

EA47

| Servo Amplifier



Power Supply Voltage	Nominal Current	Quadrants	Operation Mode		
			Torque Control	Speed Control by Hall Sensor	Speed Control by Digital Encoder
9 – 70	9 / 18	4	●	●	●

For BLDC Motors. Up to 1260W.

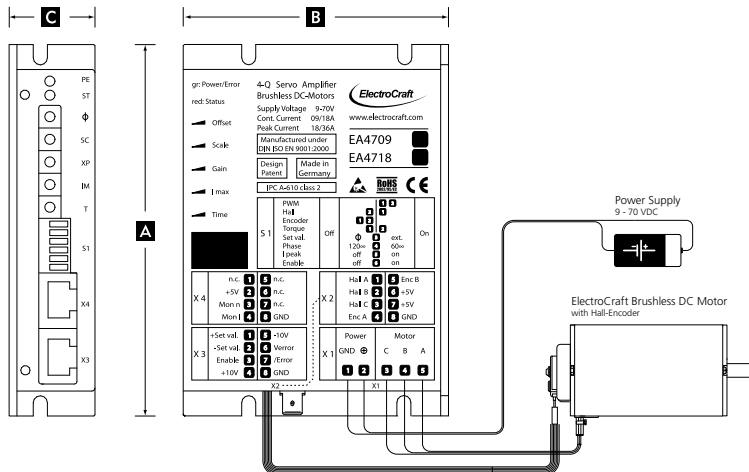
This four-quadrant brushless DC servo amplifier is fully enclosed in a small rugged aluminum case which can be DIN-rail mounted or panel mounted for easy integration. The drive can be configured in a variety of torque and speed control modes with the mode of operation being set by simple DIP switches. Both the 9 A and 18 A versions of this drive have an adjustable current limit, peak current time and ramp function and can be powered by the same 9 – 70 VDC range of supply voltage. The drive is protected against over-current and over-temperature and motor short-circuit and incorporates state of the art MOSFET technology for maximum efficiency. Connectivity is tool-free with RJ-45-CAT5 connectors for control/feedback inputs and push-type terminals for supply power and motor connections.

Drive Model Example

E Drive Technology
 A Version
 4 # Quadrants
 7 Voltage 10x VDC
 09 Current Amps

EA47 Outline Drawing

Model	A	B	C	Weight oz (g)
	Length in (mm)	Width in (mm)	Height in (mm)	
EA4709	4.69 (120.0)	3.35 (85.0)	1.08 (27.5)	7.40 (210)
EA4718				



EA47 Specifications							
Model Number	Power Supply Voltage (VDC)	Aux. Voltage Verror (VDC)	Nominal Current (Amps)	Peak current (Amps)	Max. Power with Heatsink (Watts)	Frequency of power output stage (kHz)	Efficiency (%)
EA4709	9 – 70	5 - 30	9	18	630	50	97
EA4718	9 – 70	5 - 30	18	36	1260	50	97
Control Inputs							
Encoder input signals			Channel A, B; TTL / +5 VDC; max. 78 kHz; Ri = 1 kOhm				
Hall input signals A, B, C			TTL / +5 VDC; Ri = 1 kOhm				
Set value			-10 to +10 VDC; Ri = 20 kOhm				
Enable			TTL / +24 VDC; Ri = 10 kOhm				
Switches							
PWM-, Hall-, Enc., Torque-Mode			Not set / Set				
Set value via Offset			Offset / ext				
Phase			120° / 60°				
Ipeak			on / off				
Enable			on / off				
Outputs							
Auxiliary voltage sources +5V			+5 VDC / 50 mA each				
Auxiliary voltage sources			±10 VDC / 10 mA				
Current Monitor <i>Mon I</i>			1 / 0.5 (V/A); Ri = 200 Ohm				
Speed Monitor <i>Mon n</i>			max. 10 V at n max				
Supervision output /Error			Open Collector / Push Pull / TTL / +24 V				
Display							
LEDs			green = Power / red = Error				
Potentiometer							
Function of Potentiometer			Offset; Scale; Gain; I max; Time				
Ambient conditions							
Operation temperature (°C)			-10 to +45				
Storage temperature (°C)			-40 to +85				
Humidity Range Not Condensing (%rel)			20 to 80 % rel.				
Mode of Operation							
PWM-commutation amplifier	Speed-control by hall	Speed-control by encoder	Torque-control				

Available Accessories for EA47 (details see page 47)

ASO-BM-70-30	CAxxxx	HA3008	HA3018	HA3028	IA310x	MA0025	WA2509