



SDI Review Form 1.6

Journal Name:	<u>British Journal of Applied Science & Technology</u>
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 the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	1. What's the meaning of the statement in the Abstract part "Voltage transfer ratio will be maximized in this technique so that ... could be achieved?" The author seemed not to explain clearly the voltage transfer ratio. I suggest the author should combine a figure and an expression to define this variable. 2. The language of this article must be improved. For one thing, some errors exist in the article. For another, the diversity of the language expression should be improved. 3. Repetitions occur throughout. For the sentence part, for example, the manuscript claims that "Pulse width modulation is a technique ..." in the Introduction part, while identical sentences are found in the beginning of the Section 3. For the equations, for example, equations (3.6) to (3.14) are highly similar except for their different phase angle. For the simulation sections, the similar repetitions happen, where too many similar simulation results are presented. I think there is unnecessary and with no merit for the author to list all the simulations, and instead, only showing us several figures with the highest representativeness is enough. 4. For Section 3, the meaning why so many equations are given is not clear. The author should at least draw a conclusion in the end of this section to explain the meaning. 5. For Section 4, the description of the Matlab/	1. Voltage transfer ratio is actually the ratio of output voltage to input voltage. Here output voltage of any value upto 1000 volts can be achieved with minimum harmonic losses in the fundamental component of waveform and it is shown in the results of fundamental component in THD graphs and sinusoidal voltage waveforms. 2. The language of the article is already well and if some modifications are required and errors are present, it needs to be highlighted. 3. Only repetition of PWM definition is made. Equations 3.6 – 3.14 are required because these equations basically giving the expressions of elements of 3 x 3 modulation matrix. However, it is true that only phase angle is different but this phase angle is important to highlight because output voltage value is achieved independent of modulation matrix phase angle effect. Extensive simulation approach to defend my problem that is to maximize the voltage transfer ratio. 4. Equations are clear and if modification is required, it needs to be highlighted.



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	Simulation is quite simple, and thus this part should be simplified. 6. It is highly recommended that the figure and key parameters of the simulation model should be presented. 7. The novelty of this manuscript is not distinct, which is required to emphasize in both Abstract and the Conclusion parts.	5. Extensive simulation approach is applied to defend my problem of maximizing the transfer ratio. 6. Matlab simulation diagram is added to the research paper. 7. Novelty of the paper is to maximize the voltage transfer ratio with minimum harmonic content in the fundamental waveform and it is highlighted in abstract and it is well concluded in conclusion.
<u>Minor</u> REVISION comments	1. The construction and the logic of the Introduction part should be enhanced.	The construction and logic of the introduction is enhanced by adding references from the recent papers.
<u>Optional/General</u> comments		