Product data sheet
Characteristics

BMXDDI1602
discrete input module, Modicon X80, 16 inputs, 24V DC positive



Main

Range of product	Modicon X80
Product or component type	Discrete input module
Device application	Industrial application
Discrete input number	16
Discrete input voltage	24 V DC for isolated
Discrete input logic	Positive logic (sink)

Complementary

Discrete input number	16 isolated conforming to IEC 60947-5-2 at 24 V DC
Input wiring mode	2 or 3 wires
Discrete input current	3.5 MA at 24 V DC
Voltage state 1 guaranteed	>= 11 V
Voltage state 0 guaranteed	< 5 V
Current state 1 guaranteed	>= 2 mA
Current state 0 guaranteed	<= 1.5 mA
Input impedance	6800 Ohm
Paralleling of inputs	Yes
Input protection type	Reverse polarity protection
Insulation resistance	> 10 MOhm 500 V DC
DC typical filtering time	4 Ms
DC maximum filtering time	7 Ms
Sensor power supply	: 19…30 V
Typical current consumption	76 MA DC
Current consumption	<= 107 mA at 3.3 V DC
Power dissipation in W	2.5 W
Isolation between channels and bus	1500 V for 1 minute
Hot swapping fallback	Yes
MTBF reliability	775000 H
Voltage detection threshold	< 14 V DC sensor fault > 18 V DC sensor OK
Local signalling	1 LED (green) for module operating (RUN) 1 LED per channel (green) for channel diagnostic 1 LED (red) for module error (ERR) 1 LED (red) for module I/O
Height	103.7 Mm
Width	32 Mm
Depth	86 Mm
Net weight	0.115 Kg

Environment

IP degree of protection	IP20
Protective treatment	Standard version
Marking	CE UKCA CULus EAC RCM
Standards	IEC 61131-2
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility
Dielectric strength	1500 V AC at 50/60 Hz 1 minute, primary/secondary
Ambient air temperature for operation	0…60 °C
Ambient air temperature for storage	-40…85 °C
Relative humidity	5…95 % at 55 °C without condensation
Operating altitude	0...2000 m 2000...5000 m with derating
Pollution degree	2
Environmental characteristic	Fungal spore resistant class 3B2
Vibration resistance	3 gn
Shock resistance	30 gn

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.700 Cm
Package 1 Width	11.500 Cm
Package 1 Length	12.000 Cm
Package 1 Weight	144.000 G
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	15.000 Cm
Package 2 Width	30.000 Cm
Package 2 Length	40.000 Cm
Package 2 Weight	2.950 Kg
Unit Type of Package 3	P06
Number of Units in Package 3	240
Package 3 Height	75.000 Cm
Package 3 Width	60.000 Cm
Package 3 Length	80.000 Cm
Package 3 Weight	52.000 Kg

Offer Sustainability

Recyclability potential, in %	3
Total lifecycle Carbon footprint	32 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	19.2932242424
Carbon footprint of the manufacturing phase [A1 to A3]	19 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.0197453091
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.04020809700000001
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	12.850698324
Carbon footprint of the use phase [B2, B3, B4, B6]	13 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.2679380606

Carbon footprint of the end-of-life phase [C1 to C4]	0.3 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	32
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	43b0fbab-d94b-43e8-be0a-0b39cadd288b
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, wi
End of life manual availability	End Of Life Information
Take-back	No

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised