



CERTIFICATE

No. Z10 10 08 22733 026

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.: 717500979

Date, 2010-09-06

Günter Greil
 (Günter Greil)



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**CERTIFICATE**

No. Z10 10 08 22733 026

Model(s): **CIMR-V1000 series**
For nomenclature see attachment

Parameters:

Rated voltage:	200 to 240 V 3ac 200 to 240 V ac 380 to 480 V 3ac
Rated frequency:	50 / 60 Hz
Rated input current:	200 V _{ac} : 1.2 to 17.5 A 200 V _{3ac} : 1.2 to 69 A 400 V _{3ac} : 1.2 to 38 A
Overvoltage category:	III
Protective class:	I
Remark:	When installing/inserting the equipment all requirements of the mentioned test standards must be fulfilled.

Tested according to:

- 2006/42/EC Machinery Directive
- IEC 61508:1998 / EN 61508:2001 Part 1,3,4(SIL 2)
- IEC 61508-2:2000 / EN 61508-2:2001 (SIL 2)
- ISO 13849-1:2006
- EN ISO 13849-1:2008 (Cat. 3,PL d)
- EN 55011/A2:2007 (Group1 ClassA)
- EN 61000-6-2:2005
- IEC 61800-3:2004 / EN 61800-3:2004
- IEC 61800-5-1:2007 / EN 61800-5-1:2007

Factory(ies): 42802, 63989, 51347, 38663



ATTACHMENT

to certificate

No. Z10 10 08 22733 026

Nomenclature of V1000 series

Nomenclature/Basic

<u>CIMR-V</u>	<u>A</u>	<u>2</u>	<u>A</u>	<u>0001</u>	<u>B</u>	<u>A</u>	<u>*</u>
A	B	C	D	E	F	G	H

A: Basic name of V1000 Series

B: Regional specification for initial software setting
Put any alphabet for regional settings.

C: Rated Voltage
B: 200Vac
2: 200V3ac
4: 400V3ac

D: Customer Specification
Any alphabet for a customer specification such as software initial setting, enclosure colour.

E: Rated output

200Vac

Normal duty use (120% load 1 minute)			Heavy-duty use (150% load 1 minute)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0001	1,2	0,18	0001	0,8	0,1
0002	1,9	0,37	0002	1,6	0,2
0003	3,3	0,75	0003	3,0	0,4
0006	6,0	1,1	0006	5,0	0,75
0010	9,6	2,2	0010	8,0	1,5
0012	12,0	3,0	0012	11,0	2,2

200V3ac

Normal duty use (120% load 1 minute)			Heavy-duty use (150% load 1 minute)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0001	1,2	0,18	0001	0,8	0,1
0002	1,9	0,37	0002	1,6	0,2
0004	3,5	0,75	0004	3,0	0,4
0006	6,0	1,1	0006	5,0	0,75
0008	8,0	1,5	0008	6,9	1,1



0010	9,6	2,2	0010	8,0	1,5
0012	12,0	3,0	0012	11,0	2,2
0018	17,5	3,7	0018	14,0	3,0
0020	19,6	5,5	0020	17,5	4,0

400V3ac

Normal duty use (120% load 1 minute)			Heavy-duty use (150% load 1 minute)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0001	1,2	0,37	0001	1,2	0,2
0002	2,1	0,75	0002	1,8	0,4
0004	4,1	1,5	0004	3,4	0,75
0005	5,4	2,2	0005	4,8	1,5
0007	6,9	3,0	0007	5,5	2,2
0009	8,8	3,7	0009	7,2	3,0
0011	11,1	5,5	0011	9,2	4,0

- F: Enclosure
 - B: IP20
 - A: IP00
 - F: With upper cover and bottom cover

- G: Countermeasure for air pollution
 - A: Standard
 - B to Z: Countermeasure for air pollution (non safety relevant)

- H: Design version
 - A: Functional safety compliance

Nomenclature/2nd

CIMR-V A 2 A 0001 B A *
 A B C D E F G H

- A Basic name of V1000 Series
- B Regional specification for initial software setting
Put any alphabet for regional setting.
- C Rated Voltage
 - 2: 200V3ac
 - 4: 400V3ac
- D Customer Specification
Any alphabet for a customer specification such as software initial setting, enclosure colour.



