

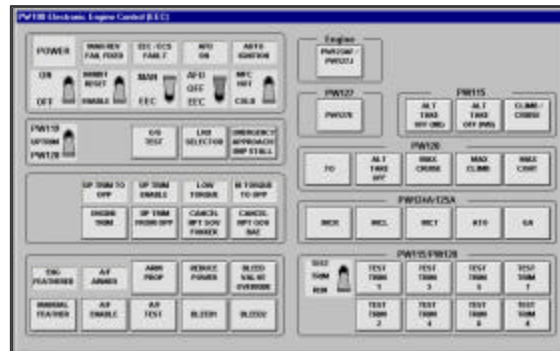


PW 100 ELECTRONIC ENGINE CONTROL (EEC)

CEL-EEC 20220A Technical Specification

Features:

The CEL-EEC 20220A is an electronic control panel designed for the aerospace industry to test the Pratt & Whitney PW100 family of engines. The control panel provides an interface to control and measure parameters from the electronic engine control. The unit is an integral component in the testing of the PW100 family of turboprop engines. The combination of computer controlled hardware with touchscreen and embedded real-time software technology provides a test environment with optimum operator interaction and ease of testing.



PW 100 electronic engine control (EEC)

General description:

- Designed in accordance with latest Pratt & Whitney EEC panel configuration. Replaces manually operated control panels PWC38224.
- Designed as a completely automated computer interface control.
- Designed to accommodate entire family of PW100 turboprop engines.
- Designed to interface with Pratt & Whitney engine harnesses.
- Designed with quality components make the PW100 CEL-EEC a highly reliable and highly affordable system solution.
- Designed for ruggedized harsh environment with extended temperature range of operation. (Engine Test Cell).
- Designed to be easily integrated with existing Test Cell facilities. Results in minimum down time for installation.
- Designed using touchscreen for human machine interface (HMI) compatible with Pratt & Whitney testing manuals.
- Designed to be easily configured for future PW100 variants.



Engine models:

PW 115, PW 116, PW118, PW118A,
PW 119, PW 119A, PW 119B, PW120,
PW120A PW 121. PW 121A, PW123,
PW123AF, PW123B, PW123C, PW 123D,
PW123E, PW124A, PW124B, PW125B,
PW126, PW126A, PW127, PW 127A,
PW 127B, PW 127C, PW127D, PW127E
PW127F, PW 127G, PW127H, PW127J

Functions:

Monitors engine parameters:

- PLA, CLA, maximum switch positions
- HI / LOW torque signals for EEC / AFU / SCU
- EEC FAULT LAMP / LATCH
- Auto feather relay status & control
- Automatic ignition monitoring
- Uprtrim monitoring for EEC / SCU

Control engine functions:

- Control of power to EEC / AFU / ECU / SCU
- Bleed valve control
- Test engine trim configuration & control
- Ground test for PW124 / PW120
- Enrichment relay control HI / LOW
- Feather control
- Automatic ignition
- Reset/manual control
- Emergency

Communication:

The CEL-EEC-PW-100 may be configured to communicate with existing data acquisition system using one of the following:

- RS-485 half duplex
- RS-232 serial communication
- Ethernet 10/100 base T

Software language:

QNX real time operating system / Windows XP

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