Electrical Slip Ring For Scotrenewables Tidal Power LTD SR2000



Focal Technologies, a Moog Inc. Company, has been awarded the contract to supply Scotrenewables Tidal Power Ltd with a 6.6 kV electrical slip ring for their new tidal turbine. Scotrenewables Tidal Power Ltd recently launched the 2 MW SR2000. The 550 tonne machine underwent preliminary tow trials in Belfast Lough, Ireland, before being towed to Orkney, Scotland, to commence a grid connected test program. The SR2000, noted as the world's largest energy generating tidal turbine, will go live in the next three months once the turbine is connecting into the grid.

The SR2000 utilises a mooring system that allows the tidal generator to weathervane about the mooring point to maintain a heading into the tidal stream to maximize power generation efficiency.

The Focal 6.6 kV slip ring transmits 2 MW of power and control signals across the turret mooring system to the export cable on the seabed and an integrated absolute rotary encoder facilitates disconnection/connection operations between the SR2000 and the mooring system.

Video of the SR2000 launch



Focal swivels can also be used in other renewable topside or subsea applications to transfer power, electrical signals, optical signals and fluid media across rotary interfaces. Diagnostic systems can be integrated with the swivel to monitor many parameters including temperature, orientation, shock and vibration.

https://www.hydro-international.com/content/news/electrical-slip-ring-for-scotrenewables-tidal-power-ltd-sr2000