功率分配集成控制器 PDIC

Power Distribution Integrated Controller (PDIC)



展品特点

功率分配集成控制器（PDIC）面向新能源商用车「续航、可靠、成本」三大痛点，将充放电管理（BDU）、集成配电（PDU）、油泵/气泵驱动（DCAC）、低压电源（DCDC）、生活电源（DCAC 220V）及绝缘检测（IU）七大高压部件深度集成于一体，以新能源重卡为典型场景，适配各类车型。

支持 600/800 V 双电压平台（500 – 930 V），单主驱配电 450/650 kW，双主驱 200/300 kW×2，上装配电 80/120 kW；DCDC 6/6.6 kW，DCAC 7.5/15 kW，充电输入 300/500 A×4。整机 700×640×230 mm，重量 ≤65 kg。高压部件合一后，整车高压线束与连接点显著减少，布置更紧凑，系统成本与故障排查难度同步下降。已在陕重汽、东风商用车等客户批量应用。

Key Parameters & Features (EN)

额定电压 Rated voltage	600 / 800 VDC（500 – 930 V）
单主驱配电 Single main drive	450 / 650 kW
双主驱配电 Dual main drive	200 / 300 kW×2
上装配电 Upper-body distribution	80 / 120 kW
DCDC / DCAC	6 / 6.6 kW · 7.5 / 15 kW
充电输入 Charge input	300 / 500 A×4
尺寸 / 重量 Size / weight	700×640×230 mm / ≤65 kg
市场应用 Applications	陕重汽、东风商用车

PDIC targets the range, reliability and cost pain points of new-energy commercial vehicles by integrating seven HV functions — BDU charge/discharge, PDU distribution, DCAC oil/air-pump drive, DCDC supply, 220 VAC life power and IU insulation detection — in one unit, with new-energy heavy trucks as the typical application. 600/800 V platforms (500 – 930 V), 450/650 kW single main-drive distribution, 200/300 kW×2 dual drive, 80/120 kW upper-body, 6/6.6 kW DCDC, 7.5/15 kW DCAC, 300/500 A×4 charge input — all in 700×640×230 mm and ≤65 kg. Integration cuts harnesses and connectors, tightens layout, and lowers cost and troubleshooting effort. In volume production with Shaanxi Automobile and Dongfeng Commercial Vehicle.