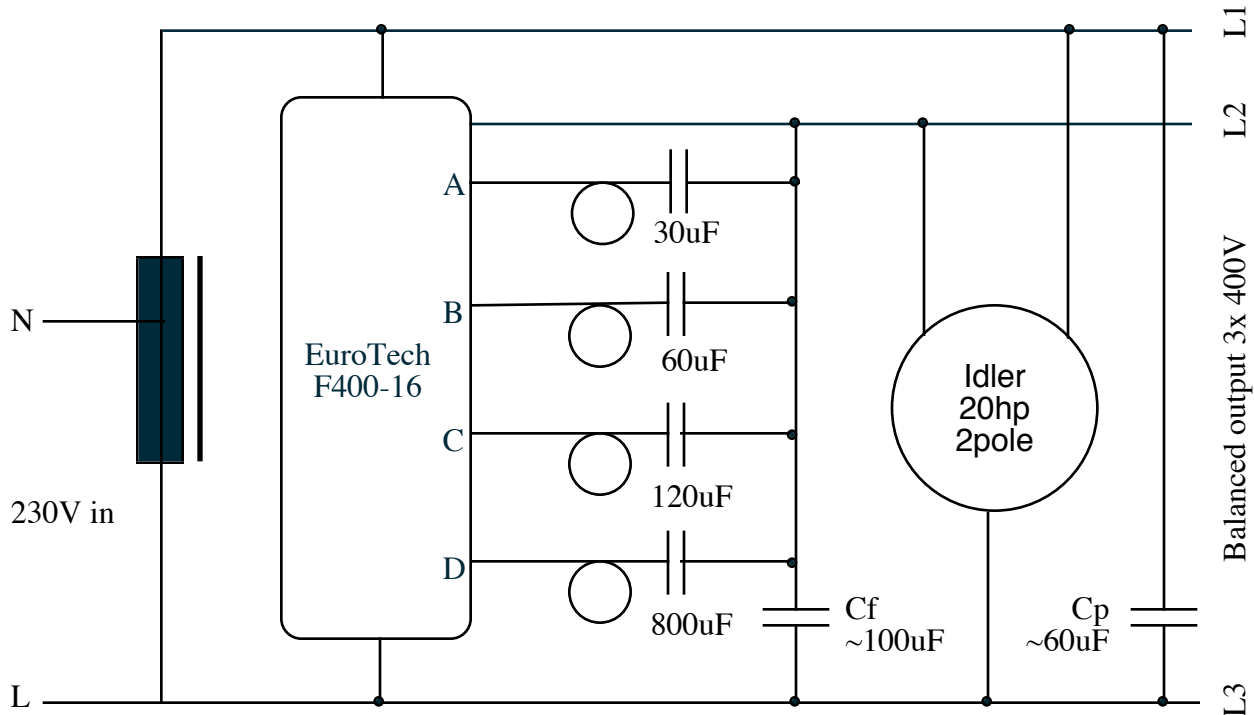




**Build a 16kW single to three-phase converter for
balanced output voltages using a F400-16 controller**



Install a standard motor (generator motor or idler) on soft rubber motor mounts.
If motor is inside an enclosure: Air intake close to vent. Second vent on opposite side.

Make air coils diameter 20cm 22 turns (~200uH). Never run a controller without coils.
Install F400-16 standing up, fins vertical for unobstructed airflow.

Apply 230V to transformer N and L. This produces 400V single phase in L1 - L3.
Auto transformer 18kVA for 100% duty cycle.

Adjust Cf for motor: V 2-3 should be 3-4% higher than V 1-3 when running idle.
Increasing Cf increases voltage. Use capacitors for 450V AC.
Adjust Cp (power factor correction) to lowest transformer input current when idle.
Safety: Connect a 200kOhm 5W discharge resistor each in parallel to capacitors A, B, C and D.
Danger: Discharge takes minutes. Measure before touching wires.

Appliances wires: Transformer input 6mm², L1-3 4mm², all others 2.5mm².

