# Product data sheet Characteristics

# **ABR7S37**

plug-in electromechanical relay - 12.5 mm - 24 V DC - 2 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	ABE7R16T370
[Uc] control circuit voltage	24 V
[lth] conventional free air thermal current	8 A
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 60947-5-1 130 V DC conforming to IEC 60947-5-1
Electrical durability	500000 cycles, maximum switching current: 2500 mA at 24 V DC-12 500000 cycles, maximum switching current: 2500 mA at 230 V AC-12 500000 cycles, maximum switching current: 1300 mA at 230 V AC-15 500000 cycles, maximum switching current: 1000 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 le 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

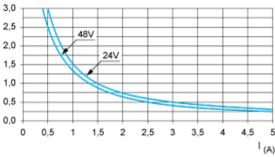
## **Environment**

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

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

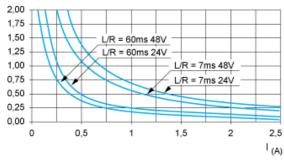
### DC Loads

# DC12 curves



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

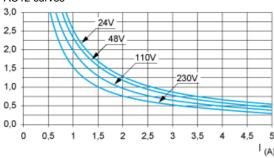
### DC13 curves



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)

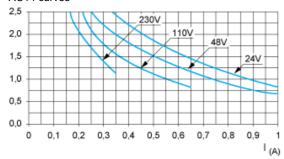
### AC Loads

### AC12 curves



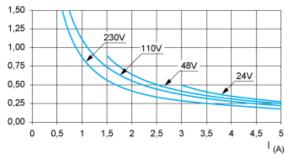
AC12control of resistive loads and of solid state loads isolated by optocoupler,  $\cos \phi \ge 0.9$ .

### 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:  $\cos \phi$  = 0.7, break:  $\cos \phi$  = 0.4.