



V. Split System Air Conditioning

Evaporator **EM-1**

Our EM-1 ceiling mount air conditioning evaporator has been engineered for maximum serviceability and ease of installation in commercial and school buses. Because the drain pan is part of the basic system, the EM-1 can be completely installed, charged and tested before the cover is put in place, greatly reducing installation time. Sim-

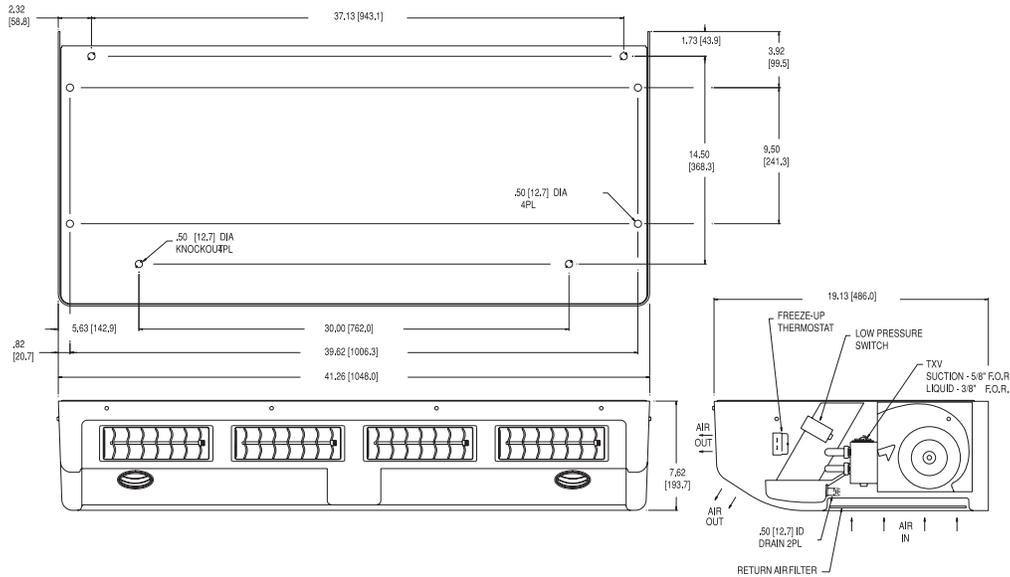
ple cover removal provides ready access to all serviceable components* . This evaporator is available for non-ducted free blow applications in 25" – 30" (635 – 762 mm) length passenger areas.

* See EM-3



Features

- New, efficient, transverse blower technology reduces AMP draw and provides increased, uniformly distributed air flow
- Higher capacity unit in a smaller package (height reduced over 20% from existing models, significantly increasing head clearance)
- Reduced service time and overall life cycle cost with single, easily accessible motor, bottom mounted air filter, 10% fewer parts and fasteners than previous models
- Return air filters can be removed and cleaned without removing the units cover
- High volume air flow, widely dispersed through bi-directional louvers for total passenger comfort
- State-of-the-art enhanced coils for maximum cooling capacity and increased efficiency
- Variable speed blower allows for full air flow adjustment to optimize system to individual cooling preferences
- Heavy-duty steel frame is reinforced for added strength
- Can be front/rear center or front/rear side mounted in all makes/models of buses



Technical Data

Cooling capacity	60000 Btu/hr (17.5 kW) IMACA ^[1]	27000 Btu/hr (8 kW) ARI ^[2]
Air flow	1600 CFM (2718.4 m ³ /hr)	
Refrigerant	R134a	
Length	41.25" (1048 mm)	
Width	19" (486 mm)	
Height	7.62" (193.5 mm)	
Weight	60 lbs (27 kg)	
Condensate Drain Connection	1/2" (12.7 mm) O.D	
Max amperage requirement	29.5 A @ 13.5 V dc (High Speed)	
Voltage	12 or 24 VDC	
Cover color	Snow White or Dove Gray	

[1] IMACA conditions: 100°F (38°C) / 90°F (32°C) / 50% RH

[2] ARI conditions: 95°F (35°C) / 80°F (27°C) / 50% RH

Evaporator **EM-2**

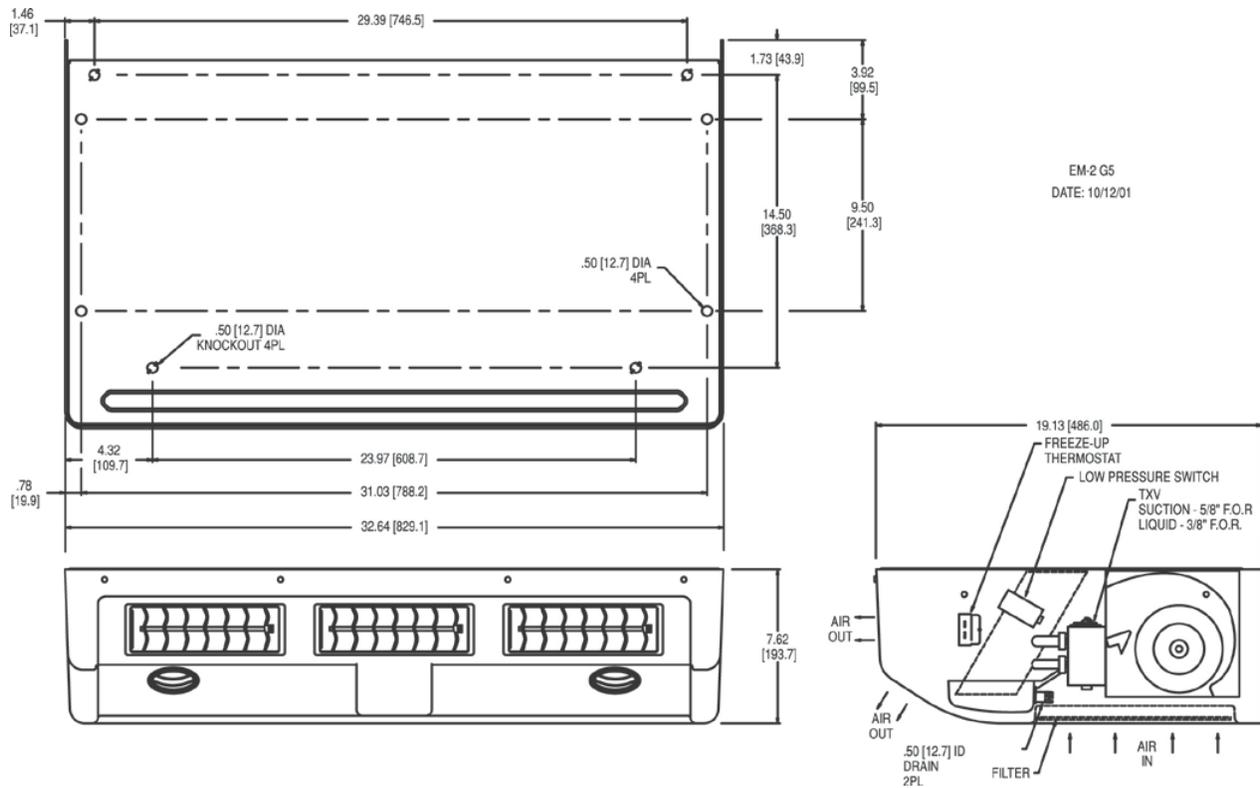
MCC's EM-2 ceiling mount air conditioning evaporator has been engineered for maximum serviceability and ease of installation in commercial and school buses application. Because the drain pan is part of the basic system, the EM-2 can be completely installed, charged and tested be-

fore the cover is put in place, greatly reducing installation time. Simple cover removal provides ready access to all serviceable components. The EM-2 evaporator is available for non-ducted, free blow applications in 20' – 25' (610 – 762 cm) length passenger areas.



