GENERAL DESCRIPTION

POWER GENERATION

The power for the operation of the locomotive is developed by a Sulzer six-cylinder diesel engine, driving an A.E.I. generator group. This comprises Main and Auxiliary generators.

FUEL OIL

AIR

diesel engine

main
generator

MECHANICAL POWER

FOR

ELECTRICAL ENERGY

TRACTION

Fig. 4 Power generation.

Power Distribution

The main generator converts the engine power to high voltage direct current which is supplied to the four traction motors through the control cubicle.

The traction motors, which are geared to the driving axles, convert the electrical energy to mechanical energy for traction.

The auxiliary generator converts up to 54 k.w. into electrical energy at a low voltage of 110 volts direct current which is distributed through the control cubicle to operate the auxiliary motors, charge the starting battery, excite the main generator and provide current for heaters, lights, cookers, control gear and steam generator.

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ELECTRICAL ENERGY FOR AUXILIARIES