

# Solid State Remote Power Controller E-1071-623

## Perfect switching and monitoring of solenoid valves



# Technical information

## Solid State Remote Power Controller E-1071-623

The SSRPC E-1071-623 is ideally suited to switching and monitoring hydraulic and pneumatic solenoid valves and magnetic brakes. These actuators with DC 24 V coils are often fitted in machinery and plants in steel production and processing (e.g. rolling mills). Type E-1071-623 complies with the requirements of the new European Machinery Directive 2006/42/EC and the associated standard IEC 60204-1 "Safety of Machinery – Electrical Equipment of Machines". Paragraph 9.4.3.1 "Earth Fault" of the

latter stipulates binding requirements how to ensure double pole switching of actuators and protection of these components and their cables in ungrounded systems (IT systems).

The E-1071-623 is a double pole device designed for rail mounting and compensates different cable lengths and cross sections and has to be operated with a higher rated voltage (DC 28...60 V) than that of the loads (DC 24 V). Electronic control of the load current allows supply of each

actuator with the required pull-in power. During hold duty the load current is reduced to a lower value.

Current rating adjustment between 0.1...3.1 A or between 10...310 mA allows individual settings. The double electronic switching output is short-circuit-proof and ensures physical disconnection of supply in accordance with the standard. Integral optocouplers activate the PLC and provide visual status and failure indication.

### Technical Data

Operating voltage	DC 48 V (DC 28...60 V)
Current rating range	version 1: 0.1...3.1 A adjustable version 2: 10...310 mA adjustable
Load output (DC 24 V)	double pole transistor output, with physical isolation via double pole relay
Switch-on current	approx. 10 % higher than pull-in current
Holding current	reduced to typically 60 % rated current
Short circuit disconnection	$I_{Load} > 4.5 \text{ A}$
Wire break detection	in ON and OFF condition of load
Control voltage	<<0>> = DC 0...5 V <<1>> = DC 8.5...35 V
Control current	typically 5...10 mA
Ambient temperature	0...60 °C (without condensation)



The new SSRPC E-1071-623 provides intelligent protection and monitoring of solenoid valves.

### Features and benefits

- Allows professional installation in accordance with Machinery Directive and IEC 60204-1
- Reduces power consumption and thus coil temperature
- Monitors load circuits via integral micro-controller and provides visual status and failure indication
- Ease of trouble-shooting and maintenance through reliable detection of faults in the load circuit

**Example:** The integral electronic control unit verifies whether there is indeed a solenoid valve in the load circuit. Wire break is detected even if only the valve plug with LED wiring is connected.



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