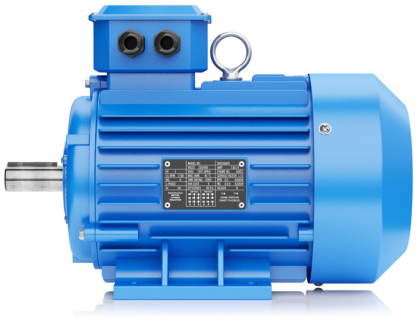
NC Electric Cooperatives
Your Touchstone Energy® Cooperatives

Electric Irrigation Pumps:

A Convenient, Cost-Effective Choice for Your Farm

Overview

Irrigation is essential for cultivating crops, raising livestock, improving land utilization, revegetating disturbed soils and much more. Many irrigation systems have traditionally been powered with diesel pumps; however, over the past two decades, electric motor-driven pumps have grown in popularity because they offer increased efficiency, lower operating costs and better reliability.



Benefits

Ongoing Costs: Running pumps on electricity can be significantly less expensive than diesel fuel, and prices are more stable. Your local electric cooperative can assist you through an assessment to determine the power requirements and considerations for your site.

Clean and Practical: Electric pumps are not subject to emissions regulations, and because there are no tanks to refill, you'll never have to worry about running out of or spilling fuel. Electric motors are also quiet and easy to use, and some systems can be operated remotely.

Efficiency: Electric motors are much more energy efficient than diesel engines.

Reliability: With fewer moving parts, electric motors are less likely to have things go wrong and require less monitoring and maintenance.

Barriers

Upfront Costs: Upfront costs can be higher for electric pumps, particularly if utility infrastructure upgrades are needed. New single-phase pumps and incentives may be available to reduce these upfront costs, and operating costs make up the difference. Contact your local electric cooperative for more information.

Cost Comparison

	Electric Pump*	Diesel Pump
Rated Output (HP)	75	75
Operating Efficiency	94.5%	25%
Input Power (equivalent kW at rated output)	59.2	237
Hourly Operating Cost	$4.74 per hour (at $0.08 per kWh)	$13.74 per hour (at $3.00 per gallon)
Estimated Annual Run Hours	750	750
Estimated Annual Maintenance Cost	$25	$250

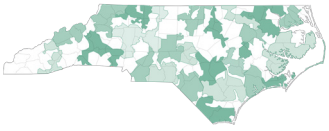
**Similar results for single-phase BELLE™ Written-Pole® or conventional three-phase electric motor. This table is an example only, with data adapted from Single Phase Power Solutions, LLC. For actual projects, official equipment quotes from relevant vendors must be obtained to determine payback.*

Business Solutions from Your Electric Cooperative

As a local electric cooperative, we are here to support you as you make the switch to electric irrigation. We can provide an initial assessment and infrastructure evaluation, as well as more details about efficiency and cost savings.

Contact Us

For more information, please contact your local electric cooperative. Visit ncelectriccooperatives.com/our-members to find contact information for your co-op. Ask for your co-op's key accounts representative.



Connect with NCEC:
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