



How a Franklin Electric 6" pump system brought the Bardolino fountain back into operation

The Seaman's Fountain of Bardolino in Italy is working again after two years, thanks to the Franklin Electric pump system, consisting of a 6" pump with a 6" encapsulated motor.

Technical Data

VS 6" Submersible pumps

- Fabricated stainless steel impellers and diffusers for corrosion resistance
- Heavy-duty stainless-steel structure for improved stiffness and ensuring the permanent alignment of all components and thus increased run time and trouble-free operation
- Floating Neck ring in PPS (14-19-25) or in PTFE (30-46-65)
- Reinforced version with double welded rings for high pressure pumps
- Compact, reliable and suited to operate in horizontal position
- Built-in check valve to protect the pump against water hammer risk
- The hydraulic design is such to enhance the overall efficiency thus reducing energy consumption and making the pumping systems more cost effective

Pump specification:

- Flow: up to 80 m³/h at 50 Hz
- Head: up to 700 m (70 Bar) at 50 Hz
- Water temperature range:
Minimum: -5 °C
Maximum: +90 °C (+60 °C for NBR parts)
- Maximum allowable amount of sand 100 g/m³
- Rotation: counterclockwise when looking into the discharge
- Pump can work continuously in vertical or horizontal position

Pressure boosting for water games

The musical fountain of Bardolino on the shores of Lake Garda, designed in 2001, was finally back to bubble again after two years of standstill, thanks to a visual and technical redesign by a local company. The new system consists of a 6" pump system from Franklin Electric, which was provided by the company Idroagrifer in Pastrengo (VR). Idroagrifer is a Franklin Electric distributor of borehole systems in the Veneto and Trentino Alto Adige area.

In this type of ornamental fountain, the pump system pushes the water through jet nozzles. This increases the pressure and the fountains reach the desired height.

The 6" systems from Franklin Electric consist of a 6" encapsulated submersible motor and a 6" Stainless steel submersible pump, which are characterised by high reliability and durability.



The fountain in operation, seen from the lakeshore at sunset.



Reliability and robustness

Franklin Electric's submersible motors allow power ratings up to 45 kW and are equipped with hermetically sealed windings. This anti-tracking system provides mechanical support, isolates the winding in the stator and ensures rapid heat dissipation.

The motors are equipped with the SandFighter® sealing system with SiC/SiC mechanical seal and sand protection as standard. The hydrodynamic liquid-lubricated radial bearings and heavy-duty Kingsbury type thrust bearing also ensure 100% maintenance-free operation.

The 6" submersible pumps of the VS series are made of Stainless steel and guarantee a long service life. Thanks to the proven components, this pump can withstand the toughest environments. It is suitable for flow rates up to 80 m³/h. The maximum permissible sand quantity for this series of submersible pumps is 100 g/m³.

The water installation is dedicated to Saint Alberti, a navy engine mechanic who went on board the submarine Topazio during the Second World War, which did not return to base in 1943 after a war mission.

Today, the sprinkler fountain, whose play of lights is reminiscent of the Italian colours, delights both tourists and locals walking along one of the most famous shores of Lake Garda. And thanks to the durable Franklin Electric integrated products, it will continue to do so for many years to come.



Franklin Electric 6" VS submersible pump and encapsulated submersible motor



The evening spectacle of the fountain with its play of light and colour

Technical Data

6" Encapsulated submersible motors

- Hermetically sealed stator, anti track
- Removable "Water Bloc" lead connector
- Cable material according to drinking water regulations (VDE / ACS / KTW approved)
- Sand fighter® Motor with SiC mechanical seal
- High efficiency electrical design for low operation cost
- Standard Motor: WW- Water well Design (Stator 304SS / Castings - CI Powder coated)
- All motors FES91 prefilled and 100 % tested
- 45 kN thrust capacity

Motor specification:

- 4 - 45 kW
- 6" NEMA flange
- Protection: IP 68
- Starts per hour: max. 20
- Installation: vertical/horizontal
- Standard Voltage: 380-415 V / 50 Hz, 460 V / 60 Hz
- Voltage tolerance 50 Hz from nominal: -10 %/+6 % U_N
[380-415 V = (380-10%) - (415+6%)]
- Voltage tolerance 60 Hz: ±10 % U_N
- Motor protection: Select thermal overloads according to DIN 61947-4-1
- Insulation: Class F
- DOL / YΔ - start (pos. of cables 90°)
- Rated ambient temperature:
4- 30 kW up to 30 °C; 37 & 45 kW up to 50 °C
- Cooling flow: min. 0,16 m/s
- Motor lead in 4 m length (VDE / ACS / KTW approved)

