ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Mitsubishi MR-J3-10A* at our website: ***Click HERE***

Product Information

EBG 169-EN (C)

MITSUBISHI ELECTRIC
FACTORY AUTOMATION

MR-J3

Servo and Motion Control

Simple, easy, dynamic

Ultimate positioning control

Now available as 400 voltage type



IMPROVED COMMUNICATION

Industry leading performance gives faster production cycles and reduced material wastage

INTELLIGENT DESIGN

Reduced component size means more flexibility for installation and reduced enclosure sizes

SIMPLER OPERATION

Many built in functions have automatic setup, reducing both installation time and installation mistakes

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

MR-J3 - Use tomorrow's technology today



Handling systems require exceptional precision and dynamic response.

Mitsubishi Electric servo systems are globally renowned and respected. Offering a perfect combination of high-end performance and ease of use, they are now found in a huge range of applications throughout all branches of industry – from single and multiple axis systems in mechanical engineering and other metal-working sectors to complex, fully-synchronised solutions in the semiconductor and motor industries.

Designed for challenging tasks

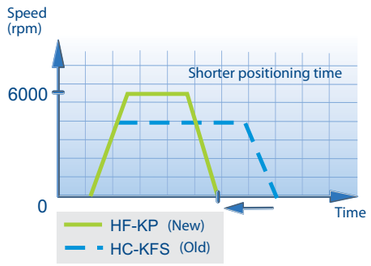
Every detail of the MR-J3 series is designed for performance and reliability, from the intelligent drive electronics to the robust mechanical components. These next-generation servo systems are both compact and flexible, featuring Plug & Play functionality, fibre-optics technology and optical feedback systems.



Plug and palay minimises wiring errors and speeds up installation

Increased response speed

The MR-J3's 900Hz speed-frequency response rate is over 30% faster than existing models. For users this means faster operation, greater precision, faster retooling in production, less wastage and better product quality.



Reduced component size

The reduced component size is critically important to machine designers who are often called upon to sqeeze all of the control solutions they need into the smallest deliverable package. The MR-J3 series boasts an intelligent design that has reduced amplifier sizes by up to 40 % and motor lengths by almost a quarter. This means machine designers don't have to make as many compromises to get the right motor and deliver the right power in the right place. These servos' compact dimensions enable flexible installation and economical design, which helps you to keep your costs down and be more competitive in the global economy.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Firmware that delivers performance

All MR-J3 servo amplifiers use the very latest regulation and control technologies. These systems ensure fast installation and setup and make it possible to configure stable systems with very short response times – no matter what your application.

Real-time auto-tuning

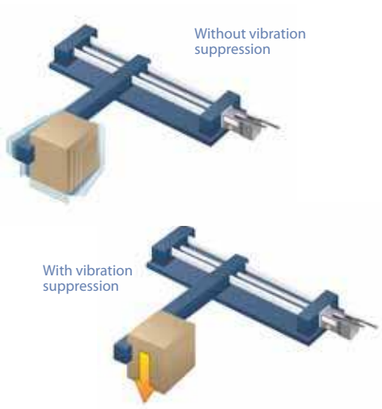
The real-time auto-tuning function sets the servo's control parameters automatically, eliminating the need to calibrate the system for each individual application. But that's not all – auto-tuning also works continuously while the system is in operation, making constant adjustments to cater for applications with fluctuating moments of inertia. This makes it possible to use these servos in a much wider range of applications.

Adaptive filtering

Adaptive filters ensure dynamic response and vibration-free operation, even in more demanding applications with suspended loads and high friction coefficients.

Advanced suppression of mechanical vibration

The MR-J3 has an automatic feature that enables the amplifier to minimize the effects of a vibrating load. In another first, this innovative function can also suppress vibrations at the end of a tool arm as well as those in the drive train.

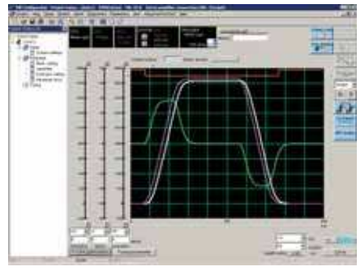


In applications with extreme load vibrations this function significantly improves both performance and system response.

