

Explanation of UL and Electrical Terms

Colmac WaterHeat uses the below terms as defined by Underwriters Laboratories (UL), among other regulatory or legal organizations.

Total Panel Ampacity / Full Load Amperage (FLA): *Rating according to UL 508a 49.2*

The sum of all Full Load Amperages in the machine plus the ratings of any transformers. The resulting amperage draw if every component in the machine were to run at 100% max capacity in the worst operating conditions the manufacturer has rated the component for.

**Note: Most applications will not approach this value and will typically run 65-80% of this number. Contact the factory for a more detailed power draw breakdown.*

Minimum Circuit Ampacity (MCA): *Calculated according to UL 1995 36.14 b*

The largest compressor load or branch circuit protection x 125% + any electric heater loads x 125% + 100% of all other loads.

Feeder Wire Gauge: *Selected according to UL 508a Table 28.1*

Minimum Wire Gauge (AWG) required based on the FLA.

Maximum Overcurrent Protection (MOCP): *Calculated according to UL 508a 32.3.1*

Equal to the sum of the largest overcurrent protection and all other loads at 100% of their rating rounded down to the first common industrial size available.

**Note: If the largest overcurrent protection is a Self-Protected Combination Motor Controller (MSP or MPCB) the largest overcurrent protection is 100% of the largest load. This may result in a MOCP equal to the Total Panel Ampacity (FLA), rounded down.*

Locked Rotor Amps (LRA): *Specified by the component manufacturer*

The maximum amp draw by a motor when the rotor is physically prevented from turning.

Rated Load Amps (RLA): *Specified by the compressor manufacturer*

A calculated value supplied by the manufacturer for UL approval. Roughly analogous to FLA for compressors, though UL has not used FLA for compressors since 1972.