

Jargon Buster E-F	
Earth fault	Failure of electrical insulation between live conductors and earth. May be considered for detection in “restricted” areas of a circuit or “unrestricted” i.e. occurrence of a fault anywhere within a circuit.
Electronic governor	Electronic device to control and maintain the speed of an engine. Usually done by monitoring the output of a tachogenerator or magnetic pick-up, and feeding a proportional output to an actuator which controls the engine fuel supply. See Governor
Emission level stages	European emission standards for new nonroad diesel engines (Fixed & variable speed). Currently we are working towards Stage 5.
Enclosure	A general term, but often mean as the acoustic cover over a Generating Set
Engine governing	Engine speed control (see Governor) which may be mechanical, hydraulic or electronic.
Engine starting	12 or 24 V dc electric, air, hydraulic, spring.
E-Stop	Emergency stop (push button).
Euronorm	European Standards which must be transposed into Member State's Standards (see BS EN acronym.)
European directive	See Directive (European)
Exhaust gas recirculation	In internal combustion engines, exhaust gas recirculation (EGR) is a nitrogen oxide (NOx) emissions reduction technique used in petrol/gasoline and diesel engines. EGR works by recirculating a portion of an engine's exhaust gas back to the engine cylinders. This dilutes the O2 in the incoming air stream and provides gases inert to combustion to act as absorbents of combustion heat to reduce peak in-cylinder temperatures. NOx is produced in a narrow band of high cylinder temperatures and pressures.
Exhaust silencer	Device to reduce noise level of engine exhaust system.
Faulty synchronising	If synchronising occurs outside relatively small limits, then the transient currents and torques resulting from the acceleration can damage the generator and prime mover. In severe cases, destruction of the generating set can result. Often called crash synchronising. This can also occur on generating sets running in parallel with a utility supply as a result of a failure to detect a loss of utility with the result that when the utility supply resumes, the two supplies are outof-phase. Can also occur with excessively long ride-through times that exceed critical fault clearance time.

Feed & return	Method of using a feed & return pipe work back to the bulk storage tank (see Bulk tank), where the fuel can be maintained and quality monitored. Particularly relevant with the growth in use of biofuels where there is a potential degradation of quality if the fuel is stored for long periods of time (see Fuel polishing). Some diesel engines return a considerable amount of fuel to the storage tank, as it is used for cooling and lubrication of the fuel system. Also known as Flow & Return pipes.
Field	A permanent or electromagnet whose magnetic field induces voltage in the armature coils of a generator.
Fill point cabinet	A cabinet, often wall mounted or free standing, with connections and equipment to allow remote filling of a storage tank.
Fire protection systems	From a simple drop weight fire valve in the fuel line to full fire suppression systems; a system is in place to react in the event of a fire; cut off the flow of combustible material (e.g. fuel) to an area or a machine and shut down the affected components or may suppress the fire with either water, foam or an inert gas.
Fire rated enclosure/ section building	An enclosure constructed to meet a fire regulation i.e. BS476 4 hour fire rating or Offshore fire rating i.e. A60 i.e. 60 minutes integrity with a max temp rise from one side to other of 140°C.
Free field measurement	Measurement of sound in an environment in which the effect of reflective boundaries can be considered negligible.
Frequency	The number of cycles of an alternating current or sound wave in a given time i.e. Hz or cycles per second.
Frequency regulation	The degree of variation in frequency of a generating set from no-load to fully loaded state.
Fuel lines	Pipelines from an engine to a fuel tank or from one fuel tank to another fuel tank.
Fuel polishing	The removal of water, sediment, non-combustible particulate matter and microbial contamination to below levels stated in ASTM D975 (Standard Specification for Diesel Fuel Oils) while re suspending combustible particulate matter to maintain ASTM standards for heating value, lubricity, and cetane number (see Diesel Bug).
Full electronic authority engine control	Full authority digital engine control (FADEC) having no form of manual override available, placing full authority over the operating parameters of the engine in the hands of the computer. If a total FADEC failure occurs, the engine fails. If the engine is controlled digitally and electronically but allows for manual override, it is considered solely an EEC (electronic engine controller) or ECU (Electronic Control Unit).
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