

VOLTAGE SOURCE INVERTER FED INDUCTION MOTOR WAVEFORMS

The tubular axle induction motor programme included the operation of the motor when fed from a 120° square wave inverter. This memorandum describes an analysis technique which enables the relationships between inverter voltages and currents to be determined.

The method described for prediction of the current and voltage waveforms is original and complete. Good correlation between predicted and measured waveforms has been achieved. The analysis is independent of stability consideration and thus can complement stability studies.