**Mitsubishi Electric unveils next-generation FR-D800 series inverters for enhanced efficiency and simplicity**

**Mitsubishi Electric has launched its latest FR-D800 series inverters, designed to deliver better performance, easy operation, and improved energy efficiency for a wide range of industrial applications. Compact and intuitive, the new series delivers powerful performance alongside features designed to make selection, installation, and operation simpler.**

With a focus on user-friendliness, the FR-D800 inverters feature a door-style surface cover and integrated wiring to make installation faster and easier. The FR-D800 is up to 37% smaller\*1 than its equivalent predecessor, reducing enclosure size requirements, allowing for more flexible mounting, and reduced installation costs. A new USB Type-C interface lets users set parameters directly from a PC without powering up the inverter, streamlining both setup and maintenance.

The inverters can help save energy with advanced synchronous motor control, which reduces power consumption and cuts operating costs. Its high-efficiency motor drive and lower standby power consumption also contribute to a reduced carbon footprint, supporting more sustainable production practices.

"With the FR-D800 series, we wanted to create an inverter that both new and experienced users can use with confidence," said Shotaro Marumoto, Inverter Development Section Leader at Mitsubishi Electric. "We've made it straightforward while delivering the advanced performance businesses need to improve productivity, save energy, and meet their sustainability goals."

The FR-D800 series is suitable for a wide range of applications, from conveyors and pumps to food processing equipment and textile machinery. Selected models\*2 are also suitable for harsh, corrosive environments, thanks to circuit board protection meeting IEC 60721-3-3:1994 3C2/3S2 standards. Furthermore, FR-D800 inverters can control both induction and permanent magnet (PM) motors, eliminating the need for multiple inverters for different motor types. Built-in support for popular Ethernet protocols including CC-Link IE TSN, Modbus/TCP, and EtherNet/IP ensures seamless integration into existing industrial networks, enabling users to quickly integrate it into their digital manufacturing and smart production environments.

The series also makes maintenance simpler. Its preventive maintenance functions include lifetime diagnostics for key components like capacitors and fans, helping operators spot potential issues early, especially when using the FR Configurator2 support software. Anomaly detection based on current patterns helps reduce the risk of unexpected downtime, and when a fault does occur, analysis functions solve the problem quickly.

"Energy efficiency, simplicity, and reliability are essential for modern automation applications and industry in general," added Marumoto. "The FR-D800 series shows Mitsubishi Electric's commitment to providing solutions that meet these needs while contributing to a greener future."

The FR-D800 series will be available globally from March 2025, with models designed for different voltage requirements, including single-phase 100V, 200V, and three-phase 400V options.

*\*1 Illustrative example FR-D820-3.7K-165, size reductions will vary by model.*

*\*2 Protected models are identified with “-60” suffix in the part number.*

*Originally (initially) released in English*

***Images***

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**Image 1:** The new FR-D800 series. Ultra-compact standard inverters for modern production requirements. *(Source: Mitsubishi Electric)*

コンピューターのスクリーンショット

AI によって生成されたコンテンツは間違っている可能性があります。

**Image 2:** Parameters can be set without needing to power the inverters main circuit

*(Source: Mitsubishi Electric)*

Ein Bild, das Text, Schrift, Reihe, Zahl enthält.

KI-generierte Inhalte können fehlerhaft sein.

**Image 3:** Comparision of power consumpten (MWh/year) and CO2 emissin (t/year) *(Source: Mitsubishi Electric)*

**About Mitsubishi Electric Corporation**

With more than 100 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. Mitsubishi Electric enriches society with technology in the spirit of its “Changes for the Better.” The company recorded a revenue of 5,257.9 billion yen (U.S.$ 34.8 billion\*) in the fiscal year ended March 31, 2024.

For more information, please visit www.MitsubishiElectric.com

*\*U.S. dollar amounts are translated from yen at the rate of ¥151=U.S.$1, the approximate rate on the Tokyo Foreign Exchange Market on March 31, 2024.*

**About Mitsubishi Electric Factory Automation Business Group**

Offering a vast range of automation and processing technologies, including controllers, drive products, power distribution and control products, electrical discharge machines, electron beam machines, laser processing machines, computerized numerical controllers, and industrial robots, Mitsubishi Electric helps bring higher productivity – and quality – to the factory floor. In addition, its extensive service networks around the globe provide direct communication and comprehensive support to customers. The global slogan “Automating the World” shows the company’s approach to leverage automation for the betterment of society, through the application of advanced technology, sharing know-how and supporting customers as a trusted partner.

For more about the story behind “Automating the World” please visit:

https://www.MitsubishiElectric.com/fa/about-us/automating-the-world/index.html

**About e-F@ctory**

e-F@ctory is Mitsubishi Electric’s integrated concept to build reliable and flexible manufacturing systems that enable users to achieve many of their high speed, information driven manufacturing aspirations. Through its partner solution activity, the e-F@ctory Alliance, and its work with open network associations such as The CC-Link Partners Association (CLPA), users can build comprehensive solutions based on a wide ranging “best in class” principle.

In summary, e-F@ctory and the e-F@ctory Alliance enable customers to achieve integrated manufacturing but still retain the ability to choose the most optimal suppliers and solutions.

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*\*Other names and brands may be claimed as the property of others.*

*\*All other trademarks are acknowledged*

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*All enquiries should be directed to the same or your local   
Mitsubishi Electric Factory Automation sales office (see link).*

*http://www.mitsubishielectric.com/fa/worldwide/index.html*