



Athenia AM II Series

Rooftop HVAC System for Coach and Transit





Athenia AM II Series

Delivers quality and reliability.

A LOW-WEIGHT, HIGH-PERFORMANCE ROOFMOUNT SYSTEM!

- Easy-to-install one-piece design
- IntelligAIRE IIITM microprocessor controller with CANBUS communications
- Designed to fit CNG, hybrid and diesel buses
- Transducers standard
- Motorized water valve standard
- Electronic capacity control standard
- 10% weight reduction
- Welded frame
- Reduced number of potential leak points
- No sealants used in design
- Stiffer construction for improved unit/bus sealing
- 10% more condenser airflow
- 5% more evaporator airflow
- Access all servicable items from inside bus

*The Rock-Solid Result of over 50 Years
of HVAC Design Experience*



ONE PLATFORM FOR ALL YOUR NEEDS



ATHENIA AM II 960

- Base platform with R-134a refrigerant

ATHENIA AM II 1000

- Base platform with R-407c refrigerant

ATHENIA AM II 700

- For articulated trailers and 29'-32' buses

ALSO AVAILABLE:

ATHENIA AM II E-800 ALL-ELECTRIC

- System for hybrid, trolley and battery buses

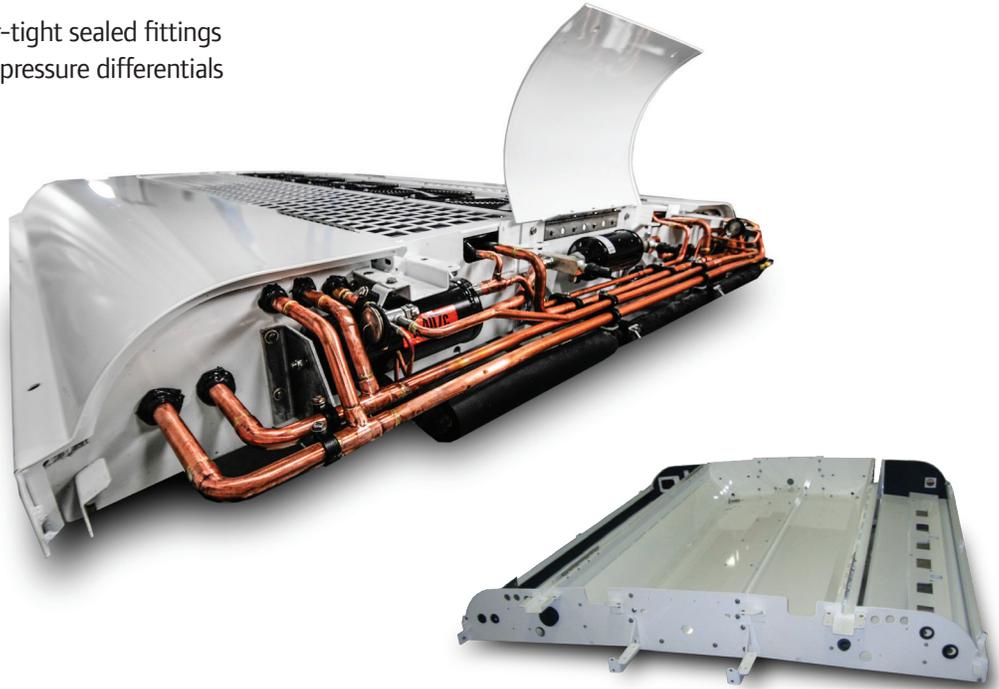
ATHENIA AM II EA-800 ALL-ELECTRIC WITH:

- Exclusive alternator/inverter power for standard diesel and CNG-powered buses

USING WHAT WE KNOW TO MAKE

WATER TIGHT DESIGN

- Harness interface points use water-tight sealed fittings
- No water ingress due to high/low pressure differentials
- One piece welded frame
- No rivets or sealant



NEW SIDE-ACCESS COVERS

- Gull wing doors eliminate prop rods
- Improved latching, sealing, access and aesthetics



WHAT YOU NEED A REALITY.

NEW ELECTRONIC CAPACITY CONTROL

- Capacity can be reduced when not needed for fuel savings on cooler days
- Improved temperature balance on Arctic buses so capacity can be shifted from unit to unit as needed



NEW MOTORIZED WATER VALVE

- Improved temperature control in re-heat and heating modes
- Eliminates water hammer



UNIT CONTROLS IN CONDITIONED AIR SPACE

- Improved environmental protection
- Improved access and servicability



MORE STANDARD FEATURES THAN EVER

Why pay for more than you want. Thermo King provides standard features designed to meet your needs.

INTELLIGIAIRE III™ CONTROL SYSTEM

- Expanded CAN communications capability
- Plugs directly into J1939 network to make more info available
- Eliminates the gateway module required between bus & unit controllers
- Eliminates need for expansion modules external to controller where multiple zones must be controlled independently



THE THERMO KING X430 COMPRESSOR

- Engineered exclusively for transport applications
- Built for extended service life
- Field repairable



HIGH PERFORMANCE R-407C OR R-134A

- Environmentally safe alternatives with zero ODP



ELECTRONIC CAPACITY CONTROL

- Capacity can be reduced when not needed for fuel savings on cooler days
- Improved temperature balance on Arctic buses so capacity can be shifted from unit to unit as needed



MOTORIZED WATER VALVE

- Improved temperature control in re-heat and heating modes
- Eliminates water hammer



OPTIONAL FEATURES INCLUDE:

Take control of your operating costs with these cost-saving options available only from Thermo King.

