Perancangan sistem proteksi petir eksternal menggunakan Ealy Streamer Emission Air Terminal (ESEAT) pada Gedung A Rumah Sakit Umum Daerah Koja = Design of external lightning protection system using the Early Streamer Emission Air Terminal (ESEAT) at building a in Koja Hospital

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Abstrak

ABSTRAK
Sebagai rumah sakit besar yang menawarkan berbagai layanan dan Rumah Sakit Koja memiliki 5 gedung yaitu gedung A, gedung B, gedung C, gedung D, dan gedung E dengan masing-masing gedung memiliki kegunaan yang berbeda. Sebuah rumah sakit harus memiliki sistem proteksi petir untuk melindungi peralatan elektronik rumah sakit dan manusia di dalamnya. Sistem penangkal petir dibagi menjadi dua yaitu sistem proteksi petir internal dan sistem proteksi petir eksternal. Dalam penelitian ini akan merancang sistem penangkal petir eksternal di gedung A RSUD KOJA menggunakan teknologi Early Streamer Emission Air Terminal (ESEAT). Sistem Proteksi petir eksternal berfungsi untuk melindungi benda dari sambaran petir langsung. Teknologi Early Streamer Emission Air Terminal (ESEAT) yang diyakini membuat sambaran petir lebih cepat di terminal udara dan kawasan lindung jangkauan yang lebih luas dari sistem proteksi petir konvensional. Desain selesai dengan memvariasikan nilai tinggi dan waktu pelepasan (ΔT) pada ESEAT yang area perlindungan akan dihitung menurut standar NF C 17-102.
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ABSTRACT
As a large hospital that offers various services and Koja Hospital has 5 buildings, namely building A, building B, building C, building D, and building E with each building having different uses. A hospital must have a lightning protection system to protect the hospital's electronic equipment and humans in it. The lightning protection system is divided into two, namely an internal lightning protection system and an external lightning protection system. In this research, we will design an external lightning protection system in building A KOJA Hospital using Early Streamer Emission Air Terminal (ESEAT) technology. External lightning protection system serves to protect objects from direct lightning strikes. The Early Streamer Emission Air Terminal (ESEAT) technology is believed to make lightning strikes faster at air terminals and protected areas with a wider range than conventional lightning protection systems. The design was completed by varying the height and discharge time (ΔT) values on the ESEAT for which the protection area would be calculated according to the NF C 17-102 standard.