

Cool solutions to thermal problems.

Rocky
Research

COMMERCIAL | INDUSTRIAL | DEFENSE

ECU06002

Increase Reliability

Energy Efficient

Load Adaptive

Sealed Compressor

Low Noise

Modular Controls

Simple to Operate

Easy to Service

Microchannel Technology

Portability

ICE® Technology



Rocky Research 5-Ton Split System ECU



Utilizing Rocky Research's patented HVAC technologies along with readily available commercial off-the-shelf components, the 5-Ton Split System **ECU06002** 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 5-Ton Split System **ECU06002** offers 60,000 BTU/hr road adaptive cooling capacity at 125°F.

Evaporator and Condenser units are stackable for transportation and are sized to effectively fit in shipping containers. The compressor, evaporator fan, and condenser fan are all independently speed/torque controlled – allowing for maximum efficiency and reliability under a wide range of temperatures and conditions. Rocky Research 5-Ton Split System **ECU06002** is fully operational up to 125°F ambient temperature.

Designed for military environments and operational system reliability, Rocky Research's 5-Ton Split System **ECU06002** uses self-sealing quick disconnect fittings and military rated electrical connectors. The custom microchannel condenser coils allow for maximum cooling in a very small footprint. All electrical components are easily accessible. A separate evaporator section allows for two man lift and easy transport capabilities. 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 Hz
Voltage:	208 - 230 VAC
Phase:	3 Phase
Wires:	5 wire
Max. Power:	10 kW (Cooling), 12 kW (Heating)
Amperage (Nominal)*	37 Amps (Cooling), 44 Amps (Heating)
Cooling Capacity:	60,000 BTU/HR
Heating Capacity:	37,500 BTU/HR
Evaporation Air Flow:	2,200 CFM
Max. Ambient Temperature:	125°F
Min. Ambient Cooling:	50°F
Min. Ambient Heating:	-40°F
Refrigerant:	R134A
COP:	1.5 at 125/90°F

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

Physical Specifications

Form Factor:	Wall-Mount / Shelter / Skid / Trailer
Dimensions:	Condenser: 39.5" L X 25.25" W X 26.25" H Evaporator: 25.25" L X 18.25" W X 39.5" H Stacked: 600 lbs
Weight:	Condenser: 400 lbs Evaporator: 200 lbs Stacked: 600 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
Enclosure Protection:	NEMA 4	✓	COMPLETED