

## **ENGINEERING PUBLICATION**MOTION CONTROL DIVISION

PRODUCT: SIGMA I & II SUBJECT: UL CERTIFICATION

**CATEGORY: PRODUCT NOTES** 

ENGINEER: Bill Leang DISTRIBUTION: MCD

**Summary**: Underwriters Laboratories (UL) listing information on Yaskawa products are provided in this document. The latest UL listing information for Yaskawa products may be obtained from UL's Listing Information System (LIS) on the UL website at http://www.ul.com/database/.

Yaskawa Electric America's product policy is to comply with global safety standards including UL for the U. S. and c-UL for Canada. The purpose of this document is to provide information on the UL listings of Yaskawa products and applicability of c-UL mark to meet Canadian safety standards such as those required by CSA.

Yaskawa servo amplifiers and accessories are covered under UL file # E147823, and servo motors are covered under file # E165827. The servo amplifiers are tested to UL standard UL508C, *Standard for Power Conversion Equipment*; and servo motors are tested to UL standard UL1004, *Electric Motors*. Copies of these Standards may be purchased from UL.

Yaskawa products also bear the c-UL mark and are certified by UL to be in compliance with appropriate Canadian standards. More information regarding the c-UL mark can be found on the UL website at http://www.ul.com/database/.

The chart below shows the UL file numbers and product categories for Yaskawa servo products:

	<u>UL</u>	c-UL
Motors	File #: E165827	E165827
	Category: PRGY2	PRGY8
Amplifiers &	File #: E147823	E147823
Application	Category: NMMS	NMMS7
Modules &		
Accessories		

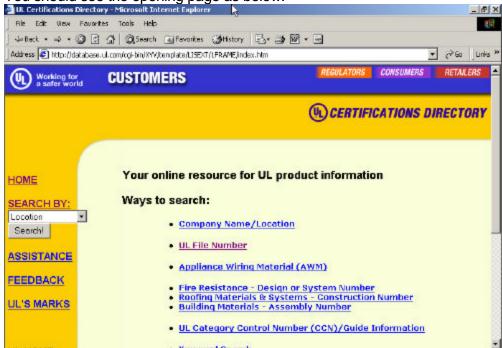
Motion ControllersFile #:E184524E184524(e.g. SMC2000)Category:NRAQNRAQ7

The latest UL and cUL listing information may be obtained from UL's Listing Information System (LIS) on the UL website. To access LIS, follow the following steps:

1. Log on to the UL website at http://www.ul.com/database/

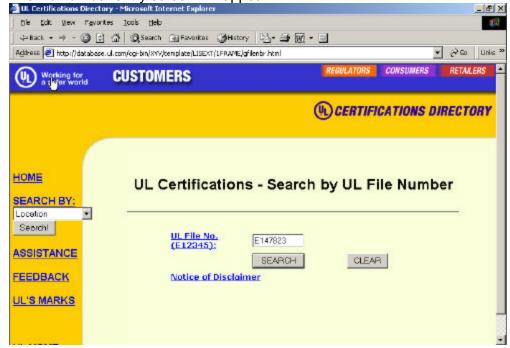


2. You should see the opening page as below:



Select "UL File Number",

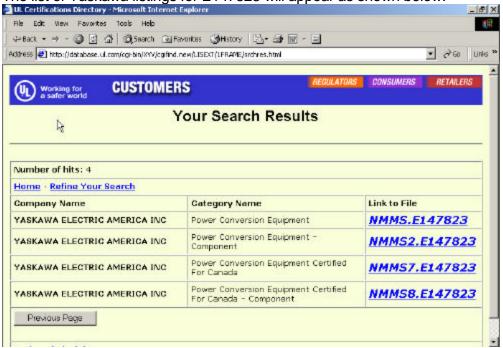
3. The file number entry screen will appear:



Enter the file number, e.g. E147823, and select "Search",

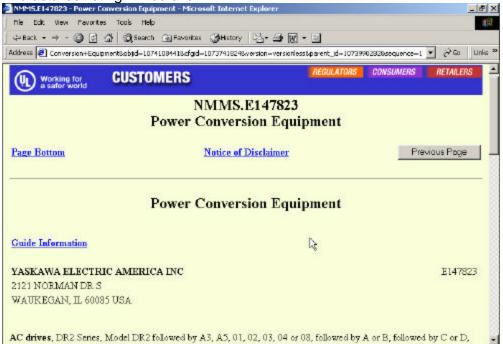


4. The list of Yaskawa listings for E147823 will appear as shown below:



Select one of the files, e.g. NMMS.E147823

5. The detailed listing will be shown:



This is the UL listing for the amplifiers & options. Scroll down for more details.

