Service Tips

Reference	*Subject*	*Date*
ST-101 R2	E-Series Error Codes	12/7/2020
Product	Logi, LogiPro, and Vended Control	

The information listed below is provided as general guidelines to assist in troubleshooting. It is ultimately the owner's/ distributor's/ technician's responsibility to properly troubleshoot the piece of equipment down to the failed component(s). Continental Girbau will not be held liable for any part replacement and/or labor associated with the misdiagnosed troubleshooting of the equipment.

It is recommended to run the Test Mode to assist in troubleshooting any error codes. There are Test Mode videos located on our website www.gnalaundry.com. Click on Services and Support. Click on Technical Service

Alarm/ Error Code	Description of the Alarm	Possible Causes	Action
ALn/ VAR 0	Communication failure between inverter and microprocessor	No communication circuit between the microprocessor and the inverter	1. Verify power to the inverter. Check fuses and relays. 2. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R* 3. Verify power on the communication cable (EH020 EM025) 4. Verify the integrity of the communication wire harness and clean the contacts points with contact cleaner 5. Replace faulty inverter 6. Replace faulty microprocessor
ALn/ U-00	Communication failure 1500 W & 2200 W Danfoss VLT Inverters	Inverter does not power up at the start of a cycle	1. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R* 2. Verify voltage supply in and out of Z1 filter. 3. Verify KA1 relay voltage across terminals 4 to 8 on the start of a cycle. 4. Verify F6 fuse is correct on L1 inductance board located in the front of the inverter.
ALn/ VAR 1	Inverter disconnected	Loss of digital communication signal	1. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R* 2. Verify the digital communication signal harness is connected. Clean contact points with contact cleaner
ALn / VAR 2	Communication failure detected by the inverter	No communication circuit between the microprocessor and the inverter	1. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R* 2. Verify power into the inverter. Check fuses, relays. 3. Verify power on the communication cable (EH020 EM025) 4. Verify the integrity of the wire harness 5. Clean contacts points with contact cleaner 6. Replace faulty inverter 7. Replace faulty microprocessor
ALn/ VAR 3 ALn/ U-47 ALn/ U-59	Inverter overcurrent	Overcurrent- Fast and high rise of motor currents detected by the inverter during acceleration, deceleration, and normal operation	1. Verify he basket movement restrictions. Possibly caused possibly by the basket catching on something, motor seizing up, or bad bearings. 2. Check inside drain valve/ pump, make sure no debris has restricted valve movement. 3. Verify the inverter is clear of debris and the inverter fan is operating properly. Clean inverter. 4. Remove the belt and spin the motor by hand to test for bad motor bearings.

			5. Isolate the inverter by disconnecting the motor and jumping out the klixons. Run Test Mode. 6. Verify that the motor windings are not shorted or open 7. Verify the amperage draw across each leg of power going to the motor. Amperage draw should be similar. 8. Verify the integrity of the motor harness/ power coming into the inverter
ALn / VAR 4 ALn/ U-04	Motor thermal safety disconnected (klixon) Motor overloads disconnect 600 W & 2200 W Danfoss VLT	Over heat condition of the motor. The motor klixons should close when temperature gets below a certain threshold.	1. Wait for the machine to cool down. Ohm through 2. Verify the basket movement restrictions. Possibly caused possibly by the basket catching on something, motor seizing up, or bad bearings. 3. Check inside drain valve/ pump, make sure no debris has restricted valve movement. 4. Verify the inverter is clear of debris and the inverter fan is operating properly. Clean inverter. 5. Remove the motor pulley belt and spin the motor to test for bad motor bearings. 6. Isolate the inverter by disconnecting the motor and jumping out the klixons. Run Test Mode. 7. Verify that the motor windings are not shorted or open. 8. Verify the amperage draw across each leg of power going to the motor. Amperage draw should be similar. 9. Check for bad motor bearings. 10. Verify the integrity of the motor harness/ power coming into the inverter
ALn / VAR 5 ALn/ U-48 ALn/ U-49	Over-voltage in the DC buss	The DC buss on the inverter is detecting a higher DC voltage than allowed	1. Replace faulty inverter
ALn / VAR 6 ALn/ U-55	Inverter overheating	High temperature detected on the inverter	1. Verify the drain valve/ pump is clear of debris. 2. Verify the inverter cooling fan is running (should blow out) 3. Clean dirty inverter 4. Replace defective fan motor 5. Verify the amperage draw across each leg of power going to the motor. Amperage draw should be similar. 6. Stand pipe too high (EH020 pump only)
ALn / VAR 7	General inverter failure	High temperature detected on the inverter	1. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R* 2. Clean the inverter 3. Verify inverter fan is operating properly 4. Replace inverter
ALn / VAR 8	Unidentified inverter failure, unbalance control failure	Unidentified inverter failure	1. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R* 2. Adjust the tension on the motor belt. 3. Replace inverter
ALn / VAR 9	Agreement error between washer model and inverter configuration.	Wrong identification plug on microprocessor/ inverter combination. Incorrect inverter installed	1. Verify correct jumper is installed on the microprocessor 2. Verify correct inverter is installed. 3. Download and verify inverter parameters (on applicable models)
ALn/ U-09	Error in initializing Danfoss 1500 W or 2200 W VLT inverters	Inverter not recognizing parameters	1. Reload and verify parameters. See "Technical Assistance" Cod. 34739en manual, Section 5-Inverter Menu

