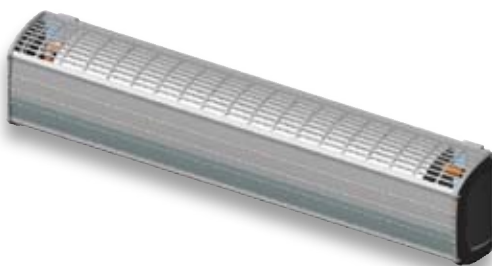




Mobile Climate Control
On Road



**An exclusive right
to optimal comfort**



PC 500 – Power Convector

Power Convector 500:

Even temperature distribution, numerous layout options, minimal space claim, low maintenance and easy to install



PC 500 (Power Convector), patent pending, is a “cross-over” product featuring the benefits of a normal convector and that of a

heating fan unit. This immediately opens many possibilities for the customer.

Buses, coaches, and other vehicles are excellent choices for the PC 500. The increased efficiency offered means that space can be saved.

Functions

The PC 500 has three operating modes:

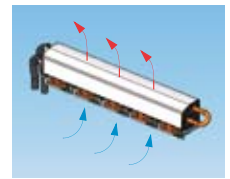
1. Normal convector mode, (Free-Flow) warm air rises naturally (convection) from the unit.
2. Fan half-speed mode, (Forced-Air) draws the air from the top of the unit through the fins and out to the floor. Once on the floor the warm air mixes and rises to the top.
3. Fan full-speed mode, (Forced-Air) gives instant heating results by taking maximum heat from the PC 500 and distributing this air all over the floor.

A sensor is mounted in the PC 500 for measuring air temperature and works with all the modes, normal convector and fan heating.

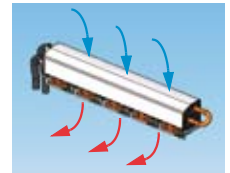
Construction

The Power Convector consists of an aluminium heat exchanger with copper pipes. Just under this heat exchanger are the fans with the connecting electrical cables. The fans are axial-brushless types and have long lasting ball bearings.

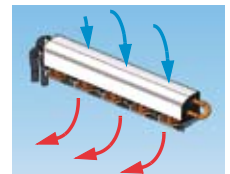
On the cover, for added convenience, is a maintenance plastic strip which gives access to the fans.



1. Normal convector mode



2. Fan half-speed mode



3. Fan full-speed mode

Summary

Suitability, long life, fast operation, greater control, reduction of components, and easy installation are all good reasons for selection of the PC 500.



Summary of advantages

- Suits a wider range of bus types
- Long life, uses standard parts
- Fast operation, quick results
- Greater temperature control
- Modular configuration
- Easy to install (due to unique integration)

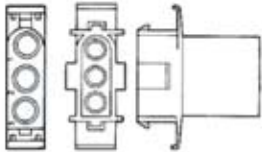
Technical Specification

Electric features

Rated voltage / operating range	24 VDC	VDC-22-29V
Start-up voltage/ Rated speed	7.0 VDC,	3800 RPM ± Nominal
Rated current/ rated power 2-speed control standard with PWM as a option	0.25 Amp. + 10% max	6 Watts/ fan
Mechanical	Ball bearing	

Electrical connections

Standard connection	Circuit board connection	GND=black RED=high speed BLUE=low speed
Optional connection	Cabling with connection cap	AMP Cap Part No. 1-350347-0 AMP plug Part No. 1-350346-0



Plug Cap

Max number of PC 500 in series connection 3 units

Water connections

Water connections to PC 500 is with 15 mm standard hose.

Noise

Measured noise from the wall mounted unit 1 m above floor level:

Full speed 58 dBA

50% speed 46 dBA

Life

Unit is designed to work for 25,000 h (with outlet air temp of 40°C degrees 65% humidity).

Lower internal air temperatures in the unit will give positive effect on lifetime.

Quality specifications

PC 500 meets the requirements according to:

- Low Voltage Direktive 73/23/EEC
- EMC Direktive 89/336/EEC
- CE Marking Direktive 93/68/EEC

Environment and limitations

PC 500 is designed to work in the expected climate inside a vehicle.

Air temperature limitations

Max ambient temperature	+40°C to +80°C	During summer with parked vehicle
Min air intake temperature operation	-30°C to -10°C	Short time
Working air intake temp continuously	-10°C to +40°C	

Water temperature limitations

Max water temperature	+120°C	Short time
Operative water temperature	+40°C to +95°C	
Min water temperature	-30°C to +40°C	Short time

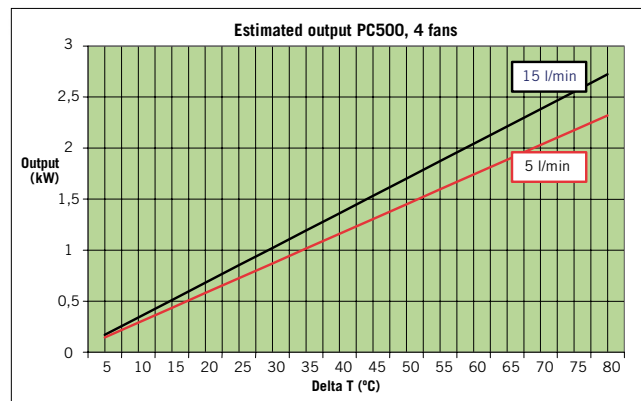
Storage

Unit can be stored in a dry place with a surrounding temperature of -40 – +65°C.

Maintenance and cleaning

Normal cleaning procedures are to be followed. Avoid direct spray of water or solutions on the unit. At least once a year it is advisable to remove the cover and conduct a better cleaning.

Performance and current consumption



Product Range

PC500 can be ordered with one fan (250mm unit) up to 15 fans (6 meters unit). The fans can be mounted according to customer specifications for each PC500 application.

Every passenger deserves the best possible vehicle climate with MCC products

Our target is to become the leading global HVAC provider to the commercial vehicle industry.

We provide exceptional performance in mobile climate control for OEM customers.



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