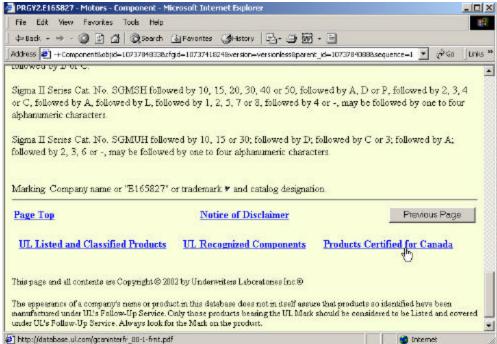


6. Go back to the previous screen and select NMMS7.E147823, the cUL listing will be displayed:



- 7. The listings may be printed by using the Print option of the web browser.
- 8. To obtain information regarding c-UL, scroll down to the bottom of the listing page and select "Products Certified for Canada":

  PRGYZ.E165827 Motors Component Microsoft Internet Explorer



A document describing the c-UL mark will be displayed.

## Certificate

PRODUCT SERVICE

No: B 80 22021 00

Yaskawa Electric Corp. Tokyo Plant 480 Kamifujisawa, Iruma Saitama 358-8555 Japan

with production facility(ies) 22021 38663

is authorized to label the following products with the

certification mark E

as shown in the certification mark list. See also notes overleaf.

Product:

Elektromotoren

**AC Servo Motor** 

Model:

SGMAH, SGMPH Series

(See Attachment 1 for Nomenclature)

Parameters:

Rated voltage:

100 V or 200 V

Rated input current:

0.44 A - 7.5 A

Protection class:

Degree of protection:

IP55

Remarks:

List of tested and certified motors as per

Attachment 2

When installing/inserting the equipment all

requirements of the mentioned test standards must be

fulfilled.

The product meets the relevant safety requirements and was tested according to:

IEC 60034-1:1996 IEC 60034-5:1991 IEC 60034-8:1972 IEC 60034-9:1997 EN 60034-1:1995 EN 60034-9:1997

Report No: TYOEMA03999, E - (B 00 03 22021 064)

Released with the above certificate number by the certification body of TÜV PRODUCT SERVICE GMBH.

Department:

Date:

TYOELP / YS 08-18-2000







## Anlage 2 zum Zertifikat

#### Attachment 2 to the Certificate

Seite 1 von 2 Page 1 of 2

Zertifikat Nr. / Certificate No.

B 00 08 22021 071

- 1. Σ-II Series SGMAH Type
- 1.1 MODEL DESCRIPTION

#### 1.1.1 PRODUCT COVERED:

Component - AC Servo Motors, Series SGMAH, followed by any number from A3 to 08, followed by A or B, followed by 1, A, B and so on, followed by A, B or C may be followed by additional letters and or numbers.

#### 1.1.2. ELECTRICAL RATINGS:

Model	Voltage	Phases	Amps	Watts (kw)
SGMAH-A3Axxxx	200	3	0.44	0.03
SGMAH-A3Bxxxx	100	3	0.66	0.03
SGMAH-A5Axxxx	200	3	0.64	0.05
SGMAH-A5Bxxxx	100	3	0.95	0.05
SGMAH-A8Axxxx	200	3	0.73	0.08
SGMAH-A8Bxxxx	100	3	1.9	0.08
SGMAH-01Axxxx	200	3	0.91	0.10
SGMAH-01Bxxxx	100	3	2.4	0.10
SGMAH-02Axxxx	200	3	2.1	0.20
SGMAH-02Bxxxx	100	3	3.0	0.20
SGMAH-04Axxxx	200	3	2.8	0.40
SGMAH-08Axxxx	200	3	4.4	0.75

<sup>&</sup>quot;X" represents variations in model number as described in product covered and series nomenclature which do no affect electrical construction or rating. Reference "Product Covered" or "Series Nomenclature."

Organisationseinheit / Organization unit: Datum / Date:

10 / EEC / Tetsuro Kushiyama / MY 2000/08/18

2000/04/10

1.00

TÜV PRODUCT SERVICE GMBH, Ridlerstraße 31, D-80339 Munich, Germany



### Anlage 2 zum Zertifikat

#### Attachment 2 to the Certificate

Seite 2 von 2 Page 2 of 2

Zertifikat Nr. / Certificate No.

B 00 08 22021 071

- 2. Σ-II Series SGMPH Type
- 2.1 MODEL DESCRIPTION

#### 2.1.1 PRODUCT COVERED:

Component - AC Servo Motors, Series SGMPH, followed by any number from A3 to 08, followed by A or B, followed by 1, A, B and so on, followed by A, B or C may be followed by additional letters and or numbers.

