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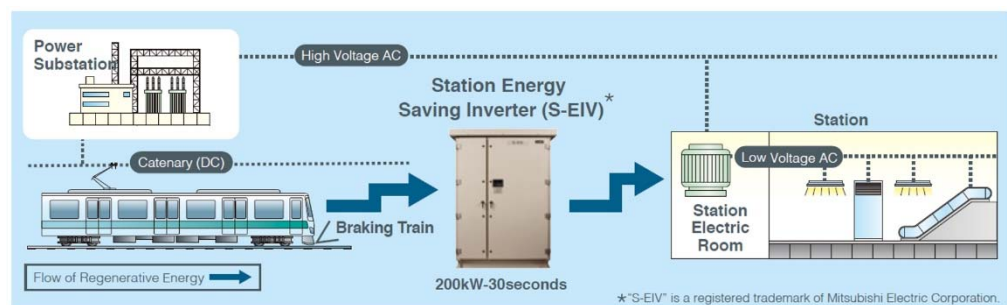
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## Mitsubishi Electric Expands Lineup of Integrated 400V AC-output Station Energy Saving Inverter

*Will contribute to more energy-efficient operations, even at train stations with high-load demands of 400V power distribution circuits*

**TOKYO, November 27, 2017** – [Mitsubishi Electric Corporation](http://www.MitsubishiElectric.com) (TOKYO: 6503) announced today that it would launch a new integrated Station Energy Saving Inverter (S-EIV<sup>®</sup>) with 400V AC-output for converting surplus regenerative energy from train braking into AC electricity for station facilities. The new 400V AC S-EIV facilitates easy installations and more energy-efficient operations, even at train stations with high-load demands of 400V power distribution circuits. The company also announced that the new S-EIV will be installed at Tokyo Metro Co. Ltd. train stations serving urban Tokyo.



System configuration of new integrated 400V S-EIV

The new S-EIV offers 400V AC-output with the same dimensions as its 200V AC predecessor. Also, its new multifunctional step-up transformer acts as a filter reactor to reduce harmonics in AC output. Front access for easy cabling and maintenance enables diverse installation options. Reliability has been improved by adding protection and monitoring functions. A new earth-fault detection circuit quickly identifies unexpected current flows to the earth via the unit's enclosure due to degraded or damaged insulation, ensuring safe grid-interconnection and durability for outdoor, along with the enclosure's dustproof, splash-resistant and rust-resistant design. Improved monitoring of main circuit devices and grid voltage contribute to system stability and easy maintenance.

### **Specifications of New Integrated 400V S-EIV**

Input voltages	1500V, 750V or 600V DC
Output voltage	400V AC, 3 phases, 50Hz/60Hz
Rated output	200kW for 30 seconds every 3 minutes
Cooling system	Self-cooling
Installation	Outdoor areas (end of platform or by rail tracks) or indoors

Compared to 200V AC systems, 400V AC systems are deployed for distribution circuits in stations with especially large loads to suppress voltage drops and reduce distribution loss, to efficiently power elevators or escalators. Due to its compatibility with 400V AC systems, the new model does away with the existing 200V AC S-EIV's step-up transformer. The new 400V AC S-EIV will make it easier for railway companies to adopt S-EIVs for stations with large loads. Mitsubishi Electric's new model and existing 200V and battery models offer a wide range of solutions.

Mitsubishi Electric has developed four types of total energy-management systems (EMS) for railways: Railway-EMS, Train-EMS, Station-EMS and Factory-EMS. The company developed the world's first silicon carbide (SiC) inverters for railcars in 2011, which recovered unprecedented levels of regenerative energy from braking in field tests conducted in 2012. Mitsubishi Electric's S-EIVs incorporate this advanced inverter technology for rail-cars.

The first unit-configuration 200V AC S-EIV entered operation at Myoden Station on Tokyo Metro's Tozai Line in 2014. This was followed by commercial launches of the integrated 200V AC S-EIV in March 2016 and the S-EIV with battery in September 2016. In total, 24 Mitsubishi Electric S-EIVs are in commercial use.

Mitsubishi Electric will exhibit its S-EIVs at Mass-Trans Innovation Japan 2017 at Makuhari Messe near Tokyo from November 29 to December 1.

Going forward, Mitsubishi Electric will continue developing energy-saving equipment for global customers to help counter global warming as a "global, leading green company."

*"S-EIV" is a registered trademark of Mitsubishi Electric Corporation.*

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### **About Mitsubishi Electric Corporation**

With over 90 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. Embracing the spirit of its corporate statement, Changes for the Better, and its environmental statement, Eco Changes, Mitsubishi Electric endeavors to be a global, leading green company, enriching society with technology. The company recorded consolidated group sales of 4,238.6 billion yen (US\$ 37.8 billion\*) in the fiscal year ended March 31, 2017. For more information visit:

[www.MitsubishiElectric.com](http://www.MitsubishiElectric.com)

\*At an exchange rate of 112 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2017