



GENERATOR SET UPS SIZING

SIZING A GENERATING SET FOR A UPS

The sizing of a diesel generator to feed an uninterruptible power supply maybe calculated from the following formula:

$$\text{KVA gen} = \frac{\text{KVA UPS} + \text{KVA battery charge}}{0.8 \times \eta \text{ UPS}}$$

Where: η is the efficiency of the UPS
0.8 is the deration factor

The frequency parameters laid down by UPS manufacturers usually requires that the diesel generator be fitted with an electronic governor so as to maintain the frequency within plus or minus one per cent under all conditions.