

HOW TO TEST THE POWER BOARD ON A SINGLE PHASE LOGIC 5.0 COMMERCIAL DOOR OPERATOR

Test if the Logic 5 board is supplying DC voltage to activate the Power Board

Make sure that the leads of the voltmeter can fit in the small pins where the harness from the Logic 5.0 board plugs into the power board. Make sure the voltmeter leads do not touch each other or short while doing this test. You should read the following voltages when activating the operator. Read each wire to the orange wire (common).

- Purple - 30Vdc when running both directions (redundant relay)
- Yellow - 30Vdc at startup - 2 seconds max (start winding relay)
- Gray - 30Vdc when running close or A relay LED on board is lit
- Black - 30Vdc when running open or B relay LED on board is lit

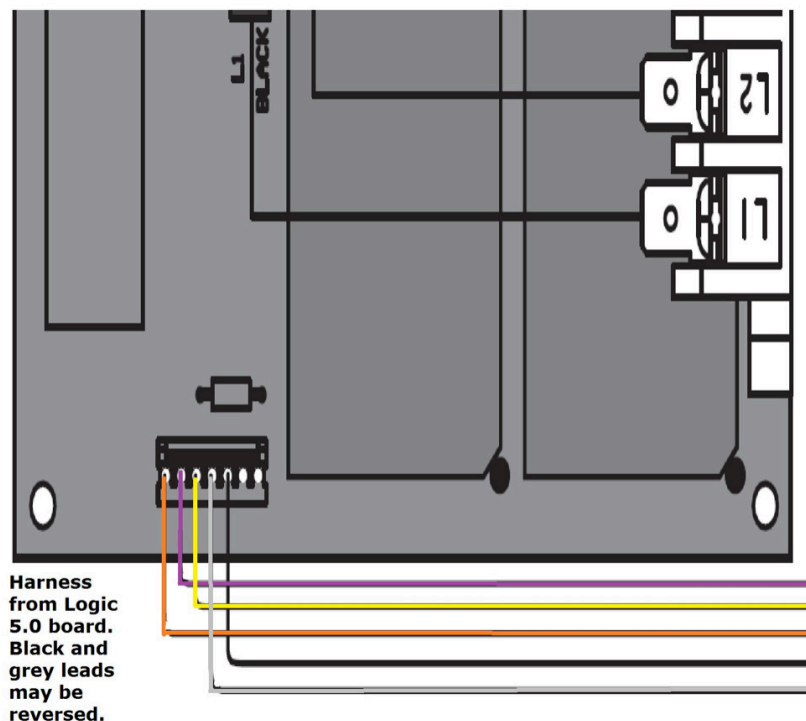
If the voltages are not there, make sure both harnesses on the power board and the harness on the Logic 5 board were seated fully and if they were seated fully then replace the Logic 5.0 board. If the voltages are there, test the relay coils on the Power Board.

Testing the power board relay coils

This test verifies the coils of the relays on the power board. This measurement is done with power removed from the operator and the low voltage harness plugged in to the Power Board. Set meter to ohms(O) and check :

- Orange to Gray - read 335 ohms
- Orange to Purple - read 648 ohms
- Orange to Black - read 335 ohms
- Orange to Yellow - read 335 ohms

Readings can have a +/- 10% deviation. If the Logic 5.0 board is putting out the correct voltages and the readings on the coils are not correct, replace the Power Board. If the voltages to the Power Board are good and the coil readings are correct, test if the Power Board is switching voltage to the motor and brake.



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Test if the Power Board is activating the motor

Take these readings at the motor plug with it plugged into the Power Board. Make sure the leads do not touch each other or short while doing this test. Activate the operator when performing these readings.

120V models:

- Read black (T5) and red (T8) motor wires - 115Vac at startup 2 seconds max. Runs at ~ 97v (this is just ambient voltage)
- Read yellow (T4) and blue (T1) motor wires - 115Vac when running
- Read white (T2) and orange (T3) motor wires - 115Vac when running

208/230V models

- Read black (T5) and red (T8) motor wires - 230Vac at startup 2 seconds max.
- Read yellow (T4) and blue (T1) motor wires - 230Vac when running

If line voltage is not present on these readings, replace the Power board. If the Power Board is sending the correct voltage, [test the motor leads](#).

Test if the Power board is activating the brake

For 120V models, read voltage between the yellow and white leads on the brake harness. When activating, there should be 120V going to the brake.

For 208/230V models, read voltage between the blue and black leads on the brake harness. When activating, there should 208/230V going to the brake.

If the board is sending the voltage, [test the brake solenoid](#).

Test if power is being supplied to the Thermal Overload

Measure voltage from L2 to both thermal overload wires (yellow w/ black) on motor harness.

Each should read 120v or 230v (Line Voltage).