

TUV SÜD  
ZERTIFIKAT ♦ CERTIFICATE ♦ 認證證書 ♦ CERTIFICADO ♦ CERTIFICAT



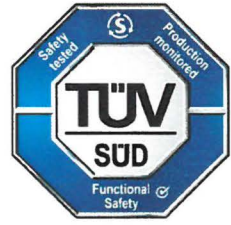
Product Service

# CERTIFICATE

No. Z10 022733 0056 Rev. 00

**Holder of Certificate:** Yaskawa Electric Corporation  
Inverter Plant  
2-13-1 Nishimiyaichi  
Yukuhashi, Fukuoka  
824-8511 JAPAN

**Certification Mark:**



**Product:** AC Servo Systems  
AC Inverter

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.:** YY93685C

**Valid until:** 2025-03-15

**Date,** 2020-03-16

  
( Guido Neumann )



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## Parameters:

Rated voltage	200 to 240 VAC 200 to 240 V3AC 380 to 480 V3AC
Rated frequency	50/60 Hz
Rated input current	See next pages
Protective class	I
Overvoltage category	III
Safety function	STO SIL 3 acc. to IEC/EN 61800-5-2 SIL 3 acc. to IEC/EN 61508 SILCL 3 acc. to IEC/EN 62061 Cat. 3, PL e acc. to ISO/EN ISO 13849-1

## Tested according to:

IEC 61508-1:2010 (SIL 3)  
IEC 61508-2:2010 (SIL 3)  
EN 61508-1:2010 (SIL 3)  
EN 61508-2:2010 (SIL 3)  
ISO 13849-1:2015  
EN ISO 13849-1:2015 (Cat. 3, PL e)  
IEC 62061:2005  
IEC 62061:2005/AMD1:2012  
IEC 62061:2005/AMD2:2015  
EN 62061:2005/A2:2015 (SILCL 3)  
IEC 61800-5-1:2007  
IEC 61800-5-1:2007/AMD1:2016  
EN 61800-5-1:2007/A1:2017  
IEC 61800-5-2:2016  
EN 61800-5-2:2017  
IEC 61326-3-1:2017  
EN 61326-3-1:2017  
IEC 61000-6-7:2014  
EN 61000-6-7:2015

## Factory(ies):

038663, 042802, 051347, 063989, 076296



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Model(s): GA500 Inverter Series

CIPR - \*\*\*\* \* \* \*\*\* \* \* \* \* - \* \* \* \* \* \* \* \* - \*\*\*\*  
 A - B C D E F G H I - J K L M N O - P

with:

From A to I: Basic Code

From J to O: Optional Code

(Control terminal, option cards, keypad and software setting. Not related to LVD.)

P: Custom Code

(Custom software and initial software setting. Not related to LVD.)

## Basic Code

A: General purpose Inverter

Group	Model	Note
CIPR	Yaskawa new generation inverter	--

B: Basic name of Inverter Series

Group	Model	Note
GA50	GA500 General purpose Inverter Series	--

C: Regional specification for initial software setting

Group	Model	Note
A to Z	Regional specification for initial software setting	--

D: Rated Voltage

Group	Model	Note
2	200V 3-phase	--
4	400V 3-phase	--
B	200V 1-phase	--

E: Rated output current

D: 2 (200V 3 phase)

Frame	Model	Rating (HD)			
	GA500	Maximum Applicable Motor Capacity (HP)	Maximum Applicable Motor Capacity (kW)	Input Current [A]	Output Current [A]
V1	001	1/6	0.1	0.7	0.8
	002	1/4	0.2	1.5	1.6
	004	1/2	0.4/0.55	2.9	3.0
	006	1	0.75/1.1	5.8	5.0
V2	008	1.5	1.1	7.0	6.9
	010	2	1.5	7.5	8.0
	012	3	2.2	11	11.0
V3	018	4	3	15.6	14.0
	021	5	3.7/4.0	18.9	17.6
V5	030	7.5	5.5	24	25
	042	10	7.5	37	33

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V6	056	15	11	52	47
V7	070	20	15	68	60
	082	25	18.5	96	75

D: 4 (400V 3 phase)

Frame	Model	Rating (HD)			
	GA500	Maximum Applicable Motor Capacity (HP)	Maximum Applicable Motor Capacity (kW)	Input Current [A]	Output Current [A]
V2	001	1/2	0.2/0.37	1.2	1.2
	002	3/4	0.4/0.55	1.8	1.8
	004	2	0.75/1.1	3.2	3.4
	005	3	1.5	4.4	4.8
	007	3	2.2	6.0	5.6
V3	009	4	3.0	8.2	7.3
	012	5	3.7/4.0	10.4	9.2
V5	018	10	5.5	15	14.8
	023	10	7.5	20	18.0
V6	031	15	11.0	29	24.0
	038	20	15.0	39	31.0
V8	044	25	18.5	50.5	39.0
	060	30	22.0	59.7	45.0

D: B (200V 1 phase)

