DDM-18K ARMORED ECU

For Operation on 208/3/60VAC Power

Dynamic Defense Materials, LLC Armored Shelter

The HDT DDM-18K Armored Environmental Control Unit (ECU) is a unique modular design by HDT Global to integrate with Dynamic Defense Materials, McCurdy Interlocking Shelter System. The DDM 18K ECU installs in a modified McCurdy 2 x 1 armored module using standard DDM mounting hardware. It integrates seamlessly into any new or existing system.

The fully armored HDT DDM-18K ECU is designed for ease of installation and provides outstanding performance in severe environments even when subjected to rough handling, sand, salt, dust, rain, snow, or extreme heat. The DDM-18K ECU operates in ambient temperatures ranging from -50°F to 125°F (-45.6° to 51.7°C) providing nominal 18,000 BTU/H Cooling capacity and 14,000 BTU/H (4.1 kW) electric resistive heating capacity.

The DDM 18K ECU is equipped with a onboard operator control offering selectable OFF/VENT/HEAT/COOL operating modes and a manually adjustable thermostat. A power quality analyzer is embedded in the control panel to prevent operation during poor power quality or phase reversal conditions.

KEY FEATURES

- McCurdy's Armored ECU is a vertical ECU that integrates cooling with McCurdy's Interlocking Armor System
- ECU incorporates the McCurdy's armor 2 x 1 frame. Frame is powder coated aluminum.
- Environmentally acceptable R-410A refrigerant
- Evaporator blower motor and wheel has a motorized impeller with integral inlet bell
- Two speed condenser blower for low ambient operation
- Reliable, energy efficient, Copeland Scroll™ Compressor
- Severe duty finned tube electric heater elements
- Condenser coil features two row deep, high performance micro-channel design
- Evaporator coil has aluminum fins/copper tubes to assure optimal heat transfer
- Incline operation 10° from horizontal in any direction

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DDM-18K ARMORED ECU SPECIFICATIONS

Ordering information[1]	**GREEN 34094 (383) PER FED-STD-595**		**TAN 33446 (686) PER FED-STD-595**	
HDT Part Number	GA1H93ZAAN00010		GA1H93ZAAN00020	
Capacity	**Cooling total**[2]	**Cooling total**[3]	**Cooling total**[4]	**Heating**
	18,000 BTU/H	17,000 BTU/H	20,000 BTU/H	14,000 BTU/H
	5.27 kW	4.97 kW	5.85 kW	4.1 kW
Operating temperatures	**Cooling**	**Heating**	**Storage**	
	40°F to > 125°F	-50°F to 70°F	-60°F to 160°F	
	4.4°C to > 52°C	-45.6°C to 21°C	-51°C to 71°C	
Physical Characteristics	**L x W x H**	**Weight** (without armor plate)		
	28.75" x 22" x 44"	230 lbs		
	73 x 55.9 x 111.8 cm	104 kg		
Air flow (Indoor Evaporator)	450 cfm @ 0" WC	765 m^3h @ 0 cm WC		
Stacking ability	X2 in transport	X4 in storage		
Sound pressure indoor	<78dbA at 3.3 ft.	<78 dbA @ 1m		
Refrigerant type/charge	HFC-410A / 2 lbs, 2 oz	HFC-410A / 0.51 kg		
High pressure/lower pressure setting	680 PSIG	47 BAR		
Pressure relief	700 PSIG	48.3 BAR		
Evaporator air filter	Washable/cleanable			
CBRN (NBC) ready	N/A			
Fresh air	None			
Fork lift possibility	Hand lift only			
Electrical				
Voltage (V/Phase/Hz)	208/3/60 VAC			
Control voltage (V/Phase/Hz)	24/1/60			
Max power cooling (Watts/Amps)[4]	3,690 W/12 Amps			
Max. power heating (Watts/Amps)	4,100W/12 Amps			
Inrush start-up current without soft start	43 Amps RMS for 4ms			
Main circuit breaker (Amps)	20 Amps			
Thermostat and mode selection	On board, modes of operation OFF / VENT / HEAT / COOL			
Power cable	25' (7.6 m) Length and connector MS3106E18-11S			

1 Units also available in CARC paint, please ask your HDT representative.
2 Capacity based on air entering the evaporator @ 80°F (26.6°C) dry bulb/67°F (19.4°C) wet bulb and 95°F (35°C) dry bulb outside ambient air entering the condenser section.
3 Capacity based on air entering the evaporator @ 90°F (32.2°C) dry bulb/75°F (23.9°C) and 125°F (51.7°C) dry bulb outside ambient air entering the condenser section.
4 Based on a heat soaked shelter with outdoor-air and indoor-air entering the ECU @ 125°F (51.7°C) dry bulb.

ECU available through

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Revision 1 09-12 01-05-02-0285