Product data sheet Characteristics

ABE7S16S1B2E

sub-base - soldered solid state output relay ABE7 - 16 outputs - 0.5 A



Main	
Range of product	Advantys Telefast ABE7
Product or component type	Solid state output relay sub-base
[Us] rated supply voltage	24 V DC (preactuator end) 24 V DC (PLC end)
Number of channels	16
Connections - terminals	Spring terminal, clamping capacity: 1 x 0.141 x 2.5 mm² AWG 2614 flexible without cable end Spring terminal, clamping capacity: 1 x 0.141 x 2.5 mm² AWG 2612 solid Spring terminal, clamping capacity: 1 x 0.091 x 1.5 mm² AWG 2816 flexible with cable end

Complementary

Terminal block type	Removable
Supply voltage limits	1930 V DC (PLC end) conforming to IEC 61131-2 <= 30 V DC (preactuator end) conforming to IEC 61131-2
Isolation PLC/operative part	No
Protection type	Internal fuse of 2 A (5 x 20 mm) , fast blow type at PLC end Adjustable by external fuse (5 x 20 mm) , fast blow type at preactuator end
Fixing mode	By screws on solid plate with fixing kit By clips on 35 mm symmetrical DIN rail
Width	125 mm
Current state 0 guaranteed	0.4 mA (PLC end)
Voltage state 0 guaranteed	3.4 V (PLC end)
Current state 1 guaranteed	3.1 mA (PLC end)
Voltage state1 guaranteed	16.9 V (PLC end)
Current per output common	<= 9 A
Current per channel	0.5 A (preactuator end)
Minimum switching current	1 mA
Drop-out voltage	<= 0.3 V (preactuator end)
Maximum switching current	700 mA DC-13 700 mA DC-12
Tungsten load	10 W DC-6
Residual current	<= 0.5 mA (preactuator end)
Fault type	Overload Short-circuit
Fault indication	Without
Switchable inductive energy L/R	<= 400(U.I) ms
Circuit breaker threshold	>= 0.75 A
Response time	<= 0.2 ms from state 0 to 1 <= 0.1 ms from state 1 to 0
Switching frequency	< 0.6/Ll² Hz
Installation category	Il conforming to IEC 60664-1
Tightening torque	0.6 N.m (withflat Ø 3.5 mm
Product weight	0.4 kg

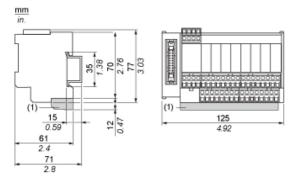
Environment

IP degree of protection	IP2x conforming to IEC 60529
Resistance to incandescent wire	750 °C, extinction time: <= 30 s conforming to IEC 60695-2-11
Shock resistance	15 gn for 11 ms conforming to IEC 60068-2-27
Vibration resistance	2 gn (f = 10150 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 (260000001000000000 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	-560 °C conforming to IEC 61131-2
Ambient air temperature for storage	-4080 °C conforming to IEC 61131-2
Pollution degree	2 conforming to IEC 60664-1



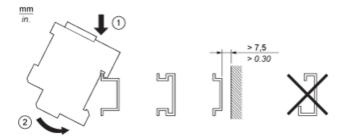
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Dimensions



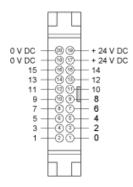
(1) ABE7BV20 / ABE7BV20E

Mounting

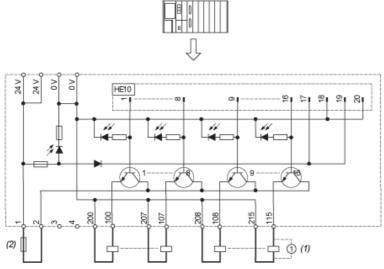


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HE10 16 Channels



Wiring Diagram

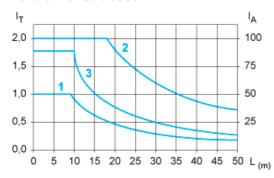


- (1) Inductive load
- (2) AB1FUSE435U5X + quick acting FUSE 5 x 20 type F.

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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.