

**Outputs: 0-5 VDC or 0-10 VDC**

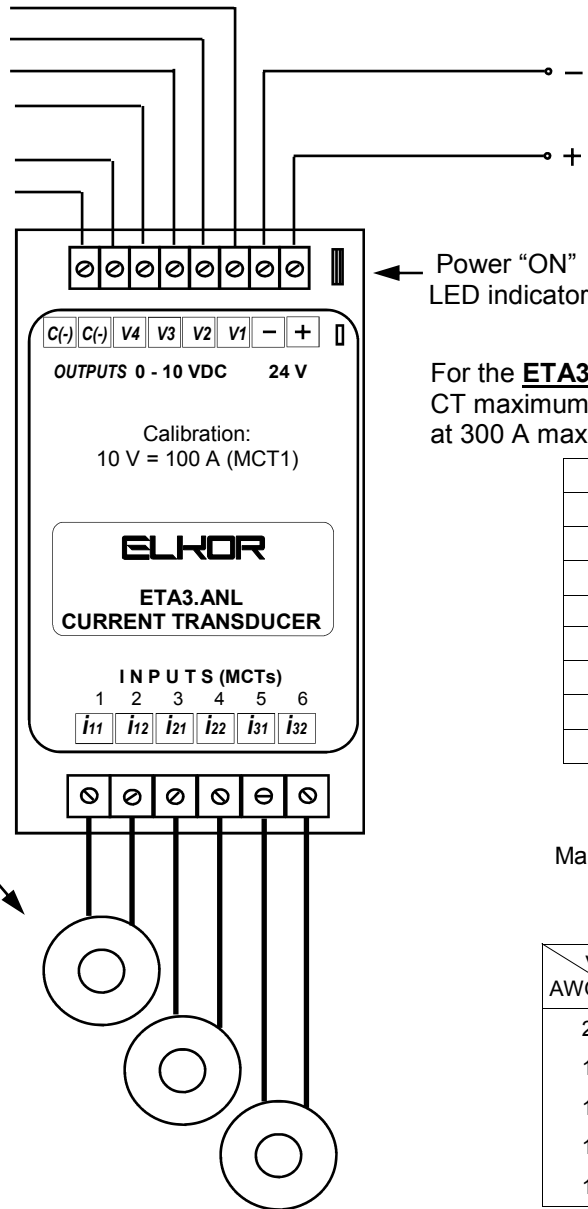
**V1 (+)** Current /Voltage 1 (Input 1)

**V2 (+)** Current /Voltage 2 (Input 2)

**V3 (+)** Current /Voltage 3 (Input 3)

**V4 (+)** Averaged Current /Voltage

**C(-)** Commons for all outputs



- Power Supply 24 VAC or 24 VDC;  $V_{min}=18\text{ V}$ ,  $V_{max}=28\text{ V}$ ;  $I_{max} < 30\text{ mA}$ . For AC supply a small VA dedicated 24VAC transformer is recommended. Observe polarity if DC is used and/or one transformer powers a number of ETA3 devices.
- NOTE: Negative power supply terminal and output signals 'common' (-) are electrically tied together.

The **ETV3.ANL** voltage transducer must to be wired to line voltages via Elkor VT600 transformers.

Any full scale calibration, up to 600 Vrms, is possible.

Standard ranges are:  
150 V, 250 V, 300 V, 500 V and 600V

**Interfacing Transformers**

- Do not wire the load directly to the unit. Always use interfacing CTs/VTs. Dedicated 5 A CTs or Elkor MCT/MSCT/VT600 miniature transformers are recommended.
- Shorting blocks are recommended for all 5A CTs. Fuses/circuit breakers are required for the VTs.
- CTs/VTs polarity is not critical
- For best accuracy the maximum wire distance from 5A CTs to the unit should be as indicated in the table.

For the **ETA3.ANL** any full scale calibration may be ordered, not to exceed the CT maximum primary current rating (i.e. 5VDC = 100 A for MCTA CTs, rated at 300 A max.)

Elkor Miniature CTs are rated as follows:			
Solid Core		Split Core	
Part	I <sub>max</sub>	Part	I <sub>max</sub>
MCTZ-3	25A	MS100	100A
MCTX	100A	MSCT1	200A
MCT1s	125A	MSCT2	600A
MCTA	300A	MSCT3	1500A
MCTB	450A	MSCT6	3000A
MCT2	400A	MS360	600A

Maximum distance between 5A CTs and the ETA3 (in meters/feet) for different wire size and CT burden (VA) rating (Note: ETA3 burden = 0.75 VA)

VA AWG	2.0	7.5	10.0	15.0	25.0	35.0
20	0.7/2.3	3.9/13	5.4/18	8.4/27	14/47	20/66
18	1.1/3.8	6.3/20	8.6/28	13/43	22/74	32/105
16	1.9/6.2	10/33	14/46	21/71	36/121	52/171
14	3/10	16/53	22/72	33/110	57/188	81/266
12	4.7/15.5	25/83	35/114	44/145	91/300	130/423

**! DO NOT GROUND CTs or VTs !**

**ETA3/ETV3.ANL - WIRING**