



MTDV3CH-22A3

Motion controller for bipolar stepper motors with additional encoder input

SPECIFICATIONS

Partnumber MTDV3CH-22A3

Electrical specifications

Voltage	(V)	24
Power consumption max	(W)	96
Interfaces	Ethernet (TCP/IP), USB2.0 (custom serial), RS485 (custom serial)	
Connectors	1x RJ45, 1x USB Type A, 2x Terminal blocks, Nx DB15HD female	
Visual indicators	Ethernet activity LED, RGB LED for each motor status	
Protections	ESD, polarity inversion, overvoltage, undervoltage, output overcurrent, shorted output, open output, overtemperature	

Functions

Non volatile memory	Yes	
Automatic position saving	Yes	
Software	Integrated web interface (Ethernet), DLL library (Ethernet, USB and RS485)	
Control type	Closed-loop, open-loop	
Motion mode	Positioning mode (relative and absolute) with 2 stage velocity ram	
Special features	Advanced motor drive with StealthChop™ and 256x SpreadCycle™, extremely silent operation, adjustable RUN and HOLD currents for optimized power consumption, advanced positioning control in closed-loop operation, motor homing based on encoder reference or limit switch, reduced EMI noise	

Motor parameters 3

Number of motors	3	
Type	Bipolar stepper	
RMS winding current	(mA)	20 to 1250 (adj)
Peak winding voltage	(V)	26 (PWM)

Encoder parameters 3

Number of encoders	3	
DC power supply	5	
Type	Linear / rotary, incremental	
Signal outputs	A, B, Z (index)	
Interface	RS424	

Environmental specifications

Operating temperature	(°C)	12 to 40
Storage temperature	(°C)	2 to 50
Humidity	(%)	10-85 non condensing
IP rating	-	
Installation	Indoor use only	

Mechanical specifications

Length	(mm)	78.6
Height	(mm)	84



Width (case only)	(mm)	80.2
Width (total)	(mm)	102.6
Material		Anodized aluminum
Mount		DIN rail

Compatibility 4

Lenses		TCZRS, ENMT, MZMT12x
Cable 5		CBMT002, CBMT003, CBETH003
Accessories		ADPT003

NOTES

1. N represents the number of channels.
2. StealthChop™ and SpreadCycle™ are property of their respective owners.
3. For a complete list of specifications please refer to the user manual.
4. All compatible products must be ordered separately.
5. CBMTxxx cables are required to connect MTDV to compatible lenses.
See the lens product page for more informations on the proper cable to order.