# Article information:

Modulation and Control for a New Hybrid Cascaded Multilevel Converter With DC Blocking Capability | IEEE Journals & Magazine | IEEE Xplore
<https://ieeexplore.ieee.org/document/6298999>

# Article summary:

1. The article discusses the modulation and control of a new hybrid cascaded multilevel converter with DC blocking capability.

2. It proposes a novel asymmetrical square-wave modulation at a very low frequency to reduce switching losses of the director switch, as well as modified phase-shifted carrier-based pulsewidth modulation (PSC-PWM) to determine the number of FSMs to be inserted or bypassed.

3. The effectiveness of the modulation and control strategies is verified by PSCAD/EMTDC simulations.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article “Modulation and Control for a New Hybrid Cascaded Multilevel Converter With DC Blocking Capability” provides an overview of the modulation and control strategies for this newly introduced voltage-source converter with dc blocking capability. The article is written in an objective manner, providing detailed information on the proposed modulation schemes and their effectiveness in reducing switching losses, determining the number of FSMs to be inserted or bypassed, limiting short-circuit current during dc fault conditions, and providing fast ac overcurrent protection.

The article does not appear to have any biases or one-sided reporting; it presents both sides equally and does not make any unsupported claims or omit any points of consideration. All claims are supported by evidence from simulations conducted using PSCAD/EMTDC software, which adds credibility to the findings presented in the article. Furthermore, no promotional content is present in the article; it is purely focused on presenting research findings related to this new hybrid cascaded multilevel converter with dc blocking capability.

In conclusion, this article appears to be reliable and trustworthy; it provides detailed information on its topic without any bias or one-sided reporting, making use of evidence from simulations conducted using PSCAD/EMTDC software to support its claims.

# Topics for further research:

* Hybrid Cascaded Multilevel Converter
* DC Blocking Capability
* Modulation Strategies
* Switching Losses
* Short-Circuit Current
* AC Overcurrent Protection

# Report location:

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