



Induction Motor Case Study

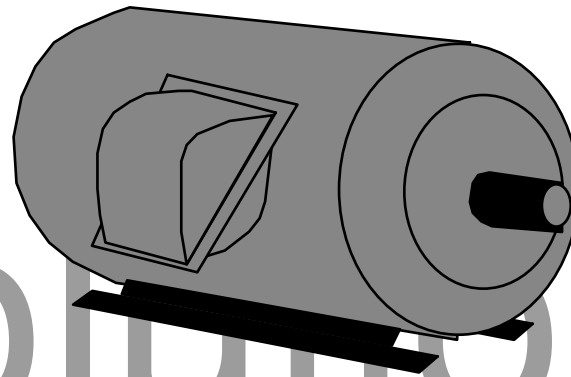


η -Power Solutions
Pima Controls Pvt. Ltd.

Annual Energy Saving Example

100 HP Induction Motor

100% Speed
100% Load



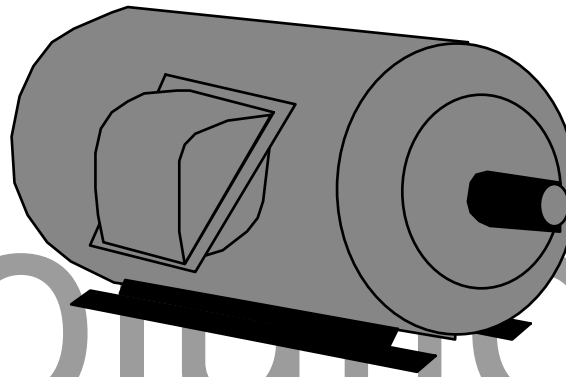
$$(100 \text{ HP}) \times \left(\frac{1}{95\% \text{ eff.}} \right) \times \left(.746 \frac{\text{KW}}{\text{HP}} \right) \times (5.5 \text{ Rs/KWh}) \times (12 \text{ H/Day}) \times (360 \text{ D/Year}) =$$

Rs. 18,65,785 per year!

Annual Energy Savings Example (Contd.)

100 HP Induction Motor

80% Speed
51% HP



$$(100 \text{ HP}) \times (0.51) \left(\frac{1}{95\% \text{ eff.}} \right) \times (.746 \text{ KW/HP}) \times (5.5 \text{ Rs/KWH}) \times (12 \text{ H/Day}) \times (360 \text{ D/Year}) =$$

Rs. 9,51,550 per year!

How much did I save?

100% Speed Rs. 18,65,785

80% Speed Rs. 9,51,550

Rs. 9,14,235 per year!

Solutions