Direct Drive Traction Motor DDTM-100

The DDTM-100 provides operators with a highly efficient traction motor for both full battery electric (BEV) and Series Electric Hybrid (HEV) applications. It is a quiet, compact, lightweight unit designed for 9-14m single deck and two-axle double deck buses. Its simple, yet flexible, 15 year design requires no major maintenance or overhaul.

The DDTM-100 is designed to be the sole source of propulsion for a vehicle whether it be BEV or HEV, and is sized accordingly. It provides high power and excellent low-end torque, and is capable of providing both exceptional acceleration and high performance on steep grades. The direct drive design means there is no gearbox therefore reducing spin losses, making for a more efficient system. The compact system design and packaging makes it easily adaptable to various bus designs and is simple to install. The components can be installed "inline" (T-drive) or "transverse" (V-Drive).



Features

- Meets all major transit industry standard performance requirements
- Mechanically simple; long life
- Excellent low-end torque and high power-to-weight ratio
- High power density and system efficiency
- Water ethylene glycol cooled, means no separate oil cooler required **Benefits**
- Reduced maintenance
- Compact and flexible, installs either T-drive or V-drive.
- Reliable with low lifecycle cost

Power Peak Intermittent Continuous	260 hp (195 kW) 1100 - 3000 rpm 228 hp (170 kW) 1100 - 4100 rpm 161hp (120 kW) 1200 - 4100 rpm
Torque Peak Intermittent Continuous	1575 ft-lbs (2100 Nm) 0 - 400 rpm 1125 ft-lbs (1500 Nm) 0 - 1000 rpm 750 ft-lbs (1000 Nm) 0 - 1200 rpm
Speed Operational Overspeed	0 - 4100 rpm 4500 rpm
Physical Length (end of shaft) Width Height Weight (wet)	21.8 in (554 mm) 24.2 in (615 mm) 26.0 in (595 mm) 424 lbs (192 kg)
Cooling	water ethylene (or propylene)-glycol, 70°C (160°F) max, 10 gpm (38lpm)/Internal ATF, mechanical oil pump, internal filter, cooler, oil sump
Operating Temperature	-40°C to 85°C (-40°F to 185°F)/Local external ambient
Vehicle GVWR up to	41,000 lbs (18.6 mT) @ 45 mph (72 kph)

North America

BAE Systems 1098 Clark Street Endicott, NY 13760 USA **Rest of World** BAE Systems Marconi Way Rochester, Kent ME1 2XX UK

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