



Super Compact Servo Drives  
For 400 VDC or 800 VDC

# SimplIQ Trombone

**A PCB-mounted servo drive that operates directly from a non-isolated 400 VDC or 800 VDC power source with up to 7 kW of continuous qualitative power**

## Trombone Digital Servo Drive

The Trombone is a new addition to Elmo's SimplIQ product suite - intelligent digital servo drives for sinusoidal, trapezoidal and DC motors.

This servo drive is PCB-mounted and it provides top performance, coupled with intelligent networking capabilities in a high level programming environment.

## A Feature-rich Solution

The Trombone is truly feature-rich, combining high power density, programming flexibility, CANopen networking and numerous motion control features, resulting in a very effective solution for a wide variety of challenging applications.

There are two single DC bus options: 80 — 390 VDC and 200 — 750 VDC, with a built-in smart supply for controlling the back-up capabilities. The Trombone can also operate with a 24 VDC auxiliary power supply for the back-up features.

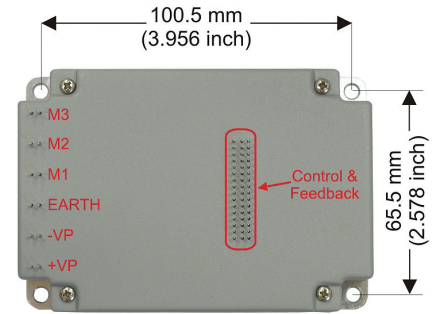
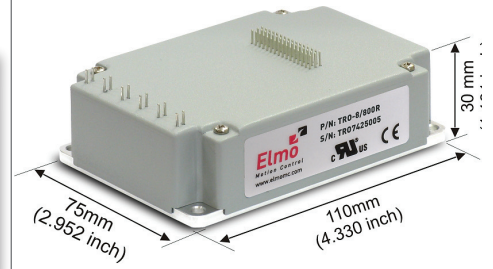
## Trombone Highlights

- Based on SimplIQ core motion control technology
- Ultra-compact, highest power density
- PCB-mounted
- Highly efficient
- Supports a wide variety of feedback sensors
- Vector control sinusoidal commutation
- Advanced filtering and velocity gain scheduling for enhanced dynamic performance

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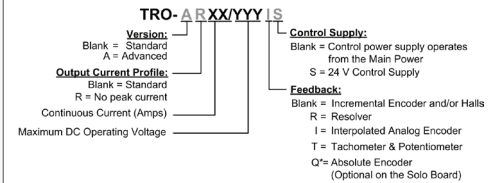
## Trombone's Environmental Conditions

Feature	Operating Conditions	Range
Ambient Temperature Range	Non-Operating Conditions	-20 °C to 85 °C (-4 °F to 185 °F)
	Operating Conditions	0 °C to 40 °C (32 °F to 104 °F)
Altitude	Non-Operating Conditions	Unlimited
	Operating Conditions	-400 m to 10,000 m (-1,000 ft to 30,000 ft) Higher altitudes available on request
Relative Humidity	Non-Operating Conditions	Up to 95% relative humidity non-condensing at 35 °C (95 °F)
	Operating Conditions	Up to 95% relative humidity non-condensing at 25 °C (77 °F), up to 90% relative humidity non-condensing at 42 °C (108 °F)



## Electrical Specifications

Feature	Units	12/400	R17/400	8/800	R11/800
Minimum supply voltage	VDC	80			200
Nominal supply voltage	VDC	330			640
Maximum supply voltage	VDC	400			750
Maximum cont. electrical output power from the drive	W	Up to 7 kW of continuous qualitative power			
Efficiency at rated conditions	%	> 98			
Auxiliary supply voltage (external option)	VDC	16.5 V - 32 V			
Auxiliary power supply (ext.)	VA	≤ 3 VA without external loading ≤ 7 VA with full external loading			
Continuous current limit (Ic) Amplitude of sinusoidal or DC trapezoidal commutation	A	12	17	8	11
Continuous RMS sinusoidal commutation (Ic)	A	2 x Ic	NA	2 x Ic	NA
Weight	g (oz)	315 g (11.1 oz)			
Dimensions	mm (in)	110 x 75 x 30 mm (4.33" x 2.95" x 1.18")			
Mounting method		PCB Mounted			
Digital In / Digital Out / Analog In		6/4/1			



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