JO3C Pre-Conditioned Air Module

The most advanced PC Air unit available–Compatible with every Fighter Jet flying today.

Model JO3C Air Module

- Select aircraft on control panel
- Automatically configures to selected aircraft
- Selectable 40˚F to 60˚F delivery temperature
- Delivery air pressure up to 5.5 PSIG at the aircraft
- Air flow up to 100 PPM
- Vent mode of operation
- Available in electric, diesel, or both
- Smallest and lightest weight unit on the market
- Transportable on a single C130 pallet position
- Advanced controls include unique learning capability
- Low profile version also available

APPLICATION

The JO3C Air Conditioner is designed to be compatible with the most advanced fighter platforms today to include the F-35 Joint Strike Fighter, F-18 Hornet, F-15 Eagle, F-16 Falcon, F-22A Raptor, as well as many special missions and UAV applications. The JO3C eliminates the need for multiple ground support carts by replacing them with one cart that is fully compliant with specification requirements for all fighter jets in service today. The fully integrated electronic control system allows operator selection of the specific aircraft to be serviced and adjusts the air systems accordingly. The computer-based controls store thousands of operational conditions and automatically adjusts each system component for optimal operation. The unit also features Data Logging, Fault Data Storage, BIT Testing, and a simple operator interface. Data may be downloaded via a USB memory interface.

ITW MILITARY GSE

ITW Military GSE leads the industry in product design and innovation. We utilize the industry's premier engineering capability along with aircraft manufacturer partnerships to Design, Build, and Deploy the finest GSE equipment available. We have been supporting Military applications worldwide since 1972 to include the most advanced fighter platforms. Our equipment includes Pre-Conditioned Air, Power (400 Hz, 270 VDC, 28 VDC), and shipboard power supplies/battery chargers. Equipment is available in facility versions as well as mobile flight-line models. All of our equipment has been tested and certified to the most stringent specifications, providing full confidence that each design will meet the customer's needs now and in the future.

PERFORMANCE FEATURES

- Both Diesel and Electric power for mobile and facility applications
- EPA certified diesel engine
- R134A refrigerant (Compatible with R152a (Drop-in Replacement))
- Simplified control panel and indications
- All information available via digital display
- Easy access to all parts
- USB Communication Port
- Air transportable with C130 aircraft
- Ability to set, store, retrieve, and use customer setting for output air pressure, flow, and temperature

Model	Cooling Capacity	Input Power	Length	Width	Height	Weight
JO3C PC Air	243.6 MBH (71.4 kW)	460vac/3ph; 50-60hz	84" (2.13 m)	62" (1.57 m)	78" (1.98 m)	3,800 lbs. (1,724 kg)
With Trailer	243.6 MBH (71.4kW)	460vac/3ph; 50-60hz	114" (2.90 m)	84 (2.13 m)	90" (2.29 m)	4,680 lbs (2,123 kg)
Diesel & Trailer	243.6 MBH (71.4kW)	(Optional) 460vac/3ph 50-60hz	114" (2.90 m)	84" (2.13 m)	90" (2.29 m)	8,880 lbs (est.) (3,992 kg)

Registered to AS9100 (with ISO 9001)

FROM DESIGN TO DEPLOYMENT

JO3C Joint Operations Configurable Combination Cart Specifications

GENERAL

- Operating temperature: -40˚F (-40˚C) to 140˚F (60˚C)
- Storage temperature: -65˚F (-54˚C) to 160˚F (71˚C)
- Central controls for system operation
- Instrumentation Accuracy: ±2%
- MTBF 3000 hrs. min. — low maintenance

COOLING AIR OUTPUT

- Max. outlet pressure 5.5 PSIG (0.38 kgf/cm2) variable
- Delivered air volume: 25 to 100 PPM (680 to 2,721 kg/h) variable
- Nominal delivered air temp @ 140˚F (60˚C) ambient: 50˚F (10˚C) @ 50 PPM (1,361 kg/h) @ 5.5 PSIG (0.38 KGF/cm^2)
- Output Duct: 30 ft. (9.14 m) of 8-inch hose and 10 ft. (3.05 m) of 4-inch hose with fitting for aircraft as required (other lengths available)

STANDARDS

- ISO 6858 Aircraft ground support electric supplies
- BS 2G 219 General requirements for ground support eq.
- EN 62040-1-1 (EN 50091-1) General & safety req.
- EN 61000-6-4 Electromagnetic compatibility - Generic emission standard
- EN 61000-6-2 Electromagnetic compatibility - Generic immunity standard
- UL 489
- UL 506
- UL 1012
- UL 1449
- IEEE 519
- IEEE C62.41
- NFPA 70
- NEMA ST 20

EMI

MIL-STD-461E:

CE102 Conducted Emissions, Power Leads, 10 kHz to 10 MHz

CS101 Conducted Susceptibility, Power Leads, 30 Hz to 150 kHz

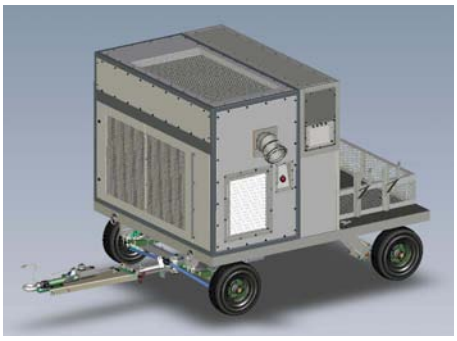
CS114 Conducted Susceptibility, Bulk Current Injection, 10 kHz to 200 MHz

CS115 Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation

CS116 Conducted Susceptibility, Damped Sinusoidal Transients, Cables and Power Leads, 10 kHz to 100 MHz, 10A max for all configurations

RE102 Radiated Emissions, Electrical Field, 10 kHz to 1 GHz

RS103 Radiated Susceptibility, Electric Field, 2 MHz to 18 GHz



OPTIONS

Engine/Generator Set:

- 4-cycle water-cooled diesel; meets Tier 3 EPA standards, jet fuel capable
- Electronic speed control
- All necessary instruments and controls
- Automatic shutdown protection:
  - High temperature
  - Low oil pressure
  - Overspeed
- 480/60 Hz or 400/50 Hz Generator with integral voltage regulator

Servo Air:

- 0.5 PPM (13.6 kg/h) @ 18 PSIG (1.26 kgf/cm2)/min.
- 30 ft (9.14 m) hose with fitting for fighter aircraft included

Specifications subject to change without notice.

The JO3C is compatible with these aircraft and others:

F-22A Raptor

F-15 Eagle

F-16 Falcon

F-18 Hornet

T-50

JSF F-35

Eurofighter

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