ZERTIFIKAT ◆ CERTIFICATE ◆ 認証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Product Service

CERTIFICATE

No. Z2 13 02 22944 231

Holder of Certificate: **Panasonic Corporation**
7-1-1 Morofuku
Daito
Osaka
574-0044 JAPAN

Production Facility(ies): 54068, 27605

Certification Mark:

Product: **AC Servo Systems**
AC Servo Amplifier

Model(s): **MINAS-A5 Series**
MINAS-A5II Series
Size A, B, C, D, E, F, G, H
(Refer to Nomenclature for detail)

Parameters:

Rated voltage:	100-120 Vac/200-240 Vac, V3ac/380-480 V3ac 200-230 V3ac/ 280-325 Vdc(for E,F,G,H) 380-480 V3ac/ 535-680 Vdc(for D,E,F,G,H)
Rated frequency:	50/60 Hz
Rated input current:	0,9-58,0 A
Overvoltage category:	III
Protection class:	I
EMC Classification:	EMI: Category C3, EMS: Second Environment (EN 61800-3) Group 1, Class A (EN 55011)

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

Tested according to:
EN 61800-5-1:2007
EN 61800-3:2004
EN 55011/A1:2010
EN 61000-6-2:2005

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.: 73541206

Date, 2013-02-22
(Takuji Kanazawa)

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Certificate Attachment
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Product Service

Input and Output ratings
MINAS A5 and A5II series (Basic models)

	Input					Output				
Model	Frame type	Voltage (Vac/Vdc) (-15%, +10%)	Phase	FLC (A)	Frq. (Hz)	Voltage (Vac)	Phase	Current (A)	Frq. (Hz)	Power (W)
MADzT1105xxx	A	100 to 120Vac	1	1,7	50/60	0-120	3	1,2	0 to 500	50
MADzT1107xxx	A	100 to 120Vac	1	2,6	50/60	0-120	3	1,7	0 to 500	100
MADzT1505xxx	A	200 to 240Vac	1/3	1,6/0,9	50/60	0-240	3	1,2	0 to 500	100
MADzT1507xxx	A	200 to 240Vac	1/3	2,4/1,3	50/60	0-240	3	1,6	0 to 500	200
MBDzT2110xxx	B	100 to 120Vac	1	4,3	50/60	0-120	3	2,5	0 to 500	200
MBDzT2510xxx	B	200 to 240Vac	1/3	4,1/2,4	50/60	0-240	3	2,6	0 to 500	400
MCDzT3120xxx	C	100 to 120Vac	1	7,6	50/60	0-120	3	4,6	0 to 500	400
MCDzT3520xxx	C	200 to 240Vac	1/3	6,6/3,6	50/60	0-240	3	4,1	0 to 500	750
MDDzT3530xxx	D	200 to 240Vac	1/3	9,1/5,2	50/60	0-240	3	5,9	0 to 416,6	1000
MDDzT5540xxx	D	200 to 240Vac	1/3	14,2/8,1	50/60	0-240	3	9,4	0 to 416,6	1500
MDDzT2407xxx	D	380 to 480Vac 535 to 680Vdc	3	2,1	50/60	0-480	3	1,5	0 to 416,6	600
MDDzT2412xxx	D	380 to 480Vac 535 to 680Vdc	3	2,8	50/60	0-480	3	2,9	0 to 416,6	1000
MDDzT3420xxx	D	380 to 480Vac 535 to 680Vdc	3	3,9	50/60	0-480	3	4,7	0 to 416,6	1500
MEDzT7364xxx	E	200 to 230Vac 280 to 325Vdc	3	11,8	50/60	0-230	3	13,4	0 to 416,6	2500
MEDzT4430xxx	E	380 to 480Vac 535 to 680Vdc	3	5,9	50/60	0-480	3	6,7	0 to 416,6	2500
MFDzTA390xxx	F	200 to 230Vac 280 to 325Vdc	3	15,1	50/60	0-230	3	18,7	0 to 416,6	3000
MFDzTB3A2xxx	F	200 to 230Vac 280 to 325Vdc	3	21,6	50/60	0-230	3	33,0	0 to 416,6	5000
MFDzT5440xxx	F	380 to 480Vac 535 to 680Vdc	3	7,6	50/60	0-480	3	9,4	0 to 416,6	3000
MFDzTA464xxx	F	380 to 480Vac 535 to 680Vdc	3	12,1	50/60	0-480	3	16,5	0 to 416,6	5000
MGDzTC3yyxxx	G	200 to 230Vac 280 to 325Vdc	3	32,0	50/60	0-230	3	44,0	0-250	7500
MGDzTB4yyxxx	G	380 to 480Vac 535 to 680Vdc	3	16,0	50/60	0-480	3	22,0	0-250	7500
MHDzTC3yyxxx	H	200 to 230Vac 280 to 325Vdc	3	58,0	50/60	0-230	3	71,3	0-250	15000
MHDzTB4yyxxx	H	380 to 480Vac 535 to 680Vdc	3	29,0	50/60	0-480	3	35,6	0-250	15000

