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		
ESD HBM Class 0	Contact discharge: ±4kV Air discharge: ±8kV	
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 – 13,2V
	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	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