



Troubleshooting Guide

for Swimming Pool Room
Dehumidifiers

Troubleshooting



Owner/User

The following is a guide for the owner/user to follow in the event the unit malfunctions. If further service is required, a qualified service technician must be called.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Unit does not start	Main power off	Turn main power on. Reset circuit breaker or replace blown fuses.
	Thermostat system switch in off position	Set system switch in automatic position.
	Humidistat turned off	Turn humidistat on and set to desired RH level, usually between 50% to 60% R.H.
	Humidistat set too high	Lower humidistat setting.
Unit does not shut off	Malfunctioning controls	Call service technician to repair or replace control.
Unit not operating properly, high humidity in room	Humidistat turned off	Turn humidistat on and set to desired RH level, usually between 50% to 60%.
	Air filters dirty	Replace filter(s).
	Controls located in room that is not being treated by dehumidifier	Change location of controls into room being treated by dehumidifier.
	Pool water temperature too high	Lower pool water temperature usually between 78°F to 82°F. Usually 2°F to 4°F below room temperature.
	Supply or return air registers blocked or closed	Remove blockage and open registers. Check diffusers, make sure they are pointed in proper direction.
	Blower belt loose & slipping	Check for worn belt and tighten or replace as necessary.

Troubleshooting



Service Technician

The following is a guide intended for use by qualified service personnel only. CAUTION: High Voltage and refrigerant under high pressure are present. Contact DCA service for assistance and information not in this manual. Be certain to have the model and serial number before you call.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Compressor will not start	Broken or loose wire	Check all wires and connections.
	Compressor is off as a result of internal overload.	Allow to cool, and compressor should start automatically.
	Low voltage to unit High pressure switch tripped Low pressure switch tripped	Check the voltage and correct.
		Press the reset switch.
		Check the refrigerant charge.
	Compressor discharge temperature switch tripped	Check the refrigerant charge
Defective start relay, start capacitor, run capacitor, transformer or compressor	Replace the defective component	
Dehumidifying	Return air below 45°F	Raise the return air temperature.
	Filters dirty or clogged	Replace the filters.
	Low air flow	Check the blower motor and belt.
		Adjust the blower speed.
		Check the duct design. Refer to the manual for proper sizing and design.
	Low refrigerant charge	Add the refrigerant. (See charging procedure)
	Bad expansion valve	Replace expansion valve.
	Restricted drier	Replace drier.
	Restricted distributor tubing	Replace the distributor tubing.
	Restricted distributor	Replace the distributor.

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PROBLEM	POSSIBLE CAUSE	SOLUTION
High head pressure	Low air flow	Adjust the blower speed.
	Return air short cycling	Check the duct design and readjust supply and return air registers.
	Refrigerant overcharge	Adjust the refrigerant. (See charging procedure).
	Non-condensable in system	Evacuate and recharge the system.
	Dirty coils	Clean all of the coils in the unit and the remote, if it is equipped.
	Dirty filters	Replace the filters.
Head pressure switch tripping (Same as above)	Blower running too slow	Increase the blower speed up.
	Blower turning backwards	Change the blower rotation. (3 phase only)
	Motor going off on internal overload	Check for rated AMP draw. Replace the motor if defective.
	Dirty filters	Replace the filters.
	Supply or return air registers restricted or blocked	Remove the restrictions or blockages.
	Refrigerant overcharge	Adjust the refrigerant. (See charging procedure)
	Dirty coils	Clean all of the coils in the unit and the remote if equipped.
	Defective head pressure switch	Replace the head pressure
Low head pressure	Low refrigerant charge	Add the refrigerant. (See charging procedure)
	Return air temperature too low	The return air temperature must be at a minimum of 45°F.

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PROBLEM	POSSIBLE CAUSE	SOLUTION
High suction pressure	High air flow	Incorrect duct work causes stratification of air on inlet.
	Return air temperature too high	Lower the temperature in the room.
	Defective compressor	Replace the compressor.
Low suction pressure	Refrigerant charge low	Adjust the refrigerant. (See charging procedure)
	Low air flow	Adjust the blower speed. Check the blower, motor and pulley
	Return air temperature too low	Raise the return air temperature.
	Dirty filters	Replace the filters.
Low head pressure	Incorrect duct work	Check the duct work design. (See manual)
	Low air flow	Adjust the blower. Check the blower, motor and pulley.
	Dirty filters	Replace the filters.
	Outdoor condenser not operating properly	Clean the outdoor coil. Check the blower, motor and belt.
	Refrigerant system overcharge	Check the pressures, and adjust per the manual
	Unit too small or not enough capacity to handle humidity and problem	Refer to the guidelines regarding sizing dehumidifiers for load and applications.

About Us

Founded in 1995, Dehumidifier Corporation of America (DCA) is a U.S. corporation dedicated to the field of dehumidification. This is a very specialized field best served by companies whose primary mission is that of solving every conceivable dehumidification challenge.

Dehumidifier Corporation of America takes pride in offering the best possible product line incorporating the latest proven technology at the most competitive prices in the industry. Our engineering staff is available to you at every step of the dehumidification process, from defining the problem, evaluating the moisture load, and matching the right dehumidification system to achieve the desired results.

Dehumidifier Corporation of America's mission is to solve our customer's dehumidification problems while offering the highest quality products at a competitive price, employing the latest proven technology and built to the highest standards by American craftsmen.

Contact Us

Resource Library

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