



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

Topic number	LI54.10-N-080879
Version	1
Function group	54.10 - Battery, power supply, voltage converter
Date	8/11/26
Validity	907 VANS (Electric Vehicles) with DC charging.
Reason for change	

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 (Powertrain (PTCU))

OBL223_GEN4 - N83/11 (Charger (AC))

DCB223 - N24/6 - Charger (DC)

Cause



Control pilot (CP) circuit in DCB (N24/6: Charger (DC)) might be not functioning due to electrical overstress from EVSE (Electric Vehicle Supply Equipment | Charging Station).

Remedy

Refer to the charging cable actual values in DCB (N24/6).

XENTRY



No.		Name	Actual Value	Specified Value
☐ 442		Terminal 30 voltage	12.9 V	[13.0 .. 15.5]
☐ 340		High-voltage on-board electrical system voltage G1/9 (high-voltage battery)	368.1 V	[200.0 .. 420.0]
☐ 225		State of charge of battery G1/9 (high-voltage battery)	31 %	[5 .. 95]
☐ 378		High-voltage on-board electrical system voltage of component N24/6 (dc/dc converter unit)	367.0 V	[0.0 .. 460.0]
☐ 618		Measured voltage value at the input of control unit N24/6 (dc/dc converter unit)	0.0 V	[0.0 .. 460.0]
☐ 128		Locking of the charging cable	LOCKED	LOCKED
☐ 773		Charging cable at charging station	Charging cable NOT PLUGGED IN	Charging cable PLUGGED IN
☐ 208		Charging cable in vehicle	Charging cable PLUGGED IN	Charging cable PLUGGED IN
☐ 158		Status of the vehicle charging socket	Charging cable VEHICLE SIDE PLUGGED IN	Charging cable PLUGGED IN
☐ 557		Status of signal 'S2'	DEACTIVATED	CLOSED
☐ 169		Status of pilot function	NOT CONNECTED	PRESENT - VALID
☐ 906		Status of the outer flap of the vehicle charging socket	OPEN	OPEN
☐ 622		Status of charging station	DEACTIVATED	READY
☐ 615		Status of electrical plug connection (High-voltage)	Electrical plug connection PLUGGED IN	Electrical plug connection PLUGGED IN
☐ 557		Current charging current	0 A	≤ 70
☐ 459		High-voltage battery charging mode	INITIALIZATION	DC CHARGING PROCESS



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 (N24-6) Actual values charging cable.png	DCB (N24-6) Actual values charging cable
Resistance measurement Proximity Pilot (CP) and Control Pilot (CP).pdf	Resistance measurement Proximity Pilot (CP) and Control Pilot (CP)
White LED on charging inlet completely goes OFF.mp4	White LED on charging inlet completely goes OFF
DCB (N24-6) 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-



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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
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XENTRY Tips

In the event of consequential damage, please
always invoice the damage code of the
component that caused the damage.

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