	NIL	SIZE	A2 SHEET 1/1

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
06/07/2021

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RAIL COACH FACTORY, KAPURTHALA

रेल कोच फैक्टरी, कपूरथला

Corrigendum-1 (शुद्धिपत्र सं.-1)

Corrigendum-1 to Document No. EDML-178, Rev-Nil


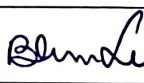
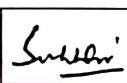
This Corrigendum is issued to Document No. EDML-178, Rev-Nil for "Emergency Light Unit for Narrow Gauge Coaches" in order to incorporate the following changes:-

1. Specification No. RDSO/PE/SPEC/AC/0153-2010, Rev-0 wherever mentioned in the document no. EDML-178, Rev-Nil may be read as RDSO/PE/SPEC/AC/0180-2016, Rev-0.
2. Accordingly all the testing of Emergency Light Unit shall be generally in compliance to RDSO spec. RDSO/PE/SPEC/AC/0180-2016, Rev-0.

3. Clause No. 9: Technical Parameters

The general Technical Parameters of Emergency Light Unit shall be read as under:

Sno.	Description	Technical Parameters
a)	In put Voltage (for charging)	110VDC
b)	Type of battery	Sealed lead Acid Maintenance Free type
c)	Battery Capacity	12V, 5.4Ah
d)	Weight	5kg (max)

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दस्तावेज सं.	शुद्धिपत्र सं.	दिनांक	एस.एस.ई./ अभिकल्प	व. बि. अभियंता/ अभिकल्प व विकास	उप मुख्य बिजली इंजी./डि. प्रोजेक्ट	पृष्ठ सं.