The EUROATLAS Model 2031 Transformer Rectifier Unit (TRU) converts aircraft primary AC power to 28 VDC power from a three-phase, 115 Volt, 400 Hz generator.

This lightweight 40 Amp. TRU has been developed for commercial airborne application. Its proven reliability recorded and confirmed by several Airlines exceeds a MTBF of 100,000 hours.

In order to achieve low weight, EUROATLAS uses special aluminum ribbon coils for TRUs instead of ordinary copper wires for the transformer. A 12-pulse rectification provides low ripple DC output. Environmental and EMI conditions mainly comply with RTCA/DO 160.

Since cooling is provided by thermal conduction via the ground plate, no forced air cooling is necessary. The absence of blowers results in high reliability and absolutely maintenance-free operation. These factors ensure low unit life-cycle cost.

This TRU offers excellent versatility for use in new designs or retrofits. EUROATLAS maintains a 24-hour spare part delivery service for its airborne power supplies.
**Electrical Specifications**

**Input**
- Voltage: 115/200 VAC, 3-ph w. Neutral
- Frequency: 400 Hz, ± 8%
- Voltage Spikes and Transients: Acc. to MIL-STD 704 D
- Frequency Transients: Acc. to RTCA/DO-160 A

**Output**
- Voltage: 28 VDC
- Current: 40 A
- Ripple: 2 Vpp max. at 40 A
- Overload: 50 A/10 min, 60 A/15 s, 100 A/1 s
- Efficiency: ≥ 86%

**Environmental Specification**
- Temperature Range: -15°C to +55°C (operation), -55°C to +85°C (storage)
- Humidity: ≤ 98%
- Shock: 6 g, 11 ms acc. to RTCA/DO-160 A
- Vibration: 6 g sine double sweep 125 - 1000 Hz
- Altitude: 4.4 kPa (20,000 m)
- EMC: Acc. to RTCA/DO-160 A
- Protection: IP 20 acc. to DIN 40050

**Physical Characteristics**
- Dimensions: 125 x 125 x 200 mm (HxWxD)
- Weight: 3.3 kg

**Design Characteristics**
- Power per Weight/per Volume: 340 W/kg, 358 W/ltr.
- Dielectric Resistance: ≥ 100 MOhm
- Contact Resistance: ≤ 10 mOhm between all leading parts of housing
- MTBF: > 100,000 h
- Speciality: Unit requires thermal resistance to the mounting structure of 0.04°C/W or better

*Specification subject to change without notice*