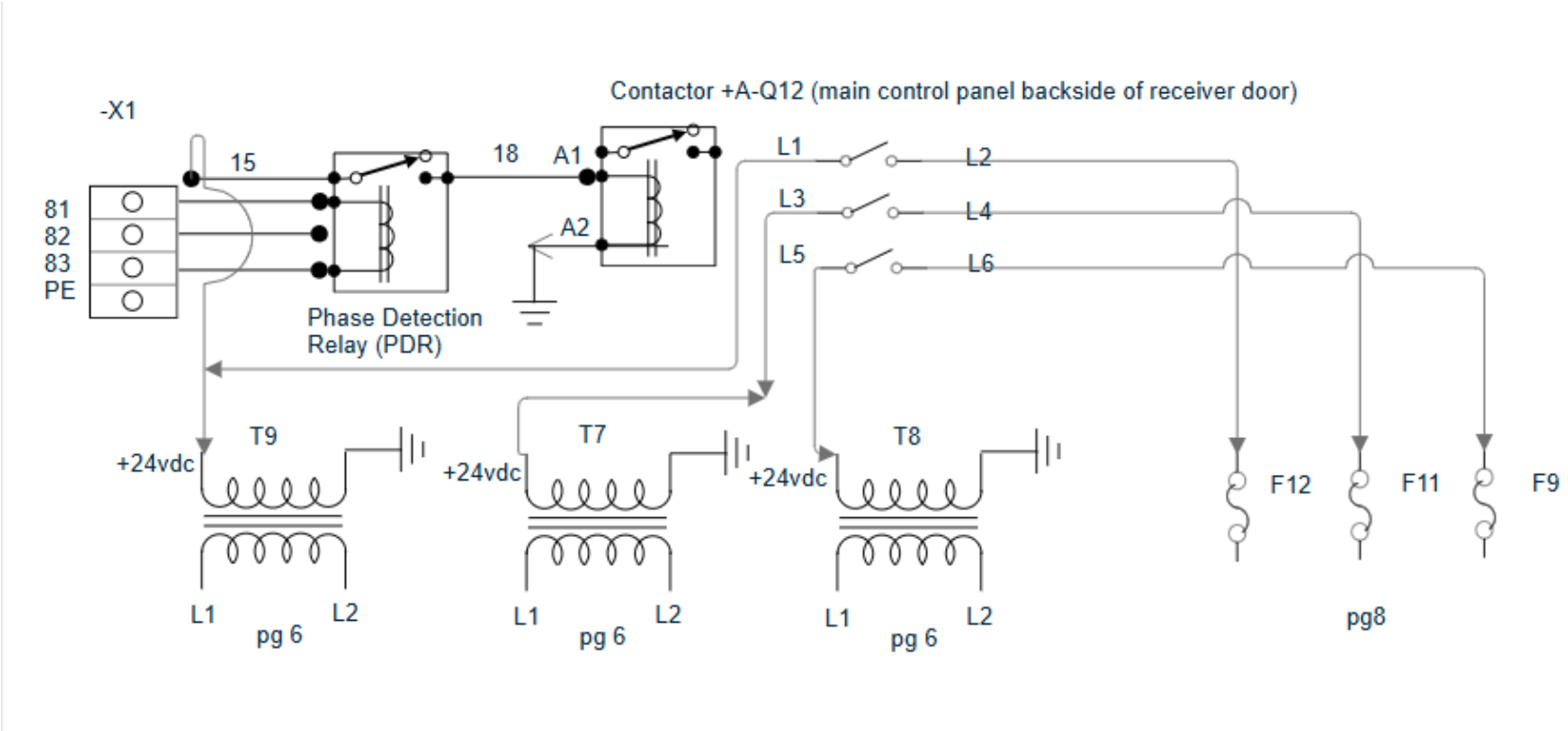
**Phase Detection Relay Wiring 9/26**




Terminal strip -X1 and terminals 81,82 and 83 supply L1, L2 and L3 respectively. Relay switch terminal 15 receives +24vdc from T9 output. When voltage, phase and frequency are all within parameters (see service post), phase detection relay closes between 15 and 18. Terminal 18 on the phase detection relay then supplies +24vdc to A1 terminal of the power cutout contactor +A-Q12. A2 is grounded. Output of transformers T9, T7, T8 (all +24vdc) is the input side of the power cutout contactor. The output of the contactor is the supply of F12, F11, F9.

If the power supplied is outside the parameters of the phase detection relay, all +24vdc to crane is disconnected – protecting PLC, CAN bus, HMI, interface cards and all other 'sensitive' computer equipment

*To bypass, connect 15 and 18 of the PDR together