Product data sheet
Characteristics

TM3AI2HG
analog input module, Modicon TM3, 2 inputs high resolution, spring, 24V DC



Main

Range of product	Modicon TM3
Product or component type	Analog input module
Range compatibility	Modicon M221 Modicon M241 Modicon M251 Modicon M262
Analogue input number	2

Complementary

Analogue input type	Current 4...20 mA Current 0...20 mA Voltage 0...10 V Voltage - 10...10 V
Analogue input resolution	16 bits 15 bits + sign
Permissible continuous overload	13 V, analogue input type: voltage 40 mA, analogue input type: current
Input impedance	<= 50 Ohm >= 1 MOhm
Sampling duration	1 Ms
Conversion time	1 ms + 1 ms per channel + 1 controller cycle time
Absolute accuracy error	+/- 0.1 % of full scale at 25 °C +/- 1 % of full scale
Repeat accuracy	+/-0.5 %FS
Cross talk	<= 1 LSB
Type of cable	Twisted shielded pairs cable <30 m for input circuit
Electrical connection	11 x 2.5 mm² removable spring terminal block with pitch 5.08 mm adjustment for inputs and sup
LSB value	2.44 mV, 0...10 V 4.88 mV, - 10...10 V 4.88 µA, 0...20 mA 3.91 µA, 4...20 mA
Insulation	Between input and supply at 1500 V AC Between input and internal logic at 500 V AC
Immunity to microbreaks	10 Ms
Temperature drift	+/- 0.006 %FS/°C
Non-linearity	+/- 0.01 %FS
Typical current consumption	30 MA at 5 V DC no load 40 MA at 5 V DC full load 25 MA at 24 V DC
Local signalling	1 LED green for PWR

Mounting support	Top hat type TH35-15 rail conforming to IEC 60715 Top hat type TH35-7.5 rail conforming to IEC 60715 plate or panel with fixing kit
Height	90 Mm
Width	23.6 Mm
Depth	70 Mm
Net weight	0.1 Kg

Environment

IP degree of protection	IP20
Marking	CE
Product certifications	CE[RETURN]UKCA[RETURN]RCM[RETURN]EAC[RETURN]CULus[RETURN]CULus HazLoc
Standards	IEC 61131-2
Electromagnetic emission	Radiated emissions - test level: 40 dBµV/m QP class A (10 m) at 30…230 MHz conforming to IEC Radiated emissions - test level: 47 dBµV/m QP class A (10 m) at 230…1000 MHz conforming to
Ambient air temperature for operation	-10…55 °C (horizontal installation) -10…35 °C (vertical installation)
Ambient air temperature for storage	-25…70 °C
Relative humidity	10…95 % without condensation
Operating altitude	0...2000 m
Pollution degree	2
Vibration resistance	3.5 mm (f = 5…8.4 Hz) on DIN rail 3 gn (f = 8.4…150 Hz) on DIN rail
Shock resistance	15 gn for 11 ms

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	7.5 Cm
Package 1 Width	10.5 Cm
Package 1 Length	12.5 Cm
Package 1 Weight	200.0 G
Unit Type of Package 2	S02
Number of Units in Package 2	9
Package 2 Height	15.0 Cm
Package 2 Width	30.0 Cm
Package 2 Length	40.0 Cm
Package 2 Weight	2.246 Kg

Offer Sustainability

Recyclability potential, in %	3
Total lifecycle Carbon footprint	36 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	12.926781354982458
Carbon footprint of the manufacturing phase [A1 to A3]	13 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.0446764743058578 1
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.005268691234095478
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	22.767616570511613
Carbon footprint of the use phase [B2, B3, B4, B6]	23 kg CO2 eq.
Toxic heavy metal free	Yes
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.4783742797729333
Carbon footprint of the end-of-life phase [C1 to C4]	0.5 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Total lifecycle Carbon footprint	36
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
PVC free	Yes
End of life manual availability	End Of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection a

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised