

AVENTICS™ 580 CHARM node and Delta V™ Distributed Control System (DCS) Integrated Solution

Life Sciences Automation Solutions



Single connection from the field to the DeltaV DCS

- Eliminates the need for an additional network such as Profibus-DP to connect pneumatic valve systems to the DeltaV DCS; connects directly to the CHARMs base plate
- Provides cost savings by reducing wiring, components, labor and software programming, and eliminates a need for an additional fieldbus communication module
- 580 CHARM coil capacity can pilot up to 96 process valves

Easy configuration and diagnostics in DeltaV DCS

- All configuration work is done in the same, easy-to-use, task-based engineering environment that the DeltaV DCS users are already familiar with
 - The AVENTICS 580 Characterization Module (CHARM) node configures just like any other CHARM
- Uses native capability of the DeltaV DCS for diagnostics of pneumatic valves
- Diagnostic and prognostic feedback from the 580 CHARM node is communicated directly back to the DeltaV explorer

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Redundant communication and power

- The AVENTICS 580 CHARM node brings CIOC (CHARM I/O Card) redundant communication and power connections to pneumatic valve manifolds via existing CHARM baseplate
 - Adds control reliable communication functionality
 - Only Emerson can offer this capability on a single network

Provides a complete Emerson system solution

- A single connection to the DeltaV system with Electronic Marshalling means a tightly integrated solution for I/O and pneumatic valve manifolds where there is no need for additional configuration tools and various network familiarity
- Offers users single point responsibility for products, documentation and support
- The AVENTICS 580 CHARM node utilizes the same hardware platform as the CHARMs device to guarantee interoperability
- Our Integrated Solutions are suitable for Zone 2-22 applications
- Solenoid valve and CHARM I/Os can be controlled by any controller listed on the DCS cloud network.

Proven pneumatic valve piloting solutions to meet end-user challenges

- Streamline connectivity between pneumatic valve manifold, CHARM I/O and DeltaV(TM) DCS provides value-add that's unmatched in the market (single supplier)
- Local graphic display to assist with start up and commissioning of the valve manifold
- Easy to read (plain language) feedback information which is available via both the graphic display (local) and the DeltaV explorer (online)
- Resistant metal override for repeated use
- LED on each side allow easy way to identify coil status of the valve
- Individual pressure shut-off allow valve replacement without interrupting the process
- Compact footprint to optimize cabinet spacing



Example: Valve systems connected to intrinsically safe I/O baseplate

