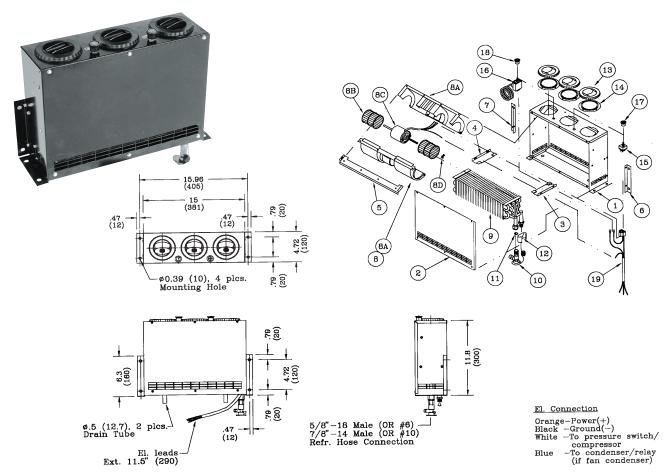
IX. Compact AC





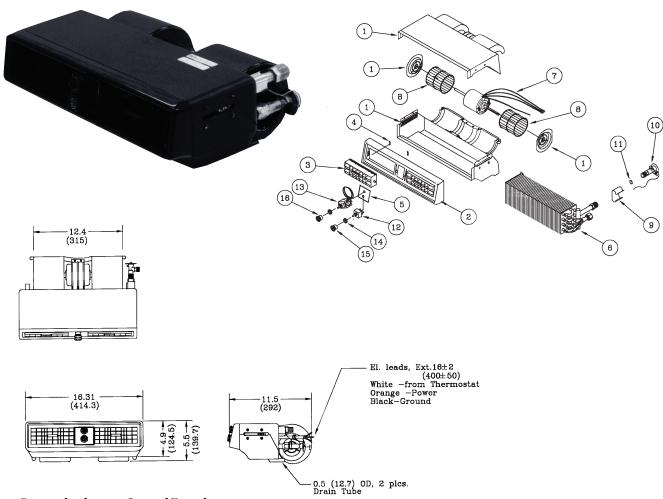
Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description
13-0121	Air Conditioner 12V	1	24-1584	Casing	8D	25-0022	Clip
13-0122	Air Conditioner 24V	2	24-1585	Cover	9	21-0276	Evaporator Coil
		3	24-1586	Coil Bracket (R)	10	26-0162	Expansion Valve
Specifications		4	24-1587	Coil Bracket (L)	11	27-0602	O-Ring #8
Cooling	-15700 Btu/hr (4600 W)	5	24-1588	Blower Support	12	26-0006	Bulb Clamp
Air Flow	-200 CFM (340 m ³ /h)	6	24-1941	Mounting Bracket (R)	13	23-0005	Louver
Current	-13 Amps/13.5V	7	24-1942	Mounting Bracket (L)	14	23-0048	Adapter
	-6.5 Amps/27V	8	15-0503	Blower 12V	15	25-0029	Blower Switch
Weight	-19 lbs. (8.6 kg)		15-0504	Blower 24V	16	25-0045	Thermostat
		88	25-0017	Blower Housing	17	25-0067	Knob
Casing made of 18GA (1.25mm) Cold Rolled		8B	25-0021	Blower Wheel	18	25-0068	Knob
Steel and finished in black semi-gloss epoxy		80	25-0070	Motor 12V	19	25-0586	Wiring Harness
powder coat.			25-0076	Motor 24V			

Features

The 301 is a compact air conditioner that is ideal for small cabs. It can be wall mounted or used as a stand alone floor mount.





Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description
13-0221	Air Conditioner 12V	1	28-0001	Case	9	26-0006	Bulb Clamp
13-0222	Air Conditioner 24V	2	28-0002	Bezel	10	26-0162	Expansion Valve
		3	23-0011	Louver	11	27-0602	O-Ring #8
Specifications		_ 4	23-0028	Louver Strip	12	25-0029	Switch
Cooling	-17950 Btu/hr (5260 W)	5	25-0032	Switch Plate	13	25-0030	Thermostat
Air Flow	-250 CFM (425 m ³ /h)	6	21-0003	Evaporator Coil	14	25-0059	Nut Cover
Current	-11 Amps/13.5V	7	25-0677	Motor 12V	15	25-0067	Knob
	-5.5 Amps/27V		25-0678	Motor 24V	16	25-0068	Knob
Weight	-9 lbs. (4 kg)	8	25-0021	Blower Wheel	17	25-0679	Wiring Harness
3-Speed motor.							(Not Shown)

Features

The 302 is a compact unit that can be ducted to deliver air flow where desired. Ideal for dash or compartment mounting.





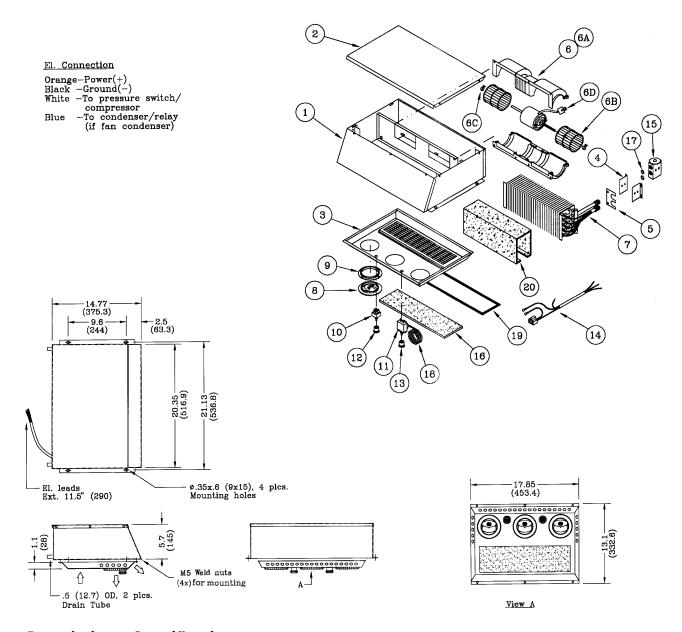
Part Descriptions: Specifications

Part No.		Specification	ns	
13-5521 13-5522	Air Conditioner 12V Air Conditioner 24V	Cooling Air Flow Current Weight	-20000 Btu/hr (5860 W) -275 CFM (468 m³/h) -12 Amps/13.5V -6 Amps/27V -31 lbs. (14 kg)	Made of 18GA (1.25mm) Cold Rolled Steel and finished in grey epoxy powder coat.

Features

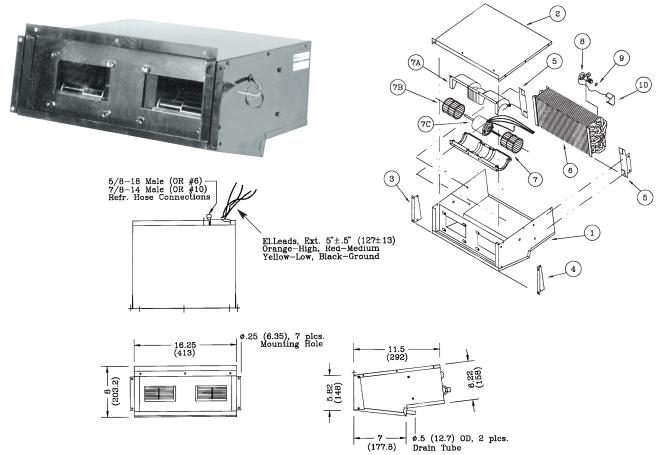
The 355 is a low profile roof mount air conditioner.





No.	Part No.	Description	No.	Part No.	Description	No.	Part No.	Description
1	24-2177	Casing Assy.	6C	25-0643	Motor 12V	13	25-0068	Knob (Temp.)
2	24-2296	Cover Assy.		25-0644	Motor 24V	14	25-0672	Wiring Harness
3	24-2437	Air Plenum	6D	25-0022	Clip	15	26-0190	Block Valve
4	24-2439	Support Bracket	7	21-0399	Evaporator Coil	16	26-0431	Air Filter
5	24-2440	Cover Plate	8	23-0005	Louver	17	27-0602	O-Ring #8
6	15-0533	Blower 12V	9	23-0048	Adapter	18	28-0031	PVC Hose
	15-0534	Blower 24V	10	25-0044	Blower Switch	19	28-0166	Hook Tape
6A	25-0017	Blower Housing	11	25-0045	Thermostat	20	28-0230	Reticulated Foam
6B	25-0021	Blower Wheel	12	25-0067	Knob(Fan)			





Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description
13-1153	Air Conditioner 12V	1	24-0267	Casing	7A	25-0017	Blower Housing
13-1154	Air Conditioner 24V	2	24-0270	Cover	7B	25-0021	Blower Wheel
		3	24-0192	Mounting Bracket (L)	7C	25-0070	Motor 12V
Specifications		_ 4	24-0193	Mounting Bracket (R)		25-0075	Motor 24V
Cooling	-21800 Btu/hr (6390 W)	5	24-0194	Coil Bracket	8	26-0162	Expansion Valve
Air Flow	-325 CFM (552 m ³ /h)	6	21-0045	Evaporator Coil	9	27-0602	O-Ring #8
Current	-11.6 Amps/13.5V	7	15-0503	Blower Assy. 12V	10	26-0006	Bulb Clamp
	-5.8 Amps/27V		15-0504	Blower Assy. 24V			•
Weight	-17 lbs. (7.7 kg)			,			
3-Speed motor							
	(1.25mm) Cold Rolled Steel						

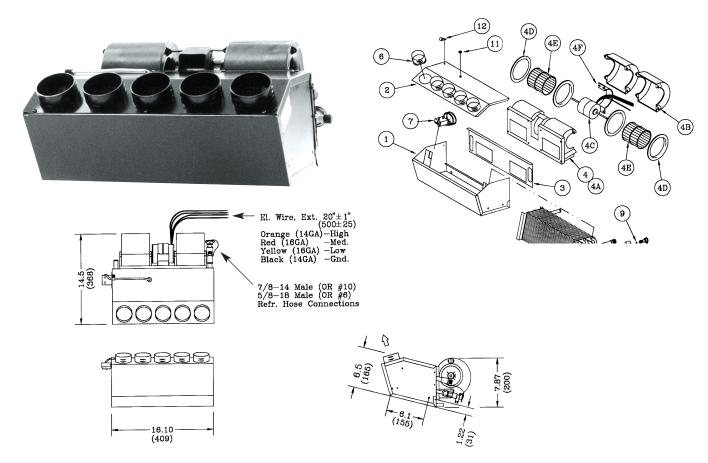
Features

separately.

The 311 is ideal for ambulance requirements.

and finished in black semi-gloss epoxy powder coat. Louvers have to be ordered





Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description
13-0651	Heater-AC 12V	1	24-0035	Casing	4E	25-0200	Blower Wheel
13-0652	Heater-AC 24V	2	24-0404	Cover	4F	25-0271	Motor Mount
		3	24-0497	Blower Plate	5	21-0005	Combo Coil
Specifications		_ 4	15-1513	Blower 12V	6	23-0038	Hose Adapter 2 1/2"
Heating	-33000 Btu/hr (9675 W)		15-1514	Blower 24V	7	25-0069	Thermostat
Cooling	-22500 Btu/hr (6685 W)	4A	25-0048	Blower Housing	8	26-0162	Expansion Valve
Air Flow	-400 CFM (680 m ³ /h)	4B	25-0348	Housing Top	9	27-0602	O-Ring #8
Current	-14 Amps/13.5V	4C	25-0053	Motor 12V	10	26-0006	Bulb Clamp
	-7 Amps/27V		25-0076	Motor 24V	11	28-0021	Snap-in Plug
Weight	-19 lbs. (8.6 kg)	4D	25-0060	Venturi	12	29-0139	Half Clamp 5/16"

Casing made of 18GA (1.25mm) Cold Rolled Steel and finished in black semi-gloss epoxy powder coat.

Features

The 306 is ideal for under seat or dash mounting. It's high performance capacity can handle most cab requirements. It can also be used in limousine applications.





Part Descriptions: Specifications

Part No.		Specificatio	ns	
13-1003	Heater-AC 12V	Heating	-25500 Btu/hr (7480 W)	Made of 18GA (1.25mm) Cold Rolled
13-1004	Heater-AC 24V	Cooling	-19775 Btu/hr (5800 W)	Steel and finished in black semi-gloss
13-1023	Air Conditioner 12V	Air Flow	-300 CFM (510 m ³ /h)	epoxy powder coat.
13-1024	Air Conditioner 24V	Current	-12 Amps/13V	
13-1090	Plenum Assy.		-6 Amps/27V	Pictured with optional cover (item 19)
	Incl.19A, 19B, 19C	Weight	-27.3 lbs. (12.4 kg)	installed.

Features

The 310 is a compact unit that can be used as a free blowing or ducting unit to direct air around the cab. A remote mount control panel is required for this system.



El. Connector (View A) Ext. 7"±1"(180±25) 2.3 -(58.4) -17.5 -(444.8) ⊷.8 (20.3) 1→ (25) 45° -- 15.5 --(393.6) Block Valve (25.4) -- 18.4 --(467.3) Ø0.31 (8), 4 plcs. Mounting Hls.

View without Louver Adapter

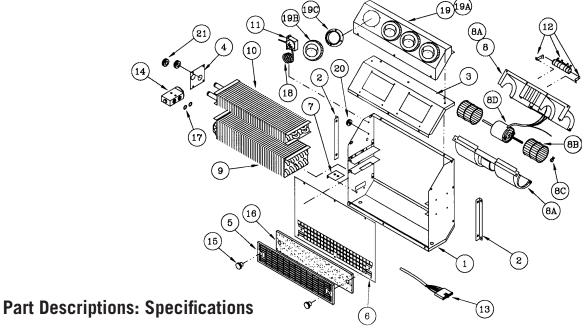


View A

A-Orange B-Red C-Yellow D-Black E-White F-White

-High speed
-Medium speed
-Low speed
-Ground
-From AC On-Off Switch
-To Compressor (over H/L switch)

Wheather pack 8-Way Male Conn. #12010975 (MCC #31-1046) with Terminal #12124582 (MCC #31-1039) and seal #12010293 (MCC #31-1024).



No.	Part No.	Description	No.	Part No.	Description	No.	Part No.	Description
1	24-2124	Casing	8B	25-0021	Blower Wheel	15	26-0263	Knurled Knob
2	24-2125	Mounting Bracket	8C	25-0022	Clip	16	26-0399	Air Filter
3	24-2126	Blower Plate	8D	25-0228	Motor 12V	17	27-0602	O-Ring
4	24-2166	Cover Plate		25-0298	Motor 24V	18	28-0031	PVC Hose
5	24-2167	Grill	9	21-0364	Evaporator	19	13-1090	Plenum Assy.
6	24-2168	Front Cover	10	22-0319	Heater Coil			Inc. 19A, B, C.
7	24-2211	Expansion Valve Bkt.	11	25-0069	Thermostat	19A	24-2396	Plenum
8	15-0551	Blower 12V	12	25-0601	Resistor 12V	19B	23-0005	Louver
	15-0552	Blower 24V		25-0602	Resistor 24V	19C	23-0048	Adapter
88	25-0017	Blower Housing	13	25-0664	Wiring Harness	20	28-0004	Grommet
			14	26-0190	Block Valve	21	28-0009	Grommet





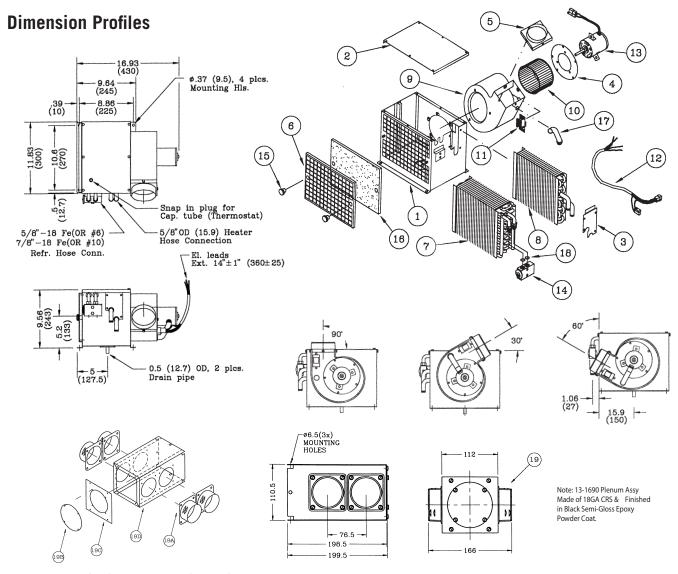
Part Descriptions: Specifications

Part No.		Specification Specification	ns	
13-1601 13-1602 13-1690	Heater-AC 12V Heater-AC 24V Plenum Assy. Inc. 19A -19D	Heating Cooling Air Flow Current Weight	-32500 Btu/hr (9525 W) -26500 Btu/hr (7770 W) -350 CFM (595 m³/h) -24 Amps/12V -12 Amps/24V -26 lbs. (11.8kg)	The unit is supplied w/o heater valve and de-icing thermostat, which have to be installed if needed.

