



Product Service

CERTIFICATE

No. B 15 05 22021 588

Holder of Certificate: Yaskawa Electric Corp.
Tokyo Plant

480 Kamifujisawa, Iruma
Saitama 358-8555
JAPAN

Production Facility(ies): 48675, 42605

Certification Mark:



Product: Electric Motors
AC Servo Motor

Model(s): SGMGH, SGMSH, SGMDH Series
(See Attachment for Nomenclature)

Parameters:

Rated voltage:	AC 200 V, 3phase
Rated output power:	0.3 kW - 15 kW
Protection class:	I
Degree of protection:	IP22, IP55, IP67

Remark:

- 1) See Attachment for Electrical Ratings.
- 2) When installing/inserting the equipment all requirements of the mentioned test standards must be fulfilled.

Tested according to: EN 60034-1:2010
EN 60034-5:2001/A1:2007
EN 60034-8:2007
EN 60034-9:2005/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.: 73552799
Valid until: 2017-04-23

Date, 2015-05-20 (Yoshio Sato)

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Electrical Ratings:

SGMGH Series

<u>Model</u>	<u>Voltage</u>	<u>Phases</u>	<u>Watts (kW)</u>	<u>Current (A)</u>	<u>Torque (N·m)</u>
SGMGH-03xxxxxx(-E)	200	3	0.3	2.6	1.96
SGMGH-05xxxxxx(-E)	200	3	0.45	3.8	2.84
SGMGH-08xxxxxx(-E)	200	3	0.75	4.4	4.77
SGMGH-09xxxxxx(-E)	200	3	0.85	7.1	5.39
SGMGH-13xxxxxx(-E)	200	3	1.3	10.7	8.34
SGMGH-20xxxxxx(-E)	200	3	1.8	16.7	11.5
SGMGH-30xxxxxx(-E)	200	3	2.9	23.8	18.6
SGMGH-44xxxxxx(-E)	200	3	4.4	32.8	28.4
SGMGH-55xxxxxx(-E)	200	3	5.5	42.1	35.0
SGMGH-75xxxxxx(-E)	200	3	7.5	54.7	48.0
SGMGH-1Axxxxxx(-E)	200	3	11	58.6	70.0
SGMGH-1Exxxxxx(-E)	200	3	15	78.0	95.4
SGMGH-03xxxxxx(-E)	200	3	0.3	3.0	2.84
SGMGH-06xxxxxx(-E)	200	3	0.6	5.7	5.68
SGMGH-09xxxxxx(-E)	200	3	0.9	7.6	8.62
SGMGH-12xxxxxx(-E)	200	3	1.2	11.6	11.5
SGMGH-20xxxxxx(-E)	200	3	2.0	18.5	19.1
SGMGH-30xxxxxx(-E)	200	3	3.0	24.8	28.4
SGMGH-40xxxxxx(-E)	200	3	4.0	30	38.2
SGMGH-55xxxxxx(-E)	200	3	5.5	43.2	52.6

SGMSH Series

<u>Model</u>	<u>Voltage</u>	<u>Phases</u>	<u>Watts (kW)</u>	<u>Current (A)</u>	<u>Torque (N·m)</u>
SGMSH-10xxxxxx(-E)	200	3	1.0	5.7	3.18
SGMSH-15xxxxxx(-E)	200	3	1.5	9.7	4.9
SGMSH-20xxxxxx(-E)	200	3	2.0	12.7	6.36
SGMSH-30xxxxxx(-E)	200	3	3.0	18.8	9.8
SGMSH-40xxxxxx(-E)	200	3	4.0	24.3	12.6
SGMSH-50xxxxxx(-E)	200	3	5.0	28.2	15.8
SGMSH-70xxxxxx(-E)	200	3	7.0	40.5	22.3

SGMDH Series

<u>Model</u>	<u>Voltage</u>	<u>Phases</u>	<u>Watts (kW)</u>	<u>Current (A)</u>	<u>Torque (N·m)</u>
SGMDH-22xxxxxx(-E)	200	3	2.2	15.7	10.5
SGMDH-32xxxxxx(-E)	200	3	3.2	20.9	15.3
SGMDH-40xxxxxx(-E)	200	3	4.0	22.8	19.1

"X" represents Variations in model number as described in product covered and series nomenclature which do not affect electrical construction or rating. "Reference Product Covered" or "Series Nomenclature."

Particulars about "-E" model see Series Nomenclature.



