

Mini Frequency Converter for Aviation



This lightweight solid-state Miniature Frequency Converter has been designed for commercial airborne application and is applied for razor outlets in the AIRBUS aeroplanes A350 and A380.

The Technical Specification for the converter is applicable also for the A320, A330 and A340 families.

The unit converts aircraft primary AC power of 115 Volt, 360-800 Hz into 115 and 230 Volt, 60 Hz.

It is located in the Lavatory and in the Cabin and Crew Rest Compartments. Depending on the single application, the unit is available without enclosure as Model 4074.

115 Volt and 230 Volt is available alternatively at the nine pole D-Sub (Pin) receptacle. The EMI filtering complies with RTCA/DO 160. Since it requires no forced air and operates with ordinary convection cooling it is absolutely maintenance-free.

The Converter is overload capable and short-circuit protected and has been qualified in accordance with latest AIRBUS-standards for interior equipment mainly based on RTCA/DO 160.

On request this Static Converter is available with 50 Hz output instead of 60 Hz. EUROATLAS maintains a 24/7 spare part delivery service for its Airborne Power Supplies.



Mini Frequency Converter, 10 VA, Model 4074A

For Commercial Aircraft

Standard Features

- Input PFC
- Galvanic isolation
- Short-circuit protected
- MTBUR: 175,000 FH
- DMC: 0.00165 US\$/FH
- Low weight and size

Application

- Civil Aircraft

Support Service

- Full Product Support
- AOG Service

Options

- Available without housing as Model 4074



Electrical Specifications

Input

Voltage 115 VAC, single phase
 Surge Voltage RTCA/DO-160 F (16.5.1.5/16.5.2/16.5.3)
 Voltage Spikes RTCA/DO-160 F, Cat. A
 Frequency 360 to 800 Hz

Output

Voltage 115/230 VAC, \pm 4%, single phase
 Frequency 60 Hz, \pm 5 Hz
 Power 10 VA/10 W
 Overload 15 VA/1 min., 20 VA/1 sec.
 Efficiency \geq 79%

Environmental Specification

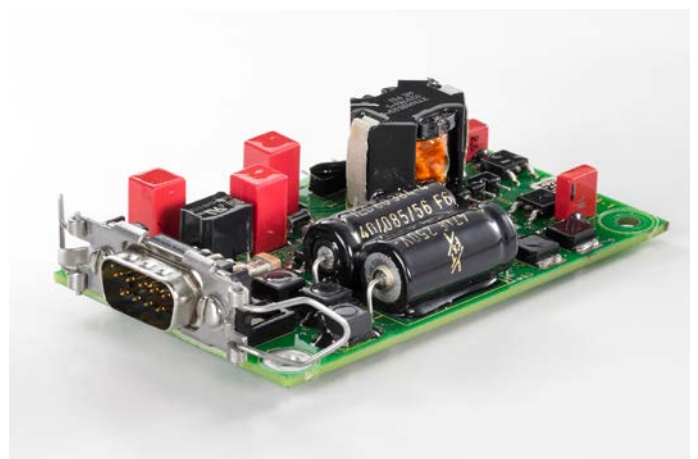
Temperature Range -15°C to +55°C (operation)
 -55°C to +85°C (ground survival)
 Humidity 95% (RTCA/DO-160 F, Cat. A1)
 Shock 6 g/11 ms, all directions
 (RTCA/DO 160 F, Section 7.2)
 Vibration RTCA/DO 160 F, Section 8, Cat. S
 Altitude 15.000 feet
 (RTCA/DO 160 F, Sect. 4.6.1, Cat. A1)
 EMC RTCA/DO 160 F, Sect. 19,
 Cat. CW/Sect. 20, Cat. D/Sect. 21,
 Cat. H/Sect. 22, Cat. D

Physical Characteristics

Dimensions 27 x 60 x 112 mm (HxWxD)
 Weight 198 g
 Interface D-Sub, 9 pole Connector

Design Characteristics

MTBF \geq 160,000 FH
 Qualification Fully qualified in accordance with
 equipment specification, based on
 RTCA/DO-160 F and ABD100 (0&1)



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