



ELECTROCORDER

Model: EC-3A

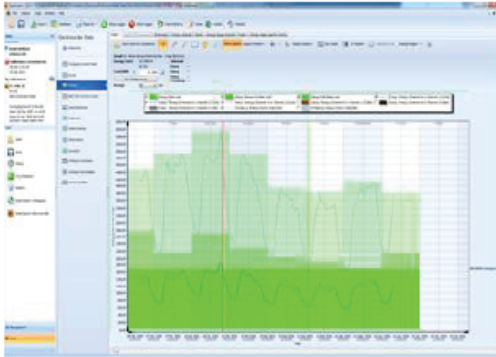
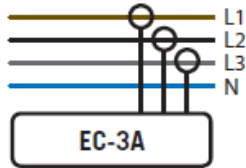
Single & Three Phase Current / Load Logger







NEMA 12/4



Three phase; 300A, 1kA, 2kA or 3kAac

Constant Sampling technique, misses very little data

Complete with Electrosoft energy analysis software

Available as IP65/NEMA 12/4



- Enables current and load problems to be highlighted for further investigation
- Allows users to record load currents up to 3kAac, range is model dependent.
- Three current input channels (A1, A2, & A3).
- Records Max, Min and Avg current on all 3 channels.
- Data stored in non-volatile memory.
- Recorded data is uploaded to a PC for analysis with Electrosoft.
- Free software, Electrosoft.
- Kit includes Logger, Carry Case, Electrosoft software, three 'current transducers', USB lead & 12Vdc PSU.
- Memory capacity of 32,000 true RMS voltage values per phase (10 bit), up to 300 days continuous recording.
- Selectable averaging period to suit each situation, accurate to $\pm 1\%$ of range.
- Four models available:-
 - EC-3A-TK (5 – 300A range)
 - EC-3A-1K (10 – 1kA range)
 - EC-3A-2K (15 – 2kA range)
 - EC-3A-3K (20 – 3kA range)
- Order code:-
 - EC-3A-*K-50-KIT (50Hz)
 - EC-3A-*K-60-KIT (60Hz)



ELECTROCORDER

Model: EC-3A

The ElectroCorder range is designed to allow electrical distribution companies to cost effectively monitor single and three loads. This product will allow single and 3 phase loading and balancing problems to be highlighted.

Setting up the ElectroCorder EC-3A is easy, suitable for semi-technical staff. Using the supplied (free) Windows software, Electrosoft; the location's details are input to the unit's memory and stored. Electrosoft will then print documentation allowing users to record and/or pass on delivery instructions to colleagues. All data is also stored in a database of dispatches and returns, which tracks the whereabouts of all units.

Why is the ElectroCorder better than other similarly priced competitors?
The ElectroCorder range use a constant sampling technique, unlike the single reading of competitors. When the loggers start to record, they sample every channel 16 times per cycle, a cycle is 16ms at 60Hz and 20ms at 50Hz. At the end of each averaging period, 3 quantities are saved for each channel, the True RMS average, the Max, which is the highest cycle value during the period and the Min, lowest cycle value. This means that it will record all the peaks and troughs which are one cycle or longer.

When recording the ElectroCorder will store the average voltages over the period chosen (1 sec to 60 min), it will also record the highest (max) & lowest (min) cycle values during that period.

The current levels are stored with dates and times. With the back-up battery, the ElectroCorder can continue to record for 3 months. A 12Vdc PSU input is available, to allow for prolonged logging without battery power.

The stored data is uploaded to a PC via the supplied USB cable. Using Electrosoft, the recorded current levels, dates & times can be viewed in both tabular and graphical form, exported to a spreadsheet or saved to file.

Graphs can be printed showing the recorded levels and the allowable tolerance bands. These results may then be discussed with the customer. Electrosoft also provides an internal database which effectively manages the distribution of multiple units.

This model is specifically designed to monitor one, two or three current channels. Allowing you to monitor the loading and energy consumption of the installation. There are many models of ElectroCorder, to suit many logging situations and user's requirements.

The product is supplied with three Rogowski transducers. Three models are available, each with 3 Rogowski transducers. The EC-3A-TK has a range of 5 to 300A, the EC-3A-1K has a range of 10 – 1,000 A, the EC-3A-2K has a range up to 2,000A and the EC-3A-3K measures from 0 to 3,000A. Other ranges may be factory set, normally up to around 10kA per phase.

TECHNICAL SPECIFICATIONS (subject to change without notice)

Recorded values	I_{avg} , I_{max} & I_{min} on all 3 channels
Current Input socket types (all channels)	Hard-wired through cable glands
I_{max} & I_{min} time resolution	Always one cycle (50/60 Hz), independent of selected averaging period
Supplied current sensor accuracy	+/-2% of range
Current measurement range (I rms)	EC-3A-TK is 5 – 300A, -1K is 10 – 1kA, -2K is 15 – 2kA, -3K 20 – 3kA
Current measurement accuracy	1~2% of range, typically
Sampling frequency (all channels)	16 samples per cycle 800Hz @ 50Hz or 960Hz @ 60Hz
Data recorded	Average, max & min current values during the averaging period
Memory capacity	192kB able to record 32,000 current levels per channel/phase
Memory type	Non-volatile EEPROM
Memory - averaging period & duration	1 sec to 60 mins (1sec gives 2 hrs logging, 60 min gives 300 days logging)
Real-time clock accuracy	Greater than 0.001%
Current Sensor Input Lead Length	Metric 2 metres; Imperial/English 6' 6" (6 feet, 6 inches)
Battery life while logging	Unlimited – 12Vdc PSU option & battery backup or 3 months while unpowered
Battery Type	Unit contains fourteen 9V Alkaline batteries (E-Block, PP3, 1604A). External PSU
Communications Interface type	USB, baud of 19,200, optically isolated to 5,2kV
Environmental (temp & sealing)	-10C to +40C or +14°F to +104°F – IP65, NEMA 12/4
Dimensions & Weight	Metric 260 x 180 x 190mm & 2kg Imperial/English - 10" x 7" x 8" & 4lb
Standards	Recording - EN50160: 1994 - CAT II

WARRANTY & CALIBRATION - All Acksen Ltd products carry a minimum of a one year's warranty covering manufacturing defects and component failures. Each unit is individually calibrated during testing.

CONFORMITY - Emissions EN55022:1994B, (EN50081-1:1992). Immunity EN50082-2:1995, following the provisions of EMC directive 89/336/EEC. Recording std EN50160:1994. LVD 72/23/EEC with respect to EN60065. (IEC-61010). All models certified (light industrial, 3V/m).

ORDERING - KIT includes case, software, USB lead, current transducers, batteries, PSU & user guide.

	Description	ENVIRONMENTAL SEALING	ORDER CODE
1	KIT incs. items 2-6 EC-3A-*K-** (50 or 60 for 50/60Hz)	IP65 / NEMA 12/4	EC-3A-*K-**-KIT
2	Replacement – Logger (includes. 3 x item 5) (50 or 60 for 50Hz or 60Hz)	IP65 / NEMA 12/4	EC-3A-*K-**-LOG
3	Replacement - Carry Case	N/a	EC-3A-xK-CC1
4	Replacement - USB Lead	IP43	EC-USBL-01
5	Replacement Rogowski Current Transducer	IP65 / NEMA 12/4	EC-ROG-001
6	Replacement – Batteries (14 per unit)	Internal to logger	EC-3A-xK-BAT
7	Plug-in mains 12Vdc PSU	None	EC-3A-xK-12VPSU



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



UK Office

Keison Products,

P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.

Tel: +44 (0)330 088 0560

Fax: +44 (0)1245 808399

Email: sales@keison.co.uk

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.