



Product Service

EC-Statement of Compliance

No. E6 12 07 22021 458

Holder of Certificate: Yaskawa Electric Corp.
Tokyo Plant

480 Kamifujisawa, Iruma
Saitama 358-8555
JAPAN

Name of Object: AC servo systems
AC Servo Motor

Model(s): SGMM, SGMMJ:
 SGMM-A1S*****, SGMM-A2S*****,
 SGMM-A3S*****, SGMM-A1W*****,
 SGMM-A2W*****, SGMM-A3W*****,
 SGMMJ-A1B*****, SGMMJ-A2B*****,
 SGMMJ-A3B*****, SGMMJ-A1C*****,
 SGMMJ-A2C*****, SGMMJ-A3C*****,
 SGMMJ-A1E*****, SGMMJ-A2E*****,
 SGMMJ-A3E*****,
 SGMMJ-A3E2A-FJ21, SGMMJ-A3E2A-FJ22,
 SGMMJ-A1CAA-MK11, SGMMJ-A3E2A-FJ23,
 SGMMJ-A2B2B-FJ21, SGMMJ-A2B2B-FJ22,
 SGMMJ-A3E2A-FJ24
 (See Attachment for Nomenclature)

Description of Object:

Rated Voltage: 24 VDC, 48 VDC, 100 VAC, 3 phases
 Rated Power: 30 W (max.)
 Protection Class: I
 EMC Classification: Group 1, Class A(EN 55011/A1)

Tested according to:

EN 55011/A1:2010
 EN 61000-6-2:2005

This EC-Statement of Compliance is issued according to the Directive 2004/108/EC relating to electromagnetic compatibility. It confirms that the listed apparatus complies with such aspects of the essential requirements of the EMC directive as specified by the manufacturer or his authorized representative in the European Community and applies only to the sample and its technical documentation submitted to TÜV SÜD Product Service GmbH for testing and certification. See also notes overleaf.

Technical report no.: 73538139

Date, 2012-07-02 (Johann Roidt)



TÜV SÜD Product Service GmbH is Notified Body to the Directive 2004/108/EC of the European Parliament and of the council with the identification number 0123.

Attachment
Statement No.



Product Service

E6 12 07 22021 458

1.SGMM TYPE

1.1 Electrical Ratings:

SERVO MOTOR	Voltage	Phases	Rated Current [A _{rms}]	Rated Output [KW]
SGMM-A1Sxxxx	24VDC	3	2.1	0.01
SGMM-A2Sxxxx			2.0	0.02
SGMM-A3Sxxxx			2.9	0.03
SGMM-A1Wxxxx	100VAC	3	0.70	0.01
SGMM-A2Wxxxx			0.66	0.02
SGMM-A3Wxxxx			0.98	0.03

“x” represents variations in model number as described in product covered and series nomenclature which do not affect electrical construction or rating. Refer to “Series Nomenclature”.

Attachment
Statement No.



Product Service

E6 12 07 22021 458

1.2 Series Nomenclature:

1)Standard

SGMM - A1 S 3 1 2 C
 a b c d e f g

- a. Motor Type: Σ-Mini Series SGMM

- b. Motor Output: A1 – 0,01KW
 A2 – 0,02KW
 A3 – 0,03KW

- c. Power Supply: S – 24VDC
 W – 100VAC

- d. Encoder Spec.: 3 – Incremental (2048P/R)
 5 – Incremental (2000P/R)
 F – Incremental (1024P/R)

- e. Design Revision Order: 1 – Standard

- f. Shaft type: 2 – Straight (without key way)
 3 – Taper (with key way)

- g. Options and Lead wire length specification:
 C – with 24VDC brake
 T – with Lead wire length 700mm



Product Service

Attachment
Statement No.

