Product data sheet Characteristics

ABR7S21

plug-in electromechanical relay - 10 mm - 24 V DC - 1 NO

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 | 10 mm |
|---|---|
| Product compatibility | ABE7P16T210 ABE7P16T212 ABE7P16T214 ABE7P16T215 |
| | ABE7P16T230 ABE7P16T230E |
| | ABE7R16T210 |
| | ABE7R16T212 |
| [Uc] control circuit voltage | 24 V |
| [Ith] conventional free air thermal current | 5 A |
| Contacts type and composition | 1 NO |
| Threshold tripping voltage | 19.7 V at 40 °C |
| Drop-out voltage | 2.4 V at 20 °C |
| Drop-out current | 1 mA at 20 °C |
| Power dissipation per pole | <= 0.36 W |
| Associated fuse rating | 1 A fast blow |
| Maximum switching voltage | 250 V AC 50/60 Hz conforming to IEC 60947-5-1 130 V DC conforming to IEC 60947-5-1 |
| Electrical durability | 500000 cycles, maximum switching current: 900 mA at 230 V AC-15 500000 cycles, maximum switching current: 600 mA at 24 V DC-13 10 ms 500000 cycles, maximum switching current: 1500 mA at 24 V DC-12 500000 cycles, maximum switching current: 1500 mA at 230 V AC-12 |
| Minimum switching current | 10 mA at >= 5 V |
| Electrical reliability | 1e-008 |
| Operating rate in Hz | 0.5 Hz at le 10 Hz no load |
| Mechanical durability | 20000000 cycles |
| [Uimp] rated impulse withstand voltage | 2.5 kV conforming to IEC 60947-1 |
| Product weight | 0.008 kg |

Environment

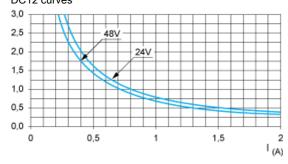
| Max immunity to microbreaks | <= 5 ms |
|-----------------------------|----------------------------------|
| Dielectric strength | 2000 V conforming to IEC 60947-1 |

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

Multiply all durability values by 0.75 for ABR7S23.

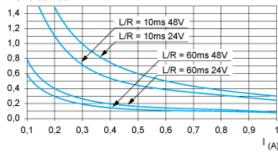
DC Loads

DC12 curves



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

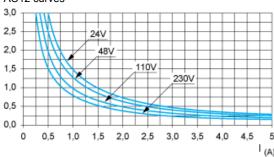
DC13 curves



DC13switching electromagnets, L/R ≤ 2 x (Ue x le) in ms, Ue: rated operational voltage, le: 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)

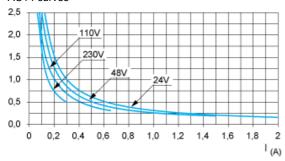
AC Loads

AC12 curves



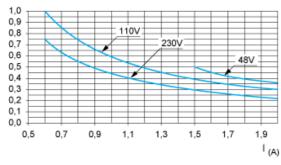
AC12control of resistive loads and of solid state loads isolated by optocoupler, $\cos \phi \ge 0.9$.

AC14 curves



AC14control of small electromagnetic loads \leq 72 VA, make: $\cos \varphi = 0.3$, break: $\cos \varphi = 0.3$.

AC15 curves



AC15control of electromagnetic loads > 72 VA, make: $\cos \varphi$ = 0.7, break: $\cos \varphi$ = 0.4.