



भारत सरकार-रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन
लखनऊ- 226011
e-mail: edse.rds@gmail.com
Telephone : 0522-2450734

Government of India - Ministry of Railways
Research, Designs & Standards Organization,
LUCKNOW - 226011
Telex: 0535-2424 RDSO-IN
Fax: 91-0522-2452581



No. EL/0.1.3/Driver

Dated: 18.06.2018

Principal Chief Electrical Engineers,

- i. Central Railway, Mumbai, CST-400 001.
- ii. Eastern Railway, Fairlie Place, Calcutta-700001.
- iii. East Coast Railway, Chandrashekharpur, Bhubneshwar-751 016
- iv. Northern Railway, Baroda House, New Delhi-110001.
- v. North Central Railway, Subedarganj, Allahabad-211 033
- vi. Southern Railway, Park Town, Chennai-600 003.
- vii. South Central Railway, Secunderabad-500 071.
- viii. South Eastern Railway, Garden Reach, Calcutta-700 043.
- ix. South Western Railway, Hubli-580 020
- x. Western Railway, Church gate, Mumbai-400 020.
- xi. West Central Railway, Jabalpur-482001
- xii. South East Central Railway, Bilaspur-495 004
- xiii. East Central Railway, Hazipur-844101.
- xiv. North Western Railway, Jaipur-302 006
- xv. North Eastern Railway, Gorakhpur-273 001
- xvi. North East Frontier Railway, Maligaon, Guwahati-781 011
- xvii. Chittaranjan Locomotives Works, Chittaranjan-713 331.
- xviii. Diesel Locomotive Works, Varanasi- 211 004
- xix. Diesel Modernization Works, Patiala, Punjab

MODIFICATION SHEET NO. RDSO/2018/EL/MS/0470 , Dated 18.06.2018

1.0 TITLE

Provision of LED type light for exchanging signals with train passing staff.

2.0 BACKGROUND

After provision of air conditioning in loco cabs, it will be very inconvenient to Loco Pilots (LP)/Assistant Loco Pilots (ALP) in exchanging the flags (Red/Green) signals with station staff due to frequent opening of cab doors/windows for exchanging the signals. The provision of LED type light for exchanging signals with train passing staff was discussed during 37th MSG held at Shimla (UMB Division/NR on 24th & 25th July 2015 wherein it was recommended that LED type light exchanging signals can be provided subject to amendment in General Rules (1976).

3.0 OBJECT

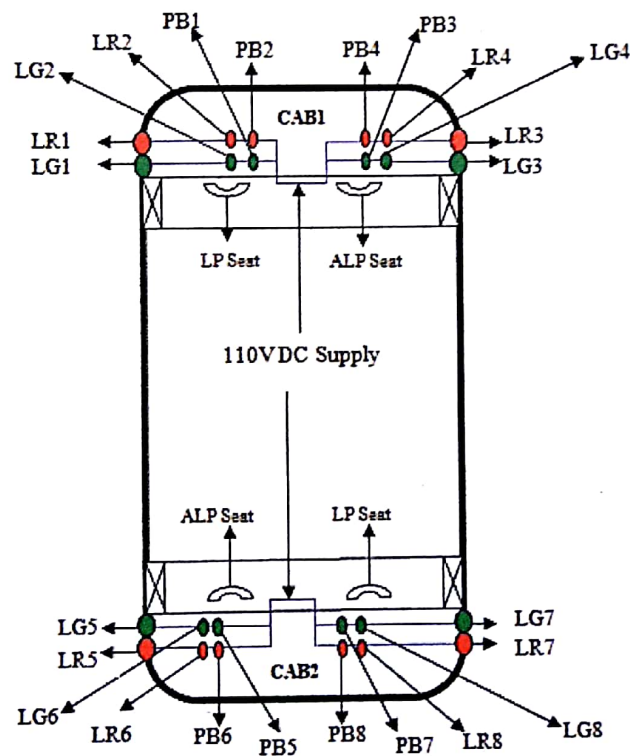
To avoid the frequent opening of windows of air conditioned cab for exchanging the signals, a LED based signal exchange lamp is required to be provided outside the cabs with control push button at the ALP/LP desk for exchange of signals. If cab doors/windows are opened frequently, this activity reduces the effectiveness of Cab AC. Therefore, provision of exchanging of signals is considered through LED light. These lamps shall be operated by push buttons as shown in Figure 1. The lamps with push button

shall be connected in series with a feedback light as repeater for ensuring the glowing of respective lamp when ever push button is pressed.

4.0 WORKS TO BE CARRIED OUT

4.1 The Green & Red LED lamps along with Push Buttons shall be provided as per Figure 1.

4.2 The 110 V supply taken for the purpose shall be through suitable rating of fuse to avoid failure of control circuit of loco in case of fault in LED based signaling circuit. The 110 V supply for LED type signaling circuit shall be taken from wire No. 003(+ve) & B-in conventional electric locos and from wire No. 2068(+ve) & 2050(-ve) in 3-phase electric locos.



Legends:

1. LG: LED light Green lamp
2. LR: LED Light Red lamp
3. PB: Push Button

Figure 1: Location of LED lamps

4.3 Indication lamp outside the loco shall be LED type similar to Marker Light as per specification no. ELRS/SPEC/PR/0022 (latest).

4.4 All push buttons shall be similar to Push button for Fast BP charging i.e. BPSW with single N/O contact as per specification No. CLW/ES/S-8 (latest).

4.5 All repeater lamps shall be similar to indication lamp provided in signaling lamp box of locomotives on driver's desk as per specification No. CLW/ES/L-24(latest).

5.0 APPLICATION TO CLASS OF LOCOMOTIVES

All class of electric locomotives fitted with Cab AC.This arrangement is applicable for cabs provided with Air conditioning.

6.0 MATERIAL REQUIRED

8 nos. 110V, LED type Green bulb, 8 nos. 110V, LED type Red bulb ,4 Nos. RED Push button Switch, 4 Nos. GREEN Push button Switch ,2 core control cable of required length.

7.0 MATERIAL RENDERED SURPLUS

None

8.0 REFERENCES

Item No. 15 of Minutes of Meeting of 37th MSG held at Shimla(UMB Division)/Northern Railway on 24th & 25th July'2015.

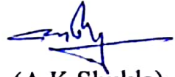
9.0 MODIFICATION IN DRAWING

Nil

10.0 AGENCY FOR IMPLEMENTATION

All Electric Loco Sheds,CLW & POH Workshops.

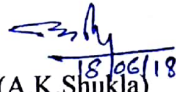
Encl: Nil


(A.K.Shukla)
for Director General Std./Electrical

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As per Standard Mailing List No. EL-M-4.2.3-19 Latest Revision

Encl: Nil


(A.K.Shukla)
for Director General Std./Electrical