August 31, 2016

Motor Business Unit,
Electromechanical Control Business Division,
Automotive & Industrial Systems Company,
Panasonic Corporation

AC Servo Amplifier MINAS A6 Series Functional Addition Notice on Software Versions 1.05 and 1.06

Thank you for your continuous cooperation and support.
We hereby notify you about the change of software for the MINAS A6 Series.
We would appreciate your understanding and cooperation with this matter.

■ Affected models: All Servo Driver models of the MINAS A6 series
    (Part No.)   : M***DL*******S***
          Part number starting with M and the 3rd and 4th characters are DL, and the 8th is S.

■ Description of the Change and implementation schedule:
  Software Ver. 1.03 has been changed to Ver. 1.05 from the July production lot.
  In addition, Ver. 1.05 will be changed to 1.06 from September production lot.
  The model part number will not be changed.

■ Reason for change: For improving the functionality of the product.

■ Change details

	Functions	Ver. 1.03	Ver. 1.05	Ver. 1.06
1	I/O block motion function	Not available	Available	Available
2	Deterioration diagnosis warning function	Not available	Available	Available
3	Position compare function	Not available	Available	Available
4	Unlimited absolute rotation function	Not available	Available	Available
5	External scale position information monitor function during semi-closed control	Not available	Available	Available
6	Fully-closed control of load variation suppression function	Not available	Available	Available
7	Quadrant protrusion suppression function expansion	Not available	Available	Available
8	Serial absolute external scale Z-phase function of pulse regeneration function	Not available	Available	Available
9	Slow stop function	Not available	Available	Available
10	Modbus functional expansion	Not available	Available	Available
11	Pr5.09 Expansion of setting range of "Main Power Off Detection Time" [ms]	70 to 2000	70 to 2000	**20** to 2000
12	Pr6.35 Expansion of setting range of "Hybrid vibration suppression filter" [0.01ms]	0 to 6400	0 to 6400	0 to **32000**
13	Functional expansion of protection settings for the motor's movement range	Not available	Not available	Available

[Change Content Details]

1) I/O block motion function
In addition to Modbus communication, the block operation function is also available from input signal of I/F connector.

2) Deterioration diagnosis warning function
This function estimates the changes in characteristics of the motor and connected devices, and can notify the predictive maintenance warning to the upper controller.

3) Position compare function
When the motor position passes through a position set by a parameter, the pulse signal can be output from the general-purpose output terminal or position compare output terminal.

4) Unlimited absolute rotation function
This function enables the setting of the upper limit value of multi-rotation data for an absolute encoder. By using this function with a turntable, the rotation angle (position) of the turntable can be obtained even when continuously rotating by more than one turn.

5) External scale position information monitor function during semi-closed control
The external scale position information monitoring and external scale pulse regeneration functions are enabled during semi-closed control.

6) Full-closed control of load variation suppression function
Full-closed control of load variation suppression function became available.

7) Functional expansion of quadrant protrusion suppression function
The compensation value of the quadrant protrusion suppression function can now be independently set in the reverse direction.

8) Serial absolute external scale Z-phase function of pulse reproduction function
When using a serial absolute external scale, an arbitrary position can be specified for the absolute position of Z-phase reproduction.

9) Slow stop function
This function can stop the motor smoothly by keeping the Servo On active and in case of a sudden stop

10) Modbus functional expansion
A variety of functions were added, including a mirror register function to place any register in the mirror register region, and a function for responding to a broadcast command from the amplifier side.

11) Pr5.09 Expansion of parameter setting range of "Main Power Off Detection Time"
Minimum settable value 70 -> 20 [ms]

12) Pr6.35 Expansion of parameter setting range of "Hybrid vibration suppression filter"
Maximum settable value 6400 -> 32000 [0.01ms]

13) Functional expansion of the setting protection of motor movable range
The detection conditions of the protection settings for the motor's movement range can be expanded.

• The setup support software (PANAERM) corresponding to this version is Ver. 6.0.0.9 or later.
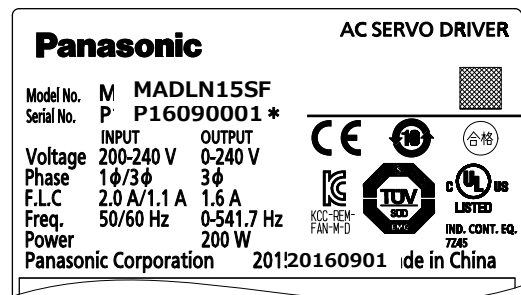• Previous functions can be used by changing settings in the Driver's previous parameter file.

■ Method of checking:
・Checking from the software version
The software version can be checked by using the setup support software (PANAERM), or by checking from the front panel.
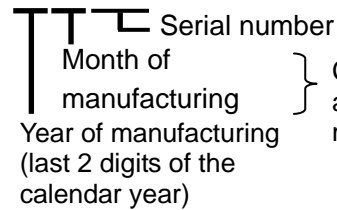・Checking from the Serial number (year and month manufactured)
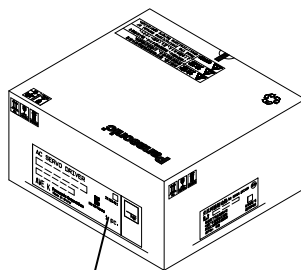The serial number shown on the name plate located on the side of the product conforms to the following rule.

Panasonic AC SERVO DRIVER
Model No. M MADLN15SF
Serial No. P P16090001 *
| | INPUT | OUTPUT |
Voltage 200-240 V 0-240 V
Phase 1φ/3φ 3φ
F.L.C 2.0 A/1.1 A 1.6 A
Freq. 50/60 Hz 0-541.7 Hz
Power 200 W
Panasonic Corporation 201'20160901 ı de in China

Serial number
Ex. **P16090001***

Serial number
Month of manufacturing
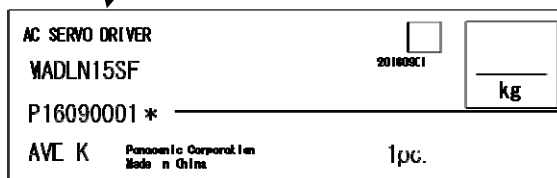Year of manufacturing (last 2 digits of the calendar year)
Check the year and month of manufacturing.

The serial number shown on the label attached to the front surface of the package box follows the following rule.

Number is not included in this label.

AC SERVO DRIVER
MADLN15SF
201609CI
kg
P16090001 *
AVE K Panasonic Corporation Made in China 1pc.

Serial number
Ex. **P16090001***

Serial number
Month of manufacturing
Year of manufacturing (last 2 digits of the calendar year)
Check the year and month of manufacturing.

■ Reference material
• Reference specification (Multi-function type)
https://industrial.panasonic.com/content/data/MT/PDF/refer/en/acs/SX-DSV03025_R2_0E.pdf
• Technical data (Basic functional specification edition)
https://industrial.panasonic.com/content/data/MT/PDF/refer/en/acs/SX-DSV03031_0E.pdf
• Technical data (Modbus communication specification and block motion function edition)
https://industrial.panasonic.com/content/data/MT/PDF/refer/en/acs/SX-DSV03042_0E.pdf

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