

Vehicle not starting after DC charging

Topic number	LI47.70-P-079912
Version	1
Function group	47.70 - Powertrain energy supply
Date	11/11/25
Validity	PHEVs of 214, 247, 254, 167, 223
Reason for change	

Complaint

Vehicle will not start after DC charging

Warning in the instrument cluster related to High-voltage on board electrical system

The following fault codes related to stuck contactor can be found in the High Voltage Control units :

PTCU - N127 (Powertrain control unit)



- P154900 - There is a warning due to overcurrent in the charging system of the high-voltage electric circuit.
- P154A00 - There is a warning due to a detected crash event at standstill.
- P154B00 - There is a warning due to a stuck contactor.

DCB223 - N116/5 (Direct current charge connection unit)

- P0E8929 - The input current of the on-board DC charging connection unit is too high. There is an invalid signal.
- P2BC500 - The contact "Positive terminal" of the contactor in the on-board DC current charge-connection unit is jammed closed
- P2BCC00 - The contact "Negative terminal" of the contactor in the on-board DC current charge-connection unit is jammed closed.

Instrument cluster warning messages :



Attachments	
File	Description
IC malfunction.jpeg	
IC Malfunction 1.jpeg	

Cause

- Current ripple due to EVSE (Electric Vehicle Supply Equipment)
- Overcurrent or Overvoltage due to EVSE (Electric Vehicle Supply Equipment)
- DCB contactors did not open immediately due to welding time at the end of DC charging

Remedy

- Check for a new software availability for DCCU (N116/5 - Direct Current Charge connection Unit). If a new software is available, update the software first.
- Reset contactor fault through special procedure without password. (N116/5 >> Special Procedure >> Resetting of contactor fault.)

Important Note :

- Do not replace component DCB (N116/5)
- If fault codes are not erasable, please raise a TIPS case and send it to HQ.

Disclaimer

NOTE: The information contained in this document is intended for use by trained, professional technicians with the knowledge to properly and safely perform diagnosis and repairs on Mercedes-Benz vehicles, using Mercedes-Benz approved tools and equipment. It informs service technicians about conditions that could occur in certain vehicles and provides information that could assist in proper vehicle diagnosis, service, or repair. It does not indicate that a defect is present in any vehicle referenced in this document nor does it imply warranty coverage. DO NOT assume that a symptom or condition, or a described cause of a symptom or condition, affects any particular vehicle or groups of vehicles, or that a described repair applies to any particular vehicle or groups of vehicles. There can be multiple causes

resulting in the same or similar symptoms or conditions described in this document, and trained professional service technicians must use their diagnostic skills to make evaluations on a case-by-case basis. The information contained in this document does not guarantee warranty coverage nor does it extend the vehicle's warranty in any way.

Symptoms
Overall vehicle > Power supply > Battery/On-board electrical system > Battery function > Battery cannot be charged
Overall vehicle > Power supply > High-voltage on-board electrical system > High-voltage battery > Display message
Overall vehicle > Power supply > High-voltage on-board electrical system > Charging > smartCharging > Aborts

Control unit/fault code	
Control unit	Fault text
N116/5 - Direct current charge connection unit (DCCU) (DCB223)	<p>P2BCC00 - The contact 'Negative terminal' of the contactor in the on-board DC current charge-connection unit is jammed closed. _</p> <p>P2BC500 - The contact 'Positive terminal' of the contactor in the on-board DC current charge-connection unit is jammed closed. _</p> <p>P0E8929 - The input current of the on-board DC charging connection unit is too high. There is an invalid signal.</p>
N127 - Control unit "Drivetrain" (PTCU) (CPC3)	<p>P154B00 - There is a warning due to a stuck contactor. _</p> <p>P154A00 - There is a warning due to a detected crash event at standstill. _</p> <p>P154900 - There is a warning due to overcurrent in the charging system of the high-voltage electric circuit. _</p>

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
	Resetting of contactor fault.	H	540RK	