



**PWM to 0-200mA**  
**PWM to 0-20mA**  
**0-200mA to PWM**

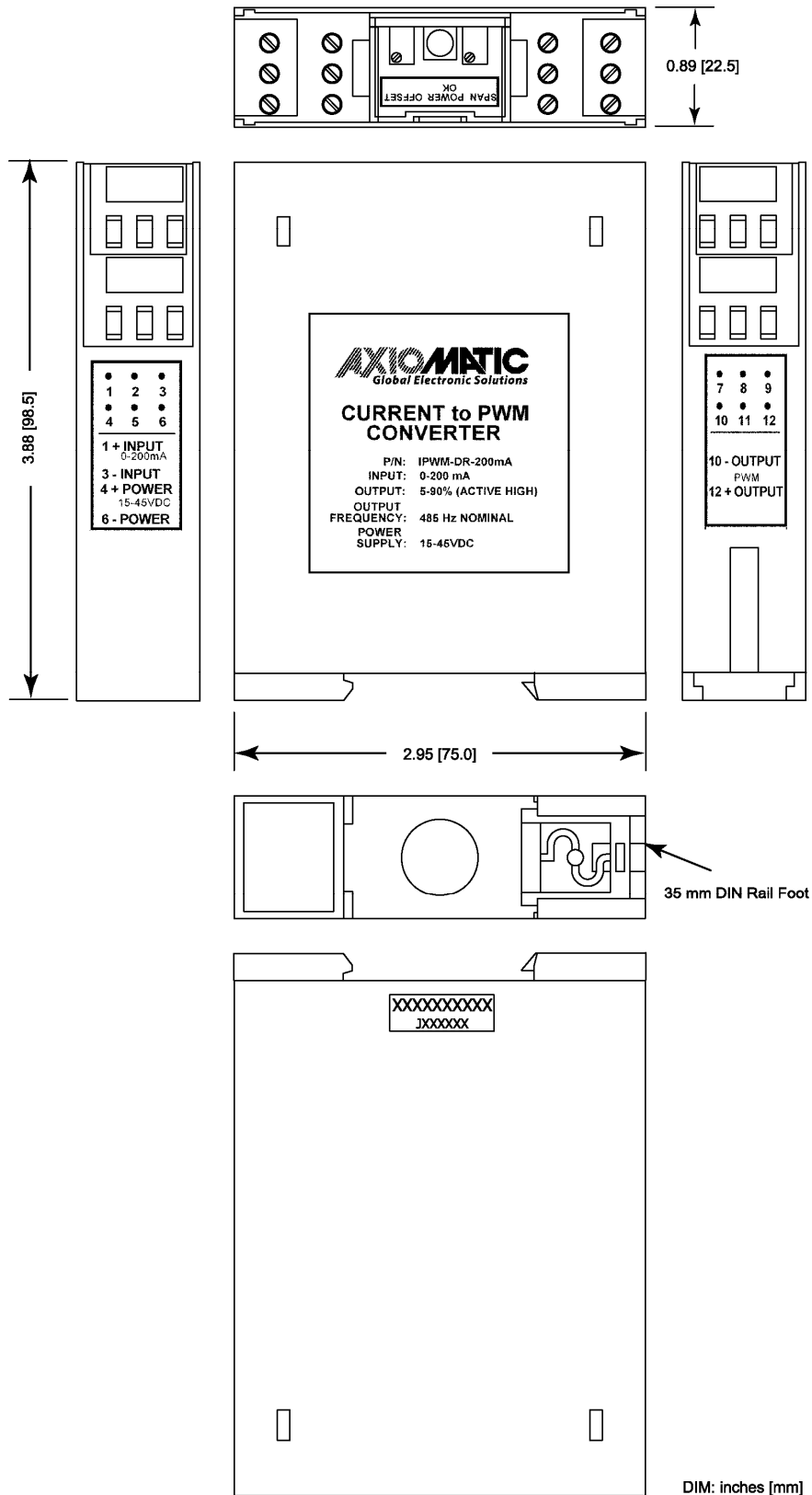
*Description:* PWM Converters provide a compact solution for converting digital pulse width modulated (PWM) signal into current or voltage or current into PWM.

