

Implementation of Inverter and Modbus RTU RS-485 Communication in Controlling Induction Motor Speed

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Abstract

As industrial technology continues to advance, the demand for efficient and automated motor control systems is increasing. Three-phase induction motors are widely used due to their durability and efficiency. However, controlling their speed remains a challenge, especially in small-scale applications without expensive systems. Therefore, a precise, affordable, and easy-to-implement motor control solution is needed. This study discusses the implementation of a three-phase induction motor speed control system using the LS G100 inverter and LS XRM-DR16S PLC through the Modbus RTU RS-485

