

Cool solutions to thermal problems.

Rocky
Research

COMMERCIAL | INDUSTRIAL | DEFENSE

ECU02401

Increased Reliability

Energy Efficient

Load Adaptive

Sealed Compressor

Low Noise

Modular Controls

Simple to Operate

Easy to Service

Microchannel Technology

ICE® Technology



2-Ton High Efficiency Air Conditioner / ECU



Utilizing Rocky Research's patented, state-of-the-art HVAC technologies along with readily available commercial-off-the-shelf components, the ECU02401 offers a highly reliable design ready to address the rigors of harsh military environments. Providing up to 30% energy efficiency when compared to conventional military ECUs, Rocky Research's ECU02401 offers a 24,000 BTU/hr load adaptive cooling capacity at 125°F.

Operating from either 50, 60 or 400 Hz power sources, Rocky Research's ECU02401 offers soft start and thereby avoids in-rush current resulting in smaller generator size requirement and higher compressor reliability. Rocky Research ECU02401 is fully operational up to 135°F ambient temperature.

Designed for military environments and operational system reliability Rocky Research's ECU02401 also offers the benefits of lower ambient noise while being simple to service and operate with straightforward and intuitive controls. Remote software control capability utilizing UDP / IP, RS-485, ModBus RTU (via RS-485 or TCP/IP), or CANBUS protocols.

System Specifications

Frequency:	50/60/400 Hz
Voltage:	208 - 230 VAC
Phase:	3 Phase
Wires:	4 wire
Max. Power:	4kW (Cooling), 6 kW (Heating)
Amperage (Nominal) *	12 Amps (Cooling), 16 Amps (Heating)
Cooling Capacity:	24,000 BTU/HR
Heating Capacity:	20,000 BTU/HR
Evaporator Air Flow	800 CFM
Max. Ambient Temperature:	135°F
Min. Ambient Cooling:	50°F
Min. Ambient Heating:	-40°F
Refrigerant:	R134A
COP:	1.4 at 125/90°F

* ECU does not impose inrush current as typically seen with other ECUs

Physical Specifications

Form Factor:	Wall-Mount / Shelter Mount
Dimensions:	32.25" W x 22.00" H x 32.50" D
Weight:	~ 295 lbs.

Environmental Specifications

Cooling Capacity:	ASHRAE STD 37 95° F OAT with 80°/67° indoor dry bulb/wet bulb temperatures 125° F OAT with 90°/75° indoor dry bulb temperatures	✓ CERTIFIED
Heating Capacity:	ASHRAE STD 37 20°F OAT w/70°F return air	✓ CERTIFIED
Vibration:	MIL-STD-810G, Method 514.60	✓ CERTIFIED
Shock:	MIL-STD-810G, Method 516.6 Rail Impact Road March	✓ CERTIFIED
EMI:	MIL-STD-461F, Method RE509.4, CE102, CS101, and RS103 (Certification in process)	
Salt Fog:	MIL-STD-810G, Method 509.4	✓ CERTIFIED