



No. EL/11.5.5/2

Dated. 20.01.09

Chief Electrical Engineer,

- Central Railway, 2nd floor, Parcel Office Building, Mumbai CST-400 001
- Northern Railway, Baroda House, New Delhi-110 001
- East Central Railway, HQs Office, Hajipur-844 101 (Bihar)
- South Central Railway, Rail Nilayam, Secunderabad-500 071
- West Central Railway, Indra Market, Jabalpur-482 001
- South East Central Railway, Bilaspur-495 004
- Chittaranjan Locomotive Works, Chittaranjan-713 331 (WB)

MODIFICATION SHEET NO.RDSO/2008/EL/MS/0372 (REV.0), DATED 20.01.2009

1. Title

Modifications in Auxiliary Converter of 3-Phase Electric locomotive to improve reliability.

2. Object

There have been numbers of failures pertaining to Gate Unit of WRE module and Power supply card of Auxiliary Converter in 3-Phase Electric locomotives. After joint investigation by RDSO & M/s Bombardier Transportation it is observed that the major cause of these failures is over heating of gate unit and power supply cards. To overcome the failures and improve cooling following modification are required to be carried out in existing as well as future manufactured Auxiliary Converter of 3-Phase Electric locomotives.

3. Existing Arrangement

- i) Gate unit cover of WRE module as per drawing no. HIET200196
- ii) BUR electronics rack cover (top & bottom) as per drawing no.3EHE400523
- iii) Cooling fans are provided in Power compartment of Aux. Converter connected with thermostat in series as per ABB Drawing no. 3EHP281149.

4. Modified Arrangement

- i) Gate unit cover of WRE module as per drawing no. HIET200196 (Adaptation –1).
- ii) BUR electronics rack cover (top & bottom) as per drawing no.3EHE400523 (Adaptation –1)
- iii) The thermostat is shorted to make the cooling fans continuously 'ON' as per Annexure- 'A'.

5. **Application**

WAG9, WAP5, WAP7 and WAG9H

6. **Material required**

- i. Gate unit cover of WRE module
- ii. BUR electronics rack cover (top & bottom)

7. **Material rendered surplus**

Nil.

8. **Reference**

Nil

9. **Modified drawing**

Attached

10. **Agency of implementation**

CLW and Loco sheds holding 3-phase locomotives in the existing locomotives. TOT partners have also been advised vide this office letter no. EL/11.5.5/2 dtd.17.12.08 and EL/11.5.5/2/BT dtd. 11.11.08 to implement these in new Auxiliary converters.

