



Trouble Shooting Guide

RWA, 1-phase
(D3629)



Trouble Shooting Guide

Problem	Possible Cause	Possible Remedy
Unit does not start	No power to unit, breaker tripped	Verify supply power is on, close breaker after correcting fault
	Low voltage	Check electrical service to unit
	High pressure cut-out tripped	Will automatically reset after correcting fault
	Loose wire	Check wiring after disconnecting power
	Defective contactor or coil	Repair or replace contactor or coil
	Loss of refrigerant	Repair leak, recharge with type and amount of refrigerant specified on serial tag
	Compressor damaged	Replace - Call Lydall
Unit does not cool	Compressor internal thermostat tripped	Allow time for compressor to cool to automatically reset
	Compressor damaged	Replace compressor - Call Lydall
	Facility Water control valve set too low	Reset Facility Water control valve
	Facility Water too warm	Provide cooler Facility Water
	Evaporator damaged	Call Lydall
	Microprocessor failure	Replace microprocessor
	Cooling load exceeds capacity of unit	Reduce cooling load
	Microprocessor programmed incorrectly	Reprogram microprocessor - Call Lydall
	Loss of refrigerant	Locate and repair leak, recharge with type and amount of refrigerant specified on serial tag
Refrigeration solenoid coil failure	Replace solenoid coil	

Problem	Possible Cause	Possible Remedy
Unit does not cool (continued)	Solid State Relay failure	Replace Solid State Relay
	Solenoid valve stuck shut	Repair or replace solenoid valve
	Defective refrigeration low pressure cut-out	Repair or replace refrigeration low pressure cut-out
	Malfunctioning thermal expansion valve	Replace thermal expansion valve
	Pump damaged, loss of flow	Replace pump
	Hot gas bypass valve setting too high	Call Lydall
	Hot gas bypass valve stuck open	Repair or replace valve
Pump leaks	Faulty pump casing	Replace pump assembly
	Shaft seal damaged	Replace shaft seal
	Pump housing O-Ring damaged	Remove pump and rebuild
	Improper fluid	Call Lydall
Excessive noise on Start-Up	Low voltage	Check electrical service
	Wrong voltage taps used on transformer	Connect to proper taps
	Contact or coil failure	Replace contactor or coil
Noisy compressor	Flooding of refrigerant into crankcase	Warm crankcase if unit has been off for a long period or has been left in a cool ambient for more than a few hours
	Worn compressor	Replace compressor - Call Lydall
	Refrigeration high pressure cut-out set too high	Adjust setting
	Refrigeration low pressure cut-out set too low	Adjust setting

Problem	Possible Cause	Possible Remedy
Pump motor overheats	Improper voltage supplied	Correct voltage
Level light remains on	Low coolant level in reservoir Reservoir level switch float stuck Time delay relay malfunction (when used) Level switch failure	Check for leaks, then fill reservoir Clean reservoir and level switch Replace time delay relay Replace level switch
Level light does not work	Time delay relay has not timed out (when used) Lamp burned out Level switch failure	Wait for time delay to time out Replace lamp Replace level switch
Fault light remains on	Low coolant flow No coolant flow Flow switch stuck	See Problem: Low coolant flow See Problem; No coolant flow Disassemble flow switch, clean and reinstall or replace
Low coolant flow	Pump suction strainer clogged Flow control valve not fully open Pressure relief valve set too low (unless not adjustable) Low coolant level in reservoir Restriction in coolant lines external to chiller Frozen evaporator Flow switch clogged	Remove strainer, clean and reinstall or replace Open flow control valve Adjust pressure relief valve to specification Fill reservoir to proper level Eliminate restrictions in coolant lines external to chiller Call Lydall Disassemble flow switch, clean and reinstall or replace

Problem	Possible Cause	Possible Remedy
No coolant flow	Pump not primed	Prime pump
	Pump suction strainer clogged	Remove and clean strainer, then reinstall
	No coolant in reservoir	Check for leaks, then fill reservoir
	Pump overload tripped	Wait 5 minutes for overload to reset
	Pump motor shaft bound to seal	Replace pump or renew seal
	Pump housing improperly torqued	Remove pump, torque to specification, test, and reinstall
	Damaged pump	Replace pump
	Frozen evaporator	Call Lydall
	Clogged line or closed valve in external piping	Check external piping for dirt or closed valve
Chiller shuts down during operation	Refrigeration high pressure cut-out set too low	Adjust and reset refrigeration high pressure cut-out
	Refrigeration low pressure cut-out set too high	Adjust and reset refrigeration low pressure cut-out
	Excess refrigerant charge	Remove excess refrigerant and recharge to specifications on serial tag
	Pump thermal overload setting too low	Adjust and reset thermal overload relay to specifications, replace if faulty
	Facility Water too warm	Provide cooler Facility Water
	Pump overload tripped	Determine reason for trip, if pump is damaged, repair or replace
	Low voltage	Check electrical service to chiller

Problem	Possible Cause	Possible Remedy
Temperature display reads incorrectly	Loose wire Broken RTD Microprocessor failure	Check wiring after disconnecting power Replace RTD Replace microprocessor
Chiller cools well below the desired Set-Point	Microprocessor programmed incorrectly Malfunctioning solenoid valve Solid State Relay failure Microprocessor failure	Reprogram microprocessor - Call Lydall Repair or replace solenoid valve Replace Solid State Relay Replace microprocessor
Too much recirculating pressure to process	Flow control valve set too high Pressure relief valve set too high (unless not adjustable)	Throttle flow control valve Adjust pressure relief valve
Compressor turns on and off automatically	Discharge pressure too high Condenser fan(s) not on Refrigeration high pressure cut-out set to automatic	Check Facility Water for blockage Check motor(s) and wiring Check settings
Compressor does not run	Compressor internal thermostat tripped Motor burned out	Allow time for compressor to cool and automatically reset Replace - Call Lydall
Microprocessor does not work	5 second delay has not timed out Microprocessor programmed incorrectly Microprocessor failure	Wait at least 5 seconds after turning on Reprogram microprocessor - Call Lydall Replace microprocessor