



6" High Efficiency System

In consideration of environmental relief and energy saving Franklin Electric developed a High Efficiency Submersible Borehole System, consisting of a synchronous 6" Submersible motor associated variable frequency drive, output filter and submersible pump.



System Product features

- Standard Motor in full 304SS
- One-stop shop – perfectly matching components guarantee first class performance
- Up to **20% energy saving***
 - ⇒ *System payback < 2 years*
- Up to **13% improved motor efficiency** (system up to 11%) with excellent partial load behaviour*
 - ⇒ *SKU Reduction*
- Significant lower motor heat rise
 - ⇒ *Increased lifetime*
- Higher power density*
 - ⇒ *Lightweight*
- Easy installation/ set-up due to tailored pre-setting, user interface and software
- Speed control
 - ⇒ *Optimum aggregate operation - pump matches system any time*
- Incorporated Soft start and protection features
 - ⇒ *Increased lifetime*
 - ⇒ *No additional investment*
- Reduced amps
 - ⇒ *Smaller drop lead cross size*
- Top class protection with Electronics in IP66/54**
 - ⇒ *Easy retrofit - no additional cabinet cost*
- Power factor corrected input
 - ⇒ *No power compensation needed*
- Communication Modbus (RS485 and Ethernet)

*In comparison to current asynchronous technology

**Alternative Electronics in IP21/00 for cabinet assembly available

Technical System Specification

- Rating: 4 - 37kW
- Power Supply: Voltage 400V +/- 10%
Frequency 50Hz +/- 6%

System Options

- Plug-in card 6x DI/DO
- Plug-in card PT100
- Plug-in card 1x AI & 2x AO
- Plug-in card Profibus
- Power Supply: 200V & 500V
- Sinus output filters in IP54 and IP00
- PT100 protection
- Motors in 316SS and 904L



Franklin Electric

High Efficiency Motors 304SS

Motor Features:

- Standard Motor complete in 304SS
- Motors also in 316SS and 904L available
- PE2/PA winding as a standard
- SandFighter® SIC seal system
- Easy rewinding - winding housings removable
- Non-contaminating FES91 filling
- All motors pre-filled and 100% tested
- Max. storage temperature -15 ... +60°C
- Drinking water approved (KTW, ACS)



Variable Speed Drive (VFD)

VFD Features:

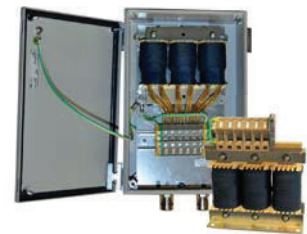
- Supports induction and permanent magnet motors
- Top class protection IP66 with Aluminium die casting powder coated enclosure . Alternative in IP21 with plastic enclosure
- Optimized for submersible permanent motor feeding – first class performance (Tailored pre-setting, user interface and software)



Output Filter

Output Filter Features:

- du/dt filter for lead lengths up to 120m, for lead lengths >120m please consult Franklin Electric.
- filter available in IP54 and IP00
- Optimized for submersible permanent motor feeding – first class performance



Pumps

For any pump support please refer to:

<http://www.etechpumps.com>

