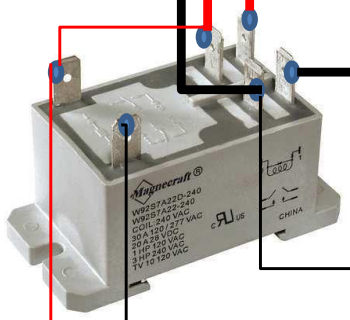
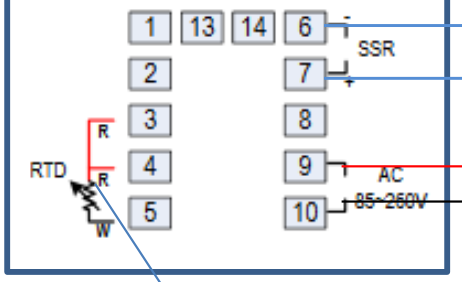
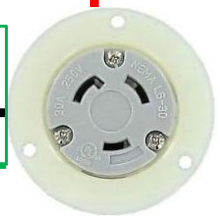
240v/30 amp controller with Auber DSPR120

Thick lines are 10 gauge wire, thin lines are 16-18 gauge.

INPUT
L1
L2
N
G

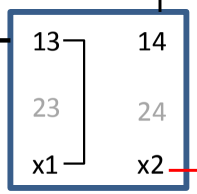




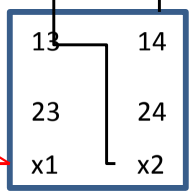


ELEMENT

Note: incoming neutral (white), pump switch, and pump receptacle only required if you want to switch a pump on this controller.



PUMP SW



ELEMENT SW

This switch engages the 240v relay coil to allow L1 to the SSR and L2 directly to the element.

The parts to build a EZboil are as follows:

DSPR120 controller/brain unit: http://www.auberins.com/index.php?main_page=product_info&cPath=53&products_id=560

SSR (high current relay) http://www.auberins.com/index.php?main_page=product_info&cPath=2_30&products_id=30
Heat sink for SSR: http://www.auberins.com/index.php?main_page=product_info&cPath=2_48&products_id=244

Thermal grease for between SSR and heat sink
http://www.auberins.com/index.php?main_page=product_info&cPath=2_48&products_id=563

Temp sensor, any RTD/PT100 such as
http://www.auberins.com/index.php?main_page=product_info&cPath=20_15&products_id=189

Illuminated push button switches: http://www.auberins.com/index.php?main_page=product_info&cPath=32&products_id=223

One of these will be used to switch the pump on and off. Another is used to enable/disable power to the heating element. it's like a kill switch that bypasses the brain/SSR control.

Last 2 items are not on Auber but ebay...

Power relay to be controlled by one of the switches above. http://www.ebay.com/itm/MAGNECRAFT-92S7A22D-240A-Enclosed-Power-Relay-30A-240VAC-DPST-/331995441808?hash=item4d4c786a90

Enclosure: http://www.ebay.com/itm/121570594673?_trksid=p2057872.m2749.l2649&ssPageName=STRK%3AMEBIDX%3AIT

Of course you can use whatever box you way.. something from Lowes or Homedepot. The small box above will require that the heat sink be trimmed to fit the back of the enclosure.