

More Compact and Easier to Use!

AC Servo Driver with Dual Axis Integration

ABH3 Series



1. This driver offers approximately a 65% volume ratio compared to our other products (ABH2). Our compact design helps accelerate product miniaturization.
2. Individual motor drive commands are available for travel and rotation. AGV forward and backward commands as well as left and right rotation commands are available. Speed (torque) commands for each motor axis can also be controlled.
3. Command control is supported for up to 8 commands by using an external analog voltage and internal speed command table. The speed can also be changed using the I/O switch for the PLC, etc.

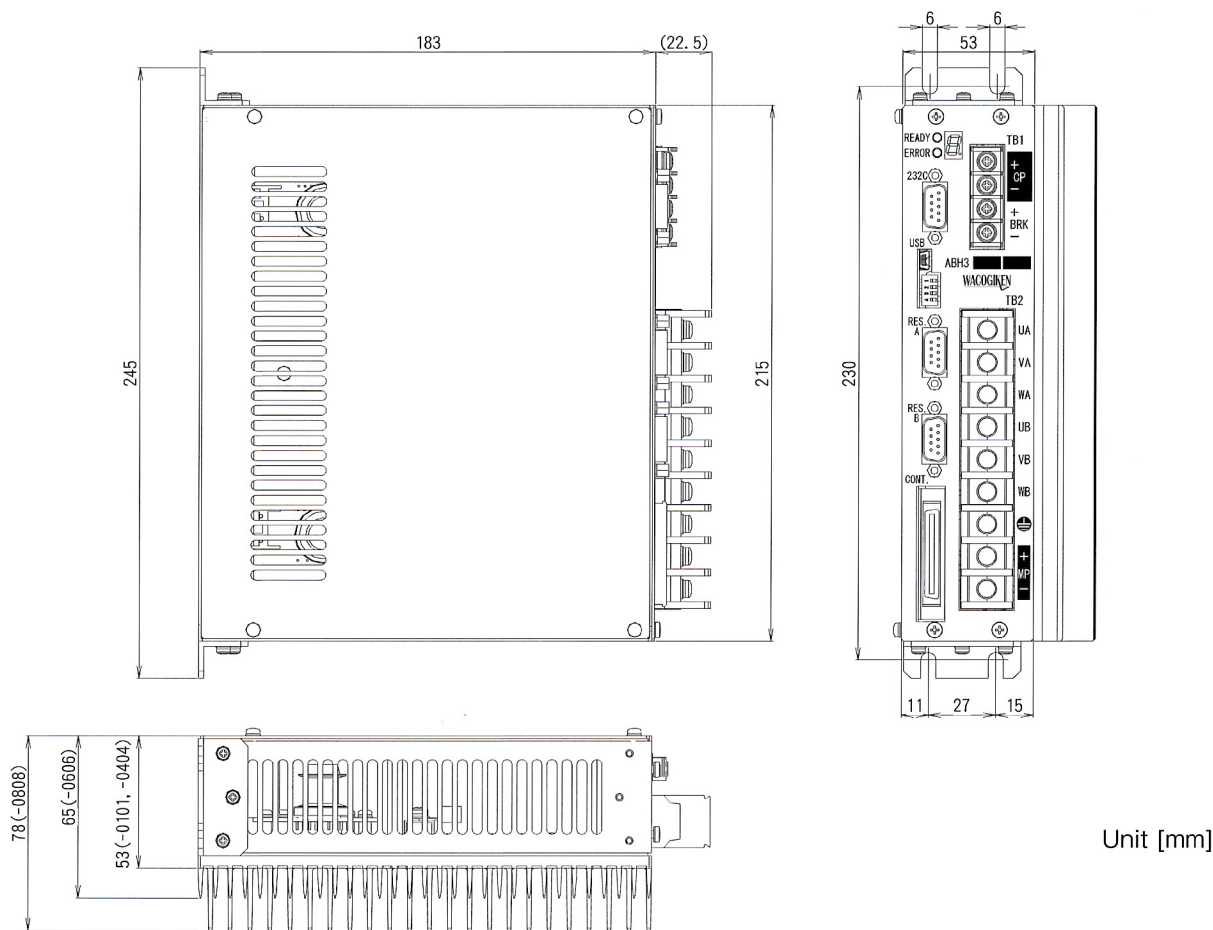


Specification

Model		ABH3-0404	ABH3-0606	ABH3-0808	ABH3-2424
Control power supply / Main power supply	Rated voltage	V DC24~48 (DC20~60)			
Rated phase voltage (RMS)	A	20 (14.1)	30 (21.2)	40 (26.0)	92 (65)
Instantaneous max. current (RMS)	A	40 (28.2)	60 (42.4)	80 (56.6)	240 (170)
Overdrive	%	200		200	260
Cooling system		Heat sink with natural air cooling			Built-in DC fan
Heat sink	mm	Flat ; Thickness: 5	With fin ; Height: 17	With fin ; Height: 30	
Power control system		Three-phase sine wave PWM using power MOSFET			
Motor structure / Motor sencer		PM synchronous motor / BRX brushless resolver (1X)			
Using environment		0~45°C 85%Rh以下			
Dimension *1	mm	W:53/H:215/D:183	W:65/H:215/D:183	W:78/H:215/D:183	W:190/H:215/D:270
Mass	Kg	2	2.3	2.6	9
Control mode	Control axle	A / B axle	Independent control for each motor		
		Traveling / Turning	Drive axis control using motor feedback		
	Control mode	Speed / Torque	Setting possible on each control axis		
Master / Slave		Valid with A/B-axis control (independent control for each motor). Used with speed control on master axis and torque control on slave axis. Speed control output (torque command) allocated to slave commands.			
Command input	Analog command	4 ch. input (2 ch. command input + 2 ch. compensation input) ; Bipolar input (±10 [V]) ; Unipolar input (0 to +5 V ; 2.5 V center)			
