

Title Of Invention: MOTOR CONTROL DEVICE, AND WASHING MACHINE OR
WASHING AND DRYING MACHINE HAVING SAID MOTOR CONTROL DEVICE
INSTALLED THEREIN

ABSTRACT

A motor control device (10) is configured to control a brushless motor (40) including a rotor with a salient pole structure and driven by an inverter circuit (13). The motor control device (10) includes the inverter circuit (13), a current detector (21), an initial phase estimation unit (22), and a polarity determination unit (23). The initial phase estimation unit (22) is configured to estimate an initial phase of the brushless motor (40), based on the current detected by the current detector (21). The polarity determination unit (23) is configured to determine the polarity of a magnetic pole of the brushless motor (40) for the initial phase estimated by the initial phase estimation unit (22), based on differences between current amplitudes in positive and negative directions of the d- and q-axes, the differences being detected by the current detector (21) by superimposing voltages in the positive and negative directions of the d- and q-axes, respectively, and correct the initial phase.

[Figure 1]