

## General Troubleshooting

Problem	Possible Cause	Remedy
Compressor will not start	Three-phase power monitor tripped	Check correct phasing of incoming power
	Compressor overload	Check supply voltage, amperage of each leg, contactor and wiring, overload set point
	Compressor contactor	Replace if faulty
	PLC output card	Replace if faulty
	Compressor failure	Contact Customer Service Department for assistance
Low refrigerant pressure	Low refrigerant charge	Contact refrigeration service technician
	Refrigerant leak	Contact refrigeration service technician
	Compressor suction service valve partially or fully closed	Open valve all the way
	Low refrigerant pressure sensor	Replace if faulty
	PLC input card	Replace if faulty
High refrigerant pressure	Plugged condenser	Clean condenser
	Insufficient condenser water flow (TXW models only)	Make sure chiller is installed in accordance with recommendations in this manual
	High condenser water temperature (TXW models only)	Maximum temperature is 95°F (35°C)
	Condenser water regulating valve (TXW models only)	Replace if faulty
	Compressor discharge service valve is fully or partially closed	Open valve all the way
	Refrigerant circuit overcharged	Contact refrigeration service technician
	High refrigerant pressure sensor	Replace if faulty
	PLC input card	Replace if faulty
Freezestat	Low flow through evaporator	Adjust flow to proper level
	Freezestat control	Check for proper setting and replace if faulty
	Thermistor	Replace if faulty
	PLC input card	Replace if faulty
Insufficient cooling (temperature continues to rise above set point)	Process load too high	Check to make sure chiller is properly sized for process load
	Coolant flow through evaporator is outside of normal operating range	Adjust flow to proper level
	Insufficient condenser cooling	See High refrigerant pressure
	Refrigeration circuit problem	Contact refrigeration service technician
	Thermocouple	Replace if faulty
	PLC input card	Replace if faulty
Erratic temperature control	Low coolant flow through evaporators	Adjust flow to proper level
	Overloading of chiller capacity	Check to make sure chiller is properly sized for process load
	Thermocouple	Replace if faulty
	PLC input card	Replace if faulty
High differential oil pressure	Oil line service valve is fully or partially closed	Open valve all the way
	Oil filter plugged	Contact Customer Service Department for assistance
	Low oil level	Contact Customer Service Department for assistance
	PLC input card	Replace if faulty

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High oil temperature	Temperature responsive valve	Contact refrigeration service technician
	Oil temperature sensor	Replace if faulty
	Low oil level	Contact Customer Service Department for assistance
	PLC input card	Replace if faulty
High discharge temperature	Temperature responsive valve	Contact refrigeration service technician
	Discharge temperature sensor	Replace if faulty
	Low oil level	Contact Customer Service Department for assistance
	PLC input card	Replace if faulty
No LEDs are illuminated on PLC	Control power not available at power supply	Check for power at power supply, check control transformer
Display not updating information	Loss of communication	Check communication cables for correct port connections. Check that selector switch is in run mode.
	PLC fault	Cycle E-stop switch
Temperature values unsteady or out of range	Loose thermocouple wire connections	Tighten terminal screw
Thermocouple fault indicated on operator display	Open circuit in thermocouple wiring or bad thermocouple	Replace thermocouple
"No active nodes found on network" (No communication with SLC or PLC controller)	Communications (COMM) fault	Check status of COMM LED and refer to LED Indicators section and verify cable connections
	Baud rate not set properly	Verify that terminal and controller are set at same baud rate
	Controller is not in run mode	Place controller in run mode
	Terminal node and maximum node numbers are not correctly set	Verify node number settings
	Controller fault	Call the Customer Service Department for assistance
Screen objects do not function	PLC fault	Cycle control power
Application file name appears as ***** on Terminal Information screen	Application is invalid or may contain an error	Download application again or download new application
Area on touch screen appears dark	One of the tubes in the backlight has burnt out	Replace backlight tube
Screen objects are not visible	Correct power is not applied	Verify power connections
	Touch screen interface is in Screen Saver mode	Contact Customer Service Department for assistance
	Backlight lamp is not on	Contact Customer Service Department for assistance
	Backlight lamp is burnt out	Replace backlight