

TECHNICAL DATASHEET #TDAX083500
DC/DC Step Up Converter
 12 or 24 Vdc / 120 Vdc, 30 W

P/N: AX083500, AX083501

Features:

- Powers devices at 120Vdc up to 0.25 Amps (30 W)
- Isolation
- 12V or 24Vdc nominal voltage input
- Reverse polarity protection
- Operational from -40 to 70°C
- IP20 protection
- DIN rail mount
- Connection options: Spring clamps or screw terminals



Ordering Part Numbers:

24Vdc/120Vdc, 30W Step Up Converter, Spring Clamp Connectors P/N: **AX083500**

24Vdc/120Vdc, 30W Step Up Converter, Screw Terminal Connectors P/N: **AX083501**

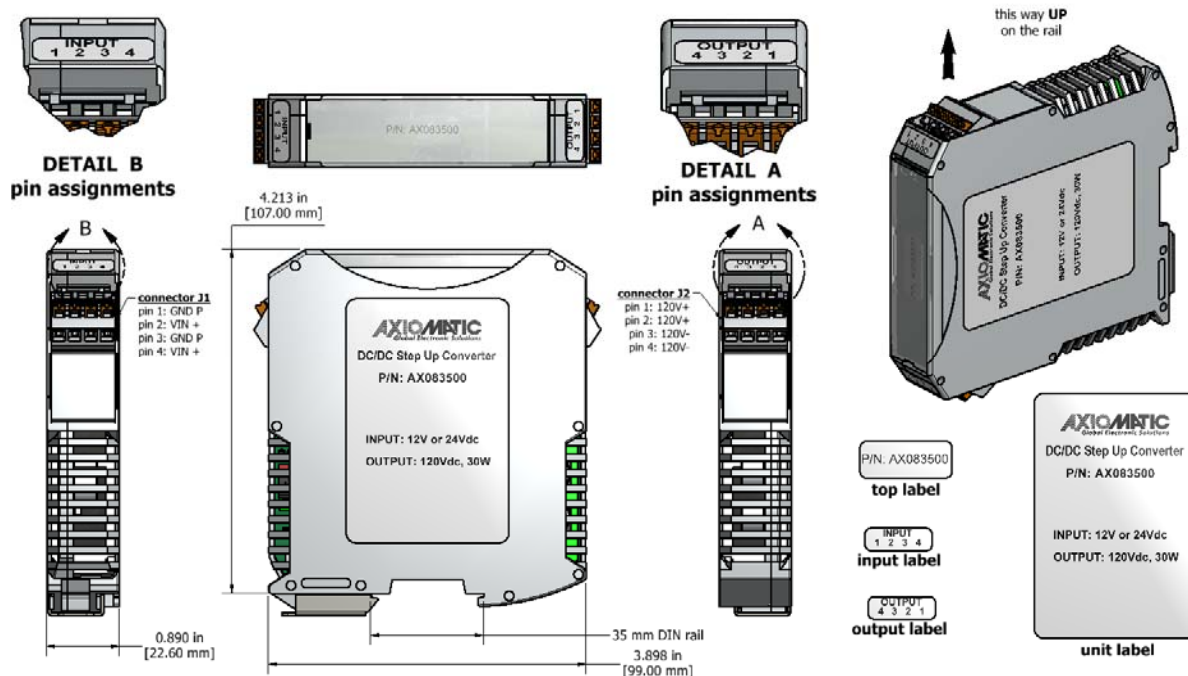


Figure 1.0 – Model AX083500 with spring clamp connectors

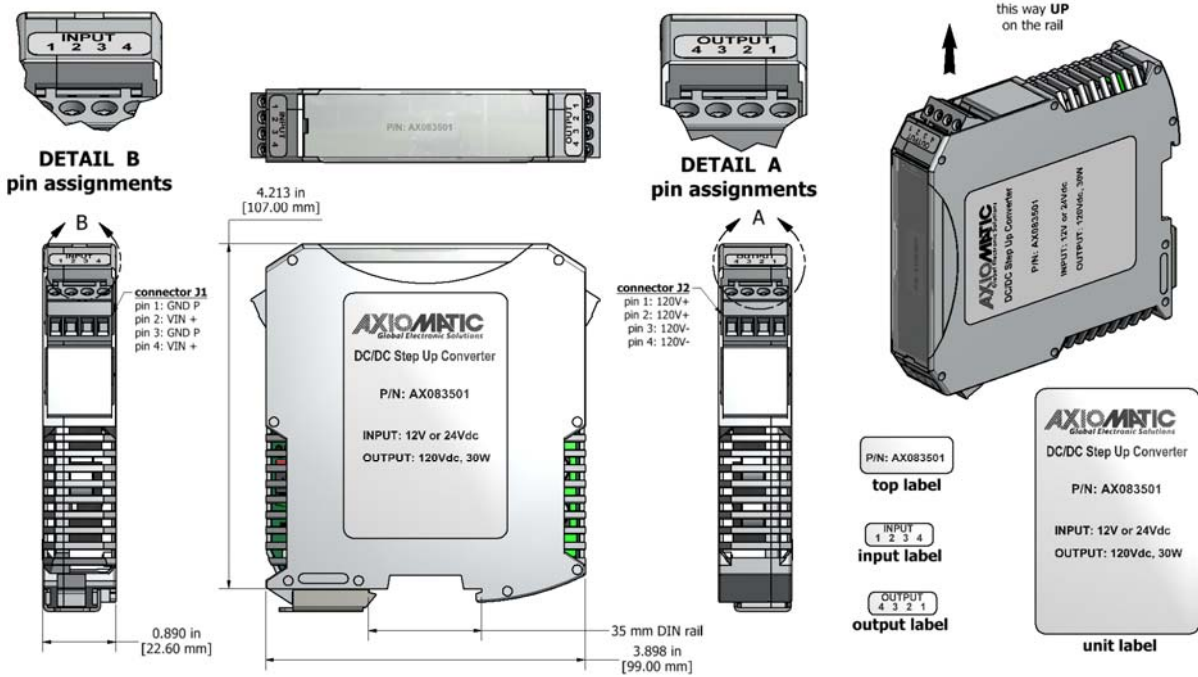


Figure 2.0 – Model AX083501 with screw terminals

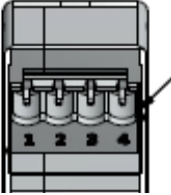
Technical Specifications: *Specifications are indicative and subject to change.*

Input Specifications		Output Specifications	
Power Source	12V or 24Vdc nominal	Nameplate Rating (Output Power)	30 Watts nominal
Operating Voltage Range	9-36 Vdc continuous	Output Current	0.25 Amps continuous Current limited to 0.3A typical
