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.