# PWM Converters

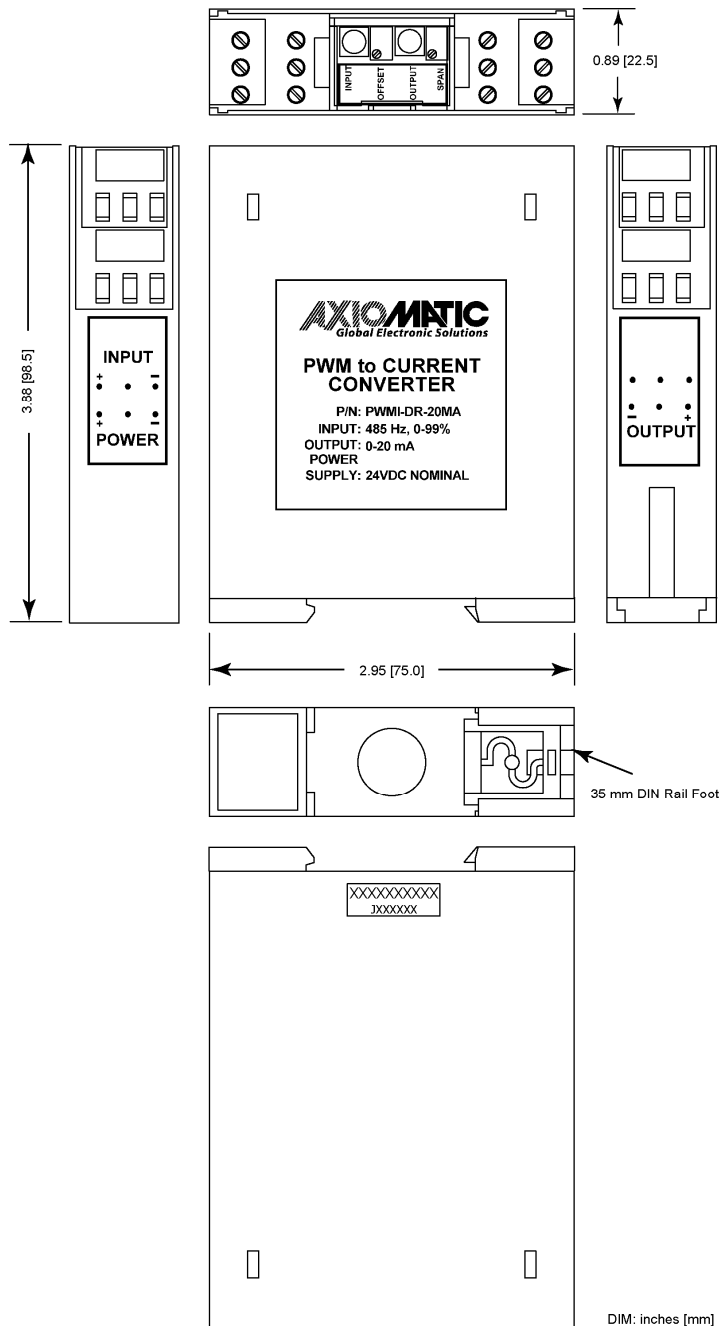
*Application:*  
 Industrial controls,  
 mobile equipment

**Technical Specifications:** All specifications typical at nominal input voltage and 25 degrees C unless otherwise specified.

	<b>PWM to 0-20mA</b>	<b>PWM to 0-200mA</b>	<b>0-200mA to PWM</b>
<b>Ordering Part Number:</b>	PWMI-DR-20mA	PWMI-DR-200mA	IPWM-DR-200mA
<b>Input Specifications:</b>			
<i>Current</i>	Not applicable		Fully isolated 0-200mA
<i>PWM</i>	Fully isolated PWM frequency 60 Hz to 2 kHz, PWM range 0-99%		Not applicable
<i>Input Voltage</i>	Low <1.5V High >3.5V (50V max.) TTL and CMOS compatible		Not applicable
<i>Input Impedance</i>	200kOhm		5 Ohms
<b>Output Specifications:</b>			
<i>Response Time</i>	<40 mSec.		<10 mSec.
<i>Current Output</i>	0-20 mA	0-200 mA	Not applicable
<i>Maximum Load Resistance</i>	500 Ohms (at 20 mA)	50 Ohms (at 200 mA)	Not applicable
<i>Compliance Voltage</i>	8VDC		Not applicable
<i>PWM Output</i>	Not applicable		PWM 485 Hz +/-10% 5-90% (Variable Active High) Open collector Over-current protection
<i>Output Voltage (Low)</i>	Not applicable		0.3V or less (at 1 mA) 0.7V or less (at 10 mA)
<i>Output Voltage (High)</i>	Not applicable		30V or less (at <10 mA)
<b>General Specifications:</b>			
<i>Power Supply</i>	24VDC (15-45VDC) with transient protection		
<i>Reverse Polarity Protection</i>	Provided		
<i>Power Consumption</i>	16 mA @24V		
<i>LED Indication</i>	Input and Output		Power OK
<i>Operating Conditions</i>	-40 to 85 degrees C (-40 to 185 degrees F), 0-95% relative humidity		
<i>Adjustments</i>	Offset (Zero) and Span Trim pots are 10 turn. CW = increasing (Offset) CCW = increasing (Span) Factory settings: 0 mA (Offset) 20 mA or 200 mA (Span)		Offset (Zero) and Span Trim pots are 10 turn. CW = increasing (Offset) CCW = increasing (Span) Factory settings: 0 mA (5% PWM) 200 mA (90% PWM) PWM output can be measured using a multi-meter (with a PWM measurement feature).
<i>Electrical connection</i>	#14-24 AWG screw terminals		
<i>Packaging</i>	DR12, DIN rail mount, 16 Amp max. current rating, Polycarbonate		
<i>Dimensions</i>	2.95 x 3.88 x 0.89 inches 75 x 98.5 x 22.5 mm (W x H x D)		
<i>Protection</i>	Encapsulated in IP40 rated housing, Terminals rated at IP20		
<i>Weight</i>	IPWM-DR-200MA: 0.45 lbs. (0.20 kg) PWMI-DR-20MA(200MA): 0.35 lbs. (0.16 kg)		



IPWM-DR-200MA  
 July 12, 2010 A. Wilkins  
 Axiomatic Technologies Corporation



NOTE: The PWM to 0-200 mA Converter has the same pin out as shown in the PWMI-DR-20MA model.

DIM: inches [mm]

PWMI-DR-200MA, PWMI-DR-20MA  
 Dec. 2, 2011 A. Wilkins  
 Axiomatic Technologies Corporation

Specifications are indicative and subject to change. Actual performance will vary depending on the application and operating conditions. Users should satisfy themselves that the product is suitable for use in the intended application. All our products carry a limited warranty against defects in material and workmanship. Please refer to our Warranty, Application Approvals/Limitations and Return Materials Process as described on [www.axiomatic.com/service.html](http://www.axiomatic.com/service.html).

Form: TD2000AX-12/02/11