



High Performance Dual Axis Servo Drive

Superior servo performance and compact footprint make the DDHD dual axis drive the ideal cost-saving solution for low and medium voltage applications.



Powerful performance while reducing system costs

Evolved from Servotronic successful CDHD servo drive, the DDHD dual axis servo drive is designed on the same platform and utilizes the same powerful HD control algorithms. Shared components and optimized wiring reduce costs by 20% per axis as compared to systems with two independent drives.

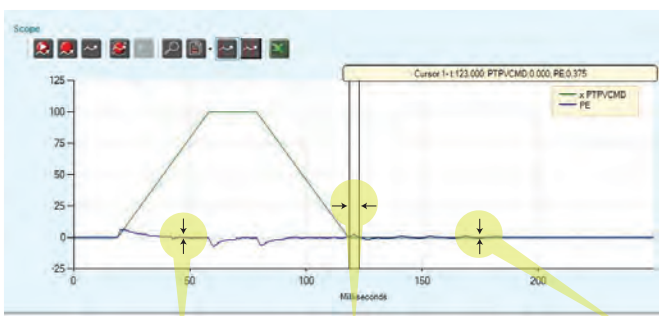


Maximum machine accuracy and throughput

New current loop design achieves an industry-leading Frequency response of 3-5 kHz.

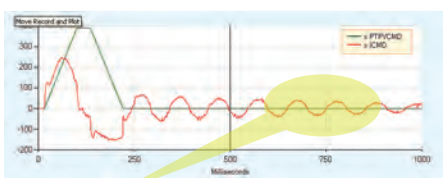


Advanced autotuning minimizes position error and settling time to almost zero.

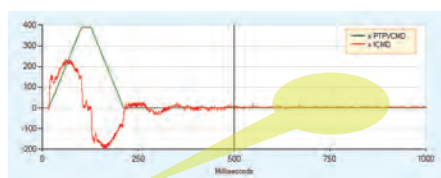


Minimum position error Settling time of almost zero No oscillations at stand-still

Active non-linear anti-vibration control algorithm eliminates mechanical resonance in highly flexible systems.



Without anti-vibe control

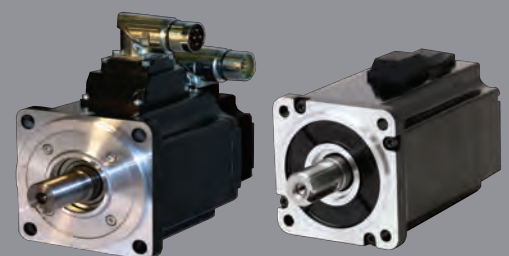


With anti-vibe control

Key benefits

- Up to 20% lower cost per axis due to shared components and less wiring
- High performance control of synchronous servo motors
- Reference command: EtherCAT, CANopen, Analog, Pulse train
- I/O programming
- Interfaces multiple feedback devices
- Share AC input and regeneration, for energy efficiency
- Simple commissioning using ServoStudio™ GUI
- Exclusive 30-month warranty

Offered with matched PRO2/PRHD2 servo motors for optimal performance



PRO/PRO2 Series

50 W – 7.5 kW
0.16 Nm – 48 Nm

PRHD2 Series

50 W – 3 kW
0.16 Nm – 14.3 Nm

ServoStudio™ wizard for simple commissioning

- Step-by-step guidance through setup and tuning process
- Excellent results for novice users within minutes
- Real-time data recording and plotting
- Easy integration of servo axes
- Plug-and-play motor and feedback wiring



Rating and dimensions

Model	Input Voltage (VAC)	Input Power Main Circuit	Continuous Current (A _{rms})	Peak Current (A _{rms})	120 VAC Typical Motor Output (W)	240 VAC Typical Motor Output (W)	Width (mm)	Height (mm)	Depth (mm)
DDHD-1D81D8	120/240	1 Phase	1.8/1.8	6.5/6.5	100/100	200/200	83.5	175.5	169.4
DDHD-3D43D4	120/240	1 Phase	3.4/3.4	12.3/12.3	200/200	400/400	83.5	175.5	169.4
DDHD-4D54D5	120/240	1 Phase	4.5/4.5	13.5/13.5	350/350	750/750	83.5	175.5	169.4
DDHD-3D46D8	120/240	1/3 Phase	6.8/3.4	18/12.3	250/500	500/1000	83.5	175.5	169.4

Communication:

EtherCAT
CANopen
RS232
Daisy Chain

Motor feedback:

Incremental Encoder
Hall Sensors
SSI Encoder (e.g. EnDat®, Nikon®, Tamagawa®)
Motor Temperature

I/Os:

Digital: 8 x Input, 10 x Output
Analog : 2 x Input
2 x Pulse & Direction
2 x Equivalent Encoder Output

Ordering information

		DDHD	-	3D46D8	AP	-	RO
DDHD Servo Drive – HD Series							
Rating							
	Axis 1		Axis 2				
	Cont. [A rms]	Peak [A rms]	Cont. [A rms]	Peak [A rms]			
1D81D8	1.8	6.5	1.8	6.5			
3D43D4	3.4	12.3	3.4	12.3			
4D54D5	4.5	13.5	4.5	13.5			
3D46D8	6.8	18.0	3.4	12.3			
Communication Interfaces							
AP	Analog Voltage, Pulse Train References, RS232						
AF	CANopen, Analog Voltage, Pulse Train, RS232						
EC	EtherCAT, Analog Voltage, Pulse Train, RS232, USB						
Motor Type							
[blank]	Rotary and linear servo motors						
-RO	Rotary servo motors. Available in Asia market only.						



DOC-DDHD-FL-EN-V1