#### 1.1.2. ELECTRICAL RATINGS:

Model	Voltage	Phases	Amps	Watts (kw)
SGMPH-A8Axxxx	200	3	0.71	0.08
SGMPH-A8Bxxxx	100	3	1.8	0.08
SGMPH-01Axxxx	200	3	0.89	0.10
SGMPH-01Bxxxx	100	3	2.2	0.10
SGMPH-02Axxxx	200	3	2.0	0.20
SGMPH-02Bxxxx	100	3	2.7	0.20
SGMPH-04Axxxx	200	3	2.6	0.40
SGMPH-08Axxxx	200	3	4.1	0.75
SGMPH-15Axxxx	200	3	7.5	1.50

<sup>&</sup>quot;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."

Organisationseinheit / Organization unit: Datum / Date:

10 / EEC / Tetsuro Kushiyama / MY 2000/08/18



## Certificate

PRODUCT SERVICE

No: В 01 21347 015

Yaskawa Electric Corporation Yahata Plant (Fukuoka) 2-1 Shiroishi Kurosaki 806-0004 Yahatanishi, Kitakyushu Japan

with production facility(ies) 21347

is authorized to label the following products with the certification mark E as shown in the certification mark list. See also notes overleaf.

Product:

Elektromotoren **AC Servo Motor** 

Model:

SGMGH Series, SGMSH Series, SGMDH series ( See Attachment 1 for Nomenclature )

Parameters:

Rated voltage:

200 V

Rated input power:

0.3 KW - 15 KW

Protection class:

Remarks:

List of tested and certified motors as per Attachment 2.

When installing/inserting the equipment all requirements of the mentioned test standards must be fulfilled.

The product meets the relevant safety requirements and was tested according to:

IEC 60034-1:1996 IEC 60034-5:1991 IEC 60034-8:1972 IEC 60034-9:1997



Report No: TYOEMA04000, HA - (B 98 02 21347 010), E - (B 98 04 21347 012)

Released with the above certificate number by the certification body of TÜV PRODUCT SERVICE GMBH.

Department:

Date:

TYOELP / HI 01-13-2000

TÜV PRODUCT SERVICE GMBH · Zertifizierstelle · Ridlerstrasse 31 · D-80339 München



Seite 1 von 4 Page 1 of 4

Zertifikat Nr. / Certificate No.

B 00 01 21347 015

#### Series Nomenclature

1. Standard

<u>SGMSH</u>	- <u>10</u>	<u>A</u>	C	Α		П	П
а	b	С	d	e	f	g	h

a. Motor Series: SGMGH, SGMSH, SGMDH

b. Motor Output (kW)

Series	SGM	IGH	SGMSH	SGMDH
Rated Speed	(r / min.) 1500	(r / min.) 1000	(r / min.) 3000	(r / min.)
03		0.3	3000	2000
05	0.45			<del> </del>
06		0.6	<del></del>	<del></del>
09	0.85	0.9		
10			1.0	<del> </del>
12		1.2	1.0	<del> </del>
13	1.3	T		<del></del>
15			1.5	
20	1.8	2.0	2.0	
22				
30	2.9	3.0	3.0	2.2
32			3,0	3.2
40	<del></del>	4.0	4.0	
44	4.4		4.0	4.0
50			5.0	
55	5.5	5.5	3.0	
75	7.5			
1A	11.0			<del></del>
1E	15.0	<del></del>	<del></del>	

c. Supply Voltage

A: 200V

d. Detector

Symbol	Contents
С	Incremental (17 bit)
2	Absolute Value (17 bit)
3	Absolute Value (20 bit)

Organisationseinheit / Organization unit: Datum / Date:

8 / TYOEMA / Tetsuro Kushiyama / MY

TÜV PRODUCT SERVICE GMBH, Ridlerstraße 31, D-80339 Munich, Germany

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Zertifikat Nr. / Certificate No.

B 00 01 21347 015

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 ma	achine 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)
Н	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
В	With Holding Brake (DC90V)
С	With Holding Brake (DC24V)

Organisationseinheit / Organization unit: Datum / Date:

8 / TYOEMA / Tetsuro Kushiyama / MY 2000/01/13

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Zertifikat Nr. / Certificate No.

B 00 01 21347 015

Design of connection

Symbol	Contents	Drawout direction * I
Blank	Receptacle	
В	With right-angled Support  Raceptacle  Support	(A)
С	Frame	(B)
F	Cable Type 1	(A)
G	(See BE9359793)	(B)
Н	Cable Type 2	(A)
J	(See BE9359793)	(B)

\* 1 Drawout direction

Drive end side

Organisationseinheit / Organization unit:

Datum / Date:

8 / TYOEMA / Tetsuro Kushiyama / MY 2000/01/13

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TÜV PRODUCT SERVICE GMBH, Ridlerstraße 31, D-80339 Munich, Germany



Seite 4 von 4 Page 4 of 4

Zertifikat Nr. / Certificate No.

