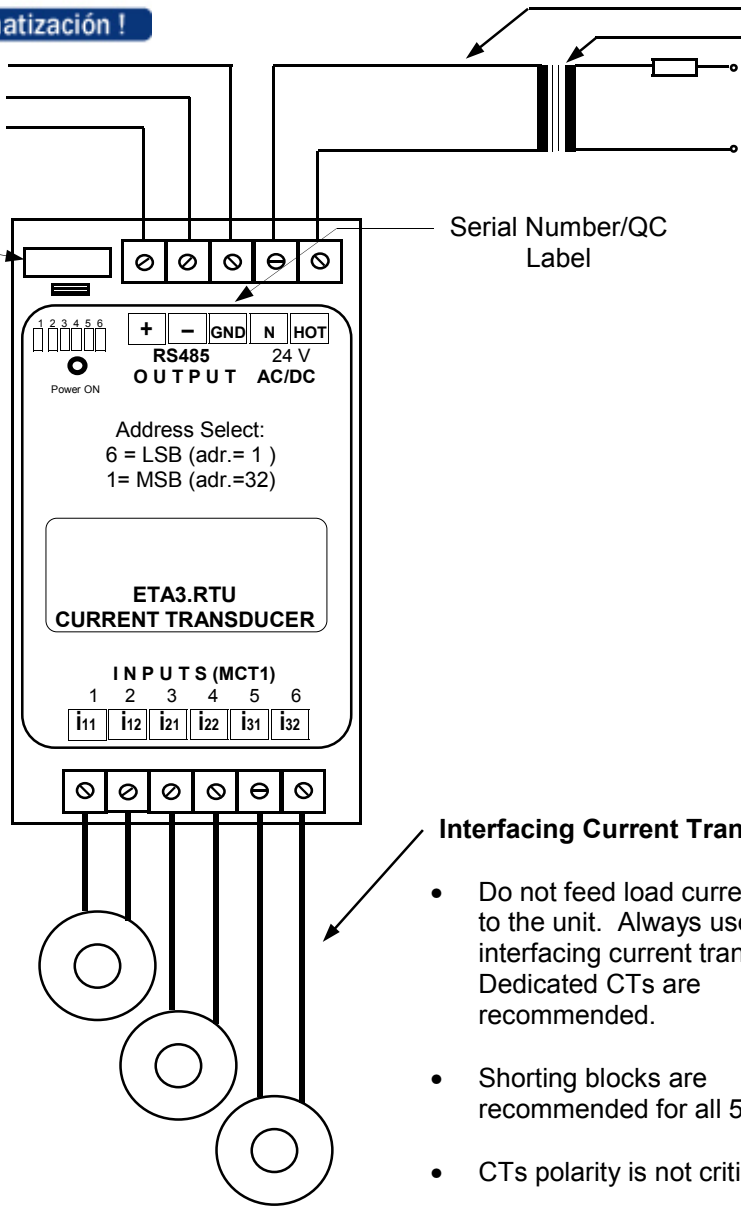


RS-485  
Communication  
(Modbus)

Address Select  
Header



**Interfacing Current Transformers**

- Do not feed load current directly to the unit. Always use interfacing current transformers. Dedicated CTs are recommended.
- Shorting blocks are recommended for all 5A CTs.
- CTs polarity is not critical
- For best accuracy the maximum wire distance from the CT to the units should be as per the table.

**! DO NOT GROUND CTs !**

Observe polarity if 24 VDC is used.  
Dedicated Class 2 xxx/18 to 24 VAC transformer (3 VA min.) is recommended for AC supply.

- Any small transformer is capable of powering the unit. Primary fuse (or fuses) as per local electrical code requirements.
- **DO NOT ground** secondary of the transformer. The RTU ground establishes system grounding. **All components of the system should be grounded at one point only.**

Specifications:

- Excitation:* 18 VAC to 24 VAC or DC (max. 3 VA required)
- CT Interface:* sensing resistor (0.03 R for 5 A CT), >500R for Elkor CTs
- I/O Isolation:* established by CTs (typically at 600 VAC insulation level)
- Input current frequency:* 45 to 65 Hz
- Accuracy:* 0.5 % FS, TRMS calculations
- Mounting:* DIN ready enclosure (95 x 50 x 60 mm) to be used inside an electrical panel
- Environment:* standard issue 0 C to +70 C, indoor, non-condensing; industrial temp. version available for outdoor installations (in weather proof enclosure)

**Maximum distance between 5 A CTs and the ETA3 (in meters/feet). (transducer's 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

**Maximum distance between MCT/MSCTs and the ETA3 transducer depends on full load calibration and the MCT/MSCT size. In general, for AWG#18 wires it is about 100 ft (30 m). Consult Elkor for other wire sizes and extra long feeders.**

**ETA3.RTU - WIRING**