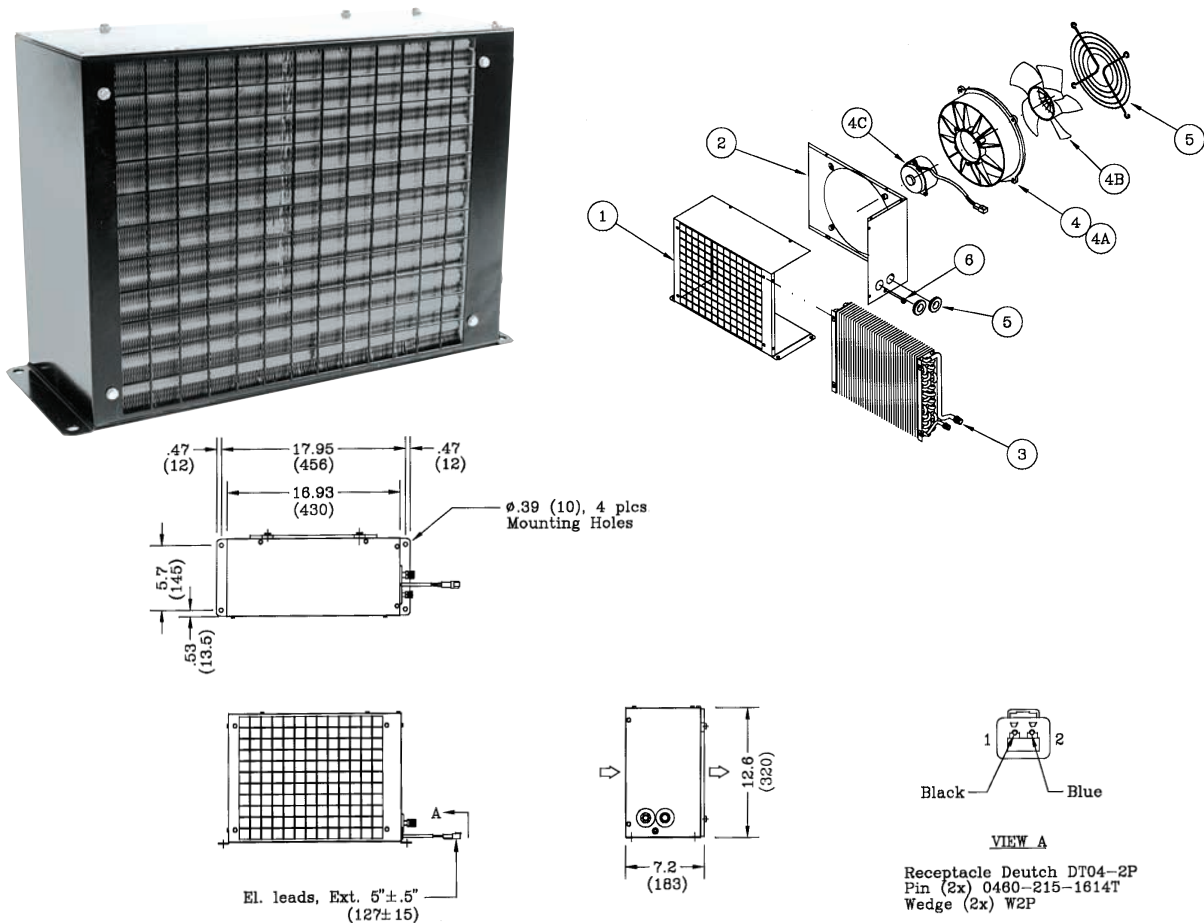




X. Compact Condensers

Electric Condenser **Model 402**



Part Descriptions: Specifications

Part No.	No.	Part No.	Description	No.	Part No.	Description
14-0201	1	24-1591	Casing	4B	25-0579	Fan
14-0202	2	24-1592	Cover	4C	25-0621	Motor Assy. 12V
Specifications	3	21-0278	Condenser Coil		25-0622	Motor Assy. 24V
Capacity	4	15-7511	Fan Assy. 12V	5	28-0005	Grommet
	4A	15-7512	Fan Assy. 24V	6	28-0014	Grommet
		25-0577	Venturi	7	23-0148	Finger Guard

Capacity -to support a cooling capacity of 26500 Btu/hr (7770 W)

Air Flow -1025 CFM (1735 m³/h)

Current -21.2 Amps/13.5V
-10.6 Amps/27V

Weight -24 lbs. (11 kg)

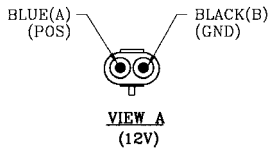
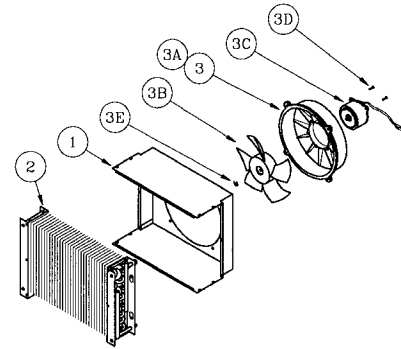
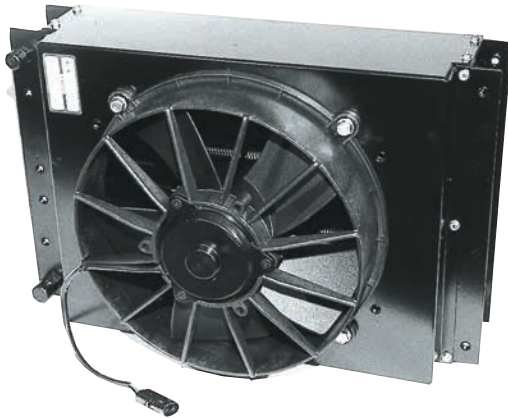
Casing made of 14/18GA (2/1.25mm) Cold Rolled Steel finished in black semi-gloss epoxy powder coat.

