

Motor News

April 25, 2019

Industrial Device Solution Business Unit,
Industrial Device Business Division,
Industrial Solutions Company
Panasonic Corporation

Announcement of New model release: **MINAS A6 Family AC Servo Motor and Driver**

Thank you for your daily support and efforts to our business.
In regard to the titled matter, we have a progressive line-up of MINAS A6 family Battery less absolute encoder motors up to 5 kW.
Please consider using these products for your project.

1. Order accepting date: starting from April 25, 2019 (Release date: starting from May 30, 2019)

2. Released Models

- MSMF Series (Low inertia) Lead wire type
 - <Voltage: AC 100V / 200 V>
 - Output: 50 W, 100 W, 200 W, 400 W
 - Rated rotational speed: 3000 r/min
 - Rated rotational Max. speed: 6000 r/min
- MHMF Series (High inertia) Lead wire type
 - <Voltage: AC 100V>
 - Output: 200 W, 400 W
 - <Voltage: AC 200V>
 - Output: 200 W, 400 W, 750 W, 1 kW (Flange size: 80 mm sq.)
 - Rated rotational speed: 3000 r/min
 - Rated rotational Max. speed: 6500 r/min (*750 W and 1 kW: 6000 r/min)

3. Model numbers

Refer to Page 4 onwards.
For the prices, please send RFQ (request for quote) to our sales representatives.

4. Applicable driver

Driver / Series number	Software version	Timing
A6SE / A6SF Series	Ver. 1.09	Production lot in Sep 2018
A6NE / A6NF Series	Ver. 1.23	Production lot in May 2018
A6BE / A6BF Series	Ver. 1.04	Production lot in Aug 2018

* The A6SE series driver does not support the absolute system specification, only incremental system can be used in combination.

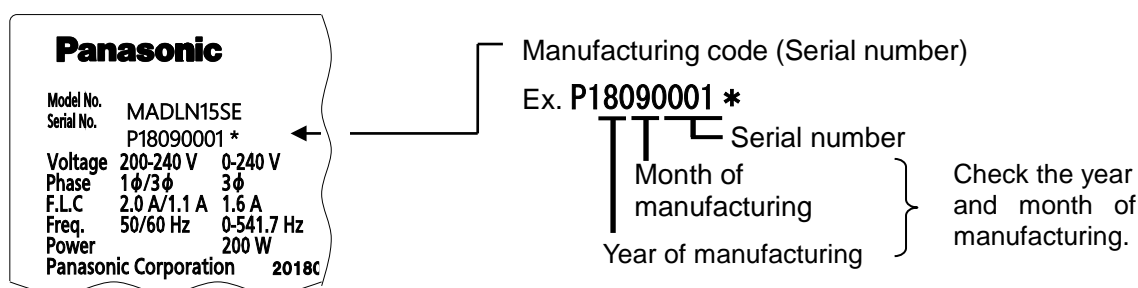
■ Method of checking:

• Method involving checking the software version

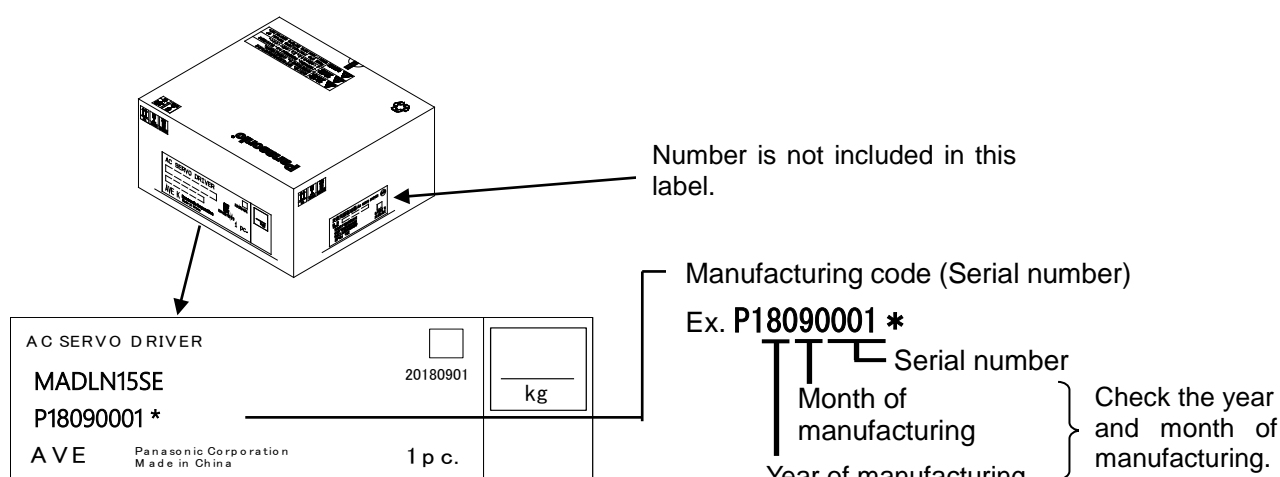
The software version can be checked by using the setup support software (PANATERM), or by checking the monitor mode of front panel.