B 00 01 21347 015

**Exclusive Design for Customer** 

SGMSH - 10 а

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.) (1000 r / min.)

B: SGMGH Series C:

(1500 r / min.)

SGMGH Series

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 Cord

h, i. Design Revision Order for Customer

International Protection Class (IP Class)

Contents	Except of drive		Oilseal of drive end side	
	end side (*1)	V type	S type	
Connection: Receptacle	IP67	IP55	IP67	
Connection: Receptacle (With right-angled support)	IP67	IP55	IP67	
Connection: Cable	IP55	IP55	IP55	
	Connection: Receptacle Connection: Receptacle (With right-angled support)	Connection: Receptacle IP67 Connection: Receptacle IP67 (With right-angled support)	Connection: Receptacle IP67 IP55  Connection: Receptacle IP67 IP55  (With right-angled support)	

drive end side needs iP55 or IP67, mount an oilseal.

Organisationseinheit / Organization unit: Datum / Date:

8 / TYOEMA / Tetsuro Kushiyama / MY 2000/01/13

TÜV PRODUCT SERVICE GMBH, Ridlerstraße 31, D-80339 Munich, Germany

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## Certificate

No: B 00 01 21347 016



Yaskawa Electric Corporation Yahata Plant (Fukuoka) 2-1 Shiroishi Kurosaki 806-0004 Yahatanishi, Kitakyushu Japan

with production facility(ies) 21347

is authorized to label the following products with the certification mark E as shown in the certification mark list. See also notes overleaf.

Product:

Elektromotoren

**AC Servo Motor** 

Model:

SGMG, SGMS, SGMGH, SGMSH, SGMUH Series (See Attachment 1 for tested and certified motors)

Parameters:

Rated voltage:

400 V

Protection class:

Degree of protection:

IP55 (V type) IP67 (S type)

Remark:

When installing/inserting the equipment all requirements of the mentioned test standards must be fulfilled.

The product meets the relevant safety requirements and was tested according to:

IEC 60034-1:1996 IEC 60034-5:1991 IEC 60034-8:1972 IEC 60034-9:1990

Report No: TYOEMA03650, E - (B 99 01 21347 014)

Released with the above certificate number by the certification body of TÜV PRODUCT SERVICE GMBH.

Department:

TYOELP / HI

Date: 01-24-2000



TÜV PRODUCT SERVICE GMBH · Zertifizierstelle · Ridlerstrasse 31 · D-80339 München

#### ∑-Ⅱ Series

#### LMODEL DESCRIPTION

#### 1.1 PRODUCT. COVERED:

Component-AC Servo Motots, Series SGMGH, SGMSH, followed by any number from 05 to 1E, followed by A, followed by 2, C, and so on, followed by A, may by followed by additional letters and/or numbers.

#### 1.2 ELECTRICAL RATINGS:

1.2.1 SGMGH Series			Watts
_Model_	Voltage	Phases_	(kW)
SGMGH-05Dxxxxx	400	3	0. 4.5
SGMGH-09Dxxxxx	400	3	0.,85
SGMGH-13Dxxxx	400	3	1. 3
SGMGH-20Dxxxx	400	3	1.8
SGMGH-30Dxxxx	400	3	2. 9
SGMGH-44Dxxxx	400	3	4.4
SGMGH-55Dxxxx	400	3	5. 5
SGMGH-75Dxxxx	400 ^	3	7. 5
SGMGH-1ADxxxx	4.0 0	3	1 1
SGMGH-1EDxxxxx	400	3	1 5

1.2.2	SGMSH	Se	r	i	e	s

2.2 SUMSH Series			Watts
_Model	Voltage	Phases	(kW)
SGMSH-10Dxxxx	400	3	1. 0
SGMSH-15Dxxxxx	400	3	1. 5
SGMSH-20Dxxxx	400	3	2. 0
SGMSH-30Dxxxx	4 0 0	3	3. 0
SGMSH-40Dxxxxx	400	3	4. 0
SGMSH-50Dxxxxx	4 !0 0	3	5. 0

#### 1.2.3 SGMSH

o somon serres			Watts
<u> Model</u>	_Voltage_	_Phases	(kW)
SGMUH-10Dxxxx	400	3	1.0
SGMUH-15Dxxxx	400	· 3	1. 5
SGMUH-30Dxxxxx	4 0 0	3	3. 0
SGMUH-40Dxxxxx	4 b o	3	
	. , , ,	3	4.0

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



Reviewed [999-11-0] M1 .

