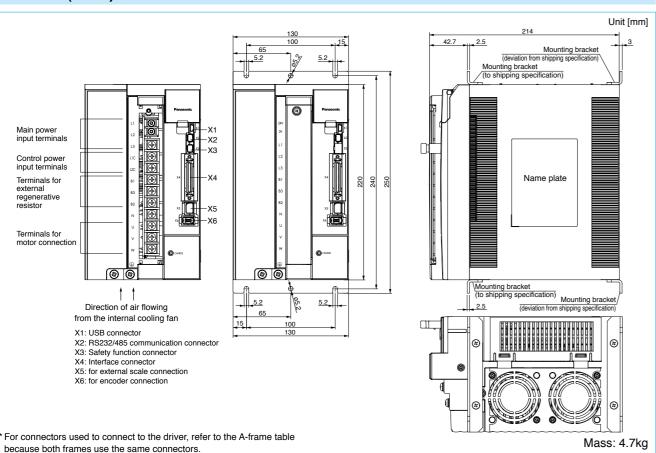


F-frame (400V)



Motor Specifications Common Specifications of Motor

Features

- Line-up: 50W to 5.0kW
- Max speed: 6000r/min (MSME 50W to 750W)
- · Low inertia (MSME) to High inertia (MHME).
- · Low cogging torque: Rated torque ratio 0.5% (typical value).
- 20-bit incremental encoder (1,048,576 pulse)
- 17-bit absolute encoder (131,072 pulse).
- Enclosure rating: IP67 (M*ME), IP65 (M*MD)
- Compact & Light weight

Middle capacity type





[MSME (50W to 750W)]
Motor (Scheduled to be released.)
• MDME 7.5kW, 11kW, 15kW
• MHME 7.5kW

• MFME 1.5kW, 2.5kW, 4.5kW · Motor with Gear Reduce: 100W, 200W, 400W, 750W

Environmental Conditions

• MGME 4.5kW, 6.0kW

Item	Conditions
Ambient temperature *	¹ 0°C to 40°C (free from freezing)
Ambient humidity	20% to 85% RH (free from condens
Storage temperature *2	–20°C to 65°C (Max.temperature guarantee: 80°C
Storage humidity	20% to 85% RH (free from condens
Vibration Motor only	Lower than 49m/s ² (5G) at running,
Impact Motor only	Lower than 98m/s ² (10G)
Enclosure type *3	IP65 (except rotating portion of ou end.)
(Motor only) (Motor only) (Motor only)	IP67 (except rotating portion of out pin part of the motor connector and
Altitude	Lower than 1000m

- *1 Ambient temperature to be measured at 5cm away from the motor.
- *2 Permissible temperature for short duration such as transportation.
- *3 These motors conform to the test conditions specified in EN standards (EN60529, EN60034-5). Do not use these motors in application where water proof performance is required such as continuous wash-down operation.
- *4 This condition is applied when the connector mounting screw in case of motor 750W or less are tightened to the recommended tightening torque (Refer to 1-16, 2-18, 2-00). Be sure to use mounting screw supplied with the connector.

<Note>

Initial setup of rotational direction: positive = CCW and negative = CW. Pay an extra attention.





[MSME (1.0kW to 5.0kW)]

sation)

for 72 hours)

sation)

24.5m/s2 (2.5G) at stall

utput shaft and readwire

utput shaft and connecting d the encoder connector)



Motor Contents

MSME (100V/200V) 50W to 750W P.36 to 44

MSME (200V) 1.0kW to 5.0kW P.45 to 50

MDME (200V) 1.0kW to 5.0kW P.51 to 56

MGME (200V) 0.9kW to 3.0kW P.57 to 59

MHME (200V) 1.0kW to 5.0kW P.60 to 65

MSMD (100V/200V) 50W to 750W P.66 to 74

MHMD (100V/200V) 200W to 750W P.76 to 80

MSME (400V) 1.0kW to 5.0kW P.82 to 87

MDME (400V) 1.0kW to 5.0kW P.88 to 93

MGME (400V) 0.9kW to 3.0kW P.94 to 96

MHME (400V) 1.0kW to 5.0kW P.98 to 103

		AC1	00V		
Motor model *1		MSME	5AZG1	5AZS1	
	Model	A5 series	MADHT1105		
Applicable driver *2	No.	A5E series	MADH	T1105E	
	Fran	ne symbol	A-fra	ame	
Power supply capacit	у	(kVA)	0	.4	
Rated output		(W)	5	0	
Rated torque		(N·m)	0.	16	
Momentary Max. pea	k torqu	e (N·m)	0.4	48	
Rated current		(A(rms))	ns)) 1.1		
Max. current		(A(o-p))	4.7		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV	DV0P4280 No limit Note)2			
Rated rotational spee	d	(r/min)	3000		
Max. rotational speed		(r/min)	60	00	
Moment of inertia	With	out brake	0.025		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	0.027		
Recommended mome ratio of the load and t			30 times	s or less	
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion pei	single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

	,
Static friction torque (N·m)	0.29 or more
Engaging time (ms)	35 or less
Releasing time (ms) Note)4	20 or less
Exciting current (DC) (A)	0.3
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

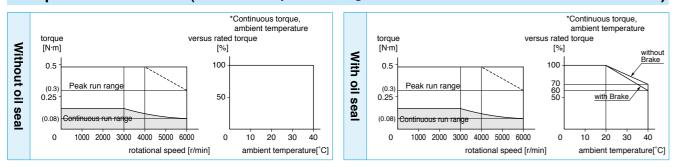
• Permissible load (For details, refer to P.104)

	. .	Radial load P-direction (N)	147
	During assembly	Thrust load A-direction (N)	88
	accombry	Thrust load B-direction (N)	117.6
	During	Radial load P-direction (N)	68.6
operation	Thrust load A, B-direction (N)	58.8	

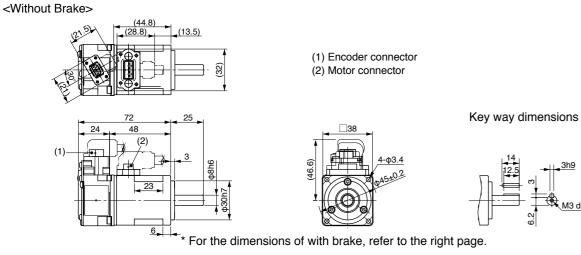
· For details of Note 1 to Note 5, refer to P.104.

- · Dimensions of Driver, refer to P.30.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".
- Detail of model designation, refer to P.11.

Torque characteristics (at AC100V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



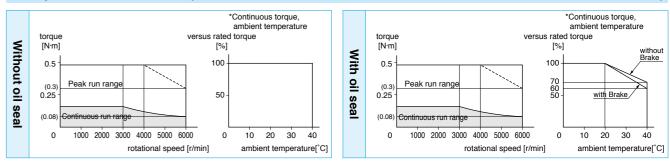
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

36

Specifications

			AC2	200V		specifications (For details	
Motor model *1		MSME	5AZG1	5AZS1		ake will be released when it is e use this for braking the motor in	
	Mode	A5 series	MADH	IT1505	Static fri	ction torque (N·m)	0.29 or more
Applicable driver *	2 No .	A5E series	MADH	T1505E	Engagin	g time (ms)	35 or less
	Fra	me symbol	A-fr	ame	Releasir	ng time (ms) Note)4	20 or less
Power supply cap	acity	(kVA)	0	.5	Exciting	current (DC) (A)	0.3
Rated output		(W)	5	0	Releasir	ng voltage (DC) (V)	1 or more
Rated torque		(N·m)	0.	16	Exciting	voltage (DC) (V)	24±1.2
Momentary Max. p	eak torq	ue (N·m)	0.	48			
Rated current		(A(rms))	1	.1	 Permi 	ssible load (For details, refe	r to P.104)
Max. current		(A(o-p))	4	.7	. .	Radial load P-direction (N)	147
Regenerative brake	With	nout option	No lim	it Note)2	During assembly	Thrust load A-direction (N)	88
frequency (times/min) N	^{ote)1} D'	V0P4280	No lim	it Note)2	uccombry	Thrust load B-direction (N)	117.6
Rated rotational s	beed	(r/min)	3000		During Ra	Radial load P-direction (N)	68.6
Max. rotational sp	ed	(r/min)	60	000	operation	Thrust load A, B-direction (N)	58.8
Moment of inertia	Wit	hout brake	0.0)25	For details of Note 1 to Note 5, refer to P.		D P 104
of rotor (×10 ⁻⁴ kg·n	²) W	ith brake	0.027		Dimensions of Driver, refer to P.30.		
Recommended moment of inertia ratio of the load and the rotor Note)3		30 times or less		*1 Rotary	\prime encoder specifications: \Box roduct that the end of driver m	odel designation	
Rotary encoder specifications Note)5 Resolution per single turn		20-bit Incremental	17-bit Absolute	has "E" is "positioning type".		U	
		er single turn	1,048,576	131,072	Detail of model designation, refer to P.11.		1.11.

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

<With Brake> (74.8) (44.8) (28.8 (13.5) (2) (3) (1)-÷. i_t√ 23

 $\frac{6}{1}$ For the dimensions of without brake, refer to the left page. Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

<Cautions>

Mass (kg)/ 0.32

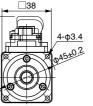
Brake	e specifications (For details, refer to P.10)5)
(This b Do no	brake will be released when it is energized. It use this for braking the motor in motion.	

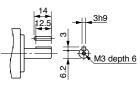
Mass (kg)/ 0.53

Motor

(1) Encoder connector (2) Brake connector (3) Motor connector

Key way dimensions





37

			AC1	00V	
Motor model *1		MSME	011G1	011S1	
	Model	A5 series	MADH	T1107	
Applicable driver *2	No.	A5E series	MADH	T1107E	
	Fran	ne symbol	A-fr	ame	
Power supply capacit	у	(kVA)	0.	.4	
Rated output		(W)	1(00	
Rated torque		(N·m)	0.3	32	
Momentary Max. peal	k torqu	ie (N·m)	0.9	95	
Rated current		(A(rms))	1.	.6	
Max. current		(A(o-p))	6.9		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV	'0P4280	No limit Note)2		
Rated rotational spee	d	(r/min)	3000		
Max. rotational speed		(r/min)	60	00	
Moment of inertia	With	out brake	0.051		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	0.054		
Recommended mome ratio of the load and the			30 times	s or less	
Rotary encoder specifications Note			20-bit Incremental	17-bit Absolute	
Resolut	ion per	1,048,576	131,072		

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

(· · · · · · · · · · · · · · · · · · ·	
Static friction torque (N·m)	0.29 or more
Engaging time (ms)	35 or less
Releasing time (ms) Note)4	20 or less
Exciting current (DC) (A)	0.3
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

• Permissible load (For details, refer to P.104)

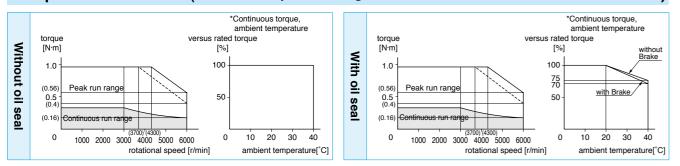
	. .	Radial load P-direction (N)	147
	During assembly	Thrust load A-direction (N)	88
	accombry	Thrust load B-direction (N)	117.6
During operation	Radial load P-direction (N)	68.6	
	Thrust load A, B-direction (N)	58.8	

· For details of Note 1 to Note 5, refer to P.104.

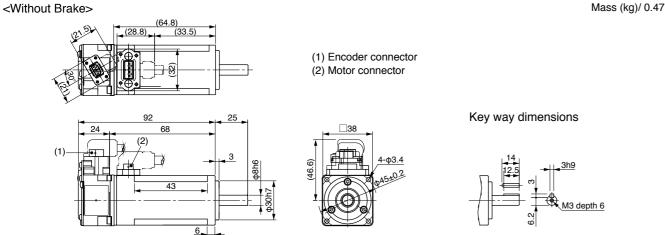
- · Dimensions of Driver, refer to P.30.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".

Detail of model designation, refer to P.11.

Torque characteristics (at AC100V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

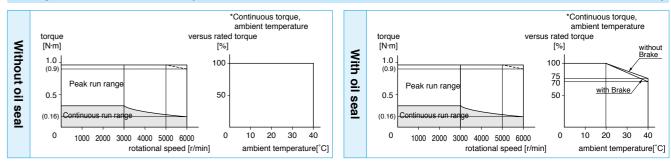
* For the dimensions of with brake, refer to the right page.

38

Specifications

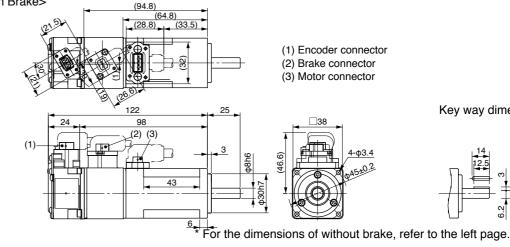
			AC2	V00		specifications (For details		
Motor model *1		MSME	012G1	012S1		ake will be released when it is e use this for braking the motor in		
	Mode	A5 series	MADH	T1505	Static fri	ction torque (N·m)	0.29 or more	
Applicable driver *2	No.	A5E series	MADH	Г1505E	Engagin	ig time (ms)	35 or less	
	Fran	ne symbol	A-fra	ame	Releasir	ng time (ms) Note)4	20 or less	
Power supply capac	ity	(kVA)	0.	5	Exciting	current (DC) (A)	0.3	
Rated output		(W)	10	00	Releasir	ng voltage (DC) (V)	1 or more	
Rated torque		(N·m)	0.3	32	Exciting	voltage (DC) (V)	24±1.2	
Momentary Max. pe	ak torqu	ue (N·m)	0.9	95				
Rated current		(A(rms))	1.	1	 Permi 	ssible load (For details, refe	er to P.104)	
Max. current		(A(o-p))	4.	7	During	Radial load P-direction (N)	147	
Regenerative brake	With	out option	No limi	t Note)2	During assembly	Thrust load A-direction (N)	88	
frequency (times/min) Not	^{e)1} D\	/0P4280	No limit Note)2		assembly	Thrust load B-direction (N)	117.6	
Rated rotational spe	ed	(r/min)	30	00	During	Radial load P-direction (N)	68.6	
Max. rotational spec	d	(r/min)	60	00	operation	Thrust load A, B-direction (N)	58.8	
Moment of inertia	With	nout brake	0.0	51	• For det	ails of Note 1 to Note 5, refer t	to D104	
of rotor (×10 ⁻⁴ kg·m ²	Wi	th brake	0.054		 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.30. 			
Recommended moment of inertia ratio of the load and the rotor Note)3 Rotary encoder specifications Note)5 Resolution per single turn		30 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designation				
		20-bit Incremental	17-bit Absolute	has "E" is "positioning type". Detail of model designation, refer to P.11.				
		1,048,576	131,072					

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

<With Brake>



<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

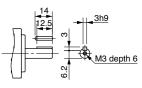
Motor Specifications 200V MSME 100W [Low inertia, Small capacity]

•	Brake specifications (For details, refer to P.	.105)
	(This brake will be released when it is energized.) Do not use this for braking the motor in motion.)	

Static friction torque (N·m)	0.29 or more
Engaging time (ms)	35 or less
Releasing time (ms) Note)4	20 or less
Exciting current (DC) (A)	0.3
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

Mass (kg)/ 0.68

Key way dimensions



		AC1	00V		
Motor model *1		021G1 021S1			
	Model	A5 series	MBDH	T2110	
Applicable driver *2	No.	A5E series	MBDHT2110E		
	Fram	ne symbol	B-frame		
Power supply capacit	у	(kVA)	0	.5	
Rated output		(W)	20	00	
Rated torque		(N·m)	0.0	64	
Momentary Max. pea	k torqu	e (N·m)	1.9	91	
Rated current		(A(rms))	2.5		
Max. current		(A(o-p))	10.6		
Regenerative brake	With	out option	No limit Note)2		
frequency (times/min) Note)1	DV	0P4283	No limit Note)2		
Rated rotational spee	d	(r/min)	3000		
Max. rotational speed		(r/min)	6000		
Moment of inertia	With	out brake	0.14		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	0.	16	
Recommended moment of inertia ratio of the load and the rotor Note)3			30 times or less		
Rotary encoder specifications N			20-bit Incremental	17-bit Absolute	
Resolut	ion per	single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

J	
Static friction torque (N·m)	1.27 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.36
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

• Permissible load (For details, refer to P.104)

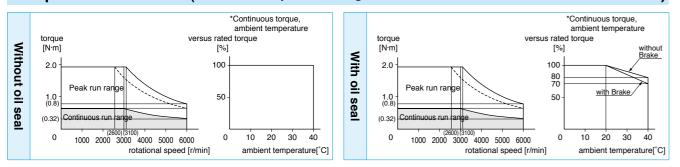
During assembly During operation	Radial load P-direction (N)	392
	Thrust load A-direction (N)	147
	Thrust load B-direction (N)	196
	Radial load P-direction (N)	245
	Thrust load A, B-direction (N)	98

· For details of Note 1 to Note 5, refer to P.104.

- · Dimensions of Driver, refer to P.30.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".

Detail of model designation, refer to P.11.

Torque characteristics (at AC100V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)

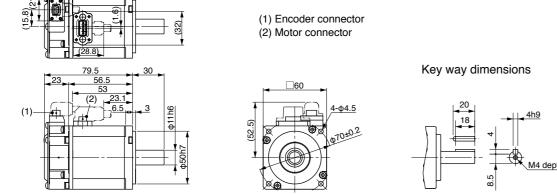


Dimensions

(21.5

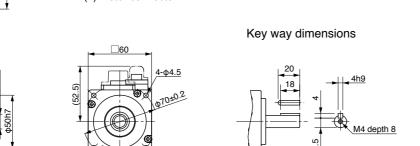
<Without Brake>

Mass (kg)/ 0.82



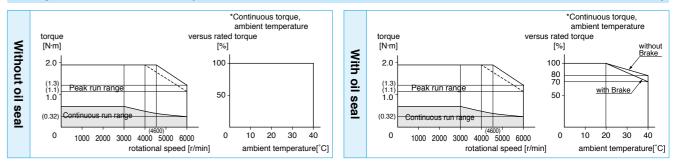
* For the dimensions of with brake, refer to the right page.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.



		AC2	00V	
Motor model *1		022G1	022S1	
	Model	A5 series	MADH	T1507
Applicable driver *2	*2 No.	A5E series	MADHT1507E	
	Frame symbol		A-frame	
Power supply capacit	у	(kVA)	0.	5
Rated output		(W)	20	00
Rated torque		(N·m)	0.6	64
Momentary Max. pea	k torqu	ie (N·m)	1.9	91
Rated current		(A(rms))	1.5	
Max. current (A(o-p))			6.5	
Regenerative brake	Without option		No limit Note)2	
frequency (times/min) Note)1	DV0P4283		No limit Note)2	
Rated rotational spee	d	(r/min)	3000	
Max. rotational speed		(r/min)	6000	
Moment of inertia	With	out brake	0.14	
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	0.16	
Recommended moment of inertia ratio of the load and the rotor Note)3			30 times or less	
Rotary encoder specifications		IS Note)5	20-bit Incremental	17-bit Absolute
Resolut	ion per	single turn	1,048,576	131,072

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

<With Brake>

(2) (3)

* For the dimensions of without brake, refer to the left page.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Motor Specifications 200V MSME 200W [Low inertia, Small capacity]

• Brake specifications (For details, refer to P.105) /This brake will be released when it is energized.) Do not use this for braking the motor in motion.

Static friction torque (N·m)	1.27 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.36
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

• Permissible load (For details, refer to P.104)

During assembly During operation	Radial load P-direction (N)	392
	Thrust load A-direction (N)	147
	Thrust load B-direction (N)	196
	Radial load P-direction (N)	245
	Thrust load A, B-direction (N)	98

• For details of Note 1 to Note 5, refer to P.104.

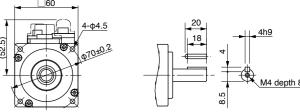
- · Dimensions of Driver, refer to P.30.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".
- Detail of model designation, refer to P.11.

Mass (kg)/ 1.30

(1) Encoder connector (2) Brake connector

(3) Motor connector

Key way dimensions



		AC1	00V		
Motor model *1		041G1	041S1		
	Model	A5 series	MCDH	T3120	
Applicable driver *2	No.	A5E series	MCDHT3120E		
	Fram	ne symbol	C-frame		
Power supply capacit	у	(kVA)	0.	.9	
Rated output		(W)	40	00	
Rated torque		(N·m)	1.	.3	
Momentary Max. pea	k torqu	ie (N·m)	3.	3.8	
Rated current		(A(rms))	4.6		
Max. current		(A(o-p))	19.5		
Regenerative brake		out option	No limit Note)2		
frequency (times/min) Note)1	DV0P4282		No limit Note)2		
Rated rotational spee	d	(r/min)	3000		
Max. rotational speed		(r/min)	6000		
Moment of inertia	With	out brake	0.26		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	0.28		
Recommended moment of inertia ratio of the load and the rotor Note)3			30 times or less		
Rotary encoder specifications Note)5			20-bit Incremental	17-bit Absolute	
Resolut	ion per	r single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

J	
Static friction torque (N·m)	1.27 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.36
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

• Permissible load (For details, refer to P.104)

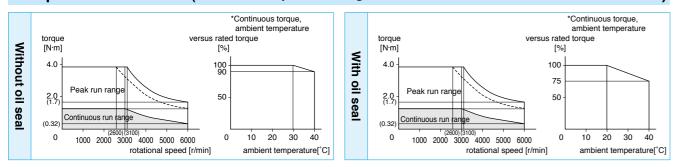
During assembly During operation	Radial load P-direction (N)	392	
	Thrust load A-direction (N)	147	
	Thrust load B-direction (N)	196	
	Radial load P-direction (N)	245	
	Thrust load A, B-direction (N)	98	

· For details of Note 1 to Note 5, refer to P.104.

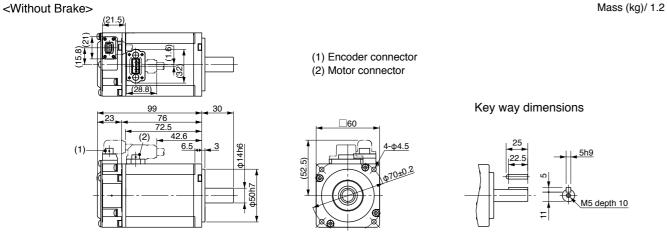
- · Dimensions of Driver, refer to P.31.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".

Detail of model designation, refer to P.11.

Torque characteristics (at AC100V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



* For the dimensions of with brake, refer to the right page.