Features

The 316 is designed for behind the seat installations or for sleeper bunks. It is also designed to duct air around the cab. The blower can be rotated as shown in dimension profiles.





Part Descriptions: Specifications

No.	Part No.	Description	No.	Part No.	Description	No.	Part No.	Description
1	24-2425	Casing	10	25-0098	Blower Wheel	16	26-0430	Air Filter
2	24-2426	Cover	11	25-0136	Resistor 12V	17	27-0105	Vent Tube
3	24-2427	Cover Plate		25-0552	Resistor 24V	18	27-0602	O-Ring #8
4	24-2431	Motor Plate	12	25-0538	Wiring Harness	19*	13-1690	Plenum Assy
5	24-2432	Hose Adapter	13	25-0675	Motor 12V	19A	23-0125	Hose Adapters 2.5"
6	24-2501	Filter Grill		25-0676	Motor 24V	19B	23-0006	Cover Plate
7	21-0395	Evaporator Coil	14	26-0190	Block Valve	19C	24-3317	Covers
8	22-0339	Heater Coil	15	26-0263	Knurled Knob	19D	24-3316	Plenum
9	25-0668	Blower Housing						

Item 19 is optional and has to be ordered seperately.

Features

The 316 is designed for behind the seat installations or for sleeper bunks. It is also designed to duct air around the cab. The blower can be rotated as shown in dimension profiles.





Note:

Switch is not as depicted in photo, has been changed to sealed rocker switch.

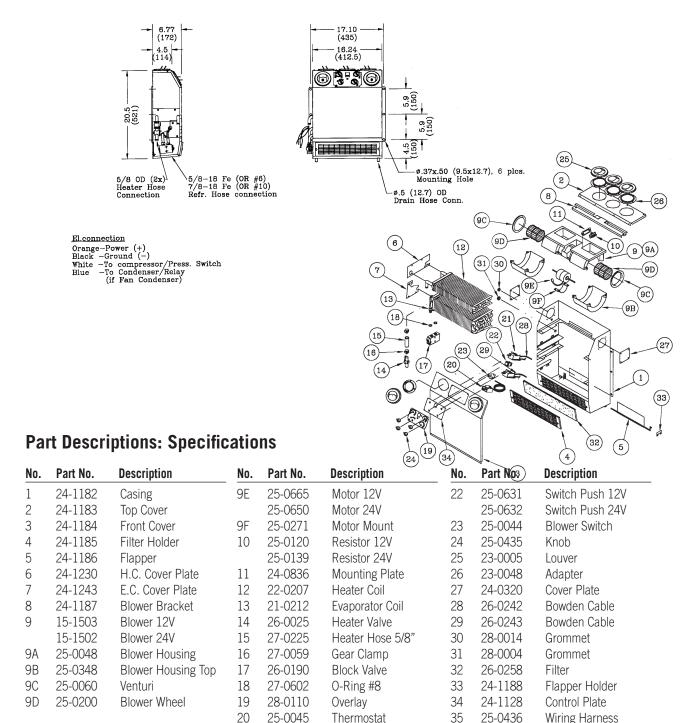
Part Descriptions: Specifications

Part No.		Specifications		
13-2021 13-2022 13-2051 13-2052	Heater-AC 12V Heater-AC 24V Air Conditioner 12V Air Conditioner 24V	Heating Cooling Air Flow- Current	-28000 Btu/hr (8200 W) -21000 Btu/hr (6150 W) 380 CFM (646 m³/h) -18 Amps/13.5V -9 Amps/27V	Made of 18GA (1.25mm) Cold Rolled Steel and finished in black semi-gloss epoxy powder coat.
		Weight	-40 lbs. (18 kg)	
		3-Speed blower	r.	

Features

The 320 is a universal wall mounted unit that can handle the requirements of most off-road cabs. An outside filter kit and damper door can be added for outside air.





Features

The 320 is a universal wall mounted unit that can handle the requirements of most off-road cabs. An outside filter kit and damper door can be added for outside air.

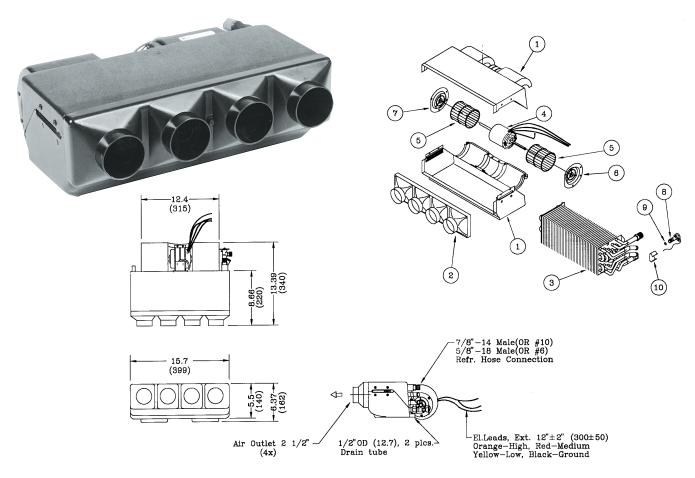
Rotary Control

(Not Shown)

21

26-0095





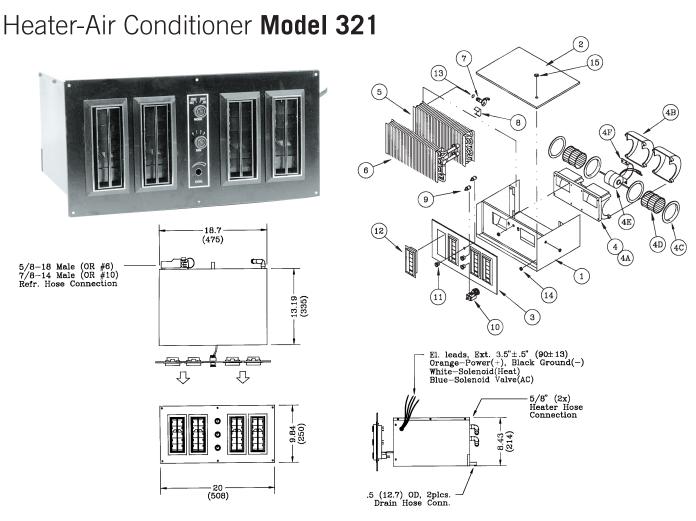
Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description
13-0953	Heater-AC 12V	1	28-0016	Case	6	28-0019	Venturi (R)
13-0954	Heater-AC 24V	2	28-0006	Bezel	7	28-0020	Venturi (L)
Specifications		3 4	21-0012 25-0070	Combo Coil Motor 12V	8 9	26-0162 27-0602	Expansion Valve O-Ring #8
Heating	-20200 Btu/hr (5920 W)		25-0076	Motor 24V	10	26-0006	Bulb Clamp
Cooling	-15100 Btu/hr (4425 W)	5	25-0021	Blower Wheel			Р
Air Flow	-310 CFM (530 m ³ /h)						
Current	-11 Amps/13.5V						
	-5.5 Amps/27V						
Weight	-10.5 lbs. (4.8 kg)						
3-Speed motor.							
Casing made of	ABS.						

Features

The 309 is a compact unit that can be ducted to deliver air flow where desired. Ideal for dash or compartment mounting.





Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description
13-2155	Heater-AC 12V	1	24-0539	Casing	6	22-0130	Heater Coil
		2	24-0274	Cover	7	26-0162	Expansion Valve
		3	24-0275	Front	8	26-0006	Bulb Clamp
Specifications		4	15-1513	Blower 12V	9	25-0029	Switch
Heating	-40000 Btu/hr (11720 W)	4A	25-0048	Blower Housing	10	25-0045	Thermostat
Cooling	-27300 Btu/hr (8000 W)	4B	25-0348	Housing Top	11	25-0072	Knob
Air Flow	-450 CFM (765 m ³ /h)	4C	25-0060	Venturi	12	23-0055	Louver
Current	-17 Amps/12V	4D	25-0200	Blower Wheel	13	27-0602	O-Ring #8
Weight	-31 lbs. (14 kg)	4E	25-0053	Motor 12V	14	28-0004	Grommet
J	G	4F	25-0271	Motor Mount	15	28-0021	Snap-in Plug
	(1.25mm) Cold Rolled Steel h black semi-gloss epoxy	5	21-0046	Evaporator Coil	10	20 0021	- C.

Features

The 321 was designed for ambulance installation. It can be used for any deck mounting application. The high capacity of the 321 makes this unit ideal for ambulance and large cabs.





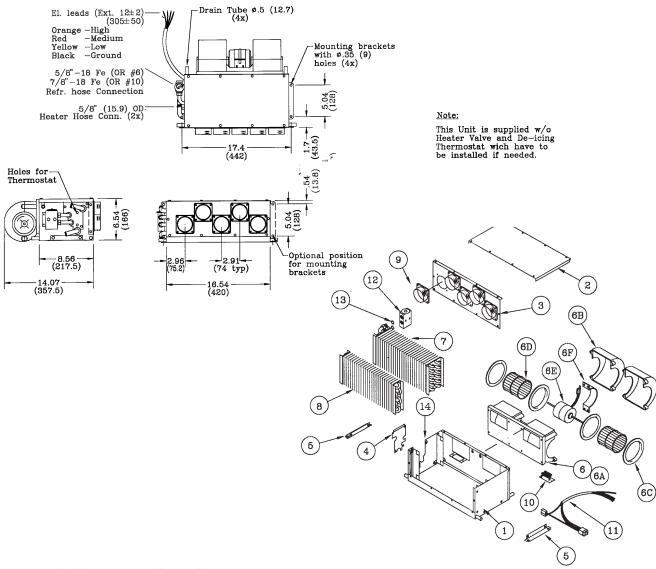
Part Descriptions: Specifications

Part No.		<u>Specification</u>	ns	
13-2503 13-2504	Heater-AC 12V Heater-AC 24V	Heating Cooling Air Flow Current Weight	-36000 Btu/hr(10500 W) -28500 Btu/hr (8350 W) -450 CFM (765 m³/h) -16 Amps/13.5V -8 Amps/27V -19 lbs. (8.6 kg)	Permanent magnet motor with ball bearings. Casing made of 18GA (1.25mm) Cold Rolled Steel and finished in black semi-gloss powder coat.

Features

The 325 is a universal unit that fits all ducting requirements.





Part Descriptions: Specifications

No.	Part No.	Description	No.	Part No.	Description	No.	Part No.	Description
1	24-0027	Casing	6B	25-0348	Housing Top	9	23-0125	Hose Adapter 2.5"
2	24-0028	Cover	6C	25-0060	Venturi	10	25-0136	Resistor 12V
3	24-0013	Cover	6D	25-0200	Blower Wheel		25-0552	Resistor 24V
4	24-0017	Coil Cover (H)	6E	25-0645	Motor 12V	11	25-0671	Wiring Harness
5	24-0033	Mounting Bracket		25-0650	Motor 24V	12	26-0190	Block Valve
6	15-1501	Blower 12V	6F	25-0271	Motor Mount	13	27-0602	O-Ring #8
	15-1502	Blower 24V	7	21-0091	Evaporator Coil	14	25-0069	Thermostat
6A	25-0048	Blower Housing	8	22-0348	Heater Coil			

Features

The 325 is a universal unit that fits all ducting requirements.



Note:

Switch is not as depicted in photo, has been changed to sealed rocker switch.

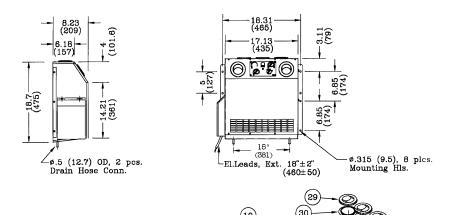


Part Descriptions: Specifications

Part No.		Specification	18	
13-3061 13-3062 13-3063 13-3064 13-3067	Heater-AC 12V Heater-AC 24V Air Conditioner 12V Air Conditioner 24V Heater 12V	Heating Cooling Air Flow Current	-42200 Btu/hr(12370 W) -28500 Btu/hr (8350 W) -450 CFM (765 m³/h) -22 Amps/13.5V -11 Amps/27V	Permanent magnet motor with long life brushes. 3-Speed blower. Made of 18GA (1.25mm) Cold Rolled Steel and finished in black semi-gloss
Features		Weight	-38 lbs. (17.2 kg)	epoxy powder coat. Items 31-35 are optional and have to be ordered separately

Although similar in design and function, the 330 is a larger capacity unit than the 320. It is ideal for street sweepers and large off-road cabs. Outside air can be achieved by adding a filter kit.





Note: 5/8-18 Male (OR #6) 7/8-14 Male (OR #10) Refr. Hose Conn. 5/8" OD Heater Hose Conn. All behind protection cover.

Electrical Connections Orange - Power (+)

Black - Ground (-)
White - To Compressor/Pressure Switch
Blue - To Condensor/Relay (if fan condensor)

No.	Part No.	Description	No.	Part No.	Description	No.	Part No.	Description
1	24-1157	Casing	9F	24-0271	Motor Mount	23	25-0045	Thermostat
2	24-1158	Front Cover	10	24-1160	Blower Mount	24	24-0836	Resistor Bracket
3	24-1159	Top Cover	11	22-0078	Heater Coil	25	25-0120	Resistor 12V
4	24-0205	Protection Cover	12	21-0063	Evaporator Coil		25-0139	Resistor 24V
5	24-0290	Mounting Bracket (L)	13	26-0025	Heater Valve	26	28-0014	Grommet
6	24-0279	Mounting Bracket (R)	14	27-0225	Heater Hose 5/8"	27	28-0110	Overlay
7	24-0242	Coil Bracket	15	27-0059	Gear Clamp	28	24-1128	Control Plate
8	24-0291	Fresh Air Cover	16	26-0190	Block Valve	29	23-0005	Louver
9	15-1503	Blower 12V	17	27-0602	O-Ring #8	30*	23-0048	Adapter
	15-1502	Blower 24V	18	25-0435	Knob	31*	23-0087	Ball Louver
9A	25-0048	Blower Housing	19	25-0631	Switch Push 12V	32*	23-0110	Hose Adapter 2"
9B	25-0348	Blower Housing Top		25-0632	Switch Push 24V	33*	23-0125	Hose Adapter 2.5"
9C	25-0060	Venturi	20	26-0095	Rotary Control	34*	24-2018	Grill
9D	25-0200	Blower Wheel	21	26-0320	Bowden Cable	35*	26-0425	Air Filter
9E	25-0665	Motor 12V	22	25-0044	Blower Switch	36	25-0436	Wiring Harness
	25-0650	Motor 24V						(Not Shown)



Note:

Switch is not as depicted in photo, has been changed to sealed rocker switch.