ALn / V- 10	Inverter supply phase failure	Incorrect incoming voltage to inverter	1. Verify the input voltage connection are tight and properly crimped 2. Verify input voltage 3. Verify supply voltage to KA1 relay 4. Clean inverter 5. Inspect wiring from inverter to motor
ALn / V- 11 ALn / V- 14	Unbalanced consumption at the inverter output	The inverter detects an unbalanced amperage draw in between the motor and inverter	1. Verify amperage draw on each leg of the output side (motor side) of the inverter. 2. Replace inverter 3. Replace motor
ALn / V- 12	Failure in the configuration parameters	Inverter model not compatible with the washer model	1. Verify the inverter is properly configured 2. Verify the identification plug is correct 3. Replace inverter 4. Replace microprocessor
ALn / V- 13	Inverter thermal relay alarm	Inverter is detecting an overheat condition in the inverter	1. Clean the inverter 2. Verify inverter fan is operating properly 3. Verify wire connections on inverter 4. Replace inverter
ALn / V- 15	Voltage lower than inverter nominal value	The inverter is detecting a lower than normal voltage reading	1. Loose input voltage connection 2. Poor input voltage 3. Verify supply voltage to KA1 relay 4. Clean inverter 5. Inspect wiring from inverter to motor
ALn/ U-39	General inverter fault. Danfoss 1500 W or 2200 W VLT inverters	Fault in inverters internal control	1. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R* 2. Turn off power for 5 minutes to reset. 3. Replace inverter
ALn/ U-41 ALn/ U-42 ALn/ U-43	Fault in inverters output phase. Danfoss 1500 W or 2200 W VLT inverters	A fault in one of the three inverter/ motor output phases	1. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R* 2. Check power across U-V-W terminals at the inverter 3. Check motor cable wiring from inverter to the motor. 4. Ohm motor winding
ALn/ U-50	Short circuit in the motor. Danfoss 1500 W or 2200 W VLT inverters	A short in the motor or motor winding	1. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R* 2. Inspect the motor cable wiring from the inverter to the motor. 3. Ohm motor winding to the housing and check for grounding. 4. Verify the amperage draw across each leg of power going to the motor. Amperage draw should be similar 5. Replace motor 6. Replace inverter
ALn/ U-52	Faulty inverter input phase. Danfoss 1500 W or 2200 W VLT inverters	A short in the motor or motor windings	1. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R* 2. Check supply voltages across terminals 2 to 6 of KA1 relay. 3. Check voltage output across terminals 4 to 8 of KA1 relay 4. Check input across terminals L1 to L3 on the inverter
ALn/ U-56	Short circuit to earth ground. Danfoss 1500 W or 2200 W VLT inverters	Short causing main circuit breaker to trip	1. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R* 2. Inspect incoming line voltage wires for damage
ALn/ U-06, 32, 33, 37, 38, 45, 46, 53, 54, 62	Fault in inverter's internal control. Danfoss 1500 W or 2200 W VLT inverters	Breakdown of inverters electronics due to over temperature or component failure	1. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R* 2. Turn off power to unit for 5 minutes to reset control.