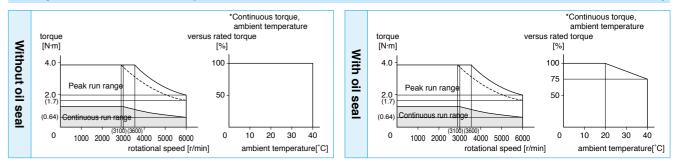
Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required.

Specifications

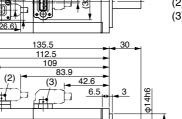
			AC2	00V		specifications (For details ake will be released when it is e	. ,	
Motor model *1		MSME	042G1	042S1		use this for braking the motor in		
	Mode	A5 series	MBDHT2510		Static fri	Static friction torque (N·m)		
Applicable driver *2	No.	A5E series	MBDHT2510E		Engagin	Engaging time (ms)		
	Fran	ne symbol	B-frame		Releasing time (ms) Note)4		15 or less	
Power supply capac	ity	(kVA)	0.	9	Exciting	current (DC) (A)	0.36	
Rated output		(W)	40	00	Releasir	ng voltage (DC) (V)	1 or more	
Rated torque		(N·m)	1.	3	Exciting	voltage (DC) (V)	24±1.2	
Momentary Max. pe	ak torqı	ie (N·m)	3.	8		0 () ()		
Rated current	Rated current (A(rms))		2.4		 Permi 	Permissible load (For details, refer to P.104)		
Max. current		(A(o-p))	10	.2	During	Radial load P-direction (N)	392	
Regenerative brake	With	out option	No limit Note)2		During assembly	Thrust load A-direction (N)	147	
frequency (times/min) Note)1		/0P4283	No limit Note)2		abbombry	Thrust load B-direction (N)	196	
Rated rotational spe	ed	(r/min)	30	00	During	Radial load P-direction (N)	245	
Max. rotational spee	ed	(r/min)	60	00	operation	Thrust load A, B-direction (N)	98	
Moment of inertia	With	out brake	0.2	26	- For dataile of Note 1 to Note 5, refer		to D104	
of rotor (×10 ⁻⁴ kg·m ²	Wi	th brake	0.28		 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.30. 			
Recommended moment of inertia ratio of the load and the rotor Note)3		30 times or less *1 Rotary encoder specifications: *2 The product that the end of driver		encoder specifications:	odel designation			
Rotary encoder specifications Note)5 Resolution per single turn		20-bit Incremental	17-bit Absolute	, has "E	has "E" is "positioning type".			
		1,048,576	131,072	Detail of model designation, refer to P.11.				

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

<With Brake>



<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Motor Specifications 200V MSME 400W [Low inertia, Small capacity]

• Brake specifications (For details, refer to P.1	105)
(This brake will be released when it is energized.) Do not use this for braking the motor in motion.	

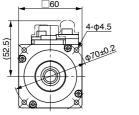
Static friction torque (N·m)	1.27 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.36
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

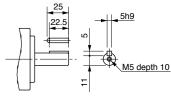
Mass (kg)/ 1.7

(1) Encoder connector (2) Brake connector

(3) Motor connector

Key way dimensions





* For the dimensions of without brake, refer to the left page.

		AC2	200V		
Motor model *1		082G1	082S1		
	Model	A5 series	MCDH	T3520	
Applicable driver *2	No.	A5E series	MCDHT3520E		
	Fran	ne symbol	C-fr	ame	
Power supply capacit	у	(kVA)	1.	.3	
Rated output		(W)	75	50	
Rated torque		(N·m)	2	.4	
Momentary Max. pea	k torqu	ie (N·m)	7.	.1	
Rated current		(A(rms))	4.1		
Max. current	(A(o-p))		17.4		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV0P4283		No limit Note)2		
Rated rotational spee	d	(r/min)	3000		
Max. rotational speed		(r/min) 6000		00	
Moment of inertia	With	out brake	0.87		
of rotor (×10 ⁻⁴ kg·m ²)	With brake		0.97		
Recommended moment of inertia ratio of the load and the rotor No			20 times	s or less	
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolution per si		r single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

1 · · · · · · · · 5 · · · ·	
Static friction torque (N·m)	2.45 or more
Engaging time (ms)	70 or less
Releasing time (ms) Note)4	20 or less
Exciting current (DC) (A)	0.42
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

• Permissible load (For details, refer to P.104)

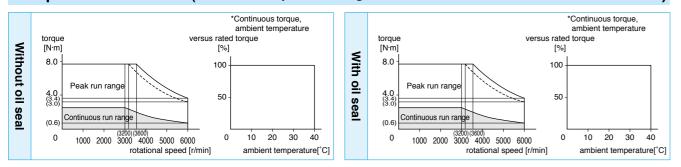
	. .	Radial load P-direction (N)	686
During assembly During operation	÷	Thrust load A-direction (N)	294
	abbornibry	Thrust load B-direction (N)	392
	Radial load P-direction (N)	392	
	Thrust load A, B-direction (N)	147	

· For details of Note 1 to Note 5, refer to P.104.

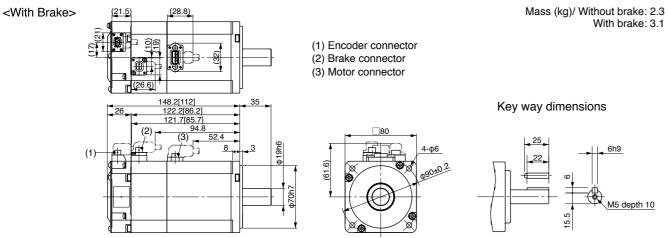
- Dimensions of Driver, refer to P.31.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".

Detail of model designation, refer to P.11.

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



* Figures in [] represent the dimensions of with brake

44

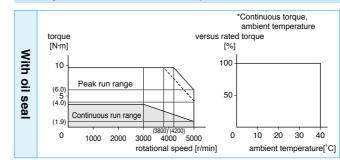
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

(1) Encoder connector (2) Motor/Brake connector

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information.

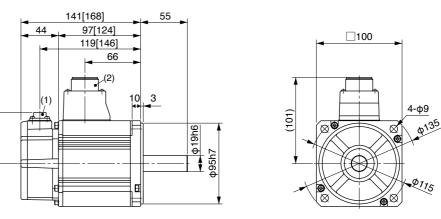
Specifications

Specification	3								
			AC2	200V	• Brake specifications (For details, refer to P.105 (This brake will be released when it is energized.)				
Motor model *1		MSME	102G1	102S1		use this for braking the motor in			
	Model	A5 series	MDDHT5540		Static fri	Static friction torque (N·m)			
Applicable driver *2	No.	A5E series	MDDH	T5540E	Engagin	g time (ms)	50 or less		
	Fran	ne symbol	D-fra	ame	Releasir	ng time (ms) Note)4	15 or less		
Power supply capacit	y	(kVA)	1.	.8	Exciting	current (DC) (A)	0.81±10%		
Rated output		(W)	1.	.0	Releasir	ng voltage (DC) (V)	2 or more		
Rated torque		(N·m)	3.	18	Exciting	voltage (DC) (V)	24±2.4		
Momentary Max. pea	k torqu	ie (N·m)	9.55						
Rated current		(A(rms))	6.6		 Permissible load (For details, refer to P.104) 		r to P.104)		
Max. current		(A(o-p))	28		(A(o-p)) 28		During	Radial load P-direction (N)	980
Regenerative brake	With	out option	No limi	İt Note)2	During assembly	Thrust load A-direction (N)	588		
frequency (times/min) Note)	DV	0P4284	No limi	İt Note)2	accombry	Thrust load B-direction (N)	686		
Rated rotational spee	ed	(r/min)	30	00	During	Radial load P-direction (N)	490		
Max. rotational speed	ł	(r/min)	50	000	operation	Thrust load A, B-direction (N)	196		
Moment of inertia	With	out brake	2.03 2.35		 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.32. 				
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake							
Recommended moment of inertia ratio of the load and the rotor 15 times of 15 tim		s or less	*1 Rotary encoder specifications: *2 The product that the end of driver model design		ndel designation				
		IS Note)5		17-bit Absolute	has "E" is "positioning type".		5		
		r single turn	1,048,576131,072Detail of model designation, refer to P.11.						



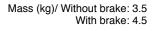
Dimensions

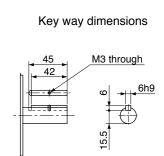
09



Motor Specifications 200V MSME 1.0kW [Low inertia, Middle capacity]

Torgue characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)





* Figures in [] represent the dimensions of with brake.

Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Motor

			AC2	200V	
Motor model *1		152G1	152S1		
	Model	A5 series	MDDH	T5540	
Applicable driver *2	No.	A5E series	MDDH	Г5540E	
	Fran	ne symbol	D-fra	ame	
Power supply capacit	у	(kVA)	2	.3	
Rated output		(W)	1.	.5	
Rated torque		(N·m)	4.	77	
Momentary Max. pea	k torqu	e (N·m)	14	l.3	
Rated current		(A(rms))	8.2		
Max. current	(A(o-p))		35		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV0P4284		No limit Note)2		
Rated rotational spee	d	(r/min)	3000		
Max. rotational speed		(r/min)	5000		
Moment of inertia	With	out brake	2.84		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	3.17		
Recommended moment of inertia ratio of the load and the rotor Note:			15 times	s or less	
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolution per single turn		single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

(e	,
Static friction torque (N·m)	7.8 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.81±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

	. .	Radial load P-direction (N)	980
During assembly During operation	•	Thrust load A-direction (N)	588
	accombry	Thrust load B-direction (N)	686
	Radial load P-direction (N)	490	
	Thrust load A, B-direction (N)	196	

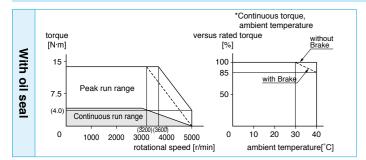
· For details of Note 1 to Note 5, refer to P.104.

• Dimensions of Driver, refer to P.32.

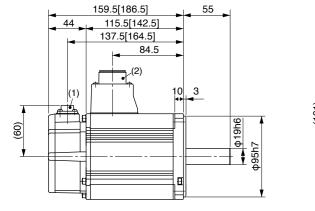
*1 Rotary encoder specifications:

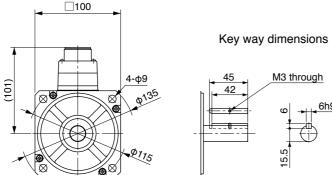
*2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions





(1) Encoder connector

- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Mass (kg)/ Without brake: 4.4

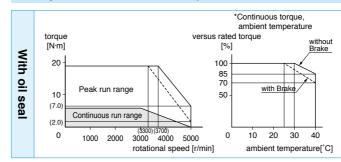
M3 through

With brake: 5.4

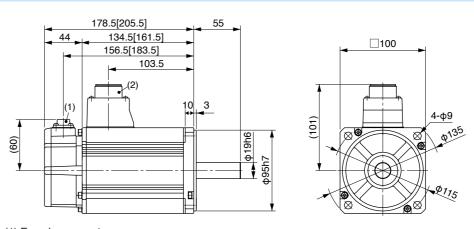
6h9

Specifications

			AC2	200V	Brake specifications (For details, refer to P.1		. ,
Motor model *1		MSME	202G1	202S1	(This brake will be released when it is energized.) Do not use this for braking the motor in motion.		
	Model	A5 series	MEDH	T7364	Static fri	ction torque (N·m)	7.8 or more
Applicable driver *2	No.	A5E series	MEDH	MEDHT7364E		g time (ms)	50 or less
	Fran	ne symbol	E-frame		Releasir	ng time (ms) Note)4	15 or less
Power supply capac	ity	(kVA)	3.	.3	Exciting	current (DC) (A)	0.81±10%
Rated output		(W)	2.	.0	Releasir	ng voltage (DC) (V)	2 or more
Rated torque		(N·m)	6.3	37	Exciting	voltage (DC) (V)	24±2.4
Momentary Max. pe	ak torqu	ie (N·m)	19	9.1			
Rated current (A(rms))		(A(rms))	11.3		• Permi	Permissible load (For details, refer to	
Max. current		(A(o-p))	4	8	. .	Radial load P-direction (N)	980
Regenerative brake	With	out option	No limit Note)2 No limit Note)2		During assembly	Thrust load A-direction (N)	588
frequency (times/min) Not	^{e)1} DV	0P4285				Thrust load B-direction (N)	686
Rated rotational spe	ed	(r/min)	3000		During	Radial load P-direction (N)	490
Max. rotational spee	ed	(r/min)	5000		operation	Thrust load A, B-direction (N)	196
Moment of inertia	With	out brake	3.68 4.01		 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.33. 		
of rotor (×10 ⁻⁴ kg·m ²	Wi	th brake					
Recommended moment of inertia ratio of the load and the rotor Note)3 Rotary encoder specifications Note)5 Resolution per single turn			15 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designatio		
		1S Note)5	20-bit Incremental	17-bit Absolute	, has "E	has "E" is "positioning type". Detail of model designation, refer to P.11.	
		r single turn	1,048,576 131,072		or model designation, telet to		



Dimensions



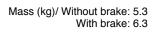
(1) Encoder connector (2) Motor/Brake connector

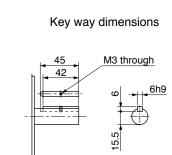
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Motor Specifications 200V MSME 2.0kW [Low inertia, Middle capacity]

Motor

Torgue characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)





* Figures in [] represent the dimensions of with brake.

		AC200V			
Motor model *1		302G1	302S1		
	Model	A5 series	MFDH	TA390	
Applicable driver *2	No.	A5E series	MFDH	FA390E	
	Fram	ne symbol	F-fra	ame	
Power supply capacit	у	(kVA)	4	.5	
Rated output		(W)	3	.0	
Rated torque		(N·m)	9.	55	
Momentary Max. pea	k torqu	e (N·m)	28	3.6	
Rated current		(A(rms))	18.1		
Max. current	(A(o-p))		77		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV0P4285×2		No limit Note)2		
Rated rotational spee	d	(r/min)	3000 5000		
Max. rotational speed		(r/min)			
Moment of inertia	Without brake		6.50		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	7.85		
Recommended moment of inerti ratio of the load and the rotor			15 times or less		
Rotary encoder speci	ficatior	IS Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion per	single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

	,
Static friction torque (N·m)	11.8 or more
Engaging time (ms)	80 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.81±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

	. .	Radial load P-direction (N)	980
During assembly During	U U	Thrust load A-direction (N)	588
	accombry	Thrust load B-direction (N)	686
	During	Radial load P-direction (N)	490
	operation	Thrust load A, B-direction (N)	196

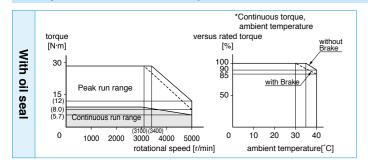
· For details of Note 1 to Note 5, refer to P.104.

• Dimensions of Driver, refer to P.34.

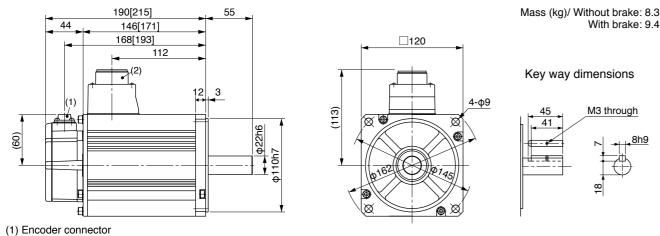
*1 Rotary encoder specifications:

*2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

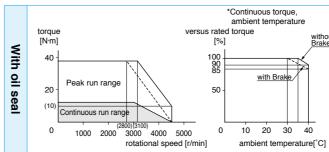
48

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

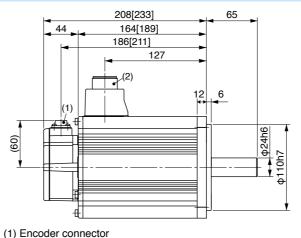
Specifications

Specification	S							
			AC2	200V		specifications (For details	. ,	
Motor model *1		MSME	402G1	402G1 402S1 402S1				
	Model	A5 series	MFDH	TB3A2	Static fr	ction torque (N·m)	16.1 or more	
Applicable driver *2	No.	A5E series	MFDH	B3A2E	Engagin	g time (ms)	110 or less	
	Fran	ne symbol	F-frame		Releasi	ng time (ms) Note)4	50 or less	
Power supply capacit	y	(kVA)	6	.0	Exciting	current (DC) (A)	0.90±10%	
Rated output		(W)	4.0		Releasi	ng voltage (DC) (V)	2 or more	
Rated torque		(N·m)	12.7 Exciting volt		voltage (DC) (V)	24±2.4		
Momentary Max. peak torque (N·m)		ie (N·m)	38	3.2				
Rated current		(A(rms))	19	9.6	• Permi	ssible load (For details, refe	er to P.104)	
Max. current		(A(o-p))	8	3	During	Radial load P-direction (N)	980	
Regenerative brake	With	out option	No lim	it Note)2	During assembly	Thrust load A-direction (N)	588	
frequency (times/min) Note)	DVC	P4285×2	No lim	it Note)2	accombry	Thrust load B-direction (N)	686	
Rated rotational spee	ed	(r/min)	30	00	During	Radial load P-direction (N)	784	
Max. rotational speed	ł	(r/min)	45	00	operation	Thrust load A, B-direction (N)	343	
Moment of inertia	With	out brake	12	2.9	• For det	- For details of Noto 1 to Noto 5, refer to D104		
of rotor (×10 ⁻⁴ kg·m ²) With brake Recommended moment of inertia ratio of the load and the rotor Note)3		th brake	14.2 15 times or less			 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.34. 		
					*1 Rotary	*1 Rotary encoder specifications: *2 The product that the end of driver model designation		
Rotary encoder spec	ification	IS Note)5	20-bit Incremental	17-bit Absolute	has "E	" is "positioning type".	Ū	
Resolution per single turn 1,048,576 131,072		Detail of model designation, refer to P.11.						

Torgue characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>) *Continuous torque, ambient temperature torque versus rated torque [N·m] [%] Brake 100 90 85 40 with Brake Peak run rang 20 50 Continuous run rang 10 20 30 40 0 0 1000 2000 3000 4000 5000 rotational speed [r/min] ambient temperature[°C]



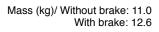
Dimensions



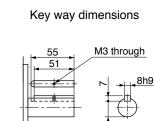
(2) Motor/Brake connector

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

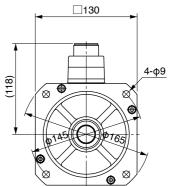
Motor Specifications 200V MSME 4.0kW [Low inertia, Middle capacity]



Motor



2



* Figures in [] represent the dimensions of with brake.

			AC2	200V	
Motor model *1		502G1	502S1		
	Model	A5 series	MFDHTB3A2		
Applicable driver *2	No.	A5E series	MFDHT	B3A2E	
	Fram	ne symbol	F-fra	ame	
Power supply capacit	у	(kVA)	7.	.5	
Rated output		(W)	5	.0	
Rated torque		(N·m)	15	5.9	
Momentary Max. pea	k torqu	e (N·m)	47.7		
Rated current		(A(rms))	24.0		
Max. current	Max. current (A(o		102		
Regenerative brake	With	out option	357		
frequency (times/min) Note)1	DV0	DV0P4285×2 No limit Note)2		t Note)2	
Rated rotational spee	d	(r/min)	3000		
Max. rotational speed		(r/min)	4500		
Moment of inertia	With	out brake	17.4		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	18.6		
Recommended moment of inertia ratio of the load and the rotor Note)3		15 times or less			
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion per	single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

(· · · · · · · · · · · · · · · · · · ·	
Static friction torque (N·m)	16.1 or more
Engaging time (ms)	110 or less
Releasing time (ms) Note)4	50 or less
Exciting current (DC) (A)	0.90±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

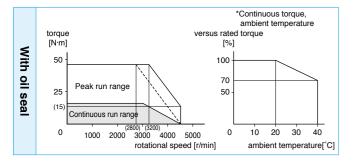
• Permissible load (For details, refer to P.104)

		Radial load P-direction (N)	980
During assembly During	Thrust load A-direction (N)	588	
	Thrust load B-direction (N)	686	
	Radial load P-direction (N)	784	
	operation	Thrust load A, B-direction (N)	343

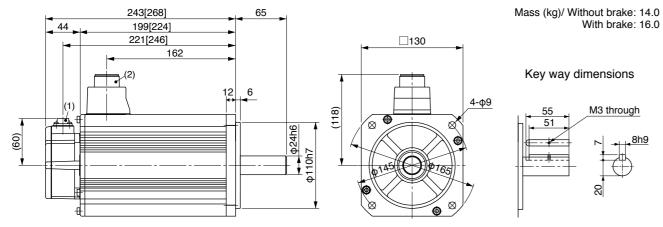
· For details of Note 1 to Note 5, refer to P.104.

- Dimensions of Driver, refer to P.34.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



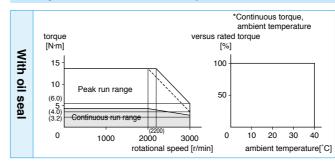
Dimensions



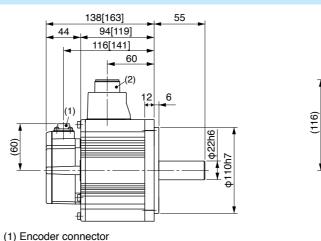
- (1) Encoder connector
- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.
- <Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Specifications

			AC200V			specifications (For details	
Motor model *1		MDME	102G1	102S1		ake will be released when it is e use this for braking the motor in	
	Mode	A5 series	MDDH	T3530	Static fri	ction torque (N·m)	4.9 or more
Applicable driver *2	No.	A5E series	MDDH	T3530E	Engagin	g time (ms)	80 or less
	Fran	ne symbol	D-fra	ame	Releasir	ng time (ms) Note)4	70 or less
Power supply capac	ity	(kVA)	1.	.8	Exciting	current (DC) (A)	0.59±10%
Rated output		(W)	1.	.0	Releasir	ng voltage (DC) (V)	2 or more
Rated torque		(N·m)	4.	77	Exciting	voltage (DC) (V)	24±2.4
Momentary Max. pe	ak torqı	ie (N·m)	14	.3			
Rated current		(A(rms))	5.	.7	 Permi 	ssible load (For details, refe	er to P.104)
Max. current		(A(o-p))	2	4	During	Radial load P-direction (N)	980
Regenerative brake	With	out option	No limi	t Note)2	During assembly	Thrust load A-direction (N)	588
frequency (times/min) Note)1 DV	/0P4284	No limi	t Note)2	accombry	Thrust load B-direction (N)	686
Rated rotational spe	ed	(r/min)	20	00	During	Radial load P-direction (N)	490
Max. rotational spee	d	(r/min)	30	00	operation	Thrust load A, B-direction (N)	196
Moment of inertia	With	out brake	4.0	60	For details of Note 1 to Note 5, refer to P.104.		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	5.90		Dimensions of Driver, refer to P.32.		
Recommended moment of inertia ratio of the load and the rotor Note)3			10 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designation		
Rotary encoder spe	cificatio	1S Note)5	20-bit Incremental	17-bit Absolute	has "E" is "positioning type".		Ū
Resol	ution pe	r single turn	1,048,576	131,072	Detail of model designation, refer to P.11.		



