

Vehicle / Marine Power Drive

12 V DC input · vehicle-grade · 3 sub-variants for car / limo / marine

Doc code: PVS-SGS-DAT-PD-CZ · Rev 1.0 · Issued 2026-05-06 · Classification INTERNAL DRAFT

TECHNICAL SPECIFICATIONS

INPUT VOLTAGE	DC 12 V (vehicle / leisure / marine bus)
INPUT FREQUENCY	DC (no AC frequency)
OUTPUT VOLTAGE	AC 48 V or 60 V to PDLC panel
OUTPUT WATTAGE	20 W per channel typical · up to 4 channels (CZ4L20A)
CHANNELS	CZPJ20A = 1 channel · CZ4L20A = 4 channels (limousine) · CZD20A = 1 channel + dimming (sunroof)
VARIABLE TRANSPARENCY	CZD20A sub-variant only
CONTROL — MANUAL	Vehicle-mount toggle switch
CONTROL — REMOTE	RF remote, multi-button
CONTROL — HA / BMS	OEM CAN bus integration on request · NMEA 2000 (marine) on request
ENCLOSURE	Sealed plastic, vehicle-grade vibration tested
IP RATING	IP54 (splash-resistant)
AMBIENT (operating)	-20 °C to +70 °C (vehicle-grade)
PROTECTION	Reverse-polarity · short-circuit · over-current · over-temperature
POWER-ON DEFAULT	Off → opaque on ignition off
DIMENSIONS (W×D×H mm)	150 × 90 × 35 [VERIFY]
WEIGHT	≈ 0.4 kg [VERIFY]
APPROVALS	CE · UKCA · IATF 16949 manufacturing for vehicle variants
WARRANTY	24 months (drive)
LEAD TIME	5–10 working days UK · 14–21 working days GCC
PER-FAMILY MANUAL	PVS-SGS-ANX-CZ-01 Rev 1.0 (Integration Annex) — full Strict + UAE manuals on roadmap Q3 2026

TYPICAL APPLICATIONS

Limousine privacy partitions (CZ4L20A) · luxury car sunroofs (CZD20A) · yacht windows (CZPJ20A) · motorhome bathroom doors · executive ambulance privacy · special-purpose vehicles.

NOTES

- [VERIFY] markers identify supplier-quoted values not yet independently re-tested by PRIVASEE.
- PDLC operates with low-voltage AC. Never connect to DC mains. (LP-002)
- TOSSEAL 381 is the only approved silicone for PRIVASEE smart-glass installations. (LP-003)
- For comparative selection across families, see PVS-SGS-CAT-PD-01 Power Drive Catalogue.
- Installation by a licensed electrician using the per-family manual cited above. PRIVASEE does not authorise site work from this datasheet alone.