

Cool solutions to thermal problems.

Rocky
Research

COMMERCIAL | INDUSTRIAL | DEFENSE

ECU02401

Increase 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 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 125°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
Evaporation Air Flow:	800 CFM
Max. Ambient Temperature:	125°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 w/ 80°/67° indoor dry bulb/wet bulb temperatures 125°F OAT w/ 90°/75° indoor dry bulb temperatures	✓ COMPLETED
Heating Capacity:	ASHRAE STD 37 20°F OAT w/ 70°F return air	✓ COMPLETED
Vibration:	MIL-STD-810G, Method 514.6	✓ COMPLETED
Shock:	MIL-STD-810G, Method 516.6 Rail Impact & Road March	✓ COMPLETED
EMI:	MIL-STD-461F, Method RE509.4, CE102, CS101, and RS103	✓ COMPLETED
Salt Fog:	MIL-STD-810G, Method 509.4	✓ COMPLETED