

EXPERTISE BEYOND CONTROLS

SERIES 5

Controllers



Series 5 controllers strike a balance between the high performance of purpose-built controls and the openness of general-purpose controls without compromising the control and protection of the turbomachinery.

Highest-performance turbomachinery controls

- Execution times as fast as 10 milliseconds
- Most complete integration of continuous control and sequencing
- Incorporates numerous standards, including IEC-61131
- Most open and user-friendly control system on the market
- Highly scalable; just as suitable for a simple, single-section, motor-driven centrifugal compressor as it is for a network of several multisection gas-turbine-driven compressors



Series 5 Vanguard

Modular, open architecture for complex turbomachinery trains

Series 5 Vanguard controllers utilize a deterministic, multitasking operating system. Automation and control programs, including antisurge protection and loadsharing, are implemented using the IEC-61131 programming standard. Our Windows-based TrainTools suite provides a comprehensive interface for programming and project engineering.

- ▶ Powerful high-speed processor
- ▶ Secure remote I/O
- ▶ Fast execution speeds
- ▶ Simplex or duplex chassis
- ▶ High resolution time stamping
- ▶ Specialized local I/O

Series 5 Reliant

Purpose-built, easy-to-use, fixed I/O configurations

- ▶ Easy installation and maintenance
- ▶ Reliable real-time multitasking
- ▶ Simplex or duplex configuration
- ▶ Local operator interface
- ▶ Multiple loop capacity
- ▶ Local maintenance interface

Series 5 Vantage products

Vantage GP

A purpose-built digital governor for optimal control of general purpose turbine applications. This system offers a combination of benefits, capabilities, and features that you can't get from other mechanical or electronic governors.

- ▶ Selectable process control modes
- ▶ Versatile speed control options
- ▶ Automated start-up sequencing
- ▶ Remote operator interface

Vantage GD

A specifically designed governor for condensing and back-pressure steam turbines driving synchronous generators. The Vantage GD provides a comprehensive collection of turbine and generator control algorithms.

- ▶ Outstanding speed control with integrated manual-control capabilities
- ▶ Stable and precise load control
- ▶ Built-in cascade-control loop

Series 5M—A full replacement for Series 3 or Series 4 controllers

CCC offers the Series 5M as a full replacement for obsolete control systems. The Series 5M replaces ONLY the electronic control modules. The existing chassis, field wiring, and field termination assemblies remain unchanged. The control system technology can be updated in one to three days, reducing process downtime and maximizing profits. Because the Series 5M controllers can communicate with obsolete Series 3 and Series 4 controllers, customers can choose to upgrade a multi-chassis system in stages over the course of months or years. Benefits include:

- ▶ Minimized downtime, because of the ability to keep the same chassis and cabinet, saving wiring I/O signals
- ▶ Eliminated obsolescence, increased user-defined functions
- ▶ Improved system reliability
- ▶ Improved operator interface for easy navigation
- ▶ Improved maintenance and diagnostics for rapid fault detection
- ▶ Guaranteed sequence of events with controller time stamping

Global experience. Global support.



Australia / Brazil / China / India / Italy / Netherlands / Russia
Saudi Arabia / Singapore / U.A.E. / United Kingdom / United States

Contact your local sales representative. Please visit our website:

www.cccglobal.com/offices

