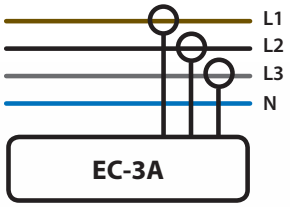
accsense
Simple and Reliable

Electrocorder

Model:
EC-3A



3Ø | 3A | 1000V CAT III | Rog | IP65

Three phase current; 400A or 3kAac

Complete with Electrosoft energy analysis software

Sealed to IP65/NEMA

Enables 3 phase loading and/or balancing problems to be highlighted quickly as well as assessment of energy usage over time.

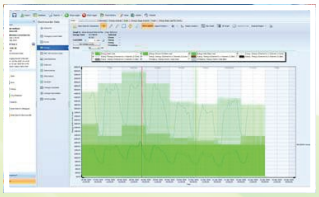
Data stored in non-volatile memory.

Memory capacity of 32,000 (True RMS) values per channel (10bit), up to 300 days continuous recording.

Selectable averaging period from 1 second to 60 minute.

Accurate to ±2% of range, typically.

Kit includes data logger, Rogoswski Coils, USB lead, Electrosoft software and a carry case.



The advantage of Electrocorder products over most others is that our Data Loggers constantly sample information (recording the Minimum, Maximum and Average reading) over the set period. Many other products only take 'snap shots' of what is going on and can miss 99.9% of the data that is critical to your analysis.

The EC-3A is specifically designed to accurately monitor one, two or three current channels allowing you to monitor the loading and/or balancing problems and energy consumption of an installation.

Setting up the Electrocorder EC-3A is easy, suitable for non-technical staff. Using the supplied (free) Windows software, Electrosoft, input the location details for the logging and choose the logging period. Electrosoft will print the necessary dispatch/return documentation including user instructions. All data is included in a database of dispatches and returns, allowing you to track location of multiple loggers.

Why is the Electrocorder better than other similarly priced competitors? The Electrocorder range uses 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. 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, the lowest cycle value. This means that it will record all the peaks and troughs which are one cycle/or longer.

The current levels are stored with dates and times. With the backup battery, the Electrocorder can continue to record for up to 3 months.

The recorded data is uploaded to a PC via the supplied USB cable. Using Electrosoft, the recorded current levels with dates and 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.

On the logger, recording is signified by a flashing green light. A red light advises users that the unit has completed recording. The current levels are stored with dates and times.

Other models are available, contact us for more information.

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 (60 Hz), independent of selected averaging period
Current Measurement Range (Irms)	EC-3A-60 is 400A and 3kA
Current Measurement Accuracy	±2% of range, typically
Sampling Frequency (All Channels)	16 samples per cycle 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 SEEPROM
Memory - Averaging Period & Duration	1 sec to 60 mins (1 sec gives 2 hrs logging, 60 min gives 300 days logging)
Real-Time Clock Accuracy	Greater than 0.001%
Current Sensor Dimensions	Lead Length 6'6" Sensor Length 18" Sensor Diameter 6"
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/Protection)	-10C to +40C or +14°F to +104°F, Sealed to IP65
Dimensions & Weight	10" x 7" x 8" & 4lb
Standards	Recording - EN50160: 1994 - 1000V CAT III, 600V CAT IV

Warranty & Calibration
All Accsense Electrocorder products carry a *Lifetime back to base warranty covering manufacturing defects and component failures. Each unit is individually calibrated during testing.
*Refer to website for full terms and conditions.

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).

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