

## **WEG W22 HIGH EFFICIENCY MOTORS CONFORM TO WIMES SPECIFICATION; REDUCING WHOLE LIFE MOTOR COSTS IN WATER INDUSTRY.**

### **WIMES- COMPLIANT W22 RANGE MEETS & EXCEEDS NEW IE CLASSIFICATIONS**

WIMES – the Water Industry Mechanical and Electrical Specification, is one of the key tools used by the UK water industry in its continuing drive to improve efficiency and reduce operating costs. The UK water industry is one of the largest consumers of industrial electricity, due, in the main, to its wide use of pumping systems. Some water companies have calculated that approximately 90% of their annual energy consumption is attributable to the pumping of water. However, studies have shown that using higher efficiency drive systems could save 30% to 50% of this energy.

Originally introduced to reduce costs across the water industry by providing a common standard, WIMES is also a means of reducing the whole life costs of equipment such as low voltage electric motors. WIMES achieves this by specifying minimum criteria for features such as energy efficiency, application with VSD, build quality and environmental protection, all of which can affect a company's profitability.

The WIMES standard lays down minimum efficiencies for 2, 4, 6 and 8 pole electric motors at  $\frac{1}{4}$  and full load in the range from 1.1kW to 400kW. The efficiencies it considers for 2 and 4 pole motors in the range 1.1kW to 90kW are also the values determined by CEMEP, the European Committee of Manufacturers of Electric Machines and Power Electronics, for high efficiency EFF1 (IE2) motors. Up to and including 90kW, on 2 and 4pole motors, CEMEP values are used for the purposes of determining enhanced capital allowances. Over 90kW, or where energy efficiency for six and eight pole motors (5.5-315kw) is concerned, then WIMES is the benchmark standard in the UK.

The importance of WIMES as a whole life cost reduction tool is clear when the ratio of the initial cost of low voltage motors is compared to their operating costs. It has been calculated that in high use cases – and the water industry has many of these - the purchase cost of a LV motor can represent as little as 1% of the motor's lifetime cost; the remaining 99% being attributable to the motor's energy consumption.

### **WEG W22 LINE MEETS & EXCEEDS REQUIREMENTS OF NEW IE CLASSIFICATION**

WEG is meeting the demands for high efficiency operation across water and waste treatment applications with its W22 line of motors, one of the most energy efficient ranges on the market today. WIMES compliant, the W22 line comprises three product categories, each designed to exceed the requirements of the new IE1 (Eff2), IE2 (Eff1) and IE3 (Premium) efficiency classes. A key part of this improvement in energy use is the W22's new and aerodynamic frame which increases airflow and reduces operational temperatures.

Another major advantage of the W22 range is that it is already available in standard IEC frame sizes for the IE3 rating; a development that gives WEG a real head start in supply against competing global manufacturers.