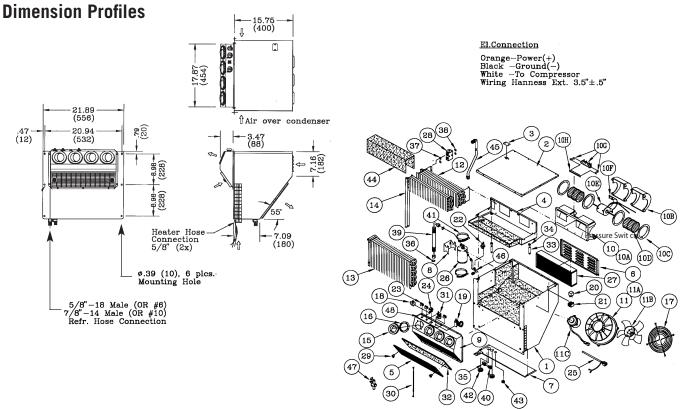
Part Descriptions: Specifications

Part No.		Specification	18	
13-4401 13-4402	Heater-AC 12V Heater-AC 24V	Heating Cooling Air Flow Current Weight	-34000 Btu/hr (9960 W) -17000 Btu/hr (4980 W) -265 CFM (450 m³/h) -33.4 Amps/3.5V -16.7 Amps/27V -77 lbs. (35 kg)	Casing made of 16GA (1.5mm) Cold Rolled Steel and finished in black semi- gloss epoxy powder coat.

Features

The 344 is a unit that has the condenser mounted in the same compartment as the heater-air conditioner. This unit is mounted on the side of any cab and blows air into a louver console. Outside air is standard.





No.	Part No.	Description	No.	Part No.	Description	No.	Part No.	Description
1	24-2229	Casing Assy.	11	15-7512	Fan Assy. 24V	27	26-0041	Air Filter
2	24-2230	Cover Assy.	11A	25-0577	Venturi	28	26-0190	Block Valve
3	24-1919	Sight Glass Cover	11B	25-0579	Fan	29	26-0263	Knurled Knob
4	24-2231	Drain Pan Assy.	11C	25-0621	Motor 12V	30	26-0347	Bowden Cable
5	24-1921	Recirc. Grill		25-0622	Motor 24V	31	26-0350	Rotary Control
6	24-1922	Filter Cover	12	21-0318	Evaporator Coil	32	26-0374	Air Filter (Recirc.)
7	24-1923	Bottom Plate	13	21-0319	Condenser Coil	33	27-0030	Drain Hose
8	24-1924	R/D Bracket	14	22-0292	Heater Coil	34	27-0091	Drain Hose Clamp
9	24-2010	Plenum	15	23-0005	Louver	35	27-0502	Clamp
10	15-1561	Blower 12V	16	23-0048	Adapter	36	27-0601	O-Ring #6
	15-1562	Blower 24V	17	23-0148	Finger Guard	37	27-0602	O-Ring #8
10A	25-0048	Blower Housing	18	25-0044	Blower Switch	38	27-0603	O-Ring #10
10B	25-0348	Blower Top	19	25-0045	Thermostat	39	27-1107	Refr. Hose Assy. #6
10C	25-0060	Venturi	20	25-0251	Relay 12V	40	27-1108	P-Clamp #8
10D	25-0200	Blower Wheel		25-0219	Relay 24V	41	27-1121	Gear Clamp
10E	25-0655	Motor 12V	21	25-0221	Socket/Relay	42	28-0005	Grommet
	25-0660	Motor 24V	22	25-0343	Pressure Switch	43	28-0045	Grommet
10F	25-0271	Motor Mount	23	25-0435	Knob	44	28-0210	Reticulated Foam
10G	25-0601	Resistor 12V	24	25-0631	Switch Push 12V	45	34-0164	Copper Tube Assy.
	25-0602	Resistor 24V		25-0632	Switch Push 24V	46	34-0167	Copper Tube Assy.
10H	29-0130	Resistor Bracket	25	25-1015	Wiring Harness	47	26-0025	Heater Valve
11	15-7511	Fan Assy. 12V	26	26-0018	Drier Receiver	48	28-0191	Overlay





Note:

Switch is not as depicted in photo, has been changed to sealed rocker switch.

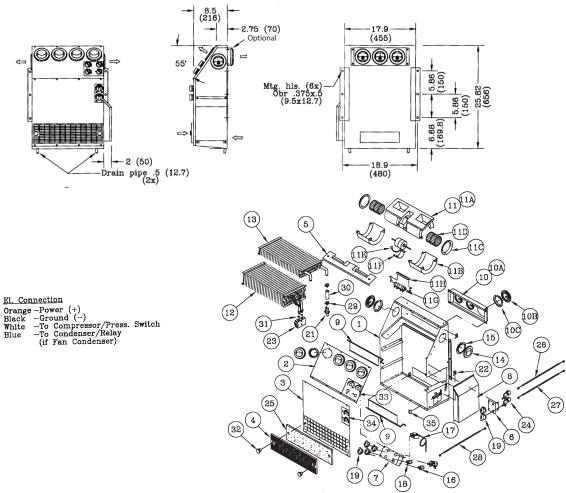
Part Descriptions: Specifications

Part No.		Specification	18	
13-4503 13-4504 13-4590 13-4595	Heater-AC 12V Heater-AC 24V Air Plenum Assy. Rear Outlet Flapper Kit	Heating Cooling Air Flow Current Weight	-46000 Btu/hr(13480 W) -33000 Btu/hr (9670 W) -450 CFM (765 m³/h) -22 Amps/13.5V -11 Amps/27V -48 lbs. (22 kg)	Made of 18GA (1.25mm) Cold Rolled Steel and finished in black semi-gloss "texture" epoxy powdercoat. 13-4595 Rear Outlet Flapper Kit includes 1 piece 26-0350, 25-0581, 26-0421 and 26-0079 with hardware. Kit is optional and has to be ordered separately

Features

The 345 is an excellent choice for armored cars and large cabs. Its many options include outside air, rear air damper control, and side air louvers.





No.	Part No.	Description	No.	Part No.	Description	No.	Part No.	Description
1	24-2235	Casing	11C	25-0060	Venturi	21	26-0025	Heater Valve
2	24-2236	Face Cover	11D	25-0200	Blower Wheel	22	26-0079	Cable Clamp
3	24-2237	Front Cover	11E	25-0228	Motor 12V	23	26-0190	Block Valve
4	24-2238	Grill		25-0298	Motor 24V	24	26-0350	Rotary Control
5	24-2239	Blower Support	11F	25-0271	Motor Mount	25	26-0400	Air Filter
6	24-2240	Control Bracket	11G	25-0601	Resistor 12V	26	26-0421	Bowden Cable
7	24-2241	Control Bracket		25-0602	Resistor 24V			(R/A-Option)
8	24-2242	Protection Cover	11H	29-0130	Resistor Bracket	27	26-0422	Bowden Cable (F/A)
9	24-2243	Flapper Door	12	21-0362	Evaporator Coil	28	26-0423	Bowden Cable (Heat)
10	13-4590	Air Plenum Assy.	13	22-0318	Heater Coil	29	27-0059	Gear Clamp
10A	24-2447	Plenum	14	23-0005	Louver	30	27-0225	Heater Hose
10B	23-0005	Louver	15	23-0048	Adapter	31	27-0602	O-Ring #8
10C	23-0048	Adapter	16	25-0044	Blower Switch	32	26-0263	Knurled Knob
11	15-1551	Blower 12V	17	25-0118	Thermostat Assy.	33	28-0212	Overlay
	15-1552	Blower 24V	18	25-0307	Switch	34	28-0213	Overlay
11A	25-0048	Blower Housing	19	25-0581	Knob	35	24-2274	Mounting Bracket
11B	25-0348	Housing Top	20	25-0669	Wiring Harness (Not Shown)			



Note:

Switch is not as depicted in photo, has been changed to sealed rocker switch.



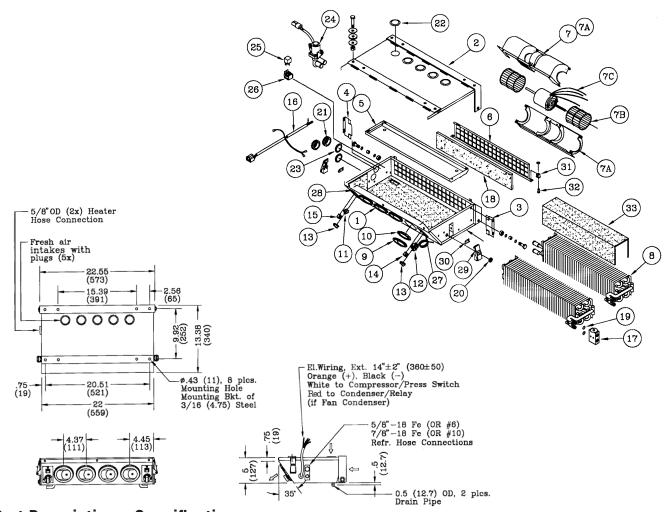
Part Descriptions: Specifications

Part No.		Specificatio	ns	
13-4603 13-4604	Heater-AC 12V Heater-AC 24V	Heating Cooling	- 17500 Btu/hr (5130 W) - 17300 Btu/hr (5070 W) -AC	3-Speed motor. Made of 18GA (1.25mm) Cold Rolled Steel
13-4623 13-4624	Air Conditioner 12V Air Conditioner 24V	only	- 14250 Btu/hr (4180 W) -	finished in black textured epoxy.
13-4024	All Collaborer 24V		Heater-AC	* Only for Heat/AC version.
		Air Flow Current	- 250 CFM (425 m ³ /h) - 12 Amps/13.5 V	** Only for AC version
		Ourion	- 6 Amps/27V	
		Weight	- 33 lbs. (15 kg)	

Features

The 346 is a compact overhead with a heater option. Its compact design makes it an excellent choice for many off-road cabs. The convenient swing-down unit makes for easy service.





No.	Part No.	Description	No.	Part No.	Description	No.	Part No.	Description
1	24-1991	Casing Assy.	10	23-0048	Adapter	22	28-0012	Snap-in Plug
2	24-1992	Cover Assy.	11	25-0029	Blower Switch	23	28-0013**	Snap-in Plug
3	24-1979	Coil Bracket	12	25-0118	Thermostat	24	26-0348	Solenoid Valve 12V
4	24-1980	Coil Bracket	13	25-0435	Knob		26-0194	Solenoid Valve 24V
5	24-1981	Drain Pan	14	25-0631	Switch Push 12V(AC)	25	25-0251	Relay 12V
6	24-1982	Filter Holder		25-0632	Switch Push 24V(AC)		25-0219	Relay 24V
7	15-0533	Blower 12V	15	25-0633*	Switch Push 12V (Heat)	26	25-0221	Socket Relay
	15-0534	Blower 24V		25-0634*	Switch Push 24V (Heat)	27	28-0173	Overlay
7A	25-0017	Blower Housing	16	25-0636**	Wiring Harness	28	28-0174	Overlay
7B	25-0021	Blower Wheel		25-0637*	Wiring Harness	29	29-0221	Latch
7C	25-0643	Motor 12V	17	26-0190	Block Valve	30	29-0222	Latch Hook
	25-0644	Motor 24V	18	26-0375	Air Filter	31	29-0075	Receptacle
8	21-	Evaporator Coil	19	27-0602	O-Ring #8	32	29-0076	Stud, Oval Slotted
	0315**	Combo Coil (HE)	20	28-0004	Grommet		29-0077	Retainer
9	21-0314* 23-0005	Louver	21	28-0005*	Grommet	33	28-0185	Reticulated Foam



Note:

Switch is not as depicted in photo, has been changed to sealed rocker switch.



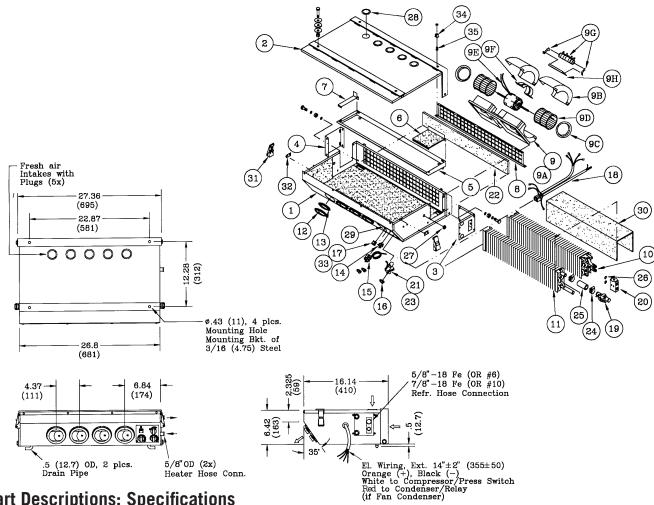
Part Descriptions: Specifications

Part No.		Specification	1\$	
13-4703 13-4704 13-4723 13-4724 13-4795	Heater-AC 12V Heater-AC 24V Air Conditioner 12V Air Conditioner 24V Heater Conv. Kit	Heating Cooling Air Flow Current Weight	-40000 Btu/hr (11720 W) -21000 Btu/hr (6150 W) -450 CFM (765 m³/h) -23 Amps/13.5V -11.5 Amps/27V -49 lbs. (22.2 kg)	3-Speed motor. Made of 18GA (1.25mm) Cold Rolled Steel and finished in black textured epoxy powder coat. * Only for Heat/AC version. Heater and Evaporator Coil can be changed to have opposite connections.

Features

The 347 is a larger capacity version of the 346. The coils can be flipped to either side of the unit to accommodate different installations. Outside air is available. This high capacity unit will handle most off-road cabs.





No.	Part No.	Description	No.	Part No.	Description	No.	Part No.	Description
1	24-2215	Casing Assy.	9F	25-0271	Motor Mount	21	26-0350*	Rotary Control
2	24-2216	Cover Assy.	9G	25-0601	Resistor 12V	22	26-0376	Air Filter
3	24-1956	Coil Bracket		25-0602	Resistor 24V	23	26-0377*	Bowden Cable
4	24-1957	Coil Bracket	9H	29-0130	Resistor Bracket	24	27-0059*	Gear Clamp
5	24-1958	Drain Pan	10	21-0313	Evaporator Coil	25	27-0225*	Heater Hose
6	24-2228	Coil Support Assy.	11	22-0290*	Heater Coil	26	27-0602	5/8"(HD)
7	24-1960	Coil Support	12	23-0005	Louver	27	28-0004	O-Ring #8
8	24-1961	Filter Holder	13	23-0048	Adapter	28	28-0012	Grommet
9	15-1561	Blower 12V	14	25-0044	Blower Switch	29	28-0172	Snap-in Plug
	15-1562	Blower 24V	15	25-0118	Thermostat	30	28-0187	Overlay
9A	25-0048	Blower Housing	16	25-0435	Knob		28-0189*	Reticulated Foam
9B	25-0348	Housing Top	17	25-0631	Switch Push 12V	31	29-0221	Reticulated Foam
90	25-0060	Venturi		25-0632	Switch Push 24V	32	29-0222	Latch
9D	25-0200	Blower Wheel	18	25-0638	Wiring Harness	33	29-0075	Latch Hook
9E	25-0655	Motor 12V	19	26-0025*	Heater Valve	34	29-0076	Receptacle
	25-0660	Motor 24V	20	26-0190	Block Valve		29-0077	Stud, Oval Slotted Retainer





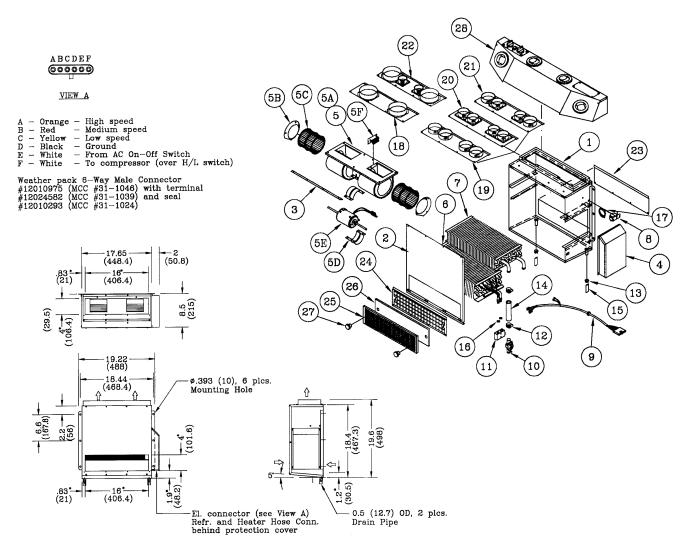
Part Descriptions: Specifications

Part No.		Specificatio	ns	
13-5303 13-5304	Heater-AC 12V Heater-AC 24Vt	Heating Cooling Air Flow Current Weight	-46000 Btu/hr (13480 W) -34000 Btu/hr (9970 W) -450 CFM (765 m³/h) -10.2 Amps/27V -20.4 Amps/13.5V -44 lbs. (22 kg)	Made of 18GA (1.25mm) Cold Rolled Steel and finished in black epoxy powder coat. Dim. marked (*) are inlet and outlet openings. Items 18 to 28 are optional and have to be ordered separately.