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MINAS A5L and A5II L Type (Linear-Motor-drive Type of MINAS A5 series)

	Input					Output				
Model	Frame type	Voltage (Vac/Vdc) (-15%, +10%)	Phase	FLC (A)	Frq. (Hz)	Voltage (Vac)	Phase	Current (A)	Frq. (Hz)	Power (W)
MADzT1105Lxx	A	100 to 120Vac	1	1,7	50/60	0-120	3	1,2	0 to 500	50
MADzT1107Lxx	A	100 to 120Vac	1	2,6	50/60	0-120	3	1,7	0 to 500	100
MADzT1505Lxx	A	200 to 240Vac	1/3	1,6/0,9	50/60	0-240	3	1,2	0 to 500	100
MADzT1507Lxx	A	200 to 240Vac	1/3	2,4/1,3	50/60	0-240	3	1,6	0 to 500	200
MBDzT2110Lxx	B	100 to 120Vac	1	4,3	50/60	0-120	3	2,5	0 to 500	200
MBDzT2510Lxx	B	200 to 240Vac	1/3	4,1/2,4	50/60	0-240	3	2,6	0 to 500	400
MCDzT3120Lxx	C	100 to 120Vac	1	7,6	50/60	0-120	3	4,6	0 to 500	400
MCDzT3520Lxx	C	200 to 240Vac	1/3	6,6/3,6	50/60	0-240	3	4,1	0 to 500	750
MDDzT3530Lxx	D	200 to 240Vac	1/3	9,1/5,2	50/60	0-240	3	5,9	0 to 416,6	1000
MDDzT5540Lxx	D	200 to 240Vac	1/3	14,2/8,1	50/60	0-240	3	9,4	0 to 416,6	1500
MDDzT2407Lxx	D	380 to 480Vac 535 to 680Vdc	3	2,1	50/60	0-480	3	1,5	0 to 416,6	600
MDDzT2412Lxx	D	380 to 480Vac 535 to 680Vdc	3	2,8	50/60	0-480	3	2,9	0 to 416,6	1000
MDDzT3420Lxx	D	380 to 480Vac 535 to 680Vdc	3	3,9	50/60	0-480	3	4,7	0 to 416,6	1500
MEDzT7364Lxx	E	200 to 230Vac 280 to 325Vdc	3	11,8	50/60	0-230	3	13,4	0 to 416,6	2500
MEDzT4430Lxx	E	380 to 480Vac 535 to 680Vdc	3	5,9	50/60	0-480	3	6,7	0 to 416,6	2500
MFDzTA390Lxx	F	200 to 230Vac 280 to 325Vdc	3	15,1	50/60	0-230	3	18,7	0 to 416,6	3000
MFDzTB3A2Lxx	F	200 to 230Vac 280 to 325Vdc	3	21,6	50/60	0-230	3	33,0	0 to 416,6	5000
MFDzT5440Lxx	F	380 to 480Vac 535 to 680Vdc	3	7,6	50/60	0-480	3	9,4	0 to 416,6	3000
MFDzTA464Lxx	F	380 to 480Vac 535 to 680Vdc	3	12,1	50/60	0-480	3	16,5	0 to 416,6	5000
MGDzTC3yyLxx	G	200 to 230Vac 280 to 325Vdc	3	32,0	50/60	0-230	3	44,0	0-250	7500
MGDzTB4yyLxx	G	380 to 480Vac 535 to 680Vdc	3	16,0	50/60	0-480	3	22,0	0-250	7500
MHDzTC3yyLxx	H	200 to 230Vac 280 to 325Vdc	3	58,0	50/60	0-230	3	71,3	0-250	15000
MHDzTB4yyLxx	H	380 to 480Vac 535 to 680Vdc	3	29,0	50/60	0-480	3	35,6	0-250	15000

