

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

**P/N: AX083500**

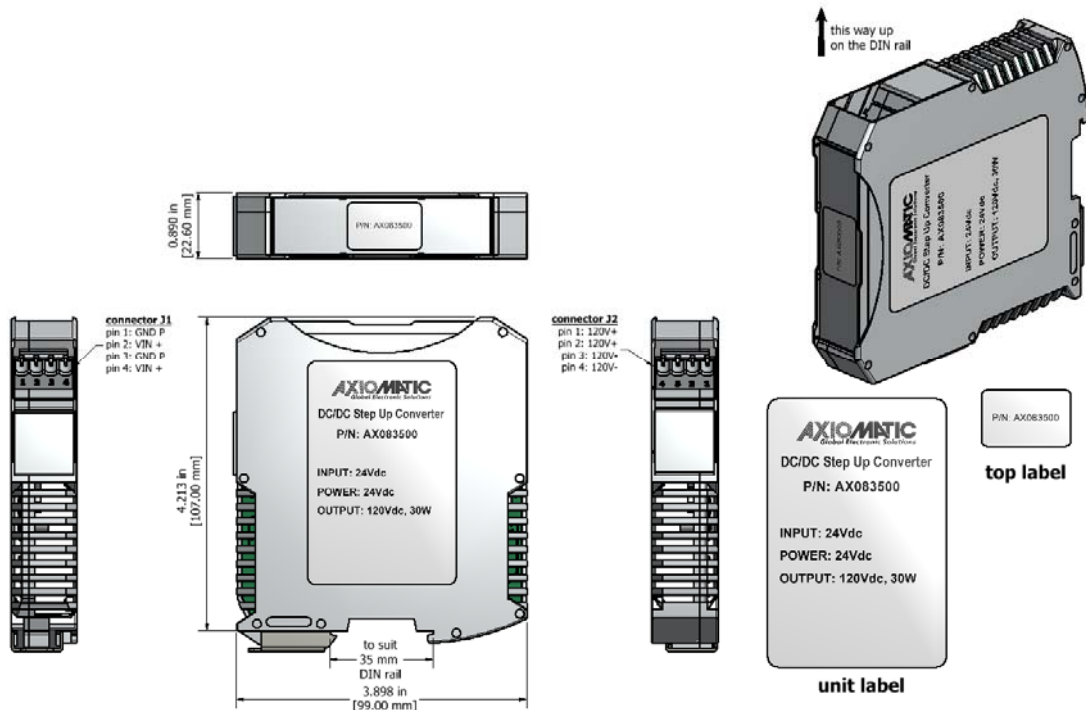
**Features:**

- 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



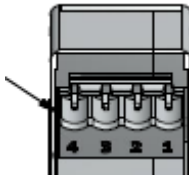
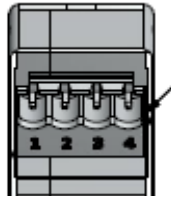
**Ordering Part Numbers:**

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



**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.	Electrical Connections: 4 Phoenix Contact PSPT 2,5/ 4-ST KMGY spring clamp connectors Accepts 24-14 AWG wire.  Input: PHO MSTBO 2.5/ 4-G1L Vin+(Pin2&4), Vin-(Pin1&2)	
Average Efficiency	91% Typical Refer to Figures 1 and 2.		
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)		
Weight	0.35 lb. (0.158 kg)	Output: PHO MSTBO 2.5/ 4-G1R +120V(Pin1&2), -120V(Pin3&4)	



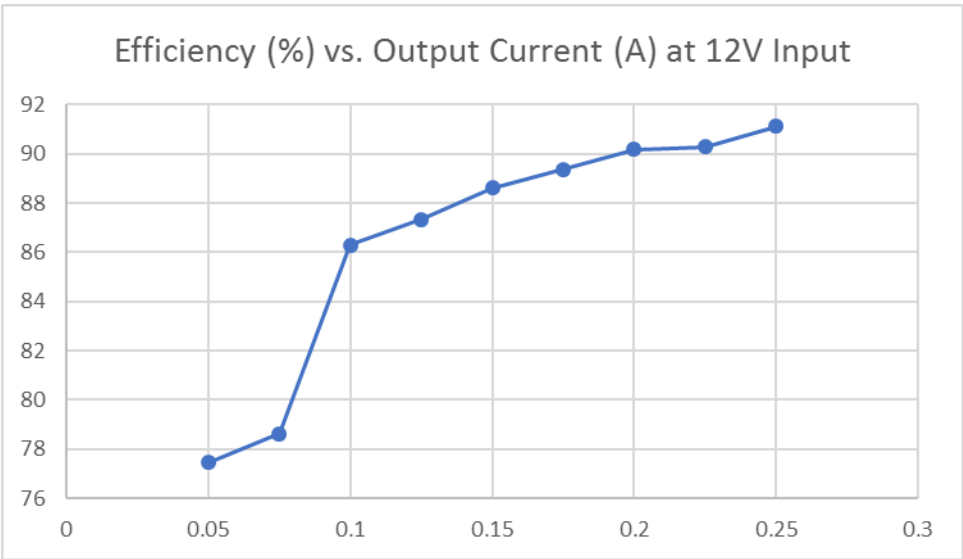


Figure 1.0 – Efficiency at 12Vdc Input

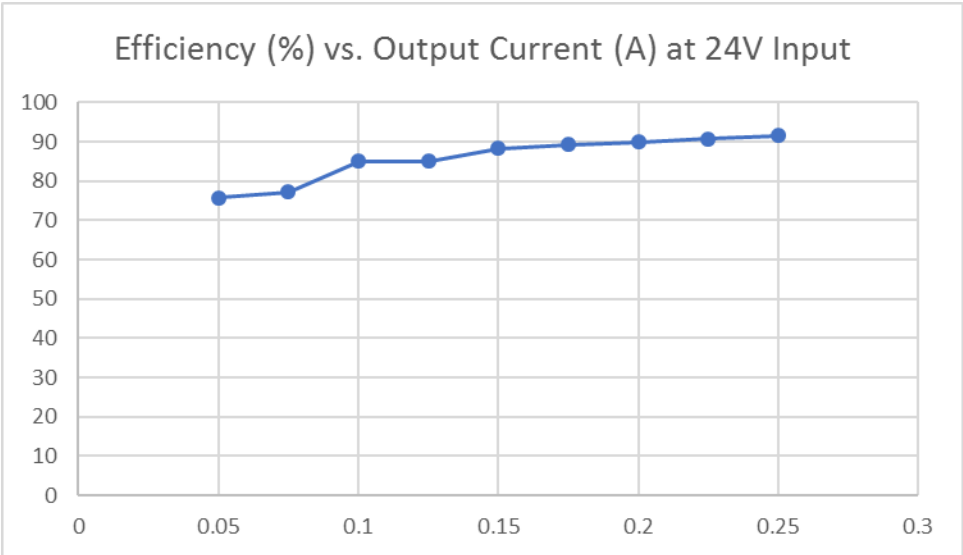


Figure 2.0 – Efficiency at 24Vdc Input

Form: TDAX083500-03/06/18