• 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.



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



5. External dimensions, specifications, and options

Refer to the information on our website on the MINAS A6 Battery less absolute encoder motor catalog. (Japanese Ver.)

https://www3.panasonic.biz/ac/download/motor/fa-motor/ac-servo/catalog/minas-a6-batteryless_ctlg.pdf?f_cd=403956

< Encoder cable >

Encoder cable for incremental system can be used.

Length (m)	Part number
3	MFECA0030EAD
5	MFECA0050EAD
10	MFECA0100EAD

Please contact us about the part number of encoder cable 10 m to 20 m.

6. Appearance



MINAS A6 Series, Battery less absolute encoder motor
Output: 400 W

■MINAS A6 Series, Battery less absolute encoder motor Model number

(Category indications)

Shaft specifications: round shaft = ○, with key tap = □

Holding brake: with = ●

Oil seals: with = △, with protection lip seals = ◎

MINAS A6 MSMF Series (60mm sq. or less) Lead wire type

Model number	Output (W)	Voltage (V)	Shaft	Holding brake	Oil seals
MSMF5AZA1A2	50	100/200	○		
MSMF5AZA1B2	50	100/200	○	●	
MSMF5AZA1C2	50	100/200	○		△
MSMF5AZA1D2	50	100/200	○	●	△
MSMF5AZA1S2	50	100/200	□		
MSMF5AZA1T2	50	100/200	□	●	
MSMF5AZA1U2	50	100/200	□		△
MSMF5AZA1V2	50	100/200	□	●	△
MSMF011A1A2	100	100	○		
MSMF011A1B2	100	100	○	●	
MSMF011A1C2	100	100	○		△
MSMF011A1D2	100	100	○	●	△
MSMF011A1S2	100	100	□		
MSMF011A1T2	100	100	□	●	
MSMF011A1U2	100	100	□		△
MSMF011A1V2	100	100	□	●	△
MSMF012A1A2	100	200	○		
MSMF012A1B2	100	200	○	●	
MSMF012A1C2	100	200	○		△
MSMF012A1D2	100	200	○	●	△
MSMF012A1S2	100	200	□		
MSMF012A1T2	100	200	□	●	

MINAS A6 MSMF Series (60mm sq. or less) Lead wire type

Model number	Output (W)	Voltage (V)	Shaft	Holding brake	Oil seals
MSMF012A1U2	100	200	□		△
MSMF012A1V2	100	200	□	●	△
MSMF021A1A2	200	100	○		
MSMF021A1B2	200	100	○	●	
MSMF021A1C2	200	100	○		△
MSMF021A1D2	200	100	○	●	△
MSMF021A1S2	200	100	□		
MSMF021A1T2	200	100	□	●	
MSMF021A1U2	200	100	□		△
MSMF021A1V2	200	100	□	●	△
MSMF022A1A2	200	200	○		
MSMF022A1B2	200	200	○	●	
MSMF022A1C2	200	200	○		△
MSMF022A1D2	200	200	○	●	△
MSMF022A1S2	200	200	□		
MSMF022A1T2	200	200	□	●	
MSMF022A1U2	200	200	□		△
MSMF022A1V2	200	200	□	●	△
MSMF041A1A2	400	100	○		
MSMF041A1B2	400	100	○	●	
MSMF041A1C2	400	100	○		△
MSMF041A1D2	400	100	○	●	△
MSMF041A1S2	400	100	□		
MSMF041A1T2	400	100	□	●	
MSMF041A1U2	400	100	□		△
MSMF041A1V2	400	100	□	●	△