Dimensions



(2) Motor/Brake connector

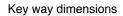
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information.

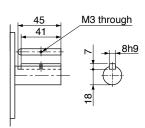
Motor Specifications 200V MDME 1.0kW [Middle inertia, Middle capacity]

Motor

Torgue characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)

Mass (kg)/ Without brake: 5.2 With brake: 6.7





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* Figures in [] represent the dimensions of with brake.

Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

			AC2	200V	
Motor model *1		152G1	152S1		
	Model	A5 series	MDDHT5540		
Applicable driver *2	No.	A5E series	MDDH	Г5540E	
	Fram	ne symbol	D-fra	ame	
Power supply capacit	у	(kVA)	2	.3	
Rated output		(W)	1.	.5	
Rated torque		(N·m)	7.	16	
Momentary Max. pea	k torqu	ie (N·m)	21	.5	
Rated current		(A(rms))	9.4		
Max. current		(A(o-p))	40		
Regenerative brake	With	out option	No limi	limit Note)2	
frequency (times/min) Note)1	DV	'0P4284	No limit Note)2		
Rated rotational spee	d	(r/min)	2000		
Max. rotational speed		(r/min)	3000		
Moment of inertia	With	out brake	6.70		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	7.99		
Recommended moment of inertia ratio of the load and the rotor Note)3		10 times or less			
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion per	r single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

Static friction torque (N·m)	13.7 or more
Engaging time (ms)	100 or less
Releasing time (ms) Note)4	50 or less
Exciting current (DC) (A)	0.79±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

		Radial load P-direction (N)	980
During assembly During	Thrust load A-direction (N)	588	
	Thrust load B-direction (N)	686	
	Radial load P-direction (N)	490	
	operation	Thrust load A, B-direction (N)	196

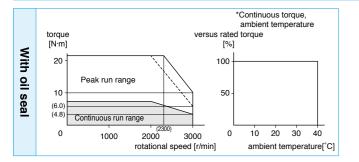
· For details of Note 1 to Note 5, refer to P.104.

• Dimensions of Driver, refer to P.32.

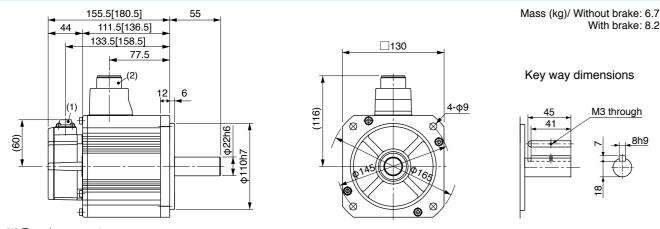
*1 Rotary encoder specifications:

*2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

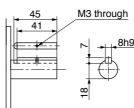


- (1) Encoder connector (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

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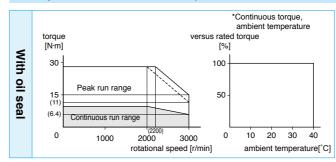
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

With brake: 8.2 Key way dimensions

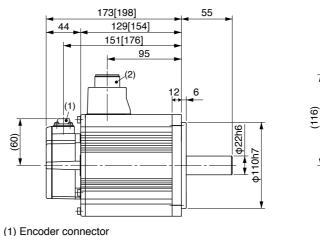


Specifications

			AC2	200V		specifications (For details		
Motor model *1		MDME	202G1	202S1		ake will be released when it is e use this for braking the motor ir		
	Mode	A5 series	MEDH	T7364	Static fri	ction torque (N·m)	13.7 or more	
Applicable driver *	2 No .	A5E series	MEDH	T7364E	Engagin	g time (ms)	100 or less	
	Fra	me symbol	E-fr	ame	Releasir	ng time (ms) Note)4	50 or less	
Power supply capa	acity	(kVA)	3	.3	Exciting	current (DC) (A)	0.79±10%	
Rated output		(W)	2	.0	Releasir	ng voltage (DC) (V)	2 or more	
Rated torque		(N·m)	9.	55	Exciting	voltage (DC) (V)	24±2.4	
Momentary Max. peak torque (N·m)		ue (N·m)	28	3.6				
Rated current		(A(rms))	11	.5	• Permi	ssible load (For details, refe	er to P.104)	
Max. current		(A(o-p))	4	.9	During	Radial load P-direction (N)	980	
Regenerative brake	Wit	nout option	No lim	it Note)2	During assembly	Thrust load A-direction (N)	588	
frequency (times/min) N	^{ote)1} D	V0P4285	No lim	it Note)2	accombry	Thrust load B-direction (N)	686	
Rated rotational sp	eed	(r/min)	20	00	During	Radial load P-direction (N)	490	
Max. rotational spe	ed	(r/min)	30	00	operation	Thrust load A, B-direction (N)	196	
Moment of inertia	Wit	hout brake	8.	72	• For deta	lataila of Nata 1 to Nata 5, refer to D104		
of rotor (×10 ⁻⁴ kg·m	²) W	ith brake	10.0			 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.33. 		
Recommended moment of inertia ratio of the load and the rotor Note)3			10 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designation			
Rotary encoder sp	ecificatio	ONS Note)5	20-bit Incremental	17-bit Absolute	has "E" is "positioning type". Detail of model designation, refer to P.11.		0	
Res	olution pe	er single turn	1,048,576	131,072	Detail	or moder designation, reler to	1.11.	



Dimensions



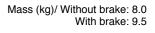
(2) Motor/Brake connector

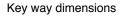
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

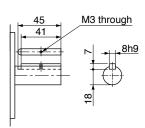
Motor Specifications 200V MDME 2.0kW [Middle inertia, Middle capacity]

Brake specifications (For details, refer to P.105	5)
(This brake will be released when it is energized.) Do not use this for braking the motor in motion.	

Torgue characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)







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* Figures in [] represent the dimensions of with brake.

Motor

			AC2	200V	
Motor model *1		302G1	302S1		
	Model	A5 series	MFDHTA390		
Applicable driver *2	No.	A5E series	MFDH	FA390E	
	Fram	ne symbol	F-fra	ame	
Power supply capacit	у	(kVA)	4	.5	
Rated output		(W)	3.	.0	
Rated torque		(N·m)	14	l.3	
Momentary Max. peal	k torqu	ie (N·m)	43	3.0	
Rated current		(A(rms))	17.4		
Max. current	Max. current (A(o-p))		74		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV0P4285×2		No limit Note)2		
Rated rotational spee	d	(r/min)	2000		
Max. rotational speed		(r/min)	3000		
Moment of inertia	Without brake		12.9		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	14.2		
Recommended moment of inertia ratio of the load and the rotor Note)3		10 times	s or less		
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion per	r single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

Static friction torque (N·m)	16.2 or more
Engaging time (ms)	110 or less
Releasing time (ms) Note)4	50 or less
Exciting current (DC) (A)	0.90±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

	. .	Radial load P-direction (N)	980
	During assembly	Thrust load A-direction (N)	588
		Thrust load B-direction (N)	686
	During	Radial load P-direction (N)	784
	operation	Thrust load A, B-direction (N)	343

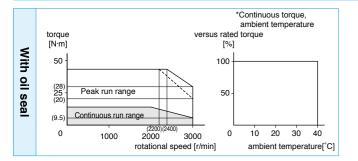
· For details of Note 1 to Note 5, refer to P.104.

• Dimensions of Driver, refer to P.34.

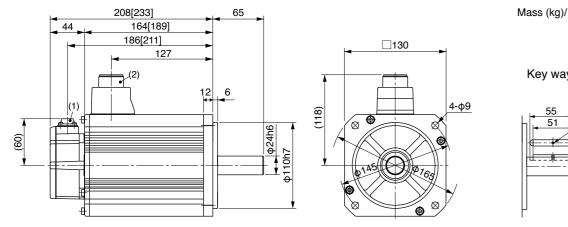
*1 Rotary encoder specifications:

*2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

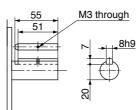


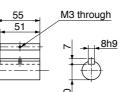
- (1) Encoder connector
- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Mass (kg)/ Without brake: 11.0 With brake: 12.6

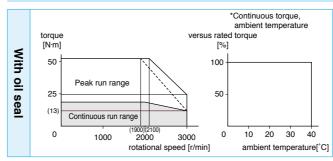
Key way dimensions



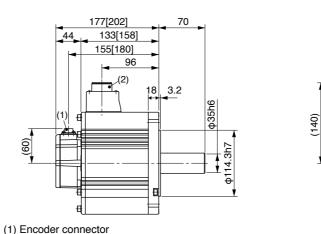


Specifications

Specification	S							
		AC200V		• Brake specifications (For details, refer to P.105)				
Motor model *1		MDME	402G1	402S1	(This brake will be released when it is Do not use this for braking the motor i			
	Mode	A5 series	MFDH	TB3A2	Static fri	ction torque (N·m)	24.5 or more	
Applicable driver *2	No.	A5E series	MFDH1	FB3A2E	Engagin	g time (ms)	80 or less	
Frame symbol		ne symbol	F-frame		Releasi	ng time (ms) Note)4	25 or less	
Power supply capacit	y	(kVA)	6	.0	Exciting	current (DC) (A)	1.3±10%	
Rated output		(W)	4	.0	Releasi	ng voltage (DC) (V)	2 or more	
Rated torque	Rated torque (N·m)		19.1		Exciting voltage (DC) (V)		24±2.4	
Momentary Max. peak torque (N·m)		ue (N·m)	57.3					
Rated current		(A(rms))	21.0		• Permissible load (For details, refer to P.104)			
Max. current		(A(o-p))	8	9	During	Radial load P-direction (N)	1666	
Regenerative brake	With	out option	No limit Note)2		During assembly	Thrust load A-direction (N)	784	
frequency (times/min) Note)1	frequency (times/min) Note)1 DV0P4285		No limit Note)2		accombry	Thrust load B-direction (N)	980	
Rated rotational spee	d	(r/min)	2000		During	Radial load P-direction (N)	784	
Max. rotational speed	l	(r/min)	3000		operation	Thrust load A, B-direction (N)	343	
Moment of inertia	With	out brake	37	7.6	For details of Note 1 to Note 5, refer to P.104.			
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	38.6		 Dimensions of Driver, refer to P.34. 			
Recommended moment of inertia ratio of the load and the rotor Note)3 Rotary encoder specifications Note)5 Resolution per single turn		10 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designation				
		20-bit Incremental	20-bit 17-bit has "E" is "positioning type".		0			
		r single turn	1,048,576	131,072	Detail of model designation, refer to P.11.			



Dimensions



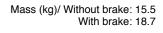
(2) Motor/Brake connector

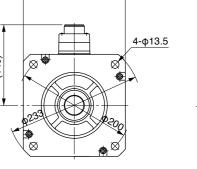
* Figures in [] represent the dimensions of with brake.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Motor Specifications 200V MDME 4.0kW [Middle inertia, Middle capacity]

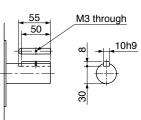
Torgue characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)





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Key way dimensions



			AC200V		
Motor model *1		502G1	502S1		
	Model	A5 series	MFDH	TB3A2	
Applicable driver *2	No.	A5E series	MFDHT	B3A2E	
	Fram	ne symbol	F-fra	ame	
Power supply capacit	у	(kVA)	7.	.5	
Rated output		(W)	5	.0	
Rated torque		(N·m)	23	3.9	
Momentary Max. pea	k torqu	e (N·m)	71	.6	
Rated current		(A(rms))	25.9		
Max. current		(A(o-p))	110		
Regenerative brake	Without option		120		
frequency (times/min) Note)1	DV0P4285×2		No limit Note)2		
Rated rotational spee	d	(r/min)	2000		
Max. rotational speed		(r/min)	3000		
Moment of inertia	Without brake		48.0		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	48.8		
Recommended mome ratio of the load and t			10 times or less		
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion per	single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

Static friction torque (N·m)	24.5 or more
Engaging time (ms)	80 or less
Releasing time (ms) Note)4	25 or less
Exciting current (DC) (A)	1.3±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

_ .	Radial load P-direction (N)	1666
During assembly	Thrust load A-direction (N)	784
accontroly	Thrust load B-direction (N)	980
During	Radial load P-direction (N)	784
operation	Thrust load A, B-direction (N)	343

· For details of Note 1 to Note 5, refer to P.104.

• Dimensions of Driver, refer to P.34.

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*1 Rotary encoder specifications:

*2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Mass (kg)/ Without brake: 18.6

Key way dimensions

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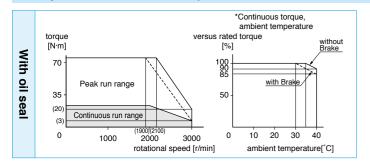
⊨⊭

With brake: 21.8

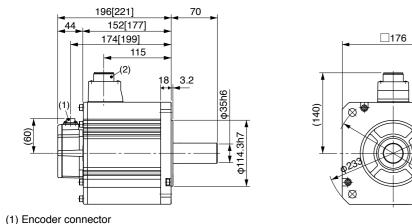
M3 through

10h9

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

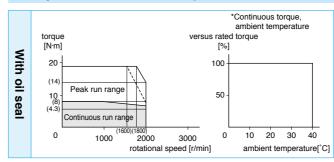


- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

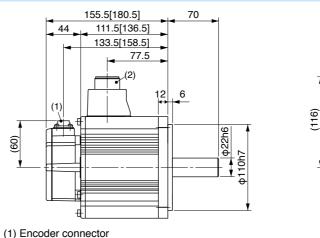
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Specifications

			AC2	00V		specifications (For details	
Motor model *1		MGME	092G1	092S1		ake will be released when it is e use this for braking the motor ir	
	Model	A5 series	MDDHT5540		Static fri	Static friction torque (N·m)	
Applicable driver *2	No.	A5E series	MDDH	MDDHT5540E		g time (ms)	100 or less
	Fram	ie symbol	D-fra	ame	Releasir	ng time (ms) Note)4	50 or less
Power supply capacit	y	(kVA)	1.	8	Exciting	current (DC) (A)	0.79±10%
Rated output		(W)	0.	9	Releasir	ng voltage (DC) (V)	2 or more
Rated torque		(N·m)	8.9	59	Exciting	voltage (DC) (V)	24±2.4
Momentary Max. peal	Momentary Max. peak torque (N·m)		19.3				
Rated current	Rated current (A(rms))		7.6		• Permi	ssible load (For details, refe	er to P.104)
Max. current		(A(o-p))	24		During	Radial load P-direction (N)	980
Regenerative brake	Without option		No limit Note)2		During assembly	Thrust load A-direction (N)	588
frequency (times/min) Note)1	DV	0P4284	No limit Note)2		assembly	Thrust load B-direction (N)	686
Rated rotational spee	d	(r/min)	1000		During	Radial load P-direction (N)	686
Max. rotational speed		(r/min)	2000		operation	Thrust load A, B-direction (N)	196
Moment of inertia	With	out brake	6.7	70	For details of Note 1 to Note 5. refer to P.104.		
of rotor (×10 ⁻⁴ kg·m ²)	Wit	h brake	7.9	99		ions of Driver, refer to P.32.	01.104.
Recommended moment of inertia ratio of the load and the rotor Note)3		10 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designation			
Rotary encoder speci	fication	IS Note)5	20-bit 17-bit Incremental Absolute		 has "E" is "positioning type". Detail of model designation, refer to P.11. 		
Resolut	single turn	1,048,576	131,072				



Dimensions



(2) Motor/Brake connector

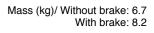
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

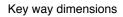
Motor Specifications 200V MGME 0.9kW [Middle inertia, Middle capacity]

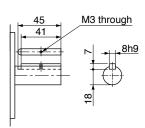
• Brake specifications (For details, refer to P.105)	
(This brake will be released when it is energized.) Do not use this for braking the motor in motion.)	

Motor

Torgue characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)







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^{*} Figures in [] represent the dimensions of with brake.

			AC200V			
Motor model *1		202G1	202S1			
	Model	A5 series	MFDH	TA390		
Applicable driver *2	No.	A5E series	MFDH	FA390E		
	Fram	ne symbol	F-fra	ame		
Power supply capacit	у	(kVA)	3	.8		
Rated output		(W)	2	.0		
Rated torque		(N·m)	19).1		
Momentary Max. pea	k torqu	ie (N·m)	47	47.7		
Rated current		(A(rms))	17.0			
Max. current	(A(o-p))		60			
Regenerative brake	Without option		No limit Note)2			
frequency (times/min) Note)1	DV0P4285×2		No limit Note)2			
Rated rotational spee	d	(r/min)	1000			
Max. rotational speed		(r/min)	2000			
Moment of inertia	Without brake		30.3			
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	31.4			
Recommended mome ratio of the load and t		10 times or less				
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute		
Resolut	ion per	r single turn	1,048,576	131,072		

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

	,
Static friction torque (N·m)	24.5 or more
Engaging time (ms)	80 or less
Releasing time (ms) Note)4	25 or less
Exciting current (DC) (A)	1.3±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

	. .	Radial load P-direction (N)	1666
	During assembly	Thrust load A-direction (N)	784
		Thrust load B-direction (N)	980
	During	Radial load P-direction (N)	1176
	operation	Thrust load A, B-direction (N)	490

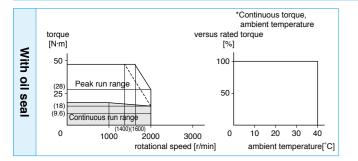
· For details of Note 1 to Note 5, refer to P.104.

· Dimensions of Driver, refer to P.34.

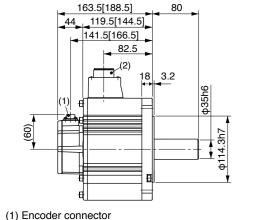
*1 Rotary encoder specifications:

*2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

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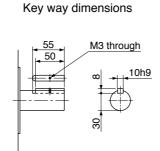
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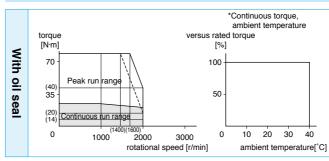
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Mass (kg)/ Without brake: 14.0 With brake: 17.5

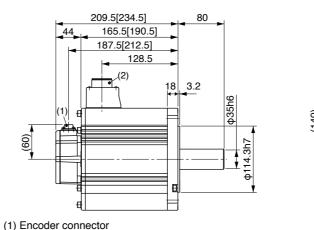


Specifications

		AC2	200V	• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.)				
Motor model *1	Motor model *1 MGME		302G1	302S1				
	Model	A5 series	MFDH	TB3A2	Static fri	ction torque (N·m)	58.8 or more	
Applicable driver *2	No.	A5E series	MFDH1	B3A2E	Engagin	g time (ms)	150 or less	
	Fram	ne symbol	F-fr	ame	Releasir	ng time (ms) Note)4	50 or less	
Power supply capacit	у	(kVA)	4	.5	Exciting	current (DC) (A)	1.4±10%	
Rated output		(W)	3	.0	Releasir	ng voltage (DC) (V)	2 or more	
Rated torque		(N·m)	28	3.7	Exciting	voltage (DC) (V)	24±2.4	
Momentary Max. pea	Momentary Max. peak torque (N·m)		71.7					
Rated current	Rated current (A(rms))		22.6		 Permi 	ssible load (For details, refe	er to P.104)	
Max. current		(A(o-p))	80		During	Radial load P-direction (N)	2058	
Regenerative brake	With	out option	No limit Note)2		During assembly	Thrust load A-direction (N)	980	
frequency (times/min) Note)1	DV0	P4285×2	No limit Note)2		accombry	Thrust load B-direction (N)	1176	
Rated rotational spee	d	(r/min)	1000		During	Radial load P-direction (N)	1470	
Max. rotational speed		(r/min)	2000		operation	Thrust load A, B-direction (N)	490	
Moment of inertia	With	out brake	48	48.4		For details of Note dite Note 5, refer to Dd04		
of rotor (×10 ⁻⁴ kg·m ²)	With brake		49.2		 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.34. 			
Recommended moment of inertia ratio of the load and the rotor Note)3		10 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designation				
Rotary encoder speci	ficatior	1S Note)5	Incremental Absolute		has "E" is "positioning type". Detail of model designation, refer to P.11.			
Resolut	ion per	r single turn			Dotai			



Dimensions



(2) Motor/Brake connector

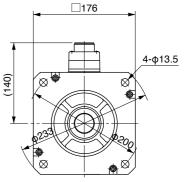
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Motor Specifications 200V MGME 3.0kW [Middle inertia, Middle capacity]

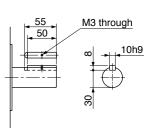
Motor

Torgue characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)

Mass (kg)/ Without brake: 20.0 With brake: 23.5



Key way dimensions



^{*} Figures in [] represent the dimensions of with brake.

			AC2	200V		
Motor model *1		102G1 102S1				
	Model	A5 series	MDDHT3530			
Applicable driver *2	No.	A5E series	MDDH	T3530E		
	Fram	ne symbol	D-fra	ame		
Power supply capacit	у	(kVA)	1.	.8		
Rated output		(W)	1.	.0		
Rated torque		(N·m)	4.	77		
Momentary Max. pea	k torqu	e (N·m)	14	14.3		
Rated current		(A(rms))	5.7			
Max. current		(A(o-p))	24			
Regenerative brake	Without option		83			
frequency (times/min) Note)1	DV0P4284		No limit Note)2			
Rated rotational spee	d	(r/min)	2000			
Max. rotational speed	(r/min)		3000			
Moment of inertia	Without brake		24.7			
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	26.0			
Recommended mome ratio of the load and t			5 times or less			
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute		
Resolut	ion per	single turn	1,048,576	131,072		

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

(e	,
Static friction torque (N·m)	4.9
Engaging time (ms)	80 or less
Releasing time (ms) Note)4	70 or less
Exciting current (DC) (A)	0.59±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

	. .	Radial load P-direction (N)	980
During assembly	Thrust load A-direction (N)	588	
	Thrust load B-direction (N)	686	
	During operation	Radial load P-direction (N)	490
		Thrust load A, B-direction (N)	196

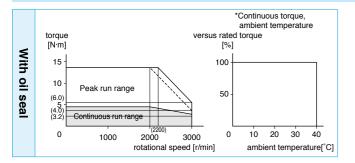
· For details of Note 1 to Note 5, refer to P.104.

• Dimensions of Driver, refer to P.32.