E Rated output

200V3ac

Normal duty use (120% load 1 minute)			Heavy-duty use (150% load 1 minute)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0030	30	7,5	0030	25,0	5,5
0040	40	11,0	0040	33,0	7,5
0056	56	15,0	0056	47,0	11,0
0069	69	18,5	0069	60,0	15,0

400V3ac

Normal duty use (120% load 1 minute)			Heavy-duty use (150% load 1 minute)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0018	17,5	7,5	0018	14,8	5,5
0023	23,0	11,0	0023	18,0	7,5
0031	31,0	15,0	0031	24,0	11,0
0038	38,0	18,5	0038	31,0	15,0

F Enclosure

- A: IP00
- F: With upper cover and bottom cover

G Countermeasure for air pollution

- A: Standard
- B to Z: Countermeasure for air pollution (non safety relevant)

H Design version

- A: Functional safety compliance

Nomenclature/Finless and IP20

CIMR-V A 2 A 0001 J A *
 A B C D E F G H

A Basic name of V1000 Series

B Regional specification for initial software setting
Put any alphabet for regional setting.

C Rated Voltage
B: 200Vac
2: 200V3ac
4: 400V3ac

D Customer Specification
Any alphabet for a customer specification such as software initial setting, enclosure color.



E Rated output

200Vac

Normal duty use (120% load 1 minute)			Heavy-duty use (150% load 1 minute)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0001	1,2	0,18	0001	0,8	0,1
0002	1,9	0,37	0002	1,6	0,2
0003	3,3	0,75	0003	3,0	0,4
0006	6,0	1,1	0006	5,0	0,75
0010	9,6	2,2	0010	8,0	1,5
0012	12,0	3,0	0012	11,0	2,2

200V3ac

Normal duty use (120% load 1 minute)			Heavy-duty use (150% load 1 minute)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0001	1,2	0,18	0001	0,8	0,1
0002	1,9	0,37	0002	1,6	0,2
0004	3,5	0,75	0004	3,0	0,4
0006	6,0	1,1	0006	5,0	0,75
0008	8,0	1,5	0008	6,9	1,1
0010	9,6	2,2	0010	8,0	1,5
0012	12,0	3,0	0012	11,0	2,2
0018	17,5	3,7	0018	14,0	3,0
0020	19,6	5,5	0020	17,5	4,0

400V3ac

Normal duty use (120% load 1 minute)			Heavy-duty use (150% load 1 minute)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0001	1,2	0,37	0001	1,2	0,2
0002	2,1	0,75	0002	1,8	0,4
0004	4,1	1,5	0004	3,4	0,75
0005	5,4	2,2	0005	4,8	1,5
0007	6,9	3,0	0007	5,5	2,2
0009	8,8	3,7	0009	7,2	3,0
0011	11,1	5,5	0011	9,2	4,0

F Enclosure

J: Finless type and IP20

G Countermeasure for air pollution

A: Standard

B to Z: Countermeasure for air pollution (non safety relevant)

H Design version

A: Functional safety compliance



Nomenclature/C3 Filter

CIMR-V A 2 A 0001 E A *
 A B C D E F G H

- A Basic name of V1000 Series
- B Regional specification for initial software setting
Put any alphabet for regional setting.
- C Rated Voltage
B: 200Vac
4: 400V3ac
- D Customer Specification
Any alphabet for a customer specification such as software initial setting, enclosure color.
- E Rated output

200Vac

Normal duty use (120% load 1 minute)			Heavy-duty use (150% load 1 minute)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0001	1,2	0,18	0001	0,8	0,1
0002	1,9	0,37	0002	1,6	0,2
0003	3,3	0,75	0003	3,0	0,4
0006	6,0	1,1	0006	5,0	0,75
0010	9,6	2,2	0010	8,0	1,5
0012	12,0	3,0	0012	11,0	2,2

400V3ac

Normal duty use (120% load 1 minute)			Heavy-duty use (150% load 1 minute)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0001	1,2	0,37	0001	1,2	0,2
0002	2,1	0,75	0002	1,8	0,4
0004	4,1	1,5	0004	3,4	0,75
0005	5,4	2,2	0005	4,8	1,5
0007	6,9	3,0	0007	5,5	2,2
0009	8,8	3,7	0009	7,2	3,0
0011	11,1	5,5	0011	9,2	4,0

- F Enclosure
E: C3 filter installed
- G Countermeasure for air pollution
A: Standard
B to Z: Countermeasure for air pollution (non safety relevant)
- H Design version
A: Functional safety compliance



Nomenclature/Finless Bigger

CIMR-V A 2 A 0030 J A *
A B C D E F G H

- A Basic name of V1000 Series
- B Regional specification for initial software setting
Put any alphabet for regional setting.
- C Rated Voltage
2: 200V3ac
4: 400V3ac
- D Customer Specification
Any alphabet for a customer specification such as software initial setting, enclosure colour.
- E Rated output

