

TECHNICAL SALES BULLETIN

Compatibility of EMI Porta Controllers with Mitsubishi VFDs for Gearless Motors

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Description: Compatibility of EMI Porta Controllers with Mitsubishi VFDs for Gearless Motors TSB			

APPLICATION REVIEW REQUIRED Contact EMI Porta before ordering or commissioning a controller for a gearless V.V.V.F. drum or traction motor application. Compatibility must be confirmed for the complete motor, VFD, encoder and brake combination.

Overview

Standard EMI Porta residential controller packages are configured for geared motors. EMI Porta can support many gearless applications, but each application requires technical review. Motor voltage or horsepower alone is not sufficient to establish compatibility.

Electrical Drive suitability depends on the exact drive model, control method, feedback requirements and motor characteristics.

Information Required for Review

- Motor manufacturer and complete model number
- Clear photograph of the motor nameplate
- Rated voltage, current, power, frequency and RPM
- Encoder manufacturer, model and signal type
- Brake voltage and current requirements
- Any current drive model and type, if the application is a MOD

Why Verification Matters

Gearless machines commonly require higher starting torque, precise motor data and encoder feedback. A VFD that performs correctly with a geared machine may not provide acceptable operation with a gearless machine.

Possible symptoms of an unsuitable or incorrectly configured combination include:

- No-start or low starting torque
- Rotation in only one direction
- Encoder or feedback faults
- Overcurrent, overvoltage or overheating trips
- Unstable speed, brake timing issues or poor ride quality

Customer Support and Quoting Guidance

Do not confirm compatibility, quote a standard controller package or recommend retaining an existing Mitsubishi VFD until the required information has been reviewed by EMI Porta Technical Support or Engineering. The review will determine whether the proposed VFD can be used, whether feedback or other hardware is required, or whether an alternate drive/controller package should be selected.

SUBMIT FOR TECHNICAL REVIEW

Provide the complete motor and drive information before equipment is ordered or installed.

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Rev #	Date	Editor:	Change Summary
A	August 24, 2026	K. Moy	Initial Release