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

Tele/Fax: 0522-2452581 E-mail:dirpnloco@gmail.com



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



No. EL/3.2.19/3-Phase/Pt-1

Dated: 27.03.2023

प्रमुख विद्युत् अभियंता,

1. मध्य रेलवे, मुम्बई सीएसटी -400 001

2. पूर्व मध्य रेलवे, हाजीपुर-844 101

3. पूर्व तटीय रेलवे, चन्द्रषेखरपुर, भुबनेश्वर-751 023

4. पूर्व रेलवे, फेयर्ली प्लेस, कोलकाता-700 001

5. उत्तर मध्य रेलवे, ब्लाक ए-2,सुबेदारगंज इलाहाबाद-211033

6. उत्तर रेलवे, बड़ौदा हाऊस, नई दिल्ली-110 001

7. उत्तर पश्चिम रेलवे जयपुर- 302006

8. उत्तर पूर्व रेलवे गोरखपुर- 273001

9. उत्तर पूर्व फ्रेन्टीयर रेलवे मालीगॉव गुवाहाटी-781011

10. दक्षिण मध्य रेलवे, रेल निलायम, सिकंदराबाद-500 371

11. दक्षिण पूर्व मध्य रेलवे, बिलासपुर - 495 004

12. दक्षिण पूर्व रेलवे, गार्डेनरीच, कोलकाता-700 043

13. दक्षिण रेलवे, पार्क टाउन, चेन्नई-600 003

14. दक्षिण पश्चिम रेलवे हबली-580020

15. पश्चिम मध्य रेलवे, जबलपुर-482 001

16. पश्चिम रेलवे, चर्चगेट, मुम्बई- 400 020

17. चित्तरंजन रेल इंजन कारखाना, चित्तरंजन- 713331

18. बनारस रेल इंजन कारखाना, वाराणसी-221004

19. पटियाला रेल इंजन कारखाना, पटियाला-147001

Principal Chief Electrical Engineer,

1. Central Railway, Mumbai, CST-400 001.

2. East Central Railway, Hazipur-844 101.

3. East Coast Railway, Chandrashekharpur, Bhubaneshwar-751 016.

4. Eastern Railway, Fairlie Place, Calcutta-700 001.

5. North Central Railway, Block-A, Subedarganj, Allahabad-211 033.

6. Northern Railway, Baroda House, New Delhi-110 001. 7. North Western Railway, Jaipur- 302 006

8. North Eastern Railway, Gorakhpur-273001

9. North East Frontier Railway, Maligaon, Guwahati- 781011

10. South Central Railway, Secunderabad-500 071.

11. South East Central Railway, Bilaspur-495 004.

12. South Eastern Railway, Garden Reach, Kolkata-700 043.

13. Southern Railway, Park Town, Chennai-600 003.

14. South Western Railway, Hubli- 580020

15. West Central Railway, Jabalpur-482 001. 16. Western Railway, Churchgate, Mumbai-400 020

17. Chittaranjan Locomotive Works, Chittaranjan-713 331

18. Banaras Locomotive Works, Varanasi-221 004.

19. Patiala Locomotive Works, Patiala-147001

SUB: MODIFICATION SHEET No. RDSO/2023/EL/MS/0491 Rev. '00', dated 27.03.2023

Ref: This office letter no. EL/3.2.19/3-Phase/Pt-1 dated 24.03.2023

Vide this office letter under reference above, the "MODIFICATION SHEET No. RDSO/2023/EL/MS/0450 Rev. '00', dated 24.03.2023" issued shall be read as "MODIFICATION SHEET No. RDSO/2023/EL/MS/0491 Rev. '00', dated 27.03.2023". Accordingly the same is uploaded on RDSO website and enclosed herewith.

> RAJESH Digitally signed by RAJESH KUMAR KUMAR Date: 2023.03.27 (Rajesh Kumar) For Director General Std./Elect.

