for a greener tomorrow

MITSUBISHI ELECTRIC
Changes for the Better

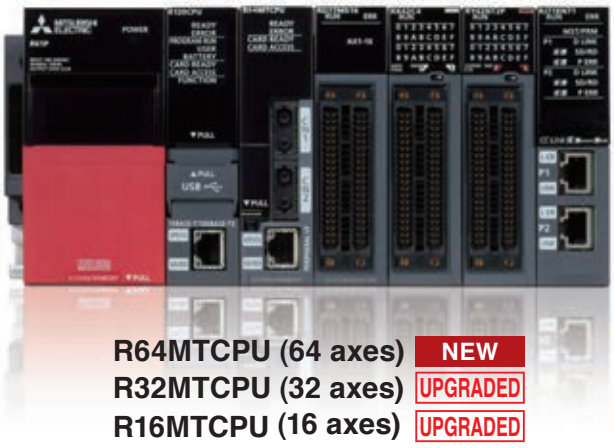
Mitsubishi Motion Controller R64MTCPU
MELSEC iQ-R series

February 2016

New Product Release
SV1602-2E

The NEW R64MTCPU
& upgraded version of R16MTCPU/R32MTCPU

MELSEC iQ-R series



R64MTCPU (64 axes) NEW
R32MTCPU (32 axes) UPGRADED
R16MTCPU (16 axes) UPGRADED

Synchronous control of 192 axes at most

- Extensive Product Line-up
  Select a controller that best suits your application from our full product line, available in 16, 32, and 64-axis control models.
- Synchronous control up to 192 axes is possible by the use of three R64MTCPUs.
- More SSCNET III/H compatible devices are connectable.

Applicable to Simple Industrial Robots

- Applicable to the simple industrial robots
  This Motion controller controls a simple industrial robot by installing a machine library for the coordinate transformation required for the robot.
- Contribution to preventive maintenance
  The status of the equipment is closely monitored by adding items for an optional data monitor such as "internal temperature of encoder", contributing to preventive maintenance.

