# Series 141 Advanced Redundant Control System (ARCS)



### **Features**

- Complete Redundant Solenoid Valve Configuration (1002/2002/2003 architecture)
- Compact and Fully Integrated Module
- Direct Valve to Valve Design (significantly reduces points of failure & leakage paths)
- Status Indication & Feedback
- Unique Emerson Designed Individual Isolation Valve Feature (available also in/ with common bypass option)
- Safe & Proven Direct Acting Solenoid Valve Technology (SIL 3 capable)

### Description

Advanced Redundant Control System (ARCS) is a redundant solenoid valve solution designed for emergency shutdown valves applications. It is available in 1002, 2002 and 2003 configuration to meet the needs for safety and/or reliability requirements. The ARCS is a direct acting platform with advanced diagnostic capability and online maintenance features.



# CONSIDER IT SOLVED



## **Advantages**

#### Complete Redundant Solenoid Valve Configuration

1002 / 2002 / 2003 redundant configuration to meet availability & reliability

- Increases safety reliability (1002)

- Increases operation availability (2002)
- Increase the safety reliability & operation availability (2003)

#### • Compact and Fully Integrated Module

Supplied as ONE complete module with factory pre-test & as a single part number

- Saves space
- Ready to install
- Simplified ordering

#### Direct Valve-to-Valve Design

Eliminate pipework and fittings between the solenoid valves

- Minimizes leak paths
- Increased reliability
- Reduces Total Cost of Ownership (TCO)

#### Status Indication & Feedback

Facilitate preventive maintenance and online detection of faults

- Visual status indication via pressure indicators / pressure gauges
- Digital input feedback to control room via pressure switches
- Avoids costly shutdown

#### • Stay ON Stay SAFE (Individual Isolation Valve / Common By Pass Options)

Allows online maintenance

- Allows emergency shutdown of the process valve in online maintenance mode
- Individual isolation valve option available for both 2002 & 2003 configuration
- Common by pass valve available for all 1002, 2002 & 2003 configuration

#### • Safe & Proven Technology

- ASCO<sup>™</sup> 327 series 3/2 way direct acting solenoid valves are certified to SIL 3 capable (Exida & TÜV)

### **Options Available**

- 3/2 Way Direct Acting
- 1⁄4" and 1⁄2" Port Size
- High flow & low temperature
- Full Flameproof (Ex d) or Intrinsically Safe (Ex ia) options (Flameproof or Intrinsically safe)
- Manual operator or manual reset function
- Full stainless steel visual indicator or pressure gauge
- Solenoid valve diagnostic: Pressure or GO SWITCH options
- Options with explosion proof and intrinsically safe wiring for pressure switches
- Material of construction available in both full stainless steel & aluminium options



For more information: www.Emerson.com/ASC





