PRODUCT DATASHEET

ES-SD-C01-S007-V012

Industrial Motion Controller

24 60 V Low Voltage Micro Servo Drives | 24-60 V Compact Servo Drive Series - ES-SD-C01-S007

Product Overview

Industrial Motion Controller with logic Supply Voltage 24 V DC, peak Output Current 160 A peak and continuous Output Current Without Auxiliary Heatsink 35 Arms.

Key Specifications

PARAMETER	VALUE	UNIT
Logic Supply Voltage	24	V DC
Peak Output Current	160 A peak	
Continuous Output Current Without Auxiliary Heatsink	35 Arms	
Communication Protocol	Profinet; Pulse	
Control Method	Profinet and pulse	
Protection Class	IP20; X5 power terminal is IP00	
Weight	0.867	kg
Digital I/O	3 digital inputs; 1 digital output	
Analog Input Count	1	

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
PERFORMANCE		
Continuous Output Current Without Auxiliary Heatsink	35 Arms	
Supported Motor Power Range	200 to +2000	W
ELECTRICAL		
Logic Supply Voltage	24	V DC
Peak Output Current	160 A peak	
Braking Absorption Voltage	63 ±2 V VDC / 63	V DC
Braking Resistor	External braking resistor supported when required by the duty cycle, particularly for rapid start/stop operation	
External Braking Resistor Required	Yes / 1	
Overvoltage Alarm Voltage	70 ±2 V VDC / 70	V DC
Undervoltage Alarm Voltage	16 ±2 V VDC / 16	V DC
Power-to-Logic Isolation Voltage	500	V DC
Logic Supply Current	500 mA plus brake-coil current	
Servo Drive AC Supply Voltage	24 to +60	V DC

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
ELECTRICAL		
Logic Power Loss	2500	mW
Protection Functions	Overvoltage; Undervoltage; Motor overtemperature (I^2T); Short circuit; Drive overtemperature	
Logic Supply Voltage Range	18 to +30	V DC
MECHANICAL		
Weight	0.867	kg
INTERFACES		
Communication Protocol	Profinet; Pulse	
Control Method	Profinet and pulse	
Digital I/O	3 digital inputs; 1 digital output	
Gantry Synchronization Supported	No / false	
USB Debug Interface	Yes / 1	
Digital Output Count	1	
High-Speed Digital Input Count	2	
Analog Input Count	1	

Technical Specifications

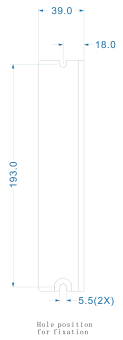
PARAMETER	SPECIFICATION	UNIT
INTERFACES		
Digital Input Count	3	
Analog Input Range	-10 to +10	V
Analog Input Resolution	12 bit	
Node Address Switch Resolution	16 bit	
Pulse Input Voltage	12 to +24	V DC
Feedback Signal Support	Tamagawa serial protocol; Incremental encoder	
Pulse Input Maximum Frequency	500	kHz
Pulse Input Count	2	
Brake Output Count	1	
Node Address Rotary Switch Count	2	
Brake Output Current	1	A
ENVIRONMENTAL		
Protection Class	IP20; X5 power terminal is IP00	

Dimensional & Integration Overview

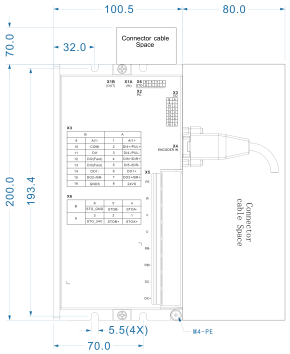
Mechanical Overview

PARAMETER	VALUE	UNIT
Weight	0.867	kg

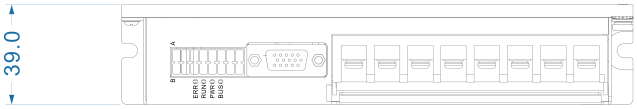
Dimensional Drawings



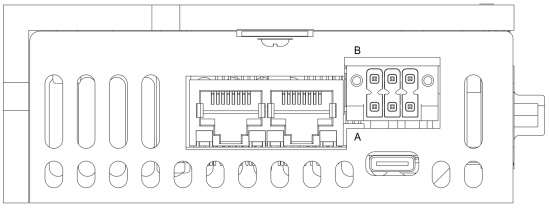
Mechanical View 1



Mechanical View 2



Mechanical View 3



Mechanical View 4

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Fixation hole position horizontal dimension	39.0 mm
	Fixation hole position offset dimension	18.0 mm
	Fixation hole position view height dimension	193.0 mm
	Fixation slot width quantity	5.5 mm, 2 places
	Fixation hole position note	Hole position for fixation
Mechanical View 2	Overall width	100.5 mm
	Right section width	80.0 mm
	Overall height	200.0 mm
	Internal main body height	193.4 mm
	Mounting hole width	70.0 mm
	Bottom mounting hole width	
	Mounting hole diameter	Φ5.5 mm, 4 places
	Ground screw hole specification	M4 thread, protective earth ground
	Connector cable space note	Reserved space for connector cables
Mechanical View 3	Local envelope width dimension	39.0 mm
Mechanical View 4	Datum label B	Datum B
	Datum label A	Datum A

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01 Specifications are subject to change without notice. Verify the current product configuration before final design release.

02 2D drawings, CAD files and integration documentation are controlled documents and are supplied separately on request.