

HYBRIDRIVE® ACCESSORY POWER SYSTEM (APS) LEVEL 2

HybriDrive®
PROPULSION SYSTEMS

HybriDrive® Accessory Power System (APS) Level 2 supports full electrification of accessories to further enhance efficiency and performance of your vehicle. APS Level 2 replaces the conventional belt driven alternator and provides 24/28 volt power to support a range of vehicle systems and electronic components (e.g. cooling fans, cooling pumps, and all conventional 28V systems and accessories). The APS also provides 208/230VAC 3-phase power for the electrification of large accessory loads (e.g. air compressors, power steering, and air conditioning). The system enables engine stop/start and electric vehicle (EV) modes. Full electrification reduces maintenance and eliminates the potential contamination of the pneumatic system (from oil blow-by in air compressors) and improves safety by eliminating hydraulic lines in the engine compartment. The APS Level 2 is packaged in a compact liquid-cooled unit for ease of installation and performance. APS Level 2 is available for both the HDS 200 and HDS 300 systems.



Features

- Provides required power for electrified vehicle accessories:
 - Air conditioning
 - Engine cooling fan
 - Air compressor
 - Power steering
- Eliminates most engine belts and minimizes belt guard

Benefits

- Increased fuel economy, from reduced parasitic load
- Eliminates oil blow-by in air compressor, which contaminates the pneumatic system
- Greater reliability and increased life of sub-components
- Ease of maintenance
- Safer — eliminates belts and hydraulic lines in the engine compartment
- Quieter
- Reduces emissions

HybriDrive Accessory Power System 2 Level

RATINGS

- 15 kW (530 Amps) DC/DC uni-directional 600V to 28V converter
- 30 kW auxiliary power inverter (208/230V AC 37.5 kVA, 3-phase, 50/60 Hz)
- Operating temperature:
- Coolant temperature for full performance: (added “for full performance”) -40° to 149° F (-40°C to 65°C)
113°F (45°C) nominal
- External ambient: -40° to 167°F (-40° to 75°C)

SIZE

- Height: 10 inches (254mm)
- Width: 24 inches (609 mm)
- Length: 24 inches (609 mm)
- Weight — wet: 190 lb. (86.2 kg)

COOLANT — water ethylene or propylene glycol 15 gpm (57 lpm)

HybriDrive propulsion system components are sold as part of our HDS family of products and are available through BAE Systems qualified OEMs. Components are not sold separately.

BAE SYSTEMS

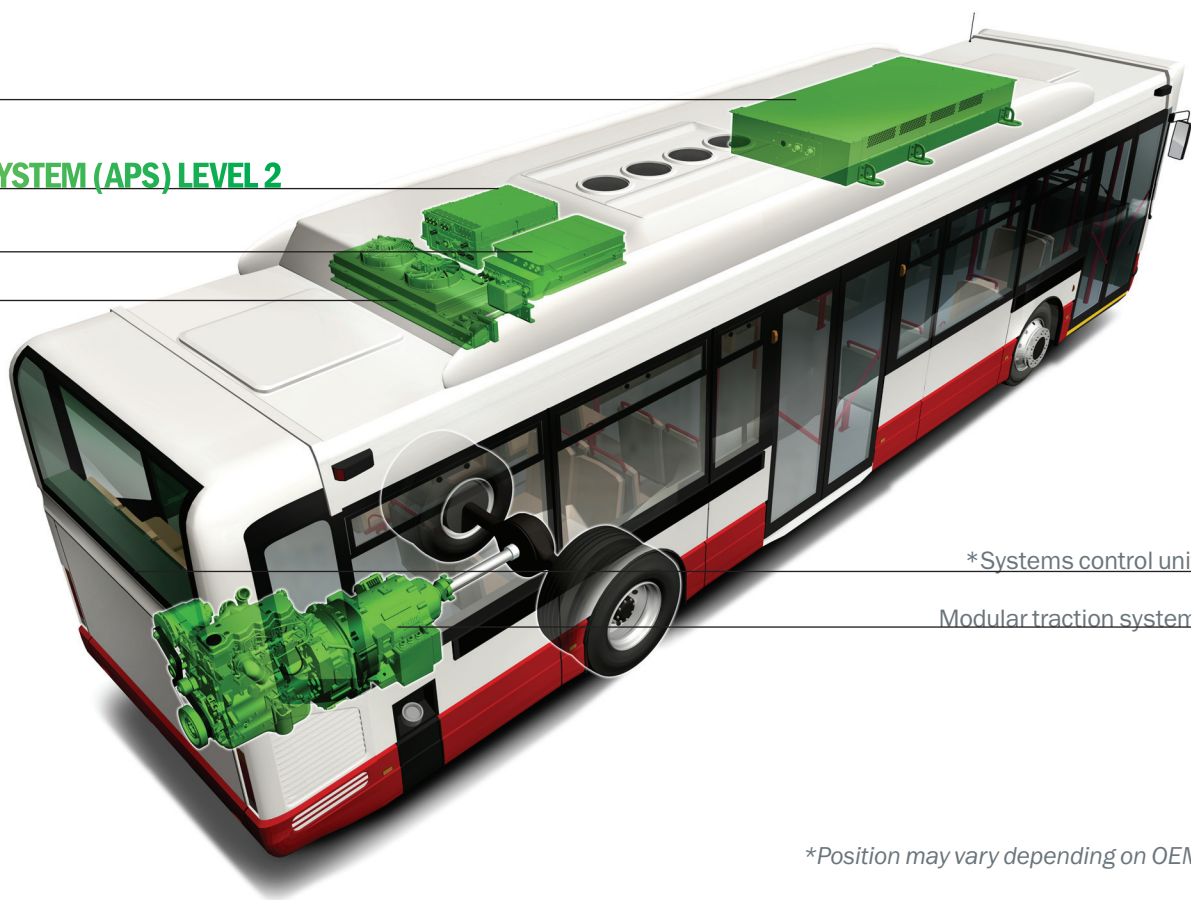
HYBRIDRIVE® ACCESSORY POWER SYSTEM (APS) LEVEL 2

Energy storage system

ACCESSORY POWER SYSTEM (APS) LEVEL 2

Propulsion control system

Cooling package



*Systems control unit

Modular traction system

**Position may vary depending on OEM*

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