

STANDARD SERVO DRIVE

WER-D048/10-FS00FD-E.C

(Size :110×73×31mm)



W:296g

Ratings	05	10
Continuous Output Current A rms	5	10
Peak Output Current A rms	10	20

Basic Specifications

Feature	Specification	
Motors	DC / BLDC / PMSM / VCM	Rotary servo motors, Linear servo motors
Current (Torque) Control	Control Periodic	24KHz
	Control Loop	PI + Feed-forward
Velocity & Position Control	Control Periodic	2KHz
	Control Loop	Cascade P/PI + Feed-forward
	Filters	First order low pass filter, Four notch filters, First order adaptive windowing filters
Reference Command	Current / Velocity / Position	USB + CANopen or EtherCAT(CoE, FoE)
Auto Tuning	Method	Automatic self-configuration and optimization of motor phasing, wires, current loop, velocity control loop
GUI	User Interface	WELSS(WelconServoStudio), Setting, Drive, Motor, Feedback, I/O, Motion
Protective Functions	Under- and over-voltage, Over-current, Over-load (with I ² T), Drive over-temperature	
Compliance Standard	CE, KC	
Environment	• Ambient temperature : Operation 0-45 °C, Storage 0-70 °C • Humidity : 10-90% • Vibration : 1.0g	

Communication

Feature	Specification	
CAN*	CANopen –CiA 301 application layer and CiA 402 device profile for drives and motion control Bit rate : 125kbps ~1Mbps	
EtherCAT*	CiA 301 application layer and CiA 402 device profile for drives and motion control Communication cycle time : up to 500µs(CSV, CSP mode), up to 250µs(CST mode)	
USB	• Baud rate : up to 3Mbps • Maximum cable length 3m	

I/O

Feature	Specification	
Analog Input	Quantity	1
	Voltage Range	Analog ±10 VDC differential
	Input Resolution	14 bit
Digital Inputs	Quantity	6 (with STO)
	Signal	Configurable. Opto-isolated.
	Voltage	24V
Digital Outputs	Quantity	2
	Signal	Configurable. Opto-isolated. Open collector.
	Voltage	24V
	Max. Output Current	45 mA

Motor Feedback

Feature	Specification	
General	Supply Voltage	5VDC
Incremental Encoder	Signal	A-quad-B with or without index, shared digital hall sensor, RS422, Differential
	A-quad-B Max Input Frequency	10MHz (before quadrature)
Digital Hall Sensor	Signal	Differential-ended
	Type	Separated and shared hall sensor
Analog Hall Sensor	Signal	0 ~ 5V, Single-ended
	Sampling Frequency	24KHz
Sin/Cos Encoder	Signal	-0.7~ +0.7V at 2.5V, Differential
	Sampling Frequency	24KHz
Serial Encoder	Type	SSI, Biss C, TAMAGAWA, Panasonic
	Bite rate	0.5Mbps, 1Mbps, 2Mbps, 2.5Mbps, 5Mbps

*Optional (Refer to product code) ** Refer to hardware manual (www.welconsystems.com)