Features

- New, efficient, transverse blower technology reduces AMP draw and provides increased, uniformly distributed air flow
- Heavy-duty galvanized steel frame is reinforced for added strength
- High volume air flow, widely dispersed through bi-directional louvers for total passenger comfort
- State-of-the-art enhanced coils for maximum cooling capacity and increased efficiency
- Return Air filter can be removed and cleaned without removing the unit cover
- Higher capacity unit in a smaller package (height reduced over 20% from existing models, significantly increasing head clearance)
- Three or variable speed blower allows for full air flow adjustment to optimize system to individual cooling preferences
- Reduced service time and overall life cycle cost with single, easily accessible motor, bottom mounted air filter,
- 10% fewer parts and fasteners than previous models
- Can be front/rear, center or front/rear side mounted indifferent bus applications



Technical Data

Cooling capacity	45000 Btu/hr (13 kW) IMACA ^[1]	18500 Btu/hr (5.4 kW) ARI ^[2]
Air flow	1200 CFM (2039 m ³ /hr)	
Refrigerant	R134a	
Length	33.9" (862 mm)	
Width	19.13" (486 mm)	
Height	7.62" (203 mm)	
Weight	49 lbs (22 kg)	
Condensate drain connection	½" (12.7 mm) O.D	
Max amperage requirement	24.3 A @ 13.5 V dc (High Speed)	
Voltage	12 or 24 VDC	
Cover color	Snow White or Dove Gray	

[1] IMACA conditions: 100°F (38°C) / 90°F (32°C) / 50% RH

[2] ARI conditions: 95°F (35°C) / 80°F (27°C) / 50% RH

Evaporator **EM-3**

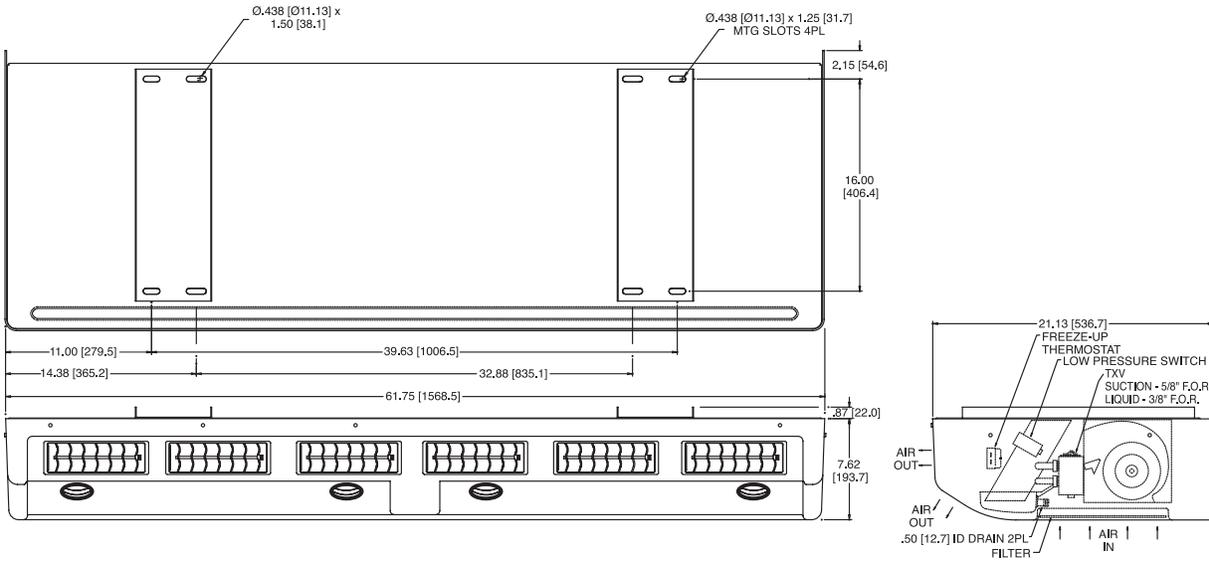
MCC EM-3 rear ceiling mount air conditioning evaporator has been engineered for maximum serviceability and ease of installation in light and medium duty buses. Because the drain pan is part of the basic system, the EM-3 can be completely installed, charged and tested before the cover is put

in place, greatly reducing installation time. Simple cover removal provides ready access to all serviceable components. EM-3 is available for non-ducted free blow applications in (30 – 35)' (914 – 1067)cm length passenger areas.



Features

- New, efficient, transverse blower technology reduces AMP draw and provides increased uniformly distributed air flow
- Higher capacity unit in a smaller package (height reduced to over 20% less than existing models, thereby significantly increasing head clearance)
- Heavy-duty steel frame is reinforced for added strength
- High volume air flow, widely dispersed through bi-directional louvers for total passenger comfort
- Return air filter can be removed and cleaned without removing the unit's cover
- State-of-the-art-enhanced coils for maximum cooling capacity and increased efficiency
- Three or variable speed blower allows for full airflow adjustment to optimize system to individual cooling preferences
- Reduced service time and over all life cycle cost with single, easily accessible motor, bottom mounted air filter,
- 10% fewer parts and fasteners than previous models
- Can only be rear center ceiling mounted in all makes and models of buses



Technical Data

Cooling capacity	90000 Btu/hr (26 kW) IMACA ^[1]	47000 Btu/hr (14 kW) ARI ^[2]
Air flow	2400 CFM (679.6 m ³ /hr)	
Refrigerant	R134a	
Length	61.75" (1566 mm)	
Width	21.13" (537 mm)	
Height	8.49" (215.6 mm)	
Weight	95 lbs (43 kg)	
Condensed drain connection	½" (12.7 mm) O.D	
Max amperage requirement	46 A @ 13.5 V dc (High Speed)	
Voltage	12 or 24 VDC	
Cover color	Snow White or Dove Gray	

[1] IMACA conditions: 100°F (38°C) / 90°F (32°C) / 50% RH

[2] ARI conditions: 95°F (35°C) / 80°F (27°C) / 50% RH

Evaporator **EM-7**

MCC EM-7 ceiling mount air conditioning evaporator has been engineered for maximum serviceability and ease of installation in commercial and school buses and vans. Because the drain pan is part of the basic system, the EM-7 can be completely installed, charged and tested before the cover is put in place, greatly reducing installation time.

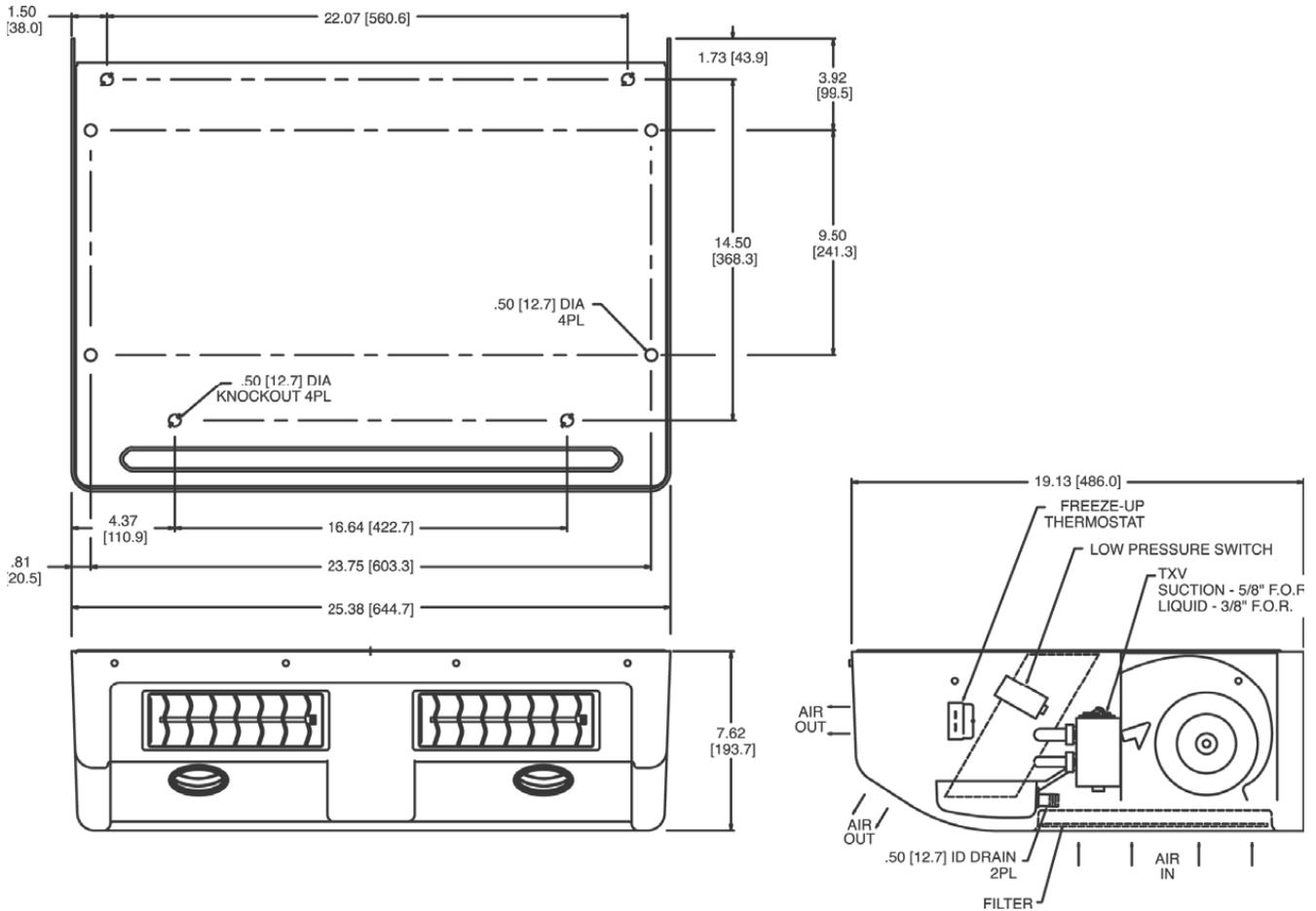
Simple cover removal provides ready access to all serviceable components.

