

ABSTRAK

**ANALISIS EFISIENSI MOTOR INDUKSI TIGA FASA PADA
CONVEYOR DI PT. BUKIT ASAM, Tbk.**

(2025 : 70 Halaman + 9 Daftar Pustaka + 81 Daftar Isi + 16 Daftar Gambar + 7 Daftar Tabel + 10 Lampiran)

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Perhitungan nilai efisiensi motor induksi tiga fasa pada *conveyor* ini dilakukan tanpa menghentikan operasionalnya. Penelitian ini bertujuan untuk menganalisis nilai efisiensi motor induksi tiga fasa pada *conveyor* di PT. Bukit Asam, Tbk. Metode yang digunakan pada perhitungan efisiensi motor induksi tiga fasa ini adalah metode *Voltage Compensated Ampere Ratio*. Hasil penelitian menunjukkan bahwa nilai efisiensi rata-rata motor induksi tiga fasa sebesar 90,51%, yang berada di bawah batas minimum efisiensi sesuai standar IEC 60034-30-1 untuk kelas IE1 (*standard efficiency*).

Kata Kunci : Efisiensi, Motor Induksi, *Voltage Compensated Ampere Ratio*

ABSTRACT

**ANALYSIS OF THREE-PHASE INDUCTION MOTOR
EFFICIENCY ON CONVEYOR AT PT. BUKIT ASAM, Tbk.**

(2025 : 70 Page + 9 Reference + 81 List of Content + 16 List of Pictures + 7 List of Table + 10 Enclosure)

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The calculation of Calculation of the efficiency value of a three-phase induction motor on a conveyor is carried out without stopping its operation. This study aims to analyze the efficiency value of a three-phase induction motor on a conveyor at PT Bukit Asam, Tbk. The method used in the calculation of the efficiency of this three-phase induction motor is the Voltage Compensated Ampere Ratio method. The results showed that the average efficiency value of a three-phase induction motor was 90.51%, which was below the minimum efficiency limit according to the IEC 60034-30-1 standard for class IE1 (standard efficiency).

Keywords : Efficiency, Induction Motor, Voltage Compensated Ampere Ratio