Features

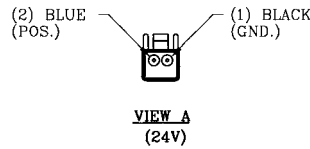
The 402 is an excellent light duty application condenser. It provides the option of deck or roof mounting.

Electric condensers are used when radiator mounted types cannot be installed. The reasons being insufficient air flow and/or when additional heat load over the engine cannot be tolerated. Condensing capacity will remain constant and will not be dependent on engine RPM.

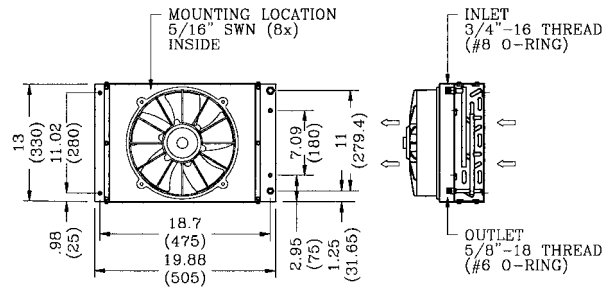
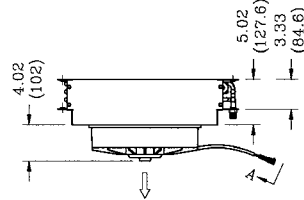
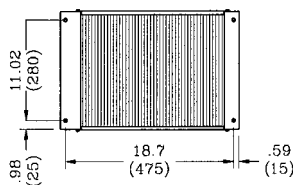
Electric Condenser Model 403



Electrical Connections
 2-way male weather pack connector, packard #12010973 (MCC #31-1068) with male terminal #12124582-L (2x) (MCC #31-1039) and seal #12010293 (2X) (MCC #31-1024)



Electrical Connections
 2-way Deutsch plug DT06 - 2S (MCC #31-1123) with #W2S wedge (MCC #31-1124) and 2 contacts 14/16Ga #0462-209-1614 (MCC #31-1125)



Part Descriptions: Specifications

Part No.	No.	Part No.	Description	No.	Part No.	Description			
14-0301	Condenser 12V	1	24-2514	Casing	25-0778	Motor 24V			
14-0302	Condenser 24V	2	21-0412	Condenser Coil	3C	25-0591	Motor 12V		
Specifications	Capacity	-To support a cooling capacity of 29700 Btu/hr (8700 W)	3	15-7604	Fan Assembly 24V	3D	29-0166	#10-32 Hex. Socket	
		Airflow	-1150 CFM (1950 m ³ /h)	3	15-7601	Fan assembly 12V	3E	29-0197	"C" Clip
		Current	-19.2 Amps (at 13.5V)	3A	25-0577	Venturi			
			-9 amps (at 27V)	3B	25-0728	Fan			
Weight	-28.7 lbs (13kg)								

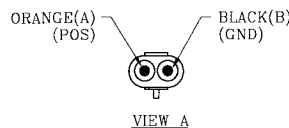
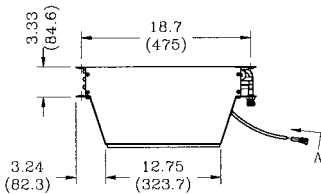
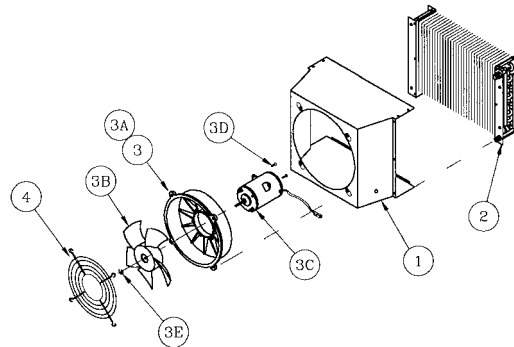
Note: Casing made of 16GA satin coat steel, endplates made of 14GA satin coat steel and both finished in black semi gloss epoxy powder coat.

Electrical condensers are used when radiator mounted types cannot be installed. The reasons being insufficient air flow and /or when additional heat load over the engine cannot be tolerated. Condensing capacity will remain constant and will not be dependent on engine RPM.

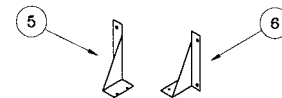
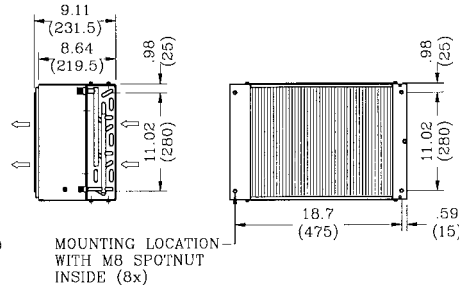
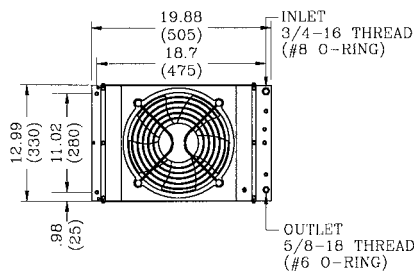
Features

The 403 is a compact high performance condenser.