Software that makes your life easier

The MR Configurator software package makes configuration and diagnostics quick and easy and includes powerful graphical machine analysis and simulation functions. Machine analysis enables determination of the frequency response of the connected drive train without any additional instruments. If necessary, you can then make design changes or install filters to achieve better machine performance. The system can be connected to a personal computer with a standard USB (Universal Serial Bus) port.

A wide range of automatic configuration assistants make it easy to set up your new servo systems correctly, even for less experienced users.



Monitiring and checking with the diagnostics features

Advanced features

Increased motor speed

MR-J3 motors lead the market, combining speeds of up to 6,000rpm with high torques. This makes it easier for designers to select the motors they need to meet tough performance criteria.

Increased encoder resolution

All MR-J3 encoders are 18 bit, delivering an industry-leading 262,144 pulses per revolution. This high resolution makes it possible to detect and suppress mechanical vibrations. The non-volatile absolute encoder system has a backup battery, eliminating the need for time-wasting zero-point calibration routines.

Improved motor IP ratings

All MR-J3 motors are IP65 rated as standard (all 400 V motors are IP67). This means that MR-J3 systems can be used in heavy-duty industrial environments.

SSCNET III – The benchmark standard

In addition to conventional pulse train positioning, the MR-J3 series also supports the SSCNET III high-speed motion control network. SSCNET III guarantees data transfer rates of 50Mbit/s and a bus cycle period of just 0.44ms. It is a fully-optical network using fibre-optics cabling for maximum performance, precision, reliability and resistance to interference. It is also a Plug & Play system that reduces both wiring overheads and configuration errors.



Flexible control solutions

Today, the MR-J3 series and SSCNET III support a very broad spectrum of applications with between 2 and 96 axes. You can combine the components with a variety of different PLC and positioning systems for a modular and fully-scalable configuration. This gives you full control over the system and complete cost transparency, combined with the dependable controller performance of the MELSEC FX series or the MELSEC System Q series with motion controllers.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Specifications ///

Servo amplifier MR-J3-A/B ①		10A 10B	20A 20B	40A 40B	70A 70B	60A(4) 60B(4)	100A(4) 100B(4)	200A(4) 200B(4)	350A(4) 350B(4)	500A(4) 500B(4)	700A(4) 700B(4)
Performance ②		0.1 kW	0.2 kW	0.4 kW	0.7 kW	0.6 kW	1 kW	2 kW	3.5 kW	5 kW	7 kW
Power supply		3~ 200 – 230 V AC, 50/60 Hz; 1~ 200 – 230 V AC, 50/60 Hz				3~ 200 – 230 V AC, 50/60 Hz (200 V type without (4)); 3~ 380 – 480 V AC, 50/60 Hz (400 V type with (4))					
Control system		Sinusoidal PWM control / current control system / analog, digital, SSCNET III									
Dynamic brake		Built-in									
Protective functions		Overcurrent shutdown, regeneration overvoltage shutdown, overload shutdown (electronic thermal), servomotor overheat protection, encoder fault protection, regeneration fault protection, undervoltage / sudden power outage protection, excess error protection									
Structure/protection		Self-cooling, open (IP00); from 70A/B (200 V) and 200A4/B4 (400 V) fan-cooling, open (IP00)									
Environment	Ambient temperature	Operation: 0 – 55 °C (no freezing); Storage: -20 – 65 °C (no freezing)									
	Ambient humidity	Operation: 90 % RH max. (no condensation); Storage: 90 % RH max. (no condensation)									
	Others	Elevation: 1000 m or less above sea level; Oscillation: 5.9 m/s (0.6 G) max.									

① A type: standard version, B type: for SSCNET III; (4) = 400 V type ② 11–55 kW types on request

Series (200 V)	Rated speed [U/min]	Rated voltage [V]	Rated output capacity [kW]	Type ③	Feature	Amplifier assignment MR-J3 10A 10B	20A 20B	40A 40B	60A 60B	70A 70B	100A 100B	200A 200B	350A 350B	500A 500B	700A 700B
HF-MP	3000	200	0.1	HF-MP13(B)	Ultra low inertia, small performance	●									
			0.2	HF-MP23(B)			●								
			0.3	HF-MP43(B)				●							
			0.75	HF-MP73(B)						●					
HF-KP	3000	200	0.1	HF-KP13(B)	Low inertia, medium performance	●									
			0.2	HF-KP23(B)			●								
			0.3	HF-KP43(B)				●							
			0.75	HF-KP73(B)						●					
HF-SP	2000	200	0.5	HF-SP52(B)	Medium inertia, medium performance				●						
			1.0	HF-SP102(B)							●				
			1.5	HF-SP152(B)								●			
			2.0	HF-SP202(B)								●			
			3.5	HF-SP352(B)									●		
			5.0	HF-SP502(B)										●	
			7.0	HF-SP702(B)											●

