

## 1 Introduction

The CR-Magnetics CR5220 DC CTs provided by eGauge Systems can be used to monitor DC amperages. The CR5220 DC CT must be properly installed for safe and effective use.

The CR5220 DC CT will read up to 100% of the current rating when properly oriented, and will read up to 20% of current rating when reversed.

The CR5220 DC CT provided by eGauge systems comes with special 8" twisted-pair leads for connection between the DC CT and eGauge CT inputs. A 23.2 ohm 1% resistor is attached between the black and white wires to convert the 4–20mA output to a suitable voltage-based output the eGauge will accept. Improper installation and/or not using the provided CT leads can be unsafe and will void the eGauge warranty.

## 2 Wiring

Using the provided black and white twisted pair leads for connection to eGauge CT input:

Pin 9 Idc1	→ Black on eGauge
Pin 6 GND	→ White on eGauge
	→ GND on Power Supply
Pin 5 VCC	→ Nothing on eGauge
	→ VCC on Power Supply

Heat-shrunked resistor on CT plug, bridging between White and Black wires

The X side of the DC CT is the in (“source”), and the O side is the out (“load”). The current should flow in the X side, and out the O side. Reversing this will read up to 20% of DC CT current rating.

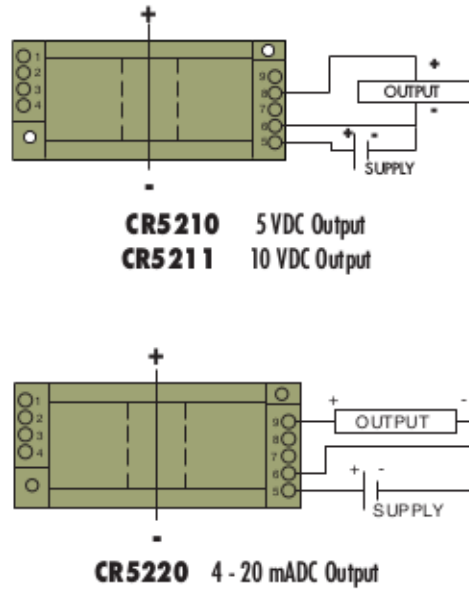
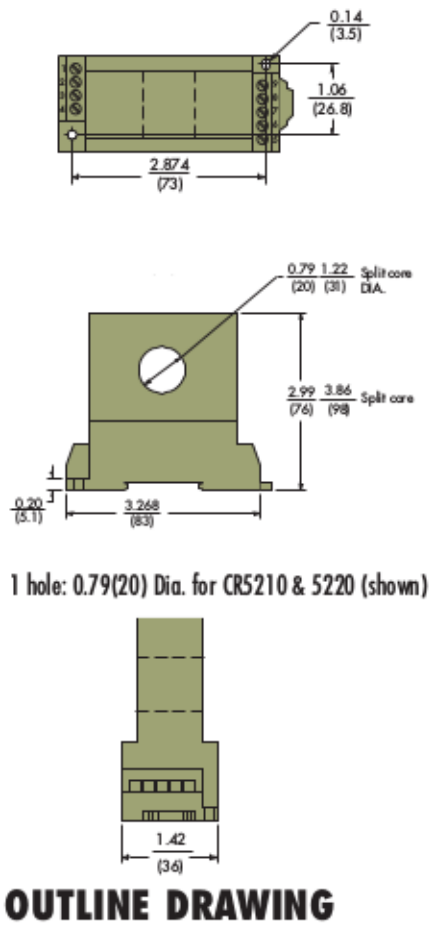


Figure 1: CR5200 series diagram



Figure 2: Completed CR5220 wiring