



EU2B5303 Current to Voltage Sensor



UL UNDERWRITERS LABORATORY RECOGNIZED FOR INDOOR APPLICATION

EU2B5303 Benefits

- Programmable voltage outputs (e.g., 0–5V or 0–10V) provide easy computer I/O interface.
- Many applications can be designed to be self powered to minimize components and wiring.

Typical Applications

- Current Display
- Loss of Current Alarm
- Overcurrent Trip-out
- Electrical Device Failure Alarm
- Equipment Operation Time Totalizer
- Phase Imbalance Indicator
- Peak Power Demand Indicator
- Phase Sequence Indicator

The BICRON Advantage:

- Over 30 years of toroidal engineering and manufacturing experience
- State-of-the-art winding, testing and assembly methods
- Cellular manufacturing and ISO 9001 compliant Quality System Standards

"Excellence Through Teamwork"



BICRON Electronics Company

50 Barlow Street Canaan, CT 06018
Tel: 860 824-5125 Fax: 860 824-1137
email: info@bcn.com
www.bcn.com



ACTUAL SIZE

Shown with optional mounting clamp, part number 8N0418

Current Sensing for Control and Measurement

The Bicron EU2B5303 Current to Voltage Sensor is a special toroidally wound transformer which converts a current measurement to an instrument or control voltage useful in any AC current monitoring or control application. A user supplied "burden" resistor determines the actual output voltage range which can be adjusted to a maximum of 0–10Vac for any current input up to 200A.

Specifications:

- Catalog Number EU2B5303
- Current Range (I_p) to 200A
- Frequency Range 50-400Hz
- Overload Capacity to 300A
- Programmable Voltage Output (V_s) to 10V_{RMS}
- Programmable Burden (load) Resistor (R_s) User supplied
- Performance Per Equation: $V_s = 2 \cdot I_p \cdot R_s \cdot 10^{-4}$
- Dimensions
 - OD 2.0" (51mm)
 - ID 0.7" (18mm)
 - H 0.8" (20mm)
- Leads #24AWG, 12" (305mm)
- Dielectric Strength 1500V_{RMS}
- Temperature Rating Class A
- Environmental Protection BicroFlex Epoxy
- Safety Standard **UL**

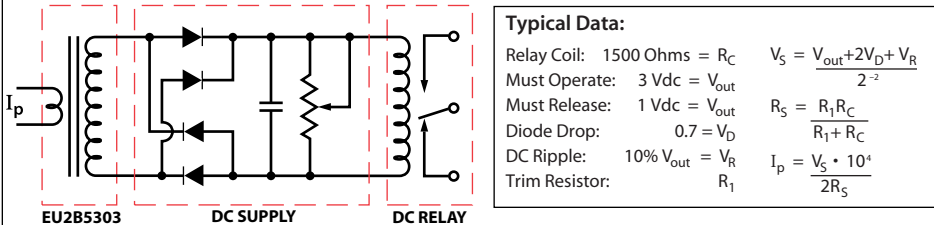


EU2B5303 Current to Voltage Sensor

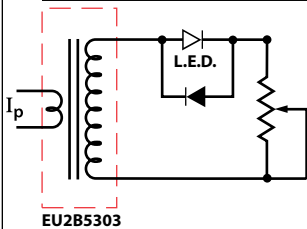


Typical Circuit Concepts and Applications

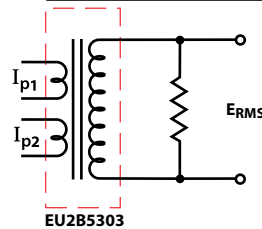
CURRENT MONITOR – CONTACT OUTPUT (SELF POWERED)



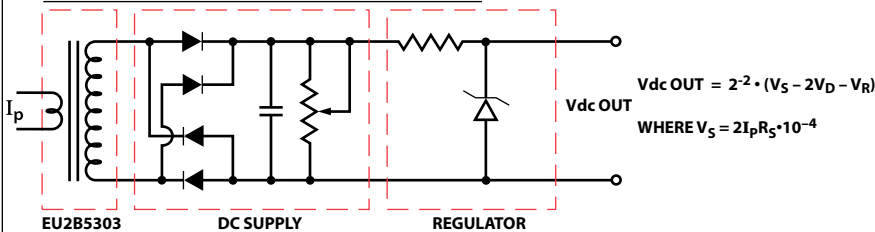
LOSS OF CURRENT INDICATOR



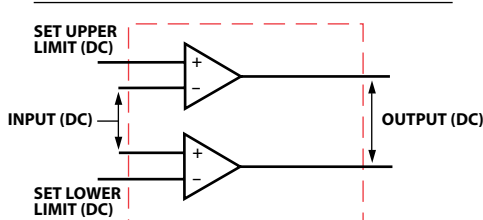
VECTOR SUM OF n CURRENTS



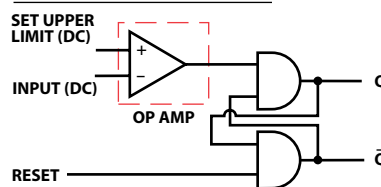
SIGNAL CONDITIONER, 0 – 10Vdc OUTPUT



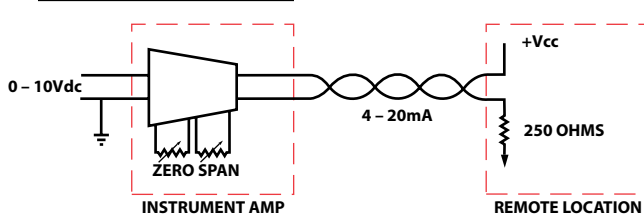
OPERATING RANGE INDICATOR (HI – LO)



OVERCURRENT TRIP-OUT



4 – 20mA TRANSMITTER



Bicron designs and manufactures a complete range of standard and custom current transformers (CT's) for instrumentation, control, monitoring and ground sensing. CT's are available in many standard configurations and sizes. Window sizes range up to 350 sq. inches and current ratings range up to 10,000A. Some models are available with a split core or removable leg configuration to allow easy retrofit installation.

All Bicron CT's are designed to meet or exceed UL requirements and most are UL Recognized or Listed. Most can be supplied to meet the requirements of other international safety standards such as IEC, VDE, CSA, TUV, etc.

We supply variations of our standard products under the Bicron "Modified Standard" program. This program enables us to supply a product specially designed to suit your application at virtually standard product pricing.

Specifications and performance data subject to change without notice. Consult factory for critical dimensions or technical assistance.

"Excellence Through Teamwork"



BICRON Electronics Company

50 Barlow Street Canaan, CT 06018
Tel: 860 824-5125 Fax: 860 824-1137
email: info@bcn.com
www.bcn.com