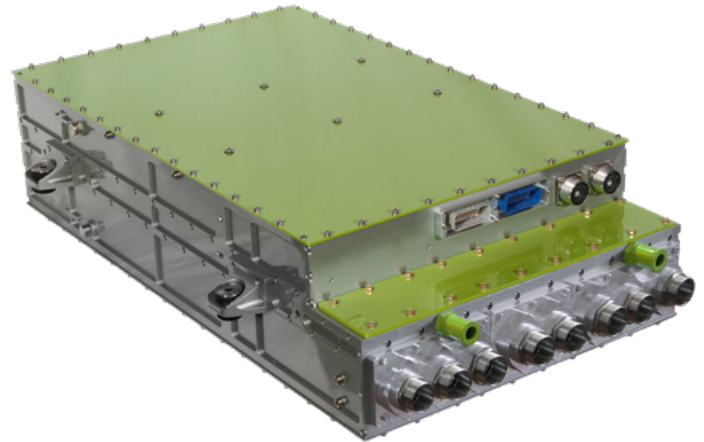


Propulsion Control System

PCS

The Propulsion Control System (PCS) is the power processing and power management center for all of BAE Systems electric-drive systems. The PCS is available for installation in vehicles of various sizes and weights. Our compact system works in conjunction with our System Control Unit (SCU), which provides the vehicle and operator interfaces, system monitoring and control, and system level diagnostics. Together the PCS and SCU optimally control power flow to and from the traction motor, generator, and energy storage system and they also support the high-voltage interface for DC accessories.

The PCS and SCU enables overall system performance to be customized to an operator's specific requirements and provide diagnostic information to enhance maintenance of the entire system. Combined with our Accessory Power System (APS-2 and APS-3), the PCS and SCU fully support stop/start technology and Depot Drive mode (EV driving > 50 yards). The PCS and SCU are available for HDS100, HDS200, and HDS300 systems and EV PCS is available for Series-EV, full battery-electric systems.



Features

PCS for HDS100, HDS200, HDS300, and Series-EV

- Selectable acceleration and regenerative braking settings
- Onboard diagnostics
- Standard SAE 1939 CAN interface
- Operation and diagnostics fully integrated with APS-1, APS-2, and APS-3
- Optional high-voltage output to support electric cabin heater
- Liquid cooled for superior thermal management

EV PCS for Series-EV

- Same footprint, connection points, and space claim as HDS100/200/300 PCS
- Same 240kW motor inverter as HDS300 PCS
- Added port for 200A charge (with pre-charge)
- Added port for 400A charge (with pre-charge)
- Available DC output for APS (Accessory Power System)
- Compatible with all traction motors

Specifications

Power for HDS100/HDS200

Generator 200kW continuous
Motor 200kW continuous

Power for HDS300

Generator 240kW continuous
Motor 240kW continuous

Coolant

Water ethylene/glycol (or propylene glycol)
Coolant temperature: -40°C to 65°C
45°C nominal

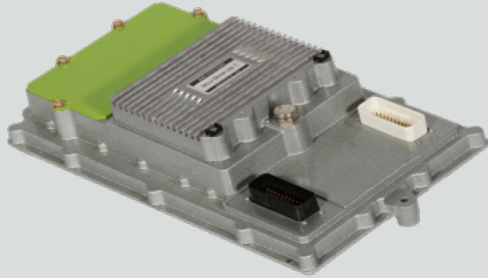
External ambient

External ambient temperature: -40°C to 75°C

Size

Length: 919 mm (36.2 in)
Width: 569 mm (22.4 in)
Height: 237 mm (9.3 in)
Weight : wet: 85 kg (188 lbs.)

System Control Unit (SCU)



Features

- Supports 3 SAE J1939 CAN buses
- On board diagnostics (OBD) compliant
- System control and vehicle interface electronics

Ratings

External ambient: -40°C to 52°C continuous, up to 75°C at initial start-up

Air cooled

Size

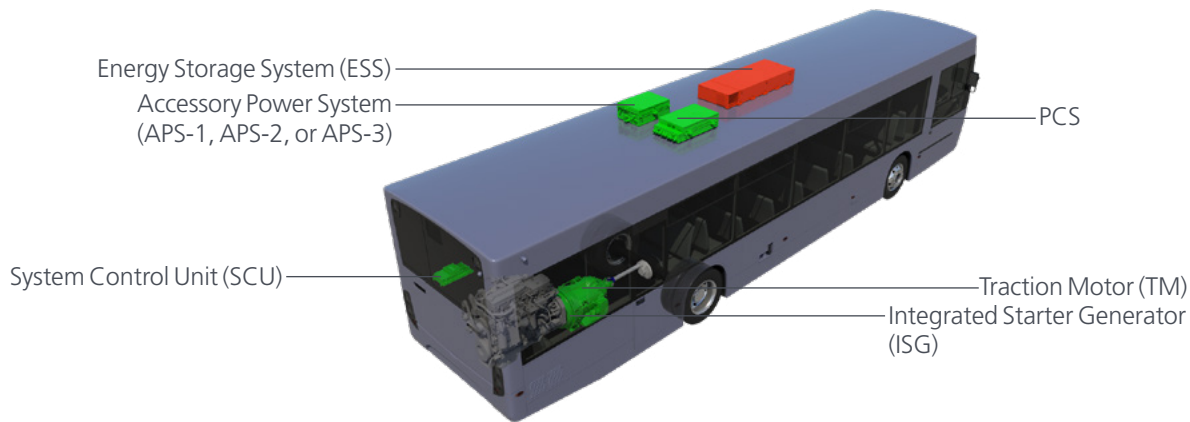
Length: 385 mm (15.15 in)

Width: 221 mm (8.70 in)

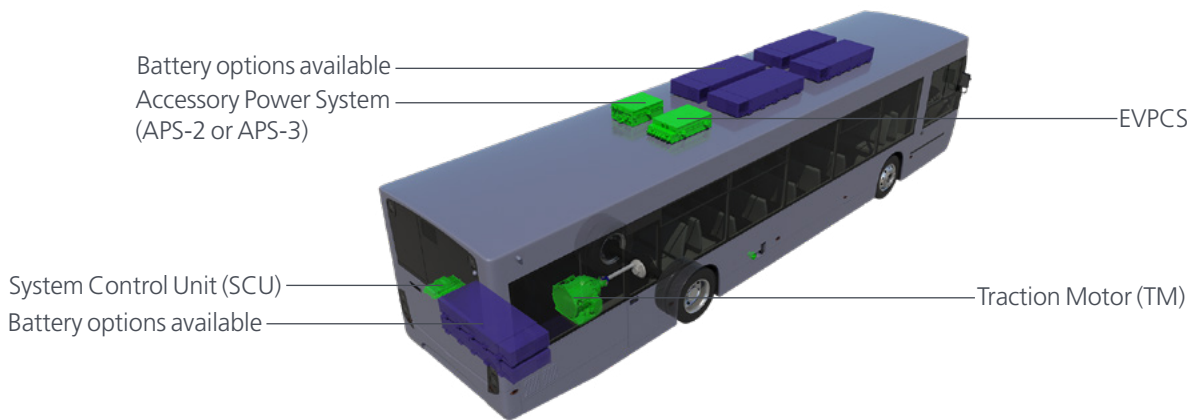
Height: 99 mm (3.91 in)

Weight: 4.5 kg (10 lbs.)

Series-E and Series-ER electric hybrids (The position of components may vary depending on OEM)



Series-EV battery electrics (The position of components may vary depending on OEM)



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