Standard Operating Procedure for RUNNING TWO DIMMER RACKS FROM ONE THREE PHASE OUTLET

The **MAXIMUM LOAD** on any of the dimmer channels on the two dimmer racks sharing the three phase outlet by using a switched three phase splitter is **1000W**.

A 1000W load will draw 4.2 amps from the dimmer channel for a nominal 235V ac.

There are four dimmer channels connected to each phase of the three phase supply in each dimmer, so the total current drawn for four 1000W lamps is 16.8 amps for each dimmer rack.

If the three phase outlet has the capacity to supply 32 amps per phase, two dimmer racks with four channels with 1000W each will draw a total of 33.8 amps, so you will need to reduce the load on one channel on each of the dimmers to 650W which is 2.8 amps, which will reduce the total loading to 15.4 amps which is within the 16 amps limit.

If you are using one light per channel of 650W or 500W, you will draw less total power.

Note: Health Public Building Regulations 1992 section 44.3 states “an isolating switch shall be provided for each dimmer bank installed” for switched outlets have to be used for three phase splitters.