

ABE7S16E2E1

sub-base - soldered solid state output relay ABE7 -
16 inputs - 48 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 (PLC end) 48 V DC (sensor end)
Number of channels	16
Number of terminal per channel	2
Connections - terminals	Screw type terminals, clamping capacity: 1 x 0.09...1 x 1.5 mm ² , cable cross section: 0.09...1.5 mm ² AWG 28...AWG 16 flexible with cable end Screw type terminals, clamping capacity: 1 x 0.14...1 x 2.5 mm ² , cable cross section: 0.14...2.5 mm ² AWG 26...AWG 12 solid Screw type terminals, clamping capacity: 1 x 0.14...1 x 2.5 mm ² , cable cross section: 0.14...2.5 mm ² AWG 26...AWG 14 flexible without cable end Screw type terminals, clamping capacity: 2 x 0.09...2 x 0.75 mm ² , cable cross section: 0.09...0.75 mm ² AWG 28...AWG 20 flexible with cable end Screw type terminals, clamping capacity: 2 x 0.2...2 x 2.5 mm ² , cable cross section: 0.2...2.5 mm ² AWG 24...AWG 14 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 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 clips on 35 mm symmetrical DIN rail By screws on solid plate with fixing kit
[Ie] rated operational current DC	<= 0.013 A
Current state 1 guaranteed	>= 6 mA (sensor end)
Voltage state1 guaranteed	>= 30 V (sensor end)
Maximum switching current	15 mA (PLC end)
Minimum switching current	1 mA (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)
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)

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

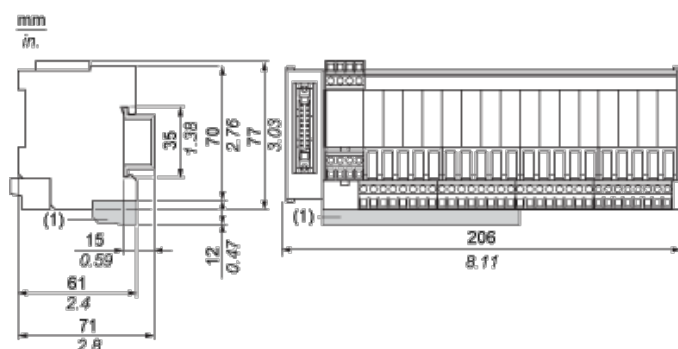
UL

standards	IEC 61131-2 Type 2
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) conforming to IEC 61000-4-2 level 3 8 kV (air) 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

Offer Sustainability

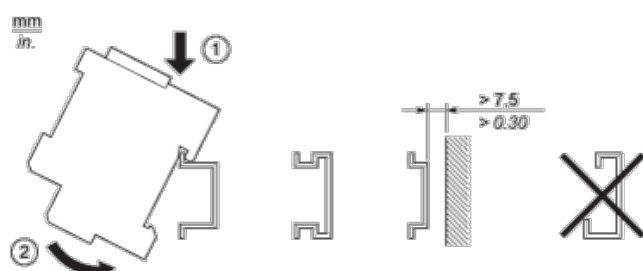
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0841 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

Dimensions

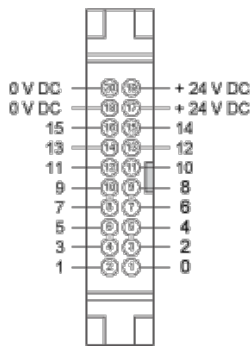


(1) ABE7BV20 / ABE7BV20E

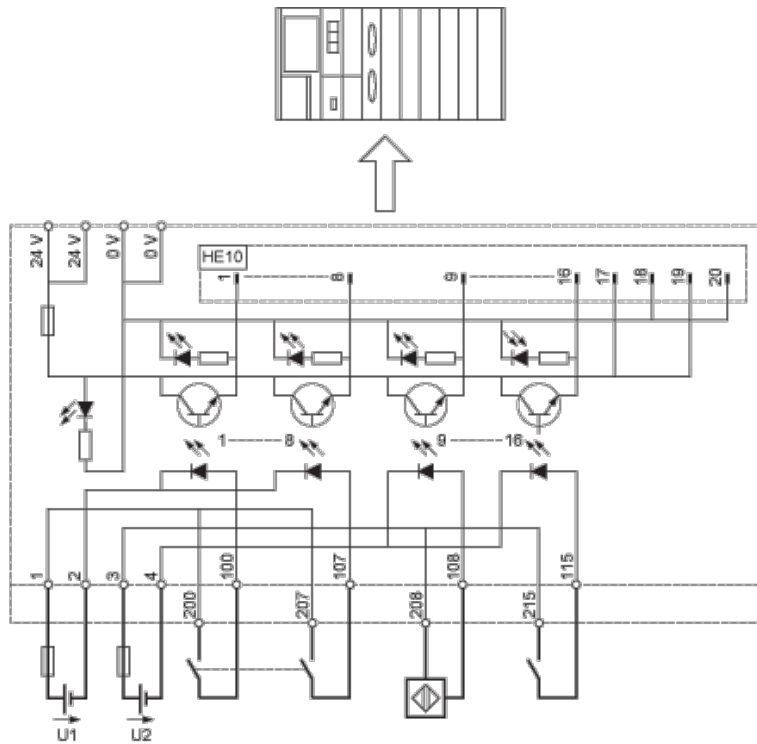
Mounting



HE10 16 Channels



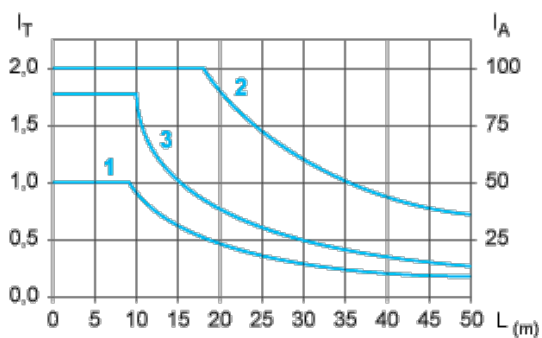
Wiring Diagram



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 mm² (AWG 28).

(2) TSXCDP••3 cables with c.s.a. 0.34 mm² (AWG 22).

(3) Cables with c.s.a. 0.13 mm² (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.