

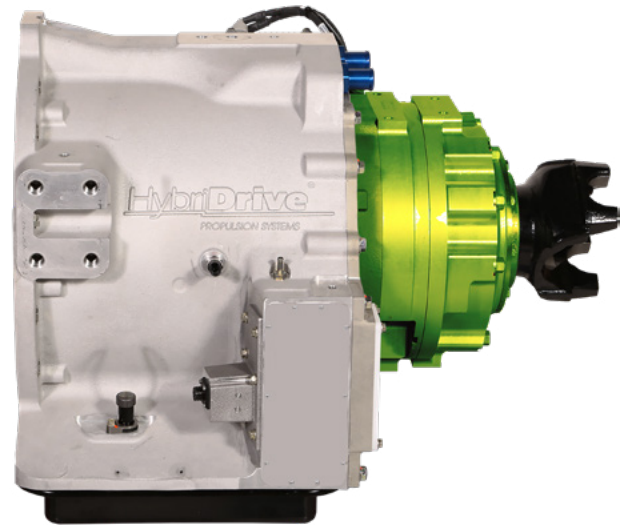
AC Traction Motor

ACTM-200/300

BAE Systems offers two alternating current (AC) traction motors (ACTM) for full vehicle propulsion, based on the size and weight of your vehicle. Each ACTM includes a reduction gear connecting directly to a standard drive shaft and rear axle to provide traction power and regenerative braking. For hybrid-electric propulsion the ACTM pairs up with our integrated starter generator (ISG).

With a fixed ratio planetary reduction gear there is no need for a shifting transmission and the vehicle travels smoothly without jerking. The ACTM is the sole source of propulsion for the vehicle providing high power and excellent low-end starting torque. What's more, our electric propulsion delivers exceptional acceleration and high-performance on steep grades exceeding APTA requirements. With an energy storage system or battery, our electric drive system increases efficiency by recapturing regenerative braking energy.

Our motor is easy to install, it occupies the same space as a conventional automation transmission when paired with our ISG for hybrid applications, and its available for multiple bus models (12m, 18m, 30', 40' and 60' buses). Our ACTM and ISG can be installed "in-line" (T-drive) or "transverse" (V-drive).



Features

- Meets all transit industry standard performance requirements
- Mechanically simple, low maintenance, easy to install
- Excellent low-end torque and high power-to-weight ratio
- High performance, exceptional acceleration and gradability
- Fits in conventional transmission space claim, installs either T-drive or V-drive
- Available for HD shuttle, transit, articulated, and double deck buses
- Completely high-voltage protected for safety
- WEG cooled, no separate oil cooler required



	AC Traction Motor Ratings	
	HDS200	HDS300
Power Peak Intermittent Continuous	200 kW (270 hp) 520 – 2000 rpm 180 kW (240 hp) 460 – 2400 rpm 160 kW (215 hp) 640 – 2485 rpm	230 kW (310 hp) 430 – 1680 rpm 200 kW (270 hp) 370 – 2640 rpm 180 kW (240 hp) 510 – 2640 rpm
Torque Peak Intermittent Continuous	5200 Nm (3800 ft-lbs) 0 – 185 rpm 3700 Nm (2700 ft-lbs) 0 – 460 rpm 2400 Nm (1800 ft-lbs) 0 – 640 rpm	6400 Nm (4700 ft-lbs) 0 – 200 rpm 5200 Nm (3800 ft-lbs) 0 – 370 rpm 3400 Nm (2500 ft-lbs) 0 – 510 rpm
Speed Operational Overspeed	0–2485 rpm 2730 rpm	0–2640 rpm 2810 rpm
Physical Length (end of shaft) Width Height Weight (wet)	629 mm (24.8 in) 613 mm (24.1 in) 569 mm (22.4 in) 352 kg (804 lbs)	653 mm (25.7 in) 613 mm (24.1 in) 569 mm (22.4 in) 388 kg (855 lbs)
Cooling	Jacket water ethylene (or propylene) -glycol, 75°C (167°F) max, 38 lpm (10 gpm) / Internal ATF, electric oil pump, filter, cooler, oil sump	Jacket water ethylene (or propylene) -glycol, 65°C (149°F) max, 38 lpm (10 gpm) / Internal ATF, electric oil pump, filter, cooler, oil sump
Operating Temperature	-40° to 85°C (-40° to 185°F) / Local external ambient	
Vehicle GVWR up to	9.5 mT (43,000 lbs) @ 65 mph (104 kp)	28.6 mT (63,000 lbs) @ 104 kph (65 mph)

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