NEXTuino

NEXTuino RISE CORE

Programmable Logic Controller

NEXTuino RISE CORE

Industrial Programmable Logic Controller

- 8 Digital Inputs (4 a/d + 2 fix d + 2 fix a)
- 8 Digital Outputs · 6 Relay Outputs
- USB-B (no pin header connector)
- DIN-rail 36×90×60 mm · 145 g

PARAMETER	COND.	VALUE / SPECIFICATION
GENERAL		
Standard		EN61010-1 / EN61010-2-201 / EN61131-2
Dimensions (W × H × D)		36x90x60mm / Weight / 145g / 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 f 9 Hz)		1,75 mm amplitude sinus / 3,5 mm amplitude random
Vibration (9 f 150 Hz)		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
I/O		
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		
		Air discharge: ±8kV
		Internal Fuse 8A / Relay Output / External Fuse required / Digital Output
		Signal Input

PARAMETER	COND.	VALUE / SPECIFICATION
PROTECTION (cont.)		
Overvoltage, ESD		
ELECTRICAL CHARACTERISTICS		
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
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 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		

PHYSICAL DIMENSIONS