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MINAS A5E and A5II E Type (Position Control Type of MINAS A5 series)

	Input					Output				
Model	Frame type	Voltage (Vac/Vdc) (-15%, +10%)	Phase	FLC (A)	Frq. (Hz)	Voltage (Vac)	Phase	Current (A)	Frq. (Hz)	Power (W)
MADzT1105Exx	A	100 to 120Vac	1	1,7	50/60	0-120	3	1,2	0 to 500	50
MADzT1107Exx	A	100 to 120Vac	1	2,6	50/60	0-120	3	1,7	0 to 500	100
MADzT1505Exx	A	200 to 240Vac	1/3	1,6/0,9	50/60	0-240	3	1,2	0 to 500	100
MADzT1507Exx	A	200 to 240Vac	1/3	2,4/1,3	50/60	0-240	3	1,6	0 to 500	200
MBDzT2110Exx	B	100 to 120Vac	1	4,3	50/60	0-120	3	2,5	0 to 500	200
MBDzT2510Exx	B	200 to 240Vac	1/3	4,1/2,4	50/60	0-240	3	2,6	0 to 500	400
MCDzT3120Exx	C	100 to 120Vac	1	7,6	50/60	0-120	3	4,6	0 to 500	400
MCDzT3520Exx	C	200 to 240Vac	1/3	6,6/3,6	50/60	0-240	3	4,1	0 to 500	750
MDDzT3530Exx	D	200 to 240Vac	1/3	9,1/5,2	50/60	0-240	3	5,9	0 to 416,6	1000
MDDzT5540Exx	D	200 to 240Vac	1/3	14,2/8,1	50/60	0-240	3	9,4	0 to 416,6	1500
MDDzT2407Exx	D	380 to 480Vac 535 to 680Vdc	3	2,1	50/60	0-480	3	1,5	0 to 416,6	600
MDDzT2412Exx	D	380 to 480Vac 535 to 680Vdc	3	2,8	50/60	0-480	3	2,9	0 to 416,6	1000
MDDzT3420Exx	D	380 to 480Vac 535 to 680Vdc	3	3,9	50/60	0-480	3	4,7	0 to 416,6	1500
MEDzT7364Exx	E	200 to 230Vac 280 to 325Vdc	3	11,8	50/60	0-230	3	13,4	0 to 416,6	2500
MEDzT4430Exx	E	380 to 480Vac 535 to 680Vdc	3	5,9	50/60	0-480	3	6,7	0 to 416,6	2500
MFDzTA390Exx	F	200 to 230Vac 280 to 325Vdc	3	15,1	50/60	0-230	3	18,7	0 to 416,6	3000
MFDzTB3A2Exx	F	200 to 230Vac 280 to 325Vdc	3	21,6	50/60	0-230	3	33,0	0 to 416,6	5000
MFDzT5440Exx	F	380 to 480Vac 535 to 680Vdc	3	7,6	50/60	0-480	3	9,4	0 to 416,6	3000
MFDzTA464Exx	F	380 to 480Vac 535 to 680Vdc	3	12,1	50/60	0-480	3	16,5	0 to 416,6	5000
MGDzTC3yyExx	G	200 to 230Vac 280 to 325Vdc	3	32,0	50/60	0-230	3	44,0	0-250	7500
MGDzTB4yyExx	G	380 to 480Vac 535 to 680Vdc	3	16,0	50/60	0-480	3	22,0	0-250	7500
MHDzTC3yyExx	H	200 to 230Vac 280 to 325Vdc	3	58,0	50/60	0-230	3	71,3	0-250	15000
MHDzTB4yyExx	H	380 to 480Vac 535 to 680Vdc	3	29,0	50/60	0-480	3	35,6	0-250	15000

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Product Service

MINAS A5N and A5II N type (RTEX Network Type of MINAS A5 series)

