

New LDHD3 High Performance Servo Drive

Product introduction

The LDHD3 series is a new generation of flagship servo drives, positioned to deliver both high cost-effectiveness and high performance. It is specially designed for lithium battery applications to help achieve standardized mass production. It comes standard with EtherCAT bus, STO, Frequency-Division Output, and high-speed probe. It is compatible with linear motors, DD motors, and rotary servo motors. The models are streamlined to 6A and 10A, covering applications within 10A. It supports one-click auto tuning and online auto tuning for efficient and worry-free debugging. Equipped with advanced motion control algorithms, it achieves high-speed and high-precision position control, fundamentally solving issues like vibration and running deviation, ensuring stable equipment operation, and effectively improving operational efficiency and processing accuracy.

Product features



High performance

Current loop bandwidth: 5.0 KHz
Speed loop bandwidth: 3.0 KHz



Supported motor types

Linear motors, DD motors,
rotary servo motors



Multiple functions

EtherCAT bus, STO,
position-based frequency division,
high-speed probe



Supported multiple encoder types

Incremental AB, BissC,
Tamagawa



Simple and easy to use

One-click auto tuning and online auto tuning, USB Type-C debugging interface
Servostudio debugging software, Internal regenerative resistor, hardware dynamic brake



Rich advanced algorithms

Full-frequency band (high, medium and low) vibration suppression, model following control (MFC), disturbance suppression
Friction compensation, gravity compensation, gain switching, adaptive notch filter



LDHD3-0062AEB



LDHD3-0102AEB

LDHD3-0062AEB

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① LDHD3 servo drive - HD series

LDHD3	3rd generation linear servo drive
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② Current rating

006	Continuous 6Arms, peak 18Arms
010	Continuous 10Arms, peak 30Arms

③ Input power supply voltage

2A	1ph 200V-240V, -10%~+10%, 50/60Hz
4D*	3ph 380V-440V, -10%~+10%, 50/60Hz

④ Communication interface

EB	EtherCAT、USB
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* Coming soon

Electrical specifications

Specification		LDHD3-0062AEB	LDHD3-0102AEB
Ratings			
Power circuit inputs L1, L2, L3、	Rated voltage (L-N) $\pm 10\%$	220	220
	Line frequency (Hz)	50/60	50/60
	220 VAC	1ph	1ph/3ph
	Continuous current (1ph/3ph, Arms)	9	14/8
	Line fuse (FRN-R, LPN, or equivalent) (A)	16	20
Drive output	Continuous output current (Arms)	6	10
	Continuous output current (Apeak)	8.48	14.14
	Peak output current (Arms) for 2s	18	30
	Peak output current (Apeak) for 2s	25.45	42.42
	kVA, 220 VAC	1.5	2.2
	PWM frequency (kHz)	16	8
Hardware			
Connection specification	PE screw/torque	M4/1.35 Nm	M4/1.35 Nm
Cable specification	Control circuit (<3 m) (AWG)	24-28	24-28
	Main circuit motor line (AWG)	16	14
	Main circuit AC input (AWG)	16	14
Clearance specification	Installation	Installation of Book	Installation of Book
	Left/right (mm)	10	10
	Top/bottom (mm)	50	50
Voltage protection	Undervoltage protection value (VDC)	180	180
	Overvoltage protection value (VDC)	400	400
Fan	Fan activation conditions	Enable	Enable
External regenerative resistor (P. D)	Min resistance (Ω)	40	20
	Max current (A)	10	30
	Internal bus capacitance (μF)	940	2040
	regenerative circuit off voltage (VDC)	380	380
	regenerative circuit on voltage (VDC)	390	390

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