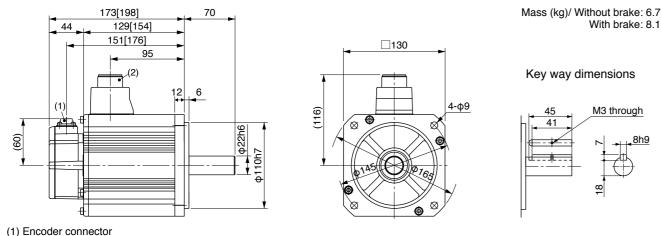
*1 Rotary encoder specifications:

*2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)

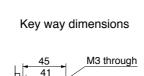


Dimensions

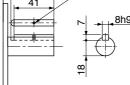


- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

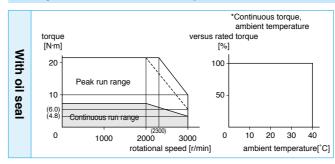
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.



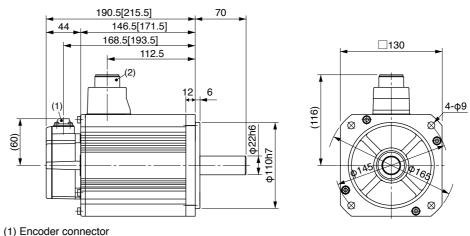
With brake: 8.1



		AC2	00V		specifications (For details			
Motor model *1	l		МНМЕ	152G1	152S1	(This brake will be released when it is energized. Do not use this for braking the motor in motion.		
	Ν	Nodel	A5 series	MDDHT5540		Static friction torque (N·m)		13.7 or mo
Applicable driver *2 No. A5		A5E series	MDDHT5540E		Engagin	g time (ms)	100 or les	
		Fram	ne symbol	D-fra	ime	Releasir	ng time (ms) Note)4	50 or les
Power supply c	apacity		(kVA)	2.	3	Exciting	current (DC) (A)	0.79±109
Rated output			(W)	1.	5	Releasir	ng voltage (DC) (V)	2 or more
Rated torque			(N·m)	7.1	6	Exciting	voltage (DC) (V)	24±2.4
Momentary Max. peak torque (N·m)		e (N·m)	21.5					
Rated current (A(rms))		(A(rms))	9.4		Permissible load (For details, refer to F		er to P.104)	
Max. current			(A(o-p))	40)	. .	Radial load P-direction (N)	980
Regenerative br	rake	Without option		22		During assembly	Thrust load A-direction (N)	588
frequency (times/mi	in) Note)1	DV0P4284		130		accombry	Thrust load B-direction (N)	686
Rated rotationa	al speed		(r/min)	2000		During	Radial load P-direction (N)	490
Max. rotational	speed		(r/min)	3000		operation	Thrust load A, B-direction (N)	196
Moment of iner	tia	With	out brake	37.1		• For deta	ails of Note 1 to Note 5, refer t	o P 104
of rotor (×10 ⁻⁴ k	g·m²)	Wit	h brake	38.4			ions of Driver, refer to P.32.	01.104.
Recommended moment of inertia ratio of the load and the rotor Note)3			5 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designatio			
Rotary encoder specifications Note)5		IS Note)5	20-bit Incremental	17-bit Absolute	has "E" is "positioning type".		0	
F	Resolutio	on per	single turn	1,048,576	131,072	Detail of model designation, refer to P.11.		



Dimensions



(2) Motor/Brake connector

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

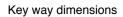
Specifications

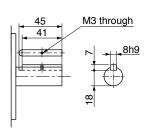
Motor Specifications 200V MHME 1.5kW [High inertia, Middle capacity]

Motor

Torgue characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)

Mass (kg)/ Without brake: 8.6 With brake: 10.1





* Figures in [] represent the dimensions of with brake.

		AC200V			
Motor model *1		МНМЕ	202G1	202S1	
	Model	A5 series	MEDHT7364		
Applicable driver *2	No.	A5E series	MEDH	Г7364E	
	Fran	ne symbol	E-fra	ame	
Power supply capacit	у	(kVA)	3	.3	
Rated output		(W)	2	.0	
Rated torque		(N·m)	9.	55	
Momentary Max. pea	k torqu	ie (N·m)	28	8.6	
Rated current		(A(rms))	11.1		
Max. current		(A(o-p)) 47			
Regenerative brake	With	out option	45		
frequency (times/min) Note)1	DV0P4285		142		
Rated rotational spee	d	(r/min)	2000		
Max. rotational speed		(r/min)	3000		
Moment of inertia	With	out brake	57.8		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	59.6		
Recommended mome ratio of the load and t		5 times or less			
Rotary encoder speci	1S Note)5	20-bit Incremental	17-bit Absolute		
Resolut	ion pei	r single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

	,
Static friction torque (N·m)	24.5 or more
Engaging time (ms)	80 or less
Releasing time (ms) Note)4	25 or less
Exciting current (DC) (A)	1.3±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

	. .	Radial load P-direction (N)	1666
During assembly	Thrust load A-direction (N)	784	
	Thrust load B-direction (N)	980	
	During operation	Radial load P-direction (N)	784
		Thrust load A, B-direction (N)	343

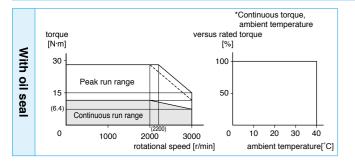
· For details of Note 1 to Note 5, refer to P.104.

- Dimensions of Driver, refer to P.33.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

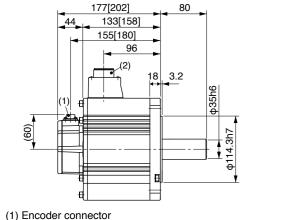
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Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

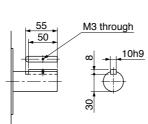
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<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

With brake: 15.5

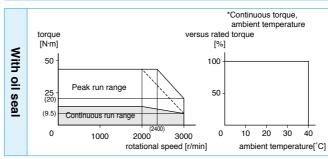


Mass (kg)/ Without brake: 12.2

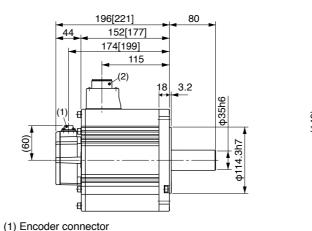
Key way dimensions

Specifications

Specification	าร							
			AC2	200V		specifications (For details		
Motor model *1		МНМЕ	302G1	302S1		rake will be released when it is e use this for braking the motor in		
	Model A5 series		MFDH	TA390	Static fr	iction torque (N·m)	24.5 or more	
Applicable driver *2	No.	A5E series	MFDH	TA390E	Engagir	ng time (ms)	80 or less	
	Fran	ne symbol	F-fr	ame	Releasi	ng time (ms) Note)4	25 or less	
Power supply capac	ity	(kVA)	4	.5	Exciting	current (DC) (A)	1.3±10%	
Rated output (W)		3.0		Releasi	ng voltage (DC) (V)	2 or more		
Rated torque (N·m)		14.3		Exciting voltage (DC) (V)		24±2.4		
Momentary Max. peak torque (N·m)		43.0						
Rated current	Rated current (A(rms))		16.0		• Permissible load (For details, refer to P.104)			
Max. current		(A(o-p))	6	8	During	Radial load P-direction (N)	1666	
		out option	19		During assembly	Thrust load A-direction (N)	784	
frequency (times/min) Note	⁾¹ DV0)P4285×2	142		accombry	Thrust load B-direction (N)	980	
Rated rotational spe	ed	(r/min)	2000		During	Radial load P-direction (N)	784	
Max. rotational spee	d	(r/min)	3000		operation	Thrust load A, B-direction (N)	343	
Moment of inertia	With	out brake	90.5		• For details of Note 1 to Note 5, refer to B104			
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	92.1		 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.34. *1 Rotary encoder specifications: *2 The product that the end of driver model designation 			
Recommended mon ratio of the load and			5 times or less					
Rotary encoder spec	cificatio	NS Note)5	20-bit Incremental	17-bit Absolute	it has "E" is "positioning type".			
Resolu	ution pe	r single turn	1,048,576	131,072	Delaii	of model designation, refer to	1.11.	
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Dimensions

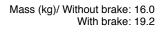


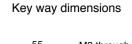
(2) Motor/Brake connector

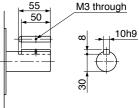
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

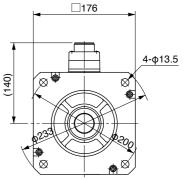
Motor Specifications 200V MHME 3.0kW [High inertia, Middle capacity]

Torgue characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)









^{*} Figures in [] represent the dimensions of with brake.

		AC2	200V		
Motor model *1		МНМЕ	402G1	402S1	
	Model	A5 series	MFDH	TB3A2	
Applicable driver *2	No.	A5E series	MFDHT	B3A2E	
	Fram	ne symbol	F-fra	ame	
Power supply capacit	у	(kVA)	6	.0	
Rated output		(W)	4	.0	
Rated torque		(N·m)	19	9.1	
Momentary Max. pea	k torqu	e (N·m)	57	7.3	
Rated current		(A(rms))	21.0		
Max. current		(A(o-p))	89		
Regenerative brake	With	out option	17		
frequency (times/min) Note)1	DV0P4285×2		125		
Rated rotational spee	d	(r/min)	2000		
Max. rotational speed		(r/min)	30	00	
Moment of inertia	With	out brake	112		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	114		
Recommended mome ratio of the load and t			5 times or less		
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion per	single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

J	
Static friction torque (N·m)	24.5 or more
Engaging time (ms)	80 or less
Releasing time (ms) Note)4	25 or less
Exciting current (DC) (A)	1.3±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

	. .	Radial load P-direction (N)	1666
During assembly	Thrust load A-direction (N)	784	
	Thrust load B-direction (N)	980	
	During operation	Radial load P-direction (N)	784
		Thrust load A, B-direction (N)	343

· For details of Note 1 to Note 5, refer to P.104.

• Dimensions of Driver, refer to P.34.

*1 Rotary encoder specifications:

*2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Mass (kg)/ Without brake: 18.6

Key way dimensions

50

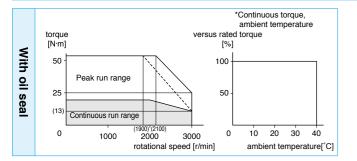
⊨⊭

With brake: 21.8

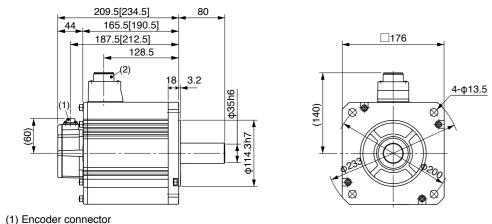
M3 through

10h9

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



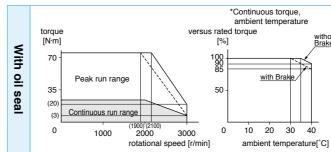
- (2) Motor/Brake connector
 - * Figures in [] represent the dimensions of with brake.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

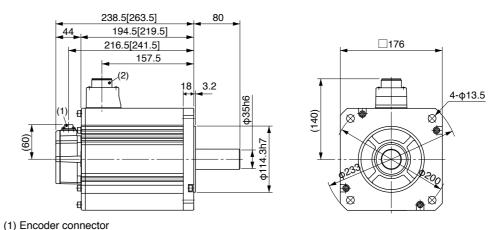
Specifications

Specificati	ons								
				AC2	200V		specifications (For details	. ,	
Motor model *1		Ν	инме	502G1	502S1		ake will be released when it is e use this for braking the motor in		
Model A5		5 series	MFDH	MFDHTB3A2		ction torque (N·m)	24.5 or more		
Applicable driver	*2 No	D. AS	5E series	MFDH	B3A2E	Engagin	g time (ms)	80 or less	
	F	rame s	symbol	F-fr	ame	Releasir	ng time (ms) Note)4	25 or less	
Power supply cap	acity		(kVA)	7	.5	Exciting	current (DC) (A)	1.3±10%	
Rated output			(W)	5	.0	Releasir	ng voltage (DC) (V)	2 or more	
Rated torque			(N·m)	23.9		Exciting voltage (DC) (V)		24±2.4	
Momentary Max. peak torque (N·m)			(N·m)	71.6					
Rated current (A(rms))		A(rms))	25.9		• Permissible load (For details, refer to P.104)				
Max. current			(A(o-p))	1	10	. .	Radial load P-direction (N)	1666	
Regenerative brak	e V	Vithout	option	10		During assembly	Thrust load A-direction (N)	784	
frequency (times/min) !	Note)1	DV0P4285×2		76		accombry	Thrust load B-direction (N)	980	
Rated rotational s	peed		(r/min)	2000		During	Radial load P-direction (N)	784	
Max. rotational sp	eed		(r/min)	3000		operation	Thrust load A, B-direction (N)	343	
Moment of inertia	v	Nithout	t brake	10	62	• For dot	 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.34. 		
of rotor (×10 ⁻⁴ kg·r	n²)	With b	orake	10	64				
Recommended moment of inertia ratio of the load and the rotor Note)3			5 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designation				
Rotary encoder s	pecifica	ations	Note)5	20-bit Incremental	17-bit Absolute	has "E	" is "positioning type".	0	
Res	solution	per sir	ngle turn	1,048,576	131,072	Detail of model designation, refer to P.11.			

Torgue characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>) *Continuous torque, ambient temperature torque versus rated torque [N·m] [%] Brake 70 100 90 85 with Brake Peak run rand 35 50 (20) Continuous run range (3) 10 20 30 40 0 0 1000 3000 2000 rotational speed [r/min] ambient temperature[°C]



Dimensions



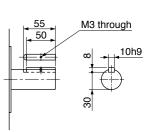
(2) Motor/Brake connector

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Motor Specifications 200V MHME 5.0kW [High inertia, Middle capacity]

Mass (kg)/ Without brake: 23.0 With brake: 26.2 Motor

Key way dimensions



* Figures in [] represent the dimensions of with brake.

		AC100V			
Motor model *1		MSMD	5AZG1	5AZS1	
	Model	A5 series	MADH	T1105	
Applicable driver *2	No.	A5E series	MADH	T1105E	
	Fram	ne symbol	A-fr	ame	
Power supply capacit	у	(kVA)	0	.5	
Rated output		(W)	5	0	
Rated torque		(N·m)	0.	16	
Momentary Max. pea	k torqu	e (N·m)	0.4	48	
Rated current		(A(rms))	1.1		
Max. current		(A(o-p))	4.7		
Regenerative brake	With	out option	No limit Note)2		
frequency (times/min) Note)1	DV0P4280		No limit Note)2		
Rated rotational spee	d	(r/min)	3000		
Max. rotational speed		(r/min)	50	00	
Moment of inertia	With	out brake	0.025		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	0.027		
Recommended mome ratio of the load and t		30 times or less			
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion per	single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

Static friction torque (N·m)	0.29 or more
Engaging time (ms)	35 or less
Releasing time (ms) Note)4	20 or less
Exciting current (DC) (A)	0.3
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

• Permissible load (For details, refer to P.104)

		Radial load P-direction (N)	147
During assembly During operation	Thrust load A-direction (N)	88	
	accombry	Thrust load B-direction (N)	117.6
	Radial load P-direction (N)	68.6	
	Thrust load A, B-direction (N)	58.8	

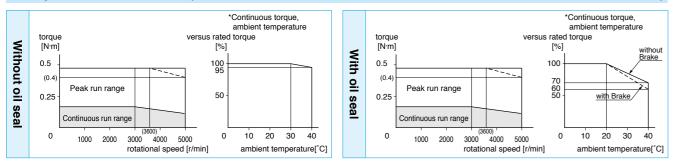
- · Dimensions of Driver, refer to P.30.
- *1 Rotary encoder specifications:
- has "E" is "positioning type".

Mass (kg)/ 0.32

M3 depth 6

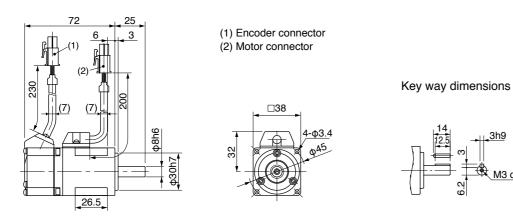
Detail of model designation, refer to P.11.

Torque characteristics (at AC100V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

<Without Brake>



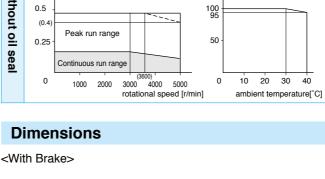
* For the dimensions of with brake, refer to the right page

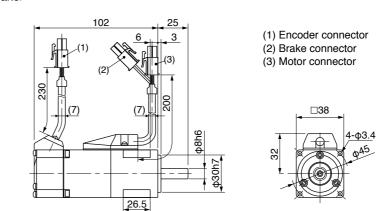
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

ouring ssembly	Radial load P-direction (N)	147
	Thrust load A-direction (N)	88
	Thrust load B-direction (N)	117.6
ouring peration	Radial load P-direction (N)	68.6
	Thrust load A, B-direction (N)	58.8

· For details of Note 1 to Note 5, refer to P.104.

- *2 The product that the end of driver model designation





*Continuous torque,

versus rated torque

ambient temperature

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Specifications

torque [N·m]

Without oil seal

		AC	200V	
Motor model *1		5AZG1	5AZS1	
	Model	A5 series	MADHT1505	
Applicable driver *2	No.	A5E series	MADHT1505E	
	Fram	ne symbol	A-frame	
Power supply capacit	у	(kVA)	().5
Rated output		(W)	Į	50
Rated torque		(N·m)	0	.16
Momentary Max. pea	k torqu	ie (N·m)	0	.48
Rated current		(A(rms))	1.1	
Max. current		(A(o-p))	4.7	
Regenerative brake	Without option		No limit Note)2	
frequency (times/min) Note)1	DV0P4281		No limit Note)2	
Rated rotational spee	d	(r/min)	3000	
Max. rotational speed		(r/min)	5000	
Moment of inertia	Without brake		0.025	
of rotor (×10 ⁻⁴ kg·m ²)	With brake		0.027	
Recommended momeratio of the load and t		30 times or less		
Rotary encoder specifications Note)5			20-bit Incremental	17-bit Absolute
Resolut	ion per	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) /This brake will be released when it is energized.) Do not use this for braking the motor in motion.

Static friction torque (N·m)	0.29 or more
Engaging time (ms)	35 or less
Releasing time (ms) Note)4	20 or less
Exciting current (DC) (A)	0.3
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

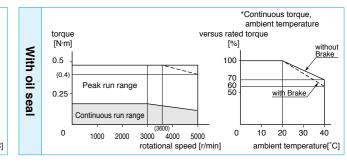
• Permissible load (For details, refer to P.104)

During assembly During operation	Radial load P-direction (N)	147
	Thrust load A-direction (N)	88
	Thrust load B-direction (N)	117.6
	Radial load P-direction (N)	68.6
	Thrust load A, B-direction (N)	58.8

• For details of Note 1 to Note 5, refer to P.104.

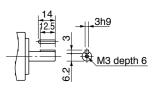
- · Dimensions of Driver, refer to P.30.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".
- Detail of model designation, refer to P.11.

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Mass (kg)/ 0.53

Key way dimensions



* For the dimensions of without brake, refer to the left page.

		AC1	00V		
Motor model *1		011G1	011S1		
	Model	A5 series	MADHT1107		
Applicable driver *2	No.	A5E series	MADHT1107E		
	Fran	ne symbol	A-fr	A-frame	
Power supply capacit	у	(kVA)	0.	.4	
Rated output		(W)	1(00	
Rated torque		(N·m)	0.3	32	
Momentary Max. pea	k torqu	ie (N·m)	0.9	95	
Rated current		(A(rms))	1.7		
Max. current		(A(o-p))	7.2		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV0P4280		No limit Note)2		
Rated rotational spee	d	(r/min)	3000		
Max. rotational speed		(r/min)	5000		
Moment of inertia	Without brake		0.051		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	0.054		
Recommended moment of inertia ratio of the load and the rotor Note)3			30 times	s or less	
Rotary encoder specifications Note)5		1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion pei	r single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.)

J	
Static friction torque (N·m)	0.29 or more
Engaging time (ms)	35 or less
Releasing time (ms) Note)4	20 or less
Exciting current (DC) (A)	0.3
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

• Permissible load (For details, refer to P.104)

	. .	Radial load P-direction (N)	147
During assembly During operation		Thrust load A-direction (N)	88
	accombry	Thrust load B-direction (N)	117.6
	Radial load P-direction (N)	68.6	
	Thrust load A, B-direction (N)	58.8	

· For details of Note 1 to Note 5, refer to P.104.

- · Dimensions of Driver, refer to P.30.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".

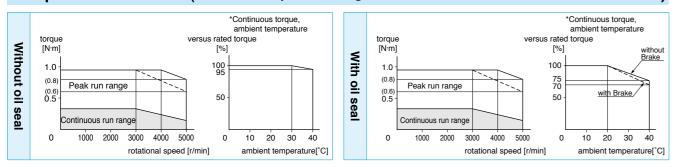
Mass (kg)/ 0.47

M3 depth (

Key way dimensions

Detail of model designation, refer to P.11.

Torque characteristics (at AC100V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

<Without Brake>

92 25 (1) Encoder connector (2)6 3 (2) Motor connector 46.5

* For the dimensions of with brake, refer to the right page

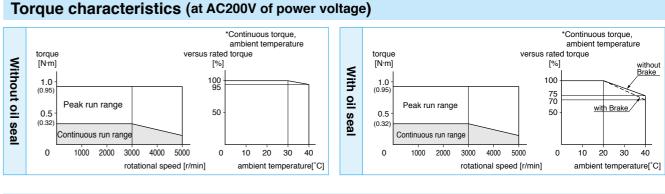
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Do not use this for braking the motor in motion.

ess	Applica
ess	
;	Power
	Rated

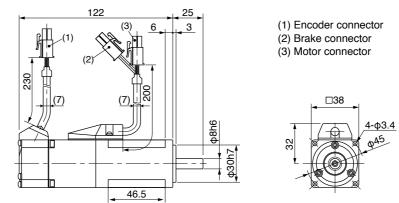
Specifications

			AC2	00V		specifications (For details	. ,	
Motor model *1		MSMD	012G1	012S1	This brake will be released when it is er Do not use this for braking the motor in			
М		A5 series	MADHT1505		Static fr	Static friction torque (N·m)		
Applicable driver *2	No.	A5E series	MADH	1505E	Engagir	g time (ms)	35 or less	
	Fran	ne symbol	A-frame		Releasing time (ms) Note)4		20 or less	
Power supply capacit	у	(kVA)	0.5		Exciting	current (DC) (A)	0.3	
Rated output		(W)	10	0	Releasi	ng voltage (DC) (V)	1 or more	
Rated torque		(N·m)	0.3	32	Exciting	voltage (DC) (V)	24±1.2	
Momentary Max. pea	k torqu	ie (N·m)	0.9	95				
Rated current (A(rms))		(A(rms))	1.1		 Permissible load (For details, refer to 		er to P.104)	
Max. current		(A(o-p))	4.7		During	Radial load P-direction (N)	147	
Regenerative brake	Without option		No limit Note)2		During assembly	Thrust load A-direction (N)	88	
frequency (times/min) Note)1	DV	/0P4281	No limit Note)2		docombry	Thrust load B-direction (N)	117.6	
Rated rotational spee	d	(r/min)	3000 5000		During	Radial load P-direction (N)	68.6	
Max. rotational speed	l	(r/min)			operation	Thrust load A, B-direction (N)	58.8	
Moment of inertia	With	out brake	0.0	51	• For details of Note 1 to Note 5, refer to P.104.			
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	0.054			 Dimensions of Driver, refer to P.30. 		
	Recommended moment of inertia ratio of the load and the rotor Note)3 Rotary encoder specifications Note)5		30 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designatio			
Rotary encoder speci			20-bit Incremental	17-bit Absolute	has "E" is "positioning type". Detail of model designation, refer to P.11.		Ū	
Resolut	ion per	r single turn	1,048,576	131,072			1.11.	
· · ·				_				



Dimensions

<With Brake>



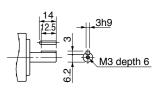
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

68

Motor Specifications 200V MSMD 100W [Low inertia, Small capacity]

Mass (kg)/ 0.68

Key way dimensions



* For the dimensions of without brake, refer to the left page.

		AC1	00V		
Motor model *1		021G1	021S1		
	Model	A5 series	MBDHT2110		
Applicable driver *2	No.	A5E series	MBDHT2110E		
	Fran	ne symbol	B-fr	B-frame	
Power supply capacit	у	(kVA)	0	.5	
Rated output		(W)	20	00	
Rated torque		(N·m)	0.	64	
Momentary Max. pea	k torqu	ie (N·m)	1.	91	
Rated current		(A(rms))	2.5		
Max. current		(A(o-p))	10.6		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV0P4283		No limit Note)2		
Rated rotational spee	d	(r/min)	3000		
Max. rotational speed		(r/min)	5000		
Moment of inertia	Without brake		0.14		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	0.16		
Recommended moment of inertia ratio of the load and the rotor Note)3			30 times	s or less	
Rotary encoder specifications		1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion per	r single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

	,
Static friction torque (N·m)	1.27 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.36
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

• Permissible load (For details, refer to P.104)

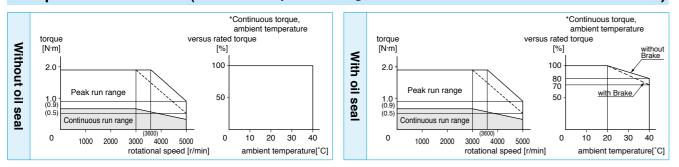
	. .	Radial load P-direction (N)	392
During assembly	Thrust load A-direction (N)	147	
	Thrust load B-direction (N)	196	
	During	Radial load P-direction (N)	245
operation	Thrust load A, B-direction (N)	98	

· For details of Note 1 to Note 5, refer to P.104.

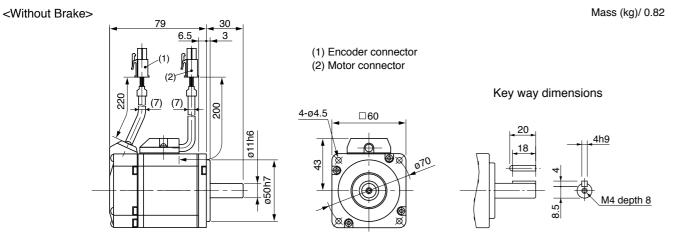
- · Dimensions of Driver, refer to P.30.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".

Detail of model designation, refer to P.11.

Torque characteristics (at AC100V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



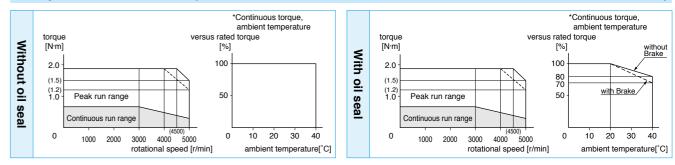
* For the dimensions of with brake, refer to the right page.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Specifications

			AC2	00V
Motor model *1		MSMD	022G1	022S1
	Model No.	A5 series	MADH	T1507
Applicable driver *2		A5E series	MADHT1507E	
	Fram	ne symbol	A-frame	
Power supply capacit	у	(kVA)	0	.5
Rated output		(W)	20	00
Rated torque		(N·m)	0.	64
Momentary Max. peak torque (N·m)			1.9	91
Rated current (A(rms))			1.6	
Max. current (A(o-p))			6.9	
Regenerative brake Wi		out option	No limit Note)2	
frequency (times/min) Note)1	DV0P4283		No limit Note)2	
Rated rotational speed (r/min)		3000		
Max. rotational speed	eed (r/min)		5000	
Moment of inertia Without		out brake	0.14	
of rotor (×10 ⁻⁴ kg·m ²)	With brake		0.16	
Recommended mome ratio of the load and t			30 times	s or less
Rotary encoder speci	Rotary encoder specifications Note)5		20-bit Incremental	17-bit Absolute
Resolut	Resolution per single		1,048,576	131,072

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

<With Brake> 115.5 6.5 3 220 4-ø4.5

* For the dimensions of without brake, refer to the left page.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

•	Brake specifications (For details, refer to P.105)
	(This brake will be released when it is energized.) Do not use this for braking the motor in motion.)

Static friction torque (N·m)	1.27 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.36
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

• Permissible load (For details, refer to P.104)

During assembly	Radial load P-direction (N)	392
	Thrust load A-direction (N)	147
	Thrust load B-direction (N)	196
During operation	Radial load P-direction (N)	245
	Thrust load A, B-direction (N)	98

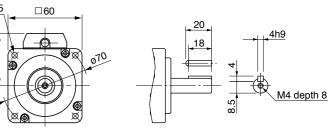
• For details of Note 1 to Note 5, refer to P.104.

- · Dimensions of Driver, refer to P.30.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".
- Detail of model designation, refer to P.11.

Mass (kg)/ 1.3

(1) Encoder connector (2) Brake connector (3) Motor connector

Key way dimensions



			AC1	00V
Motor model *1		MSMD	041G1	041S1
	Model	A5 series	MCDHT3120	
Applicable driver *2	No.	A5E series	MCDH	Г3120E
	Fram	ne symbol	C-fra	ame
Power supply capacit	у	(kVA)	0.	.9
Rated output		(W)	40	00
Rated torque	Rated torque (N·m)			.3
Momentary Max. pea	Momentary Max. peak torque (N·m)			.8
Rated current (A(rms))			4.6	
Max. current	(A(o-p))		19.5	
Regenerative brake	Without option		No limit Note)2	
frequency (times/min) Note)1	DV0P4282		No limit Note)2	
Rated rotational speed (r/min		(r/min)	3000	
Max. rotational speed	Max. rotational speed		5000	
Moment of inertia	With	out brake	0.26	
of rotor (×10 ⁻⁴ kg·m ²)	With brake		0.28	
Recommended moment of inertia ratio of the load and the rotor Note)3		30 times	s or less	
Rotary encoder speci	Rotary encoder specification		20-bit Incremental	17-bit Absolute
Resolut	ion per	single turn	1,048,576	131,072

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

	,
Static friction torque (N·m)	1.27 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.36
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

• Permissible load (For details, refer to P.104)

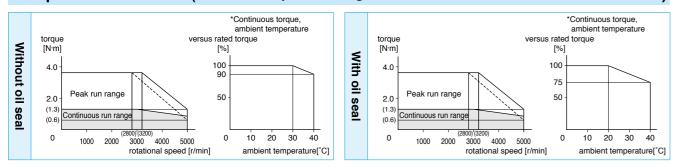
	. .	Radial load P-direction (N)	392
During assembly	Thrust load A-direction (N)	147	
	Thrust load B-direction (N)	196	
During operation	Radial load P-direction (N)	245	
	Thrust load A, B-direction (N)	98	

· For details of Note 1 to Note 5, refer to P.104.

- · Dimensions of Driver, refer to P.31.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".

Detail of model designation, refer to P.11.

Torque characteristics (at AC100V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

Mass (kg)/ 1.2 <Without Brake> 98 ! 30 6.5 3 (1) Encoder connector (2) Motor connector Key way dimensions 份₍₇₎ 220 4-ø4.5 □60 Ð .70 M5 depth 10

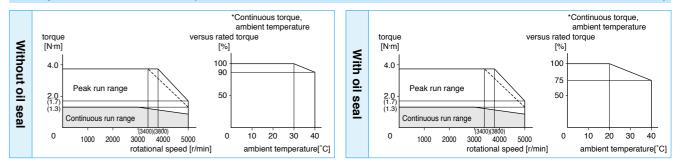
* For the dimensions of with brake, refer to the right page.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Specifications

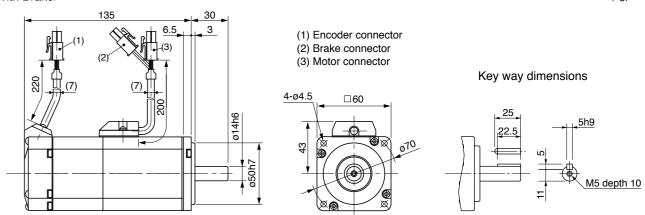
			AC2	V00	
Motor model *1		MSMD	042G1	042S1	
	Model No.	A5 series	MBDH	T2510	
Applicable driver *2		A5E series	MBDHT2510E		
	Fram	ne symbol	B-frame		
Power supply capacit	у	(kVA)	0.	.9	
Rated output		(W)	40	00	
Rated torque	Rated torque (N·m)		1.	.3	
Momentary Max. peak torque (N·m)			3.	.8	
Rated current (A(rms))			2.6		
Max. current	Max. current (A(o-p))			11.0	
Regenerative brake With		out option	No limit Note)2		
frequency (times/min) Note)1	DV0P4283		No limit Note)2		
Rated rotational speed (r/min)		3000			
Max. rotational speed	(r/min)		5000		
Moment of inertia	With	out brake	0.26		
of rotor (×10 ⁻⁴ kg·m ²)	With brake		0.28		
Recommended moment of inertia ratio of the load and the rotor Note)3		30 times	s or less		
Rotary encoder speci	Rotary encoder specifications Note)5		20-bit Incremental	17-bit Absolute	
Resolut	Resolution per		1,048,576	131,072	

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

<With Brake>



<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Brake specifications (For details, refer to P.105)
(This brake will be released when it is energized.) Do not use this for braking the motor in motion.	

Static friction torque (N·m)	1.27 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.36
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

• Permissible load (For details, refer to P.104)

During assembly During operation	Radial load P-direction (N)	392
	Thrust load A-direction (N)	147
	Thrust load B-direction (N)	196
	Radial load P-direction (N)	245
	Thrust load A, B-direction (N)	98

• For details of Note 1 to Note 5, refer to P.104.

- · Dimensions of Driver, refer to P.30.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".
- Detail of model designation, refer to P.11.

Mass (kg)/ 1.7

* For the dimensions of without brake, refer to the left page.

Motor

		AC2	200V		
Motor model *1		MSMD	082G1	082S1	
	Model	A5 series	MCDHT3520		
Applicable driver *2	No.	A5E series	MCDHT3520E		
	Fram	ne symbol	C-frame		
Power supply capacit	у	(kVA)	1.3		
Rated output		(W)	75	50	
Rated torque		(N·m)	2	.4	
Momentary Max. pea	k torqu	e (N·m)	7.	.1	
Rated current		(A(rms))	4.0		
Max. current		(A(o-p))	17	7.0	
		out option	No limi	No limit Note)2	
		DV0P4283 No limit Note)2		t Note)2	
Rated rotational speed (r/min)		3000			
Max. rotational speed		(r/min)	45	00	
Moment of inertia	Moment of inertia Without bra		0.87		
of rotor (×10 ⁻⁴ kg·m ²) With brake		th brake	0.97		
Recommended mome ratio of the load and t			20 times	s or less	
Rotary encoder specifications Note)5		1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion per	single turn	1,048,576	131,072	

Brake specifications (For details, refer to P.108	5)
(This brake will be released when it is energized.) Do not use this for braking the motor in motion.	

Static friction torque (N·m)	2.45 or more
Engaging time (ms)	70 or less
Releasing time (ms) Note)4	20 or less
Exciting current (DC) (A)	0.42
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

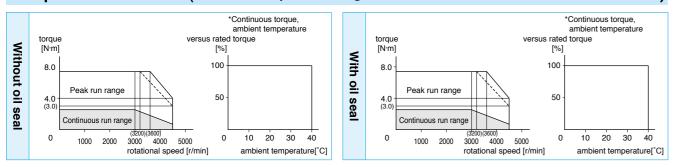
• Permissible load (For details, refer to P.104)

		Radial load P-direction (N)	686
During assembly	Thrust load A-direction (N)	294	
	Thrust load B-direction (N)	392	
	During operation	Radial load P-direction (N)	392
		Thrust load A, B-direction (N)	147

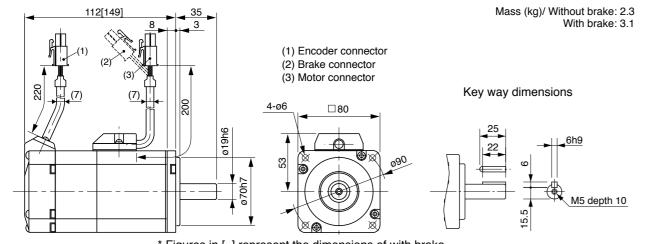
• For details of Note 1 to Note 5, refer to P.104.

- Dimensions of Driver, refer to P.31.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



* Figures in [] represent the dimensions of with brake.

Reduce the moment of inertia ratio if high speed response operation is required. <Cautions> Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.



MEMO

4

		AC1	00V	
Motor model *1 MHMD			021G1	021S1
	Model	A5 series	MBDHT2110	
Applicable driver *2	No.	A5E series	MBDHT2110E	
	Fran	ne symbol	B-frame	
Power supply capacit	у	(kVA)	0.5	
Rated output		(W)	20	00
Rated torque		(N·m)	0.0	64
Momentary Max. pea	k torqu	ie (N·m)	1.9	91
Rated current (A(rms))		(A(rms))	2.5	
Max. current (A(o-p))		10.6		
Regenerative brake		out option	No limit Note)2	
frequency (times/min) Note)1	DV0P4283		No limit Note)2	
Rated rotational spee	Rated rotational speed (r/min)		3000	
Max. rotational speed		(r/min)	5000	
Moment of inertia	With	out brake	0.42	
of rotor (×10 ⁻⁴ kg·m ²) With brake		th brake	0.45	
Recommended moment of inertia ratio of the load and the rotor Note)3		10 times	s or less	
Rotary encoder specifications Note)5		1S Note)5	20-bit Incremental	17-bit Absolute
Resolution per single turn			1,048,576	131,072

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

Static friction torque (N·m)	1.27 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.36
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

• Permissible load (For details, refer to P.104)

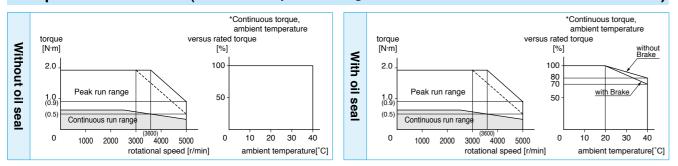
During assembly During operation	Radial load P-direction (N)	392
	Thrust load A-direction (N)	147
	Thrust load B-direction (N)	196
	Radial load P-direction (N)	245
	Thrust load A, B-direction (N)	98

· For details of Note 1 to Note 5, refer to P.104.

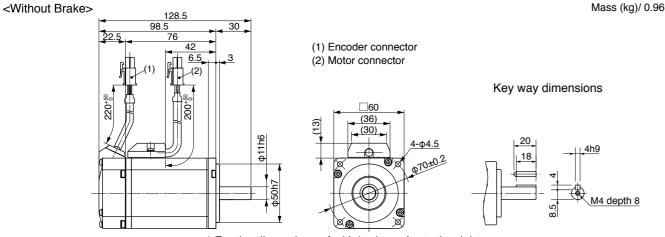
- · Dimensions of Driver, refer to P.30.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".

Detail of model designation, refer to P.11.

Torque characteristics (at AC100V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



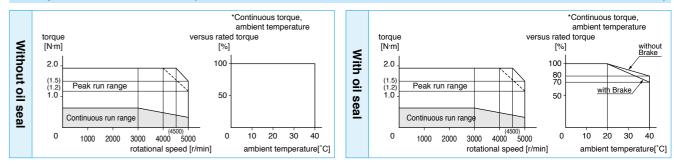
* For the dimensions of with brake, refer to the right page.

Reduce the moment of inertia ratio if high speed response operation is required. <Cautions> Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Specifications

			AC2	00V
Motor model *1 MHMD		022G1	022S1	
	Model No.	A5 series	MADH	T1507
Applicable driver *2		A5E series	MADH	Г1507E
	Frame symbol		A-frame	
Power supply capacit	у	(kVA)	0.5	
Rated output		(W)	20	00
Rated torque		(N·m)	0.6	64
Momentary Max. pea	k torqu	ie (N·m)	1.9	91
Rated current (A(rms))		(A(rms))	1.6	
Max. current (A(o-p))		6.9		
Regenerative brake	Without option		No limit Note)2	
frequency (times/min) Note)1	DV0P4283		No limit Note)2	
Rated rotational speed (r/min)		3000		
Max. rotational speed (r/min)		(r/min)	5000	
Moment of inertia	With	out brake	0.42	
of rotor (×10 ⁻⁴ kg·m ²)		th brake	0.45	
Recommended moment of inertia ratio of the load and the rotor Note)3		10 times or less		
Rotary encoder specifications Note)5		20-bit Incremental	17-bit Absolute	
Resolution per single turn		1,048,576	131,072	

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

<With Brake> 165 135 22.5 (1) Encoder connector (2) Brake connector (3) Motor connector 220+50 (36) (30) -

* For the dimensions of without brake, refer to the left page.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Motor Specifications 200V MHMD 200W [High inertia, Small capacity]

• Brake specifications (For details, refer to P.105) /This brake will be released when it is energized.) Do not use this for braking the motor in motion.

Static friction torque (N·m)	1.27 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.36
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

• Permissible load (For details, refer to P.104)

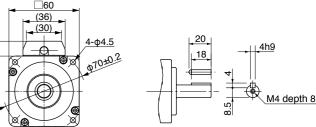
During assembly During operation	Radial load P-direction (N)	392
	Thrust load A-direction (N)	147
	Thrust load B-direction (N)	196
	Radial load P-direction (N)	245
	Thrust load A, B-direction (N)	98

• For details of Note 1 to Note 5, refer to P.104.

- · Dimensions of Driver, refer to P.30.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".
- Detail of model designation, refer to P.11.

Mass (kg)/ 1.4

Key way dimensions



			AC1	00V
Motor model *1 MHMD		041G1	041S1	
	Model	A5 series	MCDHT3120	
Applicable driver *2	No.	A5E series	MCDHT3120E	
	Frame symbol		C-frame	
Power supply capacit	у	(kVA)	0.	.9
Rated output		(W)	40	00
Rated torque		(N·m)	1.	.3
Momentary Max. peal	k torqu	ie (N·m)	3	.8
Rated current		(A(rms))	4.6	
Max. current (A(o-p))		(A(o-p))	19.5	
Regenerative brake	Without option		No limit Note)2	
frequency (times/min) Note)1	DV0P4282		No limit Note)2	
Rated rotational spee	d	(r/min)	3000	
Max. rotational speed		(r/min)	5000	
Moment of inertia	With	out brake	0.67	
of rotor (×10 ⁻⁴ kg·m ²) With brake		th brake	0.70	
Recommended moment of inertia ratio of the load and the rotor Note)3		10 times	s or less	
Rotary encoder specifications Note)5		1S Note)5	20-bit Incremental	17-bit Absolute
Resolution per single turn			1,048,576	131,072

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

1 0	/
Static friction torque (N·m)	1.27 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.36
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

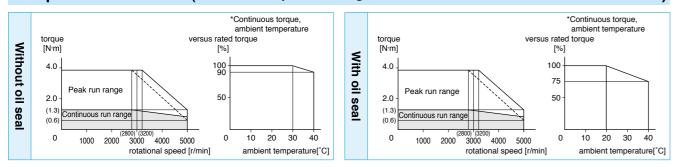
• Permissible load (For details, refer to P.104)

		Radial load P-direction (N)	392
During assembly	Thrust load A-direction (N)	147	
	Thrust load B-direction (N)	196	
	During	Radial load P-direction (N)	245
operation	Thrust load A, B-direction (N)	98	

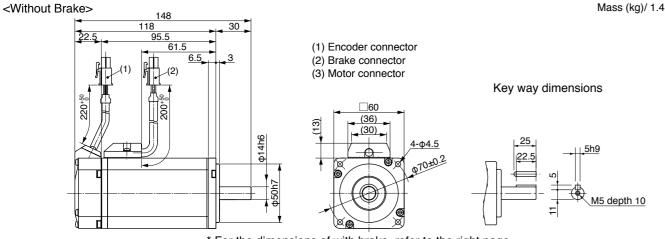
· For details of Note 1 to Note 5, refer to P.104.

- · Dimensions of Driver, refer to P.31.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".
- Detail of model designation, refer to P.11.

Torque characteristics (at AC100V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



* For the dimensions of with brake, refer to the right page.

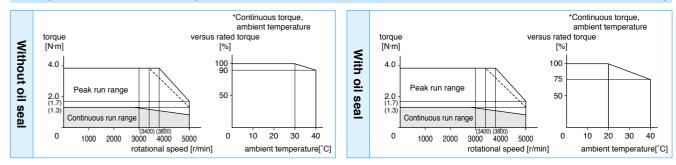
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

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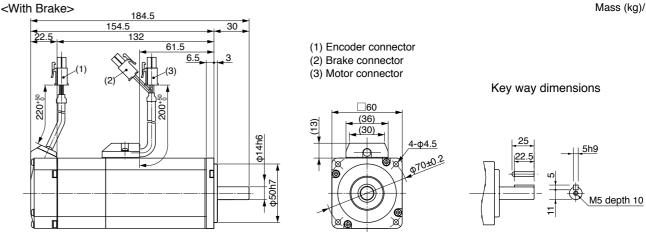
Specifications

			AC2	00V
Motor model *1 MHMD		042G1	042S1	
	Model	A5 series	MBDH	T2510
Applicable driver *2	No.	A5E series	MBDH	F2510E
	Frame symbol		B-frame	
Power supply capacit	у	(kVA)	0.	9
Rated output		(W)	40	00
Rated torque		(N·m)	1.	3
Momentary Max. pea	k torqu	ie (N·m)	3.	8
Rated current		(A(rms))	2.6	
Max. current (A(o-p))		(A(o-p))	11.0	
Regenerative brake	Without option		No limit Note)2	
frequency (times/min) Note)1	DV0P4283		No limit Note)2	
Rated rotational spee	d	(r/min)	3000	
Max. rotational speed		(r/min)	5000	
Moment of inertia	With	out brake	0.0	67
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	0.70	
Recommended moment of inertia ratio of the load and the rotor Note)3		10 times	s or less	
Rotary encoder specifications Note)5		20-bit Incremental	17-bit Absolute	
Resolution per single turn		single turn	1,048,576	131,072

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



* For the dimensions of without brake, refer to the left page.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

200V MHMD 400W [High inertia, Small capacity]

•	• Brake specifications (For details, refer to P.105)				
	(This brake will be released when it is energized.) Do not use this for braking the motor in motion.)				

Static friction torque (N·m)	1.27 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.36
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

• Permissible load (For details, refer to P.104)

During assembly During operation	Radial load P-direction (N)	392
	Thrust load A-direction (N)	147
	Thrust load B-direction (N)	196
	Radial load P-direction (N)	245
	Thrust load A, B-direction (N)	98

• For details of Note 1 to Note 5, refer to P.104.

- · Dimensions of Driver, refer to P.30.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".
- Detail of model designation, refer to P.11.

Mass (kg)/ 1.8

		AC200V		
Motor model *1 MHMD		082G1	082S1	
	Model	A5 series	MCDHT3520	
Applicable driver *2	No.	A5E series	MCDHT3520E	
	Fram	ne symbol	C-frame	
Power supply capacit	у	(kVA)	1.	.3
Rated output		(W)	75	50
Rated torque		(N·m)	2	.4
Momentary Max. pea	k torqu	e (N·m)	7.	.1
Rated current		(A(rms))	4.0	
Max. current (A(o-p))		(A(o-p))	17.0	
Regenerative brake	Without option		No limit Note)2	
frequency (times/min) Note)1	DV0P4283		No limit Note)2	
Rated rotational spee	d	(r/min)	3000	
Max. rotational speed		(r/min)	4500	
Moment of inertia	With	out brake	1.51	
of rotor (×10 ⁻⁴ kg·m ²) W		th brake	1.61	
Recommended moment of inertia ratio of the load and the rotor Note)3		10 times	s or less	
Rotary encoder speci	Rotary encoder specifications Note)5		20-bit Incremental	17-bit Absolute
Resolut	ion per	single turn	1,048,576	131,072

• Brake specifications (For details, refer to P.105)				
(This brake will be released when it is energized.)				
Do not use this for braking the motor in motion.				

Static friction torque (N·m)	2.45 or more
Engaging time (ms)	70 or less
Releasing time (ms) Note)4	20 or less
Exciting current (DC) (A)	0.42
Releasing voltage (DC) (V)	1 or more
Exciting voltage (DC) (V)	24±1.2

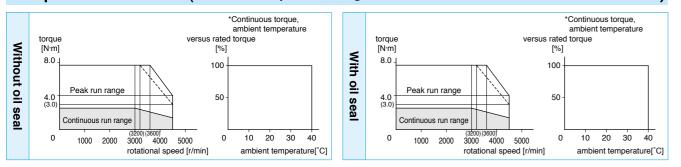
• Permissible load (For details, refer to P.104)

	During assembly	Radial load P-direction (N)	686
		Thrust load A-direction (N)	294
		Thrust load B-direction (N)	392
	During operation	Radial load P-direction (N)	392
		Thrust load A, B-direction (N)	147

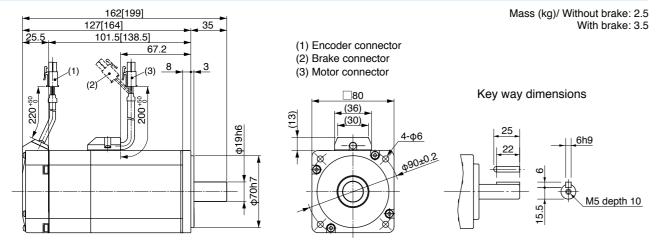
• For details of Note 1 to Note 5, refer to P.104.

- Dimensions of Driver, refer to P.31.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Torque characteristics (at AC200V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



* Figures in [] represent the dimensions of with brake.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.



MEMO

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			AC4	V00	
Motor model *1		MSME	104G1	104S1	
	Model A5 series		MDDHT3420		
Applicable driver *2	No.	A5E series	MDDH	T3420E	
	Fram	ne symbol	D-fra	ame	
Power supply capacit	у	(kVA)	1.	.8	
Rated output		(W)	1.	.0	
Rated torque		(N·m)	3.	18	
Momentary Max. pea	k torqu	e (N·m)	9.	55	
Rated current		(A(rms))	3	.3	
Max. current		(A(o-p))	14		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV0PM20048		No limit Note)2		
Rated rotational spee	d	(r/min)	3000		
Max. rotational speed		(r/min)	5000		
Moment of inertia	With	Vithout brake 2.03		03	
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	2.35		
Recommended moment of inertia ratio of the load and the rotor Note)3			15 times or less		
Rotary encoder speci	Rotary encoder specification		20-bit Incremental	17-bit Absolute	
Resolut	ion per	single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

(· · · · · · · · · · · · · · · · · · ·	
Static friction torque (N·m)	7.8 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.81±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

	During assembly	Radial load P-direction (N)	980
		Thrust load A-direction (N)	588
		Thrust load B-direction (N)	686
	During operation	Radial load P-direction (N)	490
ŀ		Thrust load A, B-direction (N)	196

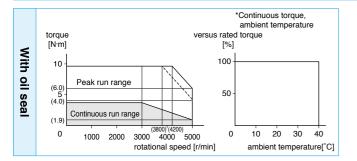
• For details of Note 1 to Note 5, refer to P.104.

• Dimensions of Driver, refer to P.32.

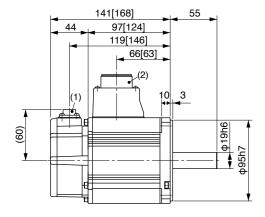
*1 Rotary encoder specifications:

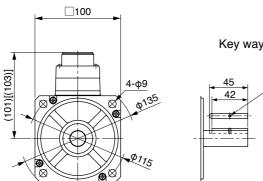
*2 The product that the end of driver model designation has "E" is "positioning type".

Torque characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions







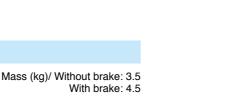
- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

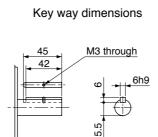
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

uring ssembly	Radial load P-direction (N)	980
	Thrust load A-direction (N)	588
	Thrust load B-direction (N)	686
uring	Radial load P-direction (N)	490
peration	Thrust load A, B-direction (N)	196

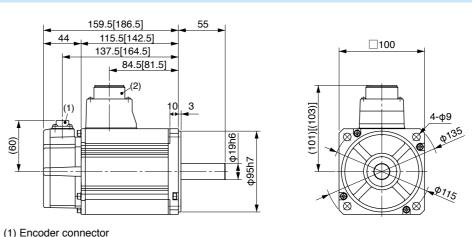
- Detail of model designation, refer to P.11.







Dimensions

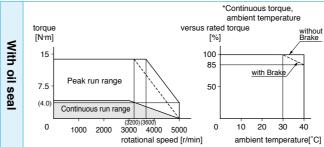


(2) Motor/Brake connector

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

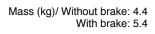
Specifications

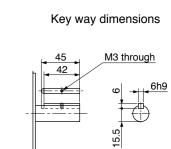
			AC4	V00	• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.)			
Motor model *1		MSME	154G1	154S1				
	Mode	A5 series	MDDH	MDDHT3420		ction torque (N·m)	7.8 or more	
Applicable driver *2	No.	A5E series	MDDHT3420E		Engagin	g time (ms)	50 or less	
	Fran	ne symbol	D-frame		Releasir	ng time (ms) Note)4	15 or less	
Power supply capac	ity	(kVA)	2	.3	Exciting	current (DC) (A)	0.81±10%	
Rated output		(W)	1	.5	Releasir	ng voltage (DC) (V)	2 or more	
Rated torque		(N·m)	4.	77	Exciting	Exciting voltage (DC) (V) 24±2		
Momentary Max. pe	Momentary Max. peak torque (N·m)		14	l.3				
Rated current (A(rms))		(A(rms))	4.2 • Permissible load (For det		ssible load (For details, refe	er to P.104)		
Max. current		(A(o-p))	18		During	Radial load P-direction (N)	980	
Regenerative brake	With	out option	No limi	t Note)2	During assembly	Thrust load A-direction (N) 588		
frequency (times/min) Not	^{e)1} DV0	PM20048	No limit Note)2		accontrary	Thrust load B-direction (N)	686	
Rated rotational spe	ed	(r/min)	3000 5000		During operation	Radial load P-direction (N)	490	
Max. rotational spee	d	(r/min)				Thrust load A, B-direction (N)	196	
Moment of inertia	With	out brake	2.	84	• For deta	For details of Note 1 to Note 5, refer to P.104.		
of rotor (×10 ⁻⁴ kg·m ²	Wi	th brake	3.17		Dimensions of Driver, refer to P.32.			
Recommended moment of inertia ratio of the load and the rotor Note)3		15 times	s or less	*1 Rotary encoder specifications: *2 The product that the end of driver model desig		odel designation		
Rotary encoder spe	cificatio	1S Note)5	20-bit Incremental			has "E" is "positioning type". Detail of model designation, refer to P.11.		
Resol	ution pe	r single turn	1,048,576 131,072					



Motor Specifications 400V MSME 1.5kW [Low inertia, Middle capacity]

Torgue characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)





* Figures in [] represent the dimensions of with brake.

Motor

			AC400V		
Motor model *1		MSME	204G1	204S1	
	Model A5 series		MEDHT4430		
Applicable driver *2	No.	A5E series	MEDH	Г4430E	
	Fram	ne symbol	E-fra	ame	
Power supply capacit	у	(kVA)	3	.3	
Rated output		(W)	2	.0	
Rated torque		6.	37		
Momentary Max. pea	k torqu	ie (N·m)	19	9.1	
Rated current	(A(rms))	5.7			
Max. current		(A(o-p))	24		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV0PM20049		No limit Note)2		
Rated rotational spee	d	(r/min)	3000		
Max. rotational speed	(r/min)	5000			
Moment of inertia	With	out brake	3.	3.68	
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	4.01		
Recommended moment of inertia ratio of the load and the rotor Note)3			15 times or less		
Rotary encoder speci	Rotary encoder specification		20-bit Incremental	17-bit Absolute	
Resolut	ion per	r single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

	,
Static friction torque (N·m)	7.8 or more
Engaging time (ms)	50 or less
Releasing time (ms) Note)4	15 or less
Exciting current (DC) (A)	0.81±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

	During assembly	Radial load P-direction (N)	980
		Thrust load A-direction (N)	588
		Thrust load B-direction (N)	686
	During operation	Radial load P-direction (N)	490
ŀ		Thrust load A, B-direction (N)	196

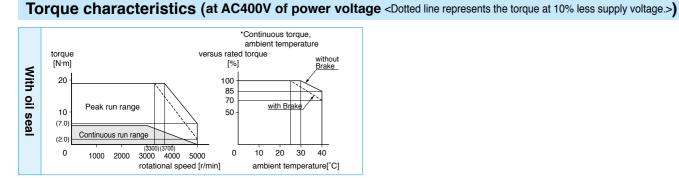
· For details of Note 1 to Note 5, refer to P.104.

- · Dimensions of Driver, refer to P.33.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

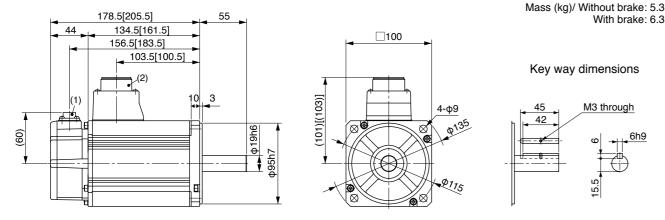
With brake: 6.3

6h9

M3 through



Dimensions



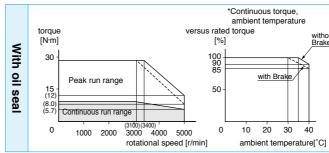
- (1) Encoder connector
- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.
- <Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.



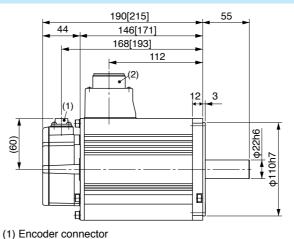
Specifications

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			AC4	00V		• Brake specifications (For detai		
Motor model *1		MSME	304G1	304S1		(This brake will be released when it is Do not use this for braking the motor it		
	Model		MFDH	T5440	Static fri	ction torque (N·m)	11.8 or m	
Applicable driver *2	No.	A5E series	MFDH	Г5440E	Engagin	g time (ms)	80 or les	
F		ne symbol	F-fra	ame	Releasir	ng time (ms) Note)4	15 or les	
Power supply capa	city	(kVA)	4	.5	Exciting	current (DC) (A)	0.81±10	
Rated output		(kW)	3	.0	Releasir	ng voltage (DC) (V)	2 or mor	
Rated torque		(N·m)	9.	55	Exciting	Exciting voltage (DC) (V)		
Momentary Max. p	eak torqu	ue (N·m)	28	3.6				
Rated current (A(rms))		(A(rms))	9.2		• Permissible load (For details, refer to P.104)			
Max. current		(A(o-p))	3	9	_ .	Radial load P-direction (N)	980	
Regenerative brake frequency (times/min) Note)1 DV0PM200		out option	No lim	t Note)2	During assembly	Thrust load A-direction (N)	588	
		PM20049×2	No limit Note)2		assombry	Thrust load B-direction (N)	686	
Rated rotational sp	eed	(r/min)	3000 5000		During	Radial load P-direction (N)	490	
Max. rotational spe	ed	(r/min)			operation	Thrust load A, B-direction (N)	196	
Moment of inertia	With	nout brake	6.	50	• For deta	ails of Note 1 to Note 5, refer t	o P 104	
of rotor (×10 ⁻⁴ kg·m ²) W	th brake	7.85			 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.34. 		
Recommended moment of inertia ratio of the load and the rotor Note)3		15 times or less *1 Rotary encoder specifications:		odel design:				
Rotary encoder spe	cificatio	NS Note)5	20-bit Incremental	17-bit Absolute	has "E	is "positioning type". of model designation, refer to	-	
Reso	lution pe	r single turn	1,048,576	131,072	Detail	or model designation, telef to		

Torque characteristics (at AC400V of power voltage <Dotted line represents the torque at 10% less supply voltage.>) *Continuous torque, ambient temperature torque versus rated torque without . [N·m] Brake 100 90 85 30 with Brak Peak run range 50 (5.7)Continuous run range 0 0 10 20 30 40 1000 2000 3000 4000 5000



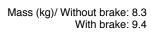
Dimensions

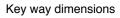


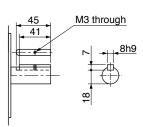
(2) Motor/Brake connector

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information.

Motor Specifications 400V MSME 3.0kW [Low inertia, Middle capacity]







120 4-Φ9 (113)

* Figures in [] represent the dimensions of with brake.

Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

			AC4	V00	
Motor model *1		MSME	404G1	404S1	
	Model A5 series		MFDHTA464		
Applicable driver *2	No.	A5E series	MFDH	ſA464E	
	Fram	ne symbol	F-fra	ame	
Power supply capacit	у	(kVA)	6	.8	
Rated output		(kW)	4	.0	
Rated torque		12	2.7		
Momentary Max. pea	k torqu	e (N·m)	38	8.2	
Rated current		(A(rms))	9.9		
Max. current		(A(o-p))	42		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV0PM20049×2		No limit Note)2		
Rated rotational spee	(r/min)	3000			
Max. rotational speed		(r/min)	4500		
Moment of inertia	With	Without brake 1		2.9	
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	14.2		
Recommended moment of inertia ratio of the load and the rotor Note)3			15 times	s or less	
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion per	single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

1 0	7
Static friction torque (N·m)	16.1 or more
Engaging time (ms)	110 or less
Releasing time (ms) Note)4	50 or less
Exciting current (DC) (A)	0.90±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

	During assembly	Radial load P-direction (N)	980
		Thrust load A-direction (N)	588
		Thrust load B-direction (N)	686
	During	Radial load P-direction (N)	784
	operation	Thrust load A, B-direction (N)	343

· For details of Note 1 to Note 5, refer to P.104.

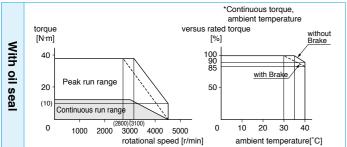
• Dimensions of Driver, refer to P.34.

*1 Rotary encoder specifications:

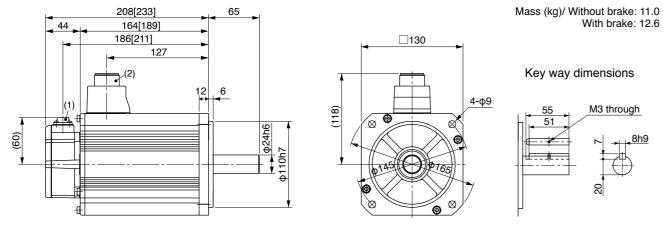
*2 The product that the end of driver model designation has "E" is "positioning type".

8h9

Torque characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



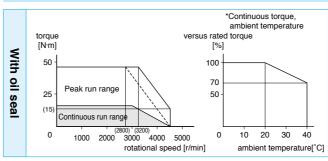
- (1) Encoder connector (2) Motor/Brake connector
 - * Figures in [] represent the dimensions of with brake.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

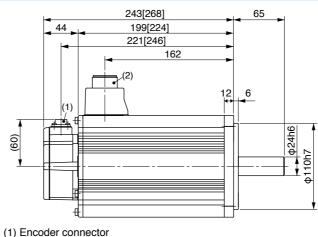
Detail of model designation, refer to P.11.

Specifications

				AC4	V00	• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.)		. ,	
Motor model *1			MSME	504G1	504S1				
	Ν	/lodel	A5 series	MFDH	TA464	Static fri	Static friction torque (N·m)		
Applicable driver	¢2 N	۱o.	A5E series	MFDHTA464E		Engagin	Engaging time (ms)		
		Fram	ne symbol	F-frame		Releasir	Releasing time (ms) Note)4		
Power supply cap	acity		(kVA)	7.	.5	Exciting	current (DC) (A)	0.90±10%	
Rated output			(kW)	5.	.0	Releasir	ng voltage (DC) (V)	2 or more	
Rated torque			(N·m)	15	5.9	Exciting	voltage (DC) (V)	24±2.4	
Momentary Max. peak torque (N·m)		e (N·m)	47.7						
Rated current (A(rms))		(A(rms))	12.0		• Permi	ssible load (For details, refe	er to P.104)		
Max. current			(A(o-p))	5	1	During	Radial load P-direction (N)	980	
Regenerative brak		Without option		357		During assembly	Thrust load A-direction (N)	588	
frequency (times/min)	lote)1	DV0PM20049×2		No limit Note)2		accombry	Thrust load B-direction (N)	686	
Rated rotational s	peed		(r/min)	3000		During	Radial load P-direction (N)	784	
Max. rotational sp	eed		(r/min)	4500		operation	Thrust load A, B-direction (N)	343	
Moment of inertia		With	out brake	17	<u>′.4</u>	 For details of Note 1 to Note 5, refer to P.104. 			
of rotor (×10 ⁻⁴ kg·r	n²)	Wit	h brake	18.6			Dimensions of Driver, refer to P.34.		
Recommended moment of inertia ratio of the load and the rotor Note)3				15 times	s or less	*d Datama anadar ana ifiaatiana.		odel designation	
Rotary encoder specifications Note)5		IS Note)5	20-bit Incremental	17-bit Absolute	has "E" is "positioning type". Detail of model designation, refer to P.11.		-		
Resolution per single tur			single turn	1,048,576	131,072				



Dimensions



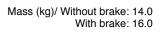
(2) Motor/Brake connector

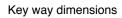
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

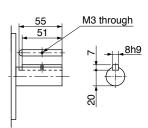
86

Motor Specifications 400V MSME 5.0kW [Low inertia, Middle capacity]

Torgue characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)







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* Figures in [] represent the dimensions of with brake.

Motor

		AC4	V00		
Motor model *1		104G1	104S1		
	Model	A5 series	MDDHT2412		
Applicable driver *2	No.	A5E series	MDDHT2412E		
	Fram	ne symbol	D-frame		
Power supply capacit	у	(kVA)	1.	.8	
Rated output		(W)	1.	.0	
Rated torque		(N·m)	4.	77	
Momentary Max. pea	k torqu	e (N·m)	14	l.3	
Rated current		(A(rms))	2.8		
Max. current		(A(o-p))	12		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV0PM20048		No limit Note)2		
Rated rotational spee	d	(r/min)	2000		
Max. rotational speed		(r/min)	3000		
Moment of inertia	Without brake		4.60		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	5.90		
Recommended mome ratio of the load and t			10 times or less		
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion per	single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) ١D

	,
Static friction torque (N·m)	4.9 or more
Engaging time (ms)	80 or less
Releasing time (ms) Note)4	70 or less
Exciting current (DC) (A)	0.59±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

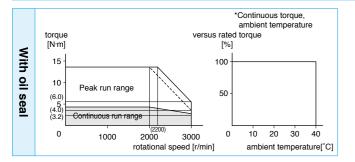
· Permissible load (For

	. .	Radial load P-direction (N)	980
	During assembly	Thrust load A-direction (N)	588
		Thrust load B-direction (N)	686
	During	Radial load P-direction (N)	490
operation	operation	Thrust load A, B-direction (N)	196

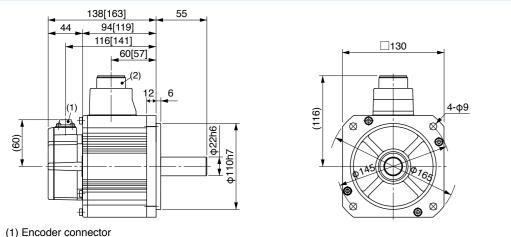
*1 Rotary encoder specifications:

*2 The product that the end of driver model designation has "E" is "positioning type".

Torque characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

o not use this for braking the motor i	n motion. /
atic friction torque (N·m)	4.9 or more

24±2.4	
details, refe	er to P.104)
ction (N)	980
ction (N)	588

assembly	Thrust load A-direction (N)	588
	Thrust load B-direction (N)	686
During	Radial load P-direction (N)	490
operation	Thrust load A B-direction (N)	196

· For details of Note 1 to Note 5, refer to P.104.

• Dimensions of Driver, refer to P.32.

Mass (kg)/ Without brake: 5.2

Key way dimensions

41

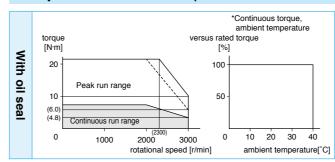
With brake: 6.7

M3 through

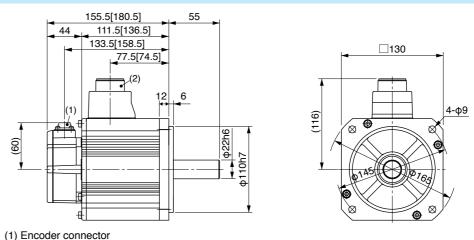
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Detail of model designation, refer to P.11.



Dimensions



(2) Motor/Brake connector

* Figures in [] represent the dimensions of with brake.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Specifications

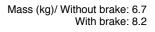
			AC4	00V		specifications (For details		
Motor model *1		MDME	154G1	154S1		ake will be released when it is e use this for braking the motor in		
Model A5 series		A5 series	MDDHT3420		Static friction torque (N·m)		13.7 or more	
Applicable driver *2	No.	A5E series	MDDH.	Г3420E	Engagin	g time (ms)	100 or less	
	Fran	ne symbol	D-frame		Releasir	Releasing time (ms) Note)4		
Power supply capacit	y	(kVA)	2.3		Exciting	Exciting current (DC) (A)		
Rated output		(W)	1	.5	Releasir	ng voltage (DC) (V)	2 or more	
Rated torque		(N·m)	7.	16	Exciting	voltage (DC) (V)	24±2.4	
· · ·	Momentary Max. peak torque (N·m)		21.5					
Rated current	Rated current (A(rms))		4.7		Permissible load (For details, reference)		er to P.104)	
Max. current		(A(o-p))	2	0	During	Radial load P-direction (N)	980	
Regenerative brake	With	out option	No limit Note)2 No limit Note)2		During assembly	Thrust load A-direction (N)	588	
frequency (times/min) Note)1	DV0	PM20048			accombry	Thrust load B-direction (N)	686	
Rated rotational spee	d	(r/min)	2000		During	Radial load P-direction (N)	490	
Max. rotational speed	1	(r/min)	3000		operation	Thrust load A, B-direction (N)	196	
Moment of inertia	With	out brake	6.70		 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.32. 			
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	7.99					
Recommended moment of inertia ratio of the load and the rotor Note)3 Rotary encoder specifications Note)5			10 times or less		 *1 Rotary encoder specifications: *2 The product that the end of driver model designation 			
		1S Note)5	20-bit Incremental	17-bit Absolute	has "E" is "positioning type". Detail of model designation, refer to P.11.			
Resolut	tion per	r single turn	1,048,576	131,072				
					-			

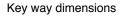
Motor Specifications 400V MDME 1.5kW [Middle inertia, Middle capacity]

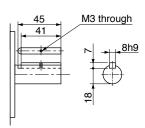
Brake specifications (For details, refer to P.105	5)
(This brake will be released when it is energized.) Do not use this for braking the motor in motion.	

Motor

Torgue characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)







		AC4	00V		
Motor model *1		204G1	204S1		
	Model	A5 series	MEDHT4430		
Applicable driver *2	No.	A5E series	MEDH	Г4430E	
	Fram	ne symbol	E-frame		
Power supply capacit	у	(kVA)	3	.3	
Rated output		(W)	2	.0	
Rated torque		(N·m)	9.	55	
Momentary Max. pea	k torqu	ie (N·m)	28	8.6	
Rated current		(A(rms))	5.9		
Max. current		(A(o-p))	25		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV0PM20049		No limit Note)2		
Rated rotational spee	d	(r/min)	2000		
Max. rotational speed		(r/min)	3000		
Moment of inertia	Without brake		8.72		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	10.0		
Recommended mome ratio of the load and t			10 times or less		
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion per	r single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

	,
Static friction torque (N·m)	13.7 or more
Engaging time (ms)	100 or less
Releasing time (ms) Note)4	50 or less
Exciting current (DC) (A)	0.79±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

During assembly During operation	Radial load P-direction (N)	980	
	Thrust load A-direction (N)	588	
	Thrust load B-direction (N)	686	
	Radial load P-direction (N)	490	
	Thrust load A, B-direction (N)	196	

· For details of Note 1 to Note 5, refer to P.104.

- Dimensions of Driver, refer to P.33.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

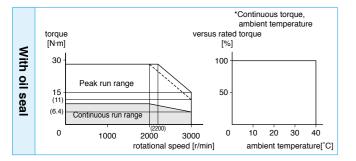
With brake: 9.5

M3 through

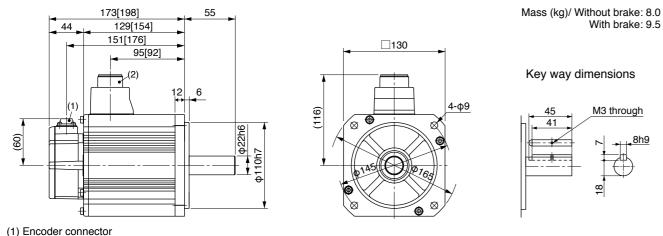
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Torque characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

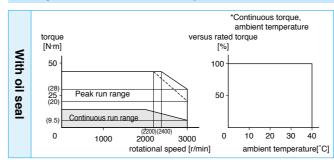
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

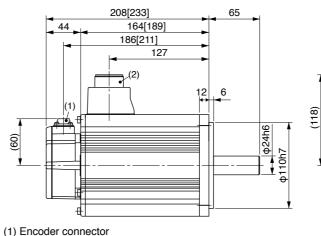
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	pecif	

Specifications

			AC400V • Brake specifications (For deta			,	
Motor model *1 MDME		304G1	304S1	(This brake will be released when it is energiz Do not use this for braking the motor in motio			
	Mod	lel A5 series	MFDH	MFDHT5440 MFDHT5440E		ction torque (N·m)	16.2 or more
Applicable driver	⊧2 No.	A5E series	MFDH1			g time (ms)	110 or less
	Fra	ame symbol	F-frame		Releasir	ng time (ms) Note)4	50 or less
Power supply cap	acity	(kVA)	4.	.5	Exciting	current (DC) (A)	0.90±10%
Rated output		(W)	3.	.0	Releasir	ng voltage (DC) (V)	2 or more
Rated torque		(N·m)	14	4.3	Exciting	voltage (DC) (V)	24±2.4
Momentary Max. peak torque (N·m)		que (N·m)	43	3.0			
Rated current (A(rms))		8.7		Permissible load (For details, refer to P.1		er to P.104)	
Max. current		(A(o-p))	37 No limit Note)2 No limit Note)2 2000		During assembly	Radial load P-direction (N)	980
Regenerative brak	e Wi	thout option				Thrust load A-direction (N)	588
frequency (times/min) N	lote)1 DV()PM20049×2			docorribiy	Thrust load B-direction (N)	686
Rated rotational s	peed	(r/min)			During	Radial load P-direction (N)	784
Max. rotational sp	eed	(r/min)	3000		operation	Thrust load A, B-direction (N)	343
Moment of inertia	W	thout brake	12.9 14.2		 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.34. 		
of rotor (×10 ⁻⁴ kg·r	²) ו	Vith brake					
Recommended moment of inertia ratio of the load and the rotor Note)3		10 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designation			
Rotary encoder specifications Note)5 Resolution per single turn		20-bit Incremental	17-bit Absolute	, has "E	has "E" is "positioning type".		
		1,048,576	131,072	Detail of model designation, refer to P.11.			



Dimensions



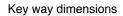
(2) Motor/Brake connector

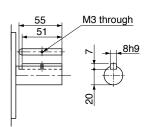
400V MDME 3.0kW [Middle inertia, Middle capacity]

Motor

Torgue characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)

Mass (kg)/ Without brake: 11.0 With brake: 12.6





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* Figures in [] represent the dimensions of with brake.

Motor Specifications 400V MDME 4.0kW [Middle inertia, Middle capacity]

Specifications

			AC400V		
Motor model *1		MDME	404G1	404S1	
	Model	A5 series	MFDH	TA464	
Applicable driver *2	No.	A5E series	MFDH	۲A464E	
	Fram	ne symbol	F-frame		
Power supply capacit	у	(kVA)	6	.8	
Rated output		(W)	4	.0	
Rated torque		(N·m)	19	0.1	
Momentary Max. pea	k torqu	57.3			
Rated current		(A(rms))	10.6		
Max. current		(A(o-p))	45		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV0PM20049×2		No limit Note)2		
Rated rotational spee	d (r/min)		2000		
Max. rotational speed		(r/min)	3000		
Moment of inertia	With	out brake	37.6		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	38.6		
Recommended moment of iner ratio of the load and the rotor			10 times or less		
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion per	single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

Static friction torque (N·m)	24.5 or more
Engaging time (ms)	80 or less
Releasing time (ms) Note)4	25 or less
Exciting current (DC) (A)	1.3±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

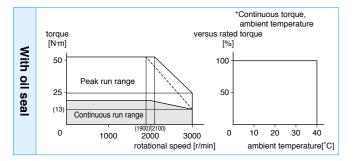
• Permissible load (For details, refer to P.104)

During assembly During operation	Radial load P-direction (N)	1666	
	Thrust load A-direction (N)	784	
	Thrust load B-direction (N)	980	
	Radial load P-direction (N)	784	
	Thrust load A, B-direction (N)	343	

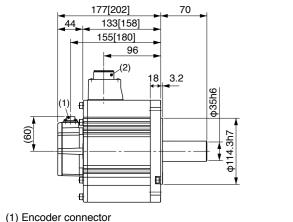
· For details of Note 1 to Note 5, refer to P.104.

- Dimensions of Driver, refer to P.34.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Torque characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

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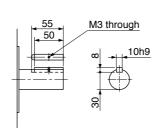
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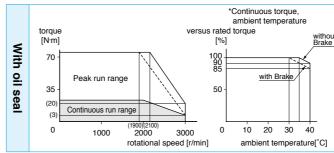
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Mass (kg)/ Without brake: 15.5 With brake: 18.7 Key way dimensions

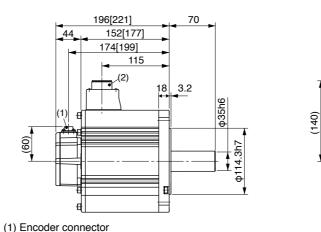


Specifications

Specifications							
			AC4	100V	• Brake specifications (For details, refer to P.10		. ,
Motor model *1 MDME		504G1 504S1		(This brake will be released when it is energized.) Do not use this for braking the motor in motion.			
N	Model	A5 series	MFDH	ITA464	Static friction torque (N·m)		24.5 or more
Applicable driver *2	No.	A5E series	MFDH	TA464E	Engagin	g time (ms)	80 or less
	Fran	ne symbol	F-fr	ame	Releasir	ng time (ms) Note)4	25 or less
Power supply capaci	ty	(kVA)	7	.5	Exciting	current (DC) (A)	1.3±10%
Rated output		(W)	5	.0	Releasir	ng voltage (DC) (V)	2 or more
Rated torque	Rated torque (N·m)		23.9		Exciting voltage (DC) (V)		24±2.4
Momentary Max. peak torque (N·m)		71.6					
Rated current	Rated current (A(rms))		13.0		• Permissible load (For details, refer to P.104)		
Max. current		(A(o-p))	55 120		During assembly	Radial load P-direction (N)	1666
Regenerative brake		out option				Thrust load A-direction (N)	784
frequency (times/min) Note)	¹ DV0P	M20049×2	No limit Note)2			Thrust load B-direction (N)	980
Rated rotational spee	ed	(r/min)	2000		During	Radial load P-direction (N)	784
Max. rotational speed	d	(r/min)	3000		operation	Thrust load A, B-direction (N)	343
Moment of inertia	With	out brake	48	3.0	- For details of Note 1 to Note 5, refer to D104		
of rotor (×10 ⁻⁴ kg·m ²)	of rotor (×10 ⁻⁴ kg·m ²) With brake		48.8		 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.34. 		
Recommended moment of inertia ratio of the load and the rotor Note)3 Rotary encoder specifications Note)5 Resolution per single turn		10 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designation			
		1S Note)5	20-bit 17-bit Incremental Absolute		has "E	Ū.	
		r single turn	1,048,576	131,072	Detail of model designation, refer to P.11.		1.11.



Dimensions



(2) Motor/Brake connector

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

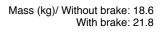
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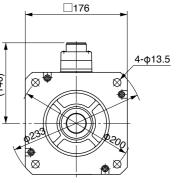
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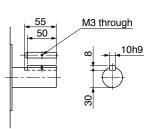
Motor Specifications 400V MDME 5.0kW [Middle inertia, Middle capacity]

Torgue characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)





Key way dimensions



* Figures in [] represent the dimensions of with brake.

			AC4	00V	
Motor model *1		MGME	094G1	094S1	
	Model	A5 series	MDDH	T3420	
Applicable driver *2	No.	A5E series	MDDH	T3420E	
	Fran	ne symbol	D-fr	ame	
Power supply capacit	у	(kVA)	1	.8	
Rated output		(W)	0	.9	
Rated torque		(N·m)	8.	59	
Momentary Max. pea	k torqu	ie (N·m)	19	0.3	
Rated current		(A(rms))	3.8		
Max. current		(A(o-p))	12		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV0PM20048		No limit Note)2		
Rated rotational spee	d	(r/min)	1000		
Max. rotational speed	l	(r/min)	2000		
Moment of inertia	With	out brake	6.70		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	7.99		
	ecommended moment of i tio of the load and the roto		10 times or l		
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	esolution per single turr		1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

	,
Static friction torque (N·m)	13.7 or more
Engaging time (ms)	100 or less
Releasing time (ms) Note)4	50 or less
Exciting current (DC) (A)	0.79±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

During assembly During operation	Radial load P-direction (N)	980	
	Thrust load A-direction (N)	588	
	Thrust load B-direction (N)	686	
	Radial load P-direction (N)	686	
	Thrust load A, B-direction (N)	196	

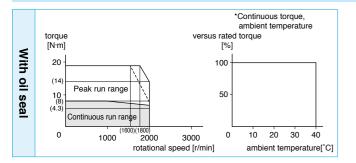
· For details of Note 1 to Note 5, refer to P.104.

· Dimensions of Driver, refer to P.32.

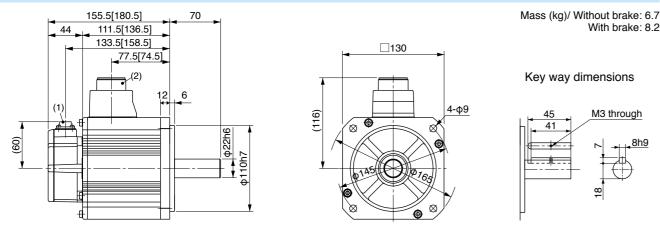
*1 Rotary encoder specifications:

*2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Torque characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



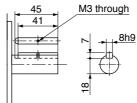
- (1) Encoder connector (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

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<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

With brake: 8.2

Key way dimensions



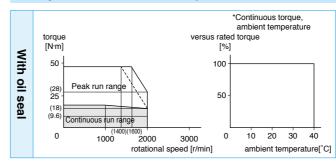
(I) Encoder connector	
(2) Motor/Brake connector	

* Figures in [] represent the dimensions of with brake.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Specifications

			AC4	00V		specifications (For details		
Motor model *1		MGME	204G1	204S1		ake will be released when it is e use this for braking the motor in		
	Mode	A5 series	MFDH	T5440	Static fri	ction torque (N·m)	24.5 or more	
Applicable driver *2	No.	A5E series	MFDHT5440E		Engagin	g time (ms)	80 or less	
	Fran	ne symbol	F-frame		Releasir	ng time (ms) Note)4	25 or less	
Power supply capac	ity	(kVA)	3.	.8	Exciting	current (DC) (A)	1.3±10%	
Rated output		(W)	2.	.0	Releasir	ng voltage (DC) (V)	2 or more	
Rated torque		(N·m)	19	0.1	Exciting	voltage (DC) (V)	24±2.4	
Momentary Max. pe	ak torqu	ue (N·m)	47.7			0 ()()		
Rated current	Rated current (A(rms))		8.5		Permissible load (For details, refer to P.1		er to P.104)	
Max. current		(A(o-p))	30		During assembly	Radial load P-direction (N)	1666	
Regenerative brake	With	out option	No limit Note)2			Thrust load A-direction (N)	784	
frequency (times/min) Not	^{e)1} DV0F	M20049×2	No limit Note)2			Thrust load B-direction (N)	980	
Rated rotational spe	ed	(r/min)	1000 2000		During	Radial load P-direction (N)	1176	
Max. rotational spec	ed	(r/min)			operation	Thrust load A, B-direction (N)	490	
Moment of inertia	With	out brake	30	.3	• For details of Note 1 to Note 5, refer to P.104.			
of rotor (×10 ⁻⁴ kg·m ²	Wi	th brake	31.4		Dimensions of Driver, refer to P.34.			
Recommended moment of inertia ratio of the load and the rotor Note)3			10 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designation			
Rotary encoder spe	Rotary encoder specifications Note)5		20-bit Incremental	17-bit Absolute	, has "E	has "E" is "positioning type". Detail of model designation, refer to P.11.		
Reso	ution pe	r single turn	1,048,576	131,072				

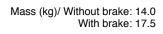


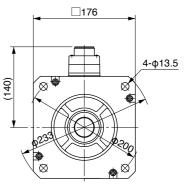
Dimensions

163.5[188.5] 80 44 119.5[144.5] 141.5[166.5] 82.5 (2) 3.2 18 00 (1) Encoder connector

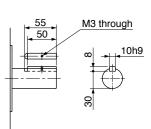
Motor Specifications 400V MGME 2.0kW [Middle inertia, Middle capacity]

Torgue characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)





Key way dimensions



Motor

		AC400V			
Motor model *1		304G1	304S1		
	Model	A5 series	MFDHTA464		
Applicable driver *2	No.	A5E series	MFDH	TA464E	
	Fram	ne symbol	F-fra	ame	
Power supply capacit	у	(kVA)	4	.5	
Rated output		(W)	3	.0	
Rated torque		(N·m)	28	3.7	
Momentary Max. pea	k torqu	e (N·m)	71.7		
Rated current		(A(rms))	11.3		
Max. current		(A(o-p))	40		
Regenerative brake	Without option		No limit Note)2		
frequency (times/min) Note)1	DV0PM20049×2		No limit Note)2		
Rated rotational spee	d	(r/min)	1000		
Max. rotational speed		(r/min)	2000		
Moment of inertia	With	out brake	48.4		
of rotor (×10 ⁻⁴ kg·m ²) W		th brake	49.2		
Recommended moment of inertia ratio of the load and the rotor Note)3			10 times or less		
Rotary encoder specifications Note)5			20-bit Incremental	17-bit Absolute	
Resolut	ion per	single turn	1,048,576	131,072	

 Brake specifications (For details, refer to P.105) 	
(This brake will be released when it is energized.) Do not use this for braking the motor in motion.	

Static friction torque (N·m)	58.8 or more
Engaging time (ms)	150 or less
Releasing time (ms) Note)4	50 or less
Exciting current (DC) (A)	1.4±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

	_ .	Radial load P-direction (N)	2058
During assembly	Thrust load A-direction (N)	980	
	assembly	Thrust load B-direction (N)	1176
During	Radial load P-direction (N)	1470	
	operation	Thrust load A, B-direction (N)	490

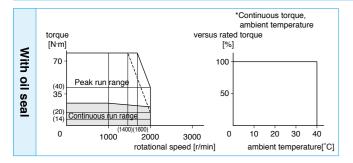
• For details of Note 1 to Note 5, refer to P.104.

• Dimensions of Driver, refer to P.34.

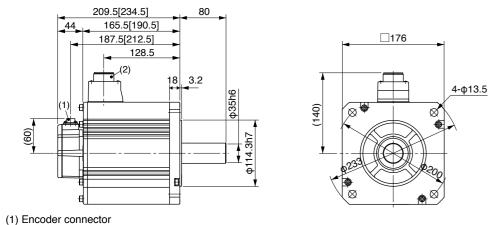
*1 Rotary encoder specifications:

*2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Torque characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions



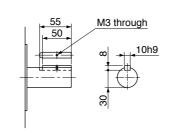
- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.



Mass (kg)/ Without brake: 20.0 With brake: 23.5

Key way dimensions





MEMO

		AC400V			
Motor model *1		104G1	104S1		
	Model	A5 series	MDDHT2412		
Applicable driver *2	No.	A5E series	MDDH	T2412E	
	Fram	ne symbol	D-fra	ame	
Power supply capacit	у	(kVA)	1.	.8	
Rated output		(W)	1.	.0	
Rated torque		(N·m)	4.	77	
Momentary Max. pea	k torqu	e (N·m)	14	l.3	
Rated current		(A(rms))	2.9		
Max. current		(A(o-p))	12		
Regenerative brake	Without option		83		
frequency (times/min) Note)1	DV0PM20048		No limit Note)2		
Rated rotational spee	d	(r/min)	2000		
Max. rotational speed		(r/min)	3000		
Moment of inertia	With	out brake	24.7		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	26.0		
Recommended moment of inertia ratio of the load and the rotor Note)3			5 times or less		
Rotary encoder specifications Note)			20-bit Incremental	17-bit Absolute	
Resolut	ion per	single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

(
Static friction torque (N·m)	4.9 or more				
Engaging time (ms)	80 or less				
Releasing time (ms) Note)4	70 or less				
Exciting current (DC) (A)	0.59±10%				
Releasing voltage (DC) (V)	2 or more				
Exciting voltage (DC) (V)	24±2.4				

• Permissible load (For details, refer to P.104)

		Radial load P-direction (N)	980
During assembly During	Thrust load A-direction (N)	588	
	Thrust load B-direction (N)	686	
	Radial load P-direction (N)	490	
	operation	Thrust load A, B-direction (N)	196

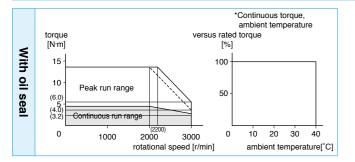
· For details of Note 1 to Note 5, refer to P.104.

• Dimensions of Driver, refer to P.32.