	Input					Output				
Model	Frame type	Voltage (Vac/Vdc) (-15%, +10%)	Phase	FLC (A)	Frq. (Hz)	Voltage (Vac)	Phase	Current (A)	Frq. (Hz)	Power (W)
MADzT1105Nxx	A	100 to 120Vac	1	1,7	50/60	0-120	3	1,2	0 to 500	50
MADzT1107Nxx	A	100 to 120Vac	1	2,6	50/60	0-120	3	1,7	0 to 500	100
MADzT1505Nxx	A	200 to 240Vac	1/3	1,6/0,9	50/60	0-240	3	1,2	0 to 500	100
MADzT1507Nxx	A	200 to 240Vac	1/3	2,4/1,3	50/60	0-240	3	1,6	0 to 500	200
MBDzT2110Nxx	B	100 to 120Vac	1	4,3	50/60	0-120	3	2,5	0 to 500	200
MBDzT2510Nxx	B	200 to 240Vac	1/3	4,1/2,4	50/60	0-240	3	2,6	0 to 500	400
MCDzT3120Nxx	C	100 to 120Vac	1	7,6	50/60	0-120	3	4,6	0 to 500	400
MCDzT3520Nxx	C	200 to 240Vac	1/3	6,6/3,6	50/60	0-240	3	4,1	0 to 500	750
MDDzT3530Nxx	D	200 to 240Vac	1/3	9,1/5,2	50/60	0-240	3	5,9	0 to 416,6	1000
MDDzT5540Nxx	D	200 to 240Vac	1/3	14,2/8,1	50/60	0-240	3	9,4	0 to 416,6	1500
MDDzT2407Nxx	D	380 to 480Vac 535 to 680Vdc	3	2,1	50/60	0-480	3	1,5	0 to 416,6	600
MDDzT2412Nxx	D	380 to 480Vac 535 to 680Vdc	3	2,8	50/60	0-480	3	2,9	0 to 416,6	1000
MDDzT3420Nxx	D	380 to 480Vac 535 to 680Vdc	3	3,9	50/60	0-480	3	4,7	0 to 416,6	1500
MEDzT7364Nxx	E	200 to 230Vac 280 to 325Vdc	3	11,8	50/60	0-230	3	13,4	0 to 416,6	2500
MEDzT4430Nxx	E	380 to 480Vac 535 to 680Vdc	3	5,9	50/60	0-480	3	6,7	0 to 416,6	2500
MFDzTA390Nxx	F	200 to 230Vac 280 to 325Vdc	3	15,1	50/60	0-230	3	18,7	0 to 416,6	3000
MFDzTB3A2Nxx	F	200 to 230Vac 280 to 325Vdc	3	21,6	50/60	0-230	3	33,0	0 to 416,6	5000
MFDzT5440Nxx	F	380 to 480Vac 535 to 680Vdc	3	7,6	50/60	0-480	3	9,4	0 to 416,6	3000
MFDzTA464Nxx	F	380 to 480Vac 535 to 680Vdc	3	12,1	50/60	0-480	3	16,5	0 to 416,6	5000
MGDzTC3yyNxx	G	200 to 230Vac 280 to 325Vdc	3	32,0	50/60	0-230	3	44,0	0-250	7500
MGDzTB4yyNxx	G	380 to 480Vac 535 to 680Vdc	3	16,0	50/60	0-480	3	22,0	0-250	7500
MHDzTC3yyNxx	H	200 to 230Vac 280 to 325Vdc	3	58,0	50/60	0-230	3	71,3	0-250	15000
MHDzTB4yyNxx	H	380 to 480Vac 535 to 680Vdc	3	29,0	50/60	0-480	3	35,6	0-250	15000

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Product Service

MINAS A5A and A5II A type (RS 485 Communication type of MINAS A5 series)

