

INDIAN RAILWAYS
CENTRE FOR DESIGN & DEVELOPMENT
CHITTARANJAN LOCOMOTIVE WORKS

PO: Chittaranjan, West Bengal. PIN: 713331
Fax: (+91) 341-2526153. Ph: (+91) 341-2525550



No: C-D&D/T/24(Part-IV)/Hirect

Date: As signed

Dy.CEE/Loco
CLW, Chittaranjan

Sub: Dispatch of Loco no. 38856 equipped with 3-Ph. propulsion system of M/s Hind Rectifier Ltd., Mumbai in dead condition for Performance test, Adhesion test and EMI/EMC trails by RDSO

Ref.: i) CLW P.O. no. 70211134D01496 dated 28.10.2021 and M.A. No. 002717 dated 16.09.2024

ii) This office letter no. C-D&D/T/24(Part-IV)/Hirect dated 21.09.2024

iii) RB letter no. 2024/Elect(TRS)/440/3 dated 03.03.2025

iv) M/s Hirect letter no. HRL/JS/Propulsion/016 dated 23.04.2025

1.0 CLW Vide P.O. under ref.(i) placed an order of 01 set of IGBT based Three Phase Drive Propulsion Equipment as per specification no. RDSO/2008/EL/SPEC/0071, Rev 05 on M/s Hind Rectifiers Limited, Mumbai. After the necessary test witnessed jointly by CLW and RDSO, dispatch clearance of proto unit was accorded vide letter under ref. (ii). Further the proto unit of M/s Hind Rectifier Ltd. with the below mentioned serial no. has been provided in loco no. 38856. The loco is nominated to ELS/BLEE/WR vide RB letter under ref. (iii). Also joint testing has been carried out by representative of CLW & ELS/BLEE/WR for which Joint report dated 24.03.2025 has been attached as annexure.

Sl. No.	Item Description	Serial No.
1	Traction Converter	Sl. no. 2023E/01187/TRC/001
2	Traction Converter	Sl. no. 2023E/01187/TRC/002
3	Auxiliary Converter (BOX-1)	Sl. no. 2023C/01187/AUX/001A
4	Auxiliary Converter (BOX-2)	Sl. no. 2023C/01187/AUX/001B
5	Vehicle Control Unit	Sl. no. 12023C/01187/VCU/001
6	Vehicle Control Unit	Sl. no. 12023C/01187/VCU/002
7	Driver Display Unit	Sl. no. DU-1023-001
8	Driver Display Unit	Sl. no. DU-1023-002

2.0 As per clause no. 5.5 of RDSO spec no. RDSO/2008/EL/SPEC/0071 Rev 5 it is mentioned that first locomotive equipped with propulsion system shall be subjected to the following test to satisfy IR regarding operational performance, capability and safety

- Dynamometer car tests to ascertain starting and rolling resistance of the locomotive to prove TE/BE vs speed characteristics.
- Adhesion tests to prove the adhesion capability of the locomotive.
- Tests to determine the level of interference with the traction power supply and signal and telecommunication equipment to prove that these are within limits.

3.0 In view of the above competent authority has accorded permission for dispatch of aforesaid loco no. 38856 to ELS/BLEE/WR in dead condition for aforesaid test which will be conducted by RDSO.

DA: Joint report dated 24.03.2025 (witnessed jointly by CLW & ELS/BLEE/WR)

(Pankaj Kumar)
Dy. CEE/CLW

Copy to :

Director/TPS/RDSO : For kind information please.

M/s Hind Rectifiers Ltd. Mumbai-400078 : For kind information and request to submit EMI/EMC test protocol to RDSO for conducting trails as per specification.

Dy. CEE/CLW