

FADEC Manual

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Description of the FADEC.

Full auto

The FADEC (Full Auto Digital Engine Control) is a system of control for model gas turbine engine. Its main function is to control the fuel pump, providing to the motor the necessary amount of fuel for its operation considering the temperature of the exhaust gas, the position of the throttle stick and the rpm of the rotor. Also it incorporates all of the protections necessary to guarantee that the engine stays between its parameters of operation, arriving to stop the engine when detecting itself an important anomaly. In order to make their assignment, the FADEC has a rpm sensor, a thermocouple input, a servo type throttle input, a digital link to program and read the data, the connection of power towards the fuel pump and the battery.

All of the measures that the FADEC makes can be read in a hand terminal, that is connected to the FADEC by a special connector. The FADEC is totally programmable by the user to adapt the margins of operation of each concrete motor. The configuration parameters are written in the FADEC by the hand terminal. The programmable parameters by the user are:

