Panasonic

AC SERVO MOTOR 3000W & DRIVER
MODEL: MSMF302L1G6M+MFDLNA3SG

Servo Motor Specification:

Type	Low inertia, connector type
Family Name	MINAS A6
Enclosure	IP67
About Enclosure	Except rotating portion of output shaft and lead wire end.
Environmental Conditions	For more details, please refer to the instruction manual.
Flange sq. dimension	120 mm sq.
Flange sq. dimension (Unit: mm)	120
Motor lead-out configuration	connector
Motor encoder connector	Motor connector: JL10, Encoder connector: Large size JL10
About Motor Encoder Connector	Connector JL10 (large size) also applicable to screwed type
Power supply capacity (kVA)	4.5
Voltage specifications	200 V
Rated output	3000 W
Rated current (A (rms))	18.1
Holding brake	without
Mass (kg)	8.7

Oil seal	with
Shaft	Key-way
Rated torque (N · m)	9.55
Continuous stall torque (N · m)	11
Momentary Max. peak torque (N · m)	28.6
Max. current (A (o-p))	77
Regenerative brake frequency	Without option: No limit With option: No limit, Option (External regenerative resistor) Part No. : DV0P4283
About regenerative brake frequency	Please refer to the details of [Motor Specification Description] , Note: 1, and 2.
Rated rotational speed (r/min)	3000
Rated rotational Max. speed (r/min)	5000
Moment of inertia of rotor ($x10^{-4}$ $kg{\cdot}m^2$)	7.04
Recommended moment of inertia ratio of the load and the rotor	15 times or less
About recommended moment of inertia ratio of the load and the rotor	Please refer to the details of [Motor Specification Description] ,Note: 3.
Rotary encoder: specifications	23-bit Absolute/Incremental system
Notice	When using a rotary encoder as an incremental system (not using multi-turn data), do not connect a battery for absolute encoder.
Rotary encoder: Resolution	8388608

Permissible load:

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

During operation: Thrust load A, B-direction (N)	196
About permissible load	For details, refer to the [Motor Specification Description] "Permissible Load at Output Shaft".

Servo Driver Description:

Details	A6SG series RS485/RS232 Communication type (Pulse train only) without safety function
Type	RS485/RS232 Communication type
Frame	F-Frame
Frequency response	3.2 kHz
Control method	Position control
Safety Function	without the safety function
Supply voltage	3-phase 200 V
I/F Classification of type	Pulse, Modbus (RS485 /RS232)
Dimensions (W) (Unit: mm)	130
Dimensions (H) (Unit: mm)	220
Dimensions (D) (Unit: mm)	216
Mass (kg)	5.2
Environment	For more details, please refer to the instruction manual
Input power: Main circuit	3-phase 200 to 240V +10% -15% 50/60 Hz
Input power: Control circuit	Single phase 200 to 240V +10% -15% 50/60 Hz
Encoder feedback	23-bit (8388608 resolution) absolute encoder, 7-wire serial
Parallel I/O connector: Control signal Input	General purpose 10 inputs The function of general-purpose input is selected by parameters.
Parallel I/O connector: Control signal Output	General purpose 6 output The function of general-purpose output is selected by parameters.
Parallel I/O connector: Analog signal Output	2 outputs (Analog monitor: 2 output)

Parallel I/O connector: Pulse signal Input	2 inputs (Photo-coupler input, Line receiver input)
Parallel I/O connector: Pulse signal Output	4 outputs (Line driver: 3 output, open collector: 1 output)
Communication function	USB, RS232, RS485, Modbus-RTU
Communication function: USB	USB interface to connect to computers for parameter setting or status monitoring.
Communication function: RS232	1:1 communication
Communication function: RS485	1: n communication (max 31)
Communication function: Modbus-RTU	1: n communication
Regeneration	built-in regenerative resistor (external resistor only)
Control mode	Switching among the following 3 mode is enabled, (1) Position control, (2) Internal velocity command, (3) Position/Internal velocity command

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