

CERTIFICATE

No. B 12 04 22021 442

Holder of Certificate: Yaskawa Electric Corp.

Tokyo Plant

480 Kamifujisawa, Iruma

Saitama 358-8555

JAPAN

Production Facility(ies):

48921

Certification Mark:



Product: Electric Motors

AC Servo Motor

Model(s): **SGMMV Series**

(See attachment for nomenclature)

Parameters:

Rated voltage:

48V dc / 200V ac

Rated input power:

3.3 ~ 30W

Connection to waterinstallation:

IP42 (SGMMV-BXXXXXX) IP55 (SGMMV-AXXXXXX)

Protection class:

Remark:

When installing/inserting the equipment all requirements

of the mentioned test standards must be fulfilled.

Tested according to: EN 60034-1:2010

EN 60034-5/A1:2007

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

Test report no.:

73534489-01

Date, 2012-04-04

(Yoshio Sato)

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Nomenclature

1) Standard

Letters

а

Items

Motor type

| SGMMV- | <u>B3</u> | <u>E</u> | 2 | <u>A</u> | 2 | 1 | K |
|--------|-----------|----------|---|----------|---|---|---|
| а | b | С | d | е | f | g | h |

| Letters | Items | (Group) | Rated Output[W] | |
|---------|--------------|---------|-----------------|---|
| b | Motor Output | B3 | 3.3 | *************************************** |
| | | B5 | 5.5 | ··· |
| | | B9 | 11 | |
| | | A1 | 10 | |
| | | A2 | 20 | ······································ |
| | | A3 | 30 | |

(Group)

SGMMV

| Letters | Items | (Group) | Power Supply Voltages[Vrms] |
|---------|--------------|---------|---|
| С | Power Supply | E | 48VDC |
| | | Α | 200VAC |
| | | | (Motor output variation are only 3 types, A1, |
| | | | A2 and A3) |

| Letters | Items | (Group) | Encoder Type |
|---------|---------|---------|-----------------------------|
| d | Encoder | 2 | 17bit Serial Absolute Value |

| Letters | Items | (Group) | Design Revision Order |
|---------|-----------------------|---------|-----------------------|
| е | Design Revision Order | Α | Standard |

| Letters | Items | (Group) | Shaft Type |
|---------|------------|---------|---------------------------------|
| f | Shaft Type | 2 | Straight (without keyway) |
| | | A | Straight (with a flat key seat) |

| Letters | Items | (Group) | Optional Specifications |
|---------|-------------------------|---------|---|
| g | Optional Specifications | 1 | Without Option |
| | | С | With Brake (24V) |
| | | | (Motor output variation are only 3 types, |
| | · | | A1, A2 and A3) |

| Letters | Items | (Group) | Optional Specifications |
|---------|------------------|---------|-------------------------|
| h | Lead Wire Length | Blank | 300mm |
| | Specification | Н | 500mm |
| | | J | 1000mm |
| | | K | 1500mm |

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2) With Gear (Motor output variation are only 3 types, A1, A2, and A3)

| SGMMV- | <u>A1</u> | E | 2 | <u>AJ</u> | <u>A</u> | 2 | <u>C</u> | <u>K</u> |
|--------|-----------|---|---|-----------|----------|---|----------|----------|
| а | b | С | d | е | f | g | h | i |

| Letter | s litems | (Group) | |
|--------|------------|---------|---|
| а | Motor type | SGMMV | - |

| Letters | Items | (Group) | Rated Output[W] |
|---------|--------------|---------|-----------------|
| b | Motor Output | A1 | 10 |
| | | A2 | 20 |
| | | A3 | 30 |

| Letters | Items | (Group) | Power Supply Voltages [V] |
|---------|--------------|---------|---------------------------|
| С | Power Supply | E | 48VDC |
| | | Α | 200VAC |

| Letters | Items | (Group) | Design Revision Order |
|---------|---------|---------|-----------------------------|
| d | Encoder | 2 | 17bit Serial Absolute Value |

| Letters | Items | (Group) | Design Revision Order |
|---------|-----------------------|---------|-----------------------|
| е | Design Revision Order | AJ | With Gear |

| Letters | Items | (Group) | Reduction Ratio |
|---------|-----------------|---------|-----------------|
| f | Reduction Ratio | 1 or A | 1/5 |
| | | 2 or B | 1/16 |
| | | 3 or C | 1/25 |

| Letters | Items | (Group) | Shaft Type |
|---------|------------|---------|--|
| g | Shaft Type | 0 | Flange Type (without keyway) |
| | | 2 | Straight (without keyway) |
| | | 6 | Straight (with keyway and tapped hole) |
| | | 8 | Straight (tapped hole) |

| Letters | Items | (Group) | Optional Specifications |
|---------|-------------------------|---------|-------------------------|
| h | Optional Specifications | 1 | Without Option |
| | | С | With Brake (24V) |

| Letters | Items | (Group) | Lead wire length Specification |
|---------|------------------|---------|--------------------------------|
| i | Lead wire length | Blank | 300mm |
| | Specification | Н | 500mm |
| | | j | 1000mm |
| | | K | 1500mm |

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3) Exclusive Design for Customer

| SGMMV- | <u>B3</u> | E | <u>2</u> | <u>A</u> | -* | * | * | * |
|--------|-----------|---|----------|----------|----|---|---|---|
| a | b | С | d | е | f | g | h | i |

| Letters | Items | (Group) | |
|---------|------------|---------|---|
| а | Motor type | SGMMV | - |

| Letters | Items | (Group) | Rated Output[W] |
|---------|----------------|---------|-----------------|
| b | b Motor Output | B3 | 3.3 |
| | | B5 | 5.5 |
| | | B9 | 11 |
| | | A1 | 10 |
| | | A2 | 20 |
| | | A3 | 30 |

| Letters | Items | (Group) | Power Supply Voltages [Vrms] |
|---------|--------------|---------|---|
| С | Power Supply | E | 48VDC |
| | | Α | 200VAC |
| | | | (Motor output variation are only 3 types, A1, |
| | | | A2 and A3) |

| Letters | Items | (Group) | Encoder Type |
|---------|---------|---------|-----------------------------|
| d | Encoder | 2 | 17bit Serial Absolute Value |

| Letters | Items | (Group) | Design Revision Order |
|---------|-----------------------|---------|---|
| е | Design Revision Order | Α | Standard |
| | | K | Rating specifications, IP specifications, encoder and/or connector are changed for standard. |
| | | AJ | With Gear (Motor output variation are only 3 types, A1, A2 and A3) |
| | | KJ | With Gear Rating specifications, IP specifications, encoder and/or connector are changed for standard. (Motor output variation are only 3 types, A1, A2 and A3) |

| Letters | Items | (Group) | Customer Code |
|---------|---------------|---------|---------------|
| f,g | Customer Code | - | - |

| Letters | Items | (Group) | Customer Code | |
|---------|------------------------------------|---------|---------------|--|
| h,i | Design Revision Order For Customer | _ | | |