GENERATOR SET
ISO 8528 POWER RATINGS EXPLAINED

CONTINUOUS POWER (COP)

Rating definition: constant load : unlimited running hours

This rating is appropriate for a generator set paralleled with an infinite bus e.g. a national electrical supply network or grid where the generator set is run at **100%** load, **24** hours a day, **365** days a year and any surplice power is **exported** into the grid.

Example: Combined Heat & Power (CHP) generator set.

PRIME POWER (PRP)

Rating definition: variable load : unlimited running hours

This rating is appropriate for a generator set used to supply power **24** hours a day, **365** days a year where there is **no** supply network or grid available.

Example: Generator set located on an off-shore island or in the middle of a desert.

LIMITED TIME RUNNING POWER (LTP)

Rating definition: constant load : limited to 500 hours per year

This rating is appropriate for a generator set used in **classic standby power** application where the generator set is used when the normally available electrical supply network or grid fails.
500 hours is considered the maximum length of time the generator set will be required to run in any one year. If the 500 running hours are reached within any one year period the generator set can continue to run but more servicing **may** be required as determined by oil sampling and inspection (rather than relying on the manufacturers normal service interval).

Example: Generator set on standby in a hospital for emergency power.

EMERGENCY STANDBY POWER (ESP)

Rating definition: variable load : limited to 200 hours per year

This rating is appropriate for a generator set used in standby power applications where the normally available electrical supply network or grid fails and where it has been determined that the load will be varying and the running hours will be less than 200 hours a year.