

Controllino MINI Pure | 100-000-10

GENERAL

Standard EN61010-1

EN61010-2-201 EN61131-2

Dimensions (W \times H \times D) 36x90x60mm

Weight 145g

Mounting Top hat rail EN50022, 35mm

ENVIRONMENTAL CONDITIONS

Vibration $(9 \le f \le 150 \text{ Hz})$

Operating ambient temperature 0°C – 55°C

Relative humidity – non-condensing $80\,\%$ for temp. up to 31 °C,

decreasing linearly to 50 % relative humidity at 55 °C

Pollution Degree PD2

Altitude up to 2000m AMSL

Vibration (5 \leq f \leq 9 Hz) 1,75 mm amplitude sinus 3,5 mm amplitude random

0,5 g acceleration sinus

1,0 g acceleration random

Transport and Storage -20°C - +70°C

10 to 90% no condensation Altitude 3000m AMSL

Shock response 15g, 11ms half sinus all 3 axes

1/0

Supply voltage 12V or 24V USB (Power for programming only) USB-B, 2.0

Inputs, no galvanic insulation 8
Common analog/digital 4
Fixed digital 2
Fixed analog 2
Digital Outputs, no galvanic insulation 8
Relay Outputs (parallel to Digital, galvanic ins.) 6

TERMINAL CAPACITIES

Relay Output, Power Input 2,5mm² (24-12AWG)

Strip length 6-7mm Max. tightening torque 0,5Nm

Digital, Analog Input Output 1,5mm² (30-16AWG)

Strip length 5-6mm Max. tightening torque 0,2Nm

PROTECTION

ESD HBM Class 0 Contact discharge: ±4kV

Air discharge: ±8kV Internal Fuse 8A

Supply input over current protection Internal Fuse 8A
Relay Output External Fuse required
Digital Output Overload, short circuit, ESD

Signal Input Overvoltage, ESD

ELECTRICAL CHARACTERISTICS

	Condition	Value
Supply voltage	12V range	10,2V – 15,0V
	24V range	20,4V - 30,0V
Signal input low level	12V range	0V – 3,6V
	24V range	0V – 7,2V
Signal input high level	12V range	9V – 13,2V
	24V range	18V – 26,4V

Analog signal input 12V range 0 - 13,2V24V range 0 - 26,4VSignal input current max. current < 3mA 0V - 2,4VSignal output low level 12V range 0V - 4,8V 24V range Signal output high level Vin - 10% Signal output – PWM functionality Duty cycle 5% - 95% Relay output, Contact rating Resistive 6A 250V AC /

30V DC Load Common Relay terminal 6A max. current

Galvanic insulation coil to contact 3000VAC 1min

Relay ON in case of PWM functionality > 30% Duty cycle

LED SIGNALIZATION

Device in run state

Power LEDs coding Color of power LED only USB powered 12V green, 24V green input voltage out of range 12V orange, 24V orange input voltage 10.2V - 15,0V 12V green, 24V orange input voltage 20.4V – 30,0V 12V orange, 24V green input voltage < 7V both LEDs off Device in reset state Reset LED yellow Reset LED off

Signal input at high (logic 1) level Corresponding LED green Signal input at low (logic 0) level Corresponding LED off Signal input in use as analog input Corresponding LED green on when input level reach high

(logic 1) state

Signal/Relay output set to active Corresponding LED green Signal/Relay output set to inactive Corresponding LED off

PHYSICAL DIMENSIONS