INTELLIGIAIRE III™ ELECTRONIC PRESSURE DISPLAY MODULE

- Touchpad displays four different pressure readings
- Simplifies problem diagnosis and pre-trip inspections



LONG LIFE BRUSHLESS MOTORS

- Integral electronics
- 10% greater airflow
- Maintenance-free
- Programmable variable speed
- 40,000-hour bearings



S391/S616 SCREW COMPRESSORS

- Exclusive oil management system for increased reliability
- Fewer moving parts than reciprocating compressors
- Lower noise levels and vibration than reciprocating compressors
- Programmable capacity control for fuel savings



OTHER AVAILABLE OPTIONS

- Return Air Grille
- Damper-Controlled Fresh Air Module

SPECIFICATIONS

SYSTEM COOLING CAPACITY (RATED CAPACITIES)	ATHENIA AM II 700	ATHENIA AM II 960	ATHENIA AM II 1000
BTU/hr	76,000	92,000	113,000
kW	22.3	30	33.1
Kcal/hr	19,151	23,183	28,476

Rated capacities are at following conditions:

Outside	35°C/95°F		
Inside	27°C/80°F DB	19°C/67°F WB	

SYSTEM HEATING CAPACITY

At 30 Lt./Min.(8 GPM) coolant flow rate and 55K (100°F) temperature differential between return air and coolant.

BTU/hr	90,000	115,000	115,000
kW	26.4	33.7	33.7
Kcal/hr	22.7	29,040	29,040

EVAPORATOR AIRFLOW

(0 in. water column external static pressure)

High Speed	2150 ft ³ /min	3200 ft ³ /min	3200 ft ³ /min
Medium Speed	1266 ft ³ /min	1900 ft ³ /min	1900 ft ³ /min
Low Speed	900 ft ³ /min	1350 ft ³ /min	1350 ft ³ /min

REFRIGERANT

	HFC R-134a	HFC R-134a	HFC R-407C
--	------------	------------	------------

POWER CONSUMPTION @ 27 VDC

	75.2 Amps	120 Amps	120 Amps
--	-----------	----------	----------

WEIGHT

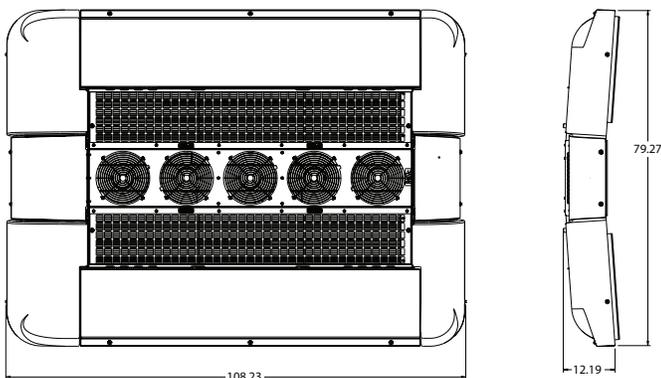
	435 lbs. (197 kg.)	470 lbs (213 kg)	470 lbs (213 kg)
--	--------------------	------------------	------------------

COMPRESSOR WEIGHT WITH CLUTCH (APPROXIMATE)

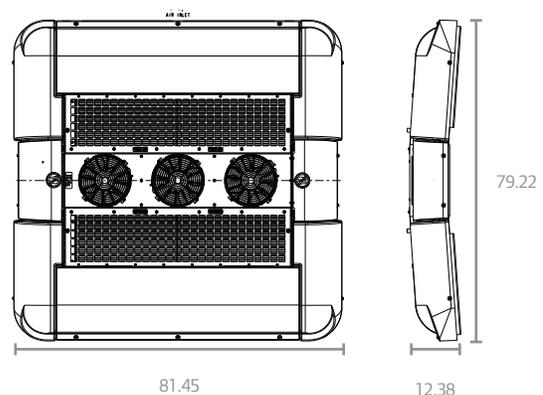
S391	147 lbs (67 kg)
S616	171 lbs (77 kg)
X426/X430	115 lbs (52.2 kg)

DIMENSIONS

AMII-960/1000



AMII-700



WORLDWIDE SERVICE ORGANIZATION

Thermo King backs its equipment and customers with a highly-trained, worldwide service organization. This assures you the support of factory authorized service facilities and a stock of factory parts and factory trained mechanics.

WARRANTY SUMMARY

Terms of the Thermo King Warranty are available on request from your local Thermo King dealer. Please reference document TK50049 for the Thermo King Bus Unit Warranty.



Thermo King – by Trane Technologies (NYSE: TT), a global climate innovator – is a worldwide leader in sustainable transport temperature control solutions. Thermo King has been providing transport temperature control solutions for a variety of applications, including trailers, truck bodies, buses, air, shipboard containers and railway cars since 1938. For more information, visit thermoking.com or tranetechnologies.com.

