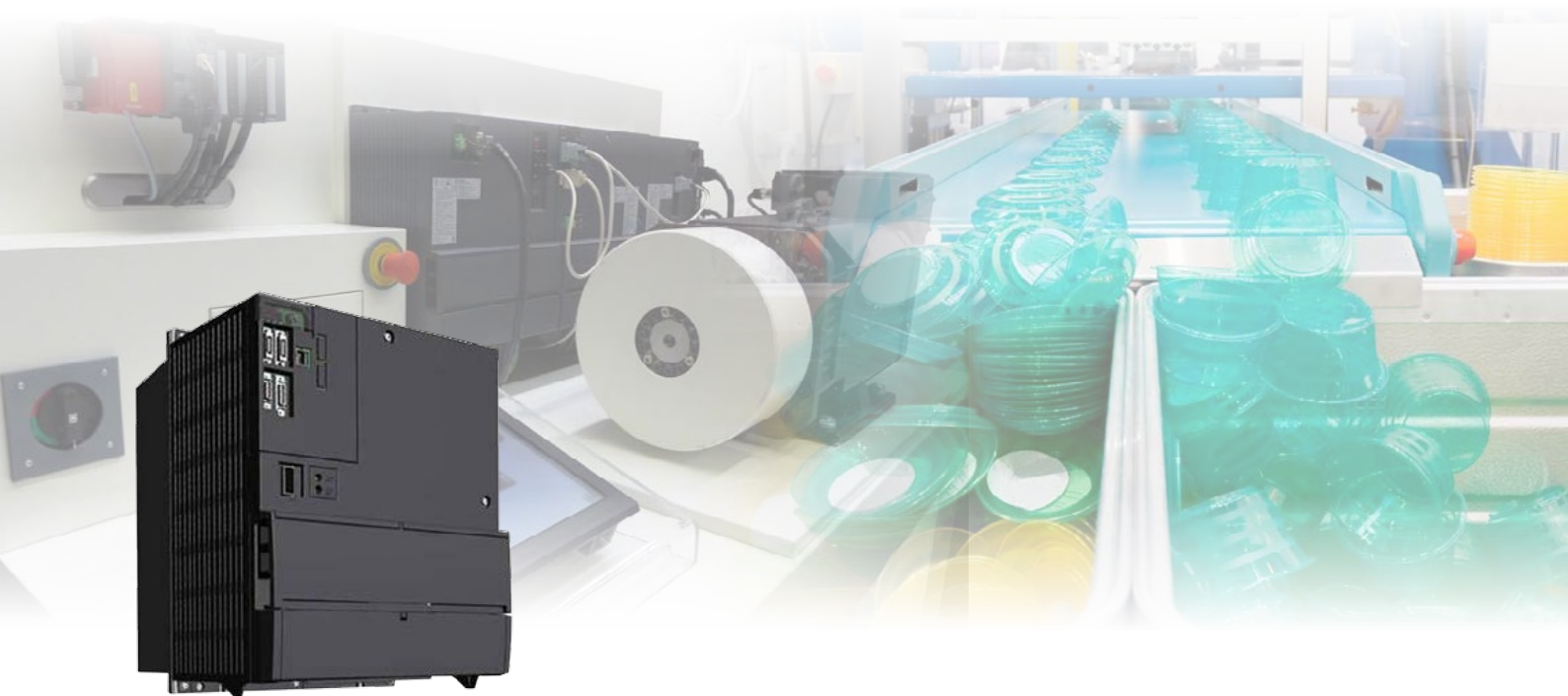


Energy Assist Unit

MR-J4 Series

Innovative servo technology
for more productivity and energy efficiency



Instantaneous power reduction during servo motor acceleration/deceleration



Saves energy and costs significantly



Fully compatible to all MR-J4 servo systems from Mitsubishi Electric

Energy Assist Unit

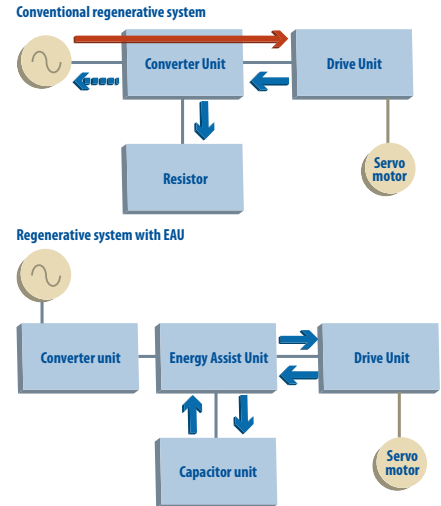
The energy and cost saving unit

Capacitor instead of resistor is the key

The Energy Assist Unit (EAU) reduces instantaneous power during acceleration / deceleration of the servo system. For example an additional installation of larger motor system requires larger power facility that forces the user to change the power line arrangement. However, having this EAU makes it possible to use the additional motor system without changing the power line.

The EAU reduces the power from main by assisting the power from capacitor unit in case of powering. On the other hand, regenerative energy was wasted in resistor or returned to AC main as "emission" at a conventional system, however, EAU saves the energy by charging in capacitor unit.

Typical applications are electric press machines, electric injection molding machines or any other machine with repeating acceleration/deceleration.



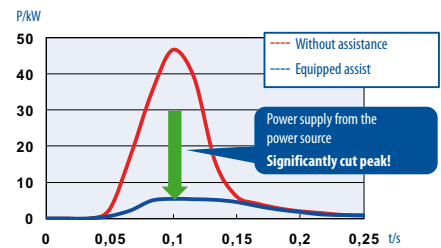
EAU compared to a conventional regenerative system.

Specifications

Specifications capacitor unit		MR-BC3014
Main circuit power supply	Voltage	Supplied from the Energy Assist Unit
	Instantaneous permissible maximum voltage	DC 800V
Capacitor capacity		45000 µF
Weight		ca. 40.0 kg
Dimensions (WxHxD)	mm	400x380x300

Specifications EAU		MR-EAU100K4
Main circuit power supply		DC 537~678 V
Control power supply		Single phase AC 380~480 V
Maximum number of connectable capacitor units		4
Maximum power assist		100 kW
Stop boost voltage		337 V ①
Maximum total output current (3-phase)		300 A
7-Segment display		3 digits
Weight		ca 25.5 kg
Dimensions (WxHxD)	mm	300x380x300

① Maximum assist state when the main circuit power supply is DC 537V



Power supply comparison with and without assistance of the EAU

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