426/21/01/09
(Sandeep Srivastava)
For Director General /Electrical

Copy to: -

1. Secretary (Electrical Traction), Railway board, Rail Bhawan, New Delhi-110001.

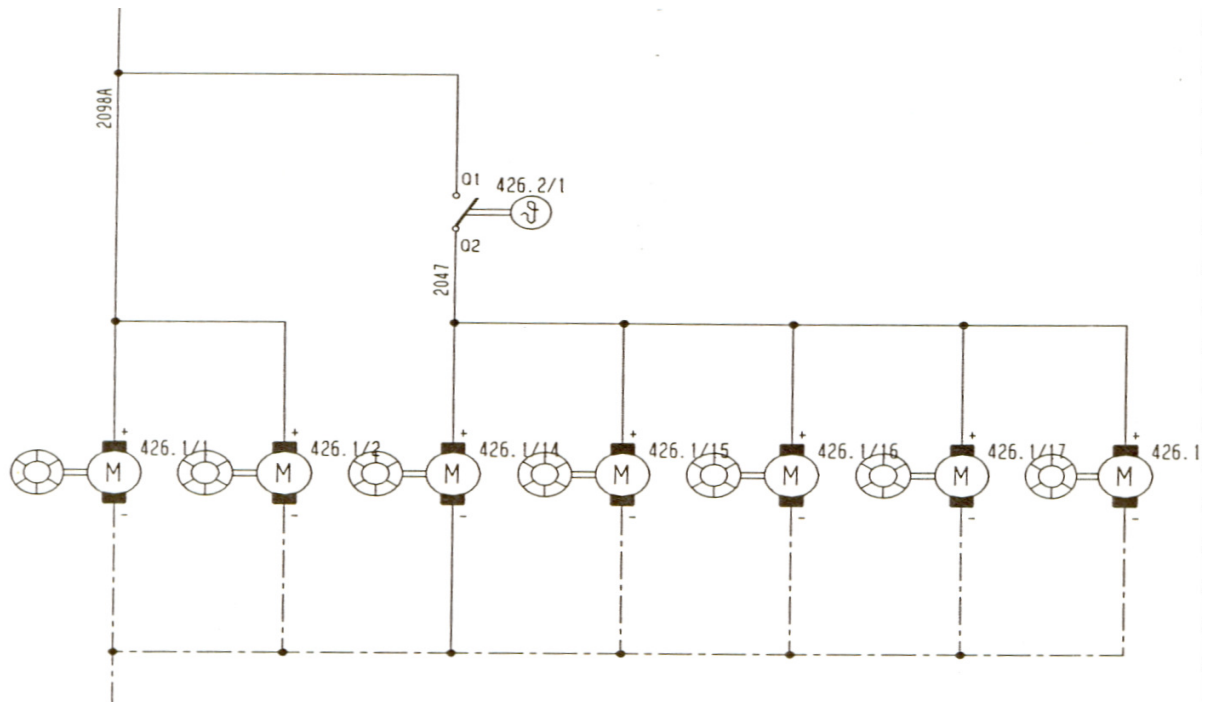
2. Sr. DEE (TRS), Electrical Loco Shed

- Central Railway, Ajni (Nagpur)-440 008.
- Northern Railway, Ghaziabad (UP)-201 001.
- East Central Railway, Gomoh-828 401.
- South Central Railway, Lalaguda, Secunderabad-500 071
- West Central Railway, Tughlaquabad-110 044
- South East Central Railway, BMY Complex, Bhilai Durga-490 025

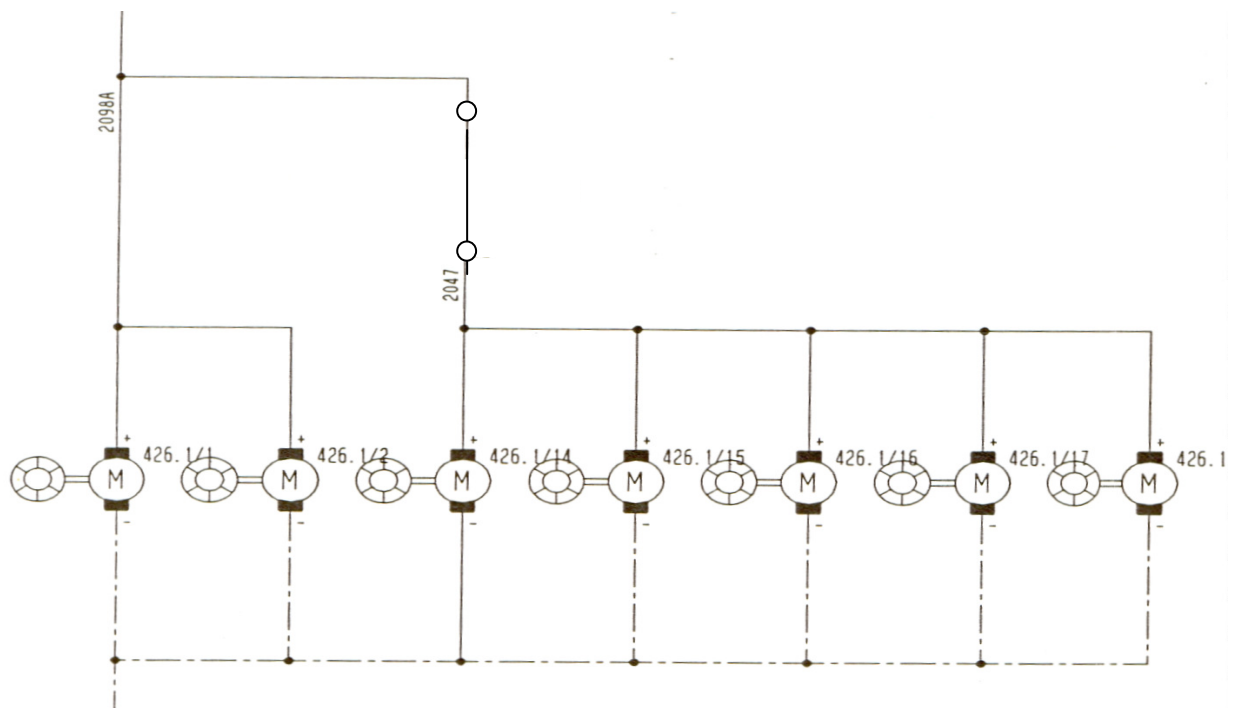
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(Sandeep Srivastava)
For Director General /Electrical

SKS
21.01.09

1. EXISTING ARRANGEMENT



2. MODIFIED ARRANGEMENT



(Ref: ABB drawing no. 3EHP28114)