	Internal command	Command input used for parameter setting values. Maximum of 8 groups can be registered for command values such as gain, acceleration and deceleration settings. Control input used for changing.			
Command calculation	Acceleration / Deceleration control	4 ch. input (2 ch. command input + 2 ch. compensation input) ; Bipolar input (±10 [V]) ; Unipolar input (0 to +5 V ; 2.5 V center)			
	Polarity switching	Control input used for changing command polarity			
	Correction calculation	Control input used for enabling/disabling compensation input and for increasing and decreasing when compensation input is enabled			
Control signal I/O	Input	Special input: 1 / General input: 20 (18 when using open collector specification)			
	Output	Error output: 1 / Alarm output: 1 / Code output: 4. Warning and error status are output. Ready output: 1 / Busy output: 1 / Total output: 8. Parameter settings can be used to redefine output.			
applicable motor 24V power supply	Rated Output W	165W(max.)	300W(max.)	380W(max.)	—
	AWRII	AWRII010B(10)	AWRII030B-P(20)	AWRII030B-P(30)	—
	SWR	SWR010B-T11	SWR020B-T15	—	—
applicable motor 48V power supply	Rated Output W	250W, 400W(max.)	600W, 750W(max.)	—	2.2KW(max.)
	AWRII	—	AWRII075B(21)	—	AWRII220B(65)
	SWR	—	SWR040B-T23	—	—

*1 Excluding protrusions such as connectors, terminal blocks and screws

Dimension



Option

■ Resolver relay cable

GP-RC2	2m
GP-RC3	3m
GP-RC5	5m
GP-RC8	8m

■ Maintenance tools

- Computer software
- Communications cable (RS232C) (USB)
- Tel ABH3 for Windows
- NS-RS9
- Mini B-type USB cable (Commercial product)

Various documentation such as CAD data can be downloaded from our website.

Guide Sensor ME-9100W



After magnetic tape is affixed to the ground surface to identify the travel course, this guide sensor is used to pick up magnetic signals that are issued to the AGV as rotation commands so that the AGV can follow the course smoothly.