200V3ac

Normal duty use (120% load 1 minute)			Heavy-duty use (150% load 1 minute)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0030	30	7,5	0030	25,0	5,5
0040	40	11,0	0040	33,0	7,5
0056	56	15,0	0056	47,0	11,0
0069	69	18,5	0069	60,0	15,0

400V3ac

Normal duty use (120% load 1 minute)			Heavy-duty use (150% load 1 minute)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0018	17,5	7,5	0018	14,8	5,5
0023	23,0	11,0	0023	18,0	7,5
0031	31,0	15,0	0031	24,0	11,0
0038	38,0	18,5	0038	31,0	15,0

- F Enclosure
J: IP20/Heat-sink less [excl. 0069]
L: IP00/Heat-sink less with upper cover and bottom cover [for 0069 only]
- G Countermeasure for air pollution
A: Standard
B to Z: Countermeasure for air pollution (non safety relevant)
- H Design version
A: Functional safety compliance



Nomenclature with upper cover and bottom cover

CIMR-V
A
A
B
B
C
A
D
0018
E
B
F
A
G
*
H

- A Basic name of V1000 Series
- B Regional specification for initial software setting
Put any alphabet for regional setting.
- C Rated Voltage
B: 200Vac
- D Customer Specification
Any alphabet for a customer specification such as software initial setting,
enclosure color.

E Rated output

Normal duty use (120% load 1 minute)			Heavy-duty use (150% load 1 minute)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0018	-	-	0018	17,5	4,0

- F Enclosure
B: IP20
F: With upper cover and bottom cover
- G Countermeasure for air pollution
A: Standard
B to Z: Countermeasure for air pollution (non safety relevant)
- H Design version
A: Functional safety compliance



Nomenclature/IP66 with C1 or C2 Filter and without

CIMR-V A 2 A **** G A *
 A B C D E F G H

- A Basic name of V1000 Series
- B Regional specification for initial software setting
 Put any alphabet for regional setting.
- C Rated Voltage
 B: 200Vac
 2: 200V3ac
 4: 400V3ac
- D Customer Specification
 Any alphabet for a customer specification such as software initial setting,
 enclosure colour.
- E Rated output

200Vac

Normal duty use (120% load 1 minutes)			Heavy-duty use (150% load 1 minutes)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0001	1,2	0,18	0001	0,8	0,1
0002	1,9	0,37	0002	1,6	0,2
0003	3,3	0,75	0003	3,0	0,4
0006	6,0	1,1	0006	5,0	0,75
0010	9,6	2,2	0010	8,0	1,5
0012	12,0	3,0	0012	11,0	2,2

200V3ac

Normal duty use (120% load 1 minutes)			Heavy-duty use (150% load 1 minutes)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0001	1,2	0,18	0001	0,8	0,1
0002	1,9	0,37	0002	1,6	0,2
0004	3,5	0,75	0004	3,0	0,4
0006	6,0	1,1	0006	5,0	0,75
0008	8,0	1,5	0008	6,9	1,1
0010	9,6	2,2	0010	8,0	1,5
0012	12,0	3,0	0012	11,0	2,2
0018	17,5	3,7	0018	14,0	3,0
0020	19,6	5,5	0020	17,5	4,0
0030	30	7,5	0030	25,0	5,5
0040	40	11,0	0040	33,0	7,5
0056	56	15,0	0056	47,0	11,0
0069	69	18,5	0069	60,0	15,0



400V3ac

Normal duty use (120% load 1 minutes)			Heavy-duty use (150% load 1 minutes)		
Model	Rated current (A)	Maximum applicable motor (KW)	Model	Rated current (A)	Maximum applicable motor (KW)
0001	1,2	0,37	0001	1,2	0,2
0002	2,1	0,75	0002	1,8	0,4
0004	4,1	1,5	0004	3,4	0,75
0005	5,4	2,2	0005	4,8	1,5
0007	6,9	3,0	0007	5,5	2,2
0009	8,8	3,7	0009	7,2	3,0
0011	11,1	5,5	0011	9,2	4,0
0018	17,5	7,5	0018	14,8	5,5
0023	23,0	11,0	0023	18,0	7,5
0031	31,0	15,0	0031	24,0	11,0
0038	38,0	18,5	0038	31,0	15,0

- F Enclosure
 - G: IP66/without filter (NEMA4)
 - H: IP66/with C1 or C2 filter

- G Countermeasure for air pollution
 - A: Standard
 - B to Z: Countermeasure for air pollution (non safety relevant)

- H Design version
 - A: Functional safety compliance

Department: TR-RA/MUC
 Date: 2010-09-06