This evaporator is available for non-ducted free blow applications in (15 – 20)” (381 – 508)mm passenger areas.



Features

- New, efficient, transverse blower technology reduces AMP draw and provides increased, uniformly distributed air flow
- Higher capacity unit in a smaller package (height reduced over 20% from existing models, significantly increasing head clearance)
- Reduced service time and overall life cycle cost with single, easily accessible motor, bottom mounted air filter, 10% fewer parts and fasteners than previous models
- Return air filters can be removed and cleaned without removing the units cover
- High volume air flow, widely dispersed through bi-directional louvers for total passenger comfort
- State-of-the-art enhanced coils for maximum cooling capacity and increased efficiency
- Variable speed blower allows for full air flow adjustment to optimize system to individual cooling preferences
- Heavy-duty steel frame is reinforced for added strength
- Can be front/rear center or front/rear side mounted in all makes/models of buses



Technical Data

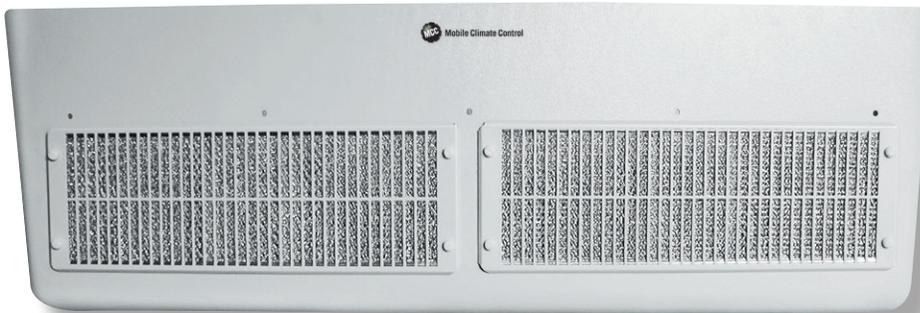
Cooling capacity	35000 Btu/hr (10.25 kW) IMACA ^[1]	13700 Btu/hr (4 kW) ARI ^[2]
Air flow	800 CFM (1359 m ³ /hr)	
Refrigerant	R134a	
Length	25.38" (645 mm)	
Width	19" (486 mm)	
Height	7.62" (193.5 mm)	
Weight	41 lbs (19 kg)	
Condensate drain connection	½" (12.7 mm) O.D	
Max amperage requirement	15.9 A @ 13.5 V dc (High Speed)	
Voltage	12 or 24 VDC	
Cover color	Snow White or Dove Gray	

[1] IMACA conditions: F (38°C) / 90°F (32°C) / 50% RH
 [2] ARI conditions: 95°F (35°C) / 80°F (27°C) / 50% RH

Evaporator **EM-9**

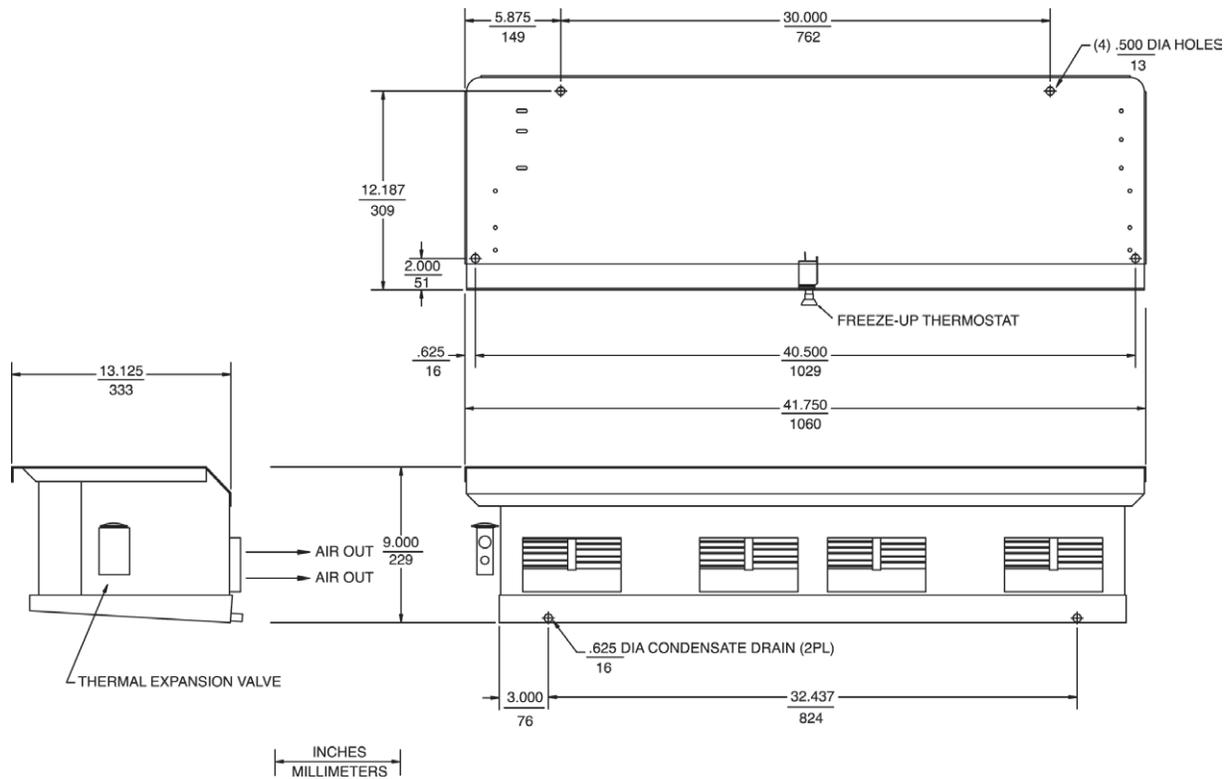
MCC EM-9 ceiling mount air conditioning evaporator has also been engineered for maximum serviceability and ease of installation in commercial and school buses. Because the drain pan is part of the basic system, the EM-9 can be completely installed, charged and tested before the cover is

put in place, greatly reducing installation time. Simple cover removal provides ready access to all serviceable components. This evaporator is available for ducted applications only up to 35" (889 mm) passenger areas.



Features

- Heavy-duty steel frame is reinforced for added strength
- High volume air flow that delivers performance in to any shape of duct work
- State-of-the-art enhanced coils for maximum cooling capacity and increased efficiency
- Flexible mounted positions offer airflow where you need it
- Three speed blower allows for full air flow adjustment to optimize system to individual cooling preferences
- Unit incorporates coil freeze up protection. The result is increased trouble-free compressor life
- Return air Filter can be removed and cleaned without removing the unit cover



Technical Data

Cooling capacity	60000 Btu/hr (17.5 kW) IMACA ^[1]	27000 Btu/hr (8 kW) ARI ^[2]
Air flow	1600 CFM (2718 m ³ /hr)	
Refrigerant	R134a	
Length	41.75" (1060 mm)	
Width	13.125" (333 mm)	
Height	9" (228 mm)	
Weight	85 lbs (38.5 kg)	
Condensate drain connection	½" (12.7 mm) O.D	
Max amperage requirement	37.5 A @ 13.5 V dc (High Speed)	
Voltage	12 or 24 VDC	
Cover color	Snow White or Dove Gray	

[1] IMACA conditions: 100°F (38°C) / 90°F (32°C) / 50% RH

[2] ARI conditions: 95°F (35°C) / 80°F (27°C) / 50% RH

Evaporator **EM-17**

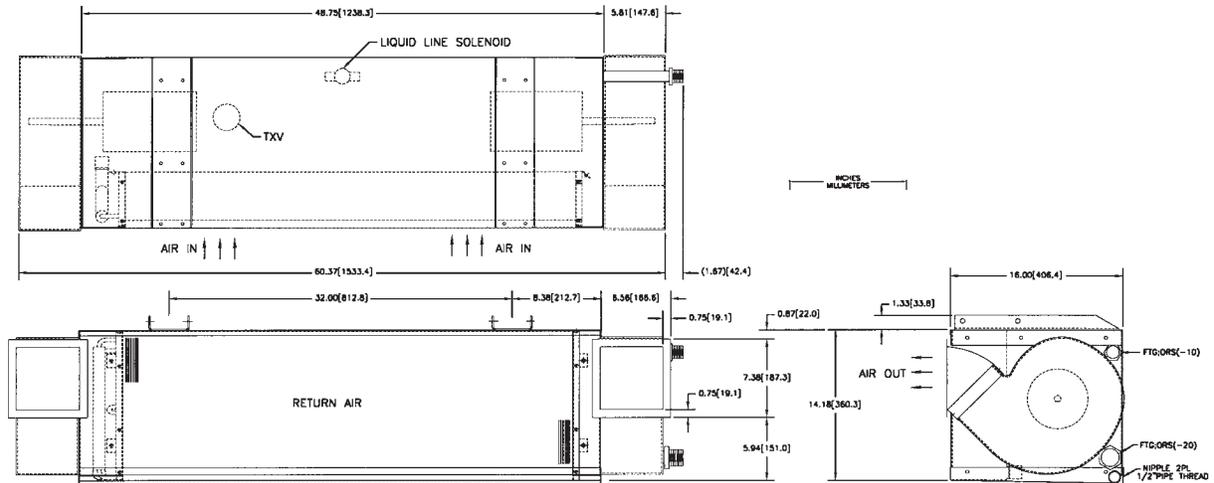
MCC's EM-17 rear ceiling mount air conditioning evaporator has been specifically engineered for use in vehicles with an overall length of 35 – 40' (1067 – 1219 cm) and which are used in the severest of climates and operating conditions. This unit was designed with the term "heavy-duty" in mind: from its long life large frame transit style motors to

its own power supply being generated by a 24V batteryless alternator. This is the unit that needs to be experienced to be appreciated. It has conquered transit-duty school bus applications in the desert, now let it conquer your unique application.



