

Electric Powered Buses Transportation, Alternative Energy GRI Product Application Sheet



Market: Transportation, Alternative Energy

Application/OEM Device: Electric powered buses for municipalities, airports, schools, etc.

- Electric buses operate on electrically charged batteries.
- Batteries produce large amounts of heat during charge and operation of vehicle.
- Batteries and electronics will fail due to long term exposure to high temperatures.
- Fluid cooling loops are used to dissipate the heat from batteries and electronics.

Purpose of pumps: Move fluid through cooling loop.

Pump models: Integrity Series Magnetic Drive Circulation Pumps



Integrity Series Pumps Market Advantages

- **Brushless DC motors:** 12-24, 36, 48V
- **Motors manufactured in-house** - Designed to customize pumps for OEM specific flow and pressure requirements.
- **Smart** - Proprietary algorithm provides smart feedback i.e.: dry run, over/under voltage, over temperature alerts, etc.
- **Multiple Control Options**
 - 0-5v Analog
 - PWM Digital
 - CAN-Bus: J1939
 - Microprocessor Driven
- **Available Agency Approvals**
 - SAE J1455
 - UL778: Motor-operated water pumps.
- **Magnetically driven** - Sealless
 - No mechanical seals to wear out over time.
 - Motor is contained away from the fluid.
- **Maximum temperature:**
 - Up to 221°F (105°C) (Electronics are separate from pump).
 - Up to 149°F (65°C) (Electronics are housed within the pump).
- **Multiple OEM options available**

INTG8 Series



Pump Series	Maximum Flow GPM, (LPM)	Maximum Head FT, (PSI)	Maximum System Pressure	Motor Specs/ Voltages
INTG8	39.0, (145.0)	70.0, (30.0)	75 PSI	12-24, 36, 48 VDC



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