Features

The 353 was designed for log loader applications in Western North America. It is available in many different hose adapter options. It also has a 32" cover option for cab wall mount applications.





No.	Part No.	Description	No.	Part No.	Description	No.	Part No.	Description
1	24-2204	Casing	6	21-0337	Evaporator Coil	18	23-0160	HA Plate (2x4")
2	24-2205	Cover	7	22-0299	Heater Coil	19	23-0161	HA Plate (4x3")
3	24-2206	Blower Mount	8	25-0069	Thermostat	20	23-0162	HA Plate (4x2 1/2")
4	24-2207	Protection Cover	9	25-0661	Wiring Harness	21	23-0165	HA Plate (2x3"/2x2
5	15-2033	Blower 12V	10	26-0025	Heater Control Valve	22	23-0167	1/2")
	15-2034	Blower 24V	11	26-0190	Block Valve	23	24-1436	HA Plate (2x4"/2x2")
5A	25-0159	Blower Housing	12	27-0059	Gear Clamp	24	24-2212	Cover Plate
5B	25-0164	Venturi	13	27-0091	Drain Hose Clamp	25	24-1524	Grill Support
5C	25-0047	Blower Wheel	14	27-0225	Heater Hose	26	26-0412	Grill
5D	24-0234	Motor Mount	15	27-0421	Drain Valve	27	26-0263	Air Filter
5E	25-0265	Motor 12V	16	27-0602	O-Ring #8	28	13-5391	Knurled Knob
	25-0270	Motor 24V	17	28-0031	PVC Hose		13-5392	Plenum 12V
5F	25-0136	Resistor 12V						Plenum 24V
	25-0552	Resistor 24V						





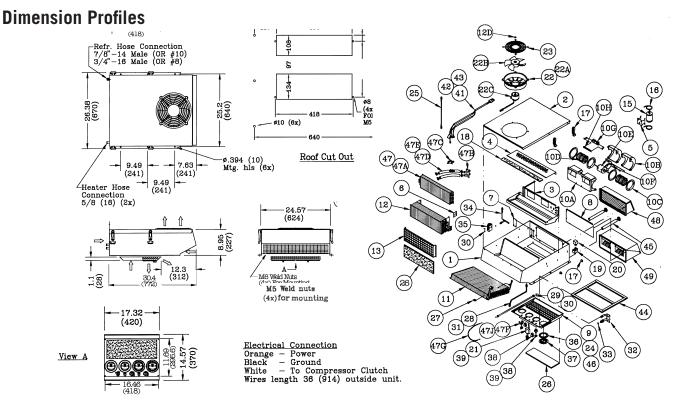
Part Descriptions: Specifications

Part No.		Specification	ns	
13-6023 13-6024 13-6095	Air Conditioner 12V Air Conditioner 24V Heater Conv. Kit	Heating Cooling Air Flow Current Weight	-46000 Btu/hr (13500 W) -27000 Btu/hr (7900 W) -400 CFM (680 m³/h) -40 Amps/12V -20 Amps/24V -77 lbs. (35 kg)	Made of 14 (1.5mm) and 16 (1.5mm) GA Cold Rolled Steel and finished in grey semi-gloss epoxy powder coat. Items 47 to 49 are optional and have to be ordered separately.

Features

The 360 was designed to offer a variety of installation options. It can be set up with an outside air or positive fan presswinger. It is also available with heat. A water and corrosion resistant condenser ensures years of service. Four nylon latches allow easy service access.





No.	Part No.	Description	No.	Part No.	Description	No.	Part No.	Description
1	24-2219	Casing Assy.	17	29-0236	Draw Latch Assy.	37	23-0005	Louver
2	24-2208	Cover Assy.	18	28-0242	Foam	38	25-0044	Blower Switch
3	24-2221	Drain Plate	19	25-0221	Socket Relay	39	25-0435	Knob
4	24-2270	Coil Support	20	25-0251	Relay 12V	40	25-0631	Switch Push 12V
5	24-2429	R.D. Bracket		25-0219	Relay 24V		25-0632	Switch Push 24V
6	24-2428	Bracket	21	25-0118	Thermostat	41	25-0693	Wiring Harness
7	24-2505	Plate	22	15-7501	Fan Assy. 12V	42	25-0689	Fuse 40A/12V (Blower)
8	24-2226	Cover Plate		15-7502	Fan Assy. 24V		25-0686	Fuse 20A/24V (Blower)
9	24-2430	Air Plenum	22A	25-0577	Venturi	43	25-0688	Fuse 30A/12V (Fan)
10	15-1561	Blower 12V	22B	25-0579	Fan		25-0685	Fuse 15A/24V (Fan)
	15-1562	Blower 24V	22C	25-0591	Motor 12V	44	28-0225	Gasket
10A	25-0048	Blower Housing		25-0592	Motor 24V	45	27-0030	Drain Hose
10B	25-0348	Housing Top	22D	29-0167	"C" Clip		27-0091	Drain Hose Clip
10C	25-0060	Venturi	23	23-0148	Finger Guard	46	28-0248	Overlay
10D	25-0200	Blower Wheel	24	28-0221	EPDM Seal	47	13-6095	Heater Conv. Kit
10E	25-0655	Motor 12V	25	29-0235	Cable Assy.	47A	22-0301	Heater Coil
	25-0660	Motor 24V	26	28-0244	Air Filter	47B	34-0267	Copper Tube Assy.
10F	25-0130	Motor Mount	27	25-0343	Pressure Switch	47C	26-0074	Heater Valve
10G	25-0601	Resistor 12V	28	34-0397	Copper Tube 3/8"	47D	27-0225	Heater Hose 5/8"
	25-0602	Resistor 24V	29	34-0398	Copper Tube 1/2"	47E	27-0059	Gear Clamp
10H	29-0130	Resistor Bracket	30	27-0602	O-Ring #8	47F	26-0345	Rotary Control
11	21-0341	Condenser Coil	31	27-0601	O-Ring #6	47G	26-0441	Bowden Cable
12	21-0339	Evaporator Coil	32	34-0261	Copper Tube Assy.	47J	25-0435	Knob
13	24-2433	Filter Support	33	27-0603	O-Ring #10	48	16-0200	Filter Unit
14	28-0243	Reticulated Foam	34	34-0364	Copper Tube 3/8"	49	16-0303	Filter Kit 12V
15	26-0018	Receiver Drier	35	26-0190	Block Valve		16-0304	Filter Kit 24V
16	27-1121	Gear Clamp 4"	36	23-0048	Adapter			





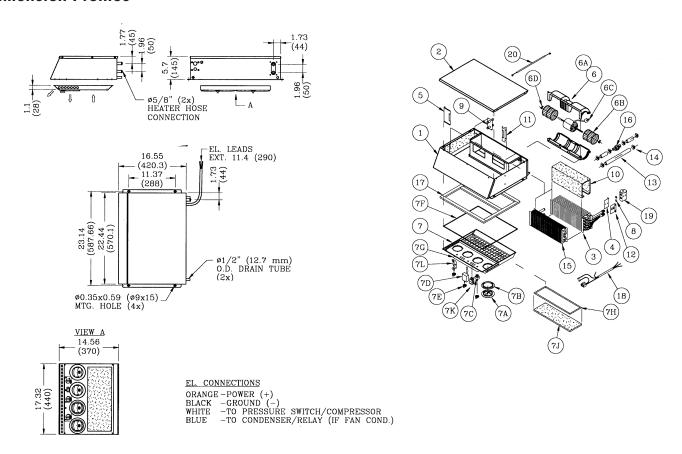
Part Descriptions: Specifications

Part No.		Specification	ns	
13-6903 13-6904	Combo Unit 12V Combo Unit 24V	Heating Cooling Air Flow Current	-28000 Btu/hr (8200 W) -20000 Btu/hr (5860 W) -275 CFM (468 m³/h) -12 Amps/12V -6 Amps/24V	Casing made of 18GA (1.25mm) Cold Rolled Steel and finished in grey epoxy powder coat.
		Weight	-30.9 lbs. (14 kg)	

Features

The 369 is a low profile roof mount heater-air conditioner.





No.	Part No.	Description	No.	Part No.	Description	No.	Part No.	Description
1	24-2842	Casing Assembly	7b	23-0048	Adapter	11	24-2722	Coil Support Bracket
2	24-2843	Cover Assembly	7c	25-0044	Blower Switch	12	24-2719	Valve Mtg. Bracket (R)
3	21-0399	Evaporator Coil	7d	25-0118	Thermostat	13	27-0225	Heater Hose
4	24-2718	Valve mtg. brkt (L)	7e	25-0435	Knob			(2x70mm&180mm)
5	24-2721	Coil Support (Long)	7f	28-0161	EPDM Seal (10mm)	14	27-0059	Gear Clamp
6	15-0533	Blower 12V	7g	28-0248	Overlay	15	22-0376	Heater Coil
6	15-0534	Blower 24V	7h	28-0166	Hook Tape	16	26-0025	Heater Valve
6a	25-0017	Blower Housing	7j	28-0244	Air Filter	17	28-0225	Gasket
6b	25-0021	Blower Wheel	7k	25-1106	Rocker Switch (G) 24V	18	25-0737	Wiring Harness
6c	25-0644	Motor 24V	7k	25-1105	Rocker Switch (G) 12V	19	26-0190	Block Valve
6c	25-0643	Motor 12V	7L	26-0350	Rotary Control w/nut	20	26-0590	Bowden Cable
6d	25-0022	Clip	8	27-0602	O-Ring #8			
7	26-0584	Air Plenum Assy. 24V	9	34-0560	Copper Tube Assy.			
7	26-0583	Air Plenum Assy. 12V	10	28-0230	Reticulated Foam			
7a	23-0005	Louver						



Notes

VIII. Heaters



Heater Whisper UW-9

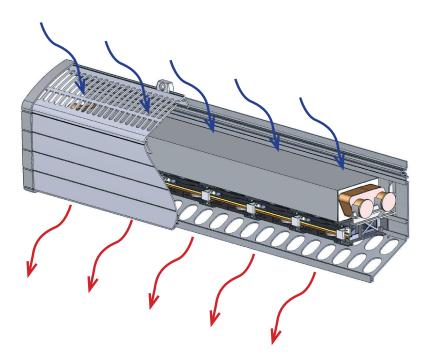
Very compact heater

Having the same profile as the UC-9 convector, MCC heater whisper UW-9 is the ideal wall mounted heater when extra heat output is required.

As a part of the UC-9 family, the UW-9 heater is compact, it is also highly customizable suitable for motor coaches

and transit buses. The unit consists of heat exchanger with configurable water connections, two speed fans.

The UC-9 can be also be used in as a standalone heating unit or in combination with other heaters and convectors. An electrostatic or mesh filter can also be added as an option.



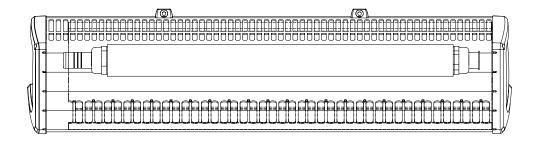
Features

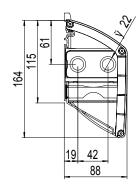
- Smooth air distribution
- Rugged design
- Suitable for sloping floors

- Flexible design (3-18 fans)
- Two speed long life fans
- Lightweight



Dimensions





Dimensions in mm

Technical Data

Heat	15013 Btu/hr (4.4 kW)Q ₈₀	18767 Btu/hr (5.5 kW) Q ₁₀₀	
Air flow @ 28V (6 fans)	61 CFM (182 m ³ /h)		
Coolant connection	Copper Ø 0.9 (22 mm)		
Voltage	12 or 24V		
Height	6.5" (165 mm)		
Lengths	10-79" (250-2000 mm)		
Cover sections	Anodized aluminum		

 $^{^*}$ The Q_x value stands for the temperature difference between the water inlet temp and the air temp in the room where the heat exchanger is. For instance water inlet temp +80°C and air temp +20°C is known as Q₆₀.



Heater Whisper 3C, 7C and 12C

High performance heating system

The Whisper 3C, 7C and 12C heaters are units designed for high output.

Whisper 3C available only in 24V, 7C and 12C are available in 12V and 24V versions. Thanks to its modular

design, piping can be mounted on either left or right side for easy installation. 3C, 7C and 12C are electro- magnetic interference conformance (EMC) approved according to 72/245/EG including revision 2005/83/EG.



Whisper 3C



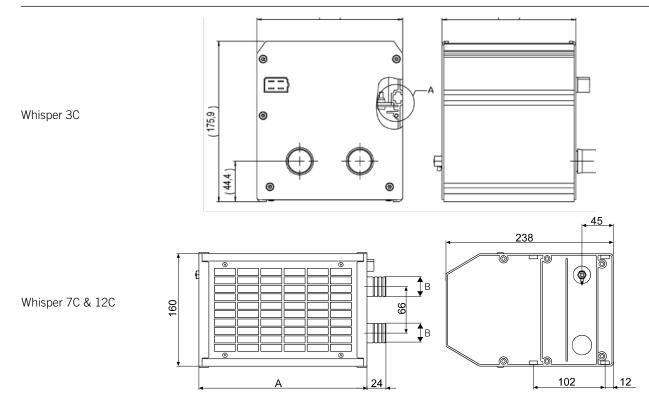
Whisper 7C & 12C

Features

- Design for buses, off-road and marine applications
- High performance
- Rugged design

- · Piping can be mounted either left or right side
- · Can be mounted in horizontal or vertical position





Technical Data

	3C	7C	12C
Heat @ 24V	10577 Btu/hr (3.1 kW) Q ₈₀ ^[1]	24567 Btu (7 kW) Q ₈₀ [1]	39240 Btu (11.5 kW) Q ₈₀ [1]
Heat @ 12V	N/A	21496 Btu (6 kW) Q ₈₀ [1]	35827 Btu (10.5 kW) Q ₈₀ [1]
Air flow @ 24 V	102 CFM (175 m³/h)	212 CFM (360 m ³ /h)	309 CFM (525 m³/h)
Air flow @ 12 V	N/A	182.5 CFM (310 m ³ /h)	256 CFM (435 m³/h)
Max current @ 24 V (A)	2.6 Amp	4.3	6.2
Max current @ 12 V (A)	N/A	8.3	11.7
Hose connection	22/28 mm	22/28 mm	22/28 mm
Weight	6 lbs (2.6 kg)	11.2 lbs (5.1 kg)	14.5 lbs (6.6 kg)
Depth	6.3" (160 mm)	9.3" (238 mm)	9.3" (238 mm)
Height	6.9" (175 mm)	6.3" (160 mm)	6.3" (160 mm)
Length	5.7" (147 mm)	9.4" (239 mm)	14" (356 mm)
Electrical connection	4 pin AMP 180901-0 connector		
Heat exchanger	Copper fins with brass and plates		
Casing	Natural anodised aluminium sections		
Standard colour	Natural aluminium		
Accessories	Different types of hoses, brackets etc, see product sheet		

^[1] The Q_x value stands for the temperature difference between the water inlet temp and the air temp in the room where the heat exchanger is. For instance water inlet temp +80°C and air temp +20°C is known as Q_{60} .



Heater Whisper K-200

Economical Compact Heater

MCC Whisper K-200 compact heating unit is a part of the Whisper 200 family, its compact size means that it can be mounted anywhere. The whisper K-200 consists of a heat exchanger and four brushless fans (12VDC or 24VDC) with

long life bearings for quiet operation. All components are mounted in a rugged anodized aluminum case with integrated mounting bracket for simple installation.

