



electronic concepts, inc.

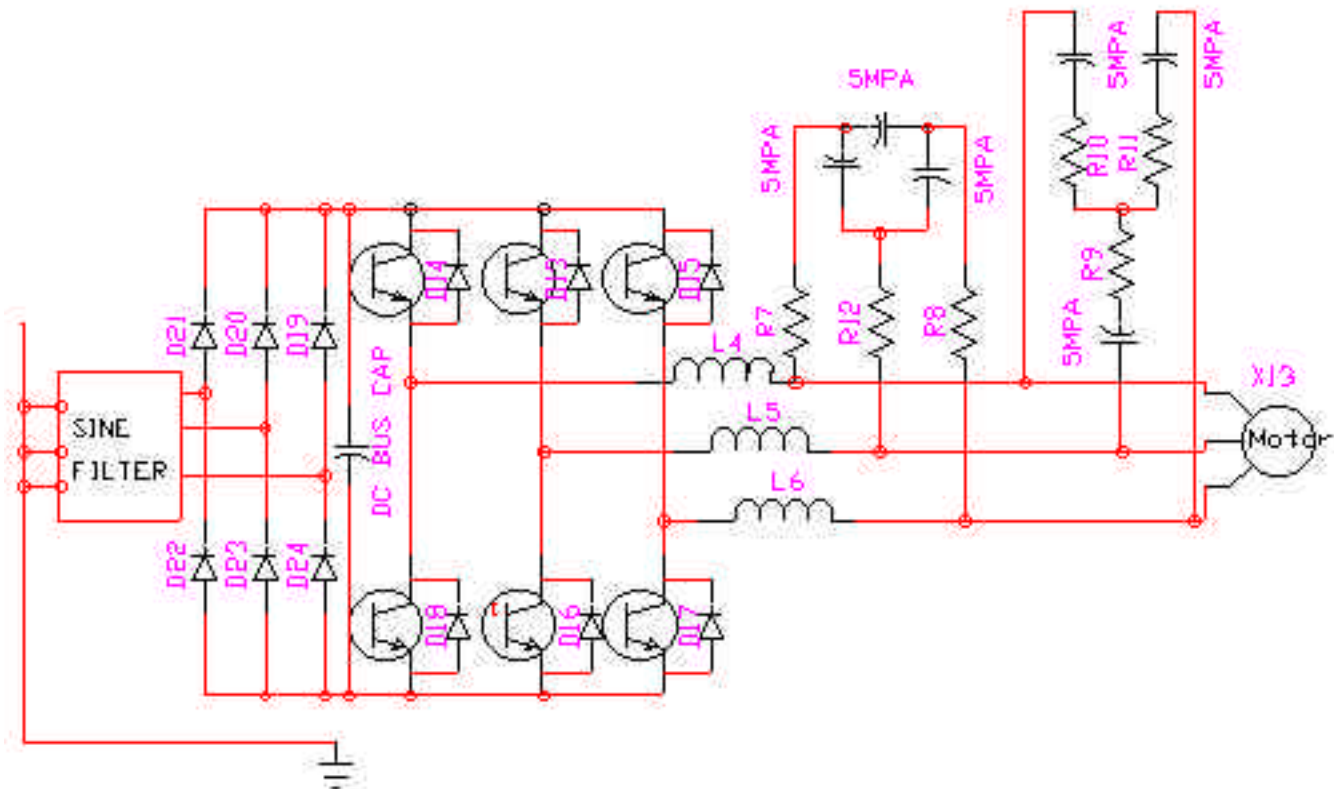
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AC FILTER FOR PWM INVERTER

LOW PASS
OUTPUT FILTER

OR

R - C IMPEDANCE
MATCHING FILTER



THE OVERALL VARIABLE FREQUENCY DRIVE (VFD) SYSTEM RELIES ON CAPACITORS TO CONTROL AN AC INDUCTION MOTOR PROPERLY.

WITHIN THE VFD ARE DC BUS CAPACITORS WHICH STORE ENERGY, HELP TO FILTER, AND PROVIDE "RIDE - THROUGH CAPABILITY" FOR REQUIREMENT TO LOWER THE TOTAL HARMONIC DISTORTION (THD) CONTRIBUTION TO THE SUPPLY FROM THE DRIVE'S RECTIFIER. THIS TOTAL THD CAN BE REDUCED WITH CAPACITOR BASED SINE FILTERS.

AT THE VFD'S OUTPUT IS A NEED TO ELIMINATE VOLTAGE SPIKES OUT TO THE MOTOR CAUSED BY THE FAST - SWITCHING TRANSISTORS AND LONG CABLE RUNS.

AGAIN, THIS CAPACITANCE IN THESE VFD OUTPUT FILTERS WILL HELP SOLVE THE PROBLEM

ELECTRONIC CONCEPT'S 5MPA LINE OF HIGH - CURRENT, BROAD RMS SPECTRUM, AC CAPACITORS ADDRESS THE REQUIREMENTS OF THE INVERTER OUTPUT.

THE UNIQUE RUGGED TERMINATIONS AND ROBUST DESIGN OF THE 5MPA CAPACITORS ARE PARTICULARLY SUITED FOR PWM OUTPUTS TO HANDLE CURRENT SPECTRUMS FROM BOTH; LINE FREQUENCY TO SUPERIMPOSED RIPPLE ON THE CARRIER WAVE. MULTIPLE INTERNAL CONNECTION JOINTS PROVIDE EXCELLENT CURRENT DISTRIBUTION, AND THE FLAT COPPER TERMINATIONS OFFER WIDE FREQUENCY RESPONSE AND LOW ELECTRICAL AND THERMAL IMPEDANCE.