	Input					Output				
Model	Frame type	Voltage (Vac/Vdc) (-15%, +10%)	Phase	FLC (A)	Frq. (Hz)	Voltage (Vac)	Phase	Current (A)	Frq. (Hz)	Power (W)
MADzT1105Axx	A	100 to 120Vac	1	1,7	50/60	0-120	3	1,2	0 to 500	50
MADzT1107Axx	A	100 to 120Vac	1	2,6	50/60	0-120	3	1,7	0 to 500	100
MADzT1505Axx	A	200 to 240Vac	1/3	1,6/0,9	50/60	0-240	3	1,2	0 to 500	100
MADzT1507Axx	A	200 to 240Vac	1/3	2,4/1,3	50/60	0-240	3	1,6	0 to 500	200
MBDzT2110Axx	B	100 to 120Vac	1	4,3	50/60	0-120	3	2,5	0 to 500	200
MBDzT2510Axx	B	200 to 240Vac	1/3	4,1/2,4	50/60	0-240	3	2,6	0 to 500	400
MCDzT3120Axx	C	100 to 120Vac	1	7,6	50/60	0-120	3	4,6	0 to 500	400
MCDzT3520Axx	C	200 to 240Vac	1/3	6,6/3,6	50/60	0-240	3	4,1	0 to 500	750
MDDzT3530Axx	D	200 to 240Vac	1/3	9,1/5,2	50/60	0-240	3	5,9	0 to 416,6	1000
MDDzT5540Axx	D	200 to 240Vac	1/3	14,2/8,1	50/60	0-240	3	9,4	0 to 416,6	1500
MDDzT2407Axx	D	380 to 480Vac 535 to 680Vdc	3	2,1	50/60	0-480	3	1,5	0 to 416,6	600
MDDzT2412Axx	D	380 to 480Vac 535 to 680Vdc	3	2,8	50/60	0-480	3	2,9	0 to 416,6	1000
MDDzT3420Axx	D	380 to 480Vac 535 to 680Vdc	3	3,9	50/60	0-480	3	4,7	0 to 416,6	1500
MEDzT7364Axx	E	200 to 230Vac 280 to 325Vdc	3	11,8	50/60	0-230	3	13,4	0 to 416,6	2500
MEDzT4430Axx	E	380 to 480Vac 535 to 680Vdc	3	5,9	50/60	0-480	3	6,7	0 to 416,6	2500
MFDzTA390Axx	F	200 to 230Vac 280 to 325Vdc	3	15,1	50/60	0-230	3	18,7	0 to 416,6	3000
MFDzTB3A2Axx	F	200 to 230Vac 280 to 325Vdc	3	21,6	50/60	0-230	3	33,0	0 to 416,6	5000
MFDzT5440Axx	F	380 to 480Vac 535 to 680Vdc	3	7,6	50/60	0-480	3	9,4	0 to 416,6	3000
MFDzTA464Axx	F	380 to 480Vac 535 to 680Vdc	3	12,1	50/60	0-480	3	16,5	0 to 416,6	5000
MGDzTC3yyAxx	G	200 to 230Vac 280 to 325Vdc	3	32,0	50/60	0-230	3	44,0	0-250	7500
MGDzTB4yyAxx	G	380 to 480Vac 535 to 680Vdc	3	16,0	50/60	0-480	3	22,0	0-250	7500
MHDzTC3yyAxx	H	200 to 230Vac 280 to 325Vdc	3	58,0	50/60	0-230	3	71,3	0-250	15000
MHDzTB4yyAxx	H	380 to 480Vac 535 to 680Vdc	3	29,0	50/60	0-480	3	35,6	0-250	15000

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Nomenclature

M	A	D	z	T1	1	07	0	0	1
I	II	III	IV	V	VI	VII	VIII	IX	X

I: Manufacturer's designation
- M: Panasonic

II: Amplifier Power Range
- A: Size A
- B: Size B
- C: Size C
- D: Size D
- E: Size E
- F: Size F
- G: Size G
- H: Size H

III: Device type
- D: Servo amplifier

IV: AC Servo amplifier
- H: A5 Series
- K: A5II Series

V: IGBT rating
- T1: 10A
- T2: 15A
- T3: 30A
- T4: 35A
- T5: 50A
- T7: 75A
- TA: 100A
- TB: 150A
- TC: 300A

VI: Input voltage Specification
- 1: Single Phase 100Vac
- 3: Three Phase 200Vac, or 280 to 325Vdc (for size E, F, G, H)
- 4: Three Phase 400Vac, or 535 to 680Vdc (for size D,E, F, G, H)
- 5: Single or Three Phase 200Vac

VII: Current rating of current detector
- 05: 5A
- 07: 7,5A
- 10: 10A
- 12: 12A
- 20: 20A
- 30: 30A
- 40: 40A
- 64: 64A
- 90: 90A
- A2: 120A
- B4: 240A

VIII: Special Specification
- N: RTEX network type
- L: Linear-Motor-drive Type
- E: Position Control Type
- A : RS485 Communication Type

Any alphanumeric suffix except N, L,E and A - Not related to neither Safety nor EMC (ex. Parameter setting , Color of Enclosure and so on.)

IX: Functional Safety Specification

Any alphabet except C - Non-Functional Safety Model
Blank or Any alphanumeric suffix (When the value of VIII is "E") - Non-Functional Safety Model

X: Internal Specification:

Blank or Any alphanumeric suffix – Not related to neither Safety nor EMC (ex. Parameter setting , Color of Enclosure and so on.).

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