



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	Ms_BJAST_33416
Title of the Manuscript:	Maximization of Transfer Ratio and Minimization of Harmonics in Three Phase AC/AC Matrix Converter
Type of Article:	Original Research Article

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
1. From figure 2 to figure 21 the output voltage shown has no distortions, without filter it is not possible to get such output. You should give some clarifications. 2. From figure. 22 to figure 32, If your switching frequency is 50kHz, FFT analysis should be above that frequency. 3. According to standards your converter cannot use for any applications due to harmonics. In Matrix converter, it is necessary to connect filter. So, I recommend you to design a filter which can cut down your harmonics at least below 20%. 4. There are no electrical and mechanical characteristic waveforms. 5. Figure. 1 is irrelevant, it shows that the matrix converter is connected to induction motor but no corresponding outputs. 6. It is better to show the matrix converter diagram and pulse waveforms of each switches.	1. These figures are obtained without filter and are obtained after modulation algorithm. Modulation algorithm is made in such a way that there should be no effect of phase difference. Hence due to no phase difference, only the magnitudes will be playing a role. Distortion occurs mostly due to phase difference. In our case, phase difference is cancelled out to achieve a sinusoidal waveform. 2. FFT analysis is carried out at load side on frequencies that are going to feed the load. It is not carried out at Matrix converter switches. 3. Yes, filter designing can be my future work and I shall make mathematical model for it. However, in my work, actual response of system is evaluated without filters. Since actual filter designing is a novel task for this model in order to avoid any loss in efficiency. 4. Since, it is not desirable to get electrical and mechanical waveforms. Because this paper focuses the maximization of voltage transfer ratio not the effect of voltage ratio on load characteristics. A new research paper can be written over it. 5. Figure 1 is not irrelevant. It contains scopes and scopes results are used to evaluate my research problem. Outputs are made shown on graph not on multi meters and that is there is no displaying of result. 6. Internal structure of matrix converter and Timing Diagram of