Electric Condenser **Model 405**



Electrical Connections:
 2-way male weather pack connector, packard #12010973 (MCC #31-1068) with male terminal #12124582-L)(2x) (MCC #31-1039) and seal #12010293 (2x) (MCC #31-1024)



Part Descriptions: Specifications

Part No.	Description
14-0513	Condenser 12V
14-0514	Condenser 24V

Specifications	
Capacity	-to support a cooling capacity of 29650 Btu/hr (8700 W)
Air Flow	-1150 CFM (1950 m ³ /h)
Current	-17 Amps (1.35V)
Weight	-8.5 Amps at (27V) -28.5 lbs. (13 kg)

No.	Part No.	Description
1	24-2892	Casing
2	21-0412	Condenser Coil
3	15-7551	Fan Assy. 12V
3A	15-7552	Fan Assy. 24V
	25-0577	Venturi
3B	25-0579	Fan

No.	Part No.	Description
3C	25-0745	Motor 12V
	25-0746	Motor 24V
3D	29-0166	#10 -32 HEX. Socket CTR.Sunk
3E	29-0167	"C" clip
4	23-0148	Finger Guard
5	24-3639	Bracket, Left (Opt.)
6	24-3640	Bracket, Right (Opt.)

Items 5 and 6 have to be ordered separately.

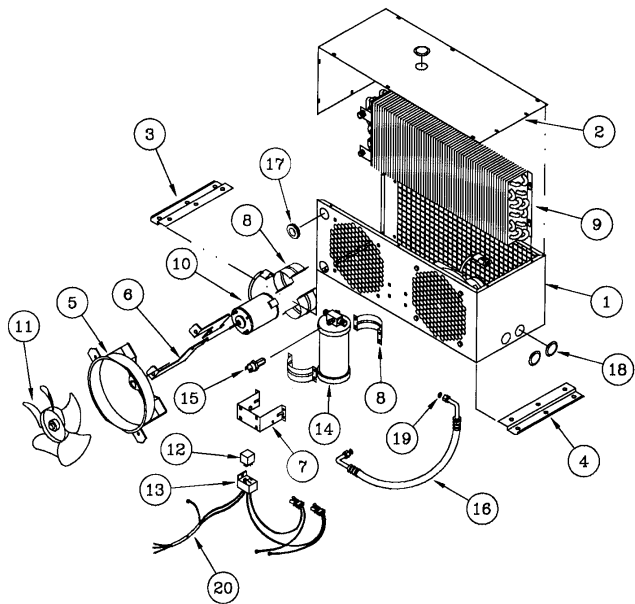
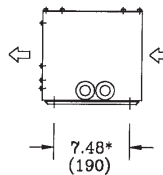
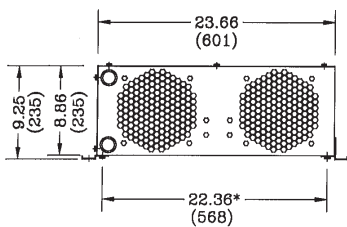
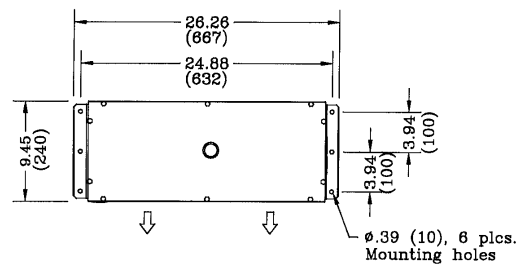
Casing made of 16GA (1.5mm) Satin Coat Steel. Endplates made of 14GA (2mm) Satin Coat Steel. Both are finished in black semi-gloss epoxy powder coat.

Electric condensers are used when radiator mounted types cannot be installed. The reasons being insufficient air flow and /or when additional heat load over the engine cannot be tolerated. Condensing capacity will remain constant and will not be dependent on engine RPM.

Features

The 405 is a compact, high capacity unit. Its compact design allows for wall or flush mounting applications in engine compartments. A motor with longer life than in the 403 is used in this condenser which makes it slightly deeper.

Electric Condenser Model 406



Note
El. Wiring and Refr. Hose to be connected inside casing

Wiring
Orange(+), Black(-)
Blue (from On-Off AC)

Refrigerant
Inlet-3/4"-18 Male (# 8 O-Ring)
Outlet-5/8"-18 Male (#6 O-Ring)

(*) - Dimensions of Mounting Hole (M8 Thd)

Part Descriptions: Specifications

Part No.	No.	Part No.	Description	No.	Part No.	Description	
14-0611	Condenser 12V	1	24-0145	Casing	11	25-0108	Fan
14-0612	Condenser 24V	2	24-0159	Cover	12	25-0251	Relay 12V
Specifications		3	24-1993	Mounting Bracket (L)	25-0219	Relay 24V	
Capacity	-to support a cooling capacity of 23600 Btu/hr (6925 W)	4	24-1998	Mounting Bracket (R)	13	25-0221	Socket, Relay
Air Flow	-950 CFM (560 m ³ /h)	5	25-0309	Venturi Assy.	14	26-0220	Receiver Drier
Current	-14 Amps/13.5V	6	25-0434	Motor Support	15	25-0343	Pressure Switch
	-7 Amps /27V	7	24-0343	Receiver Drier Bracket	16	27-0288	Refr. Hose Assy. #6
Weight	-30 lbs. (13.6 kg)	8	24-0234	Mount	17	28-0005	Grommet
		9	21-0122	Condenser Coil	18	28-0013	Snap-in Plug
		10	25-0470	Motor 12V	19	27-0601	O-Ring #6
			25-0490	Motor 24V	20	25-0451	Wiring Harness

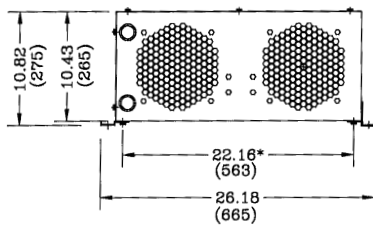
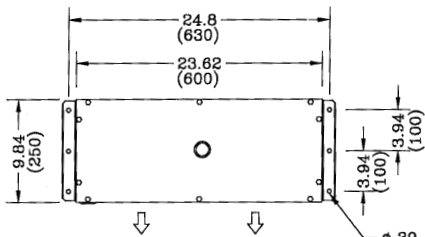
Casing made of 16GA (1.5mm) and mounting brackets of 14GA (2mm) Cold Rolled Steel finished in black semi-gloss epoxy powder coat.

