

Main

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|---------------------------|---|
| Range of product | Advantys Telefast ABE7 |
| Product or component type | Sub-base with plug-in electromechanical relay |
| Sub-base type | Output sub-base |
| [Us] rated supply voltage | 19...30 V conforming to IEC 61131-2 |
| Number of channels | 16 |
| Connections - terminals | Screw type terminals, clamping capacity: 1 x 0.14...1 x 2.5 mm ² AWG 26...AWG 14 flexible without cable end Screw type terminals, clamping capacity: 1 x 0.14...1 x 1.5 mm ² AWG 26...AWG 16 flexible with cable end Screw type terminals, clamping capacity: 1 x 0.14...1 x 4 mm ² AWG 26...AWG 12 solid Screw type terminals, clamping capacity: 2 x 0.14...2 x 0.75 mm ² AWG 26...AWG 18 flexible with cable end Screw type terminals, clamping capacity: 2 x 0.14...2 x 1.5 mm ² AWG 26...AWG 16 solid |

Complementary

| | |
|--|--|
| Supply circuit type | DC |
| Product compatibility | ABR7S11 |
| Contacts type and composition | 1 NO |
| Status LED | 1 LED power ON 1 LED per channel channel status |
| Polarity distribution | Common distribution group of 4 |
| Short-circuit protection | 1 A internal fuse, 5 x 20 mm, fast blow (PLC end) |
| Mounting mode | By clips on 35 mm DIN rail By screws on surface mount with kit |
| Supply current | <= 1 A |
| Voltage drop on power supply fuse | 0.3 V |
| Current per output common | <= 5 A screw type terminals |
| [Ui] rated insulation voltage | 2000 V between terminals/mounting rails 300 V between coil circuit/contact circuits conforming to IEC 60947-1 |
| Current per module | <= 12 A |
| [Uimp] rated impulse withstand voltage | 2.5 kV |
| Installation category | II conforming to IEC 60664-1 |
| Tightening torque | 5.31 lbf.in (0.6 N.m) (with flat Ø 3.5 mm) |
| Product weight | 1.32 lb(US) (0.6 kg) |

Environment

| | |
|---------------------------------------|---|
| 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 | 1382 °F (750 °C), extinction time: <= 30 s conforming to IEC 60695-2-11 |
| shock resistance | 15 gn 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 |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance 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.

| | |
|---------------------------------------|---|
| | 8 kV (air) conforming to IEC 61000-4-2 level 3 |
| resistance to radiated fields | 9.14 V/yd (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 | 23...140 °F (-5...60 °C) conforming to IEC 61131-2 |
| ambient air temperature for storage | -40...176 °F (-40...80 °C) conforming to IEC 61131-2 |
| pollution degree | 2 conforming to IEC 60664-1 |

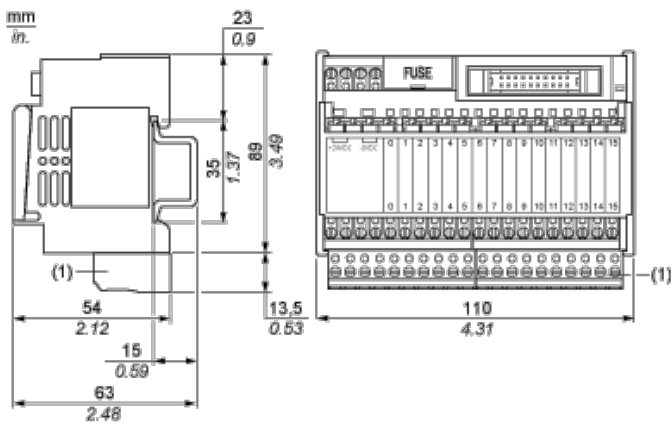
Offer Sustainability

| | |
|---|---|
| Green Premium product | Green Premium product |
| Compliant - since 0841 - Schneider Electric declaration of conformity | Compliant - since 0841 - Schneider Electric declaration of conformity |
| Reference not containing SVHC above the threshold | Reference not containing SVHC above the threshold |
| Available | Available |
| Available | Available |

Contractual warranty

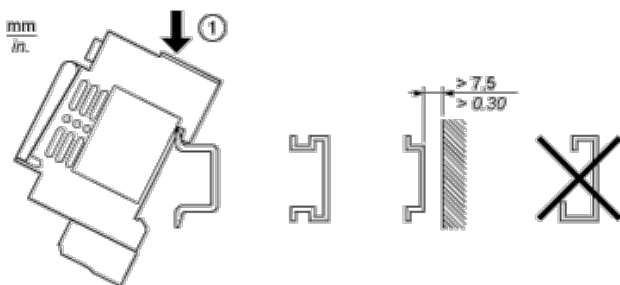
| | |
|-----------------|-----------|
| Warranty period | 18 months |
|-----------------|-----------|

