

July 2020

6" High Efficiency System (HES) now available up to 45 kW with the new encapsulated Permanent Magnet motor

Franklin Electric is pleased to announce the extension of the 6" High Efficiency System up to 45 kW with encapsulated Permanent magnet motors. Due to the encapsulated technology the operational safety can be further increased as well as the power density and thus the Maximum power.

The complete package consisting of variable frequency drive, permanent magnet synchronous motor and output filter offers a compact system solution to meet your water pumping requirements. Well-chosen and perfectly matching components guarantee first-class efficiency and energy saving of up to 15 %*. The 6" High Efficiency System can be used in either grid or solar applications which makes it a unique and flexible all-in-one solution.

FEATURES & BENEFITS

SUPERIOR EFFICIENCY

- Up to 15 % improved motor efficiency (system up to 11 %)*
- Excellent partial load behavior (SKU reduction)
- Due to the high motor efficiency, amps are significantly reduced, which might lead to smaller drop lead cross size and thus cost saving.
- One-stop shop and perfectly matching components guarantee first-class performance/efficiency
- Three motor ratings with increased power density and extended performance range
 - 4.0 kW – 11.0 kW
 - 13.0 kW – 22.0 kW
 - 26.0 kW – 45.0 kW



SOLAR SYSTEM

- Best-class performance / efficiency, less pv-panels, more water respectively
- Solar drive available in IP21/54 and IP66 enclosure rating
- AC and DC power source compatible
- MVPT algorithm maximizes system performance



INCREASED LIFETIME

- Incorporated Soft start and protection features (no additional investment)
- Speed control (Optimum aggregate operation - pump matches system any time)

EASY INSTALLATION & FULLY SUPPORTED

- Easy system commissioning due to integrated start-up wizard with tailored pre settings.
- Fully supported by the Technical Support Professionals and Field Service Engineers



PACKAGED DEAL

- 6" synchronous 304SS submersible NEMA encapsulated motor
- Variable frequency drive
- Matching output filter
- Flow switch (Solar systems)
- Matching submersible pumps available separately



SPECIFICATION

- Motor range: 4.0 – 45 kW (100 Hz - 3000 rpm) - 51.7 kW (120 Hz – 3600 rpm)
- System Power Supply: 400 V \pm 10 %
- Frequency: 50 Hz - 60 Hz \pm 2 %
- Nominal ambient temperature: motor: 30 °C, electronics: 50 °C (> 40 °C with derating)
- Vertical and horizontal operation
- Protection: motor: IP68, insulation class F
 drive: IP66/54/21
 filter: IP00/54

OPTIONS

- Special Voltages
- Further materials: 316SS, WW (with powder coated motor brackets)
- Solar version

For ordering information please refer to the product catalog, available on <https://franklinwater.eu/products/>.

The system will soon be available in the Selection & Payback Tool at <https://fehighefficiency.franklinwater.eu/>.

Please do not hesitate to contact your Franklin Electric Area Sales Manager or Field Service Engineer for additional information.