

# 4" - 10" HIGH EFFICIENCY SYSTEMS

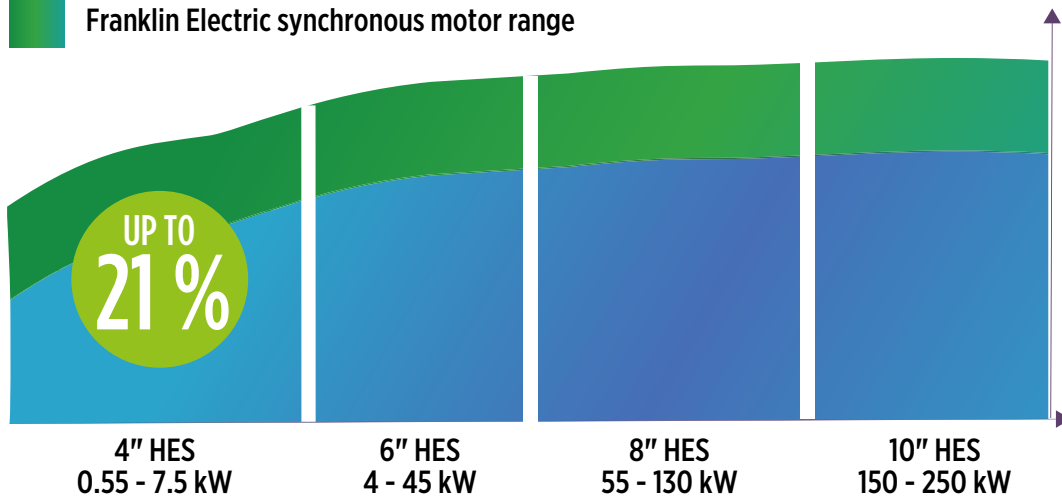


## SUPERIOR EFFICIENCY

In times of rising energy costs, new systems put more and more emphasis on the best possible efficiency. Here, Franklin Electric has set a new benchmark with its High Efficiency Systems (HES).

Compared to standard asynchronous motors, energy savings of up to 21 % have been achieved in numerous systems installed worldwide. See the success stories of our customers on [franklinwater.eu](http://franklinwater.eu)

- Standard asynchronous motor range
- Franklin Electric synchronous motor range



- ✓ No electrical rotor losses with permanent magnet motors
- ✓ Synchronous speed (no slip)
- ✓ Up to 15 points (21 %) improved motor efficiency\*
- ✓ Excellent partial load behaviour (Reduced stock levels)
- ✓ Reduced motor current / cable cross-section
- ✓ Less temperature heat rise

## PACKAGED DEAL



One-stop shop - Perfectly matching components guarantee first-class performance

- Synchronous submersible motor
- Variable frequency drive
- Matching output filter (> 230 V)
- Flow switch (Solar systems  $\geq$  4 kW)
- Submersible pump



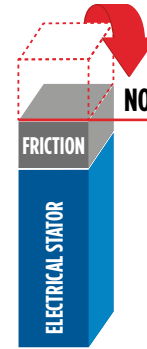
# 4"/6"/8"/10" HIGH EFFICIENCY SYSTEMS

## PERMANENT MAGNET TECHNOLOGY

The key factor for energy savings and superior efficiency is the permanent magnet technology of the motor. Instead of a short-circuit induction type rotor, the high efficiency motor contains a permanent magnet rotor design with buried magnets.



ASYNCHRONOUS  
MOTOR LOSSES



NO ELECTRICAL ROTOR LOSSES

SYNCHRONOUS  
MOTOR LOSSES

## SELECTION AND PAYBACK TOOL

To help you select the right system for your grid and solar applications, use the HES selection and sizing tool on the [Franklin website](#).



## EASY INSTALLATION & SUPPORT

- Operation with grid or solar supply
- Easy and fast commissioning due to initial configuration wizard
- Remote control and real-time monitoring via Mobile App (4")
- Remote assistance / Trouble shooting from the Franklin Electric support team (4")

## APPLICATIONS



## SOLAR SYSTEMS

- ✓ One-stop shop and perfectly matching components guarantee first-class performance/efficiency
- ✓ Direct DC feeding, AC power source compatible
- ✓ Suitable for the use in remote areas and harsh environments
- ✓ Robust Electronics enclosure designs
- ✓ The special Franklin Electric MPPT algorithm for borehole applications maximizes the system performance.
- ✓ 4" Solar Voltage Boost (up to 2.2 kW)
  - ▶ Sizing in power rather than voltage
  - ▶ Reduction of required Solar panels, more water respectively
  - ▶ Saving of investments and installation work

