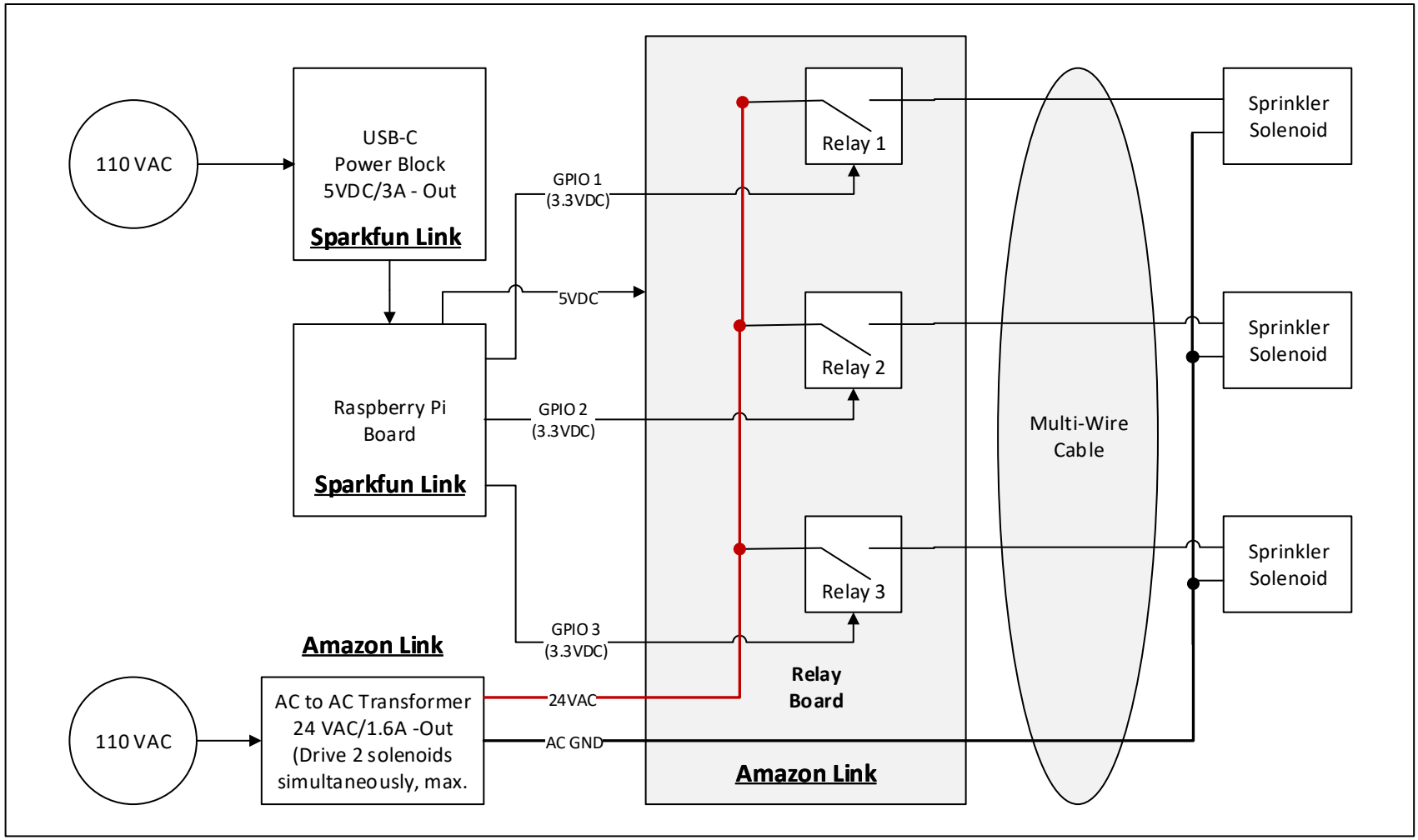

Relay Board: GPIO 3.3V with max current draw of 16mA. GPIO doesn't actually control the relay but instead controls a 5V control signal to the relays. The 5V is sourced from the RPi. The closed current draw of the relay is about 6mA (don't know if this is on the 3.3 or 5V so assume both). So the diagram is a little misleading.
At turn-on the solenoid will draw about 0.6A and at steady state it will draw about 0.2A.

USB-C Power Block The power block can supply 3.0A at 5V = 15W. The RPi itself draws about 1.0A @5V = 5W and the 8 relays will draw 8*(3.3V*.006A + 5.0V*.006A) = 0.4W. Total power draw from the 15W supply is 5.4W.

AC/AC Transformer The xformer can supply 1.6A at 24V = 38W. The the 8 solenoids will draw 8*0.6A*24V = 115.W at turn-on! The the 8 solenoids will draw 8*0.2A*24V = 38.W at steady-state!! Max solenoids that can be turned-on simultaneously is 38W/(0.6A*24V) = 2.7.