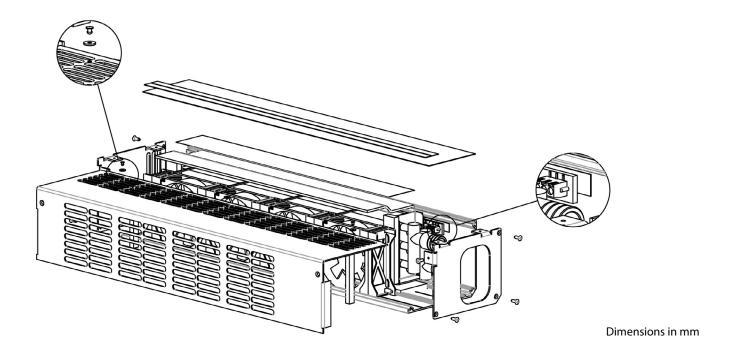


Features

- Heater system for interior heating in buses with water/ glycol based heating systems
- · Piping can be mounted either left or right side
- Smooth air distribution
- Compact and light weight design
- Long life brushless fans



Dimensions



Technical Data

Operating voltage/Maximum operating voltage	24/28 VDC	
Power consumption	0.8A/19W	
K 200 meets the requirements according to:	Low Voltage Directive 73/23/EEC	
	EMC Directive 89/336/EEC	
	CE Marking Directive 93/68/EEC	
Standard connection	Direct to circuit board	Black=Ground
		Red=High speed
		Blue=Low speed
Heat ^[1]	8190 Btu/hr (2.4 kW) Q ₆₀	13649 Btu/hr (4.0 kW) Q ₁₀₀
		AMP plug P/N 1-350346-0
Air flow	103 CFM (175 m ³ /h)	
Coolant connections	Connections to K200 are with Ø	0.9" (22 mm) hoses.

^[1] The $\rm Q_x$ value stands for the temperature difference between the water inlet temp and the air temp in the room where the heat exchanger is. For instance water inlet temp +80°C and air temp +20°C is known as $\rm Q_{so}$.



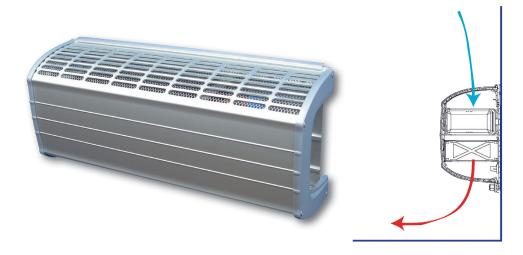
Heater Whisper 200/2-3-5 fans

High performance with unique flexibility

The Whisper 200 family is a highly customizable wall mounted heating unit designed for motor coaches and buses. It consists of a coolant type heat exchanger with various fan configurations in 24V or 12V. The Whisper 200 can be customized in different configurations. with two to five fans and

front or rear water connections. It can be used as stand alone heating source or in combination with convectors.

The Whisper 200 is EMC approved according to directive 72/245/EEG including rev 2006/28/EG.



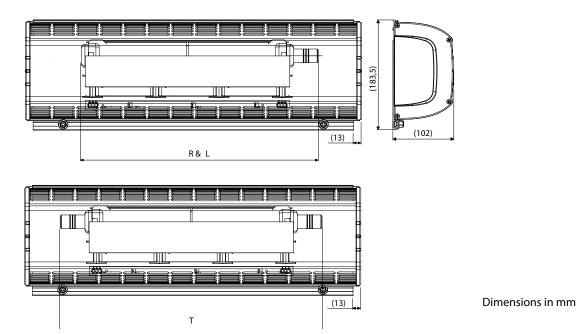
Features

- Heater blower system for buses with water/glycol based heating systems
- Smooth air distribution
- Whisper quiet operation

- Many configurations possible thanks to flexible design
- Long life two speed fans
- Low weight



Dimensions



Variant	2 Fans	3 Fans	5 Fans
Left or Right Connection (R&L)	10.2" (260 mm)	15.1" (383 mm)	23.3" (591 mm)
Through water Connection (T)	11.8" (300 mm)	17" (423 mm)	25" (631 mm)

Technical Data

	2 Fans	3 Fans	5 Fans
Heat	6824 Btu/hr (2 kW) Q ₈₀	9554 Btu/hr (2.8 kW) Q ₈₀	16037 Btu/hr (4.7 kW) Q ₈₀
	8530 Btu/hr (2.5 kW) Q ₁₀₀	11942.5 Btu/hr (3.5 kW) Q ₁₀₀	20131 Btu/hr (5.9 kW) Q ₁₀₀
Air flow	153 CFM (260 m³/h) Ø	92 CFM (156 m³/h)	153 CFM (260 m ³ /h)
Heat exchanger water connection	Ø 0.9" (22 mm)	Ø 0.9" (22 mm)	Ø 0.9" (22 mm)
Voltage	12 or 24V	12 or 24V	12 or 24V
Depth	4" (102 mm)	4" (102 mm)	4" (102 mm)
Height	7.2" (183.5 mm)	7.2" (183.5 mm)	7.2" (183.5 mm)
Length	According to request, see Whisper 200 product configuration		
Cover sections	Anodized aluminum		

^{*} The Q_x value stands for the temperature difference between the water inlet temp and the air temp in the room where the heat exchanger is. For instance water inlet temp +80°C and air temp +20°C is known as Q_{so} .



Compact Under-Seat Heater T12-12801

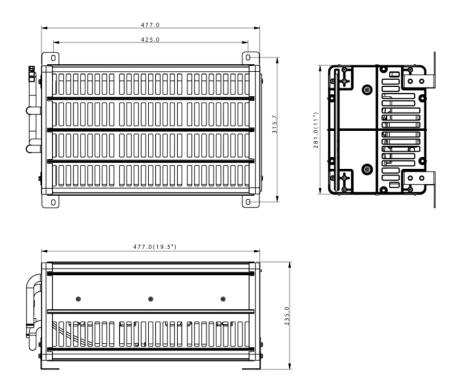
Robust, Light-weight and Cost Competitive Heater

Compact under-seat heater with all aluminum heater core designed for low pressure and low coolant flow, suited for all climates and vehicles.

Can be filled as a stand alone unit for multiple placements. This low cost multi-functional heater will suit all budgets.



Features	Benefits
Simple compact designAll aluminum heater core	Light-weight
Single or multi-pack use	Adapts to any application
Available in 12 and 24 vdc	Many configurations possible due to flexible design
· Connection in minutes	Simple installation
Brush or brushless motors	 Low cost



Technical Data

Heating capacity @ max	45000 Btu/hr (13kW)	50000 BTU/hr option with higher output motor
Length	18.7" (477mm)	
Width	12.4" (315.7mm)	
Height	9.2" (235mm)	
Weight	15 lbs (6.8 kg)	
Fans	2 fan	
Current Draw (Max)	12 amps (12 VDC)	

[1] Max conditions 95°F (35°C)/104°F (40°C)/50% RH



Compact Under-Seat Heater T12-12807

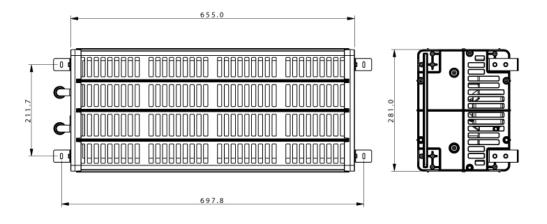
Robust, Light-weight and Cost Competitive Heater

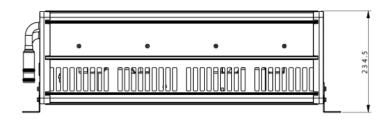
Compact under-seat heater with all aluminum heater core designed for low pressure and low coolant flow, suited for all climates and vehicles.

Can be filled as a stand alone unit for multiple placements. This low cost multi-functional heater will suit all budgets.



Features	Benefits
Simple compact design	· Light-weight
All aluminum heater core Single or multi-pack use	Adopte to any application
Single or multi-pack useAvailable in 12 and 24 vdc	Adapts to any applicationMany configurations possible due to flexible design
Connection in minutes	Simple installation
Brush or brushless motors	· Low cost





Technical Data

Heating capacity @ max	75000 Btu/hr (13kW)	85000 BTU/hr option with higher output motor
Length	27.4" (697.8mm)	
Width	11" (281mm)	
Height	9.2" (234.5mm)	
Weight	15 lbs (6.8 kg)	
Fans	2 fan	
Current Draw (Max)	14 amps (12 VDC)	

[1] Max conditions 95°F (35°C)/104°F (40°C)/50% RH

PN: 89-3100

Compact Under-Seat Heater T12-12809

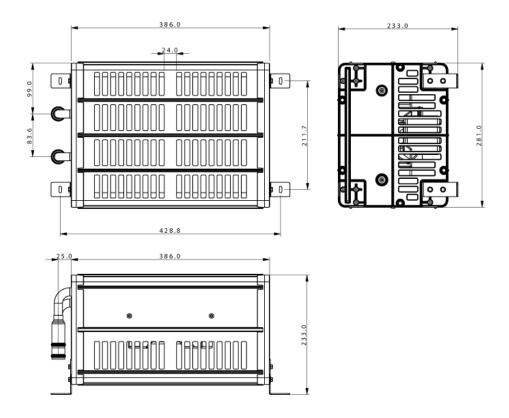
Robust, Light-weight and Cost Competitive Heater

Compact under-seat heater with all aluminum heater core designed for low pressure and low coolant flow, suited for all climates and vehicles.

Can be filled as a stand alone unit for multiple placements. This low cost multi-functional heater will suit all budgets.



Features	Benefits
Simple compact design	Light-weight
All aluminum heater core Single or multi-pack use	Adapts to any application
Available in 12 and 24 vdc	Many configurations possible due to flexible design
Connection in minutes	Simple installation
Brush or brushless motors	Low cost



Technical Data

Heating capacity @ max	40000 Btu/hr (13kW)	50000 BTU/hr option with higher output motor
Length	16.8" (428.8mm)	
Width	11" (281mm)	
Height	9.1" (233mm)	
Weight	15 lbs (6.8 kg)	
Fans	1 fan	
Current Draw (Max)	7 amps (12 VDC)	

[1] Max conditions 95°F (35°C)/104°F (40°C)/50% RH



Compact Under-Seat Heater T12-12811

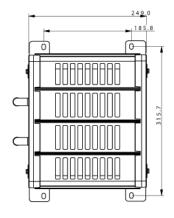
Robust, Light-weight and Cost Competitive Heater

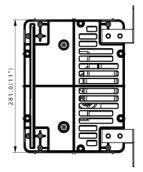
Compact under-seat heater with all aluminum heater core designed for low pressure and low coolant flow, suited for all climates and vehicles.

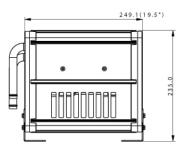
Can be filled as a stand alone unit for multiple placements. This low cost multi-functional heater will suit all budgets.



Features	Benefits
Simple compact design All aluminum heater core	Light-weight
Single or multi-pack use	Adapts to any application
Available in 12 and 24 vdc	Many configurations possible due to flexible design
Connection in minutes	Simple installation
Brush or brushless motors	Low cost







Technical Data

Heating capacity @ max	25000 Btu/hr (13kW)	30000 BTU/hr option with higher output motor
Length	9.8" (249mm)	
Width	12.4" (315.7mm)	
Height	9.2" (235mm)	
Weight	15 lbs (6.8 kg)	
Fans	1 fan	
Current Draw (Max)	6 amps (12 VDC)	

[1] Max conditions 95°F (35°C)/104°F (40°C)/50% RH



Electric DC Voltage Heater

PTC heating element with MCC electronic temperature stabilization and safety control

This newly designed mini electric heater with fully integrated controls can be used where space is at a premium. Small and economical, but powerful for its size, it is perfect for electrically powered compact cabins, forklifts, mini

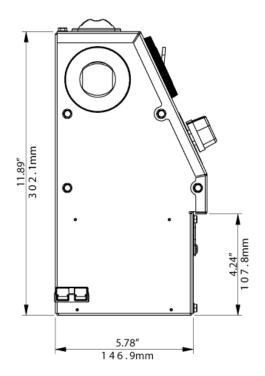
construction equipment, or as an aftermarket replacement. Simple and easy to instal, all that is needed is an electrical connection and a power supply. The heater casing is made of durable powder coated metal to withstand rigors of daily use.

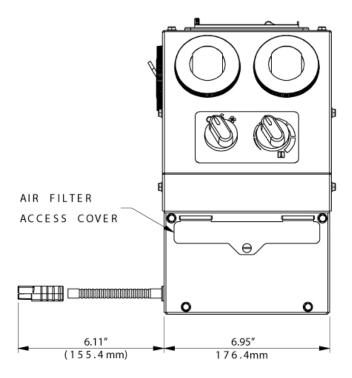


Features

- Compact design with low weight
- High efficiency and quiet operation
- Integrated speed and temperature control
- Four direction airflow louvers
- Flexible mounting for bottom or side

- No maintenance other than filter cleaning
- Easy access and reusable filter
- Industry leading power management
- MCC optimized electronic controller
- CAN (J1939) capability

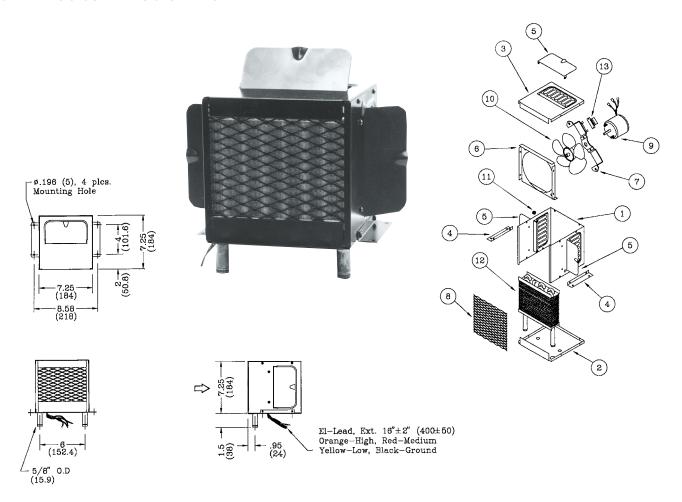




Technical Data

Airflow	~175 CFM (297 m³/h)
Heating Capacity	5500 Btu/hr (1600 Watts)
Noise (SPL)	60 dba at maximum speed setting
Maximum discharge temperature	60° C (140° F)
Maximum surface temperature	60° C (140° F)
Voltage	36/48/80 VDC
Amperage	~ 45/36/20 Amps
Connector	Anderson Power 2-W SB 50 (BLUE)





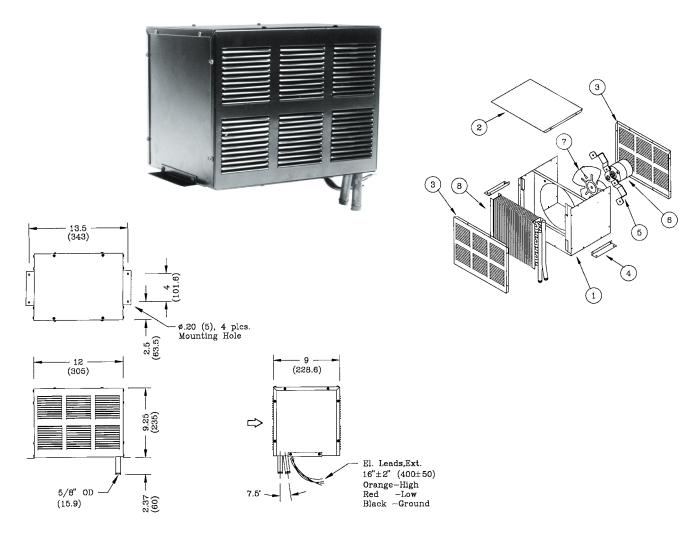
Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description
12-0103	Heater 12V	1	24-0135	Casing	8	24-0172	Coil Protector
12-0102	Heater 24V	2	24-0136	Cover	9	25-0105	Motor 12V
		3	24-0137	Cover		25-0107	Motor 24V
Specifications		_ 4	24-0133	Mounting Bracket	10	25-0023	Fan
Heating	-13500 Btu/hr (3960 W)	5	23-0009	Door (3 Pcs.)	11	28-0014	Grommet
Air Flow	-185 CFM (315 m ³ /h)	6	24-0138	Venturi	12	22-0042	Heater Coil
Current	-5.8 Amps/12V -2.9 Amps/24V	7	24-0113	Motor Bracket	13	25-0095	Resistor
Weight	-7.5 lbs. (3.4 kg)						
3-Speed opera	ited motor.						

