AC-M5MKII AIR CONDITIONER

Function

The AC-M5MKII is designed for window mounting in ISO containers. Together with the trap door system the air conditioner is mounted in the container wall. It is designed to store within the confinement of the ISO corners of the container during transportation, or storage. The AC-M5MKII is sliding in its trap door system and is deployed from the container for operation. Once deployed the unit is locked from inside the container when operating.

The function of the AC-M5MKII is based on a cooling circuit with two powerful fans. The evaporator (inside the container) section contains the evaporator core and a radial fan, which cycles the warm internal air from the shelter through the cold evaporator core and expels the cooled air through the discharge grill. The condenser (outside the container) section contains the condenser core and an axial fan, which is moving the heat from the internal air to the outside atmosphere. The condenser circuit is not filtered. Instead of filtering this air path, sand and debris entering the unit will be expelled through holes in the bottom of the AC-M5MKII. This means low maintenance.

FEATURES

- The AC-M5MKII is manufactured from hot dip galvanized and powder coated steel sheet.
- AC-M5MKII and trap door is a 100% bolt-on upgrade for customers already using the AC-M5W.
- No fresh air intake, as to qualify CBRN/COLPRO compliance.
- When in operation and transportation mode the trap door and AC-M5MKII provides an air tight boundary to ambient environment.
- The above qualifies for CBRN/COLPRO compatibility.
- The trap door unit also serves as protection against rain and extreme sun when the unit is operating.
- NATO green, IR reflective, BS381C285. Optional colors on request.
- Provides cooling at ambient temperatures up to + 60°C.
- Scroll compressor for high degree of reliability and low noise level.
- Environment-friendly R134a refrigerant.
- 5 kW cooling standard.
- 2 kW heating standard.
- Safety high pressure switch to prevent over pressure.
- Easy to operate micro processor to control temperature and comply with EMC military standard.
- No external room thermostat. Only cable exiting the unit is mains 230V.
- Two speed selector for the internal fan.
- "VENT-only" option, allowing air circulation without cooling or heating.
- PPI 15 filtering recirculated air, within the shelter.
- Easy mounting into the trap door system, by means of a forklift or crane.
- During transport the AC-M5MKII is stored safely, bolted to the trap door within the ISO dimensions of container.
- Possibility to lock the trapdoor with a padlock or positively lock the trapdoor for under-slung transportation by helicopter.
- CE-marked.
- AC-M5MKII and trap door setup complies with Def Stan 59-411 Land Class C.
- ErP 2015 compliant.

ACCESSORIES

- Trap door unit, containing trap door and mounting kit for ACM 5 MK II
- Welding frame for corrugated container. (Same as ACM 5)

