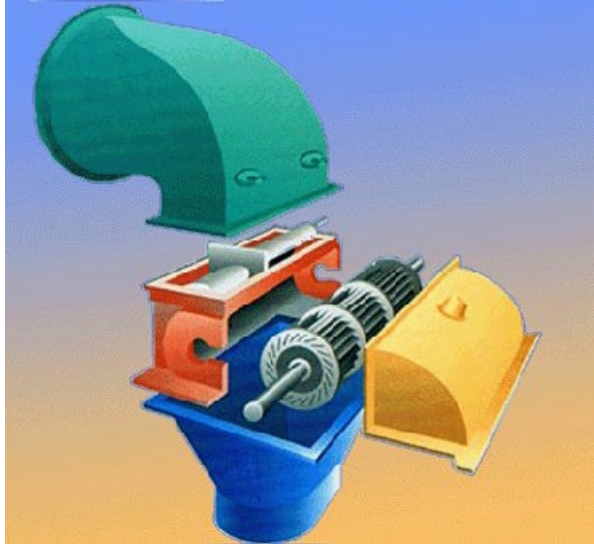


ATS Three phase to single phase Power Converter



A typical ATS application - off-grid supply needs power quality

With the growing number of off-grid generators there is an increasing demand for a sensibly priced and extremely reliable universal input computer grade power supply.

A typical example is that of a recent customer whose Micro-hydro generator (a river based water turbine) was producing significant levels of power with only a small proportion of it being usable. Traditional solutions would have involved rectifying the power to 12-48Vdc across a large bank of batteries and then using expensive inverter technology to generate usable 230Vac. This system is basically inefficient and expensive with a significant on cost associated with maintenance, failure and regular battery replacement.

The use of an Advance ATS Power Converter has enabled the customer to transform his unreliable variable frequency power into the computer grade sine wave he desires.

Additional benefits have been realised as the ATS continues to function seamlessly with one input phase removed as occasionally happens in the harsh environment of a riverside cabinet.

Lower Costs over 10 years

As the ATS doesn't need ambient temperature control the installation and running costs present a significant reduction compared to a comparable traditional technology solution. The real bonus comes in

the Total Cost of Ownership calculation, with an extraordinary MTBF of 100,000 hours (over 10 years) the ATS is a dream solution.

Another Application - Multiple choice in supply continuity is the aim



Due to its innovative topology the ATS can accept a wide variety of different inputs. Indeed two inputs can be of different phasing frequency and nominal voltage and transfer between them can be achieved with a no break output.

This unusual ability makes it ideal for use in a portable building made for demonstrations to the rail industry.

The UK rail system is supported by many different power networks. Conventional three phase 400V national grid supplies are converted to 600-650V single phase isolated supplies for trackside distribution.

Ideally all loads in the infrastructure would be able to accept either input and indeed seamlessly transfer from one to the other to allow for planned maintenance or unplanned outages. The simple addition of an Advance Dual Redundant Switch (DRS) in front of the standard ATS unit allows acceptance of single phase 650Vac achieving maximum continuity of supply.

For more details contact sales@aelgroup.co.uk