## Certificate

PRODUCT SERVICE

No: B 01 02 21347 020

Yaskawa Electric Corporation Yahata Plant (Fukuoka) 2-1 Shiroishi Kurosaki 806-0004 Yahatanishi, Kitakyushu Japan

with production facility(ies) 21347

is authorized to label the following products with the certification mark E as shown in the certification mark list. See also notes overleaf.

Product:

Elektromotoren

AC Servo Motor

Model:

SGMB Series, SGMBH Series

(See Attachment 1 for Nomenclature)

Parameters:

Rated voltage:

AC 200 V, 400 V

Rated input current:

22kW - 55kW

Protection class:

I

Remark:

When installing/inserting the equipment all requirements of the mentioned test standards must be fulfilled.

The product meets the relevant safety requirements and was tested according to:

EN 60034-1/A1:1998 EN 60034-5:1991 EN 60034-8/A2:1996 EN 60034-9:1997 EN 60034-11:1979

Report No: TYOMAE07020, E - (B 00 04 21347 018)

Released with the above certificate number by the certification body of TÜV PRODUCT SERVICE GMBH.

Department:

TYOELP / YS

Date:

02-01-2001

TÜV PRODUCT SERVICE GMBH · Zertifizierstelle · Ridlerstrasse 65 · D-80339 München

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## Certificate

PRODUCT SERVICE

No: B 01 03 22021 087

Yaskawa Electric Corp. Tokyo Plant 480 Kamifujisawa, Iruma Saitama 358-8555 Japan

with production facility(ies) 22021 38373

is authorized to label the following products with the

certification mark E

as shown in the certification mark list. See also notes overleaf,

Product:

Geschwindigkeitsgeregelte Servoantriebe

**AC Servo Amplifiers** 

Model:

SGDM Series, SGDH-\*\*\*E\*\*\*\*\* Series,

SGDP-\*\*\*P\*\*\*\*\* Series, SGDH-\*\*DE\*\*\*\*\* Series,

SGDP-\*\*\*PA\*\*\*\*\* Series (See Attachment 1)

Parameters:

Rated voltage:

AC 100 - 115 V AC 200 - 230 V AC 380 - 480 V

Rated frequency:

50 / 60 Hz

Rated input current:

1 - 81 A

Protection class:

#### Remarks:

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

The product meets the relevant safety requirements and was tested according to:

EN 50178:1997

Report No: TYOEMA07144, E - (B 00 10 22021 078)

Released with the above certificate number by the certification body of TÜV PRODUCT SERVICE GMBH.

Department:

TYOELP / YS

Date:

03-13-2001



TÜV PRODUCT SERVICE GMBH · Zertifizierstelle · Ridlerstrasse 65 · D-80339 München

Type SGDH-\*\* E( $\Sigma - II$ ) series

MODEL:	Item Des	cription:	
SGDHA3BE * * * * *	100V	0. 03 [KW]	
SGDH~A5BE * * * * *	100V	0. 05 [KW]	
SGDH-01BE*****	100V	0. 10 (KW)	
SGDH-02BE*****	100V	0. 20 [KW]	
SGDH~A3AE * * * * *	200V	0. 03 [KW]	
SGDH-A5AE * * * * *	200V	0. 05 [KW]	
SGDH-01AE * * * * *	200V	0. 10 [KW]	
SGDH-02AE * * * * *	200V	0. 20 [KW]	
SGDH-04AE * * * * *	200V	0. 40 [KW]	
SGDH-05AE * * * * *	200V	0. 50 [KW]	CT SERV
SGDH08AE * * * * *	200V	0. 75 [KW]	(0)
SGDH-10AE * * * * *	200V	1. 0 [KW]	OF ASSETS A DEA
SGDH-15AE*****	200V	1. 5 [KW]	
SGDH-20AE * * * * *	200V	2. 0 [KW]	
SGDH-30AE * * * * *	200V	3. 0 [KW]	PHODUCT SERVICE
SGDH50AE * * * * *	200V	5. 0 [KW]	PODUCT SAFE
SGDH60AE * * * * *	200V	6. 0 [KW]	
GDH-75AE*****	200V	7. 5 [KW]	reviewed
GDH-05DE*****	400V	0. 5 [KW]	1 2 FEB 1999
GDH-10DE*****	400V	1. 0 [KW]	
GDH-15DE*****	400V	1. 5 [KW]	SIG.
GDH-20DE*****	400V	2. 0 [KW]	(
SGDH-30DE * * * * * *	400V	3. 0 [KW]	••