ALn	Alarm code doesn’t exist	This alarm code doesn’t exist	1. The alarm that you might be seeing is Aln A (Ln will be flashing). 2. The alarm that you might be seeing is ALn L (A n are flashing). 3. Please refer to specific error codes.
ALn/A	Faulty water supply	Alarm is on if the programmed after level as not been reached within a set amount of time	1. Verify there is water supply to the valve 2. Verify valve is open 3. Clean water valve filter screen 4. Verify the functionality of the drain valve. It might be stuck in the open position. 5. Verify power supply to hot or cold fill valves 6. Verify air dome is not clogged 7. Verify pressure switch tube is not clogged. 8. Replace/ repair valve. 9. Replace pressure switch and/ or pressure switch tube.
ALn/E	Blocked drain system	Alarm is on if water is detected in the washer after a set amount of time after the drain opens.	1. Verify the drain valve does not open or is clogged 2. Verify the air dome and/ or pressure tube is not clogged or dirty 3. Verify functionality of the drain valve. 4. Check for loose/ poor wire connection between microprocessor and pressure switch. 5. Replace drain valve 6. Replace pressure switch
ALn/HOT	Interruption of the program using the START/STOP key with the bath at high temperature	Interruption of the program using the START/STOP key with the bath at high temperature	1. Resume cycle by pressing start 2. Verify the thermistor is reading correctly
ALn/L	Water level	Alarm is on if level is detected when washer should be empty	1. Verify the drain valve does not open or is clogged 2. Verify the air dome and/ or pressure tube is not clogged or dirty 3. Verify functionality of the drain valve. 4. Check for loose/ poor wire connection between microprocessor and pressure switch. 5. Replace drain valve 6. Replace pressure switch
ALn/SL	Persistent overfill	Alarm is on if higher water level is detected for 5 consecutive seconds	1. Water valve stuck in the open position with power off 2. Water valve stuck open with power on indicates faulty microprocessor 3. Verify the wiring going to the water valve
ALn/C	Faulty steam heating- does not increase 18 degrees in 20 min. The washer is configured for heat, and has no heat.	Alarm is on if auxiliary heat is programmed and the temperature	1. Verify the machine has steam and is properly configured. 2. Verify that there is proper steam supply 3. Check power to steam valve 4. Verify the temperature probe is within spec
ALn/Prob	Faulty sensor	Alarm is on if the microprocessor senses the temperature probe is out of range	1. Verify the sensor is not wet, this will change the ohm value 2. Verify the wiring

			3. Faulty sensor
ALn/bAL End-bAL	Unbalance detected	Switch detected an out of balance condition	1. Out of balanced load. Run machine empty and with a load that is filled almost to the top of the basket. 2. Verify the machine is properly installed/ leveled 3. Verify functionality of the balance switch 4. Verify wiring 5. Verify the unbalance value listed in the service manual. If above value, replace the inverter 6. EH020 is configured to EM020
ALn door	Faulty door lock	Door does not lock when commanded to	1. Verify the door lock adjustments with ST-113 R*(RMG055 and smaller) 2. Verify the functionality of the door hinge switch (EH060 and larger) 3. Verify the functionality of the door lock switch (EH060 and larger) 4. Replace the door lock
Err/ 000	Error in machine ID	Identification error between model of washer and the microprocessor	1. Verify jumper connection at X18 & X19 located on the top of the micro.
EnEr	Emergency stop activated (open)	The emergency stop button has been pressed activated by pressing the switch in.	1. Release the E-Stop switch 2. Faulty E-Stop switch 3. Incorrect wire connections to the E-Stop

	*Always follow the warnings and procedures in the corresponding equipment instruction manual.*