Electric condensers are used when radiator mounted types cannot be installed. The reasons being insufficient air flow and /or when additional heat load over the engine cannot be tolerated. Condensing capacity will remain constant and will not be dependent on engine RPM.

Features

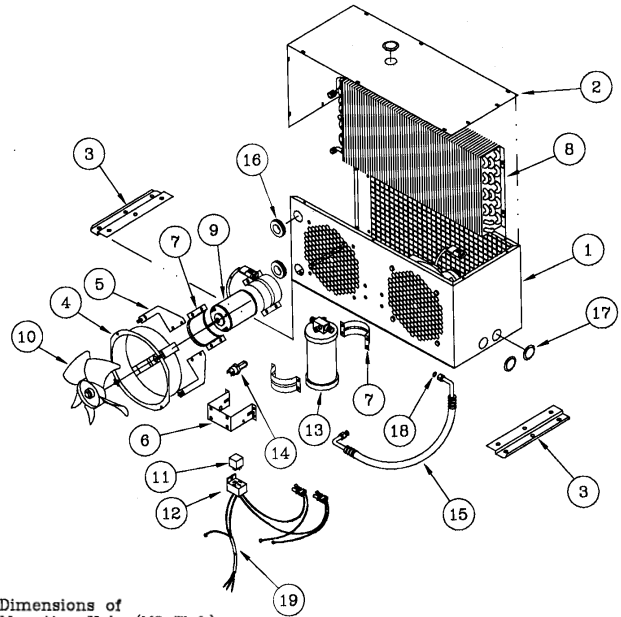
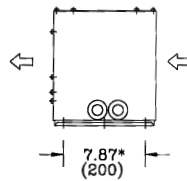
The 406 is a deck or roof mount condenser that has the receiver/drier mounted internally. The hose can exit either side of the 406. Condenser must be mounted as shown in picture.

Electric Condenser **Model 407**



∅.39 (10), 6 pls. Mounting Holes

(*) - Dimensions of Mounting Hole (M8 Thd.)



Note
El. Wiring and Refr. Hose to be connected inside casing

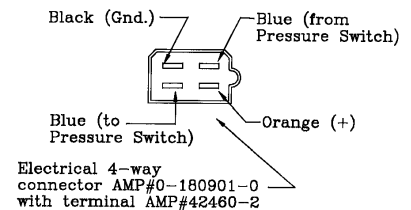
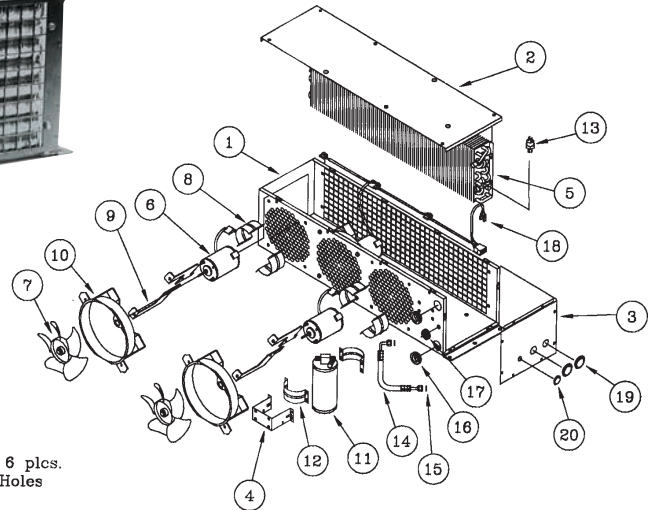
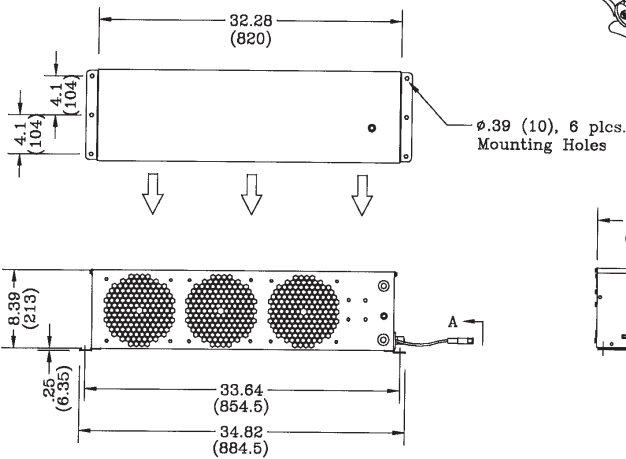
Wiring
Orange(+), Black(-)
Blue (from On-Off AC)

Refrigerant
Inlet-3/4"-16 Male (# 8 O-Ring)
Outlet-5/8"-18 Male (#6 O-Ring)

Features

The 407 is a larger capacity version of the 406. With the receiver/drier mounted internally, installation time is minimized. Condenser must be mounted as shown in picture.

