Minimum Circuit Ampacity

MCA = 1.25 x (*Load 1* + *Load 2* + *Load 3* + *Load 4*)

Maximum Overcurrent Protection

MOP = (2.25 x load 1) + load 2 + load 3 + load 4

If the calculated MOP does not equal the standard current rating of an overcurrent protective device (typically even multiples of 5), then the marked MOP is the next lower standard rating.

Exceptions:

- 1. The marked MOP will be the next higher standard rating than the computed value, if the next lower standard rating is less than 125 percent of the current rating of an electric heater load when such heater is involved.
- 2. If the computed value for MOP is less than the MCA, then the marked MOP is increased to the largest MOP appropriate for the MCA
- 3. If the MCA does not correspond to a standard protective device rating, the next higher standard rating of the protective device will be marked if this rating does not exceed 800 A

For Nailor Fan Powered Terminal Units, *Load 1* is the largest motor current, *Load 2* is the sum of all other motor currents, and *Load 3* is the heater current. *Load 4* is used for other loads greater than 1.0 ampere and can be considered zero for most standard products.

For Nailor Variable Air Volume Units, *Load 1* and *Load 2* are considered zero. *Load 3* is the heater current *Load 4* is used for other loads greater than 1.0 ampere and can be considered zero for most standard products.

(Motor currents are determined by product application test in accordance with UL 1995 and may not be the same as the motor manufacture's FLA marking.)

All formulae, definitions, and exceptions are cited from Underwriters Laboratories Inc. Standard for Safety for Heating and Cooling Equipment, UL 1995 Second Edition(Sec. 36.1, 36.2) CAN/CSA-C22.2 No. 236 Second Edition