Encl: As above

COPY TO:

Secretary (Electrical), Railway Board, Rail Bhawan, New Delhi-110 001 (Kind attention: Shri Kishore Vaibhav, ED/RS/RB)

-for kind information please

Encl: As above

RAJESH Digitally signed by RAJESH KUMAR KUMAR Date: 2023.03.27 Date: 2023.03.27

(Rajesh Kumar) For Director General Std./Elect. भारत सरकार—रेल मंत्रालय अनुसंधान अभिकल्प और मानक संगठन लखनऊ— 226011

লঙ্গনিজ— 226011 Tele/Fax : 0522-2452581 E-mail:dirpnloco@gmail.com



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



No. EL/3.2.19/3-Phase/Pt-1

Dated 27.03.2023

All Principal Chief Electrical Engineers,

## MODIFICATION SHEET No. RDSO/2023/EL/MS/0491 Rev. '0', Dated 27.03.2023

#### 1.0 Title:

Relocation of RS valve/Emergency Cock for ease of operation by Assistant Loco Pilot (ALP) in 3-Phase Electric Locomotives.

#### 2.0 Object:

- 2.1 Zonal Railways reported that ALPs find it difficult to put their hand over RS valve handle by bending down and to continuously see the signal aspect in case next signal is at "ON" & in suburban section where sometimes every next signal is "Yellow".
- 2.2 The modification sheet has been prepared for better approach by ALP to put their hand on RS valve handle while approaching the signal at danger.
- 2.3 Railway Board vide letter no.2023/Elect.(TRS)/225/1 (NFIR- RS/Valve) dated 12.01.2023 had forwarded the NFIR's letter no. NFIR/IV/RSAC/2023 dated 09.01.2023 and advised RDSO to take necessary action under advice to Railway Board.
- 3.0 Existing arrangement with cross references of respective design document:
- 3.1 Presently, RS valve is provided on right hand side of ALP seat. RS valve handle is in vertical downward at 6 o'clock position in close condition and open at 9 o'clock position by rotating in clockwise direction.
- 3.2 In existing arrangement, bottom of RS Valve handle position is about 360 mm (approx.) above from cab floor level.
- 4.0 Modified arrangement to replace existing arrangement as given above in 3.0:
- 4.1 As per modified arrangement RS valve handle to be rotated in anti clockwise direction from 12 o'clock position(closed) to 9 o'clock position(open). The existing locking screw provided on spindle of cock to restrict operation between 6 o' clock & 9 o' clock to be removed and a lock plate as per drawing & photographs (enclosed) to be provided in such way that the operation should be restricted between 12 o' clock-closed and 9 o' clock-open.
- 4.2 With the implementation of the modification, the top position of the RS Valve handle will be about 735 mm (Approx) above from cab floor level.

## 5.0 Application to Class of Locomotives:

All three phase electric locomotives (WAG9, WAP7 & WAP5).

#### 6.0 Material Required:

Locking plate as per drawing no. SKEL 5065 ALT '0' Quantity 02 nos. per locomotive.

### 7.0 Material Rendered Surplus:

Locking Screw 02 nos. per locomotives

#### 8.0 References:

- i. Railway Board Letter no. 97/Elect(TRS)/113/4 dated 27.09.2022 &12.01.2023
- ii. ELS/TATA/SER Letter no. RS/TATA/T/3 Phase/128 dated 31.01.2023
- iii. CELE/SCR letter no. E.221/MOD/SMI/TC/Vol. dated 07.03.2023
- iv. PCEE/WCR letter no. WCR/L/05/1118 dated 19.09.2022
- v. CELE/CR Letter no.L.733 Loco.S.9 dated 29.10.2022

### 9.0 Modification Drawing:

RDSO Drawing no. SKEL 5065 ALT '0'

#### 10.0 Agency of Implementation:

PUs, Workshops & Zonal Railways

Encl: As above:

RAJESH Digitally signed by RAJESH KUMAR

KUMAR

Date: 2023.03.27

17:17:02 +05'30'

for Director General Std./Elect.

Copy to: As per Standard Mailing List.

# FIGURERS FOR MODIFICATION SHEET No. RDSO/2023/EL/MS/0491



Fig.1 Existing Position of RS valve Handle



Fig.2 Existing Locking Screw



Fig.3 Proposed Locking Plate



Fig.4 Fitment position of Locking Plate



Fig.5 Modified Position of RS valve handle