E6 12 07 22021 458

2)With gear

<u>SGMM</u>	-	<u>A1</u>	<u>S</u>	<u>3</u>	<u>J</u>	<u>1</u>	<u>6</u>	<u>C</u>
a		b	c	d	e	f	g	h

- a. Motor Type: Σ -Mini Series SGMM
- b. Motor Output: A1 – 0,01KW
A2 – 0,02KW
A3 – 0,03KW
- c. Power Supply: S – 24VDC
W – 100VAC
- d. Encoder Spec.: 3 – Incremental (2048P/R)
5 – Incremental (2000P/R)
F – Incremental (1024P/R)
- e. Design Revision Order: J – With standard backlash gear
- f. Reduction ratio: 1 – 5 (Gear flange sizes 40mm)
2 – 16 (Gear flange sizes 40mm)
3 – 25 (Gear flange sizes 40mm)
A – 5 (Gear flange sizes 25mm)
B – 16 (Gear flange sizes 25mm)
C – 25 (Gear flange sizes 25mm)
- g. Shaft Type: 2 – Straight (without keyway)
3 – Taper (with keyway)
6 – Straight (with keyway and tapped hole)
8 – Straight (with tapped hole)
- h. Options and Lead wire length specification:
C – with 24VDC brake T – with Lead wire length 700mm

Attachment
Statement No.



Product Service

E6 12 07 22021 458

3)Exclusive design for customer

SGMM - A1 S 3 * * * *
a b c d e f g h

- a. Motor Type: Σ -Mini Series SGMM
- b. Motor Output: A1 – 0,01KW
A2 – 0,02KW
A3 – 0,03KW
- c. Power Supply: S – 24VDC
W –100VAC
- d. Encoder Spec.: 3 – Incremental (2048P/R)
5 – Incremental (2000P/R)
F – Incremental (1024P/R)
- e,f. Customer Code: put any alphabets.
- g,h. Design Revision Oder for Customer: put any numbers.

Attachment
Statement No.



Product Service

E6 12 07 22021 458

2.SGMMJ TYPE

2.1 Electrical Ratings:

SERVO MOTOR	Voltage	Phases	Rated Current [A _{rms}]	Rated Output [KW]
SGMMJ-A1Cxxxx	24VDC	3	2.1	0.01
SGMMJ-A2Cxxxx			2.0	0.02
SGMMJ-A3Cxxxx			2.9	0.03
SGMMJ-A1Exxxx	48VDC	3	2.1	0.01
SGMMJ-A2Exxxx			2.0	0.02
SGMMJ-A3Exxxx			2.9	0.03
SGMMJ-A1Bxxxx	100VAC	3	0.70	0.01
SGMMJ-A2Bxxxx			0.66	0.02
SGMMJ-A3Bxxxx			0.98	0.03

“x” represents variations in model number as described in product covered and series nomenclature which do not affect electrical construction or rating. Refer to “Series Nomenclature”.

Attachment
Statement No.



Product Service

E6 12 07 22021 458

2.2 Series Nomenclature:

1) Standard

SGMMJ - A1 C A A 2 1 H E
a b c d e f g h i

- | | | |
|----------------------------|--|---|
| a. Motor Type: | Σ-Mini Series SGMMJ | |
| b. Motor Output: | A1 – 0,01KW
A2 – 0,02KW
A3 – 0,03KW | |
| c. Power Supply: | C – 24VDC
E – 48VDC
B – 100VAC | |
| d. Encoder Spec.: | A – Incremental
2 – Absolute | (13Bit serial)
(17Bit serial) |
| e. Design Revision Order: | A – Standard
B – Standard | |
| f. Shaft type: | 2 – Straight
A – Straight | (without flat key seat)
(with flat key seat) |
| g. Brake: | 1 – Without brake
C – With 24VDC brake | |
| h. Optional specification: | Blank – Lead wire length 300mm
H – Lead wire length 500mm
J – Lead wire length 1000mm
K – Lead wire length 1500mm | |
| i. Additional type: | Blank – standard
-E – Standard (for Rohs directive) | |



Product Service

Attachment
Statement No.

E6 12 07 22021 458

2)With gear

<u>SGMMJ</u>	-	<u>A1</u>	<u>C</u>	<u>A</u>	<u>AJ</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>H</u>	<u>-E</u>
a		b	c	d	e	f	g	h	i	j