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Series Nomenclature

Standard

SGMSH - **10** **A** **C** **A** * * * **-E**
 a b c d e f g h i

a. Motor Series: SGMGH, SGMSH, SGMDH

b. Motor Output (kW)

Series	SGMGH		SGMSH	SGHDH
	(r / min.) 1500	(r / min.) 1000	(r / min.) 3000	(r / min.) 2000
03	0.3	0.3	--	--
05	0.45	--	--	--
06	--	0.6	--	--
08	0.75	--	--	--
09	0.85	0.9	--	--
10	--	--	1.0	--
12	--	1.2	--	--
13	1.3	--	--	--
15	--	--	1.5	--
20	1.8	2.0	2.0	--
22	--	--	--	2.2
30	2.9	3.0	3.0	--
32	--	--	--	3.2
40	--	4.0	4.0	4.0
44	4.4	--	--	--
50	--	--	5.0	--
55	5.5	5.5	--	--
70	--	--	7.0	--
75	7.5	--	--	--
1A	11.0	--	--	--
1E	15.0	--	--	--

c. Supply Voltage and Structure which of Encoder's shaft connect to Motor's shaft

Symbol	Supply Voltage	Structure which of Encoder's shaft connect to Motor's shaft
A	200 V	Encoder's shaft connect direct to Motor's shaft
P		Encoder's shaft connect to Motor's shaft by Flexible coupling
K		The same as symbol "A". Among SGMGH-05 and SGMGH-08, flange size -90 type, Use this symbol "K".



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d. Detector

Symbol	Contents
C	Incremental (17bit)
2	Absolute Value (17bit)
3	Absolute Value (20bit)
5	Absolute Value (17bit) With Super Capacitor

e. Design Revision Order and Rated Speed

A:	SGMGH Series	(1500 r / min.)
	SGMSH Series	(3000 r / min.)
	SGMDH Series	(2000 r / min.)
B:	SGMGH Series	(1000 r / min.)
C:	SGMGH Series	(1500 r / min.)
	For high precision machine tool	
D:	SGMGH Series	(1000 r / min.)
	For high precision machine tool	

f. Shaft Type

Symbol	Contents
2	Straight
4	Straight, Without Key
6	Straight, With Key and Tap
3	1/10 Conical shaft ends, With Sunk Key
5	1/10 Conical shaft ends, With Woodruff Key
8	Straight, With Tap

g. Optional parts

Symbol	Contents
F	With Oil Seal (V type)
G	With Oil Seal (V type) and With Holding Brake (DC90V)
H	With Oil Seal (V type) and With Holding Brake (DC24V)
D	With Oil Seal (S type) and With Holding Brake (DC90V)
E	With Oil Seal (S type) and With Holding Brake (DC24V)
S	With Oil Seal (S type)
1	Without Option
B	With Holding Brake (DC90V)
C	With Holding Brake (DC24V)

h. Design of connection

- Blank: Receptacle
- B, C: With right-angled Support
- F, G: Cable Type 1
- H, J: Cable Type 2

i. Design of RoHS responses model.

- E or blank.
- If be indicated “-E”, those models represent RoHS responses model.



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Exclusive Design for Customer

SGMSH - 10 A C A - * * * * -E
a b c d e f g h i j

a to d. same as standard

e. Revision Order and Rated Speed

A:	SGMGH Series	(1500 r / min.)
	SGMSH Series	(3000 r / min.)
	SGMDH Series	(2000 r / min.)
B:	SGMGH Series	(1000 r / min.)
C:	SGMGH Series	(1500 r / min.)
	For high precision machine tool	
D:	SGMGH Series	(1000 r / min.)
	For high precision machine tool	
E:	SGMGH Series	(Special Rated Speed)
	SGMSH Series	(Special Rated Speed)
	SGMDH Series	(Special Rated Speed)

f, g. Customer Code

Alphameric character(s) or none

h, i. Design Revision Order for Customer

2 digit code for specific change for the client.

Shaft, encoder (EMC counter measure), output downward,
addition of name plate for the client, direction of lead wire outlet,
change mounting bracket.

j. Design of RoHS responses model.

-E or blank.

If be indicated “-E”, those models represent RoHS responses model.

International Protection Class (IP Class)

No.	Contents	Except for drive end side (*1)	Oilseal of drive end side V type	Oilseal of drive end side S type
1	Connection: Receptacle	IP67	IP55	IP67
2	Connection: Receptacle (With right-angled support)	IP67	IP55	IP67
3	Connection: Cable	IP55	IP55	IP55
4	SGMSH-70xxx-xxxx	IP22	IP22	IP22

*1. When drive end side needs IP55 or IP67, mount an oilseal.
Although, SGMSH-70xxx-xxxx stays IP22 even mounting an oilseal.