Product data sheet
Characteristics

ABE7R08S216
sub-base - soldered electromechanical relays ABE7 - 8 channels - relay 5 mm

Main

Range of product	Advantys Telefast ABE7
Product or component type	Electromechanical output relay sub-base
[Us] rated supply voltage	24 V DC (PLC end)
Number of channels	8
Connections - terminals	Screw type terminals, clamping capacity: 2 x 0.2...2 x 2.5 mm² AWG 24...14 solid Screw type terminals, clamping capacity: 2 x 0.09...2 x 0.75 mm² AWG 28...20 flexible with cable end Screw type terminals, clamping capacity: 1 x 0.14...1 x 2.5 mm² AWG 26...14 flexible without cable end Screw type terminals, clamping capacity: 1 x 0.14...1 x 2.5 mm² AWG 26...12 solid Screw type terminals, clamping capacity: 1 x 0.09...1 x 1.5 mm² AWG 28...16 flexible with cable end
Relay type	Latching

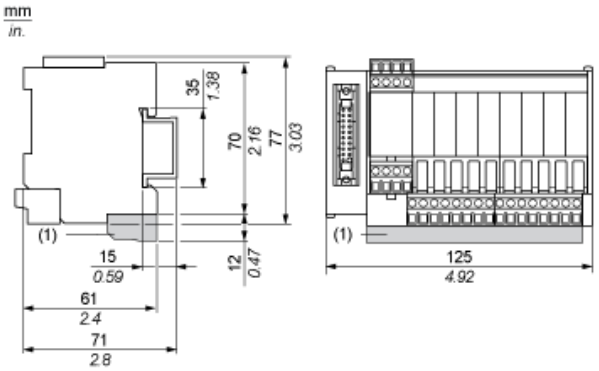
Complementary

Terminal block type	Removable
Supply voltage limits	<= 30 V DC (PLC end)
Polarity distribution	Volt-free
Protection type	Internal fuse of 1 A (5 x 20 mm) , fast blow type at PLC end Adjustable by external fuse , high breaking capacity 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 per channel	2 A (preactuator end)
Minimum switching current	2 mA at >= 5 V
Threshold tripping voltage	19.2 V at 40 °C
Power dissipation per channel in W	<= 0.3 W (PLC end)
Contacts type and composition	1 NO(preactuator end)
Maximum switching voltage	380 V AC 50/60 Hz conforming to IEC 60947-5-1 220 V DC conforming to IEC 60947-5-1
Electrical durability	500000 cycles, maximum switching current: 2000 mA at 24 V DC-12 (preactuator end) 500000 cycles, maximum switching current: 2000 mA at 230 V AC-12 (preactuator end) 500000 cycles, maximum switching current: 1500 mA at 24 V DC-13 10 ms (preactuator end) 500000 cycles, maximum switching current: 1000 mA at 230 V AC-15 (preactuator end)
Electrical reliability	2e-006
Operating time	<= 5 ms between coil energisation and NO closing <= 4 ms between coil de-energisation and NO opening
Contact bounce time	<= 2 ms 1 NO
Operating rate in Hz	0.5 Hz at Ie 3 Hz no load
Mechanical durability	20000000 cycles
[Uimp] rated impulse withstand voltage	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	0.448 kg

Environment

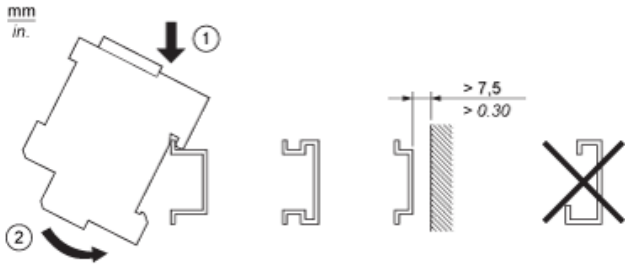
Max immunity to microbreaks	<= 3 ms
Dielectric strength	2000 V conforming to IEC 60947-1
Product certifications	BV CSA DNV GL LROS (Lloyds register of shipping) UL
IP degree of protection	IP2x conforming to IEC 60529
Resistance to incandescent wire	750 °C, extinction time: <= 30 s conforming to IEC 60695-2-11
Shock resistance	15 gn for 11 ms conforming to IEC 60068-2-27
Vibration resistance	2 gn (f = 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

