Product data sheet
Characteristics

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

Main

Range of product	Advantys Telefast ABE7
Product or component type	Solid state input relay sub-base
[Us] rated supply voltage	24 V DC (sensor end) 24 V DC (PLC end)
Number of channels	16
Number of terminal per channel	2
Connections - terminals	Screw type terminals, clamping capacity: 2 x 0.2...2 x 2.5 mm², cable cross section: 0.2...2.5 mm² AWG 24...14 solid Screw type terminals, clamping capacity: 2 x 0.09...2 x 0.75 mm², cable cross section: 0.09...0.75 mm² AWG 28...20 flexible with cable end Screw type terminals, clamping capacity: 1 x 0.14...1 x 2.5 mm², cable cross section: 0.14...2.5 mm² AWG 26...14 flexible without cable end Screw type terminals, clamping capacity: 1 x 0.14...1 x 2.5 mm², cable cross section: 0.14...2.5 mm² AWG 26...12 solid Screw type terminals, clamping capacity: 1 x 0.09...1 x 1.5 mm², cable cross section: 0.09...1.5 mm² AWG 28...16 flexible with cable end

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 of 1 A (5 x 20 mm) , fast blow type at PLC end Adjustable by external fuse , fast blow type at sensor end
Fixing mode	By screws on solid plate with fixing kit By clips on 35 mm symmetrical DIN rail
[Ie] rated operational current DC	<= 0.012 A
Current state 1 guaranteed	>= 2 mA (sensor end)
Voltage state1 guaranteed	>= 15 V (sensor end)
Maximum switching current	15 mA (PLC end)
Minimum switching current	1 mA (PLC end)
Response time	<= 0.4 ms from state 1 to 0 <= 0.05 ms from state 0 to 1
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 (withflat Ø 3.5 mm
Product weight	0.37 kg

Environment

Dielectric strength	2000 V 50/60 Hz conforming to IEC 60947-1
Product certifications	BV CSA DNV GL LROS (Lloyds register of shipping) UL
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	8 kV (air) conforming to IEC 61000-4-2 level 3 4 kV (contact) conforming to IEC 61000-4-2 level 3
Resistance to radiated fields	10 V/m (26000000...1000000000 Hz) conforming to IEC 61000-4-3 level 3
Resistance to fast transients	2 kV conforming to IEC 61000-4-4 level 3
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

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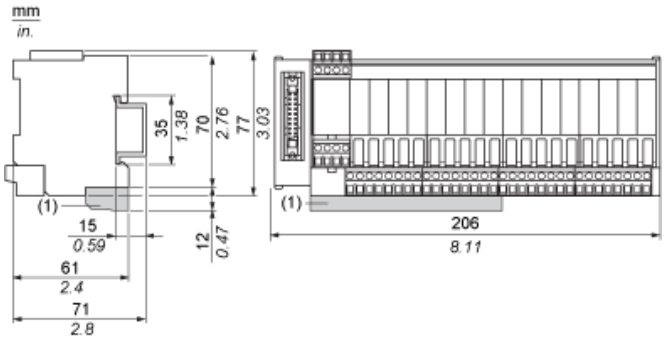
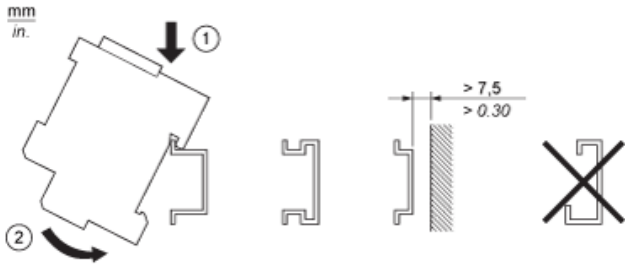
Dimensions



(1) ABE7BV20 / ABE7BV20E

Mounting



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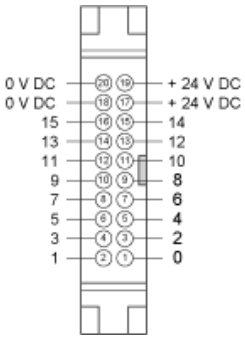
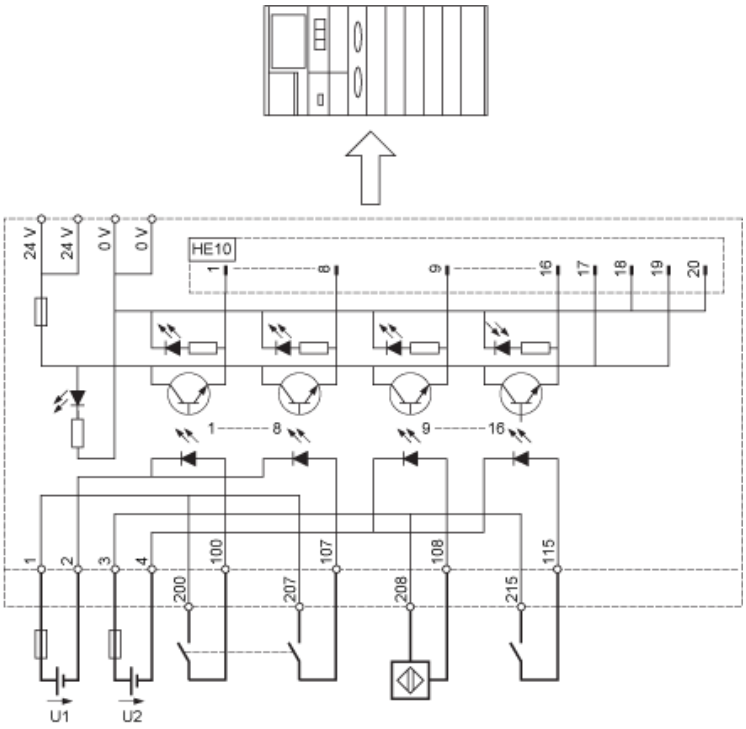
HE10 16 Channels



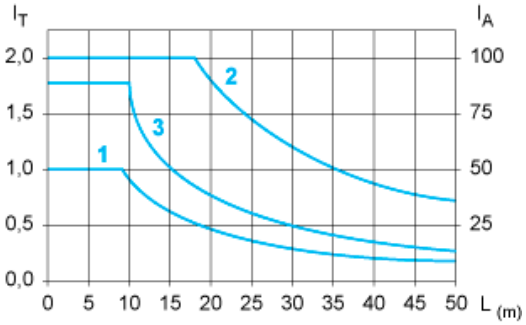
Wiring Diagram



ABE7	U1, U2
S16E2B1 / E2B1E	24 VDC
S16E2E1 / E2E1E	48 VDC
S16E2E0 / E2E0E	48 VAC
S16E2F0 / E2F0E	115 VAC
S16E2M0 / E2M0E	230 VAC

Curves for Determining Cable Type and Length According to the Current

16-channel Sub-base



L Cable length
I_T Total current per sub base (A)
I_A Average current per channel (mA)
(1) TSXCDP••2 and ABFH20H••0 cables with c.s.a. 0.08 mm^2 (AWG 28).
(2) TSXCDP••3 cables with c.s.a. 0.34 mm^2 (AWG 22).
(3) Cables with c.s.a. 0.13 mm^2 (AWG 26).

The curves are given for a voltage drop of 1 V in the cable. For n volts tolerance, multiply the length determined from the graph by n.