Electric Condenser **Model 408**



View A

Part Descriptions: Specifications

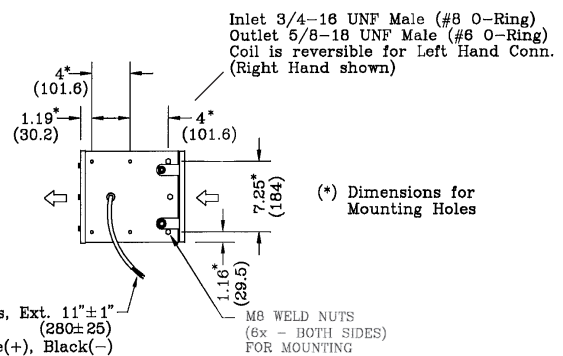
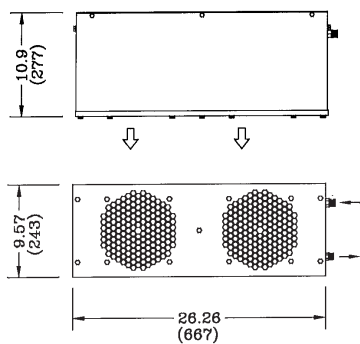
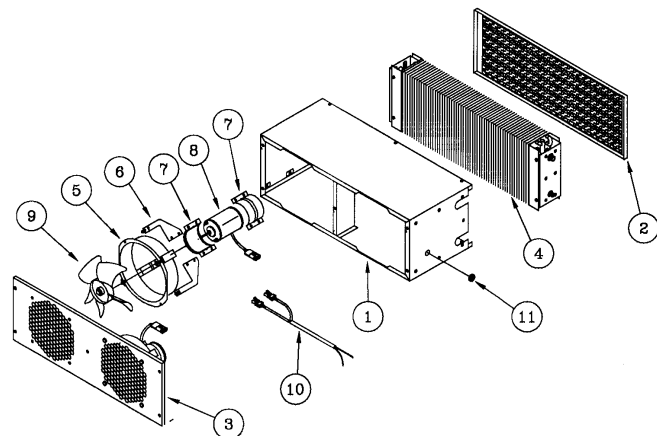
Part No.	No.	Part No.	Description	No.	Part No.	Description	
14-0851	Condenser 12V	1	24-0964	Casing	11	26-0219	Receiver Drier
14-0852	Condenser 24V	2	24-0965	Cover	12	25-0297	Mount
Specifications		3	24-0966	Side Cover	13	25-0308	Pressure Switch
Capacity	-to support a cooling capacity of 29000 Btu/hr (8500 W)	4	24-0967	Receiver Drier Bracket	14	27-0373	Refrigerant Hose #6
Air Flow	-1050 CFM (1785 m ³ /h)	5	21-0166	Condenser Coil	15	27-0601	O-Ring #6
Current	-20 Amps/13.5V	6	25-0185	Motor 12V	16	28-0005	Grommet
	-10 Amps/27V	7	25-0190	Motor 24V	17	28-0004	Grommet
Weight	-47 lbs. (21.3 kg)	8	25-0108	Fan C.C.W.	18	25-0450	Wiring Harness
Casing made of 16GA (1.5mm) and mounting bracket of 14GA (2mm) Cold Rolled Steel finished in black semi-gloss epoxy powder coat.		9	24-0234	Motor Mount	19	28-0013	Snap-in Plug
		10	25-0434	Motor Support	20	28-0011	Snap-in Plug
			25-0309	Venturi Assy.			

Electric condensers are used when radiator mounted types cannot be installed. The reasons being insufficient air flow and /or when additional heat load over the engine cannot be tolerated. Condensing capacity will remain constant and will not be dependent on engine RPM.

Features

The 408 was designed for large capacity requirements in the forestry, construction and mining industries. Its three fan design ensures high capacity performance in the most demanding conditions. Receiver/drier mounted internally. Condenser must be mounted as shown in picture.

Electric Condenser **Model 409**



Part Descriptions: Specifications

Part No.	No.	Part No.	Description	No.	Part No.	Description
14-0901	1	24-1967	Casing	7	24-0234	Motor Mount
14-0902	2	24-1966	Grill	8	25-0181	Fan
Specifications	3	24-1968	Cover	9	25-0470	Motor 12V
Capacity	4	21-0309	Condenser Coil		25-0490	Motor 24V
Air Flow	5	25-0388	Venturi	10	25-0635	Wiring Harness
Current	6	25-0434	Motor Support	11	28-0045	Grommet

Capacity -to support a cooling capacity of 28500 Btu/hr (8350 W)

Air Flow -1100 CFM (1870 m³/h)

Current -14 Amps/13.5V
-7 Amps/27V

Weight -46 lbs. (21 kg)

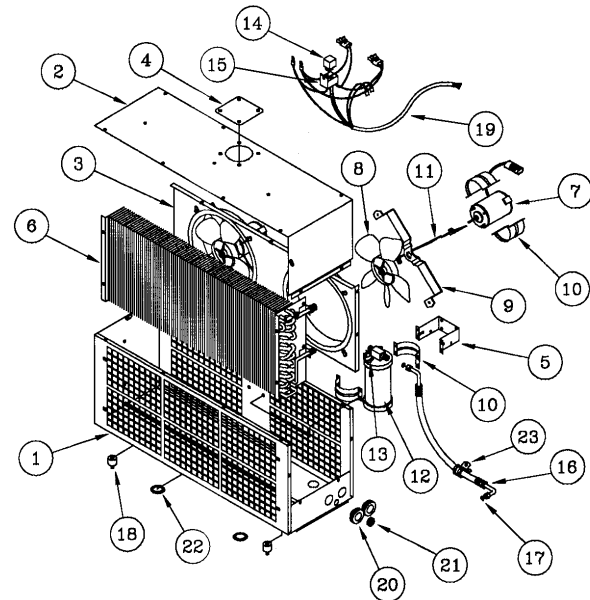
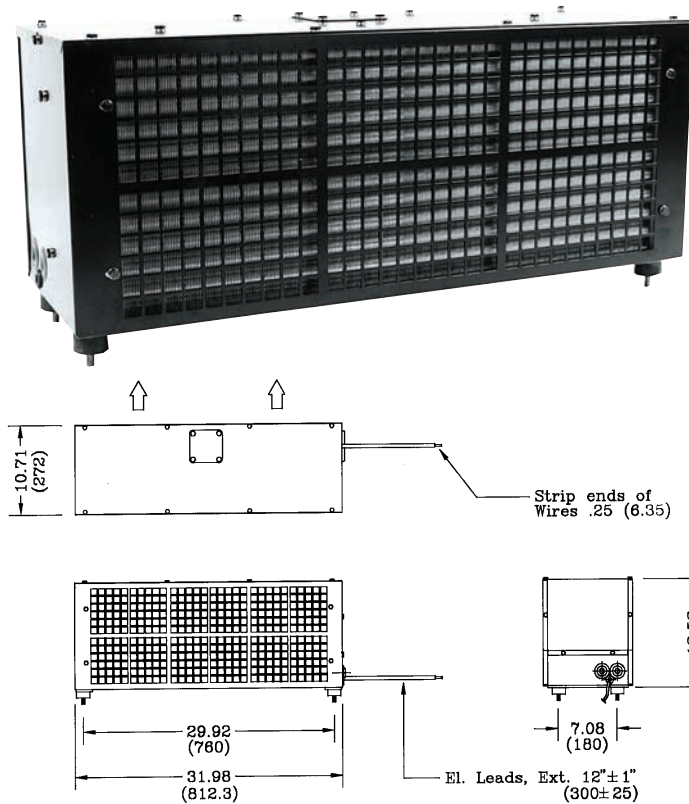
Casing made of 16GA (1.5mm) Cold Rolled Steel finished in black semi-gloss epoxy powder coat.

