

C-15	Keywords	Y1	material or part	Z4	electricity	S7	traffic system
						E29	electrical machinery

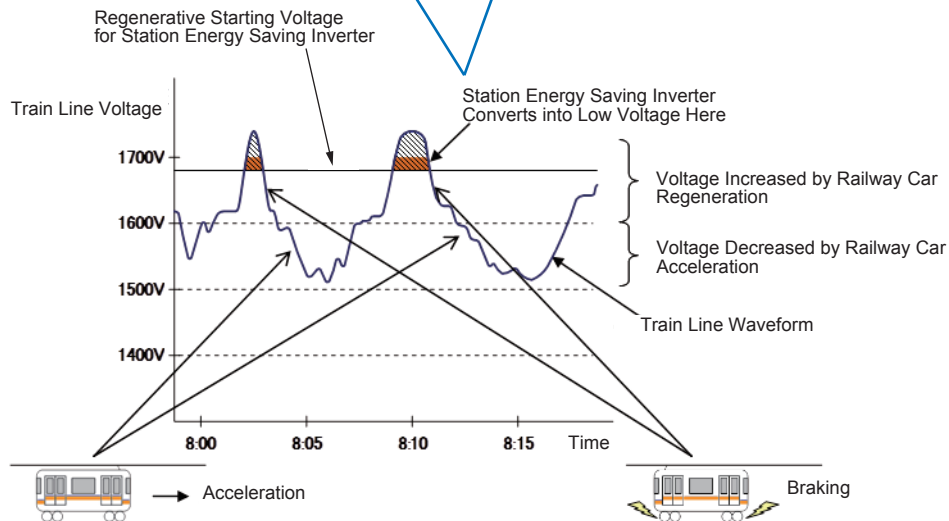
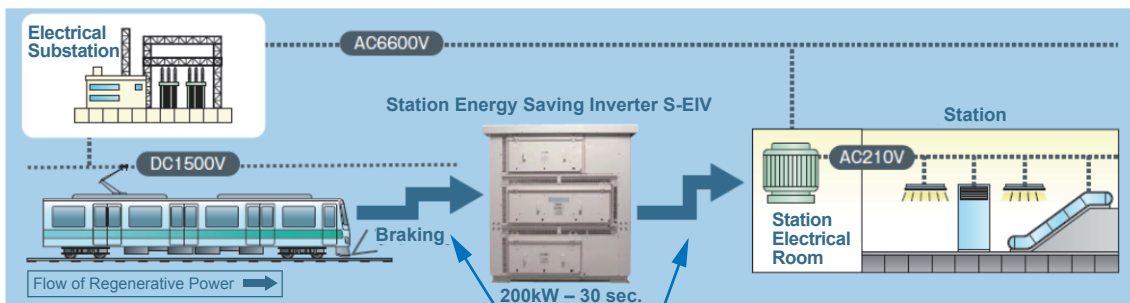
Mitsubishi Electric Corporation

## Station Energy Saving Inverter

### Features

- ◆ Directly supplies regenerative power generated when brakes are applied in railway cars to electrical equipment at station
- ◆ Size allows installation at edge of station platform or in electrical room
- ◆ Adoption of SiC (silicon carbide) power module achieves low power loss
- ◆ Ensures reliability and electric power quality in accordance with JEAC9710-2010 Grid Connection Regulations
- ◆ Provision of dust-proof/splash-proof (IP54) rust-resistant structure means that it is maintenance free over a long period of time
- ◆ Monitoring and Operation panel enables recording and displaying measured trend data such as operation condition, electricity energy, and etc.

### Basic Concept or Summary





Power Unit Appearance

Main Circuit Type	High-frequency link type DC/DC converter + SiC power module inverter
Rated Capacity	200kW – 30 sec. (3 min. interval)
Input Voltage	DC900 – 1850V
Output Voltage	AC210V±5%, 3 phase, 50/60Hz
Power Factor	0.85 – 1 (leading)
Distortion	Overall: 5% or less Each level: 3% or less (Up to 40 <sup>th</sup> level)
Dust Proof / Splash-Proof / Anti-Rust	IP54 JEM-TR144
Cooling System	Self-cooled

Power Unit Specifications



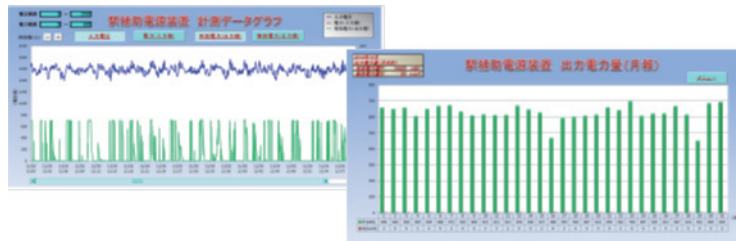
Monitoring/Operation Panel Appearance

Configuration	Touch panel type operation display
Operation Functions	Start/stop, change operation mode, set control characteristics
Display Functions	Operation status, breakdown display, measured value
Measured Value Record Functions	Input/output voltage / current / watt hours
Notification Functions	Contact point interface / wireless communication network / ordinary telephone line

Monitoring/Operation Panel Specifications

### Effects or Remarks

- ◆ Energy savings of approximately 600kWh per day can be expected (equivalent to electricity consumption by 60 ordinary households).
- ◆ Measured data and accumulated data can be visualized with mobile PC, and with the information the actual energy saving effect can be measured.



### Installation in Practice or Schedule

- Domestic** Launched in fiscal 2013 9 units delivered in fiscal 2013/2014 Expect to delivery 10 units in fiscal 2015
- Overseas** Implementing sales promotion activities

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