MELSEC iQ-R series

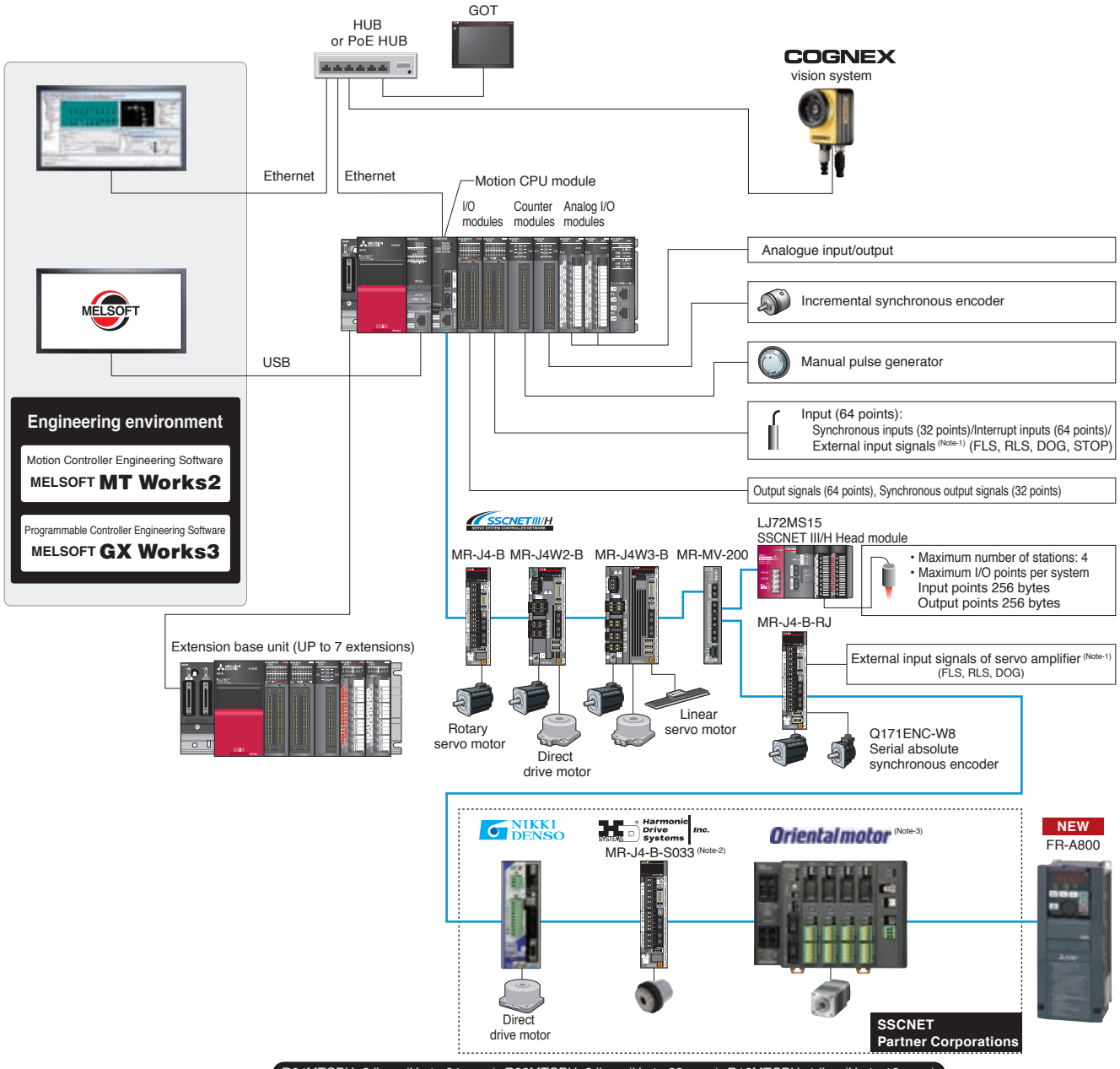
SSCNET III/H compatible

MELSEC iQ-R series

Motion Controller

- A full product line with the newly released R64MTCPU
  - Up to 192 axes are synchronized by the use of three R64MTCPUs, enabling control of a large-scale system.
- This Motion controller controls the simple industrial robot by installing the machine library.
- More SSCNET III/H compatible devices are connectable as follows;
  - The NIKKI DENSO VPH series NEW
  - The Mitsubishi Inverter FR-A800 NEW

■System Configuration



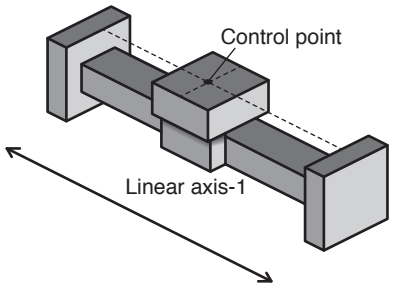
(Note-1): Destination of external input signals (FLS, RLS, DOG) can be changed with parameters.
(Note-2): The MR-J4-B-S033 is the servo amplifier for a servo motor of Harmonic Drive Systems Inc.
(Note-3): When using a partner corporation's product, use one whose version supports the Motion controller. (Refer to MELSEC iQ-R series Motion Controller User's Manual.)

■Machine Control Function NEW

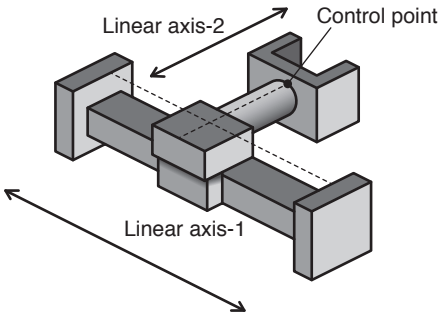
This Motion controller controls the simple industrial robot by installing the machine library.
The control method of the robots is a machine control which controls in a three dimensional (XYZ) Cartesian coordinates space.