Features

The compact design of the 201 is ideal for dash or under seat mounting. Air is delivered to sides of unit and can be controlled by air doors.





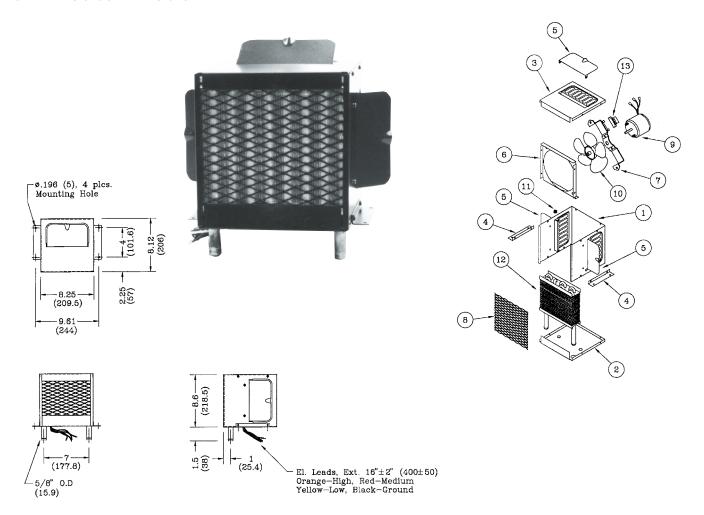
Part Descriptions: Specifications

Part No.		No.	Part No.	Description
12-0903	Heater 12V	1	24-0353	Casing
12-0904	Heater 24V	2	24-0354	Cover
		3	24-0355	Grill
Specifications		4	24-0133	Mounting Bracket
Heating	- 32000 Btu/hr (9380 W)	5	24-0223	Motor Bracket
Air Flow	- 350 CFM (595 m ³ /h)	6	25-0344	Motor 12V
Current	- 12 Amps/12V		25-0107	Motor 24V
	- 6 Amps/24V	7	25-0121	Fan C.W. (8")
Weight	- 25.5 lbs. (11.5 kg)	8	22-0029	Heater Coil
2-Speed motor.				

Features

High capacity design can be used as auxiliary heater for bus, or as stand alone cab heater.





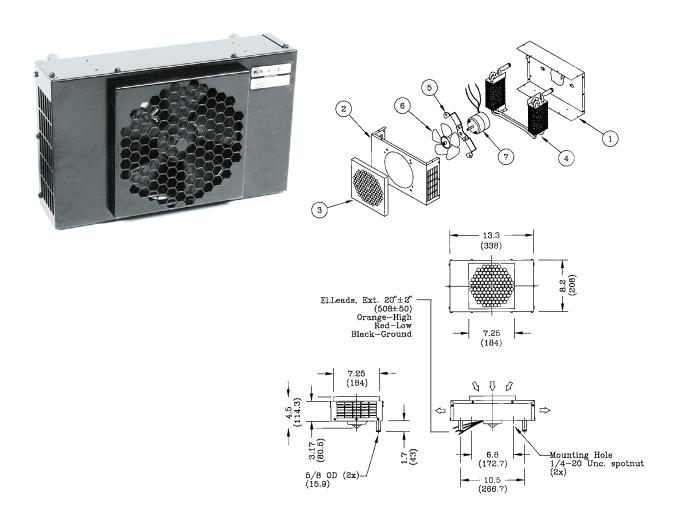
Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description
12-1103	Heater 12V	1	24-0140	Casing	9	25-0105	Motor 12V
12-1104	Heater 24V	2	24-0142	Cover		25-0107	Motor 24V
		3	24-0143	Cover	10	25-0023	Fan
Specifications		_ 4	24-0133	Mounting Bracket	11	28-0014	Grommet
Heating	-21000 Btu/hr (6150 W)	5	23-0009	Door (3 Pcs.)	12	22-0023	Heater Coil
Air Flow	-265 CFM (450 m ³ /h)	6	24-0141	Venturi	13	25-0095	Resistor
Current	-5.8 Amps/12V	7	24-0113	Motor Bracket			
	-2.9 Amps/24V	8	24-0171	Coil Protector			
Weight	-9 lbs. (4 kg)						
3-Speed motor.							

Features

Similar design as our popular 201. The 211 offers a higher quality heater with controllable air doors.





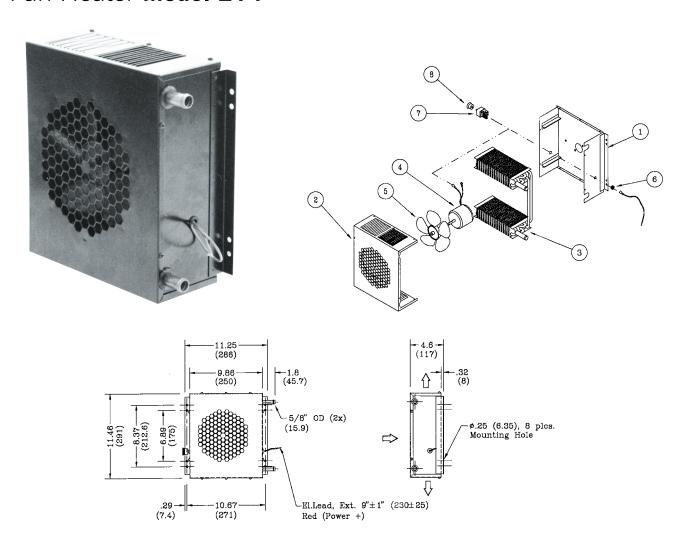
Part Descriptions: Specifications

Part No.		No.	Part No.	Description
12-1301	Heater 12V	1	24-1120	Casing
12-1302	Heater 24V	2	24-1121	Cover
		3	25-1122	Fan Guard
Specifications		4	22-0196	Heater Coil
Heating	-12500 Btu/hr (3660 W)	5	24-0110	Motor Bracket
Air Flow	-150 CFM (255 m ³ /h)	6	25-0023	Fan
Current	- 5.8 Amps/12V	7	25-0105	Motor 12V
	- 2.9 Amps/24V		25-0107	Motor 24V
Weight	- 7 lbs. (3.2 kg)			
2-Speed motor.				

Features

Slim design allows for mounting in tight spots. Can be wall mounted with heater connectors exiting the back of the unit.





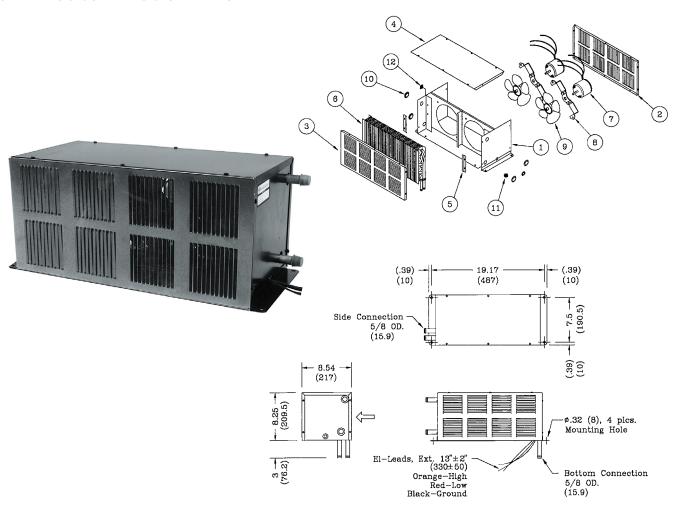
Part Descriptions: Specifications

Part No.		No.	Part No.	Description
12-1411	Heater 12V	1	24-0042	Casing
12-1412	Heater 24V	2	24-0043	Cover
		3	22-0073	Heater Coil
Specifications		4	25-0039	Motor 12V
Heating	-18500 Btu/hr (5420 W)		25-0043	Motor 24V
Air Flow	-175 CFM (300 m ³ /h)	5	25-0015	Fan
Current	-4.4 Amps/12V	6	28-0014	Grommet
	-2.2 Amps/24	7	25-0028	Switch
Weight	-9 lbs. (4 kg)	8	25-0067	Knob
3-Speed motor	and internally grounded.			

Features

With a larger capacity than the 213, the 214 offers flexible mounting solutions for wall mount situations. Fittings exit the side of the 214.





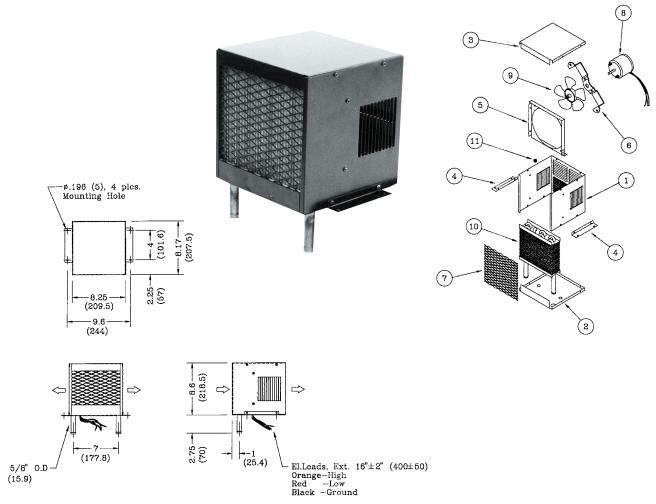
Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description
12-1601	Heater 12V -R.H.C.	1	24-0130	Casing	7	25-0105	Motor 12V
12-1602	Heater 24V -R.H.C.	2	24-0131	Grill (Inlet)		25-0107	Motor 24V
12-1621	Heater 12V -B.C.	3	24-0132	Front (Outlet)	8	24-0110	Motor Bracket
12-1622	Heater 24V -B.C.	4	24-0105	Cover	9	25-0023	Fan
		5	24-0146	Coil Support	10	28-0010	Snap-in Plug
Specifications			24-0162	Coil Support (B.C.)	11	28-0004	Grommet
Heating	-42000 Btu/hr (12300 W)		24-0163	Coil Support (B.C.)	12	28-0011	Snap-in Plug
Air Flow	-500 CFM (850 m ³ /h)	6	22-0038	Heater Coil			
Current	-11.6 Amps/12V		22-0039	Heater Coil (B.C.)			
	-5.8 Amps/24V						
Weight	-18.5 lbs. (8.4 kg)						
2-Speed motor.	J						

Features

High capacity heating solution for buses, fire trucks and truck bodies. The 216 delivers maximum performance for large capacity heating requirements.





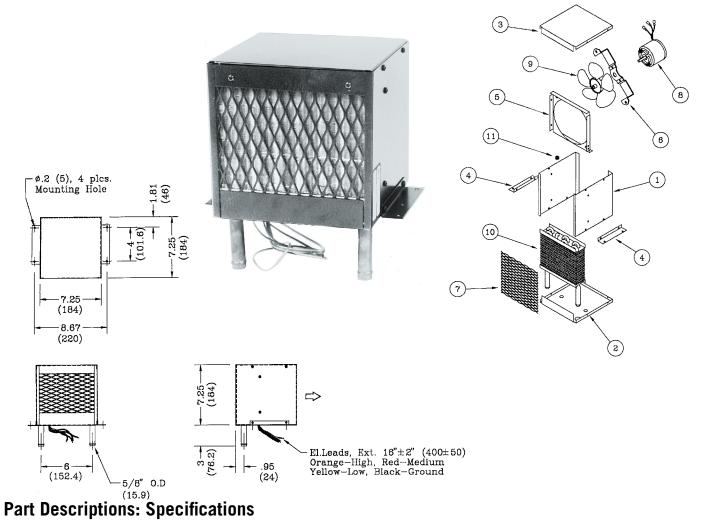
Part Descriptions: Specifications

Part No.		No.	Part No.	Description
12-2251	Heater 12V	1	24-0167	Casing
12-2252	Heater 24V	2	24-0142	Cover
		3	24-0161	Cover
Specifications		_ 4	24-0133	Mounting Bracket
Heating	-21000 Btu/hr (6150 W)	5	24-0141	Venturi
Air Flow	-265 CFM (450 m ³ /h)	6	24-0110	Motor Bracket
Current	-5.8 Amps/12V	7	24-0171	Coil Protector
	-2.9 Amps/24V	8	25-0105	Motor 12V
Weight	-9 lbs. (4 kg)		25-0107	Motor 24V
2-Speed motor.		9	25-0023	Fan
		10	22-0033	Heater Coil
		11	28-0014	Grommet

Features

The compact design of the 222 is ideal for dash or under seat mounting.



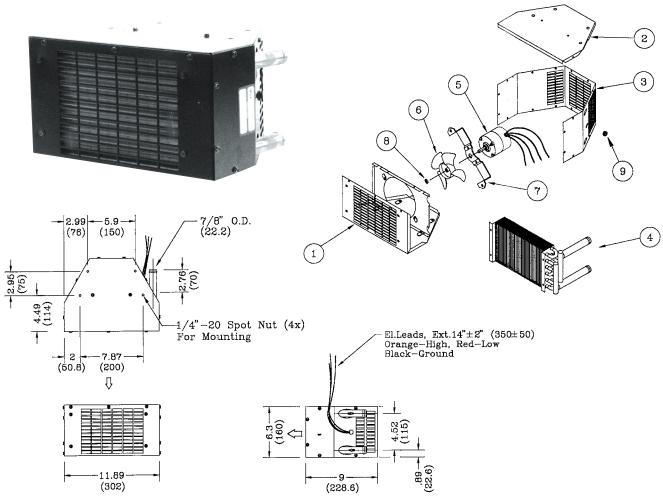


Part No.		No.	Part No.	Description
12-2611	Heater 12V	1	24-0173	Side Plate
		2	24-0136	Cover
		3	24-0160	Cover
Specifications		4	24-0133	Mounting Bracket
Heating	-13500 Btu/hr (3960 W)	5	24-0138	Venturi
Air Flow	-185 CFM (315 m ³ /h)	6	24-0110	Motor Bracket
Current	-5.8 Amps	7	24-0172	Coil Protector
Weight	-4.5 lbs. (2 kg)	8	25-0105	Motor 12V
2-Speed motor.		9	25-0023	Fan
		10	22-0052	Heater Coil
		11	28-0014	Grommet

Features

The 226 was designed to offer flexible mounting and deliver air directly out front of the heater.





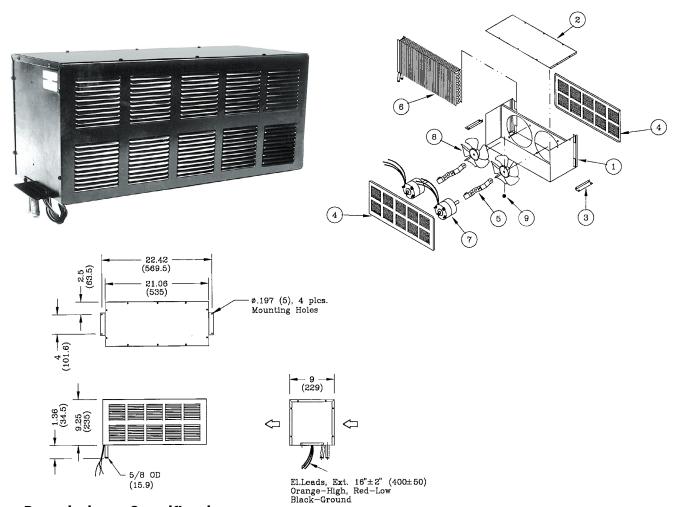
Part Descriptions: Specifications

Part No.		No.	Part No.	Description
12-3811	Heater 12V	1	24-0147	Casing
12-3812	Heater 24V	2	24-0148	Top Cover
		3	24-0149	Side Cover
Specifications		4	22-0110	Heater Coil
Heating	-22500 Btu/hr (6600 W)	5	25-0105	Motor 12V
Air Flow	-250 CFM (425 m ³ /h)		25-0107	Motor 24V
Current	-4 Amps/12V	6	25-0041	Fan
	-2 Amps/24V	7	25-0110	Motor Bracket
Weight	-11.5 lbs. (5.2 kg)	8	29-0039	Retaining Ring
2-Speed motor.		9	28-0014	Grommet

Features

The 238 is ideal for underseat mounting. Air is disbursed to the front of the unit.