Frame	Model	Rating (HD)			
	GA500	Maximum Applicable Motor Capacity (HP)	Maximum Applicable Motor Capacity (kW)	Input Current [A]	Output Current [A]
V1	001	1/6	0.1	1.4	0.8
	002	1/4	0.2	2.8	1.6
	004	1/2	0.4/0.55	5.5	3
V2	006	1	0.75/1.1	11	5
	010	2	1.5	14.1	8
V3	012	3	2.2	20.6	11
V4	018	5	3.7/4.0	35.0	17.6

F: EMC filter option

Group	Model	Note
A	No built-in filter	--
E	built-in filter	--

G: Enclosure

Group	Model	Note
B	IP20	--
F	IP20, UL Type1	--



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## H: Environmental Specification

Group	Model	Note
A	Standard (Conformal coating PCB)	Non-safety related
B to Z	Put any alphabet for an Environmental Specification	Non-safety related

## I: Design Spec

Group	Comment	Note
A to Z	Put any alphabet for a design Spec	Non-safety related

## Optional Code

### J: Control terminal option

Group	Comment	Note
A to Z	Put any alphabet for a Control terminal setting.	Non-safety related

### K: Option setting in slot A

Group	Comment	Note
A to Z	Put any alphabet for a Option setting in slot A	Non-safety related

### L: Option setting

Group	Comment	Note
A	Standard	Non-safety related

### M: Option setting

Group	Comment	Note
A	Standard	Non-safety related

### N: Keypad option

Group	Comment	Note
A to Z	Put any alphabet for a Keypad	Non-safety related

### O: Sub-application software setting

Group	Comment	Note
A to Z	Put any alphabet for a Sub-application software	Non-safety related

## Custom Code

### P: Custom setting

Group	Comment	Note
0000 to 9999	Put any numeric for a Custom setting	Non-safety related

## Zertifizierungsvertrag

Grundlage für die Zertifikatserteilung ist die Prüf- und Zertifizierungsordnung von TÜV SÜD Product Service.

Mit Erhalt des Zertifikates erkennt der Zertifikatsinhaber die jeweils gültige Fassung der Prüf- und Zertifizierungsordnung an ([www.tuev-sued.de/ps\\_regulations](http://www.tuev-sued.de/ps_regulations)) und wird somit Partner im Zertifiziersystem von TÜV SÜD Product Service.

## Certification contract

Certification is based on the TÜV SÜD Product Service Testing and Certification Regulations. On receipt of the certificate the certificate holder agrees to the current version of the Testing and Certification Regulations ([www.tuv-sud.com/ps\\_regulations](http://www.tuv-sud.com/ps_regulations)) and thus becomes partner in the TÜV SÜD Product Service Certification System.

## 认证合约

认证基于 TÜV SÜD 产品服务《测试及认证准则》。获得证书即表明证书持有者接受当前版本的《测试及认证准则》（见 [www.tuv-sud.com/ps\\_regulations](http://www.tuv-sud.com/ps_regulations)）并成为 TÜV SÜD 产品服务认证系统内的合作伙伴。

## 認証契約

認証は TÜV SÜD Product Service の試験認証規約に基づく。認証書保持者は認証書を受領することにより最新の試験認証規約([www.tuv-sud.com/ps\\_regulations](http://www.tuv-sud.com/ps_regulations))に同意したものとする。その結果、TÜV SÜD Product Service 認証システムのパートナーとなる。

## Contrato de certificação

A certificação se baseia nos Regulamentos de Testes e Certificação do Grupo TÜV SÜD. Ao receber o certificado, o Fornecedor, titular do certificado concorda com a versão atual dos Regulamentos de Testes e Certificação do Grupo TÜV SÜD ([www.tuv-sud.com/ps\\_regulations](http://www.tuv-sud.com/ps_regulations)) e assim, torna-se parceiro no Sistema de Certificação de Produtos e Serviços TÜV SÜD.

## Prinzipielle Voraussetzung für die Gültigkeit des Zertifikates:

- Gültigkeit der zitierten normativen Prüfgrundlage(n) ist gegeben und zusätzlich bei Zertifikaten mit Berechtigung zur Verwendung eines Prüfzeichens bzw. bei Zertifikaten für QM-Systeme:
- Voraussetzungen für vorschriftsmäßige Fertigung werden eingehalten.
- Die Fertigungs- bzw. Betriebsstätten werden regelmäßig überwacht.

## Requirements for the validity of the certificate in principle:

- Validity of the quoted test standard(s) In addition, for certificates with the right to use a certification mark and for QM certificates:
- Conditions for an adequate manufacturing are maintained
- Regular surveillance of the facility is performed

## 维持证书有效性的原则要求：

- 认证所依据标准的有效性
- 此外，对于授权可使用认证标志的证书和质量管理体系证书：
- 保持充分的生产条件
  - 生产场地通过定期的监督

## 認証書の有効性に関する原則的な要求事項

- 引用している試験規格が有効である
- さらに認証マークの使用を許諾された認証書や品質マネジメント認証書は：
- 適切な製造の条件を維持している
  - 定期的な工場監査を実施している

## Requisitos para a validade do certificado (em princípio):

- Validade da(s) norma(s) de ensaio(s) referenciada(s).
- Adicionalmente, para os certificados com o direito ao uso da marca de certificação e para certificados de SG:
- Condições de fabricação adequada estão mantidas.
  - Auditoria de monitoração realizada regularmente.