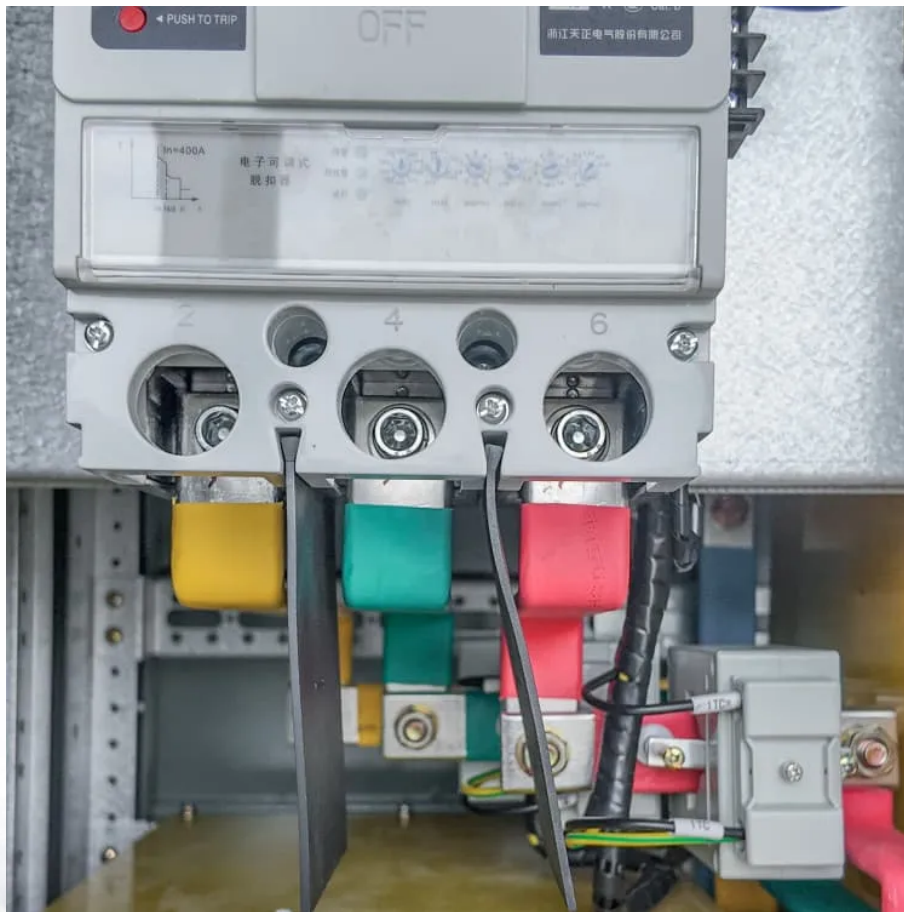


Energy management system for solar container communication stations in high-rise buildings





Overview

How can solar energy be used in high-rise buildings?

These strategies can be applied and adapted to high-rise buildings by using direct solar gain, indirect solar gain, isolated solar gain, thermal storage mass and passive cooling systems. On the other hand, considering active solar technologies can also add extra potential by providing part of the building necessary energy demands.

Are solar passive strategies effective in high-rise buildings?

This study reviews the recent literature about the solar passive strategies and active technologies in high-rise buildings. It illustrates the effectiveness of benefiting solar energy. It introduces solar energy as a substitute source of energy in high-rise buildings.

Which energy management strategy is adopted for high-rise buildings?

The conventional energy management strategy of maximizing PV utilization is adopted for the high-rise building with a 20.99 % PV supply-load ratio in the low-energy case (Case 1).

Can solar-powered smart buildings be integrated with IoT-based control systems?

This paper presents an integrated energy management solution for solar-powered smart buildings, combining a multifaceted physical system with advanced IoT- and cloud-based control systems.



Energy management system for solar container communication station



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