

## 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	130 V DC conforming to IEC 60947-5-1 250 V AC 50/60 Hz conforming to IEC 60947-5-1
Electrical durability	500000 cycles, maximum switching current: 1500 mA at 230 V AC-12 500000 cycles, maximum switching current: 1500 mA at 24 V DC-12 500000 cycles, maximum switching current: 600 mA at 24 V DC-13 10 ms 500000 cycles, maximum switching current: 900 mA at 230 V AC-15
Minimum switching current	10 mA at >= 5 V
Electrical reliability	1e-008
Operating rate in Hz	10 Hz no load 0.5 Hz at Ie
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

### Offer Sustainability

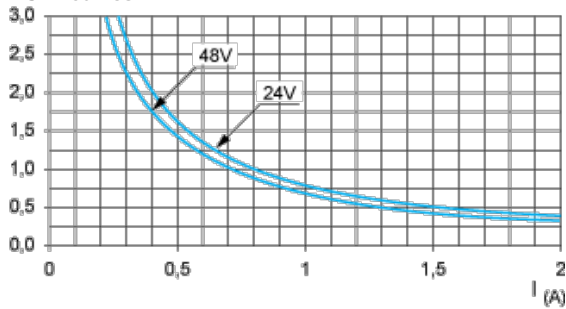
Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Compliant - since 0701 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold

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

Multiply all durability values by 0.75 for ABR7S23.

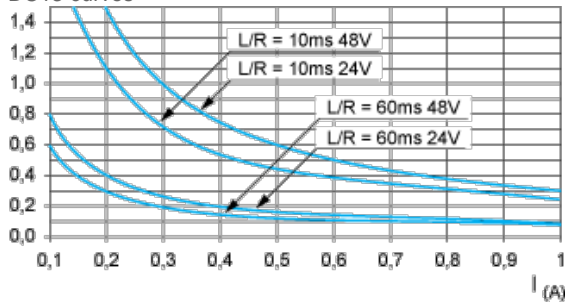
### DC Loads

DC12 curves



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

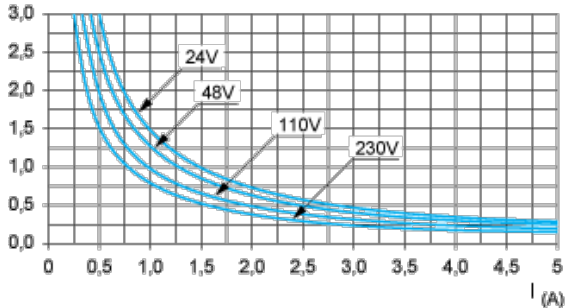
DC13 curves



DC13switching 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)

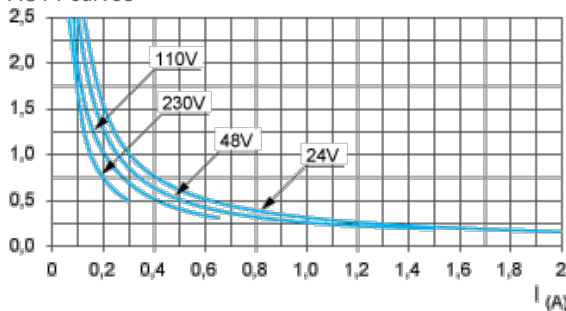
### AC Loads

AC12 curves



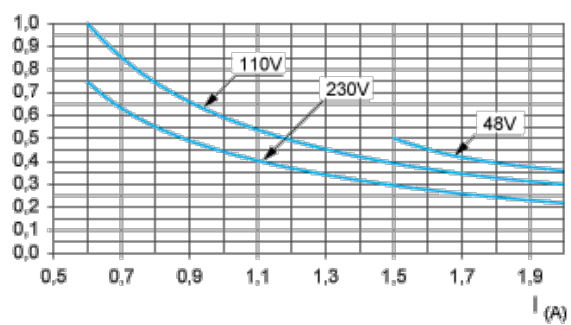
AC12control of resistive loads and of solid state loads isolated by optocoupler,  $\cos \phi \geq 0.9$ .

AC14 curves



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

AC15 curves



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