

AC and DC Charging inoperative with no failure codes in the relevant control units.

Topic number	LI54.10-P-080881
Version	1
Function group	54.10 - Battery, power supply, voltage converter
Date	8/11/26
Validity	BEVs (Battery Electric Vehicles) & PHEVs (Plug-in Hybrid Electric Vehicles) with code 83B.
Reason for change	Request from German market to provide measurement instructions in German.

Complaint

AC and DC charging are not possible.

The white LED on the charging inlet completely goes OFF after plugging in the charging cable.

Related DTCs in quick test:

There are no related fault codes (DTCs) stored in relevant control units.

CPC3 - N127 (Drivetrain control unit)

OBL223_GEN4 - N83/11 (Alternating current charger for high-voltage battery)

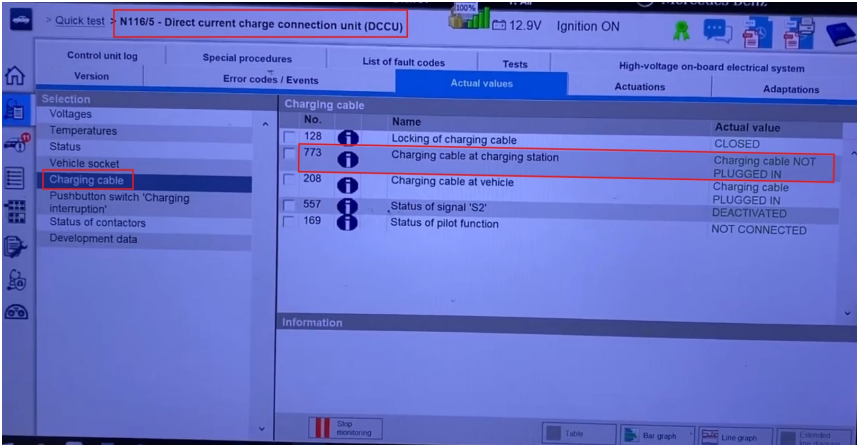
DCB223 - N116/5 - Direct current charge connection unit (DCCU)

Cause

Control pilot (CP) circuit in DCB (N116/5: Direct current charge connection unit) might be not functional due to electrical overstress from EVSE (Electric Vehicle Supply Equipment | Charging Station).

Remedy

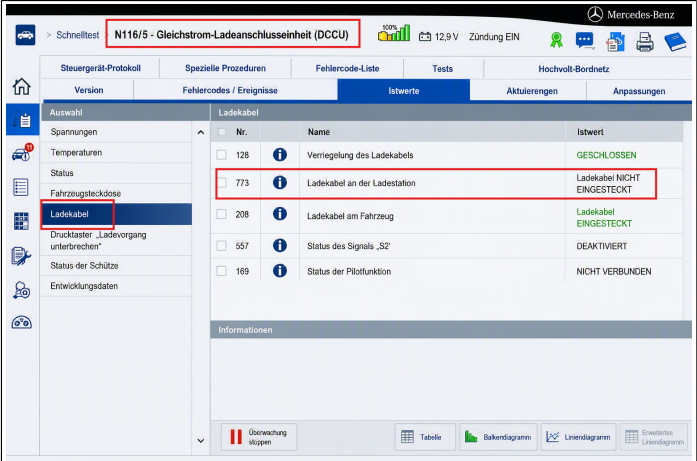
Refer to the charging cable actual values in DCB (N116/5).



The actual value “Charging cable at charging station” and “status of pilot function” shows “Charging cable NOT PLUGGED IN” & “CP not connected” respectively, even though the charging cable is connected on both sides. This confirms a possible breakdown of Control Pilot (CP) circuit inside the DCB.

Measurement of the resistance of Proximity Pilot (PP) and Control Pilot (CP) at the charging socket (G10) (see Annex “Resistance measurement Proximity Pilot (CP) and Control Pilot (CP)”)

Attachments	
File	Description
DCB (N116-5) Actual values charging cable.jpg	DCB (N116-5) Actual values charging cable
Resistance measurement Proximity Pilot (CP) and Control Pilot (CP).pdf	Resistance measurement Proximity Pilot (CP) and Control Pilot (CP)
Charging not possible, White LED on charging inlet completely goes OFF.mp4	Charging not possible, White LED on charging inlet completely goes OFF
Charging not possible, CP voltage is zero, Status charging cable is not connected even though it is connected.mp4	Charging not possible, CP voltage is zero, Status charging cable is not connected even though it is connected
DCB (N116-5) Istwerte des Ladekabels.png	



Messung des Widerstands von Proximity Pilot (PP) und Control Pilot (CP).pdf

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 > High-voltage on-board electrical system > Charging > Wallbox (Mode3/Level2) > Does not start
Overall vehicle > Power supply > High-voltage on-board electrical system > Charging > Charging pillar (Mode3/Level2) > Does not start
Overall vehicle > Power supply > High-voltage on-board electrical system > Charging > smartCharging > Does not start

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
	In the event of consequential damage, please always invoice the damage code of the component that caused the damage.	H	540RK	