



Key Features

- Ruggedized design for military applications
- Used with military vehicles which travel across rough terrain
- Compact and light-weight design, constructed from aluminium
- Internally mounted
- Designed to meet extreme conditions
- Quiet operation
- Electro-mechanically operated fresh-air system
- In service with military forces throughout the world
- Easy, low maintenance design
- Available in various power supply options
- External finish, either 2 pack polyurethane Matt IRR or Powder Coating for durability



Air-conditioning and Cooling Systems

MPA-550 Internally Mounted

Designed to replace the UK MoD Type 57 ACU the “ruggedised” MPA-550 is currently in-service with military forces throughout the world. The unit is mounted internally within a shelter and provides both equipment and operator climate control.

The unit can either be mounted on the floor underneath a work surface, with the conditioned airflow exiting from the top of the unit via a short fitted duct under the work surface, or alternatively, it can discharge the airflow at ceiling level via a suitable plenum.

The unit provides a constant flow of filtered ‘fresh-air’ into the shelter which can be manually closed-off if required when the shelter is unmanned, whereupon air is conditioned/cooled and recirculated.

Monitoring and display of internal shelter temperature, mode status and fault alarms, is by a separate control unit which also allows the ACU to be operated in ‘AUTO’

mode via an electronic thermostat or ‘Heat’ or Cooling’ modes can be selected manually. The control unit can be mounted in accordance with customer requirements.

The unit is designed to operate in extreme environments as defined in DEF STAN 00-35 climatic categories A1 to C2.

It is constructed from lightweight aluminium and its refrigeration circuit is ‘hermetically’ sealed for ‘leak free’ reliability. Available in both 400Vac 3 Phase or 230Vac single phase, it is NATO codified and fully supportable with spare parts. Paint finish is dependent upon customer requirements.

About CMCA

CMCA Ltd is an original equipment manufacturer specialising in the design and manufacture of precision air-conditioning, power generation and environmental control equipment systems for military applications. A range of equipment is offered all using proven technology in battlefield conditions, designed to operate in the most extreme environments on earth.

Facts and Figures

Overall Dimensions (nominal):

Width: 430mm
 Height: 695mm
 Length: 775mm

Weight: 102kg

Power Supply: 230Vac
 1 phase, 50Hz
 400Vac
 3 phase, 50Hz

Cooling Capacity (nominal): 4.5kW @+55°C
 5.8kW @+35°C

Heating Capacity (nominal): 4.0kW

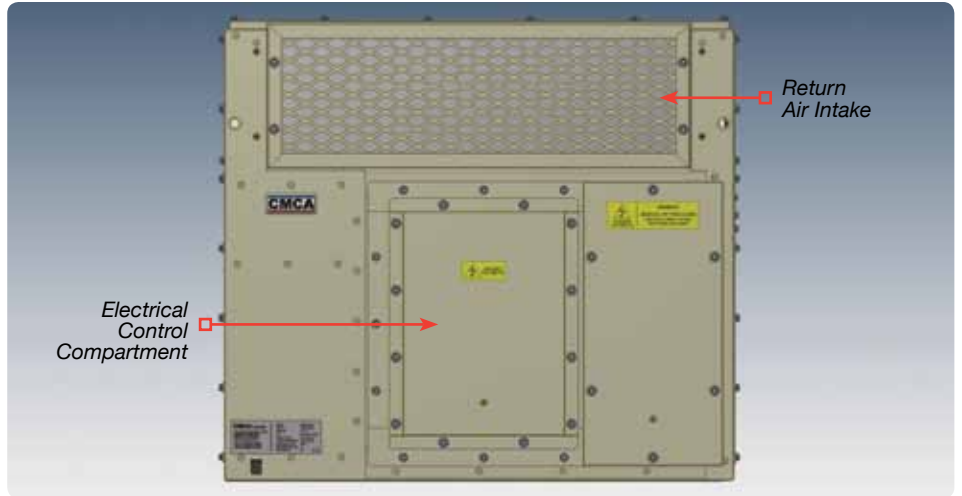
Evaporator Airflow (nominal): 1,050m³/hr

Operating Conditions: -46°C to +55°C

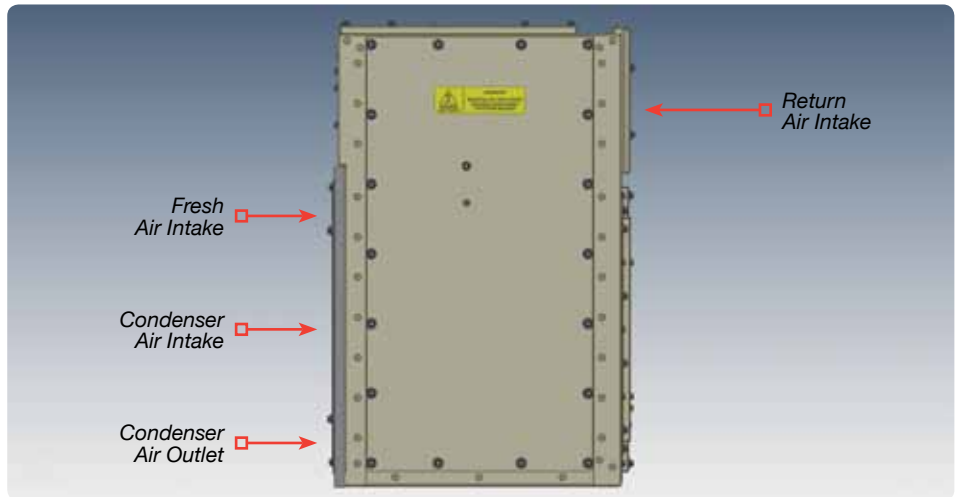
Refrigerant Type: R134a

Front Elevation

MPA-550



Side Elevation



Further Information

For a full technical specification on this or any other CMCA product please contact:

Plan View

