

Ref. No. : ABB/4118/CLW/PE-Leroy /0092

Date: 18.01.2025

To,  
Dy Chief Electrical Engineer,  
Centre for Design & Development  
Chittaranjan Locomotive Works  
Chittaranjan - 713 331

Kind Attn: Shri Pankaj Kumar (Dy CEE/D&D/CLW)

Subject: Request for regular approval of **ABB make Leroy VCU software version 4005 for G9 & 7002 for P7** in all PER2 propulsion fleet.

Dear Sir

With respect to above subject & continuous reliability discussion we are released the ABB make Propulsion Leroy VCU software version 4005 for G9 & 7002 for P7 .

For WAG9 loco, software version is 4005 tested & running at ELS DNDE in loco 38647 – 1.1.25 , 38736 – 23.12.24 , 38786 – 21.12.24 , ELS BSL – 38444 – 11.1.26 , 38996 – 2.1.26

**The below features are implemented with the latest software: -**

1. The issue of spurious ACP message displayed sometimes is resolved.
2. The issue of VCB stuck ON during neutral section is resolved.
3. The MVB port for Remote monitoring system device is configured for both ARC and LOTUS make RMS.
4. The issue of MR low due to compressor not working is resolved.
5. The output for hotel load converters is enabled in WAP7 loco.
6. The issue of emergency shutdown Pop up message during booting is resolved.
7. The issue of TE-BE meter not deflecting in CAB2 side after putting in self-hold mode is resolved.
8. The issue of multi formation with Hasler with Hasler and AMiT with Hasler gateway is resolved.
9. Logic changes for AFL and recording of flasher light operation has been implemented.
10. The issue with energy counter value retention is resolved.
11. Software is tuned to resolve the spurious life sign missing from BURs during booting time.

Thanking you and assuring you the best of our services, we remain.

Yours Sincerely,



Mohit Sharma  
Service Manager - Traction  
ABB India Limited.  
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**Copy to-** Director Electrical, RDSO – For your kind information  
**Attached – Software release note - 4005 for G9 & 7002 for P7**

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# 1 Introduction

This document summarizes new features along with the modifications done in software version: G9 - 4005 / P7 - 7002 to resolve the issues reported from the field installed with ABB TCN based VCU system.

## 2 Release Notification

### 2.1 Modifications/Improvements in software version G9 - 4005 / P7 - 7002

1. The issue of spurious ACP message displayed sometimes is resolved.
2. The issue of VCB stuck ON during neutral section is resolved.
3. The MVB port for Remote monitoring system device is configured for both ARC and LOTUS make RMS.
4. The issue of MR low due to compressor not working is resolved.
5. The output for hotel load converters is enabled in WAP7 loco.
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9. Logic changes for AFL and recording of flasher light operation has been implemented.
10. The issue with energy counter value retention is resolved.
11. Software is tuned to resolve the spurious life sign missing from BURs during booting time.


### 2.2 Improvements in software version G9 - 4005 / P7 - 7002

- As per technical Note and request letter no. from CLW, Indian Railways – C-D&D/T/24, Vol-VIII, to implement the modified AFL logic along with the modification for recording of flasher light operation in VCU for IGBT based three-phase drive propulsion system.

All the modifications/improvements of the new SW release are verified by testing the new functionalities comprehensively on the simulator in ABB lab.

## 3 Field Action

With the simulator test results of version G9 - 4005 / P7 - 7002, it is recommended to upload the software into Locomotive and test the application software for improved reliability and to address the different issues reported from field by zonal railways.

Prepared	Anand Raj	08.01.2025	Project	CLW 3-Phase Locomotives	No of pages 1		
Reviewed	Himanshu Pandey	13.01.2025	Title	Change note for VCU software			
Approved	Ashish Mishra	13.01.2025	Converter	ABB TCN based VCU system			
Department	MOTR						
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