

## 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 ABE7P08T330E ABE7P16T318 ABE7P16T318E ABE7P16T330 ABE7P16T330E ABE7P16T332 ABE7P16T334 ABE7R16T330 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	130 V DC conforming to IEC 60947-5-1 264 V AC 50/60 Hz conforming to IEC 60947-5-1
Electrical durability	500000 cycles, maximum switching current: 1400 mA at 24 V DC-13 10 ms 500000 cycles, maximum switching current: 1700 mA at 230 V AC-15 500000 cycles, maximum switching current: 3000 mA at 230 V AC-12 500000 cycles, maximum switching current: 3000 mA at 24 V DC-12
Minimum switching current	100 mA at >= 5 V
Electrical reliability	1e-008
Operating rate in Hz	5 Hz no load 0.5 Hz at le
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

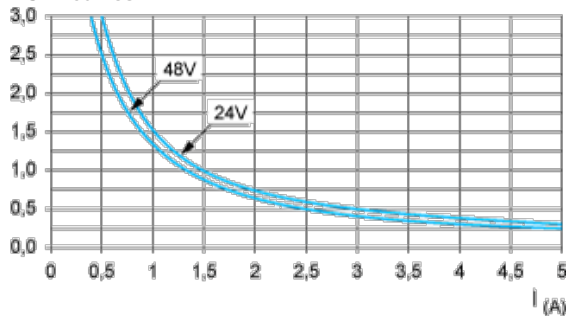
### Offer Sustainability

Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Compliant - since 0701 - Schneider Electric declaration of conformity

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

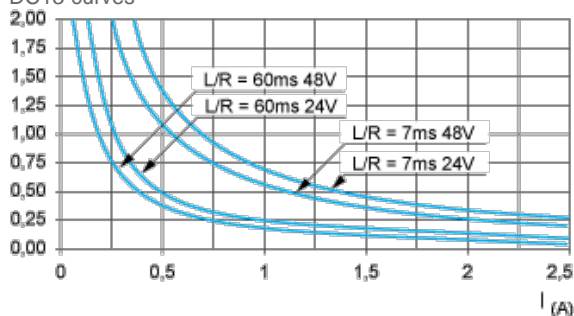
### DC Loads

DC12 curves



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

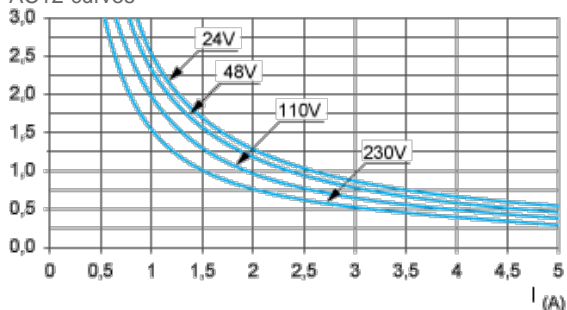
DC13 curves



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)

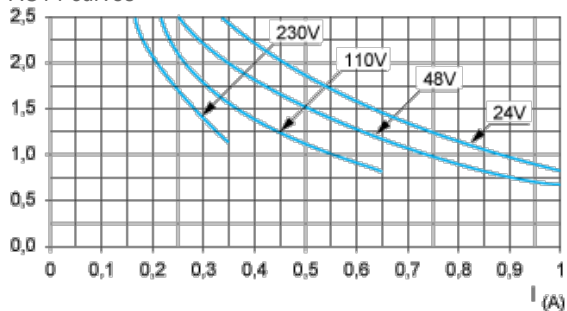
### AC Loads

AC12 curves



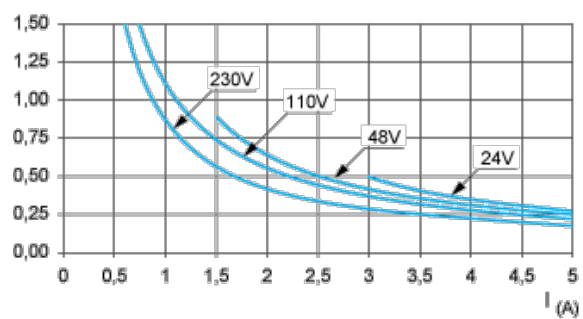
AC12 control of resistive loads and of solid state loads isolated by optocoupler,  $\cos \phi \geq 0.9$ .

AC14 curves



AC14 control of small electromagnetic loads  $\leq 72$  VA, make:  $\cos \phi = 0.3$ , break:  $\cos \phi = 0.3$ .

AC15 curves



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