## **EC Certificate of Conformity**

No.: E9 98 06 22021 040



concerning the EMC protection requirements in accordance with Article 10 of the Council Directive 89/336/EEC on electromagnetic compatibility for

Yaskawa Electric Corporation Tokyo Plant 480 Kamifujisawa, Iruma-Shi Saitama 358-8555 Japan

Item Identification:

Industrial Scientific and Medical Equipment

SGMAH, SGMPH series (see Attachment 1 for grouping)

Item Description:

**AC Servo Motors** 

30W-750W, 100W-1.5kW

Protection class I

Project-/TCF No.:

TYOEMC04845A

This Certificate of Conformity was issued in accordance with Article 10.2 of the Council Directive 89/336 EEC on the harmonization of the laws of the Member States relating to electromagnetic compatibility. It was transposed into the "Gesetz über die elektromagnetische Verträglichkeit von Geräten vom 9. November 1992 (EMVG, § 5.2)" in Germany. This certificate does not contain any statements pertaining to the EMC protection requirements governed by other laws which serve to implement EC Directives other than the aforementioned Council Directive 89/336 EEC. This certificate or the technical report refers only to the tested sample or product family listed in the above mentioned Project-/TCF documentation.

This certificate does not permit the use of a TÜV PRODUCT SERVICE certification mark on the tested product.

Released with the above mentioned certificate number by the certification body of TÜV PRODUCT SERVICE.

Robert Binder

Sty. des Leitors dar zuständigen Stalle

Department:

TYOEMC/Robert Binder

Date:

02.06.1998



TÜV Product Service GmbH is Competent Body in accordance with EMC Directive 89/336/EEC (BMPT VFG. 91/1992).

## **EC Certificate of Conformity**

No.: E9 98 06 22021 042



concerning the EMC protection requirements in accordance with Article 10 of the Council Directive 89/336/EEC on electromagnetic compatibility for

Yaskawa Electric Corporation Tokyo Plant 480 Kamifujisawa, Iruma-Shi Saitama 358-8555 Japan

Item Identification:

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Industrial Scientific and Medical Equipment

SGMGH-\*\*A\*\*\*\*\*, SGMSH-\*\*A\*\*\*\*\* series

(see Attachment 1 for grouping)

Item Description:

AC Servo Motors 200-230VAC, 0.3-3kW Protection class I

Project-/TCF No.:

TYOEMC04847A

This Certificate of Conformity was issued in accordance with Article 10.2 of the Council Directive 89/336 EEC on the harmonization of the laws of the Member States relating to electromagnetic compatibility. It was transposed into the "Gesetz über die elektromagnetische Verträglichkeit von Geräten vom 9. November 1992 (EMVG, § 5.2)" in Germany. This certificate does not contain any statements pertaining to the EMC protection requirements governed by other laws which serve to implement EC Directives other than the aforementioned Council Directive 89/336 EEC. This certificate or the technical report refers only to the tested sample or product family listed in the above mentioned Project-/TCF documentation.

This certificate does not permit the use of a TÜV PRODUCT SERVICE certification mark on the tested product.

Released with the above mentioned certificate number by the certification body of TÜV PRODUCT SERVICE.

RLA BL Robert Binder

Stv. des Leiters der zuständigen Stelle

Department:

TYOEMC/Robert Binder

Date:

02.06.1998

TÜV Product Service GmbH is Competent Body in accordance with EMC Directive 89/336/EEC (BMPT VFG. 91/1992).



Seite 1 von 1 Page 1 of 1

Zertifikat Nr. / Certificate No.

E9 98 06 22021 042

#### <Grouping>

```
SGMGH-03A*A***,
SGMGH-05A*A***,
SGMGH-09A*A***,
SGMGH-20A*A***,
SGMGH-30A*A***,
SGMGH-06A*B***,
SGMGH-09A*B***,
SGMGH-12A*B***,
SGMGH-20A*B***,
SGMGH-30A*B***,
SGMGH-20A*B***,
SGMGH-30A*B***,
SGMGH-40A*B***,
SGMGH-55A*A**,
SGMGH-55A*A**,
SGMGH-75A*A**

SGMSH-10A****,
SGMSH-15A****,
SGMSH-20A****,
SGMSH-30A****,
SGMSH-40A****,
SGMSH-50A****,
SGMSH-30A****,
SGMSH-30A****,
SGMSH-30A****,
SGMGH-30ACA-AM11,
SGMGH-44ACA-AM12,
SGMGH-55ACA-AM12,
SGMGH-1AACA-AM11
```

Total: 32

Organisationseinheit / Organization unit: Datum / Date:

