

November 27, 2017

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

Software Version Upgrade Notice
for AC Servo Driver of MINAS A6BE series

Thank you for your daily support and efforts to our business.
As described below, we will upgrade the software for MINAS A6BE series.
We would appreciate your understanding and cooperation with this matter.

- Affected models: Servo drivers of all MINAS A6BE series models
(Part Number) **M*DL***BE**
Starting with M, with DL as the 3rd and 4th characters, and BE as the 8th and 9th character from the left.

- Description of the Change and Reason:
 - (1) Expansion of serial number range required for the increased production of AC-servo drivers
 - (2) The software will be upgraded from Ver1.01 to Ver1.02 for functionality improvement purposes.

No.	Function		Ver1.01	→	Ver1.02
1	Serial number range expansion		Possible range of indication 0001 to 9999		Possible range of indication 0001 to Z999
2	Retracting operation function		Not available		Available
3	Change of the attribute of Making Err 27.4 (Command error protection)		Clearing disabled		Clearing enabled
4	Servo information monitor object function expansion	Object PDO mapping • 4F41h-01h (Mechanical angle) • 4F41h-02h (Multi-turn data)	TxPDO mapping disabled		TxPDO mapping enabled
		Attribute of object 6080h (Max motor speed)	EEPROM backup – No		EEPROM backup - Yes
		Signal of object 4F22h-00h (Logical output signal)	Deterioration diagnosis speed output (V-DIAG) - No		Deterioration diagnosis speed output (V-DIAG) - Yes
5	Err 91.1 (Command error protection) for the out-of-range target position setting in the continuous rotating absolute encoder mode		Not available		Available
6	Err 27.7 (Position information initialization error protection) at the time of return to origin cancellation		Not available		Available

[Detail of Changed Contents]

No.1) Serial number range

- The range of serial numbers indicated as manufacturing codes has been expanded for accommodating increased production.
- For the expanded range of serial numbers indicated as manufacturing codes, please refer to the "Method of Indicating Serial Numbers" on page 4/4.
- The manufacturing code indicated in the plate attached to the side of the product surface can be indicated and monitored as described below.
 - * Common to all series of MINAS A6B* The indication method is different from other series.
 - (1) The number can be checked on the "Version Information" screen of the setup support software (PANATERM).
 - (2) The number can also be checked by referring to the following object via EtherCAT communication.
 - 1018h-04h (Serial number) or 4D15h (Drive serial number)
 - * In the case of mfg number A000~Z999, refer to 4D15h.

No. 2) Retracting operation function

A retracting operation function is added to cope with EtherCAT communication anomalies or the input of an external signal.

When this function's status is set to invalid (initial setting condition), the motion is the same as before.

No. 3) Err27.4(command error protection) clearing response

Err27.4 (Command error protection) Clearing attribute is enabled.

No.4) Servo information monitor object functional expansion

• Object PDO mapping

The following object is added to the TxPDO mapping target.

- 4F41h-01h(Mechanical angle) • 4F41h-02h(Multi-turn data)
- **Attribute of object 6080h (Max motor speed)**
The attribute of object 6080h (Max motor speed) is changed to "Backup exists in EEPROM".
- **Signal of object 4F22h-00h (Logical output signal)**
V-DIAG (deterioration diagnosis output) is added to bit 10 of object 4F22h-00h (logical output signal).

No.5) Command error protection for the out-of-range target position setting in the continuous rotating absolute encoder mode

When a position to which it is not possible to move, i.e. one that is out of the position range limit (607BH), is set as target position, the function for generating Err91.1 (command anomaly protection) is added.

No.6) Position information initialization error protection function

When an error is detected by canceling the origin return motion, the function for generating Err27.7 (error protection during position information initialization) is added.

- This change does not affect the product characteristics or reliability.
- The setup support software (PANATERM), which is capable of Ver.1.02, will be implemented in Ver.6.0.1.8 and after.
- Previously offered functions can be used by setting up the previous parameter file for the driver.

○ Notice

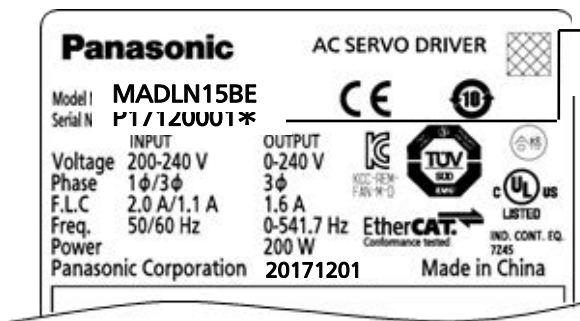
After the Windows Update on October 10, 2017, it was reported that PANATERM did not start correctly with a certain version of Windows. Microsoft released a patch to correct the program, after which we started checking the operation of the corrected program.

Actions to be taken with the PANATERM version upgrade and additional information about the status of the updated program can be found at

<https://industrial.panasonic.com/ww/products/motors-compressors/fa-motors>

Please see the section entitled "For users of the PANATERM setup support software".

- Timing: The change will be executed starting from December 2017 production onwards.
- Method of checking:
 - Method involving checking the software version
You can check your software version with the setup support software (PANATERM) or by examining object 3744h (Software version).
 - Method of checking the year and month of manufacturing from the manufacturing code (serial number)
The manufacturing code (serial number) shown on the name plate located on the side of the product conforms to the following rule.

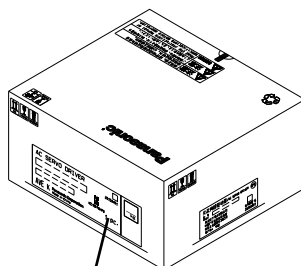


Manufacturing code (serial number)

Ex. **P17120001** *

T	T	T	E	Serial number *1	} Check the year and month of manufacturing.
	T	T	E	Month of manufacturing	
				Year of manufacturing (last 2 digits of calendar year)	

The manufacturing code (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.



Manufacturing code (serial number)

Ex. **P17120001** *

T	T	T	E	Serial number *1	} Check these year and month of manufacturing.
	T	T	E	Month of manufacturing	
				Year of manufacturing (last 2 digits of calendar year)	

■ Method of indicating numbers

Indication of	Range	Range of the previous manufacturing codes
0001 to 9999	0001 to 9999	Range of the previous manufacturing codes
10000 to 10999	10999	A000 to A999 Range of the manufacturing codes to be expanded this time.
11000 to 11999	11999	B000 to B999
:	:	:
17000 to 17999	17999	H000 to H999
18000 to 18999	18999	J000 to J999 *I is not used.
:	:	:
22000 to 22999	22999	N000 to N999
23000 to 23999	23999	P000 to P999 *O is not used.
33000 to 33999	33999	Z000 to Z999

○ For your Reference

Software version of MINAS A6BF Series (Part No. M*DL***BF) of the product released after November 28, 2017 is Ver1.02.