Reverse Voltage and Inrush Current Protection	Provided	Output Voltage	120Vdc \pm 2%
Over-voltage Shutdown	41 Vdc typical	Line Regulation	\pm 0.5% max.
Under-voltage Shutdown	8 Vdc typical	Output Voltage Ripple	1% maximum
		Turn-on Time (with full load)	0.5 sec @ 9-36Vdc
		Stability	Stable at all loads (no minimum load requirement)
		Over-voltage Shutdown and Latched	145 Vdc max.
		Short Circuit Current	Protection provided Hiccup Self-recovery

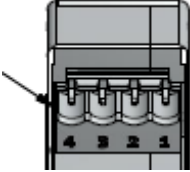
General Specifications	
Isolation	700Vdc Input to output is isolated.
Average Efficiency	91% Typical Refer to Figures 3 and 4.
Operating Temperature	-40 to 70°C (-40 to 158°F)
Storage Temperature	-40 to 85°C (-40 to 185°F)
Humidity	5-95% relative humidity (non-condensing)
Protection rating	IP20
Enclosure and Dimensions	Phoenix Contact: PHO ME MAX 22.5 2-2 KMGY – 2713625 (vented) Polyamide, UL94V0, cULus recognized, China RoHS DIN rail TH 35-7.5 99 x 114.5 x 22.5 x 99 mm (L x H x W x D) Refer to Figures 1 and 2.
Weight	0.35 lb. (0.158 kg)

Model AX083500 Electrical Connections:
4 Phoenix Contact PSPT 2,5/ 4-ST KMGY
spring clamp connectors
Accepts 24-14 AWG wire.