Dimensions

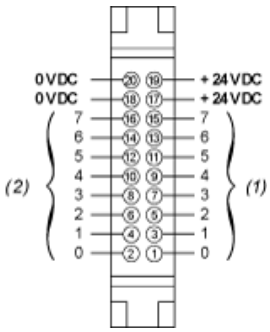


(1) ABE7BV10 / BV10E

Mounting

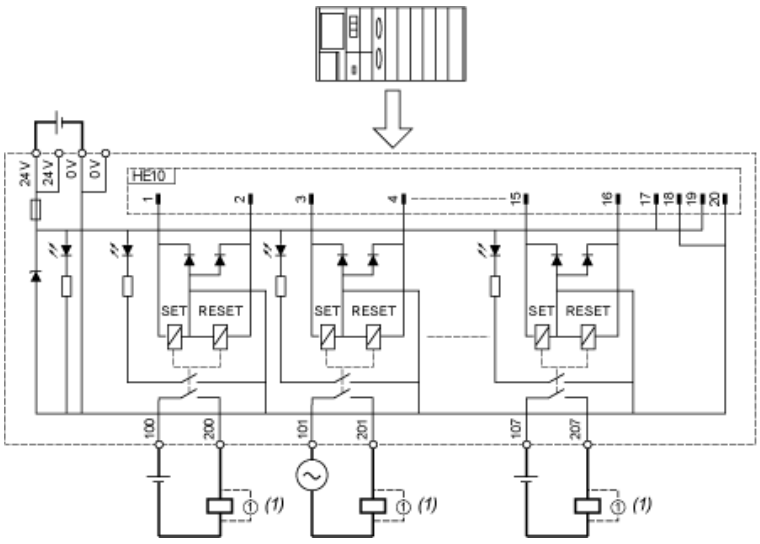


HE10 8 Channels



(1) SET
(2) RESET

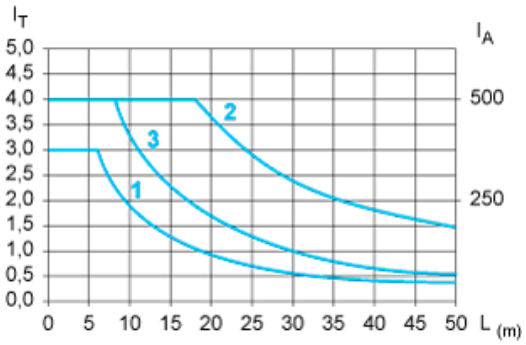
Wiring Diagram



(1) Inductive load

Curves for Determining Cable Type and Length According to the Current

8-channel Sub-base



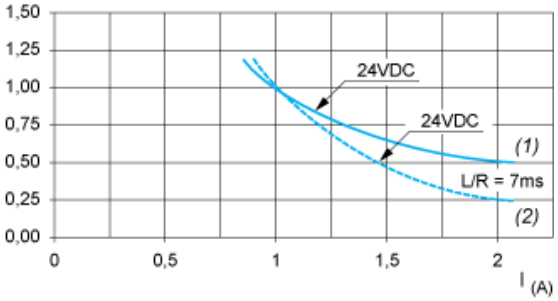
L Cable length
I_T Total current per sub base (A)
I_A Average current per channel (mA)
(1) TSXCDP••2 and ABFH20H••0 cables with c.s.a. 0.08 mm^2 (AWG 28).
(2) TSXCDP••3 cables with c.s.a. 0.34 mm^2 (AWG 22).
(3) Cables with c.s.a. 0.13 mm^2 (AWG 26).

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.

Electrical Durability (in Millions of Operating cycles) Conforming to IEC 60947-5-1

DC Loads

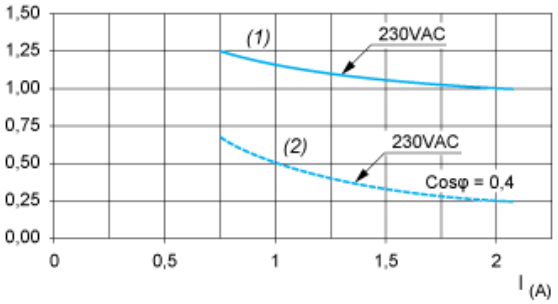
DC12 curves



DC12control of resistive loads and of solid state loads isolated by optocoupler, l/R ≤ 1 ms.
(1) Resistive loads
(2) Inductive loads

AC Loads

AC12 curves



AC12control of resistive loads and of solid state loads isolated by optocoupler, cos ϕ ≥ 0.9.
(1) Resistive loads
(2) Inductive loads