Features

- Internally-enhanced rugged coil design delivers the highest capacity in its class while using R-134a as its refrigerant
- Heavy-duty steel frame construction coupled with stainless steel fasteners equal rugged construction
- The highest air volume in its class is generated by two re-buildable 56-series cast frame constructed motors which drive two large diameter metal scroll blower wheels. This is then evenly dispersed through the use of ductwork to provide total passenger comfort
- State-of-the-art electronic controls are incorporated to provide minimum wiring, improved reliability, and maximum protection
- All refrigerant connection points are O-ring for added leak protection and are coupled with hoses constructed to meet or exceed SAE Spec J2064 Type E
- A vinyl-clad steel cover is included in your choice of two colors (snow white or dove gray) which are custom fit to your vehicles unique contours
- A durable aluminum mesh filter is mounted in an easy to service hinged air return grill for minimized service time and maximum operating time



Technical Data

Cooling capacity	130000 Btu/hr (38 kW) IMACA ^[1]	32760 Btu/hr (9.61 kW) ARI ^[2]
Air flow	2400 CFM (4080 m ³ /hr)	
Refrigerant	R134a	
Length	16" (406.4 mm)	
Width	48.75" (1238.3 mm)	
Height	15.5" (394 mm)	
Weight	196 lbs (89 kg)	
Condensate drain connection	½" (12.7 mm) O.D	
Current draw	57 amps at 27 VDC (Rated @ high speed and ½" static)	
Cooling coil	6 rows deep, galvanized steel tube sheets with internally enhanced 0.4" (9.5 mm) diameter copper tubes expanded into 0.006" (0.15 mm) aluminum fins	
Motors	Fully re-buildable 56-series frame construction capable of a constant duty design life rating of no less than 10000 hours. Motor shafts are a series-300 stainless steel for corrosion resistance. Motors are two speed (hi/low) through use of an external voltage dropping resistor.	
Blowers	Rated at 2060 CFM (3500 m ³ /hr) @ 0.5" (13 mm) static @ 27 volts and dynamical balanced for quiet operation.	
Blower housings	Steel construction coated with a heat-resistant sound dampening foam to aid in noise reduction	
Expansion valve	Externally equalized right-angle valve with a replaceable power head and cage assembly. The superheat is factory preset.	
Return air filter	Constructed of a durable aluminum mesh rated to pass FMVSS302.	

[1] IMACA conditions: 100°F (38°C) / 90°F (32°C) / 50% RH

[2] ARI conditions: 95°F (35°C) / 80°F (27°C) / 50% RH

Evaporator IW-1

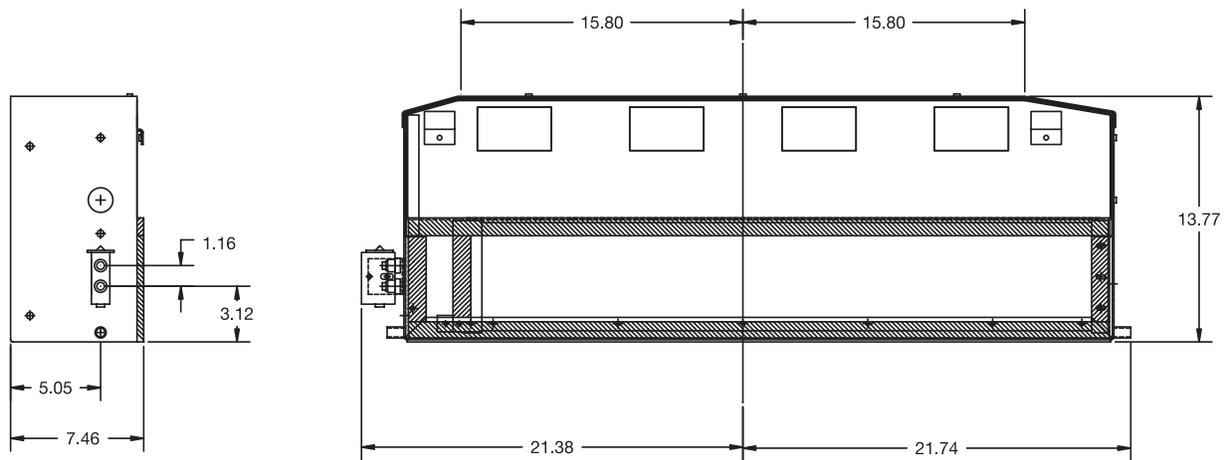
The IW-1 is designed to free up the overhead compartment where traditional evaporators are located. The IW-1 evaporator can also be matched with other MCC components to

provide a complete air conditioning system that meets your exact vehicle size, operating mode, and climate.



Features

- Lightweight aluminum frame construction
- Flexible mounting configurations for every make of body
- Integrated motor cover panel for ease of service
- State-of-the-art enhanced coils for maximum cooling capacity
- Flush mount installation provides maximum head clearance and clean OEM appearance
- Easy access hinged return air filter provides for reduced service time



Technical Data

Cooling capacity	55000 Btu/hr (16.11 kW) IMACA ^[1] 27005 Btu/hr (8 kW) ARI ^[2]
Air flow	1600 CFM (2718.42 m ³ /hr)
Refrigerant	R134a
Length	43.12" (1095.2 mm)
Width	7.46" (189.5 mm)
Height	13.77" (349.8 mm)
Weight	50 lbs (22.7 kg)
Condensate drain connection	½" (12.7 mm) OD
Max amperage requirement	23.7 A @ 13.5 V dc (High Speed)
Voltage	12 or 24 VDC
Cover color	Snow White or Dove Gray

[1] IMACA conditions: 100°F (38°C) / 90°F (32°C) / 50% RH
 [2] ARI conditions: 95°F (35°C) / 80°F (27°C) / 50% RH

Evaporator **IW-2**

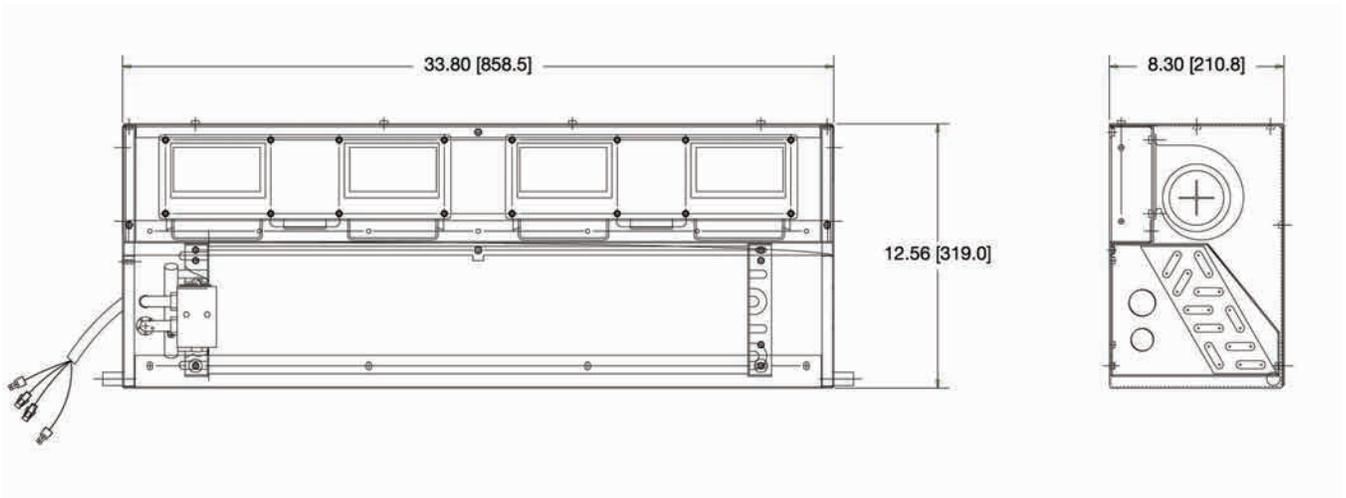
The IW-2 is designed to free up the overhead compartment where traditional evaporators are located. The IW-2 evaporator can also be matched with other MCC components to

provide a complete air conditioning system that meets your exact vehicle size, operating mode, and climate.



