The line voltage at the generator bus is given to us by the alternator rating of 4160 volts. Since power is a scalar quantity, we know all power dissipations in a system must simply add to make the total. Thus, the total motor load is 56.2 kw. Power dissipated by the delta–connected resistor load is the sum of each resistor's dissipation (240.18 volts across 10 ohms), which is 3 x 5768.5 watts, or 17.3kw tts. Unless otherwise specified, the voltage or current rating of a three–phase device is always a line quantity The load bus receives its power through the step–down transformer, with 30:1 ratio between primary and secondary windings. Each primary winding sees the full 4160 VAC of the generator bus, because those windings are in a delta configuration.