



## DFE Soft Starters Help Safeguard the River

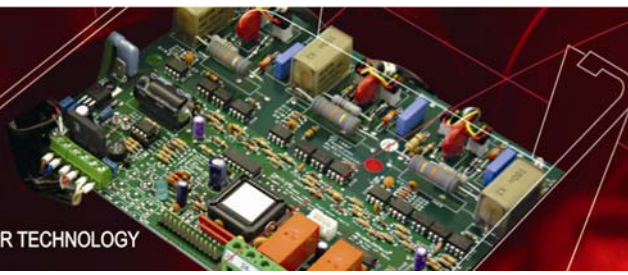


### **FAIRFORD'S NEW LOW COST DFE SOFT STARTERS CHOSEN FOR WATER EXTRACTION IN HARSH ENVIRONMENT OF DEVON QUARRY.**

Fairford's new low-cost DFE soft starters are being employed in the harsh environment of a Devonshire quarry to provide soft starting and soft stopping of 45kW, 75kW and 90kW motors that drive pumps to extract water from the quarry workings.

The DFE soft starters have been installed as part of three complete, turnkey panel systems designed and installed by Portico Industrial Control Systems, an international provider of turnkey systems right across the spectrum from HV switching to control and plant interfaces. Portico operates across the world in all industrial markets segments, the company having recently completed a major turnkey industrial supply and automation contract for an Australian aluminium refinery.

"Like any contractor who has to guarantee their work, we want equipment that gives us trouble free operation, which means no costly returns to site," said Mike Shoulder, principal of Portico. "We've used Fairford soft starters before, and they're a superb product, both in terms of performance and reliability - and also as regards Fairford's pre and after sales service. We also like the price of the DFE starters, which is very competitive; something which helps us in our price submissions to customers."



The first system installed by Portico controls a 45 kW pump extracting run-off water from new quarry workings. As a river runs through the site, it was necessary for the quarry to provide a man-made reservoir to collect the water run-off from the new workings. When the reservoir level reaches a certain point, the pump is started to extract water and pump it up to a new level, where it is treated to remove all the heavy metals (etc) before being pumped back into the river. The control panel for this pump is fitted with a Fairford DFE-14 soft starter, which, in addition to its reliability and cost advantages, was chosen for its ease of installation.

“The DFE is so simple to wire, in contrast to units from many manufacturers which have lots of complex control wiring,” said Mike Shoulder. “This saves us time on installation and also reduces costs.”

The second and third systems supplied by Portico control two pumps. The first, driven by a 75kW motor, takes surface water from the area where the operating machinery is located and pumps it into a settlement tank. A second prime mover, driven by a 90kW motor, then pumps this water up to the treatment area, where it is treated before being discharged into the river. The first pump is controlled by a DFE-22 soft Starter, and the second by a DFE-24: both units being chosen for their ease of installation and also their competitive price.

### **About The DFE Soft Starter**

The low cost DFE Soft Starter is a unit with simplified wiring that fits in the same space as a conventional Star/Delta Starter, and provides motor protection by offering the key benefits of both Soft Starting and Soft Stopping. The DFE offers a new form of soft starting which overcomes the problems of Star Delta current surges by ramping up to an initial voltage, holding the voltage, and then ramping up to full volts without disconnecting the motor from the mains supply. This eliminates the high current that can occur at the transition from Star to Delta.