Electric condensers are used when radiator mounted types cannot be installed. The reasons being insufficient air flow and/or when additional heat overload the engine cannot be tolerated. Condensing capacity will remain constant and will not be dependent on engine RPM.

Features

The 409 is a universal mount electric condenser. It does not have the receiver/drier mounted internally. This allows for many different installation options. Condenser can be mounted vertically or horizontally.

Electric Condenser **Model 410**



Part Descriptions: Specifications

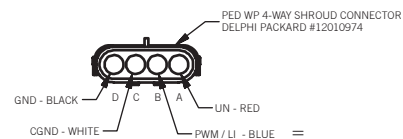
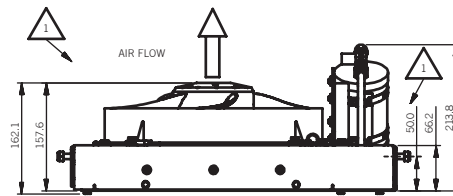
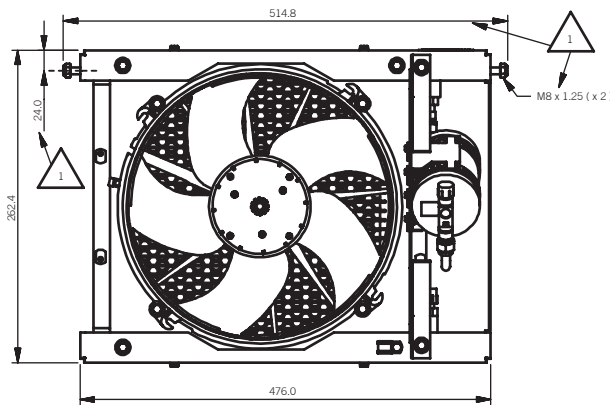
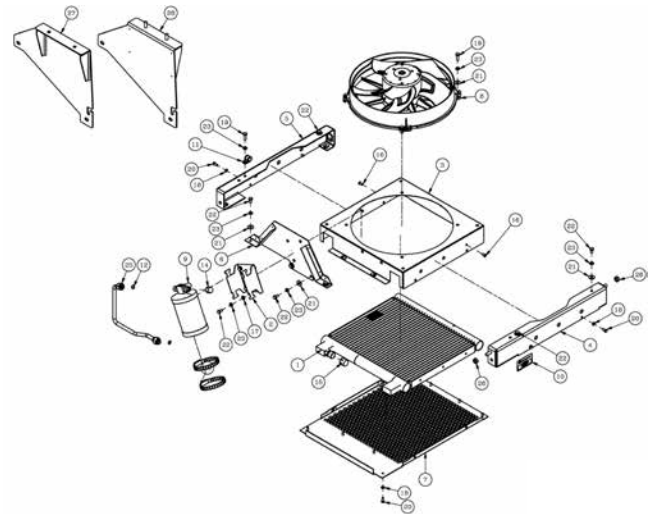
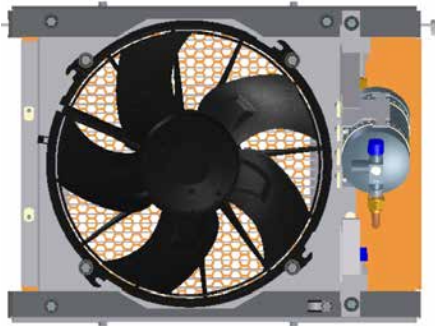
Part No.	No.	Part No.	Description	No.	Part No.	Description
14-1001	1	24-0925	Casing	13	25-0308	Pressure Switch
14-1002	2	24-0926	Cover	14	25-0251	Relay 12V
Specifications	3	24-0927	Fan Mounting Plate		25-0219	Relay 24V
Capacity	4	24-0928	Cover Plate	15	25-0221	Socket
-to support a cooling capacity of 41600 Btu/hr(12200 W)	5	24-0929	Receiver Drier Bracket	16	27-0379	Refrigerant Hose #6
Air Flow	6	21-0188	Condenser Coil	17	27-0601	O-Ring #6
-1900 CFM (3230 m ³ /h)	7	25-0470	Motor 12V (B.B.)	18	28-0057	Vibration Mount
Current	8	25-0229	Motor 24V (B.B.)	19	25-0394	Wiring Harness
-24 Amps/13.5V	9	25-0302	Fan	20	28-0045	Grommet
-12 Amps/27V	10	24-0963	Motor Bracket	21	28-0005	Grommet
Weight	11	24-0234	Motor Mount	22	28-0013	Plastic Plug
-65 lbs. (29.5 kg)	12	24-0962	Motor Support	23	27-0012	Hose Clamp #6
Casing made of 16GA (1.5mm) Cold Rolled Steel and finished in black semi-gloss epoxy powder coat.		26-0219	Receiver Drier			

Electric condensers are used when radiator mounted types cannot be installed. The reasons being insufficient air flow and /or when additional heat load over the engine cannot be tolerated. Condensing capacity will remain constant and will not be dependent on engine RPM.

