# Steam turbine governor

Data sheet





## Steam turbine governor

DEIF Steam Turbine Governor, an advanced governor solution built on our proven hardware platform. Leveraging over a decade of expertise with the AGC Steam Controllers and our extensive experience in developing control solutions for steam turbines, our new steam Turbine governors deliver unparalleled performance and reliability.

With over 20 successful installations to date, the Steam Turbine Governor combines cutting-edge technology with an unprecedented level of robustness, ensuring superior power management and control. This makes it the ideal choice for optimizing steam turbine operations in diverse power applications.

#### **Steam Governor Application Support**

- → Small to medium steam turbine (1–50 MW)
- → Condensate, Back Pressure & Extraction Turbines
- → Generator Application
- → Onboard Voltage (Turbine & Bus/Mains) & Current
- → Measurement with protections
- → TG Synchronizing / Breaker Control
- → Island and Grid Parallel Application
- → Turbine Overspeed Protection
- → Integrated Service Tool
- → Back-plate mounted Hardware
- → Remote display
- → Industrial communication



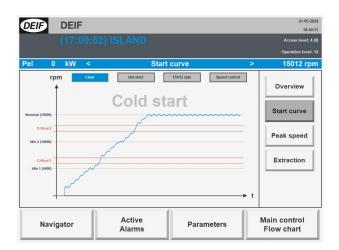
### Steam turbine hardware features

- → Full support for existing applications
- → Up to 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
- → Built-in 50W 24V (18...32V) Power Supply
- → Fully EtherCAT-based I/O
- → 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

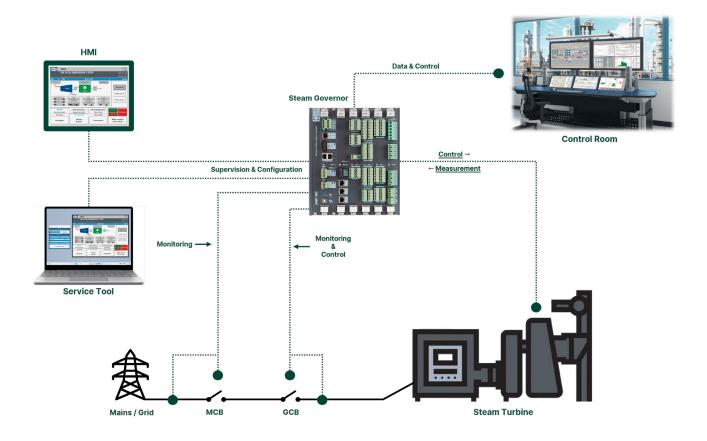


#### **Steam Governor Application Features**

- → Steam Governor Application Features
- → Overspeed protection
- → Overspeed test
- → 2 x critical speed protection
- → Peak speed detection
- → Zero speed detection with proximity probes
- → Three fully configurable turbine startup sequence: →
- → Manual, Semi auto and Automatic
- → Auto start up curves (hot / cold)
- → Idle / rated control
- → Speed control
- → Load sharing (droop sharing)
- → Isochronous / droop
- → Local / remote process control
- → Inlet / exhaust pressure control
- → kW / Auxiliary control
- → Extraction Control
- → User Configured Steam Map



- → Programmable I/O
- → Valve limiter
- → Dual speed control dynamics
- → Actuator output selectable
- → Fail safe shutdown logic
- → Windows based service tool for configuration







Founded in 1933, DEIF has more than 90 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.

