The MD range of Dehumidifiers

Power Portables from SPC

A range of powerful Dehumidifiers offering unsurpassed performance, maximum reliability and true portability, up to 160 Ltrs/Day from a standard 13 amp socket.

MD100 & MD160 use a 13 amp socket

Up to 200 litres a day moisture removal
27°C 60% Ashrae

Advancing the science of Dehumidifiers using Heat Pipe Technology

SPC

Benefits of Dehumidification

ENSURING GOOD CONTROL OF HUMIDITY LEVELS HAS BENEFITS IN:

Indoor Air Quality
High humidity is implicated in Sick Building Syndrome.

Bio-Activity - Germs, Mould and Mildew
Humidity is absorbed or condenses on building surfaces and provides a growing medium for bio-agents.

Product Quality
High humidity encourages food spoiling and can affect the life and finish of many products.

Personal Comfort
Moderate levels of humidity permit the body's cooling mechanisms to work better, and there is a greater tolerance of temperature variations.

Conservation
Controlled humidity can prevent damage to books and art work.

Equipment Efficiency
High humidity soaks up latent capacity in refrigeration equipment.

Heat Pipe Technology - Cut Costs By using our experience of Heat pipe technology which is incorporated in the Dehumidification units, we are able to provide increased performance with savings in energy costs.

A New Approach

SPC MD Dehumidifiers are *different* and *better* than equivalent standard portable dehumidifiers:

- The SPC MD range of Dehumidifiers has at its heart a patented Heat Pipe loop which outperforms standard technology by squeezing out more moisture per kW of input power.
- In addition the SPC MD units are built to provide years of quiet, trouble-free operation and durability.

The dehumidifier is based around a closed refrigeration system comprising evaporator coil, condenser coil, expansion valve and compressor. It uses heat pipes to increase the cooling efficiency, allowing more moisture to be removed than conventional dehumidifiers. A fan is used to draw air in through a filter and across the evaporator and discharge it through the condenser. Moisture is removed from the entering humid air at the evaporator coil, collected in a drain pan, removed by gravity drainage or pumped away by the integral condensate pump(s).

PORT

POWERFUL DEHUMIDIFIERS - O

TABLE

Where do I need Dehumidification?

Wherever air can stagnate and moisture collect in an enclosed area. Typical applications are:

- Hotels
- Warehousing
- Hospitals
- Offices
- Factories
- Restaurants
- Indoor Pools
- Plant Rooms

Wherever you have a problem: perhaps from change of use, or where humidity wasn't considered at the outset. Even buildings which are air-conditioned can have humidity problems.

MD100

MD100 & MD160 use a 13 amp socket

NOMINAL SPECIFICATION

MODEL	MD100	MD160	MD200
Dehumidification capacity at 27°C 60%RH (Ashrae) Ltrs/day	100	160	200
Air Delivery FID (cfm)	530	1060	1360
(Ltrs/sec)	250	500	640
Maximum running current (A)	12	12	20
Size H x W x D (mm)	856 x 780 x 565	1456 x 780 x 745	1500 x 780 x 745
Weight (kg)	65	105	105
Mounting	Wheels	Wheels	Skids
Compressor	HBP Reciprocating		
Refrigerant	R22		
Condense removal	Integral condense pump and facility for gravity drainage		
Filtration	Low maintenance washable EU 1/2 filter		
Manual controls	On/Off Humidistat range settings: 30% - 100% Fan only/Humidistat controlled dehumidification. (On/off compressor)		
Auto compressor cut-out occurs when:	High pressure/temperature - auto reset. Low pressure - manual reset Condensate pump failure/blockage - auto reset.		
Packed dimensions & weights	H=880mm W=795mm D=575mm **80kg**	H=1470mm W=795mm D=755mm **120kg**	H=1515mm W=795mm D=755mm **120kg**

QUICK SELECTION GUIDE

For **indoor pool** area use, based on a water temperature of 27°C and an air temperature of 30°C/60%RH and 24 hour evaporation:

Pool Surface Area (m^2)	Evaporation (ltr/day)	Recommended unit
20	100	MD100
50	250	MD200
100	500	2xMD200

Higher air temperatures will provide more evaporation.

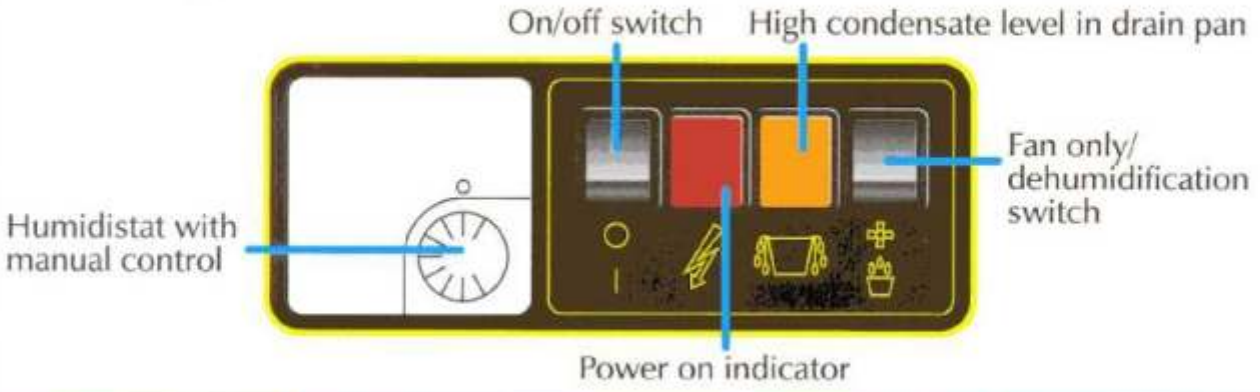
For **room use** where temperatures are close to comfort but humidity levels are elevated due to high moisture content, infiltration or production:

Room volume (m^3)	Excess moisture in air (ltr/day)	Recommended unit
100	30 - 60	MD100
200	60 - 120	MD160
500	150 - 300	MD200

Based on 3 air changes per hour, and a moisture difference of 0.005 kg/kg dry air as indicative figures only.

ffering unsurpassed performance

CONTROL PANEL FOR THE MD RANGE OF DEHUMIDIFIERS



PERFORMANCE CURVES FOR THE MD RANGE OF DEHUMIDIFIERS

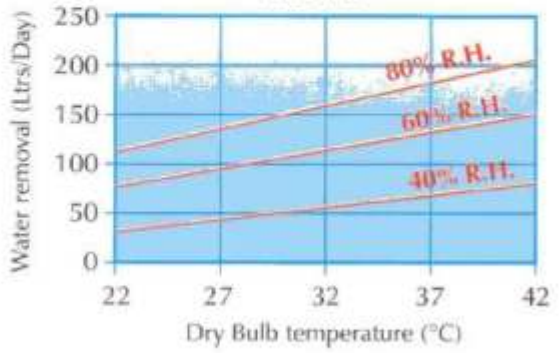
Performance

The MD range of Dehumidifiers has been designed to operate under the following conditions:

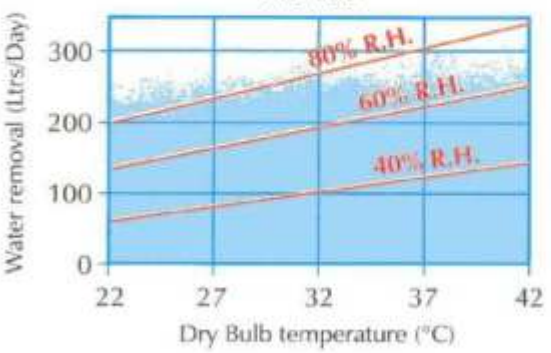
Dry bulb temperature	21-40°C
Relative humidity	30-100%

This corresponds to an approximate minimum wet bulb temperature of 13°C.
Performance is dependent upon both dry bulb temperature and relative humidity.
The moisture removal for a range of operating conditions is shown below.

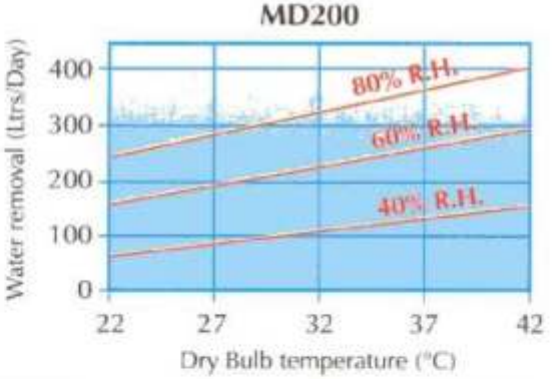
MD100



MD160



MD200



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