Product data sheet
Characteristics

TM3AI2H
analog input module, Modicon TM3, 2 inputs high resolution, screw, 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 screw terminal block with pitch 5.08 mm adjustment for inputs and sup
LSB value	0.153 mV, 0...10 V 0.305 mV, - 10...10 V 0.305 µA, 0...20 mA 0.244 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	0.115 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	7.46 Cm
Package 1 Width	10.645 Cm
Package 1 Length	12.707 Cm
Package 1 Weight	220.0 G
Unit Type of Package 2	S04
Number of Units in Package 2	42
Package 2 Height	30 Cm
Package 2 Width	40 Cm
Package 2 Length	60 Cm
Package 2 Weight	10.341 Kg
Unit Type of Package 3	P12
Number of Units in Package 3	504
Package 3 Height	105 Cm
Package 3 Width	120 Cm
Package 3 Length	80 Cm
Package 3 Weight	134 Kg

Offer Sustainability

Recyclability potential, in %	3
Total lifecycle Carbon footprint	38 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	14.434905846397077
Carbon footprint of the manufacturing phase [A1 to A3]	14 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.04988872964154122
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.0058833718780732834
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]	0.5341846124131088
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	38
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