

# EEECU-M18-2 BASIC (400/3/50VAC)

Energy Efficient Environmental Control Unit (EEECU)



The EEECU-M18-2 BASIC Energy Efficient Environmental Control Unit (EEECU) is designed for operation in severe environments, providing outstanding performance even when subjected to rough handling, sand, dust, rain, snow, or extreme heat. Whether positioned on the ground outside an expeditionary shelter or trailer mounted for portability, the EEECU-M18-2 BASIC is qualified for operation in temperatures ranging from -45.6° to 54.4°C (-50° to 130°F). The unit features onboard storage capability for optional flexible air ducts and power cord simplifying the EEECU-M18-2 BASIC set-up and teardown processes.

The EEECU-M18-2 BASIC operator control offers OFF/COOL/HEAT/VENT 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. Resettable circuit breakers are provided for the main power, control and fan circuits.

## KEY FEATURES

- Corrosion-resistant, powder coated aluminum frame, optional CARC coating available
- Refrigerant Charge is less than <2.99kg (R-410A)
- Reliable, energy efficient Copeland Hermetic Scroll Compressor
- Hot-gas-bypass valve provides freeze protection during low load conditions
- Liquid Quench valve provides compressor cooling during high ambient operation
- Fin-Tube type evaporator coil assures optimal heat transfer
- Incline operation 10° from horizontal any direction
- Lightweight all-aluminum micro-channel condenser coil with 1.8mm pitch (14 fins per inch) allows sand, dust and organic materials to pass-thru the fins
- Washable/cleanable evaporator air filter
- CBRN (NBC) ready, use the optional ducts and adapter kit (HDT part number AF-9454311, NSN 4130-01-434-7665)
- On board storage basket for air ducts and power cable



# EEECU-M18-2 BASIC (400/3/50VAC)

Energy Efficient Environmental Control Unit (EEECU)



## EEECU-M18-2 BASIC ECU SPECIFICATIONS

<b>Ordering information</b>		<b>Powder Coated-RAL Color Code #</b>	
HDT Part Number, Green	GL0599ZAADWYX10 (no overpack)	GREEN 34094 (383), PER FED-STD-595	
HDT Part Number, Tan	GL0599ZAADWYX20 (no overpack)	TAN 33446 (686), PER FED-STD-595	
<b>Overpack options</b>		<b>Description</b>	
Insulated flexible duct	064-00028 (NSN 4520-01-532-3184) 064-00031	GREEN, 40.6 cm outside diameter x 3 m (16" x 9.8') long, two ducts required TAN, 40.6 cm outside diameter x 3 m (16" x 9.8') long, two ducts required	
Power cable	108-00148 108-00165	Cable with connectors, 10 m (32.8') length, Male CEE-5 Pin, 32A Cable with pigtailed on power input end	
Condensate hose	250-00057-APH	5 m (16.4') length with barbed 90° adapter	
<b>Controls</b>			
Remote thermostat with cable	254-00002-15-P1 254-00002-15-P2	GREEN, 4.6 m (15.1') length TAN, 4.6 m (15.1') length	
<b>Cooling capacity</b>	<b>@ 35/26°C (95°/80°F)<sup>2</sup></b>	<b>@ 52/32°C (125°/90°F)<sup>3</sup></b>	<b>@ 52/52°C (125°/125°F)<sup>4</sup></b>
Total (sensible/latent)	18.4 kW 63,000 BTU/H	18.4 kW 63,000 BTU/H	16 kW 55,000 BTU/H
<b>Heating capacity</b>	11.2 kW – 400V 38,236 BTU/H		
<b>Air flow</b>	<b>Evaporator<sup>3</sup></b> 2,375 m <sup>3</sup> /h @ 7.6 mm WC 1,400 cfm @ 0.3 iwq	<b>Condenser</b> 7,475 m <sup>3</sup> /h 4,400 cfm	<b>Heating<sup>5</sup></b> 2,375 m <sup>3</sup> /h @ 7.6mm WC 1,400 cfm @ 0.3 iwq
<b>Operating temperature</b>	<b>Cooling</b> 4.4°C to >54.4°C 40°F to > 130°F	<b>Heating</b> -45.6°C to 32°C -50°F to 90°F	<b>Storage</b> -51°C to 71°C -60°F to 160°F
<b>Physical characteristics</b>	<b>L x W x H</b> 116 x 91 x 120 cm 45.75" x 35.75" x 47.38"	<b>Gross weight (no overpack)</b> 245 kg 540 lbs	<b>Sound pressure (Lp)</b> 70 dbA @ 1m 70 dbA @ 3.3'
<b>Refrigerant (charge weight)</b>	R-410A (2.27 kg) R-410A (5 lbs)		
<b>High pressure switch setting</b>	47 BAR 680 PSIG		
<b>Pressure relief</b>	50 BAR 725 PSIG		
<b>Electrical</b>			
IP-Protection/NEMA Unit Control Panel	IP 54	NEMA-12	
Voltage (V/Phase/Hz)	400/3/50VAC		
Control voltage (V/Phase/Hz)	24/1/50VAC		
Max power cooling (Watts/Amps) <sup>4</sup>	10,810 W / 19A (400V)		
Max. power heating (Watts/Amps)	11,200 W / 16.3A (400V)		
Inrush start-up current without soft start	154A Peak , 109A RMS (400V)		
Main circuit breaker (Amps)	25A		
Control circuit breaker (Amps)	0.6A		
Power receptacle	MS-3102R24-79P, 5 Pin (3P-N-E)		

1 Units also available in CARC paint, please ask your HDT representative.

2 Based on outside air entering the condenser @ 35°C (95°F) dry bulb and 26.6°C (80°F) dry bulb/ 19.4°C (67°F) wet bulb indoor air entering the evaporator section.

3 Based on outside air entering the condenser @ 52°C (125°F) dry bulb and 32°C (90°F) dry bulb/ 23.9°C (75°F) wet bulb indoor air entering the evaporator section.

4 Based on a heat soaked shelter with outdoor-air and indoor-air entering the ECU @ 52°C (125°F) dry bulb.

5 Based on inside return-air temperature entering the ECU at 21.1°C (70°F) dry bulb / 15.6°C (60°F) wet bulb.

### HDT Global

30500 Aurora Road Suite 100

Solon, OH 44139 USA

P 800.969.8527 / 540.887.4700

sales@hdtglobal.com

This item and the technical data and defense services directly related to this item are subject to the International Traffic in Arms Regulations (ITAR), 22 CFR 120-130 and may not be exported to any foreign destination or any foreign entity or foreign national, inside or outside the United States, without prior approval by the U.S. Department of State.

Revision 1 10-12 01-05-02-0281