Input:
Vin+(Pin2&4), Vin-(Pin1&3)



Output:
+120V(Pin1&2), -120V(Pin3&4)



Model AX083501 Electrical Connections:
4 Phoenix Contact MSTBT 2,5 HC/ 4-STP GY7035
screw terminal connectors
Accepts 12-24 AWG wire.

The pin out shown above is the same for the screw
terminals.

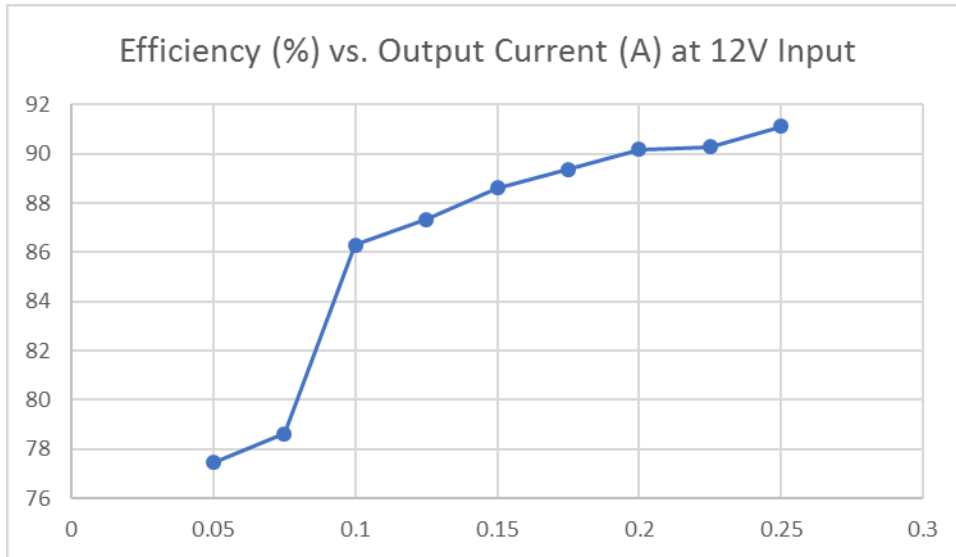


Figure 3.0 – Efficiency at 12Vdc Input

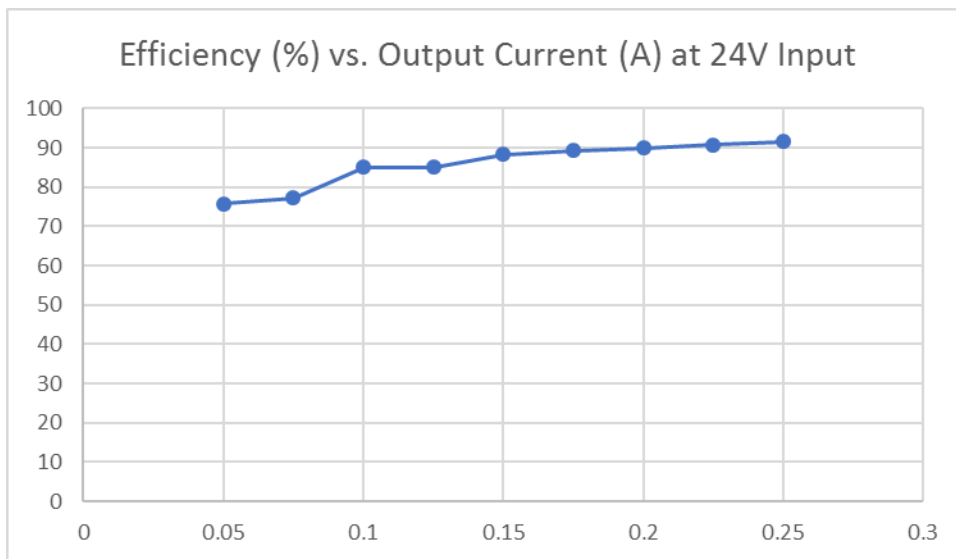


Figure 4.0 – Efficiency at 24Vdc Input

Form: TDAX083500-12/12/18