Features

The 410 was designed for high capacity off-road applications. Its large design has flexible hose routing options. The receiver/drier is mounted internally. Condenser must be mounted as shown in picture.

Electric Condenser **Model 443**



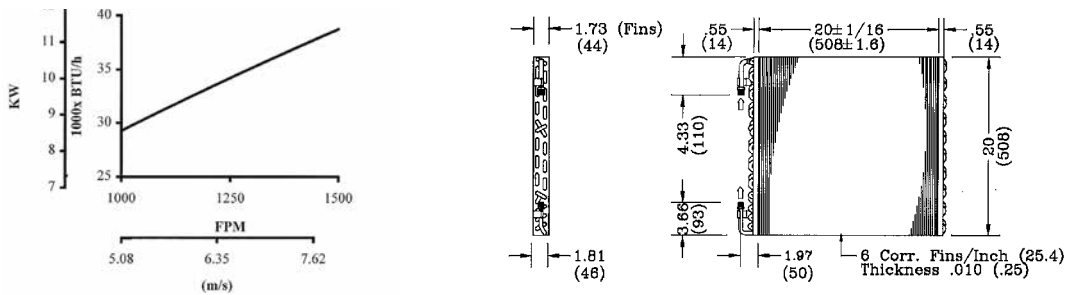
Part Descriptions: Specifications

Part no.	No.	Part No.	Description	No.	Part No.	Description	
14-4302	Condenser 24V	1	21-1855	CONDENSER	11	27-0082	P-Clamp #08
		2	24-12022	Receiver Bracket	12	27-0601	O-Ring #6
		3	24-12040	Condenser Casing	13	27-1211	Gear Clamp 3"
		4	24-12041	Condenser Supp. Back	14	28-0345	Plastic Cap #6
		5	24-12042	Condenser Supporter	15	28-0348	Plastic Cap #8
Specifications		6	24-12043	Receiver Support	16	29-0315	Pop Rivet 3/16"x.44"
Heating	23.000 Btu/hr	7	24-12044	Condenser Cover	17	29-0500	Washer M6 SS
Air flow	1000 CFM	8	25-3089	Fan EBМ 24V	18	29-0514	Washer M5 SS
Current	2.0 AMPS	9	26-0018	Receiver Drier	19	29-0520	Bolt M6x20 SS
Weight	10.7KG	10	26-1916	MCC Label for 14-4302	20	29-0626	Bolt M5x12 SS
	(13.8KG with mounting brackets and mtg. fastners)				21	29-0555	Washer M6 S.S.
					22	29-0753	Bolt M6x12 SS
					23	29-1252	Lock Washer M6
					24	31-1164	Conduit 3/8" L=300mm
					25	34-4810	Copper Tube 3/8"
					26	29-1455	M8 LOCKNUT w/NYLON IN

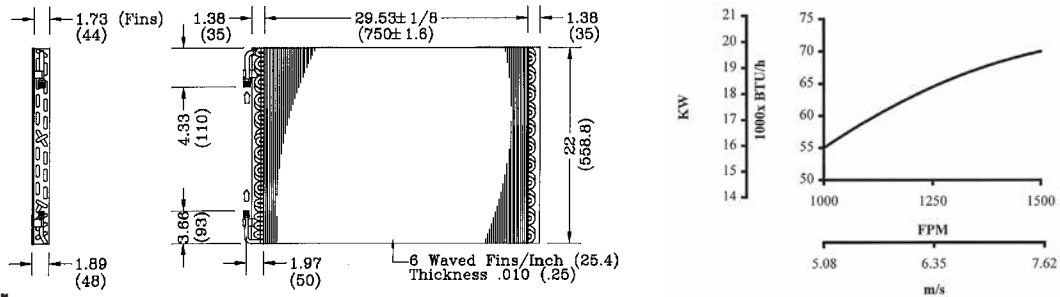
Condensers Radiator Mount

MCC's heavy duty radiator mounted condensers are the least expensive alternative compared to forced air types. They are manufactured in-house using 0.008-0.010" (0.20mm-0.25mm) thick aluminum fins and copper tubes. With endplates made of 16GA (1.5mm) Satin Coat Steel. Waved or corrugated fins are available, as indicated on the drawings. In addition to the heavy fin thickness, the edges are rippled, increasing the strength further. Low fin density makes cleaning easier and provides less pressure drop. Please keep in mind that the MCC condensers are developed for off-road environments. Condensers are painted black. In and outlet tubes are reinforced with metal brackets where required. All coils are pressure tested to a minimum of 300 psi (2.1 MPa) .