Cartesian Robot

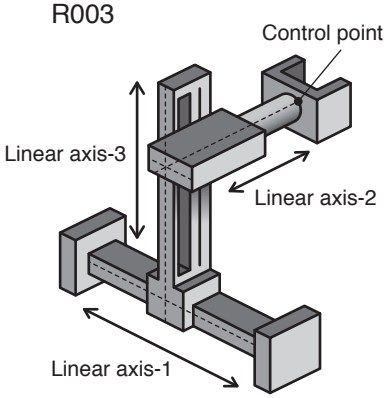
Machine Type No. :
R001



R002

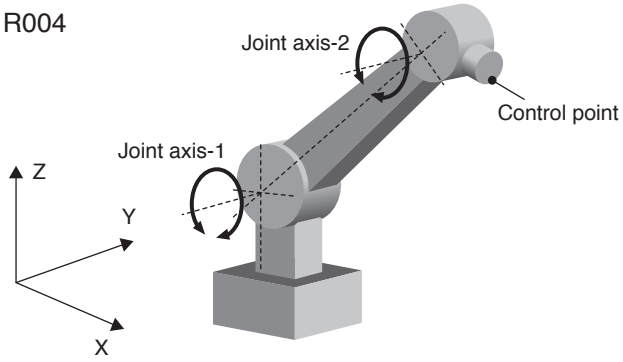


R003

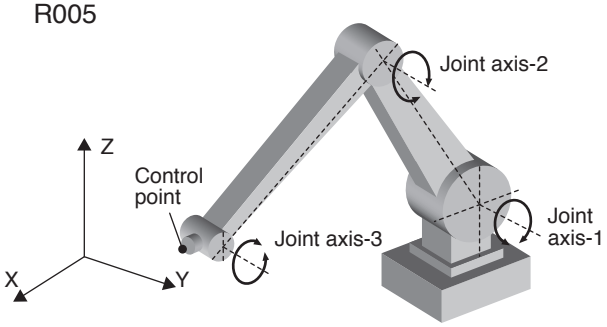


Vertical Articulated Robot

R004



R005



Machine Library Name

MCNTYP-R□□□

→ Machine Type No. (R001-R005)

Product name	Model	Compatible Motion controller	Description
Operation system software	SW10DNC-RMTFW	R16MTCPU R32MTCPU R64MTCPU	Pre-installed before shipment.
Machine Library (Note-1)	MCNTYP-R□□□		Contact your local Mitsubishi Electric office.

(Note-1): R□□□ of the machine library is the machine type No.

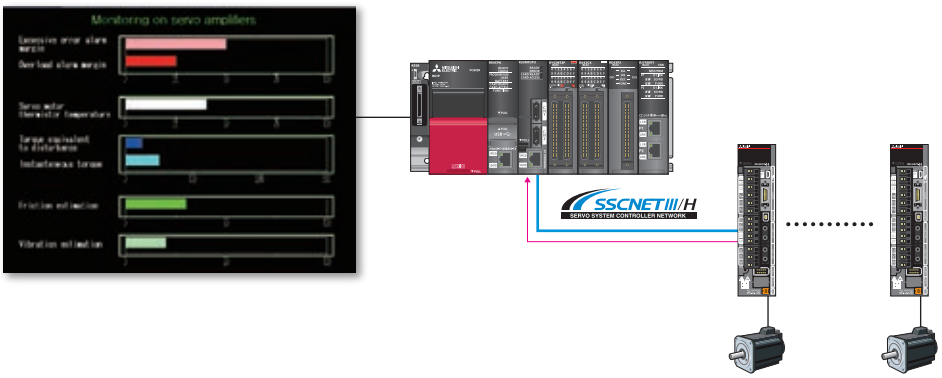
Point Applicable to the simple industrial robots.

■Monitoring of Servo Data UPGRADED

Monitoring and modifying the data of up to 50 monitoring items successively during operation is now possible since the monitoring setting points have been increased from the maximum of 6 points (a fixed communication cycle of 0.888) to the maximum of 14 points.
The operation status of servo amplifiers and servo motors (including partner products) acquired via SSCNET III/H are transferred to the upper network layer or to any GOT screens created by customers, and are displayed.

[Monitoring and data collection]
Alarm history of servo amplifiers, Identification information of servo amplifiers and servo motors, Power consumption, 7-segment LED display status, Load ratio of servo motors, Speed, and Temperature of various parts, etc.

[Preventive maintenance]
Inrush relay ON/OFF number, Power ON cumulative time, and Machine diagnosis information (the estimated friction value and the estimated vibration value), etc.



Point Contribution to preventive maintenance by adding the items for the optional data monitor.

■Specification

Item		R16MTCPU	R32MTCPU	R64MTCPU
Maximum number of control axes	[axes]	16	32	64
Operation cycle	[ms]	0.222, 0.444, 0.888, 1.777, 3.555, 7.111		
Command interface		SSCNET III/H		

⚠ Safety Warning
To ensure proper use of the products listed in this catalog, please be sure to read the instruction manual prior to use.

Mitsubishi Electric Corporation Nagoya Works is a factory certified for ISO14001 (standards for environmental management systems) and ISO9001(standards for quality assurance management systems)

EC97J1113 051

ISO 9001 BUREAU VERITAS Certification 008

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Specifications are subject to change without notice.