ELKOR ETA3.RTU CURRENT TRANSDUCER
COMMUNICATION PROTOCOL

PROTOCOL: MODBUS RTU

- Baud Rate: 9600
- Parity: None
- Data: 8 bits
- Stop Bits: 1

Frame Synchronization: more than 3.5 Character Time (for 9600 Baud longer than 3.5 msec).

Query Format (8 bytes):

Device Address (1 byte)	Function (1 byte)	Starting Register (2 bytes)	# of Registers Required (2 bytes)	CRC (2 bytes)

- *Note: Only Function number 03 is used.*

Answer Format:

Device Address (1 byte)	Function (1 byte)	Byte Count (see note)	Integer Data (2 bytes per Register)			CRC (2 bytes)

- *Note: Byte Count Data = number of bytes received (2 times longer than total number of registers requested).*

Elkor's ETAMP3.RTU has available the following registers:

Register Offset	***Name***	***Comments***
0x0000	Version	Type of Elkor Transducer (100 for ETAMP3)
0x0001	Ia	RMS Current in Phase A.
0x0002	Ib	RMS Current in Phase B.
0x0003	Ic	RMS Current in Phase C.
0x0004	Iabc	Averaged RMS Current {Ia + Ib + Ic} / 3

Currents are calibrated to full scale represented by 1000. Thus if full scale current is calibrated to 50A, a reading of 800 represents (800/1000 * 50A) = 40A.

Check the product calibration on the front cover.