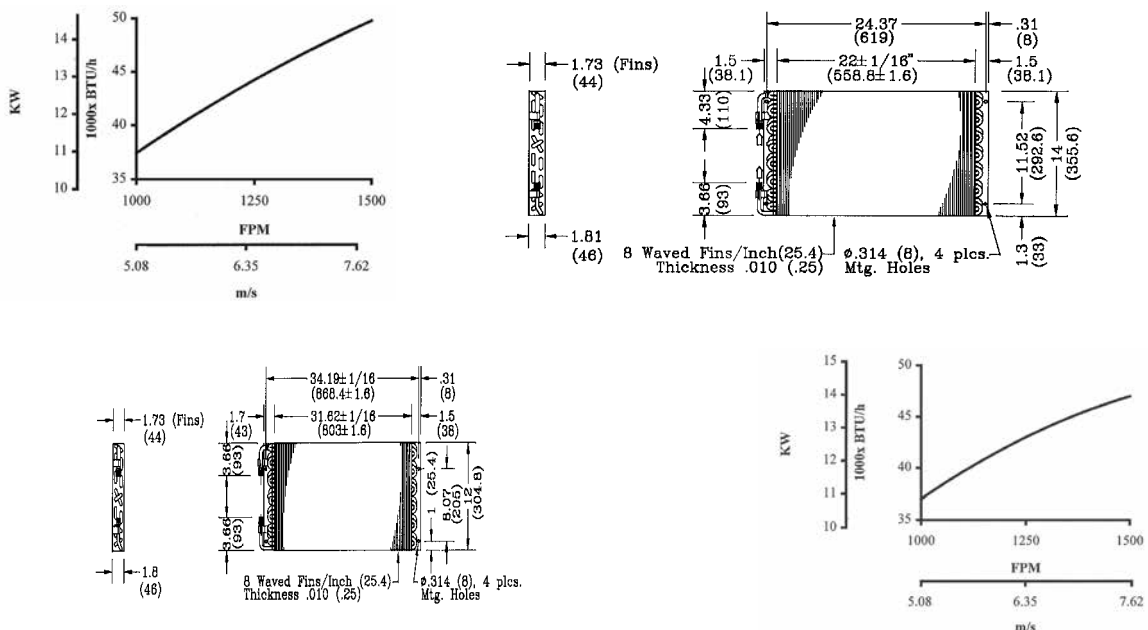
21-0089 Condenser



21-0176 Condenser



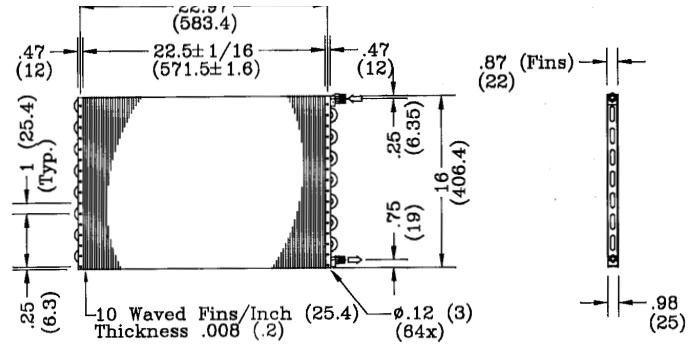
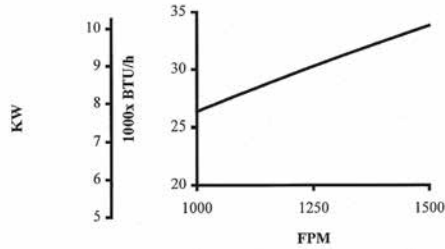
21-0320 Condenser



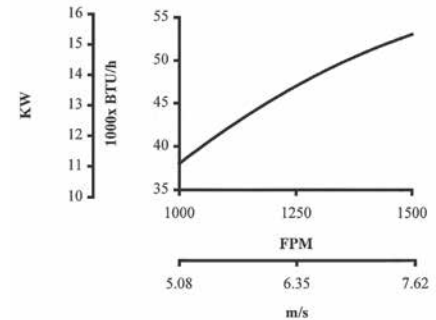
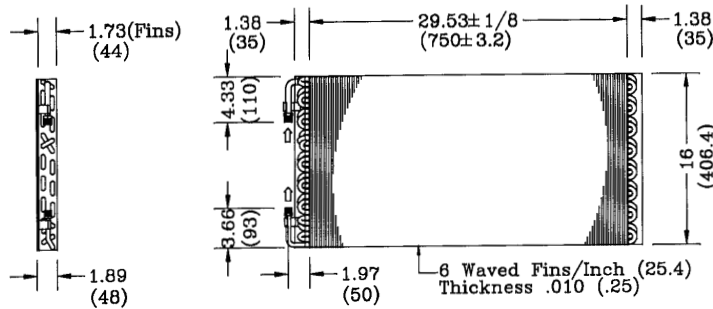
Note: Capacity based on 100°F (38°C) air temp. and 140°F (60°C) condensing temp.
 Inlet -3/4-16 UNF Male (O-Ring #8) Outlet -5/8-18 UNF Male (O-Ring #6)

Condensors Radiator Mount

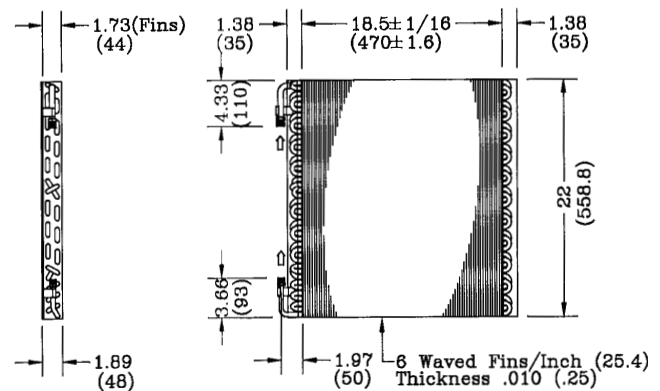
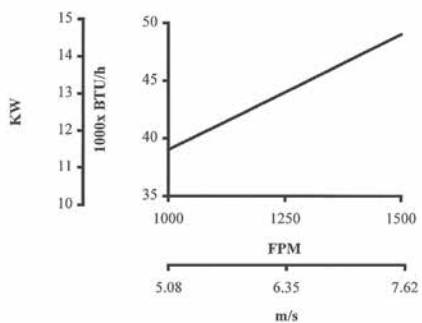
21-0020 Condenser



21-0322 Condenser



21-0324 Condenser



Note: Capacity based on 100°F (38°C) air temp. and 140°F (60°C) condensing temp.
 Inlet -3/4-16 UNF Male (O-Ring #8) Outlet -5/8-18 UNF Male (O-Ring #6)