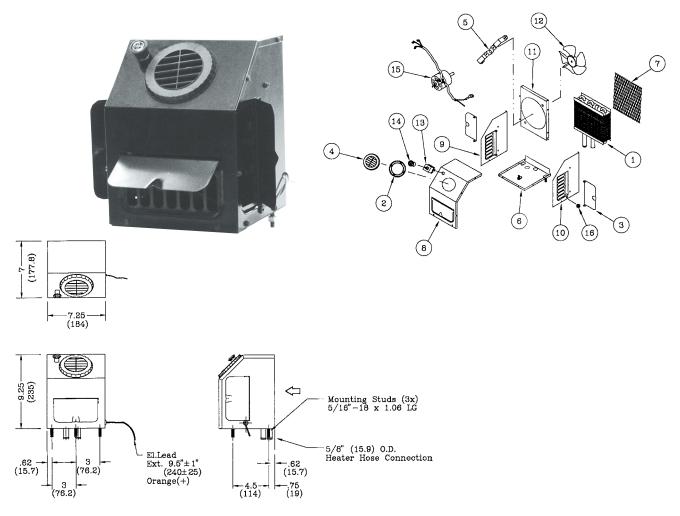
Part Descriptions: Specifications

Part No.		No.	Part No.	Description
12-3903	Heater 12V	1	24-0356	Casing
12-3904	Heater 24V	2	24-0357	Cover
		3	24-0133	Mounting Bracket
Specifications		. 4	24-0358	Grill
Heating	- 64000 Btu/hr (18760 W)	5	24-0223	Motor Bracket
Air Flow	- 800 CFM (1360 m ³ /h)	6	22-0030	Heater Coil
Current	- 13 Amps/12V	7	25-0344	Motor 12V
	- 6.5 Amps/24V		25-0107	Motor 24V
Weight	- 25 lbs. (11.3 kg)	8	25-0121	Fan (8" C.W.)
2-Speed motor.		9	28-0004	Grommet

Features

The 239 is our largest capacity fan heater - ideal for buses and other large capacity requirements.





Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description
12-4503	Heater 12V	1	22-0140	Heater Coil	10	24-0893	Side (R)
12-4504	Heater 24V	2	23-0048	Adapter	11	24-0894	Venturi
		3	23-0009	Door	12	25-0023	Fan (6.6" C.C.W.)
Specifications		_ 4	23-0045	Louver	13	25-0029	Switch
Heating	-20000 Btu/hr (5860 W)	5	24-0110	Motor Bracket	14	25-0067	Knob
Air Flow	-265 CFM (450 m ³ /h)	6	24-0175	Base	15	25-0105	Motor 12V
Current	-5.8 Amps/12V	7	24-0890	Coil Protector		25-0107	Motor 24V
	-2.9 Amps/24V	8	24-0891	Cover	16	28-0014	Grommet
Weight	-8.5 lbs. (3.8 kg)	9	24-0892	Side (L)			
2-Speed motor.	_			• •			

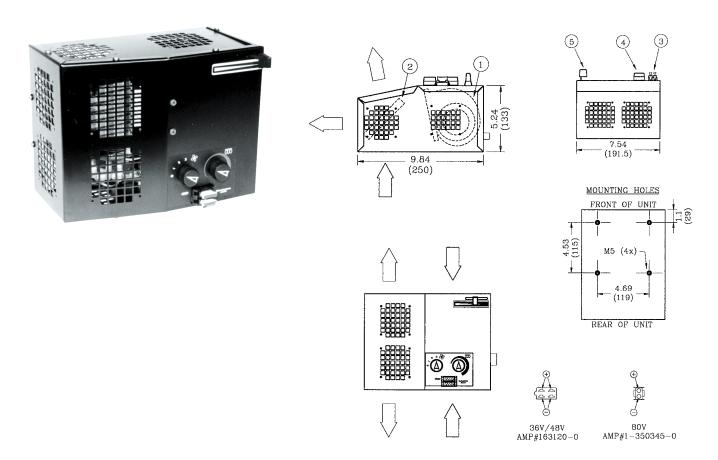
Heater is internally grounded.

Features

The 245 offers the ability to control fan speed with a control on the box. Ideal for auxiliary heaters or small cab applications.



Fan Heater **Model 290E** (Europe only)

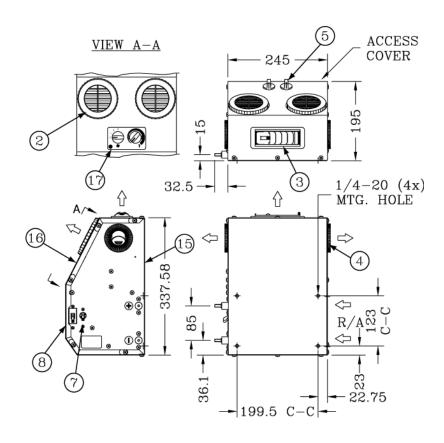


Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description
		1	15-0290	Blower 24V	6	25-1181	Resistor 36V (3.3Ω)
12-9050	Heater 48V	2	25-1171	Heater Element 80V	6	25-1184	Resistor 48V (6.8Ω)
12-9038	Heater 80V	2	25-1170	Heater Element 48V	6	25-1182	Resistor 80V (15Ω)
		2	25-1169	Heater Element 36V	7	25-1185	Resistor 36V (2.2Ω)
Specification	ne	3	25-1172	Fuse 30/A 80V At 80V	7	25-1183	Resistor 48V (4.7Ω)
		3	25-1173	Fuse 20/A/80V	7	25-1179	Resistor 80V (10Ω)
Heating	36V - 1000 Btu/hr (292.87W)	3	25-1174	Fuse 20A/32V At 36V	8	25-1180	Thermostat
	48V - 1600 Btu/hr (468.59W)	4	25-1175	Knob	9	25-1178	Relay 24V
A: EI	80V - 2000 Btu/hr (585.74W)	5	26-0712	Lever			-
Air Flow	82.4 CFM (140 m ³ /h)						
Current	36V - 28A				Item	s 6 through S	are not shown.
	48V - 33A				<u>Part</u>		MCC P/N
	80V - 25A				Casi	ng	11.058.00.001
Weight	8.8 lbs. (4kg)				Cove	er (80V)	11.058.00.002
0 -	. 5.				Cove	er (36/48V)	11.058.00.009
					Deca	al	20.400.00.244



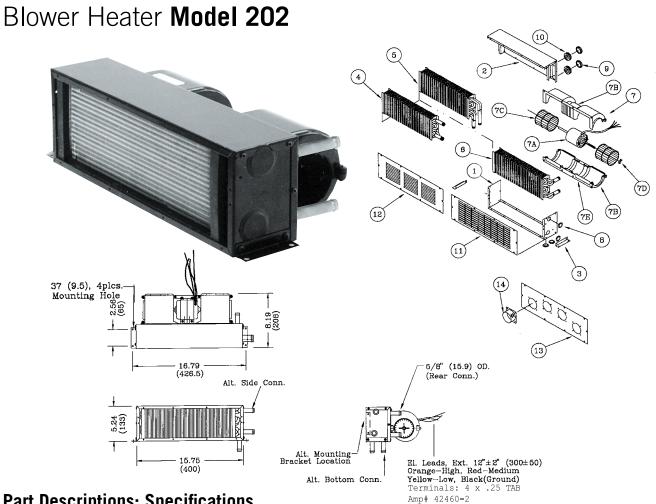
Fan Heater **Model 290N** (North America only)



Part Descriptions: Specifications

Specificati	ons	No.	Part No.	Description	No.	Part No.	Description
Heating	2kW (36V)	3	23-0145	Louver	11	25-1204	Contactor
	1.6kW (48V)	4	23-0171	Louver	12	25-1373	Resistor 10Ω (12-9038)
	220 CFM (339.8m3/h)	5	25-0435	Knob	13	25-1760	Resistor 4Ω (12-9050)
Air flow	55A (36V)	6	25-1160	Heater Element 48V	14	25-1761	Resistor 2.5Ω (12-9038/12-9050)
Current	42A (48V)	6	25-1169	Heater Element 36V	15	24-4796	Casing Stainless Steel
Weight	18 lbs. (8.16kg)	7	25-1372	Circuit Breaker 8A/80V	16	24-4797	Cover Stainless Steel
		8	25-1481	Cirucit Breaker 50A/80V	17	28-0722	Overlay
		8	25-2459	Circuit Breaker 60A/80V		Items 1.6	10 to 14 are not shown





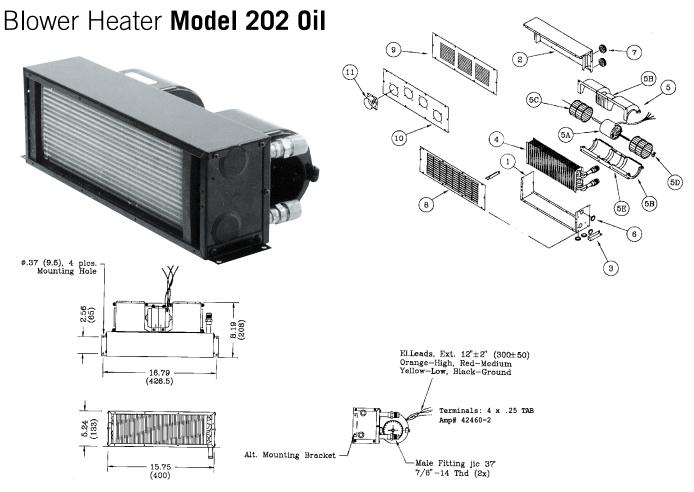
Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description	
12-0203	Heater 12V - Rear Conn.	1	24-0009	Casing	7D	25-0022	Clip	
12-0213	Heater 12V - Side Conn.	2	24-0008	Cover	7E	25-0020	Motor Tape	
12-0204	Heater 24V - Rear Conn.	3	24-0012	Mounting Bracket	8	28-0010	Snap-in Plug	
12-0214	Heater 24V - Side Conn.	4	22-0014	Heater Coil	9	28-0013	Snap-in Plug	
12-0293	Heater 12V - Bottom Conn.			(Side Conn.)	10	28-0005	Grommet	
o :r .:		5	22-0021	Heater Coil			(Rear Conn.)	
Specifications				(Bottom Conn.)	11	24-0060	Grill	
Heating	- 24700 Btu/hr (7240 W)	6	22-0024	Heater Coil	12	24-0045	Grill	
Air Flow	- 295 CFM (500 m ³ /h)			(Rear Conn.)	13	24-0066	Front (4 x 2" HA)	
Current	- 12 Amps/12V	7	15-0503	Blower Assy. 12V		24-0067	Front (4 x 2 1/2" HA)	
	- 6 Amps/24V		15-0504	Blower Assy. 24V	14	23-0110	Hose Adapter 2"	
Weight	- 9 lbs. (4 kg)	7A	25-0070	Motor 12V		23-0125	Hose Adapter 2 1/2"	
3-Speed motor.			25-0075	Motor 24V	Itom	Items 11-14 are optional and have to be ordered		
		7B	25-0017	Blower Housing	separately.		philonal and have to be ordered	
		7C	25-0021	Blower Wheel	ъсра			

Features

The 202 offers flexible installation options to fit a wide range of applications. Can be ducted for defrost capabilities. Also available with an oil coil.





Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description
12-0253	Heater 12V	1	24-0009	Casing	5D	25-0022	Clip
12-0254	Heater 12V	2	24-0008	Cover	5E	25-0020	Motor Tape
		3	24-0012	Mounting Bracket	6	28-0010	Snap-in Plug
		4	22-0282	Heater Coil (Oil)	7	28-0005	Grommet
		5	15-0503	Blower Assy. 12V	8	24-0060	Grill
			15-0504	Blower Assy. 24V	9	24-0045	Grill
Specifications		5A	25-0070	Motor 12V	10	24-0066	Front (4 x 2" HA)
Heating	- 14500 Btu/hr (4250 W)		25-0075	Motor 24V		24-0067	Front (4 x 2 1/2" HA)
Air Flow	- 295 CFM (500 m3/h)	5B	25-0017	Blower Housing	11	23-0110	Hose Adapter 2"
Current	- 12 Amps/12V - 6 Amps/24V	5C	25-0021	Blower Wheel		23-0125	Hose Adapter 2 1/2"
Weight	- 9 lbs. (4 kg)						
3-Speed motor.	-				ltom	c Q_11 are or	tional and have to he

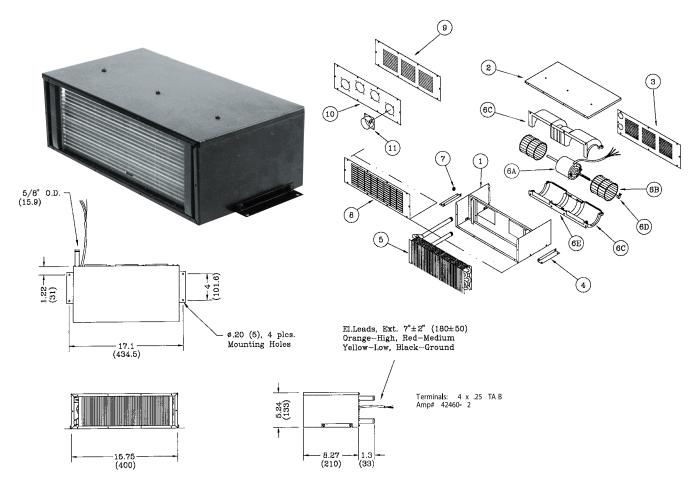
Items 8-11 are optional and have to be ordered separately.

Features

The 202 offers flexible installation options to fit a wide range of applications. Can be ducted for defrost capabilities.



Blower Heater Model 205



Part Descriptions: Specifications

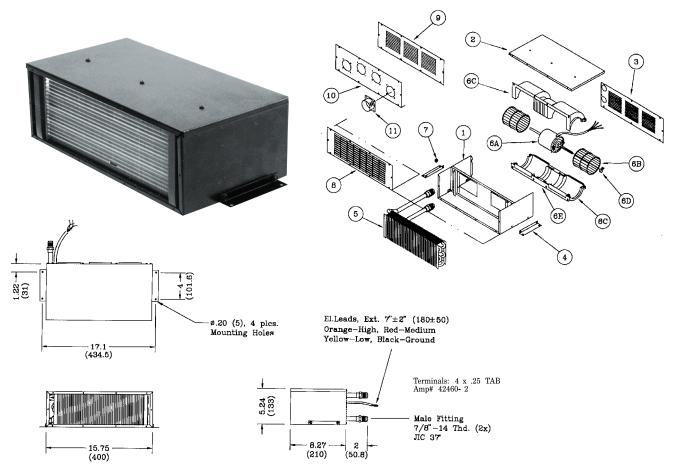
Part No.		No.	Part No.	Description	No.	Part No.	Description
12-0503	Heater 12V	1	24-0225	Casing	7	28-0014	Grommet
12-0504	Heater 24V	2	24-0226	Cover	8	24-0060	Grill
		3	24-0199	Grill	9	24-0045	Grill
		4	24-0133	Mounting Bracket	10	24-0066	Front (4 x 2"HA)
Specifications		5	22-0060	Heater Coil		24-0067	Front (4 x 2 1/2"HA)
Heating	- 24700 Btu/hr (7240 W)	6	15-0503	Blower Assy. 12V	11	23-0110	Hose Adapter 2"
Air Flow	- 295 CFM (500 m ³ /h)		15-0504	Blower Assy. 24V		23-0125	Hose Adapter 2 1/2"
Current	- 12 Amps/12V	6A	25-0070	Motor 12V			•
0 0.1.01.10	- 6 Amps/24V		25-0075	Motor 24V			
Weight	- 13.5 lbs. (6 kg)	6B	25-0021	Blower Wheel			
3-Speed motor.	10.0 100. (0 1.6)	6C	25-0017	Blower Housing			
o opeca motor.		6D	25-0022	Clip			
Fastones		6E	25-0020	Motor Tape		s 8-11 are op rately.	ntional and have to be ordered

Features

A more heavy duty option than the 202. The 205 offers the same installation flexibility. Also available with an oil coil.



