DA47 | Servo Amplifier

Power Supply Voltage	Nominal Current	Quadrants	Operation Mode						
			Torque Control	Analog Pos.	Speed Control				
					I x R Comp.	DC-Tacho	Voltage	Encoder	
11 – 70	9 / 18	4	●		●	●	●		

## For Brush-Commutated PMDC Motors. Up to 1260 W.

This four-quadrant PWM brush 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 the following modes of operation with simple dip switch settings: I/R compensation, Tach mode, Voltage mode and Torque mode. Both the 9 A and 18 A versions have twice the rated current available as peak current for intermittent overload conditions. This drive is protected against over-current and over-temperature and incorporates state of the art MOSFET technology for maximum efficiency. Connectivity is tool-free with RJ-45-connectors for input/outputs and push-type terminals for supply power and motor connections.

Drive Model Example

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

DA47 Outline Drawing

Model	A	B	C	Weight oz (g)
	Length in (mm)	Width in (mm)	Height in (mm)	
DA4709	4.69 (119)	3.35 (85)	1.08 (27.5)	7.76 (220)
DA4718				
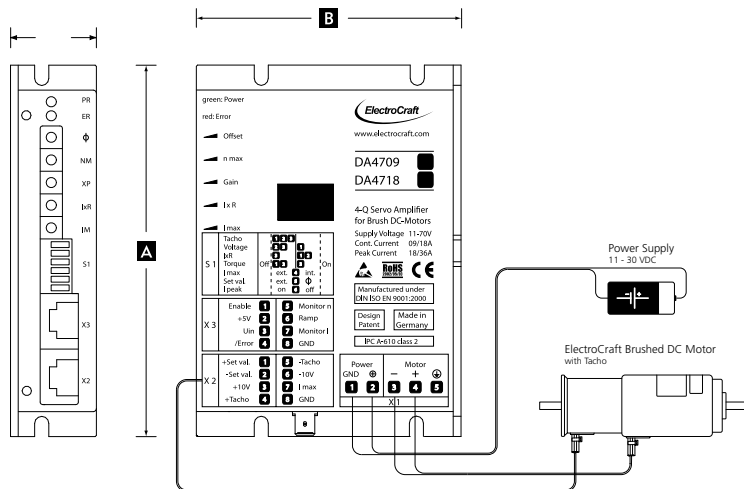
DA47 Specifications

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 (%)
DA4709	11 - 30	5 - 30	9	18	630	50	95
DA4718	11 - 70	5 - 30	18	36	1260	50	95

Control Inputs	
Set value	-10 to +10 VDC; Ri = 20 kOhm
Tacho	max. 50 VDC; Ri = 50 kOhm
Enable	TTL/ +24 VDC; Ri = 4.7 kOhm
Ramp	TTL / +24 VDC; Ri = 4.7 kOhm
Imax	0 to +10 VDC; Ri > 100 kOhm

Switches	
Tacho-, Voltage-, IxR-, Torque-Mode	Not set / Set
Set value via Offset	extern / intern
I peak	on / off

Outputs	
Auxiliary voltage source	+5 VDC / 50 mA
Auxiliary voltage sources	±10 VDC / 20 mA
Monitor I	1 / 0.5 V/A; Ri = 100 Ohm
Monitor n	0.1 V / 1 Vmotor ; Ri = 100 Ohm
Supervisory output /Error	Open Collector / Push Pull / TTL / +24V; Ri = 50 Ohm

Display	
LEDs	green = Power / red = Error

Potentiometers	
Function of Potentiometer	Offset; nmax; Gain; IxR; Imax

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			
Speed-control by voltage	Torque-control	IxR-compensation	Speed-control by DC-tacho

Available Accessories for DA47 (details see page 39)

ASO-BM-70-30	IA210x	CAxxxx	HA3008	HA3018	HA3028	MA0025	WA2509

EA