STEAM TURBINE GOVERNOR

AWC 500

Advanced Controller (PLC-based PAC) with Steam Govenor

DEIF introduces Steam Governor on its proven hardware platform AWC 500.

With an unprecedented level of robustness, the AWC 500 (PLC-based PAC) is the 5th generation addition to DEIF's range of advanced controllers.

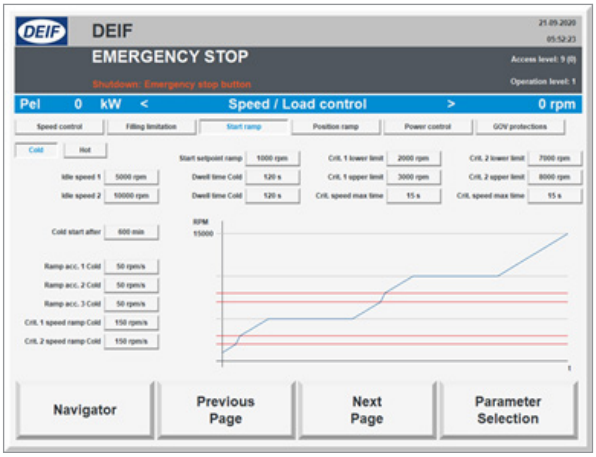
After numerous successful power management installations with AGC-4 Steam Controllers over the past decade, DEIF now extends its offering with steam governors. The steam governors are based on our experience of building control solutions for steam turbines, including governor function. We have more than 20 installations running successfully

AWC 500 Hardware features

- Designed for a lifetime of no less than 20 years
- 5 years warranty
- 100% production-tested system units
- Extended Environmental spec
  - Operating temperature: -40°C to 70°C
  - Storage temperature: -40°C to 70°C
  - Climate: 55°C / 97% RH
  - Coated PCBs
  - Altitude: Up to 4,000m
  - Vibration: 2.1g (3.2 to 50Hz)
    1.0g (13.2 to 100Hz)
  - Shock: 50g, 11ms, half-sine
  - Bump: 25g, 6ms, half-sine
- Build-in 50W 24V (18…32V) Power Supply
- Fully EtherCAT-based I/O
- TCP/IP, CAN, CANopen, SSI, RS-422/485 communication interfaces
- Direct 3-phase 690V voltage and 1/5A current measurement, with class 0.5 power measurement
- Real-time embedded Linux operation system software maintained 100% in-house
  - <5 second start-up time from power on
  - Fail-safe remote update
  - Fault-tolerant file system

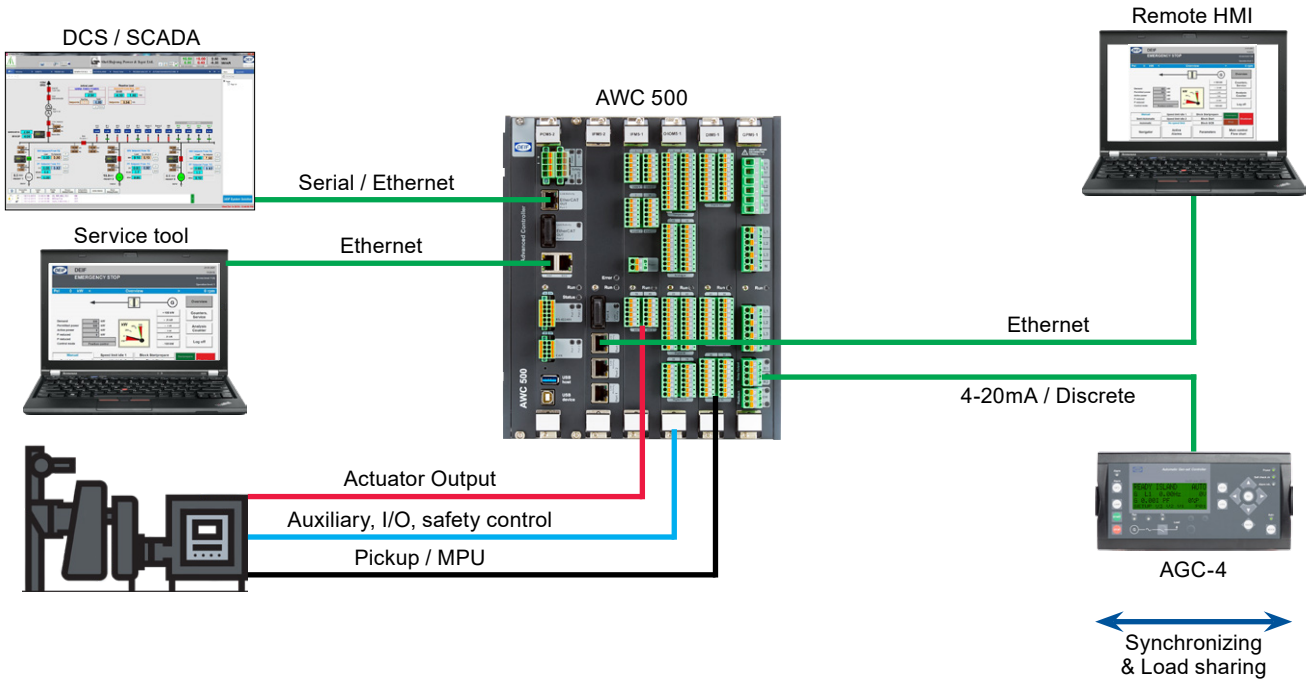
Steam Governor Application Range

- Small to medium steam turbines (1 – 50MW)
- Field-programmable software
- Remote display
- AWC-500 (back-plate mounted)
- Mechanical or generator drivers
- Industrial communication support
- Load sharing and synchronising compatibility



Steam Governor Application Features

- Overspeed protection
- Overspeed test
- 2 x critical speed protection
- Speed control
- Load sharing (droop sharing)
- Isochronous / droop
- Idle / rated
- Local / remote process control
- Inlet / exhaust pressure control
- kW / pressure control
- Auxiliary control
- Programmable I/O
- Three turbine start modes, Manual, Semi auto & Automatic
- Auto start up curves (hot / cold)
- Valve limiter
- Dual speed control dynamics
- Actuator output selectable
- Fail safe shutdown logic
- Peak speed detection
- Zero speed detection with proximity probes
- Windows based service tool for configuration



Founded in 1933, DEIF has more than 85 years of experience. Today, we are active on the international markets for engine & genset controls, marine bridge instrumentation, switchboard instrumentation and renewable energy controls.

It is our ambition to maintain and expand our position as one of the most trusted suppliers within our fields of operation. This goal will be reached by ensuring that DEIF continues to offer competitive advantages to our customers by supplying superior product quality, the best and most flexible features and competitive pricing.

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