TYO / Robert Binder modified 26.01.2000 bn

TÜV PRODUCT SERVICE GMBH, Ridlerstraße 31, D-80339 Munich, Germany

RAARI

## **EC Certificate of Conformity**

No.: E9 00 10 23695 003



concerning the EMC protection requirements in accordance with Article 10 of the Council Directive 89/336/EEC on electromagnetic compatibility for

Yaskawa Electric Corporation Yahata Plant 2-1 Shiroishi Kurosaki Yahatanishi-Ku, Kitakyushu-Shi Fukuoka 806-0004 Japan

Item Identification:

Industrial Scientific and Medical Equipment

SGMGH Series, SGMSH Series, SGMUH Series

(See attachment 1 for grouping)

Item Description:

**AC Servo Motors** 400-460VAC, 0.5-15kW Protection class I

Project-/TCF No.:

TYOEMC09256A

This Certificate of Conformity was issued in accordance with Article 10.2 of the Council Directive 89/336 EEC on the harmonization of the laws of the Member States relating to electromagnetic compatibility. It was transposed into the "Gesetz über die elektromagnetische Verträglichkeit von Geräten vom 9. November 1992 (EMVG, § 5.2)" in Germany. This certificate does not contain any statements pertaining to the EMC protection requirements governed by other laws which serve to implement EC Directives other than the aforementioned Council Directive 89/336 EEC. This certificate or the technical report refers only to the tested sample or product family listed in the above mentioned Project-/TCF documentation.

This certificate does not permit the use of a TÜV PRODUCT SERVICE certification mark on the tested product.

Released with the above mentioned certificate number by the certification body of TÜV PRODUCT SERVICE.

Robert Binder

Stv. des Leiters der zuständigen Stelle

Department:

TYOEMC/Robert Binder

02.10.2000

Date:

TÜV Product Service GmbH is Competent Body in accordance with EMC Directive 89/336/EEC (BMPT VFG. 91/1992).

PMOD-ICT-SERVICE

### **EC Certificate of Conformity**

No.: E9 98 09 22021 045



concerning the EMC protection requirements in accordance with Article 10 of the Council Directive 89/336/EEC on electromagnetic compatibility for

Yaskawa Electric Corporation **Tokyo Plant** 480 Kamifujisawa, Iruma-Shi Saitama 358-8555 Japan

Item Identification:

Industrial Scientific and Medical Equipment

SGDM-\*\*\*DA, SGDH-\*\*\*E series (see Attachment 1 & 2 for grouping)

Item Description:

AC Servo Amplifier (AC SERVOPACK) 100-115VAC, 200-230VAC, 30W-3kW

Protection class I

Project-/TCF No.:

TYOEMC05309A

This Certificate of Conformity was issued in accordance with Article 10.2 of the Council Directive 89/336 EEC on the harmonization of the laws of the Member States relating to electromagnetic compatibility. It was transposed into the "Gesetz über die elektromagnetische Verträglichkeit von Geräten vom 9. November 1992 (EMVG, § 5.2)" in Germany. This certificate does not contain any statements pertaining to the EMC protection requirements governed by other laws which serve to implement EC Directives other than the aforementioned Council Directive 89/336 EEC. This certificate or the technical report refers only to the tested sample or product family listed in the above mentioned Project-/TCF documentation.

This certificate does not permit the use of a TÜV PRODUCT SERVICE certification mark on the tested product.

Released with the above mentioned certificate number by the certification body of TÜV PRODUCT SERVICE.

> RH RL Robert Binder

Sty, des Leiters der zuständigen Otalla

Department:

TYOEMC/Robert Binder

Date:

09.09.1998

TÜV Product Service GmbH is Competent Body in accordance with EMC Directive 89/336/EEC (BMPT VFG. 91/1992).



Seite 2 von 2 Page 2 of 2

Zertifikat Nr. / Certificate No.

E9 98 09 22021 045

Grouping:

<u>Model</u>	<u>Voltage</u>	<u>Watts (kW)</u>
SGDH-A3BE*****	100	0.03
SGDH-A5BE*****	100	0.05
SGDH-01BE*****	100	0.10
SGDH-02BE*****	100	0.20
SGDH-A3AE*****	200	0.03
SGDH-A5AE*****	200	0.05
SGDH-01AE*****	200	0.10
SGDH-02AE*****	200	0.20
SGDH-04AE*****	200	0.40
SGDH-05AE*****	200	0.50
SGDH-08AE*****	200	0.75
SGDH-10AE*****	200	1.0
SGDH-15AE*****	200	1.5
SGDH-20AE*****	200	2.0
SGDH-30AE*****	200	3.0
SGDM-**AD*-S****	200	see above power ratings
SGDH-**AE-S****	200	see above power ratings

Sub total: 17

Organisationseinheit / Organization unit: Datum / Date:

Yaskawa Electric Corporation 1998/12/09 modified

TÜV PRODUCT SERVICE GMBH, Ridlerstraße 31, D-80339 Munich, Germany

ROBERT Binder



## Anlage 1 zum Zertifikat

Attachment 1 to the Certificate

Seite 1 von 2 Page 1 of 2

Zertifikat Nr. / Certificate No.

