

### JOINT NOTE

SSE/HP/ELS/VSKP/801

Date: 30-01-2024.

Equipment Name: VCU-LEROY MAKE	Equipment serial no::1) VCU I-ABB-R2-005A , 2) VCU II-ABB-R2-005B.
Po No.Dt/ Receipt details: CLW/C	
Equipment make: ABB	Receipt Dt: 30-03-2023
Loco No: 38005	Loco Type: WAG9 HC (ABB PROPULSION)
Dt of Fitment/Comm. Dt: 26-04-2023	Date of Failure: NA, Software version 4003 containing 43 signal DR file downloaded in VCU-1&2.

**SUBJECT:** Observations after downloading the software version 4003 containing 43 signal DR File in VCU-1&2 of ABB Propulsion loco 38005 having LEROY make VCU dated 20-01-2024.

Sl.No	Software versions of different sub equipment before downloading of SW version 4003 in VCU-1&2 containing DR file		Sl.no	Software versions of different sub equipment after downloading of SW version 4003 in VCU-1&2 containing DR file at ELS/VSKP on 20-01-2024.	
	Name of sub equipment	Software Version		Name of sub equipment	Software Version
1	RIOM 1&2	4001	1	RIOM 1&2	4003
2	BRIO 1&2	4001	2	BRIO 1&2	4003
3	SLG 1&2	0083	3	SLG 1&2	0083
4	BUR 1,2&3	0082	4	BUR 1,2&3	0082
5	DDU 1&2	A-0.95	5	DDU 1&2	A-0.95

The following observations were made by ELS/VSKP & ABB firm representative during the testing of locomotive 38005 after loading new software version 4003 in both VCU-1&2.

1. DR file containing 43 signals incorporated in Software version 4003 in both VCU-1 and VCU-1&2. All the functions related to 43 signals (except LSP) tested in standstill position and during run test. Then downloaded the Log files from VCU-1 and observed all 43 signals (EXCEPT LSP) are updating with an interval of one second. Wheel slip functionality could not tested because condition could not be simulated by removing the speed sensor.  
Sometimes while VCB open or close through BLDJ from both cab, Emergency brake vigilance message pop up on DDU and vigilance penalty brakes applying along with BP dropping to "0". Even after keeping the Vigilance rotary switch 237.1 in "0" position i.e. in isolation, still facing the same issue, so one signal of DR file i.e. Vigilance Emergency brake not able to validate. (During preliminary inspection found control supply voltage to 3000-cable getting interrupted momentarily and verified with multi-meter and becoming normal. ABB firm will further extend support to ELS/VSKP for this issue).
2. Multiple unit, Energy saving, DR file and TM healthy/isolation status in home screen of DDU features are implemented in VCU software version 4003.
3. Software tool for downloading and viewing the DR file and operation manual of the tool shared to ELS/VSKP.
4. Graphical representation of healthy/isolation status of all Traction motors and Line converters in home screen of DDU checked and found Traction motors and Line converters healthy/isolation indication are displaying on DDU along with respective message pop up and logging in DDS. However, when both line converters of same Traction converter are in isolated condition, only line converters are showing as isolated i.e. in red colour but Traction motors status under the control of the respective traction converter are showing healthy i.e. in green colour representing that Traction motors are healthy.
5. Loco tested in ELS/VSKP, its performance is under monitoring till next shed visit for further analysis.

Name & Sign of ABB Firm Representative

Signature of SSE

Counter signed by Officer

Counter signed by Officer  
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