# Product data sheet
## Characteristics

# ABR7S33

plug-in electromechanical relay - 12.5 mm - 24 V DC - 1 CO

## Main

| | |
|---|---|
| Range of product | Advantys Telefast ABE7 |
| Product or component type | Plug-in electromechanical relay |
| Control circuit type | DC |
| Quantity per set | Set of 4 |

## Complementary

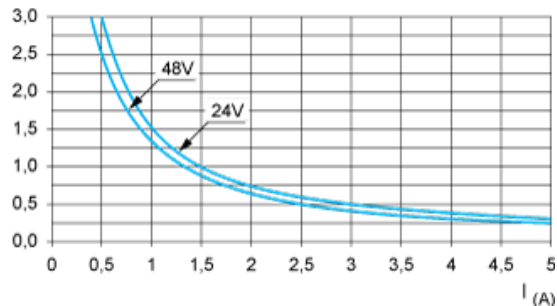| | |
|---|---|
| Width pitch dimension | 12 mm |
| Product compatibility | ABE7P08T330<br>ABE7P08T330E<br>ABE7P16T318<br>ABE7P16T318E<br>ABE7P16T330<br>ABE7P16T330E<br>ABE7P16T332<br>ABE7P16T334<br>ABE7R16T330<br>ABE7R16T332 |
| [Uc] control circuit voltage | 24 V |
| [Ith] conventional free air thermal current | 10 A |
| Contacts type and composition | 1 C/O |
| Threshold tripping voltage | 16.8 V at 40 °C |
| Drop-out voltage | 3.6 V at 20 °C |
| Drop-out current | 3.5 mA at 20 °C |
| Power dissipation per pole | <= 0.6 W |
| Associated fuse rating | 1 A fast blow |
| Maximum switching voltage | 264 V AC 50/60 Hz conforming to IEC 60947-5-1<br>130 V DC conforming to IEC 60947-5-1 |
| Electrical durability | 500000 cycles, maximum switching current: 3000 mA at 24 V DC-12<br>500000 cycles, maximum switching current: 3000 mA at 230 V AC-12<br>500000 cycles, maximum switching current: 1700 mA at 230 V AC-15<br>500000 cycles, maximum switching current: 1400 mA at 24 V DC-13 10 ms |
| Minimum switching current | 100 mA at >= 5 V |
| Electrical reliability | 1e-008 |
| Operating rate in Hz | 0.5 Hz at Ie<br>5 Hz no load |
| Mechanical durability | 20000000 cycles |
| [Uimp] rated impulse withstand voltage | 2.5 kV conforming to IEC 60947-1 |
| Product weight | 0.017 kg |

## Environment

| | |
|---|---|
| Max immunity to microbreaks | <= 5 ms |
| Dielectric strength | 2000 V conforming to IEC 60947-1 |

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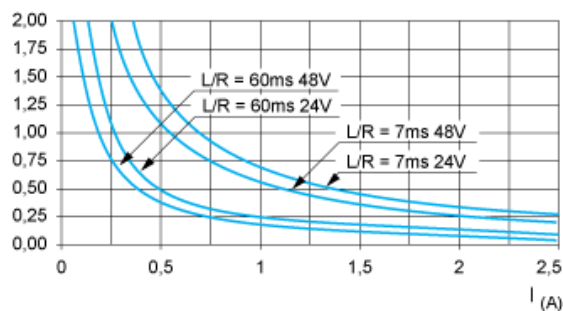## Electrical Durability (in Millions of Operating Cycles) Conforming to IEC 60947-5-1

### DC Loads

DC12 curves



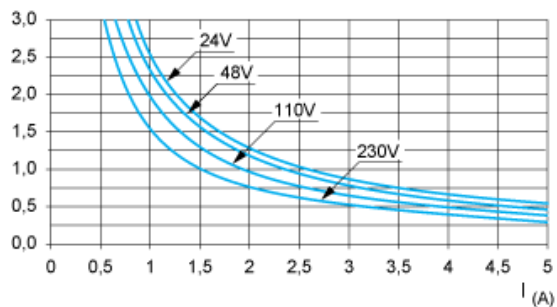DC12control of resistive loads and of solid state loads isolated by optocoupler, l/R ≤ 1 ms.

DC13 curves



DC13switching electromagnets, L/R ≤ 2 x (Ue x Ie) in ms, Ue: rated operational voltage, Ie: 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)
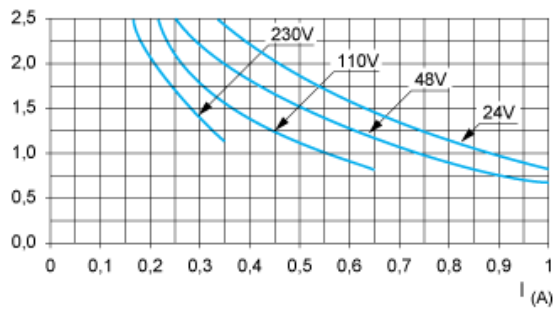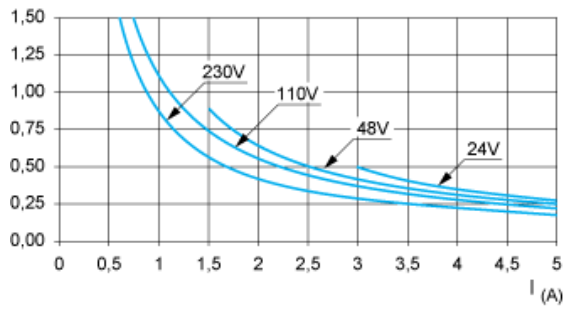
### AC Loads

AC12 curves



AC12control of resistive loads and of solid state loads isolated by optocoupler, cos φ ≥ 0.9.

Schneider Electric

AC14 curves



AC14 control of small electromagnetic loads ≤ 72 VA, make: cos φ = 0.3, break: cos φ = 0.3.

AC15 curves



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