Features

- Lightweight aluminum frame construction
- Flexible mounting configurations for every make or body
- Integrated motor cover panel for ease of service
- State-of-the-art enhanced coils for maximum cooling capacity
- Flush mount installation provides maximum head clearance and clean OEM appearance
- Easy access return air filter provides for reduced service time



Technical Data

Cooling capacity	45000 Btu/hr (13.2 kW) IMACA ^[1]	18500 Btu/hr (5.42 kW) ARI ^[2]
Air flow	800 CFM (1359.2 m ³ /hr)	
Refrigerant	R134a	
Length	33.8" (858.5 mm)	
Width	8.30" (211 mm)	
Height	12.56" (319 mm)	
Weight	45 lbs (20.41 kg)	
Condensate drain connection	½" (12.7 mm) OD	
Max amperage requirement	23.7 A @ 13.5 V dc (High Speed)	
Voltage	12 or 24 VDC	
Cover color	Snow White or Dove Gray	

[1] IMACA conditions: 100°F (38°C) / 90°F (32°C) / 50% RH

[2] ARI conditions: 95°F (35°C) / 80°F (27°C) / 50% RH

Evaporator **IW-4**

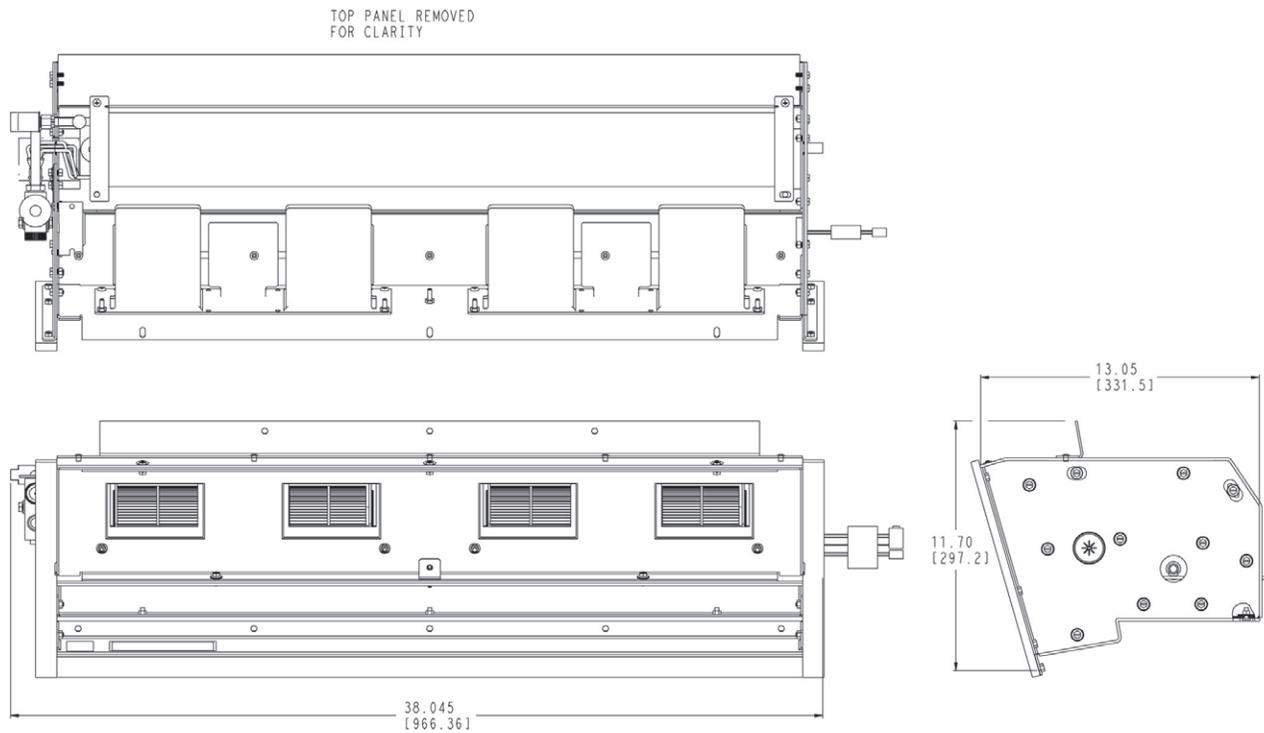
The IW-4 unit frees up the front bulkhead of Thomas Built Buses C2 conventional buses. The IW-4 evaporator can also be matched with other MCC components to provide

a complete air-conditioning system that meets your exact vehicle size, operating mode and climate.



Features

- Lightweight aluminum frame construction
- Integrated motor cover panel for ease of service
- Enhanced coils for maximum cooling capacity
- Easy access return air filter helps to reduce service time
- Drop-in one-piece construction simplifies installation time and provides maximum head clearance and clean OEM appearance



Technical Data

Cooling capacity	55000 Btu/hr (16.1 kW) IMACA ^[1]	28450 Btu/hr (8.33 kW) ARI ^[2]
Air flow	1500 CFM (2548.5 m ³ /hr)	
Refrigerant	R134a	
Length	38.10" (967.7 mm)	
Width	13.64" (346.5 mm)	
Height	10.30" (261.6 mm)	
Weight	40 lbs (18.1 kg)	
Condensate drain connection	½" (12.7 mm) OD	
Max amperage requirement	23.7 A @ 13.5 V dc (High Speed)	
Voltage	12 or 24 VDC	
Cover color	Snow White or Dove Gray	

[1] IMACA conditions: 100°F (38°C) / 90°F (32°C) / 50% RH

[2] ARI conditions: 95°F (35°C) / 80°F (27°C) / 50% RH

Evaporator **IW-10**

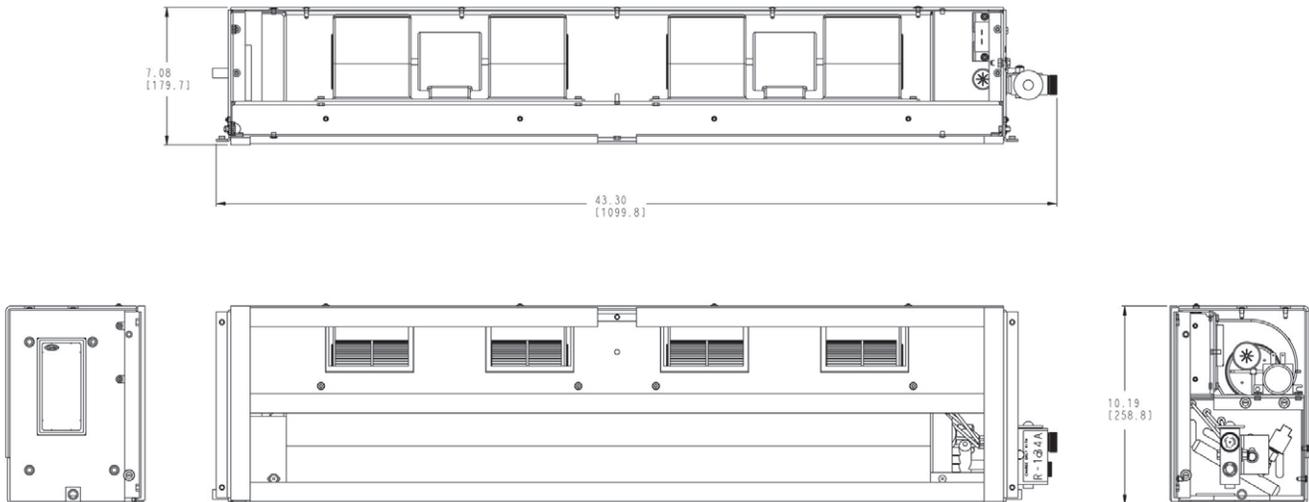
The IW-10 unit frees up the overhead compartment where traditional evaporators are located. The IW-10 evaporator can also be matched with other MCC components to

provide a complete air conditioning system that meets your exact vehicle size, operating mode and climate.