Series (400 V)						—	—	—	60A4 60B4	—	100A4 100B4	200A4 200B4	350A4 350B4	500A4 500B4	700A4 700B4
HF-SP	2000	400	0.5	HF-SP524(B)	Medium inertia, medium performance				●						
			1.0	HF-SP1024(B)							●				
			1.5	HF-SP1524(B)								●			
			2.0	HF-SP2024(B)								●			
			3.5	HF-SP3524(B)									●		
			5.0	HF-SP5024(B)										●	
			7.0	HF-SP7024(B)											●

③ (B) = with electromagnetic brake

EUROPEAN BRANCHES

MITSUBISHI ELECTRIC EUROPE B.V. **FRANCE**
25, Boulevard des Bouvets
F-92741 Nanterre Cedex
Tel: +33 (0)1 / 55 68 55 68

MITSUBISHI ELECTRIC EUROPE B.V. **GERMANY**
Gothaer Straße 8
D-40880 Ratingen
Tel: +49 (0)2102 / 486-0

MITSUBISHI ELECTRIC EUROPE B.V. **IRELAND**
Westgate Business Park, Ballymount
IRL-Dublin 24
Tel: +353 (0) 1 / 419 88 00

MITSUBISHI ELECTRIC EUROPE B.V. **ITALY**
Viale Colleoni 7
I-20041 Agrate Brianza (MI)
Tel: +39 039 / 60 53 1

MITSUBISHI ELECTRIC EUROPE B.V. **SPAIN**
Carretera de Rubi 76-80
E-08190 Sant Cugat del Vallés (Barcelona)
Tel: +34 93 / 565 3131

MITSUBISHI ELECTRIC EUROPE B.V. **UK**
Travellers Lane
UK-Hatfield, Herts. AL10 8XB
Tel: +44 (0)1707 / 27 61 00

EUROPEAN REPRESENTATIVES

GEVA **AUSTRIA**
Wiener Straße 89
AT-2500 Baden
Tel: +43 (0)2252 / 85 55 20

TEHNIKON **BELARUS**
Oktyabrskaya 16/5, Off. 703-711
BY-220030 Minsk
Tel: +375 (0)17 / 210 46 26

Koning & Hartman B.V. **BELGIUM**
Woluwelaan 31
BE-1800 Vilvoorde
Tel: +32 (0)2 / 257 02 40

AKHNATON **BULGARIA**
4 Andrej Ljapchev Blvd. Pb 21
BG-1756 Sofia
Tel: +359 (0)2 / 97 44 05 8

INEA CR d.o.o. **CROATIA**
Losinjska 4 a
HR-10000 Zagreb
Tel: +385 (0)1 / 36 940 - 01/ -02/ -03

AutoCont Control **CZECH REPUBLIC**
Jelinkova 59/3
CZ-721 00 Ostrava Svinov
Tel: +420 (0)59 / 5691 150

B:TECH A.S. **CZECH REPUBLIC**
Na Ostrove 84
CZ - 58001 Havlickuv Brod
Tel: +420 (0)569 / 408 841

B:TECH A.S. **CZECH REPUBLIC**
Headoffice, U Borové 69
CZ-580 01 Havlickuv Brod
Tel: +420 569 777 777

Beijer Electronics A/S **DENMARK**
Lautruphoj 1-3
DK-2750 Ballerup
Tel: +45 (0)70 / 26 46 46

Beijer Electronics Eesti OÜ **ESTONIA**
Pärnu mnt.160i
EE-11317 Tallinn
Tel: +372 (0)6 / 51 81 40

Beijer Electronics OY **FINLAND**
Jaakonkatu 2
FIN-01620 Vantaa
Tel: +358 (0)207 / 463 500

UTECO A.B.E.E. **GREECE**
5, Mavrogenous Str.
GR-18542 Piraeus
Tel: +30 211 / 1206 900

