Product data sheet
Characteristics

ABE7S16E2B1
sub-base - soldered solid state output relay
ABE7 - 16 inputs - 24 V DC



Main

Range of product	Modicon ABE7
Product or component type	Solid state input relay sub-base
[Us] rated supply voltage	24 V DC (PLC end) 24 V DC (sensor end)
Number of channels	16
Number of terminal per channel	2
Connections - terminals	Screw type terminals, 1 x 0.09...1 x 1.5 mm², 0.09…1.5 mm² (28 AWG...16 AWG) flexible with c Screw type terminals, 1 x 0.14...1 x 2.5 mm², 0.14…2.5 mm² (26 AWG...12 AWG) solid Screw type terminals, 1 x 0.14...1 x 2.5 mm², 0.14…2.5 mm² (26 AWG...14 AWG) flexible witho Screw type terminals, 2 x 0.09...2 x 0.75 mm², 0.09…0.75 mm² (28 AWG...20 AWG) flexible wi Screw type terminals, 2 x 0.2...2 x 2.5 mm², 0.2…2.5 mm² (24 AWG...14 AWG) solid

Complementary

Terminal block type	Removable
Supply voltage limits	19…30 V DC (PLC end) conforming to IEC 61131-2
Isolation PLC/operative part	Yes
Protection type	Internal fuse 1 A 5 x 20 mm fast blow PLC end Adjustable by external fuse fast blow sensor end
Fixing mode	By clips (35 mm symmetrical DIN rail) By screws (solid plate with fixing kit)
Current per channel	0.012 A
Current state 1 guaranteed	>= 2 mA (sensor end)
Voltage state 1 guaranteed	>= 15 V for sensor end
Maximum switching current	15 MA (PLC end)
Minimum switching current	1 MA for PLC end
Response time	<= 0.05 ms from state 0 to 1 <= 0.4 ms from state 1 to 0
Switching frequency	<= 1000 Hz duty cycle: 50 %
[Uimp] rated impulse withstand voltage	2.5 KV conforming to IEC 60947-1
[Ui] rated insulation voltage	2000 V
Installation category	II conforming to IEC 60664-1
Tightening torque	0.6 N.M with flat Ø 3.5 mm screwdriver
Net weight	0.37 Kg

Environment

Dielectric strength	2000 V at 50/60 Hz conforming to IEC 60947-1
Product certifications	UL[RETURN]DNV[RETURN]CSA[RETURN]GL[RETURN]EAC
Standards	IEC 61131-2 Type 1
IP degree of protection	IP2X conforming to IEC 60529
Resistance to incandescent wire	750 °C conforming to IEC 60695-2-11
Shock resistance	15 gn for 11 ms conforming to IEC 60068-2-27
Vibration resistance	2 gn (f= 10…150 Hz) conforming to IEC 60068-2-6
Resistance to electrostatic discharge	4 KV (contact) level 3 conforming to IEC 61000-4-2 8 KV (air) level 3 conforming to IEC 61000-4-2
Resistance to radiated fields	10 V/M (26000000…1000000000 Hz) conforming to IEC 61000-4-3 level 3
Resistance to fast transients	2 KV level 3 conforming to IEC 61000-4-4
Ambient air temperature for operation	-5…60 °C conforming to IEC 61131-2
Ambient air temperature for storage	-40…80 °C conforming to IEC 61131-2
Pollution degree	2 conforming to IEC 60664-1

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	7.0 Cm
Package 1 Width	8.3 Cm
Package 1 Length	21.0 Cm
Package 1 Weight	438.0 G
Unit Type of Package 2	S03
Number of Units in Package 2	16
Package 2 Height	30.0 Cm
Package 2 Width	30.0 Cm
Package 2 Length	40.0 Cm
Package 2 Weight	7.478 Kg

Offer Sustainability

Recyclability potential, in %	6
Total lifecycle Carbon footprint	62 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	12.284222419326436
Carbon footprint of the manufacturing phase [A1 to A3]	12 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.06539438792180702
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.11597345591788308
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	48.58680178177649
Carbon footprint of the use phase [B2, B3, B4, B6]	49 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.9428806221770503
Carbon footprint of the end-of-life phase [C1 to C4]	0.9 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	62
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	1bbe7d20-74c0-4e7e-b98b-d2946f4ab8b4
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, which

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