Features

- Lightweight aluminum construction
- Flexible mounting configurations
- Enhanced coils for maximum cooling capacity
- Easy access return air filter helps to reduce service time
- Flat or formed ABS cover
- Covers available in white or gray
- Flush mount installation provides maximum head clearance and clean OEM appearance



Technical Data

Cooling capacity	55000 Btu/hr (16.1 kW) IMACA ^[1]	20580 Btu/hr (6.87 kW) ARI ^[2]
Air flow	1300 CFM (2208.7 m ³)	
Refrigerant	R134a	
Length	43.30" (1100 mm)	
Width	7.00" (177.8 mm)	
Height	10.19" (259 mm)	
Weight	32 lbs (14.5 kg)	
Condensate drain connection	½" (12.7 mm) OD	
Max amperage requirement	23.7 A @ 13.5 V dc (High Speed)	
Voltage	12 or 24 VDC	
Cover color	Snow White or Dove Gray	

[1] IMACA conditions: 100°F (38°C) / 90°F (32°C) / 50% RH

[2] ARI conditions: 95°F (35°C) / 80°F (27°C) / 50% RH

Slim Line Series **Condenser CM-2**

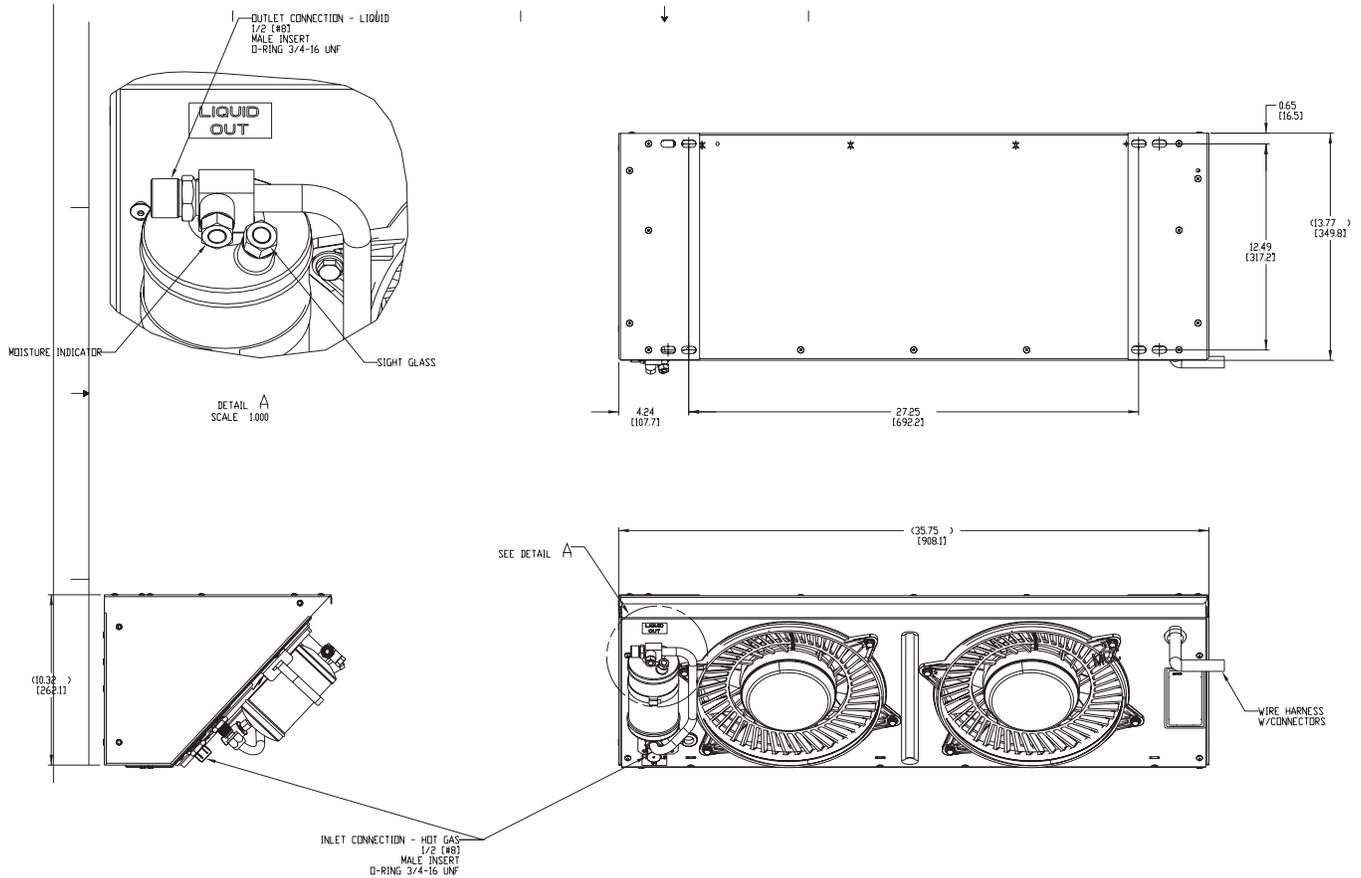
Field experience led to our innovative CM-2 condenser design for commercial and school bus air conditioning. Lower condensing temperatures and pressures result in enhanced cooling, longer compressor life and more efficient system operation. In this MCC unique design, air is channeled away from the vehicle undercarriage, eliminating recircu-

lation of hot air. Need high performance in new or retrofit applications, specify the MCC CM-2 condenser. The CM-2 condenser can be matched with other MCC components to provide a complete air conditioning system that meets your exact vehicle size, operating mode and environment.



Features

- Slim Line CM-2 cabinet is constructed using rugged, powder coated, steel construction
- Zinc coated for added durability and corrosion protection.
- Integrated high pressure safety switch as standard equipment
- Unitized motor/fan package increases service access and decreases service time
- Winter protection package
- Skirt mount or component mount air inlet grill
- 12V or 24V operation
- Stackable kit available
- Plug-n-Play connectors on unit and fan motor provide for ease of installation and motor service
- Incorporated single piece receiver/dryer and system moisture indicator reduced possible leak joints



Technical Data

Capacity	60000 Btu/hr (17.58 kW) IMACA ^[1]
Air flow	900 CFM (1529 m ³ /hr)
Condenser coil	Advanced technology Micro Channel Heat Exchanger (MCHX)
Condenser fans	Unitized, low-profile, axial-flow type propeller fans balanced for quiet, vibration-free operation with finger guard
Fan motors	Totally enclosed, pancake-style, permanent-magnet type with extended-life, permanently lubricated bearings
Max amperage requirement	14 amps @ 13.5 VDC; 7 amps @ 27.0 VDC
Safety controls	High refrigerant pressure cut-out 400 psi (28 bar); cut-in 300 psi (21 bar)
Receiver filter dryer	16 in ³ (262 cm ³), 1/2" [#8] Male Insert O-Ring (MIOR)
Weight	45 lbs (20.5 kg)
Available color	Midnight black

[1] IMACA conditions: 100°F (38°C) / 90°F (32°C) / 50% RH

Slim Line Series **Condenser CM-3**

Field experience led to our innovative CM-3 condenser design for commercial and school bus air conditioning. Lower condensing temperatures and pressures result in enhanced cooling, longer compressor life and more efficient system operation. In this MCC unique design, air is channeled away from the vehicle undercarriage, eliminating recirculation of

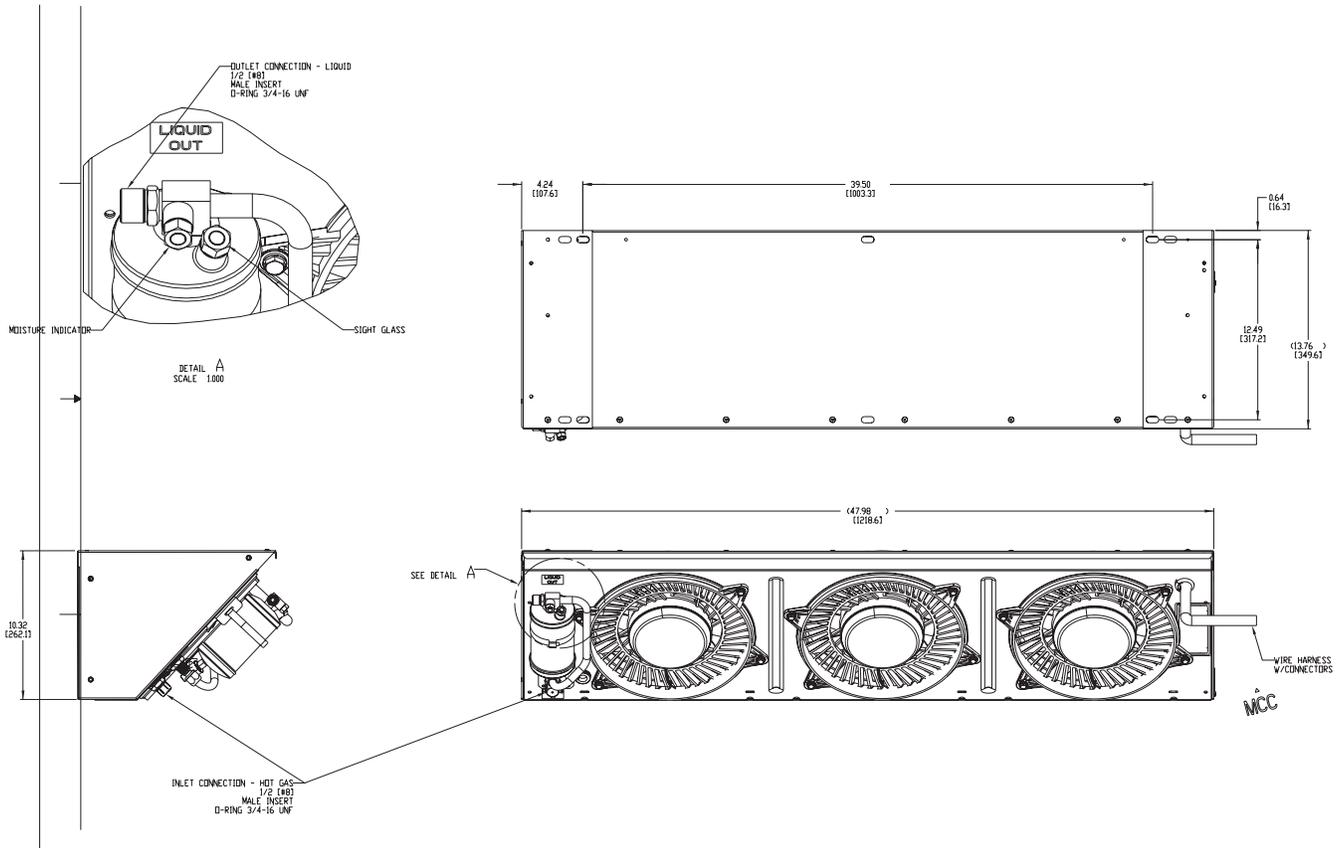
hot air. For high performance in new or retrofit applications, specify the MCC CM-3 condenser. The CM-3 condenser can be matched with other MCC components to provide a complete air conditioning system that meets your exact vehicle size, operating mode and climate.



Features

- Micro channel all aluminum coil design for unmatched-heat transfer
- Zink coated for added durability and corrosion protection
- Rugged coated steel construction
- Integrated high pressure safety switch as standard equipment
- Unitized motor/fan package increases service access and decreases service time
- Winter protection package
- Skirt mount or component mount air inlet grill
- 12V or 24V operation
- Stackable kit available
- Incorporated single piece receiver/dryer and system moisture indicator reduced possible leak joints
- Plug-n-Play connectors on unit and fan motor provide for ease of installation and motor service

Slim Line Series **Condenser CM-3**



Technical Data

Capacity	80000 Btu/hr (23.44 kW) IMACA ^[1]
Air flow	1350 CFM (2294 m ³ /hr)
Condenser coil	Advanced technology Micro Channel Heat Exchanger (MCHX)
Condenser fans	Unitized, low-profile, axial-flow vector fans balanced for quiet, vibration-free operation with finger guard
Fan motors	Totally enclosed, pancake-style, permanent-magnet type with extended-life, permanently lubricated bearings
Max amperage requirement	21 amps @ 13.5 VDC; 11.5 amps @ 27.0 VDC
Safety controls	High refrigerant pressure cut-out 400 psi (28 bar); cut-in 300 psi (21 bar)
Receiver filter dryer	16 in ³ (262 cm ³), ½" [#8] Male Insert O-Ring (MIOR)
Weight	51 lbs (23.2 kg)
Available color	Midnight black

[1] IMACA conditions: 100°F (38°C) / 90°F (32°C) / 50% RH

Condenser **CM-14**

Field experience led to our innovative CM-14 condenser design for commercial and school bus air conditioning. Lower condensing temperatures and pressures result in enhanced cooling, longer compressor life and more efficient system operation. In MCC unique design, air is channeled away from the vehicle undercarriage, eliminating recirculation of hot air.

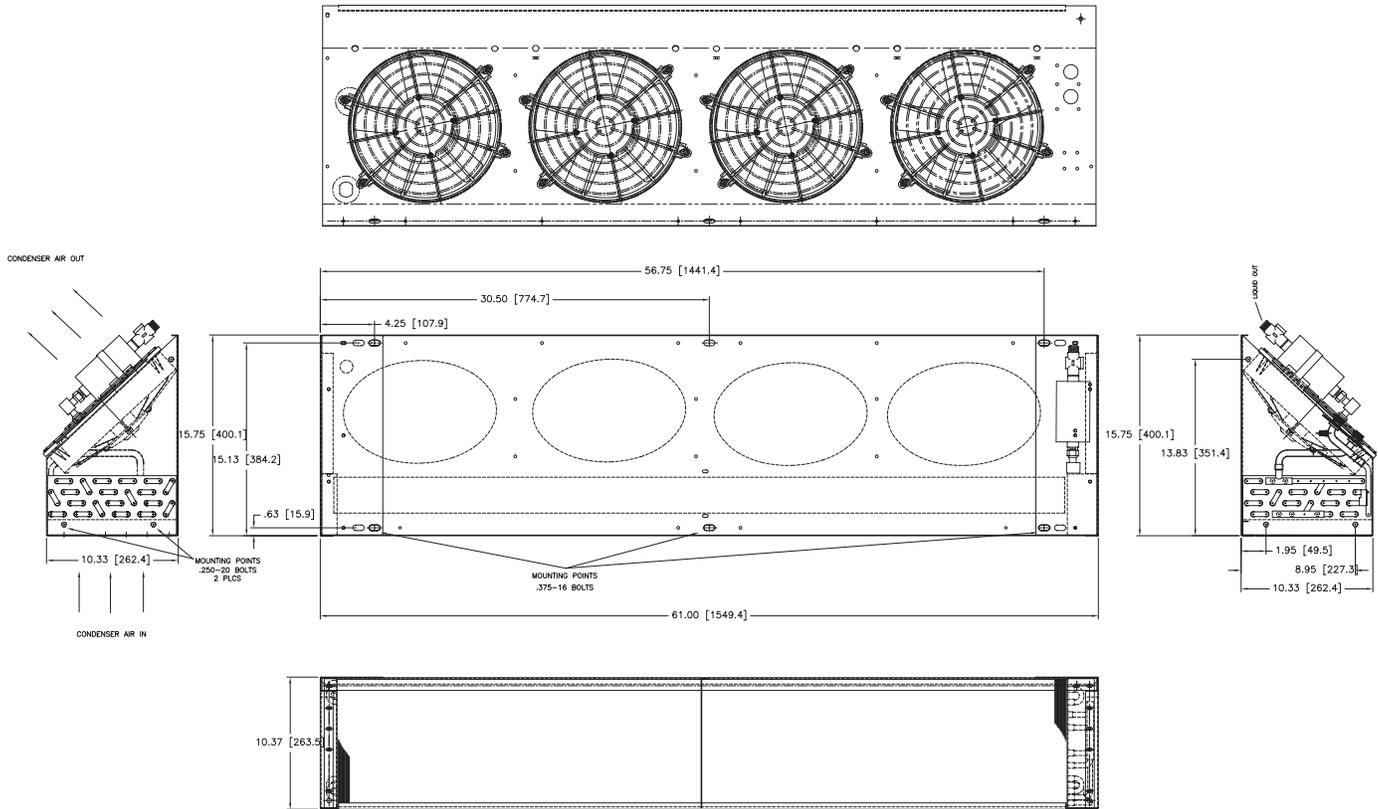
For best possible performance in new or retrofit applications, specify the MCC CM-14 condenser. The CM-14 condenser can be matched with other MCC components to provide a complete air conditioning system that meets your exact vehicle size, operating mode and climate.



Features

- Enhanced Copper Tube and Aluminium fin coil design for unmatched heat transfer coil
- Zinc coated for added durability and corrosion protection
- Rugged coated steel construction
- Integral high-pressure switch eliminates high-side compressor cycling
- Unitized motor/fan package increases service access and decreases service time
- Winter protection package
- Incorporated single piece combination filter drier and sight glass with system moisture indicator reduces possible leak joints
- Skirt mount or component mount air inlet grille
- 12 V or 24 V operation
- Stackable kit available
- Plug-n-Play connectors on unit and fan motor provide for ease of installation and motor service

Condenser **CM-14**



Technical Data

Capacity	107000 Btu/hr (31.35 kW) IMACA ^[1]
Air flow	3200 CFM (5437 m ³ /hr)
Condenser coil	Four rows deep, patented, internally enhanced copper tubes expanded into aluminum fins
Condenser fans	Unitized, low-profile, axial-flow vector fans balanced for quiet, vibration-free operation with finger guard
Fan motors	Totally enclosed, pancake-style, permanent-magnet type with extended-life permanently lubricated bearings
Max amperage requirement	29 amps @ 13.5 VDC; 26 amps @ 27.0 VDC
Safety controls	High refrigerant pressure cut-out 400 psi (28 bar); cut-in 300 psi (21 bar)
Receiver filter dryer	16 in ³ (262 cm ³)
Weight	95 lbs (43.1 kg)
Available color	Midnight Black

[1] IMACA conditions: 100°F (38°C) / 90°F (32°C) / 50% RH

Condenser **KR-4**

MCC's KR-4 high-capacity roof mount condenser has been specifically engineered for use in school and commercial buses that are 20'– 40' (7620 – 12192 mm) long.