MELTRADE Ltd. **HUNGARY**
Fertö utca 14.
HU-1107 Budapest
Tel: +36 (0)1 / 431-9726

SHERF MOTION TECHN. Ltd. **ISRAEL**
Rehov Hamerkava 19
IL-58851 Holon
Tel: +972 (0)3 / 559 54 62

Kazpromautomatics Ltd. **KAZAKHSTAN**
2, Sladskaya str.
KAZ-470046 Karaganda
Tel: +7 3212 / 50 11 50

Beijer Electronics SIA **LATVIA**
Vestienas iela 2
LV-1035 Riga
Tel: +371 (0)784 / 2280

Beijer Electronics UAB **LITHUANIA**
Savanoriu Pr. 187
LT-02300 Vilnius
Tel: +370 (0)5 / 232 3101

INTEHSIS srl **MOLDOVA**
bld. Traian 23/1
MD-2060 Kishinev
Tel: +373 (0)22 / 66 4242

Koning & Hartman B.V. **NETHERLANDS**
Haarlerbergweg 21-23
NL-1101 CH Amsterdam
Tel: +31 (0)20 / 587 76 00

Beijer Electronics AS **NORWAY**
Postboks 487
NO-3002 Drammen
Tel: +47 (0)32 / 24 30 00

MPL Technology Sp. z o.o. **POLAND**
Ul. Krakowska 50
PL-32-083 Balice
Tel: +48 (0)12 / 630 47 00

Sirius Trading & Services **ROMANIA**
Aleea Lacul Morii Nr. 3
RO-060841 Bucuresti, Sector 6
Tel: +40 (0)21 / 430 40 06

AVTOMATIKA SEVER **RUSSIA**
Lva Tolstogo str. 7, off. 311
RU-197376 St Petersburg
Tel: +7 812 / 718 3238

CONSYS **RUSSIA**
Promyshlennaya st. 42
RU-198099 St. Petersburg
Tel: +7 812 / 325 36 53

Electrotechnical Systems Siberia **RUSSIA**
Derbenevskaya st. 11A, Office 69
RU-115114 Moscow
Tel: +7 495 / 744 55 54

STC DRIVE TECHNIQUE **RUSSIA**
Poslannikov per. 9, str. 1
RU-105005 Moscow
Tel: +7 495 / 790 72 10

Craft Cons. & Engineering d.o.o. **SERBIA**
Toplicina str. 4 lok 6
SER-1800 Nis
Tel: +381 (0)18 / 292-24-4/5 , 523 962

INEA SR d.o.o. **SERBIA**
Karadjordjeva 12/260
SER-113000 Smederevo
Tel: +381 (0)26 / 617 163

CS MTrade Slovensko, s.r.o. **SLOVAKIA**
Vajanskeho 58
SK - 92101 Piestany
Tel: +421 (0)33 / 7742 760

INEA d.o.o. **SLOVENIA**
Stegne 11
SI-1000 Ljubljana
Tel: +386 (0)1 / 513 8100

Beijer Electronics AB **SWEDEN**
Box 426
SE-20124 Malmö
Tel: +46 (0)40 / 35 86 00

ECONOTEC AG **SWITZERLAND**
Hinterdorfstr. 12
CH-8309 Nürensdorf
Tel: +41 (0)44 / 838 48 11

GTS **TURKEY**
Darulaceze Cad. No. 43 KAT. 2
TR-34384 Okmeydani-Istanbul
Tel: +90 (0)212 / 320 1640

CSC AUTOMATION Ltd. **UKRAINE**
15, M. Raskova St., Fl. 10, Office 1010
UA-02002 Kiev
Tel: +380 (0)44 / 494 33 55

CBI Ltd. **SOUTH AFRICA**
Private Bag 2016
ZA-1600 Isando
Tel: + 27 (0)11 / 928 2000

MITSUBISHI ELECTRIC
FACTORY AUTOMATION

Mitsubishi Electric Europe B.V. /// FA - European Business Group /// Gothaer Straße 8 /// D-40880 Ratingen /// Germany
Tel.: +49(0)2102-4860 /// Fax: +49(0)2102-4861120 /// info@mitsubishi-automation.com /// www.mitsubishi-automation.com

Specifications subject to change /// Art. no. 189225-C /// 08.2007

All trademarks and copyrights acknowledged.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP