



Status

Symptom	Cause	Corrective Action
HEAD PRESSURE HIGH	If unit is in bypass, ambient may be too high	Head pressure rising when fans are running full speed is based on condenser design and performance. Not a drive fault
	Condenser may be dirty	Check and clean condenser. Put unit into CLEAN mode or wet clean condenser
	Some fans may have failed	Check motor overloads and reset if necessary
		Check motor fuses, replace if needed
Check power to fans, correct wiring		
HEAD PRESSURE LOW	Low ambient	If ambient drops, fans will run backwards at low speed. If head pressure continues to drop, flooded head pressure controls will be needed
	Low charge	Add refrigerant as needed. Check flooded head pressure control settings
	Compressor failure	Check and repair compressor as needed
NO FANS RUNNING	No power to motor	Check motor fuses, replace if needed
		check power to fans, correct wiring
		Check power after disconnect, reset or replace disconnect as required
SOME FANS NOT RUNNING	Head pressure at setpoint	Fans will restart when head pressure changes
	Overloads tripped	Check motor overloads and reset if necessary
	No power to motor	Check motor fuses, replace if needed
		Check power to fans, correct wiring
Phase loss to motor	Check fuses, wiring and motor windings	
ALL FANS RUNNING IN REVERSE AT HIGH SPEED	Unit in clean mode	Check CLEAN switch, return to ON setting
	Power phasing incorrect	Review setup instructions for correct phasing and motor connections
SOME FANS RUNNING IN REVERSE	Phasing to some fans incorrect	Review setup instructions for correct phasing and motor connections
UNIT IN BYPASS	head pressure 20 psi or more over drive setpoint	Normal operation, drive will resume control when head pressure drops to drive setpoint
	bypass pressure control set too low	Set bypass pressure control to 20 psi over drive setpoint
	drive setpoint too low	Correct setpoint of drive or bypass control as above
	flooded head pressure set to high	Condenser flooding valves should be set ~20 psi below drive setpoint
DISPLAY SHOWS EFS	Head pressure 20 psi or more over drive setpoint	Normal operation, drive will resume control when head pressure drops to drive setpoint
	Bypass pressure control set too low	Correct setpoint of drive or bypass control as above
	Unit in TEST mode	Return switch to ON position
FANS RUNNING SLOWLY IN REVERSE	Cold ambient	Normal operation for cold ambients when head pressure is below setpoint
	Head pressure low	Low refrigerant charge - inspect receiver or sightglass
		Compressor failed or off - inspect compressor
DISPLAY SHOWS oH	Overheat fault	Drive will go to bypass until cool
DISPLAY SHOWS Uu	Undervoltage fault	Check incoming power
DISPLAY SHOWS PF	Input phase loss	Check incoming power
DISPLAY SHOWS ou	Over voltage fault	Check incoming power
DISPLAY SHOWS GF	Ground fault	Check incoming power
DISPLAY SHOWS LF	Output phase loss	Check incoming power
DISPLAY SHOWS CrSt	Can't restart	Momentarily turn CLEAN/TEST switch to TEST
RUN LED FLASHING	Drive manually stopped	Momentarily turn CLEAN/TEST switch to TEST
FANS CYCLING ON AND OFF TOO OFTEN AT LOW AMBIENT	Condenser oversized	Enable Fan Load Matching by removing jumpers as shown in Installation Bulletin N.2.1
SPLIT CONDENSER VERSION NOT TURNING ON FANS AT HIGH AMBIENT	A419 Split Condenser thermostat set incorrectly	Lower A419 thermostat setting- default is 30°F see Installation Bulletin N.2.1



KE2 FanControl
 Troubleshooting Guide

SPLIT CONDENSER VERSION NOT TURNING OFF FANS AT LOW AMBIENT	A419 Split Condenser thermostat set incorrectly	Raise A419 thermostat setting- default is 30F see Installation Bulletin N.2.2
	Resonant point of condenser	Set parameter D3-02 to avoid resonant frequency see Quick Start Guide Q.2.1
CONDENSER NOISY OR VIBRATES AT A CERTAIN FREQUENCY	Fan blade out of balance	Check blade
	Fan brackets broken	Check bracket
BUZZING OR CHATTERING CONTACTORS	Mechanical interlock not installed correctly	Each variable speed contactor is connected to a constant speed contactor by a mechanical interlock snapped onto the contactors. The white run indicators on the contactors must engage the slots in the interlock to work properly. Remove interlock, realign indicators, and replace.