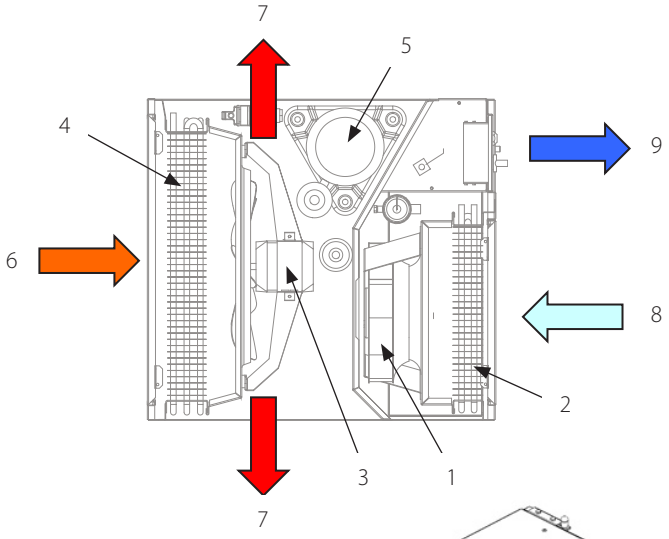
TECHNICAL DATA

Air Conditioner		**AC-M5MKII**
Nato Stock Number (w/o heating element)	NSN	N/A
Nato Stock Number (with heating element)	NSN	4120-22-624-3431
Operating range, ambient temperature, cooling	°C	20-(+60)
Operating range, ambient temperature, heating	°C	-32-(+20)
Airflow, internal, step I / II	m^3/h	417 / 900
Airflow, fresh air intake, step I / II	m^3/h	N/A
Airflow, external	m^3/h	1475
Max. cooling capacity*	kW/BTU	4,7/16000
Cooling capacity @ 55/55°C	kW/BTU	4,7/16000
Cooling capacity @ 35/27°C	kW/BTU	3,3/11000
Heating capacity (with electric heating element)	kW/BTU	2,0/7000
Power supply	Ph / V / Hz	1 / 230 / 50
Max. running current, cooling	A	9,8
Max. running current, heating	A	9,3
Locked rotor amperage (LRA), cooling	A	47
Max. power consumption	kW	2,3
Refrigerant/quantity**	Type / kg	R 134a / 1,4
Filter material	Polypropylene	PPI 15
Protection class	IP	55
Noise level, 1 m distance, step I / II	dB(A)	49 / 63,5
Weight	kg	79
Weight including trap door	kg	105,5

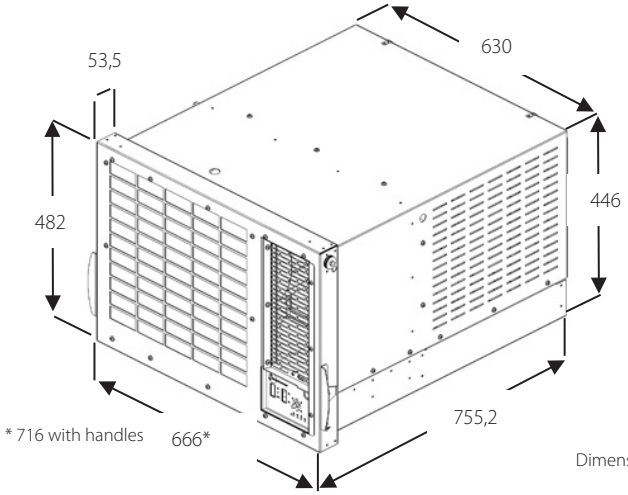
* The cooling capacity can change considerably depending on air temperature and humidity.
**GWP 1430 (hermetically sealed).

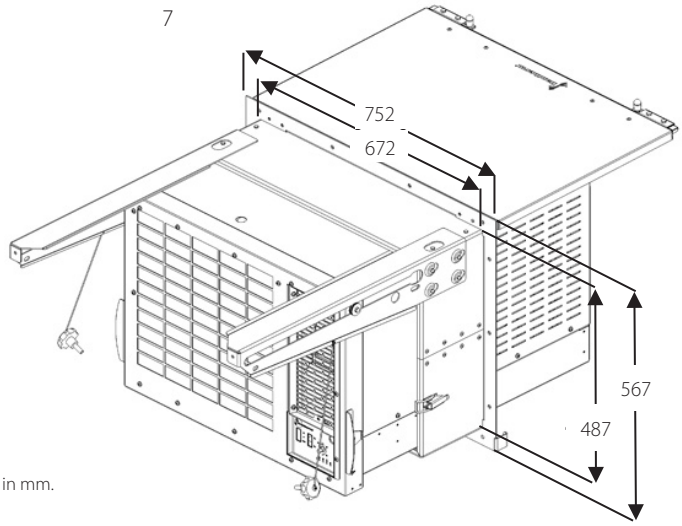
Unit components and airflow

1. Internal fan
2. Evaporator core
3. External fan
4. Condenser core
5. Compressor
6. External air intake
7. External air discharge
8. Internal warm air intake
9. Internal cooled air discharge



DIMENSIONS





Dimensions in mm.