

Controllino MEGA | 100-200-00

GENERAL

Standard EN61010-1

EN61010-2-201 EN61131-2

Dimensions (W \times H \times D) 107x90x62mm

Weight 370g

Mounting Top hat rail EN50022, 35mm

ENVIRONMENTAL CONDITIONS

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 ($5 \le f \le 9 \text{ Hz}$) 1,75 mm amplitude sinus

3,5 mm amplitude random 0,5 g acceleration sinus

Vibration (9 \leq f \leq 150 Hz) 0,5 g acceleration sinu

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

Ethernet RJ45, 10/100Mbps

RS485 (no termination inside)

Inputs, no galvanic insulation

Common analog/digital

Fixed digital, ext. Interrupt usable

Digital Outputs, no galvanic insulation

24

Relay Outputs, galvanic insulation

16

PIN Header, no galvanic insulation

Logic level I/Os 71, partially parallel to terminal I/Os

Analog 0-5V Inputs 16

Communication SPI, 2xUART, I2C, Reset Internal Power +3,3V, +5V, ARef, GND

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

Pin header connector 2x 26 Pin, Dual row, 2.54 pitch

PROTECTION

ESD HBM Class 0 Contact discharge: ±4kV
Air discharge: ±8kV

Internal Fuse 30A External Fuse required

Relay Output External Fuse required
Digital Output Overload, short circuit, ESD

Signal Input Overvoltage, ESD

Pin header connector ESD

Supply input over current protection

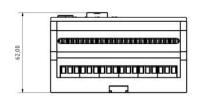
ELECTRICAL CHARACTERISTICS

	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 – 13,2V
	24V range	0 – 26,4V
Signal input current	max. current	< 3mA
Logic "0" level	@ pin header	0V − 1,5V
Logic "1" level	@ pin header	3V – 5,5V
Signal output low level	12V range	0V - 2,4V
	24V range	0V – 4,8V
Signal output high level		Vin – 10%
Signal output – PWM functionality	Duty cycle	5% - 95%
Relay output, Contact rating	Resistive	6A 250V AC /
	Load	30V DC
Common Relay terminal	max. current	6A
Galvanic insulation	coil to contact	3000VAC 1min
Relay ON in case of PWM functionality	Duty cycle	> 30%
LED CLONIALITATION		

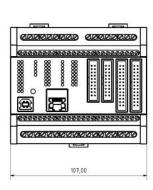
LED SIGNALIZATION

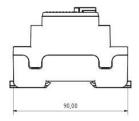
Power LEDs coding Color of power LED only USB powered 12V green, 24V green input voltage out of range 12V orange, 24V orange input voltage 10.2V - 15,0V 12V green, 24V orange input voltage 20.4V – 30,0V 12V orange, 24V green input voltage < 7V both LEDs off Device in reset state Reset LED yellow Device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



Signal/Relay output set to active





Corresponding LED green

Corresponding LED off