E9 98 09 22021 045

#### Grouping:

<u>Model</u>	<u>Voltage</u>	Watts (kW)
SGDM-A3BDA*****	100	0.03
SGDM-A5BDA*****	100	0.05
SGDM-01BDA*****	100	0.10
SGDM-02BDA*****	100	0.20
SGDM-A3ADA*****	200	0.03
SGDM-A5ADA*****	200	0.05
SGDM-01ADA*****	200	0.10
SGDM-02ADA*****	200	0.20
SGDM-04ADA*****	200	0.40
SGDM-05ADA*****	200	0.50
SGDM-08ADA*****	200	0.75
SGDM-10ADA*****	200	1.0
SGDM-15ADA*****	200	1.5
SGDM-20ADA*****	200	2.0
SGDM-30ADA*****	200	3.0

Sub total: 15

Organisationseinheit / Organization unit: Datum / Date:

Yaskawa Electric Corporation 1998/11/10 modified

TÜV PRODUCT SERVICE GMBH, Ridlerstraße 31, D-80339 Munich, Germany

Robert Binder

### **EC Certificate of Conformity**

No.: E9 99 12 22021 060



concerning the EMC protection requirements in accordance with Article 10 of the Council Directive 89/336/EEC on electromagnetic compatibility for

Yaskawa Electric Corporation Tokyo Plant 480 Kamifujisawa, Iruma-Shi Saitama 358-8555 Japan

Item Identification:

Industrial Scientific and Medical Equipment

SGDM Series SGDH Series

(see attachement for grouping)

Item Description:

AC Servo Amplifier Protection class I

Project-/TCF No.:

TYOEMC07603A

This Certificate of Conformity was issued in accordance with Article 10.2 of the Council Directive 89/336 EEC on the harmonization of the laws of the Member States relating to electromagnetic compatibility. It was transposed into the "Gesetz über die elektromagnetische Verträglichkeit von Geräten vom 9. November 1992 (EMVG, § 5.2)" in Germany. This certificate does not contain any statements pertaining to the EMC protection requirements governed by other laws which serve to implement EC Directives other than the aforementioned Council Directive 89/336 EEC. This certificate or the technical report refers only to the tested sample or product family listed in the above mentioned Project-/TCF documentation.

This certificate does not permit the use of a TÜV PRODUCT SERVICE certification mark on the tested product.

Released with the above mentioned certificate number by the certification body of TÜV PRODUCT SERVICE.

RA /// Frobert Binder

Stv. des Leiters der zuständigen Stelle

Department:

TYOEMC/Robert Binder

Date:

10.12.1999

TÜV Product Service GmbH is Competent Body in accordance with EMC Directive 89/336/EEC (BMPT VFG. 91/1992).

## Anlage 1 zum Zertifikat

Attachment 1 to the Certificate

Seite 1 von 1 Page 1 of 1

Zertifikat Nr. / Certificate No.

E9 99 12 22021 060

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<model></model>	<voltage></voltage>	<power></power>	
SGDM-50ADA*****	200V	5.0kW	
SGDM-60ADA*****	200V	6.0kW	
SGDM-75ADA*****	200V	7.5kW	
SGDH-50AE*****	200V	5.0kW	
SGDH-60AE*****	200V	6.0kW	
SGDH-75AE*****	200V	7.5kW	
SGDH-05DE*****	400V	0.5kW	
SGDH-10DE*****	400V	1.0kW	
SGDH-15DE*****	400V	1.5kW	
SGDH-20DE*****	400V	2.0kW	
SGDH-30DE*****	400V	3.0kW	
SGDH-50DE*****	400V	5.0 <b>k</b> W	
SGDH-60DE*****	400V	6.0kW	
SGDH-75DE*****	400V	7.5kW	
SGDH-1ADE*****	400V	11kW	
SGDH-1EDE*****	400V	15kW	
Total: 16			

Total: 16

Organisationseinheit / Organization unit: Datum / Date:

Yaskawa Electric Corporation / Robert Binder 1999/12/08

TÜV PRODUCT SERVICE GMBH, Ridlerstraße 31, D-80339 Munich, Germany