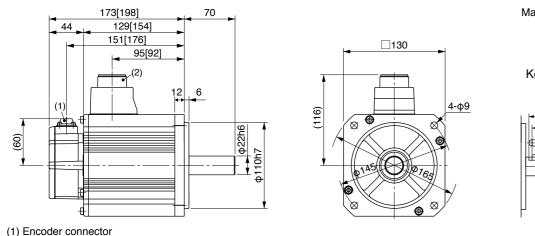
*1 Rotary encoder specifications:

*2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Torque characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

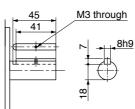


- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

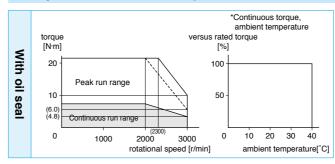
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Mass (kg)/ Without brake: 6.7 With brake: 8.1

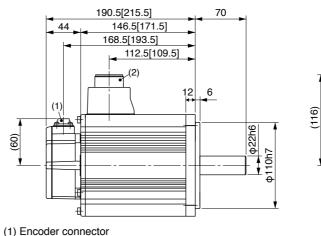
Key way dimensions



		AC4	00V	Brake specifications (For details, refer to P (This basis will be released when it is ensuring)					
Motor model *	⊧1		МНМЕ	154G1	154S1	(This brake will be released when it is energized. Do not use this for braking the motor in motion.)			
Applicable driver *2 Model No. A5E series Frame symbol		A5 series	MDDHT3420		Static fri	Static friction torque (N·m)			
		No.	A5E series	MDDHT3420E		Engagin	g time (ms)	100 or less	
		Fram	ne symbol	D-frame		Releasir	ng time (ms) Note)4	50 or less	
Power supply	capacit	у	(kVA)	2	3	Exciting	current (DC) (A)	0.79±10%	
Rated output			(W)	1.	5	Releasir	ng voltage (DC) (V)	2 or more	
Rated torque			(N·m)	7.	16	Exciting	voltage (DC) (V)	24±2.4	
Momentary M	ax. pea	k torqu	ie (N·m)	21.5					
Rated current			(A(rms))	4.7		• Permissible load (For details, refer to P.104)		er to P.104)	
Max. current (A(o-p))		(A(o-p))	20		_ .	Radial load P-direction (N)	980		
Regenerative I	orake	With	out option	22		During assembly	Thrust load A-direction (N)	588	
frequency (times/	min) Note)1	DV0	PM20048	130			Thrust load B-direction (N)	686	
Rated rotation	al spee	d	(r/min)	2000		During	Radial load P-direction (N)	490	
Max. rotationa	al speed		(r/min)	3000		operation	Thrust load A, B-direction (N)	196	
Moment of ine	ertia	With	out brake	37.1		 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.32. 			
of rotor (×10 ⁻⁴	kg∙m²)	Wi	th brake	38.4					
Recommended moment of inertia ratio of the load and the rotor Note)3		5 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designation					
Rotary encoder specifications Note)5		1S Note)5	20-bit 17-bit has "E" is "positioning type".			5			
	Resolut	ion per	single turn	1,048,576	131,072				



Dimensions



(2) Motor/Brake connector

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

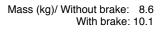
Specifications

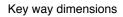
Motor model *1			МНМЕ	154G1	154S	
		Model	A5 series	MDDHT3420		
Applicable dri	ver *2	No.	A5E series	MDDHT3420E		
		Fram	ne symbol	D-frame		
Power supply capacity			(kVA)	2	.3	
Rated output			(W)	1.	.5	
Rated torque			(N·m)	7.	16	
Momentary M	lax. pea	k torqu	ie (N·m)	21	.5	
Rated current	:		(A(rms))	4.7		
Max. current			(A(o-p))	20		
Regenerative	brake	With	out option	22		
frequency (times	/min) Note)1	DV0	PM20048	130		
Rated rotation	nal spee	d	(r/min)	2000		
Max. rotationa	al speed	I	(r/min)	3000		
Moment of ine	ertia	With	out brake	37.1		
of rotor (×10-	Wi	th brake	38.4			
Recommender ratio of the loa		5 times	or less			
Rotary encoder specification			IS Note)5	20-bit Incremental	17-b Absol	
	Resolut	ion per	single turn	1,048,576	131,0	

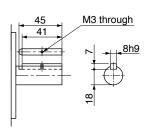
Motor Specifications 400V MHME 1.5kW [High inertia, Middle capacity]

Motor

Torgue characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)







130 4-Φ§

* Figures in [] represent the dimensions of with brake.

		AC400V			
Motor model *1		204G1	204S1		
	Model	A5 series	MEDH	T4430	
Applicable driver *2	No.	A5E series	MEDH	Г4430E	
	Fram	ne symbol	E-fra	ame	
Power supply capacit	у	(kVA)	3	.3	
Rated output		(W)	2	.0	
Rated torque		(N·m)	9.	55	
Momentary Max. peal	k torqu	e (N·m)	28	8.6	
Rated current		(A(rms))	5.5		
Max. current		(A(o-p))	24		
Regenerative brake	With	out option	45		
frequency (times/min) Note)1	DV0PM20048		142		
Rated rotational spee	d	(r/min)	2000		
Max. rotational speed		(r/min)	3000		
Moment of inertia	With	out brake	57.8		
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	59.6		
Recommended moment of inertia ratio of the load and the rotor Note)3			5 times or less		
Rotary encoder speci	ficatior	1S Note)5	20-bit Incremental	17-bit Absolute	
Resolut	ion per	single turn	1,048,576	131,072	

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

	,
Static friction torque (N·m)	24.5 or more
Engaging time (ms)	80 or less
Releasing time (ms) Note)4	25 or less
Exciting current (DC) (A)	1.3±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

	_ .	Radial load P-direction (N)	1666
During assembly During operation	Thrust load A-direction (N)	784	
	accombry	Thrust load B-direction (N)	980
	Radial load P-direction (N)	784	
	Thrust load A, B-direction (N)	343	

· For details of Note 1 to Note 5, refer to P.104.

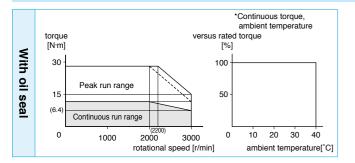
- Dimensions of Driver, refer to P.33.
- *1 Rotary encoder specifications:
- *2 The product that the end of driver model designation has "E" is "positioning type".

Detail of model designation, refer to P.11.

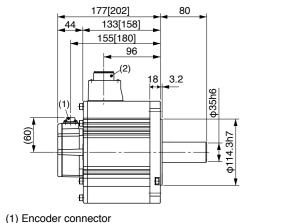
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Torque characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

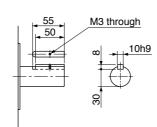


- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

(140)

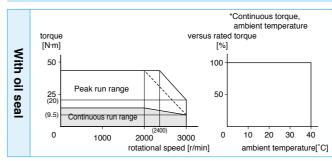
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Mass (kg)/ Without brake: 12.2 With brake: 15.5 **176** Key way dimensions

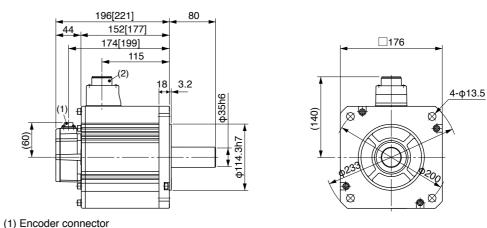


Specifications

Specificati	ons	;								
				AC4	100V	• Brake specifications (For details			. ,	
Motor model *1 MHME		МНМЕ	304G1 304S1		(This brake will be released when it is energized.) (Do not use this for braking the motor in motion.)					
	Model A5 series		MFDHT5440		Static friction torque (N·m)			24.5 or more		
Applicable driver	*2 N	I 0.	A5E series	MFDHT5440E		Engaging time (ms)			80 or less	
		Fram	ne symbol	F-frame		Releasing time (ms) Note)4			25 or less	
Power supply cap	bacity		(kVA)	4	Excitin	Exciting current (DC) (A)				
Rated output			(W)	3.0		Releas	Releasing voltage (DC) (V)		2 or more	
Rated torque			(N·m)	14.3		Exciting voltage (DC) (V)		24±2.4		
Momentary Max.	Momentary Max. peak torque (N·m)			43.0						
Rated current			(A(rms))	8.0		Permissible load (For details, refer to P.104)			er to P.104)	
Max. current	Max. current (A(o-p))		(A(o-p))	34		_ .	Radial load P-direction (N)	1666		
Regenerative brak	e	Witho	out option	19		During assembly	lv	Thrust load A-direction (N)	784	
frequency (times/min)	Note)1	DV0PM20049×2		142		assertion	''y	Thrust load B-direction (N)	980	
Rated rotational s	speed		(r/min)	2000		During		Radial load P-direction (N)	784	
Max. rotational sp	beed		(r/min)	3000		operatio	n	Thrust load A, B-direction (N)	343	
Moment of inertia		With	out brake	90.5		For details of Note 1 to Note 5, refer to P.104.				
of rotor (×10 ⁻⁴ kg·r	n²)	Wit	h brake	92.1		• Por details of Note 1 to Note 5, refer to P.104. • Dimensions of Driver, refer to P.34.				
	Recommended moment of inertia ratio of the load and the rotor Note)3			5 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designation				
Rotary encoder s	Rotary encoder specifications Note)5		IS Note)5	20-bit Incremental			has "E" is "positioning type". Detail of model designation, refer to P.11.			
Resolution per single turn				1,048,576	131,072					



Dimensions

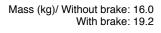


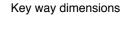
(2) Motor/Brake connector

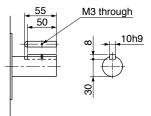
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Motor Specifications 400V MHME 3.0kW [High inertia, Middle capacity]

Torgue characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)







* Figures in [] represent the dimensions of with brake.

Motor Specifications 400V MHME 4.0kW [High inertia, Middle capacity]

Specifications

		AC4	V00			
Motor model *1		404G1 404S1				
	Model	A5 series	MFDHTA464			
Applicable driver *2	No.	A5E series	MFDH	TA464E		
	Fram	ne symbol	F-frame			
Power supply capacit	у	(kVA)	6	.8		
Rated output		(W)	4	.0		
Rated torque		(N·m)	19).1		
Momentary Max. pea	k torqu	e (N·m)	57	57.3		
Rated current		(A(rms))	10.5			
Max. current		(A(o-p))	45			
Regenerative brake		out option	17			
frequency (times/min) Note)1	DV0P	M20049×2	125			
Rated rotational spee	d	(r/min)	2000			
Max. rotational speed		(r/min)	3000			
Moment of inertia	With	out brake	112			
of rotor (×10 ⁻⁴ kg·m ²)	Wi	th brake	114			
Recommended mome ratio of the load and t		5 times or less				
Rotary encoder speci	ficatior	1S Note)5	20-bit 17-bit Incremental Absolute			
Resolut	ion per	1,048,576	131,072			

• Brake specifications (For details, refer to P.105) (This brake will be released when it is energized.) Do not use this for braking the motor in motion.

J	1
Static friction torque (N·m)	24.5 or more
Engaging time (ms)	80 or less
Releasing time (ms) Note)4	25 or less
Exciting current (DC) (A)	1.3±10%
Releasing voltage (DC) (V)	2 or more
Exciting voltage (DC) (V)	24±2.4

• Permissible load (For details, refer to P.104)

During assembly During operation	Radial load P-direction (N)	1666
	Thrust load A-direction (N)	784
	Thrust load B-direction (N)	980
	Radial load P-direction (N)	784
	Thrust load A, B-direction (N)	343

· For details of Note 1 to Note 5, refer to P.104.

• Dimensions of Driver, refer to P.34.

*1 Rotary encoder specifications:

*2 The product that the end of driver model designation has "E" is "positioning type". Detail of model designation, refer to P.11.

Mass (kg)/ Without brake: 18.6

Key way dimensions

50

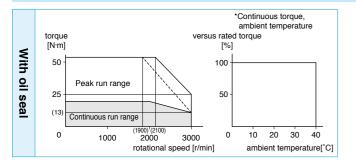
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With brake: 21.8

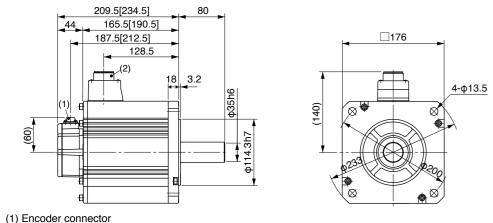
M3 through

10h9

Torque characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Dimensions

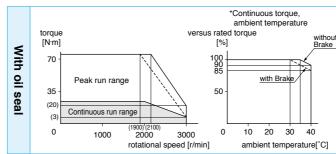


- (2) Motor/Brake connector
- * Figures in [] represent the dimensions of with brake.

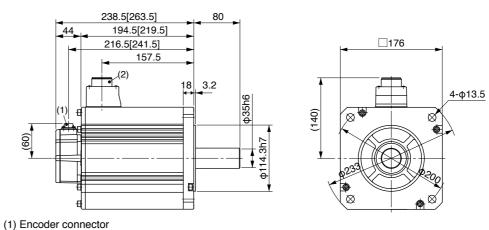
<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Specifications

Specificati	ons	5								
				AC4	100V			specifications (For details	. ,	
Motor model *1 MHME			504G1	(This brake will be released when it is energized.) Do not use this for braking the motor in motion.)						
	Ν	Nodel	A5 series	MFDH	TA464	Static friction torque (N·m) Engaging time (ms)		ction torque (N·m)	24.5 or more	
Applicable driver	*2 N	۱o.	A5E series	MFDH	TA464E			80 or less		
		Fram	ie symbol	F-frame		Releas	Releasing time (ms) Note)4			
Power supply cap	acity		(kVA)	7.5		Excitin	Exciting current (DC) (A)			
Rated output			(W)	5.0		Releas	Releasing voltage (DC) (V)		2 or more	
Rated torque			(N·m)	23.9		Exciting voltage (DC) (V)			24±2.4	
Momentary Max.	Momentary Max. peak torque (N·m)		e (N·m)	71.6						
Rated current	Rated current (A(rms))		(A(rms))	13.0		• Permissible load (For details, refer to P.104)			er to P.104)	
Max. current			(A(o-p))	55		During assembly	Radial load P-direction (N)	1666		
Regenerative brak	е	Witho	out option	10			dv	Thrust load A-direction (N)	784	
frequency (times/min) !	Note)1	DV0PM20049×2		76		assemb	''y	Thrust load B-direction (N)	980	
Rated rotational s	peed		(r/min)	2000		During		Radial load P-direction (N)	784	
Max. rotational sp	eed		(r/min)	3000		operatio	on	Thrust load A, B-direction (N)	343	
Moment of inertia		With	out brake	162		- For details of Note 1 to Note 5, refer to D101				
of rotor (×10 ⁻⁴ kg·r	n²)	Wit	h brake	164		 For details of Note 1 to Note 5, refer to P.104. Dimensions of Driver, refer to P.34. 				
	Recommended moment of inertia ratio of the load and the rotor Note)3		5 times or less		*1 Rotary encoder specifications: *2 The product that the end of driver model designation					
Rotary encoder s	Rotary encoder specifications Note)5		IS Note)5	20-bit 17-bit Incremental Absolute		has "E" is "positioning type".			0	
Resolution per single turn				1,048,576	131,072	Detail of model designation, refer to P.11.			1.11.	



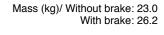
Dimensions



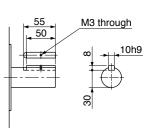
(2) Motor/Brake connector

Motor Specifications 400V MHME 5.0kW [High inertia, Middle capacity]

Torgue characteristics (at AC400V of power voltage < Dotted line represents the torque at 10% less supply voltage.>)



Key way dimensions



* Figures in [] represent the dimensions of with brake.

<Cautions> Reduce the moment of inertia ratio if high speed response operation is required. Dimensions are subject to change without notice. Contact us or a dealer for the latest information. Read the Instruction Manual carefully and understand all precautions and remarks before using the products.

Notes on [Motor specification] page

Note) 1. [At AC100V of power voltage]

Regenerative brake frequency represents the frequency of the motor's stops from the rated speed with deceleration without load.

- If the load is connected, frequency will be defines as 1/(m+1), where m=load moment of inertia/ rotor moment of inertia.
- When the motor speed exceeds the rated speed, regenerative brake frequency is in inverse proportion to the square of (running speed/rated speed).
- Power supply voltage is AC115V (at 100V of the main voltage).
- If the supply voltage fluctuates, frequency is in inverse proportion to the square of (Running supply voltage/115) relative to the value in the table.
- · When regeneration occurs continuously such cases as running speed frequently changes or vertical feeding, consult us or a dealer.

[At AC200V of power voltage]

Regenerative brake frequency represents the frequency of the motor's stops from the rated speed with deceleration without load.

- If the load is connected, frequency will be defines as 1/(m+1), where m=load moment of inertia/ rotor moment of inertia.
- When the motor speed exceeds the rated speed, regenerative brake frequency is in inverse proportion to the square of (running speed/rated speed).
- Power supply voltage is AC230V (at 200V of the main voltage).
- If the supply voltage fluctuates, frequency is in inverse proportion to the square of (Running supply voltage/230) relative to the value in the table.
- · When regeneration occurs continuously such cases as running speed frequently changes or vertical feeding, consult us or a dealer.

[At AC400V of power voltage]

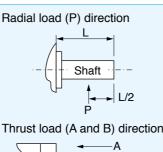
Regenerative brake frequency represents the frequency of the motor's stops from the rated speed with deceleration without load.

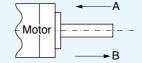
- If the load is connected, frequency will be defines as 1/(m+1), where m=load moment of inertia/ rotor moment of inertia.
- When the motor speed exceeds the rated speed, regenerative brake frequency is in inverse proportion to the square of (running speed/rated speed).
- Power supply voltage is AC460V (at 400V of the main voltage).
- If the supply voltage fluctuates, frequency is in inverse proportion to the square of (Running supply voltage/460) relative to the value in the table.
- · When regeneration occurs continuously such cases as running speed frequently changes or vertical feeding, consult us or a dealer.
- Note) 2. If the effective torque is within the rated torque, there is no limit in generative brake.
- Note) 3. Consult us or a dealer if the load moment of inertia exceeds the specified value.
- Note) 4. Releasing time values represent the ones with DC-cutoff using a varistor.
- Note) 5. The 17-bit absolute encoder can also be used as a 17-bit incremental encoder.

Permissible Load at Output Shaft

The radial load is defined as a load applied to the output shaft in the rightangle direction. This load is generated when the gear head is coupled to the machine using a chain, belt, etc., but not when the gear head is directly connected to the coupling. As shown in the right figure, the permissible value is determined based on the load applied to the L/2 position of the output shaft. The thrust load is defined as a load applied to the output shaft in the axial direction.

Because the radial load and thrust load significantly affect the life of the bearing, take care not to allow the load during operation to exceed the permissible radial load and thrust load shown in the table below.





Built-in Holding Brake

In the applications where the motor drives the vertical axis, this brake would be used to hold and prevent the work (moving load) from falling by gravity while the power to the servo is shut off.

Never use this for "Brake" purpose to stop the load in motion.

• Output Timing of BRK-OFF Signal

- in motion, refer to the Operating Instructions (Overall).
- details, download a copy of the instruction manual from our website. <Note>
- built-in brake, however this does not affect any functionality.
- open). Pay an extra attention when magnetic sensors are used nearby the motor.

Specifications of Built-in Holding Brake

Motor series	Motor output	Static friction torque N·m	Rotor inertia x 10 ⁻⁴ kg·m²	Engaging time ms	Releasing time ms	Exciting current DC A (at cool-off)	Releasing voltage	Permissible work (J) per one braking	Permissible total work x 10 ³ J	Permissible angular acceleration rad/s ²
	50W, 100W	0.29 or more	0.002	35 or less	20 or less	0.3	DOW	39.2	4.9	
MSMD	200W, 400W	1.27 or more	0.018	50 or less	15 or less	0.36	DC1V or more	137	44.1	30000
	750W	2.45 or more	0.075	70 or less	20 or less	0.42	or more	196	147	
	50W, 100W	0.29 or more	0.002	35 or less	20 or less	0.3	DOW	39.2	4.9	
	200W, 400W	1.27 or more	0.018	50 or less	15 or less	0.36	DC1V or more	137	44.1	30000
	750W	2.45 or more	0.075	70 or less	20 or less	0.42	or more	196	147	
MSME	1.0kW, 1.5kW, 2.0kW	7.8 or more	0.33	50 or less	15 or less (100)	0.81	5001	392	490	
	3.0kW	11.8 or more		80 or less	(100)		DC2V or more			10000
	4.0kW, 5.0kW	16.1 or more	1.35	110 or less	50 or less (130)	0.9	or more	1470	2200	
	1.0kW	4.9 or more	4.05	80 or less	70 or less (200)	0.59	DC2V or more	588	780	10000
MDME	1.5kW, 2.0kW	13.7 or more	1.35	100 or less	50 or less	0.79		1176	1500	
NUDIVIE	3.0kW	16.2 or more		110 or less	(130)	0.9		1470	2200	
	4.0kW, 5.0kW	24.5 or more	4.7	80 or less	25 or less (200)	1.3		1372	2900	5440
	900W	13.7 or more	1.35	100 or less	50 or less (130)	0.79		1176	1500	10000
MGME	2.0kW	24.5 or more	4.7	80 or less	25 or less (200)	1.3	DC2V or more	1372	2900	5440
	3.0kW	58.8 or more	4.7	150 or less	50 or less (130)	1.4		1372	2900	5440
MHMD	200W, 400W	1.27 or more	0.018	50 or less	15 or less	0.36	DC1V	137	44.1	30000
	750W	2.45 or more	0.075	70 or less	20 or less	0.42	or more	196	147	30000
	1.0kW	4.9 or more	1.35	80 or less	70 or less (200)	0.59	DC2V or more	588	780	10000
MHME	1.5kW	13.7 or more	1.00	100 or less	50 or less (130)	0.79		1176	1500	
	2.0kW to 5.0kW	24.5 or more	4.7	80 or less	25 or less (200)	1.3		1372	2900	5440

Excitation voltage is DC24V±10% (Large type motor) and DC24V±5% (Small type motor).

- · Releasing time values represent the ones with DC-cutoff using a varistor.
- Values in () represent those measured by using a diode (V03C by Hitachi, Ltd.)
- · Backlash of the built-in holding brake is kept ±1° or smaller at ex-factory point.
- 10 million times. (Life end is defined as when the brake backlash drastically changes.)

Use this built-in brake for "Holding" purpose only, that is to hold the stalling status.

• For the brake release timing at power-on, or braking timing at Servo-OFF/Servo-Alarm while the motor is

• With the parameter, Pr4.38 (Setup of mechanical brake action while the motor is in motion), you can set up a time between when the motor enters to a free-run from energized status and when BRK-OFF signal turns off (brake will be engaged), when the Servo-OFF or alarm occurs while the motor is in motion. For

1. The lining sound of the brake (chattering and etc.) might be generated while running the motor with

2. Magnetic flux might be generated through the motor shaft while the brake coil is energized (brake is

Above values (except static friction torque, releasing voltage and excitation current) represent typical values.

· Service life of the number of acceleration/deceleration with the above permissible angular acceleration is more than