Blower Heater Model 205 0il



Part Descriptions: Specifications

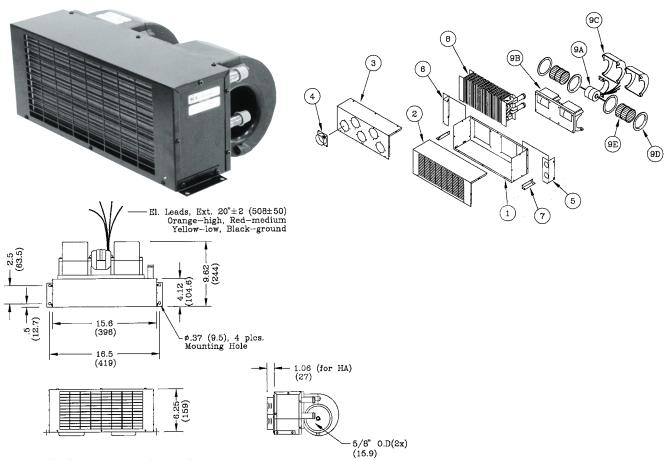
Part No.		No.	Part No.	Description	No.	Part No.	Description
12-0553	Heater 12V	1	24-0225	Casing	7	28-0014	Grommet
12-0554	Heater 24V	2	24-0226	Cover	8	24-0060	Grill
		3	24-0199	Grill	9	24-0045	Grill
		4	24-0133	Mounting Bracket	10	24-0066	Front (4 x 2" HA)
Specifications		5	22-0283	Heater Coil		24-0067	Front (4 x 2 1/2" HA)
Heating	- 14500 Btu/hr (4250 W)	6	15-0503	Blower Assy. 12V	11	23-0110	Hose Adapter 2"
Air Flow	- 295 CFM (500 m ³ /h)		15-0504	Blower Assy. 24V		23-0125	Hose Adapter 2 1/2'
Current	- 12 Amps/12V	6A	25-0070	Motor 12V			
	- 6 Amps/24V		25-0075	Motor 24V			
Weight	- 13.5 lbs. (6 kg)	6B	25-0021	Blower Wheel			
3-Speed motor.	2010 1001 (0 118)	6C	25-0017	Blower Housing			
o opeca meter.		6D	25-0022	Clip			
Fastones		6E	25-0020	Motor Tape		s 8-11 are op rately.	ntional and have to be ordered

Features

A more heavy duty option than the 202. The 205 offers the same installation flexibility.



Blower Heater Model 212



Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description
12-1203	Heater 12V (w.24-0056)	1	24-0055	Casing	9	15-1513	Blower Assy. 12V
12-1204	Heater 24V (w.24-0056)	2	24-0056	Cover		15-1514	Blower Assy. 24V
12-1223	Heater 12V (w.24-1011) &	3	24-1011	Cover (5 HA's)	9A	25-0053	Motor 12V, 3-Speed
12-1224	Heater 24V (w.23-0125) (5x)	4	23-0125	Hose Adapter 2 1/2"		25-0076	Motor 24V, 3-Speed
		5	24-0057	Coil Bracket	9B	25-0048	Blower Housing
		6	24-0058	Coil Bracket	9C	25-0348	Housing Top
		7	24-0012	Mounting Bracket	9D	25-0060	Venturi
Specifications		8	22-0090	Heater Coil	9E	25-0200	Blower Wheel
Heating	-36000 Btu/hr (10550 W)					25-0022	Clip (B.W.)
Air Flow	-400 CFM (680 m ³ /h)						
Current	-14 Amps/12V						
	-8 Amps/24V						
Weight	-12 lbs. (5.5 kg)						

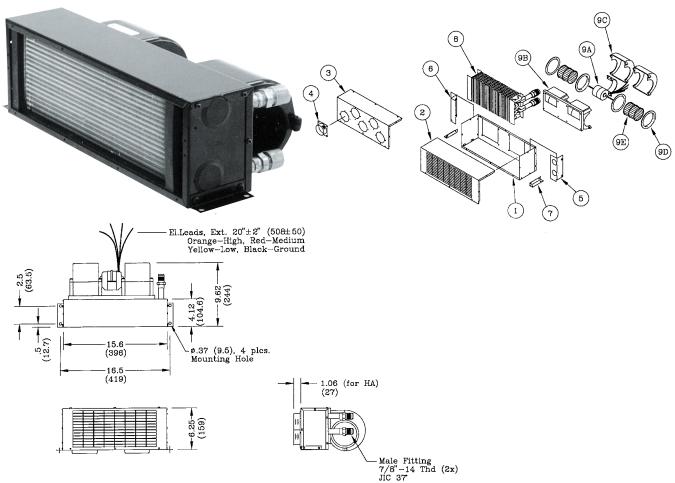
3-Speed motor.

Features

A higher capacity heater than the 202 and 205, the 212 equipped with hose adapters offers installation flexibility for defrosting and cab ducting requirements.



Blower Heater Model 212 Oil



Part Descriptions: Specifications

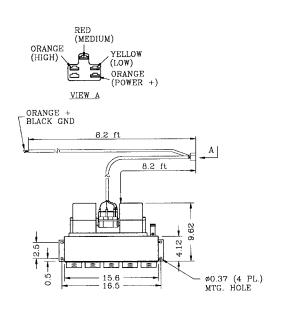
Part No.		No.	Part No.	Description	No.	Part No.	Description
12-1251	Heater 12V (w.24-0056)	1	24-0055	Casing	9	15-1513	Blower Assy. 12V
12-1252	Heater 24V (w.24-0056)	2	24-0056	Cover		15-1514	Blower Assy. 24V
12-1255	Heater 12V (w.24-1011) &	3	24-1011	Cover (5 HA's)	9A	25-0053	Motor 12V, 3-Speed
12-1256	Heater 24V (23-0125) (5x)	4	23-0125	Hose Adapter 2 1/2"		25-0076	Motor 24V, 3-Speed
		5	24-0057	Coil Bracket	9B	25-0048	Blower Housing
Specifications		6	24-0058	Coil Bracket	9C	25-0348	Housing Top
Heating	-36000 Btu/hr (10550 W)	0	24-0012 22-0284	Mounting Bracket	9D	25-0060 25-0200	Venturi Blower Wheel
Air Flow	-400 CFM (680 m ³ /h)	8	22-0264	Heater Coil (Oil)	9E		
Current	-14 Amps/12V					25-0022	Clip (B.W.)
Garrone	-8 Amps/24V						
Weight	-12 lbs. (5.5 kg)						
3-Speed motor.							

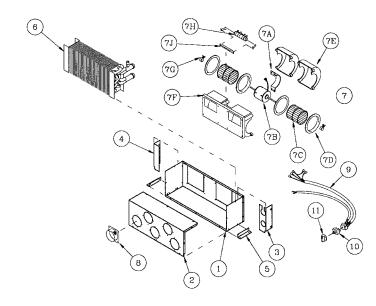
Features

A higher capacity heater than the 202 and 205, the 212 offers installation flexibility for defrosting and cab ducting requirements.

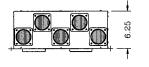


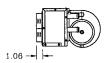
Blower Heater Model 212 Marine











DETAIL OF RESISTOR

TO MOTOR (ORANGE) LOW SPEED MED. SPEED HIGH SPEED

Important! Motor is of a non-explosion proof design. The heater must be installed in areas where flammable liquids and vapors are not present.

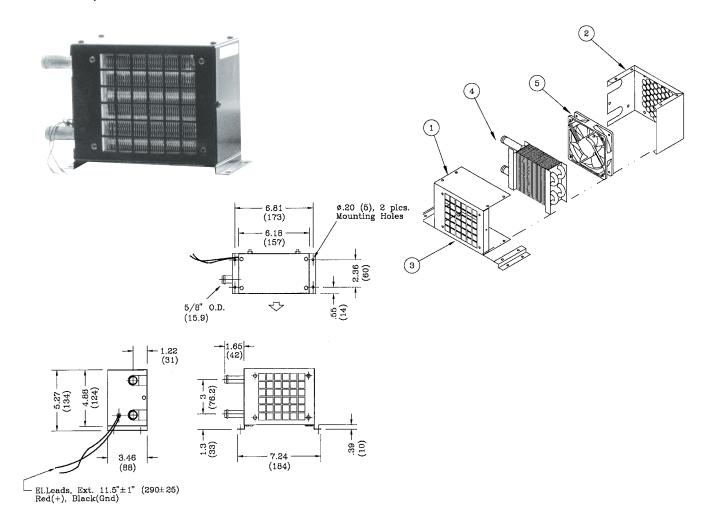
Part Descriptions: Specifications

Part No.		No.	Part No.	Description	No.	Part No.	Description
12-1239	Heater 12V	1	24-3937	Casing	7D	25-0060	Venturi
		2	24-3938	Cover	7E	25-0348	Housing Top
Cuasifications		3	24-3939	Coil Bracket	7F	25-0048	Blower Housing
Specifications		4	24-3940	Coil Bracket	7G	28-0022	Clip
Heating	- 40000 Btu/hr (11700 W)	5	24-3945	Mounting Bracket	7H	25-0601	Resistor 12V w/Bkt
Air Flow	- 500 CFM (850 m ³ /h)	6	22-0520	Heater Coil	7J	29-0130	Resistor Bracket
Current	- 22 Amps/12V	7	15-1561	Blower Assy. 12V	8	23-0125	Hose Adapter 2 1/2"
		7A	25-0861	Motor Mount	9	25-1126	Wiring Harness
Weight	- 15 lbs. (6.8 kg)	7B	25-0655	Motor 12V	10	25-0044	Switch 25 Amp
PM Motor 3-S All Hardware S	•	7C	25-0200	Blower Wheel	11	25-0067	Knob

Features

This powerful version of the popular #212 family of heaters is specifically designed for the corrosive ocean environment. Coil is made of copper with stainless steel (SS) end plates. Hardware and casing are made of SS as well. Engineering plastics are used for hose adapters and blower. Details of the blower can be found in the blower section. Hose adapters make the heater suitable for ducting to windshields etc. Switch for 3 speed operation, wiring harness and knob are included.





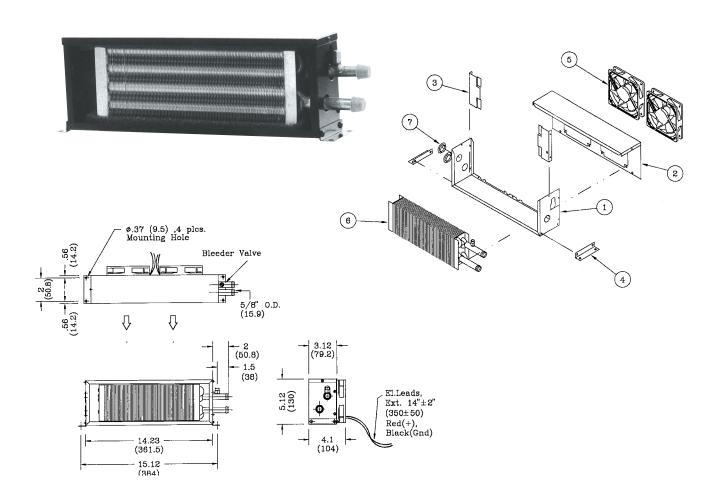
Part Descriptions: Specifications

Part No.		No.	Part No.	Description
12-3421	Heater 12V	1	24-1105	Casing (Front)
12-3422	Heater 24V	2	24-1106	Casing (Rear)
		3	24-1107	Mounting Bracket
Specifications		4	24-0041	Heater Coil
Heating	- 32000 Btu/hr (9380 W)	5	25-0172	Fan 12V
Air Flow	- 350 CFM (595 m ³ /h)		25-0244	Fan 24V
Current	- 12 Amps/12V			
	- 6 Amps/24V			
Weight	- 25.5 lbs. (11.5 kg)			
2-Speed motor.				

Features

The low amp current of the 234HD allows for mounting in applications such as motor homes, where an auxiliary heater is required.





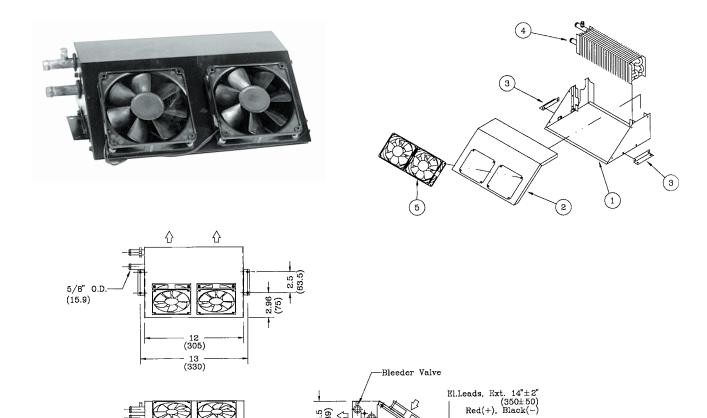
Part Descriptions: Specifications

Part No.		No.	Part No.	Description
12-3601	Heater 12V	1	24-0369	Casing
12-3602	Heater 24V	2	24-0370	Cover
		3	24-0380	Coil Bracket
Specifications		4	24-0012	Mounting Bracket
Heating	-8700 Btu/hr (2550 W)	5	25-0172	Fan 12V
Air Flow	-130 CFM (220 m ³ /h)		25-0244	Fan 24V
Current	-0.7 Amps/12V	6	22-0083	Heater Coil
	-0.35 Amps/24V	7	28-0010	Snap-in Plug
Weight	-5 lbs. (2.3 kg)			
1-Speed motor.				

Features

A larger capacity heater than the 234HD, the 236 offers the capacity to handle larger low amp heater requirements.





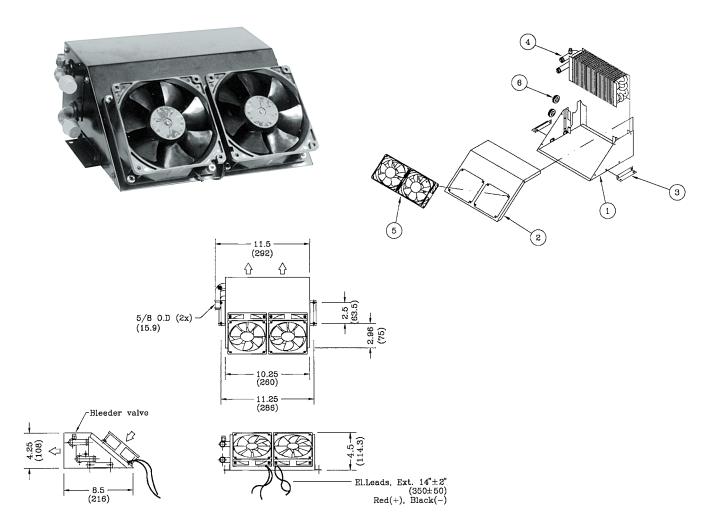
Part Descriptions: Specifications

Part No.		No.	Part No.	Description
12-4701	Heater 12V	1	24-1114	Casing
12-4702	Heater 24V	2	24-1115	Cover
		3	24-0012	Mounting Bracket
Specifications		4	22-0171	Heater Coil
Heating	-8700 Btu/hr (2550 W)	5	25-0172	Fan 12V
Air Flow	-130 CFM (220 m ³ /h)		25-0144	Fan 24V
Current	-0.70 Amps/12V			
	-0.35 Amps/24V			
Weight	-6.1 lbs. (2.8 kg)			
1-Speed motor.	_			

Features

The 247 is another option for low amp heater requirements.





Part Descriptions: Specifications

Part No.		No.	Part No.	Description
12-4901	Heater 12V	1	24-1189	Casing
		2	24-1190	Cover
		3	24-0012	Mounting Bracket
Specifications		4	22-0203	Heater Coil
Heating	-10000 Btu/hr (2930 W)	5	25-0447	Fan 12V
Air Flow	-160 CFM (270 m ³ /h)	6	28-0009	Grommet
Current	- 1.0 Amps/12V			
Weight	-7.5 lbs. (3.4 kg)			
1-Speed motor.				

Features

The 249 offers similar mounting and installation to the 247, in a larger capacity package.



Notes