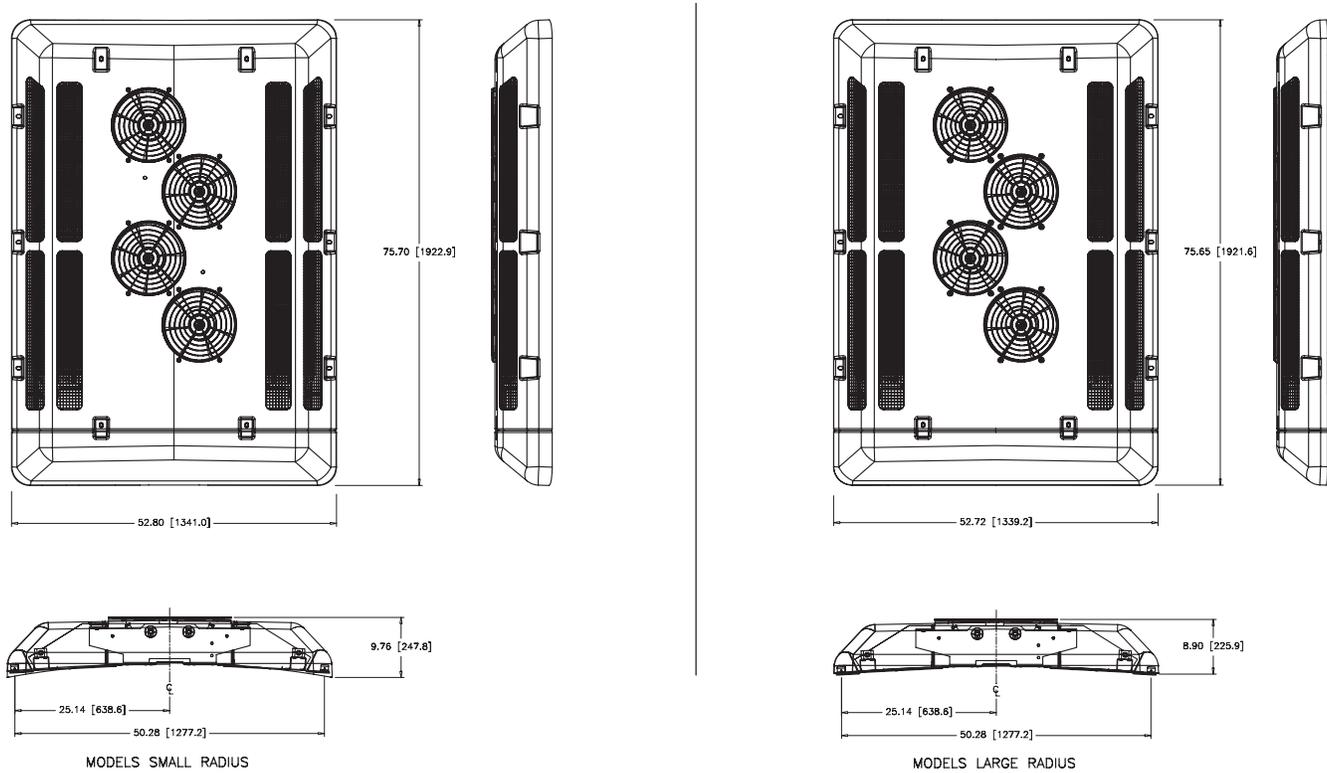
The ultra-low-profile KR-4 roofmount condenser frees up the skirt area for a variety of options including CNG tanks, wheel-chair lifts and luggage boxes. Simply mount it on the roof and free up space inside.



Standard Features

- Delivers the highest capacity in its class using R134a
- The sleek, low-profile design looks like part of the roof
- Transit-duty construction: Combines the toughness of steel with the light weight and corrosion resistance of aluminum fiberglass
- Swiss-made, stainless steel shaft with long-life, ball-bearing motors
- Available in both 12V and 24V configurations
- All refrigerant termination points feature O-ring connections for ease of installation and leak-free reliability
- The KR-4 can be matched with a wide variety of MCC evaporators including our EM-1, EM-3, EM-9 and EM-17
- MCC's newest "whisper quiet" fan technology, which delivers the highest-rated CFM at the industry's lowest decibel rating
- Two cover radiuses available to better fit your application. Small (15" red) and larger (300" red)

Condenser KR-4



Technical Data

Capacity	163000 Btu/hr (47.7 kW) IMACA ^[1]
Coil	Four rows deep. Aluminum tube sheets with MCC's patented, internally enhanced 3/8" diameter copper tubes expanded into .008"-thick aluminum-coated fins
Motors	Four permanent-magnet fan motors. Stainless steel shafts and sealed ball-type bearings rated at 20000 hours
Air flow	3500 CFM (5946.5 m ³ /hr) at 2950 rpm; zero-static rating condition
Fan blade	Four tri-blade glass-filled ABS propeller-type fans, 14" in diameter
Housing	Corrosion-resistant, lightweight, hand-laid fiberglass with UV-resistant gel-coated exterior layer
Fitting connections	Single Circuit – Outlet – #12 male ORFS Inlet – #16 male ORFS Dual Circuit – Outlet – # 8 (3/4"-16) male insert O-ring Inlet – #10 (7/8"-14) male insert O-ring
Max amperage requirement	44 amps @ 13.5 VDC; 22 amps @ 27.0 VDC
Weight	187 lbs (85 kg)

[1] IMACA conditions: 100°F (38°C) / 90°F (32°C) / 50% RH

Roof top Condenser **K-410**

Our K-410 high capacity roof mount condenser has been specifically engineered for use in commercial, light transit and school bus applications. This unit is the perfect marriage of sleek, low profile European styling and American innovation.

The rugged fiberglass cover shrouds the high strength steel and lightweight aluminum structure underneath, while allowing complete service access without cover removal.

The highly adjustable mounting rails are designed to attach this unit to any exterior roof radius without leaving visually unsightly gaps between roof and unit cover.

MCC's innovative introduction of the roofmount condenser series to the North American bus market has given body builders the opportunity to free up skirt space for a variety of options including CNG tanks, wheelchair lifts and luggage compartments, while maintaining an aerodynamic exterior appearance to your vehicle.

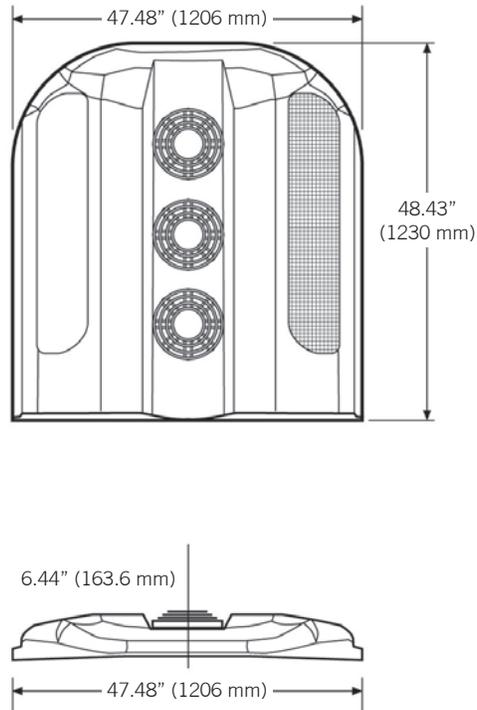
The roofmount condenser is the answer to severe road salt corrosion and high radiant ground temperature environments.



Features

- Half the height of current models
- Lower condensing temperatures and pressures than skirt-mounted condensers provide enhanced cooling and better efficiency
- Adaptable to 12V and 24V applications
- Corrosion resistant, lightweight frame
- Lightweight, durable fiberglass cover
- Optional fan winter guard kit

Condenser **K-410**



Technical Data

Capacity	82000 Btu/hr (24 kW) IMACA ^[1] 57000 Btu/hr (16.7 kW) ARI ^[2]
Air flow	1700 CFM (288 m ³ /hr)
Condenser coil	Two coils each, two rows deep with internally enhanced copper tubes expanded into aluminium fins
Condenser fans	3
Fan motors	Totally enclosed, pancake-style, permanent-magnet type with extended-life permanently lubricated, sealed bearings and 4-pole graphite brushes
Max amperage requirement	23 amps @ 13.5 VDC; 11 amps @ 24 VDC
Safety controls	High refrigerant pressure cut-out 400 psi (28 bar); cut-in 300 psi (21 bar)
Filter dryer	16 in ³ (262 cm ³)
Weight	Installed weight 80 lbs (36.3 kg)
Available color	Gel coat white

[1] IMACA conditions: 100°F (38°C) / 90°F (32°C) / 50% RH
 [2] ARI conditions: 95°F (35°C) / 80°F (27°C) / 50% RH