MINAS A6 MSMF Series (60mm sq. or less) Lead wire type

Model number	Output (W)	Voltage (V)	Shaft	Holding brake	Oil seals
MSMF042A1A2	400	200	○		
MSMF042A1B2	400	200	○	●	
MSMF042A1C2	400	200	○		△
MSMF042A1D2	400	200	○	●	△
MSMF042A1S2	400	200	□		
MSMF042A1T2	400	200	□	●	
MSMF042A1U2	400	200	□		△
MSMF042A1V2	400	200	□	●	△

MINAS A6 MHMF Series (60mm sq. to 80mm sq.) Lead wire type

Model number	Output (W)	Voltage (V)	Shaft	Holding brake	Oil seals
MHMF021A1A2	200	100	○		
MHMF021A1B2	200	100	○	●	
MHMF021A1C2	200	100	○		△
MHMF021A1C4	200	100	○		◎
MHMF021A1D2	200	100	○	●	△
MHMF021A1D4	200	100	○	●	◎
MHMF021A1S2	200	100	□		
MHMF021A1T2	200	100	□	●	
MHMF021A1U2	200	100	□		△
MHMF021A1U4	200	100	□		◎
MHMF021A1V2	200	100	□	●	△
MHMF021A1V4	200	100	□	●	◎
MHMF022A1A2	200	200	○		
MHMF022A1B2	200	200	○	●	
MHMF022A1C2	200	200	○		△
MHMF022A1C4	200	200	○		◎
MHMF022A1D2	200	200	○	●	△
MHMF022A1D4	200	200	○	●	◎

MINAS A6 MHMF Series (60mm sq. to 80mm sq.) Lead wire type

Model number	Output (W)	Voltage (V)	Shaft	Holding brake	Oil seals
MHMF022A1S2	200	200	□		
MHMF022A1T2	200	200	□	●	
MHMF022A1U2	200	200	□		△
MHMF022A1U4	200	200	□		◎
MHMF022A1V2	200	200	□	●	△
MHMF022A1V4	200	200	□	●	◎
MHMF041A1A2	400	100	○		
MHMF041A1B2	400	100	○	●	
MHMF041A1C2	400	100	○		△
MHMF041A1C4	400	100	○		◎
MHMF041A1D2	400	100	○	●	△
MHMF041A1D4	400	100	○	●	◎
MHMF041A1S2	400	100	□		
MHMF041A1T2	400	100	□	●	
MHMF041A1U2	400	100	□		△
MHMF041A1U4	400	100	□		◎
MHMF041A1V2	400	100	□	●	△
MHMF041A1V4	400	100	□	●	◎
MHMF042A1A2	400	200	○		
MHMF042A1B2	400	200	○	●	
MHMF042A1C2	400	200	○		△
MHMF042A1C4	400	200	○		◎
MHMF042A1D2	400	200	○	●	△
MHMF042A1D4	400	200	○	●	◎
MHMF042A1S2	400	200	□		
MHMF042A1T2	400	200	□	●	

MINAS A6 MHMF Series (60mm sq. to 80mm sq.) Lead wire type

Model number	Output (W)	Voltage (V)	Shaft	Holding brake	Oil seals
MHMF042A1U2	400	200	□		△
MHMF042A1U4	400	200	□		◎
MHMF042A1V2	400	200	□	●	△
MHMF042A1V4	400	200	□	●	◎
MHMF082A1A2	750	200	○		
MHMF082A1B2	750	200	○	●	
MHMF082A1C2	750	200	○		△
MHMF082A1C4	750	200	○		◎
MHMF082A1D2	750	200	○	●	△
MHMF082A1D4	750	200	○	●	◎
MHMF082A1S2	750	200	□		
MHMF082A1T2	750	200	□	●	
MHMF082A1U2	750	200	□		△
MHMF082A1U4	750	200	□		◎
MHMF082A1V2	750	200	□	●	△
MHMF082A1V4	750	200	□	●	◎
MHMF092A1A2	1000	200	○		
MHMF092A1B2	1,000	200	○	●	
MHMF092A1C2	1,000	200	○		△
MHMF092A1C4	1,000	200	○		◎
MHMF092A1D2	1,000	200	○	●	△
MHMF092A1D4	1,000	200	○	●	◎
MHMF092A1S2	1,000	200	□		
MHMF092A1T2	1,000	200	□	●	
MHMF092A1U2	1,000	200	□		△
MHMF092A1U4	1,000	200	□		◎
MHMF092A1V2	1,000	200	□	●	△
MHMF092A1V4	1,000	200	□	●	◎