



AC Power Converter E174

The AC Power Converter E174 is intended to convert ~220V/50Hz mains supply to 140V DC voltage of up to 1.4kW output power, which is needed for the 1000W lighthouse control system E602. It delivers a regulated output $(100...150V) \pm 3\%$ and provides high efficiency of conversion over wide range of load currents and environment temperatures

Features

- Normally, when the power of ~220V mains is sufficient, the DC power to the Power Flasher E175 and to the 1000W lamp will be delivered by E174
- If the energy from the mains is interrupted or insufficient, then the Power Flasher E175 and 1000W lamp will be supplied by the buffer battery
- When the ~220V mains returns, then the E174 charges the buffer battery and supplies the energy also to the Power Flasher E175 and the lamp
- Optimal control of battery charging when ~220V mains supply returns
- Monitoring by the embedded microprocessor unit of all input/output voltages, temperatures and setting the level of output voltage
- Sending status information to the E602 over the local area network (Echelon LON)
- Protection of the output against shorting and overloading



Specification

Input AC voltage	187V min. 220V nom. 242V max
Effective input current	20A rms
Average input current	10A
Input power	1600W
Output voltage	max145V DC
Output power	1400W (continuous), 1800W (short-term)

Load current	10A (continuous), 14A (short-term)
Inputs	~220V, secondary supply voltage 14V, temperature transducer, battery voltage and current measurement inputs
Outputs	converter's output 140V, 4 service socket outputs
Local area network	Echelon LON
Temperature range	-40°C to +55°C (IEC 68-2-1,2,14)
Relative humidity	max 98% at +35°C (IEC 68-2-3)
Dimensions	124x210x314mm
Weight	10.54kg

PDF datasheet vers. E174-20012302.