- | | | |
|----------------------------|--|-------------------------|
| a. Motor Type: | Σ-Mini Series SGMMJ | |
| b. Motor Output: | A1 – 0,01KW
A2 – 0,02KW
A3 – 0,03KW | |
| c. Power Supply: | C – 24VDC
E – 48VDC
B – 100VAC | |
| d. Encoder Specification: | A – Incremental | (13Bit serial) |
| | 2 – Absolute | (17Bit serial) |
| e. Design Revision Order: | AJ – With gear
BJ – With gear | |
| f. Reduction ratio: | 1 – 1/5 (Gear flange sizes 40mm)
2 – 1/16 (Gear flange sizes 40mm)
3 – 1/25 (Gear flange sizes 40mm)
A – 1/5 (Gear flange sizes 25mm)
B – 1/16 (Gear flange sizes 25mm)
C – 1/25 (Gear flange sizes 25mm) | |
| g. Shaft Type: | 2 – Straight | (without flat key seat) |
| | A – Straight | (with flat key seat) |
| h. Brake: | 1 – Without brake
C – With 24VDC brake | |
| i. Optional specification: | Blank – Lead wire length 300mm
H – Lead wire length 500mm
J – Lead wire length 1000mm
K – Lead wire length 1500mm | |
| j. Additional type: | Blank – standard
-E – Standard (for Rohs directive) | |

Attachment
Statement No.



Product Service

E6 12 07 22021 458

3)Exclusive design for customer

SGMMJ - A1 C A A - * * * *
a b c d e f g h i

- a. Motor Type: Σ -Mini Series SGMMJ
- b. Motor Output: A1 – 0,01KW
A2 – 0,02KW
A3 – 0,03KW
- c. Power Supply: C – 24VDC
E – 48VDC
B – 100VAC
- d. Encoder Specification: A – Incremental (13Bit serial)
2 – Absolute (17Bit serial)
- e. Design Revision Order: A – Standard
B – Standard
AJ – With gear
BJ – With gear
- f,g. Customer Code: put any alphabets.
- h.i. Design Revision Oder for Customer: put any numbers.

Attachment
Statement No.



Product Service

E6 12 07 22021 458

3. Characteristic of Ratings

3.1 SGMM

SERVO MOTOR	Voltage	Phases	Rated Current [A _{rms}]	Rated Output [KW]	Rated torque [Nm]	Rated speed [min ⁻¹]	Insulation class [Deg_C]
SGMM-A1Sxxxx	24VDC	3	2.1	0.01	0.0318	3000	130
SGMM-A2Sxxxx			2.0	0.02	0.0637		
SGMM-A3Sxxxx			2.9	0.03	0.0955		
SGMM-A1Wxxxx	100VAC	3	0.70	0.01	0.0318		
SGMM-A2Wxxxx			0.66	0.02	0.0637		
SGMM-A3Wxxxx			0.98	0.03	0.0955		

3.2 SGMMJ

SERVO MOTOR	Voltage	Phases	Rated Current [A _{rms}]	Rated Output [KW]	Rated torque [Nm]	Rated speed [min ⁻¹]	Insulation class [Deg_C]
SGMMJ-A1Cxxxx	24VDC	3	2.1	0.01	0.0318	3000	130
SGMMJ-A2Cxxxx			2.0	0.02	0.0637		
SGMMJ-A3Cxxxx			2.9	0.03	0.0955		
SGMMJ-A1Exxxx	48VDC	3	2.1	0.01	0.0318		
SGMMJ-A2Exxxx			2.0	0.02	0.0637		
SGMMJ-A3Exxxx			2.9	0.03	0.0955		
SGMMJ-A1Bxxxx	100VAC	3	0.70	0.01	0.0318		
SGMMJ-A2Bxxxx			0.66	0.02	0.0637		
SGMMJ-A3Bxxxx			0.98	0.03	0.0955		

Attachment
Statement No.



Product Service

E6 12 07 22021 458

4. Exclusive design

4.1 SGMMJ TYPE

Additional motor type	Drawing	Base motor	Difference point
SGMMJ-A3E2A-FJ21	DP0350004	SGMMJ-A3E2A21	Lead length, shaft, and motor type
SGMMJ-A3E2A-FJ22	DP0350273	SGMMJ-A3E2A21	Lead length and motor type
SGMMJ-A1CAA-MK11	DP0312933	SGMMJ-A1CAA21	Motor type only
SGMMJ-A2B2B-FJ21	900-056-518	SGMMJ-A2B2B21-E	Motor type only
SGMMJ-A3E2A-FJ23	900-014-963	SGMMJ-A3E2A21-E	Lead length, shaft , position of NP and model type
SGMMJ-A3E2A-FJ24	900-072-217	SGMMJ-A3E2A21-E	Lead length, shaft, position of NP, bearing and model type
SGMMJ-A2B2B-FJ22	900-072-198	SGMMJ-A2B2B21-E	Bearing and model type