

Duratherm, Hydrotherm and Minitherm Water Systems

Mokon Troubleshooting Guide | Models DA, DB, DC, DD, DE, DF, DG, DH, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DT, DU, DV, DW, DX, DY, DZ, HN, HR, HW, HX, HY, HZ, MT



Problem	Possible Cause	Corrective Measure
System will not start	System unplugged/power off	Plug system in/turn power on
	Low pressure on supply side (water off)	Turn water on
	Improper power source wiring	Check wiring (electrical schematics) and correct
	Blown fuse at power supply	Isolate open fuse and replace. Check for shorted/ground condition.
	Blown control circuit fuse	Replace and check for shorted/ground condition
	Blown motor branch circuit fusing	Check fuse and replace or check for shorted/ground condition
	Low voltage	Measure incoming voltage. If too, low correct.
	Overload on pump/motor starter	Press reset button on Overload to reset — see process flow adjustment section in manual.
Circulating pump shut down during operation	Overload on pump/motor starter	Press reset button on Overload to reset — see process flow adjustment section in manual.
	Safety shut down	Check pressures and temperatures are within system design
	Open winding in pump motor	Check motor windings with an OHM meter. If open reading, replace motor.
	You can also refer to Possible Causes and Corrective Measures listed under System will not start (above).	
Discharge pressure will not build up	Incorrect pump rotation	Reverse phase to incoming power
	Entrapped air	Press purge button and run system with temperature at its lowest setting
	Faulty Pressure gauges	Inspect/replace as required
Pressure gauges erratic and system will not hold temperature	Entrapped air	Press purge button
	Cooling solenoid valve or pressure regulator	Clean valve(s)

For more information, refer to complete operation and installation instructions in manual or consult Mokon factory.



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Problem	Possible Cause	Corrective Measure
High pressure and erratic temperature	Plugged flow paths, inadequate circulation through process and connecting lines	Inspect. If plugged, dislodge.
Loss of pressure and volume output	Cooling solenoid valve or pressure regulator	Clean valve(s)
	Leak in "To Process" line	Repair leak
Temperature climbs beyond setpoint	Stuck heater contactor	Inspect/replace as required
	Temperature controller needs tuning	Tune as required. Refer to controller section in manual.
	Faulty Thermocouple or RTD	Inspect/ eplace as required
System does not reach and/or hold temperature	Cooling solenoid valve or pressure regulator	Clean or replace valve(s)
	Heater burn out	Inspect/replace as required
	Heater contactor	Inspect/replace as required
	Lime deposits	Clean system (recommend using a Mokon D-Scaler system). Visit our website.
	Temperature controller needs tuning	Tune as required — refer to controller section in manual.
	Kilowatt capacity inadequate	Consult with a Mokon application engineer to determine correct sizing
	Loose electrical connections	Tighten connection or replace broken wires
	Faulty Thermocouple or RTD	Inspect/replace as required
Variance in temperature readings	Plugged flow paths, inadequate circulation through process and connecting lines	Inspect. If plugged, dislodge.
	Lime deposits	Clean system (recommend using a Mokon D-Scaler system). Visit our website.
	Kilowatt capacity inadequate	Consult with a Mokon application engineer to determine proper sizing
	Faulty thermometers	Inspect/replace as required
	Temperature controller needs tuning	Tune as required — refer to controller section in manual for proper procedure.
Leaking water around the motor shaft	Leaking Pump seal	Replace pump seal

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Problem	Possible Cause	Corrective Measure
Slow response after changing temperature setting	Heater burn out	Inspect/replace as required
	Heater contactor	Inspect/replace as required
	Lime deposits	Clean system (recommend using a Mokon D-Scaler system). Visit our website.
	Kilowatt capacity inadequate	Consult with a Mokon application engineer to determine proper sizing
	Sticking cooling solenoid valve	Clean or replace valve as required
	Faulty thermocouple or RTD	Inspect/replace as required
Fluctuating temperature readings from controller	Lime deposits	Clean system (recommend using a Mokon D-Scaler system). Visit our website.
	Faulty thermocouple or RTD	Inspect/replace as required
	Temperature controller needs tuning	Tune as required. Refer to controller section in manual for proper procedure.
Noisy pump	System at end of long feeder line	Install another source line
	Entrapped air	Press purge button
	Cooling solenoid valve or pressure regulator	Clean or replace valve(s)
	Incorrect pump rotation	Check and correct pump rotation

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