Dimensions

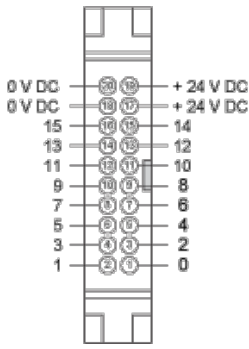


(1) ABE7BV10 / BV20

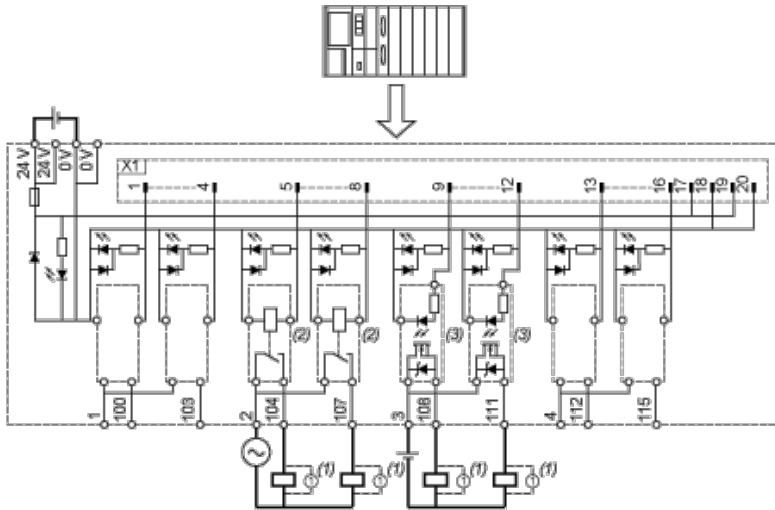
Mounting



HE10 16 Channels



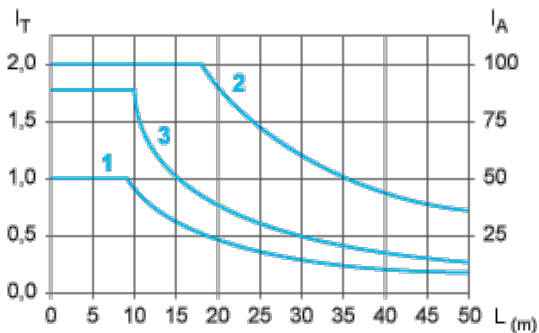
Wiring Diagram



- (1) Inductive load
- (2) ABR7S11 (1F) - N/O Ith = 6 A (supplied for ABE7R16T111 and not supplied for ABE7P16T111)
- (3) ABS7SC1B 24 V DC I_{max.} = 2 A (not supplied)

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)

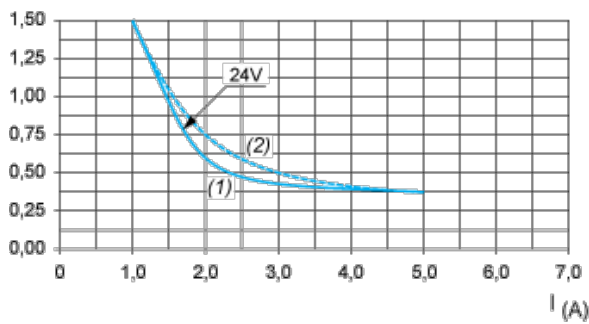
- (1) TSXCDP••2 and ABFH20H••0 cables with c.s.a. 0.08 mm² (AWG 28).
- (2) TSXCDP••3 cables with c.s.a. 0.34 mm² (AWG 22).
- (3) Cables with c.s.a. 0.13 mm² (AWG 26).

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.

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

DC Loads

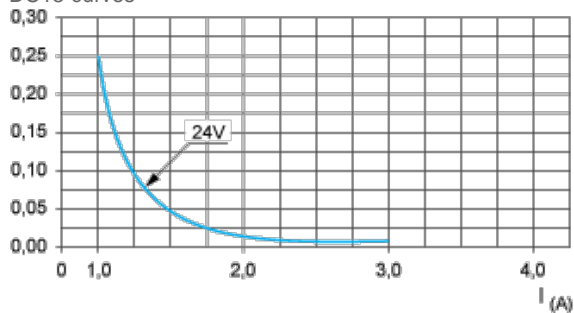
DC12 curves



DC12 control of resistive loads and of solid state loads isolated by optocoupler, $L/R \leq 1$ ms.

- (1) Resistive loads
- (2) Inductive loads

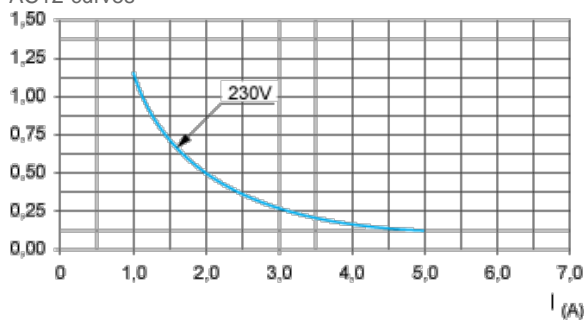
DC13 curves



DC13 switching electromagnets, $L/R \leq 2 \times (U_e \times I_e)$ in ms, U_e : rated operational voltage, I_e : rated operational current (with a protective diode on the load, DC12 curves must be used with a coefficient of 0.9 applied to the number in millions of operating cycles)

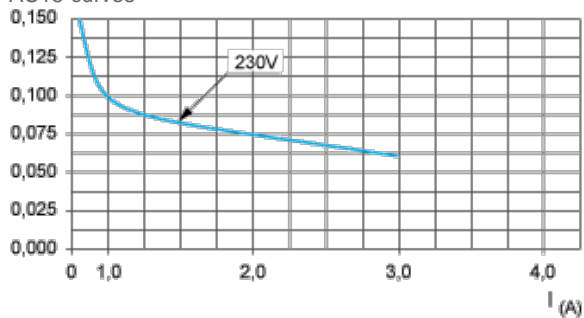
AC Loads

AC12 curves



AC12 control of resistive loads and of solid state loads isolated by optocoupler, $\cos \phi \geq 0.9$.

AC15 curves



AC15 control of electromagnetic loads > 72 VA, make: $\cos \phi = 0.7$, break: $\cos \phi = 0.4$.