

INDIAN RAILWAYS
CENTRE FOR DESIGN & DEVELOPMENT
CHITTARANJAN LOCOMOTIVE WORKS

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No. C-D&D/T/21, Vol. II

Date: As signed

M/s ABB India Limited
21st floor, World Trade Centre,
Dr. Rajkumar Road, Malleshwaram
West Bangalore- 560001 Karnataka, India

Sub: Regular approval of s/w ver. Version 55 for redesigned IGBT based Traction Converter of M/s ABB make Propulsion system.

Ref: M/s ABB ref. no. ABB/4118/CLW/PE/0080 dated 26.06.2024

1. In response to your letter under reference above it has been decided that software version 55 for redesigned IGBT based Traction Converter is hereby accorded for regular downloading in all locos at different electric/diesel loco sheds equipped with M/s ABB make propulsion system. Further the modification carried out are as follows:

- Plausibility Check between two channels of transformer oil temperature sensor** has been corrected in which if the difference of transformer oil temperature of two sensors is $>250^{\circ}\text{C}$ the plausibility check will fail and minimum of two values will be decisive for operation.
- VCB will not close:** Holding circuit logic has been modified for line contactor failure leading to non-closure of VCB during operation of both converters during loco running condition.
- Harmonic Filter current high popup:** Mapped with appropriate fault message 'F0401P1 Filter current $>$ maximum has been done.
- MUB temp too hot:** Improvement in the Motor backup braking during Panto bounce to damp the DC oscillations below VLU activation level has been done for consecutive Panto bounce above 130 KMPH.
- No pop-up message in case of reduction in traction power due to high coolant temperature.** Pop-up Message mapped in case for power reduction from any of the SR.
- Ventilation level setting temperature:** Ventilation demand level 3 is reduced from 480°C to 45°C so that transformer oil cooling can be done efficiently and failure with message coolant temp $>$ limit can be arrested.

2. The aforesaid software with release note may be downloaded from the below link: https://clw.indianrailways.gov.in/view_section.jsp?lang=0&id=0,295,329,493,496
Further comments/feedback/issues, if any, may be sent to this office on ceednd@clw.railnet.gov.in & dyceedd@clw.railnet.gov.in.

Pankaj
27/06/24
(Pankaj Kumar)
Dy.CEE/D&D-I

Copy to:

Director TPS/RDSO, Lucknow	-- For kind information please
Sr. DEE/ELS, All Zonal railways	-- For kind information please
Sr. DEE/DLS, All Zonal railways	-- For kind information please

Pankaj
27/06/24
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