

ABSTRACT

METHOD OF CONTROLLING POWER CONVERSION DEVICE

5 [Object] To suppress a sudden change of noise due to a changeover between modulation methods and to suppress a switching loss while improving a voltage accuracy.

[solution] A correction-term adder 1 compares a maximum value $\max(V^*)$ with an absolute value of a minimum value
10 $\min(V^*)$. The correction-term adder 1 selects a signal $1 - \max(V^*)$ when the maximum value $\max(V^*)$ is larger than the absolute value of the minimum value $\min(V^*)$, on the other hand, selects a signal $-1 - \min(V^*)$ when the absolute value of the minimum value $\min(V^*)$ is larger than the maximum value
15 $\max(V^*)$. Thereby, a signal of correction amount α is calculated. Moreover, the correction-term adder 1 produces a triangular-wave-shaped signal $k(\max(V^*) + \min(V^*))$ by multiplying a gain k by an addition signal $\max(V^*) + \min(V^*)$ of the maximum value $\max(V^*)$ and the minimum value
20 $\min(V^*)$. This triangular-wave-shaped signal $k(\max(V^*) + \min(V^*))$ is synchronized with the correction amount α . The correction-term adder 1 produces a correction amount β by selecting smaller one in absolute value between the triangular-wave-shaped signal $k(\max(V^*) + \min(V^*))$ and the
25 correction amount α , and adds the correction amount β to the voltage command values V^*_u, V^*_v, V^*_w .

[Representative drawing] FIG. 2