

Environmental Control Systems Division



Air-conditioning and Cooling Systems

MPA-100

Specifically designed as a small compact 'ruggedised' air conditioning unit for the cooling and heating of a 'closed loop' transit case containing customer specific electronic equipment the MPA-100 is capable of deployment in demanding ambient temperature conditions, as defined in DEF STAN 00-35 climatic categories A1 to C0.

Operationally it is directly coupled to the transit case and creates an internally 'sealed' environment between +30°C to +35°C utilising an integral intelligent control system that provides visual alarms with 'blackout' capability. It can also connect to the Users own data system in order to provide remote indication of operational status and 'fault' alarms. It currently interfaces with an Arges Mitraset 19" transit case, can be adapted to any type as required and utilises a refrigeration circuit that is hermitically sealed for leak free reliability.

Constructed from lightweight aluminium it is man-portable, with a paint finish specific to customer

requirements. Infrared reflective (IRR) Matt paint and Chemical Agent Resistant Coating (CARC) to Defence Standard 80-208 are readily available. A4 marine grade fixings are employed for corrosion resistance for coastal applications.

About CMCA

CMCA Limited is an original equipment manufacturer specialising in the design and manufacture of precision air-conditioning systems, environmental control equipment and power generation systems for military applications. The company has been assessed and registered as complying with the quality assurance standard BS EN ISO 9001:2008 and are signatories to SC21.

A range of equipment is offered all using proven technology in battlefield conditions and designed to operate in the most extreme environments on earth. Tailor-made solutions can be provided to customers' individual requirements all delivering advanced solutions alongside a dedicated support mechanism, to deliver truly outstanding performance in the most testing of environments.

Key Features

- Ruggedized design for military applications
- Used with military vehicles which travel across rough terrain
- Compact, lightweight design, constructed from aluminium, deployable and transportable
- Externally mounted to electronic satellite communication equipment cases
- Integral control system with mode status and fault indication
- Designed to operate in extreme conditions
- Quiet operation
- In service with military forces throughout the world
- Easy, low maintenance design
- Painted to customer's specific requirements





Environmental Control Systems Division

Facts and Figures

Overall Dimensions (nominal):

Width: 430mm Height: 380mm Length: 545mm

Weight: 36kg

Power Supply: 230Vac

1 phase, 50Hz

Cooling Capacity

(nominal): 990W @+55°C

Heating Capacity

(nominal): 600W

Evaporator Airflow

(nominal): 200m3/hr

Operating

Conditions: -20°C to +55°C

Refrigerant Type: R134a

RFI/EMC: Designed for use with rapid deployment transportable military satellite electronic communication systems

Front Elevation

MPA-100



Side Elevation



Further Information

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



Unit 35/36 Prospect Road Beechburn Industrial Estate Crook, Co. Durham DL16 8JL England

Company Reg No: 3643009

Tel: +44 (0)1388 764 985 Fax: +44 (0)1388 764 997 Email: info@cmca.ltd.uk www.cmca.ltd.uk

Plan View

