JUMO diraTRON 104/108/116/132

Compact controllers

Uniquely versatile.

- Quick and simple startup
- Intuitive configuration and operation
- Fixed value and program controller
- ST code (structured text) for individual application development
- Easy-to-use USB setup without auxiliary energy
- Service and operation hours counter
- Text display for process information

Types 702110, 702111, 702112, 702113, 702114

Brief overview

The JUMO controller family has been expanded to include a particularly powerful new product in the form of the JUMO diraTRON. The series comprises five configurable, universally usable compact controllers in various DIN formats to control temperature, pressure, and other process variables. Depending on the hardware design the devices can be used as two-state controllers, three-state controllers, three-step controllers, or continuous controllers. The devices are characterized by a simple, clearly structured operation that is supported with texts.

Autotuning, ramp function, program controller, limit value monitoring, binary functions, extensive timer functions, as well as a service and operating hours counter are already included in the basic version.

In addition, this version provides flexibility through four digital control signals. Furthermore, four configurable math and logic formulas as well as the programming language ST code (structured text) are available to users for more complex applications and for creating individual applications.

Technical data

Designation	JUMO diraTRON 132 JUMO diraTRON 116	JUMO diraTRON 108, diagonally/horizontally JUMO diraTRON 104
Type	702110, 702111	702112, 702113, 702114
Format	48 mm × 24 mm × 89 mm 48 mm × 48 mm × 78 mm	96 mm × 48 mm × 65 mm 48 mm × 96 mm × 65 mm 96 mm × 96 mm × 65 mm
Connections	Spring-cage terminals, Push-in® terminal technology	
Protection type	IP65	
Measuring inputs	One configurable analog input for RTD temperature probes, thermocouples, current 0(4) to 20 mA, voltage 0(2) to 10 V, resistance transmitters, resistance/potentiometers	
Display	18 segment LCD display, display elements for switch position of the outputs, as well as manual mode, ramp function, and timer	
	–	Pixel matrix LCD display
Outputs	**702110:** one relay 3 A/230 V AC (N/O contact), one logic output 0/14 V (alternative to digital input 1) **702111:** two relays 3 A/230 V AC (N/O contact), one logic output 0/14 V (alternative to digital input 1), optional: analog output, relay	Two relays 3 A/230 V AC (N/O contact), one logic output 0/14 V (alternative to digital input 1), optional: analog output, relay, PhotoMOS® relay
Alarms	4x limit value monitoring	
Digital inputs	Two digital inputs for potential-free contacts (digital input 1 alternative to logic output)	
Interfaces	Setup interface (USB powered), RS485 interface (optional)	
Special features	Fixed value and program controller, math and logic functions, ST code programming, service and operating hours counter	