



MCM280 PORTABLE AIR CONDITIONER



PRODUCT MANUAL

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

WARNINGS

These instructions should be read by:

- The specifying engineer.
- The installation engineer.
- The user.
- The service engineer.



- Failure to follow these instructions may result in risk of personal injury or damage to the equipment.
- Damage due to a failure to follow these instructions will invalidate the warranty.
- The appliance must be serviced by qualified engineers in compliance with local regulations.
- The appliance must be switched off and disconnected from the power supply before any work is carried out.
- There are no user controls inside the appliance casing.
- Do not place anything on top of the appliance.
- An air gap of at least 300mm should be allowed at the front and rear of the unit to ensure a clear airflow.
- Do not disconnect the appliance from the supply under load.
- For internal use only. Do not use out of doors.
- Extension cables should be correctly rated for the load, fully unwound and never run through water or over sharp edges.
- Always transport and store in an upright position.
- Maximum operating temperature 35°C.
- Minimum operating temperature 21°C.

SPECIFICATIONS:

The MCM280 is a Mono-block portable air conditioning unit. It is connected to a 13 Amp. 230Vac. 50Hz (60Hz on selected models) power supply and comes fitted with a fused UK moulded plug.

It is recommended that the supply to the machine should be protected by a 30mA RCD

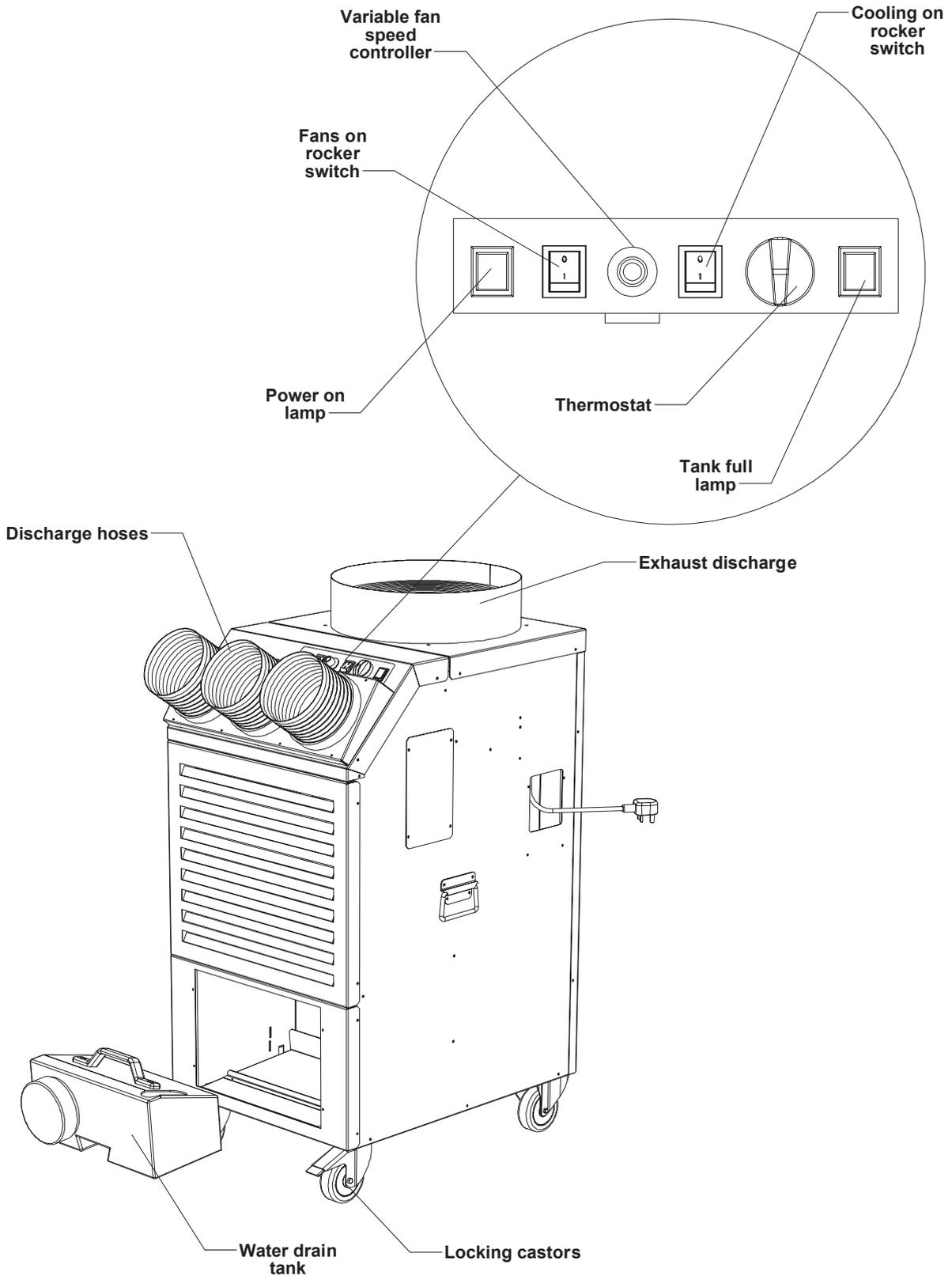
SET UP AND OPERATION:

- The unit is designed to operate between 21°C and 35°C. Operation outside of these temperatures could cause compressor failure and will invalidate the warranty. If the temperature in the room is above 35°C it is recommended that all the doors and windows are opened and the unit run on Fan only to reduce the temperature.
- Site the unit on a firm level surface and apply the castor brakes. Do not operate the machine without engaging the castor brakes.
- Attach the 400mm exhaust duct and route to a suitable discharge point. Keep the duct as short and straight as possible. Do not operate the unit if the hose is kinked or punctured. Do not exceed the supplied length of exhaust duct.
- Should air need to be directed to a particular area fit the air discharge hoses to the front outlets and extend to the desired discharge points. Do not exceed 1.25M per hose.
- Check that the water drain tank is correctly located in its housing and the flexible drain hose is inserted into the tank.
- Connect the unit to a 230Vac 50Hz (60 Hz on selected models) power supply and check that the 'Power On' lamp is illuminated.
- Turn the 'Fan On' switch to 'I' to start the fans.
- Select the desired fan speed by rotating the fan speed control knob clockwise for greater speed and anticlockwise for slower speed.
- Rotate the thermostat fully anti-clockwise for maximum cooling.
- Turn the 'Cooling On' switch to 'I' to start the compressor. It should be noted that the compressor will not start if the fans are not running or the ambient temperature is below 21°C. The compressor is fitted with a start delay timer and will not run for 3 minutes from activation of the cooling switch. This device is designed to protect the compressor from repeated start/stop cycles.
- Allow a minimum of 10 minutes for the unit to start cooling.
- During the cooling process the unit will produce condensate (water) which will drain into the water drain tank. Once this tank fills to a set level it will switch the compressor and fans off and illuminate the 'Tank Full' lamp.
- Before removing the water drain tank, and to avoid any potentially damaging water spillage, switch the fans and cooling off and allow 5 minutes for any accumulated moisture within the machine to drain into the tank.
- To empty the tank carefully remove it from the machine using the grab handle on the top by lifting and sliding it forwards. Do not loosen or remove the large screw cap on the front of the tank. Once the tank is emptied replace it in the housing ensuring it is correctly located and that the flexible drain hose is inserted into the tank.
- The machine can now be restarted.
- Ensure the water drain tank is empty prior to transportation.
- Do not remove the water drain tank while the machine is operating.

CLOSE CONTROL WITH THE THERMOSTAT:

Once the desired temperature has been achieved in the area to be cooled the thermostat can be slowly turned clockwise until there is an audible click. The machine will now cycle on and off around this temperature.

OPERATION AND CONTROLS:



MAINTENANCE:

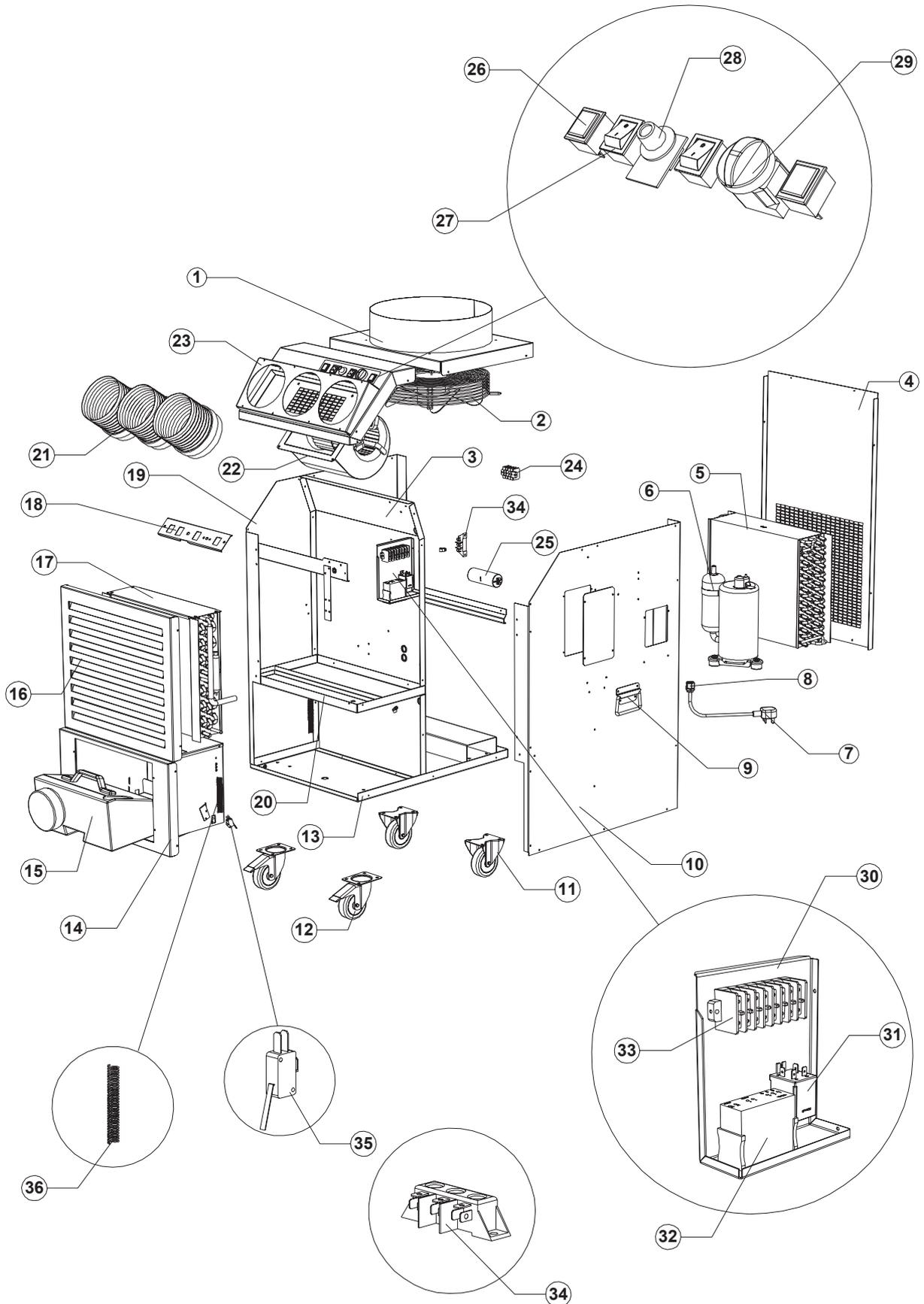
1. Check and clean the evaporator and condenser heat exchanger coils. Build up of dust and dirt can severely effect the performance of the machine. Remove the front and rear panels and clean with compressed air.
2. Periodically check the water tank drain mechanism is operating correctly and the drain hose is present and in good condition.
3. Regularly inspect the mains cable and plug for signs of damage or wear. Do not operate the machine with a damaged mains cable.
4. Check that the castors are running freely and that the breaking mechanisms are working correctly.

TROUBLESHOOTING GUIDE:

PROBLEM	POSSIBLE CAUSE	SOLUTION
Machine fails to operate	Power Failure	Check power on lamp is illuminated.
		Check unit is connected to the power supply. Check plug fuse for failure and correct 13A rating
		Check Building circuit is not overloaded.
Poor cooling performance.	'Tank Full' lamp illuminated	Empty water tank.
	Cooling not selected	Switch cooling on
	If fitted, Thermostat knob not turned fully anti-clockwise	Turn knob fully anti-clockwise. Allow 3 minutes for compressor to start and 10 minutes for cooling.
	Coils dirty Filters dirty. (where fitted) Exhaust hose too long or kinked. Exhaust outlet restricted or blocked.	Clean coils. See Maintenance. Clean filters. See Maintenance. Ensure maximum duct length is not exceeded. Ensure duct is run as straight as possible and is venting correctly at it's exit point.
	Air inlet grills obstructed	Remove obstruction.
Water leaking.	Clogged drain hose. Water drain tank missing	Remove blockage. Replace tank
	Tank full and tank mechanism not working correctly.	Check tank mechanism operates correctly. Ensure 'Tank Full' lamp illuminates when mechanism is activated.
	Drain hose not correctly located in tank.	Ensure drain hose is located inside the tank.
Compressor stops working.	Input voltage too low. Water drain tank full	Check line voltage. Check water drain tank is not full

SHOULD YOU CONTINUE TO EXPERIENCE PROBLEMS PLEASE CONTACT THE SUPPLIER.

EXPLODED VIEW:



SPARE PARTS:

ITEM No	PART No	DESCRIPTION	PRICE
1	BW0201219	TOP REAR PANEL	POA
2	FA010124	CONDENSER FAN	POA
3	BW0201221	CENTRE PANEL	POA
4	BW0201222	REAR PANEL	POA
5	FR030211	CONDENSER COIL	POA
6	FR010123	COMPRESSOR	POA
7	EL020108	MAINS CABLE	POA
8	ME040201	CABLE GLAND AND LOCKNUT	POA
9	ME040305	TRUNK HANDLE	POA
10	BW0201223	RIGHT SIDE PANEL	POA
11	ME010211	100mm FIXED CASTOR	POA
12	ME010212	100mm SWIVEL CASTOR	POA
13	BW0201224	BASE PANEL	POA
14	BW0201225	LOWER FRONT PANEL	POA
15	ME040137	CONDENSATE TANK	POA
16	BW0201226	EVAPORATOR PANEL	POA
17	FR030111	EVAPORATOR COIL	POA
18	BW0201227	SWITCH PLATE	POA
19	BW0201229	LEFT SIDE PANEL	POA
20	BW0201230	GALVANISED DRIPTRAY	POA
21	BW030201	1500 DUCT C/W PLASTIC PLASTIC	POA
22	FA010317	EVAPORATOR FAN	POA
23	BW0201231	FRONT TOP PANEL	POA
24	EL020423	MODULAR TERMINAL BLOCK	POA
25	EL030111	55uf CAPACITOR	POA
26	EL030704	INDICATOR LIGHT	POA
27	EL030109	0/1 ROCKER SWITCH	POA
28	EL030145	SPEED CONTROLLER (WITH KNOB)	POA
29	EL030414	THERMOSTAT (WITH KNOB)	POA
30	BW0201233	ELECTRICS PLATE	POA
31	EL030201	SLAVE RELAY	POA
32	EL030403	DIGISTAT XR10	POA
33	EL020423	MODULAR TERMINAL BLOCK	POA
34	EL020415	40A TERMINAL BLOCK	POA
35	EL030101	MICROSWITCH	POA
36	ME040526	SPRING	POA
37	BW030110	EXHAUST DUCT. (NOT SHOWN) SHOWN)	POA
38	BW030439	FASCIA LABEL (NOT SHOWN) SHOWN)	POA
39	FR020101	3/8 COPPER PIPE (NOT (NOT	POA
40	FR020301	20g FILTER DRIER (NOT (NOT	POA
41	FR010302	3/8 INSULATION TUBE (NOT (NOT	POA

