



1429

Dual Frequency Converter Unit (DFCU)

The EMPOWER® Dual Frequency Converter Unit is a revolutionary departure from traditional converters. With its ability to produce either 115 or 230 volts AC, this unit can support passenger and utility power anywhere in the world the aircraft operates. Output is separated into multiple channels, each protected and controlled by programmable solid state electronic circuit breakers.



Features

- MTBF: Airborne inhabited, 43,750 flight hours
- Design is based upon our patented, highly efficient, state-of-the-art power supply technology
- AC outputs can be either 115VAC at 60Hz or 230VAC at 50Hz
- Provides clean sine wave power for laptop computers, portable electronic devices (PEDs), lavatory, and galley
- Ten programmable AC electronic circuit breaker (ECB) outputs with configurable ratings: 7@15A and 3@10A at 115VAC, or 10@10A at 230VAC
- Fault and status reporting via ARINC 429 and RS-485
- MIL-DTL-38999, Series III input/output connectors
- Operation from -45°C to +70°C at full load

- Normal operation during input voltage condition of 97VAC–134VAC
- Regulated output voltage

Power

Input: 115VAC, 324–800Hz, 3-phase
Output: 10 AC outputs at 115VAC/60Hz or 230VAC/50Hz
4kVA total AC output power
Output mode is pin selectable

Safety

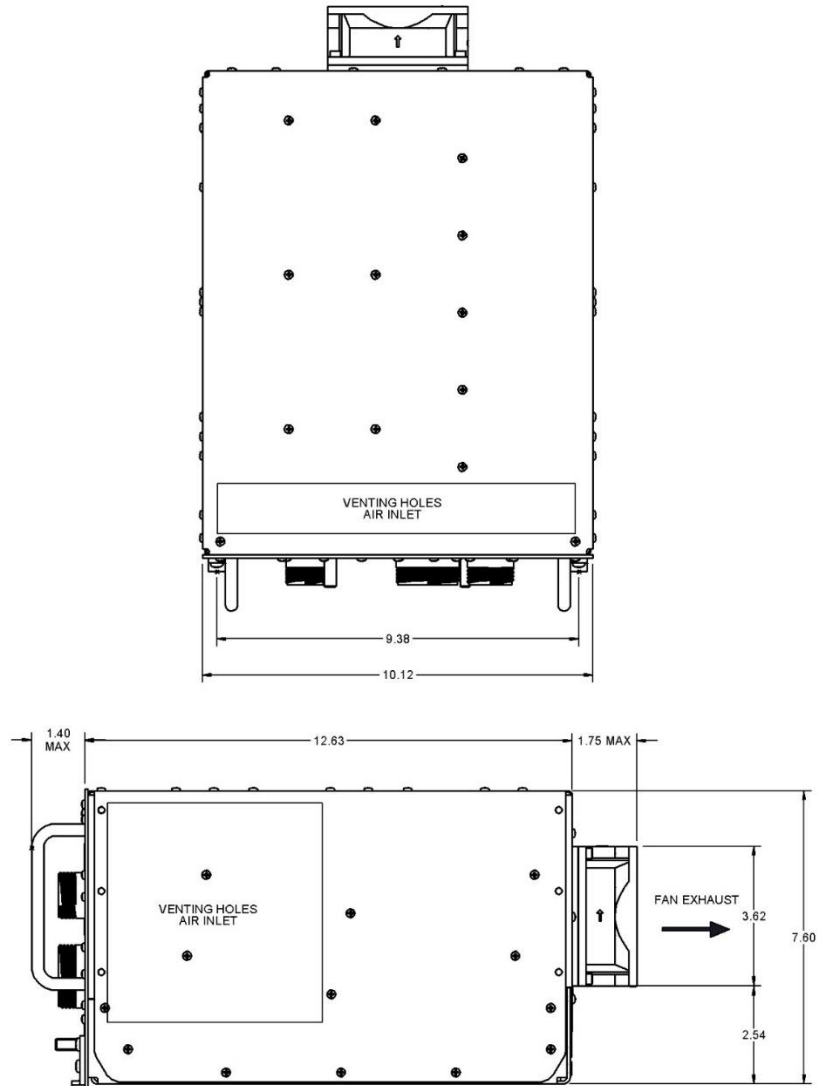
- Intelligent thermal management system
- Remote ON/OFF
- Over-current and over-voltage protection circuits
- Load shedding of outputs with programmable priority scheme to prevent overloading conditions

KEY BENEFITS

- No need to source separate 115VAC and 230VAC systems
- Remote reporting and control of each channel
- Eliminates conventional distribution panels
- Reduced cost to install
- Reduced overall system weight
- Provides reliable consistent cabin power to stay productive, entertained and connected

Qualification

- RTCA/DO-160G



Size

10.12 in W x 12.62 in L x 7.62 in H
(257.0 mm W x 320.5 mm L x 193.5 mm H)

ARINC 404A 1ATR Short Interface

Weight

29.2 lbs (13.2 kg) maximum
with 1ATR Short mounting tray

CONTACT INFO

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