Specifications



# Sub-base with plug-in electromechanical relay ABE7 - 16 channels - relay 10 mm

ABE7R16T230

## Main

Range Of Product	Modicon ABE7
Product Or Component Type	Sub-base with plug-in electromechanical relay
Sub-Base Type	Output sub-base
[Us] Rated Supply Voltage	1930 V conforming to IEC 61131-2
Number Of Channels	16

# alomontary

Complementary	
Supply Voltage Type	DC
Product Compatibility	ABR7S23
Contacts Type And Composition	1 C/O
Status Led	1 LED per channel (green) channel status 1 LED (green) power ON
Polarity Distribution	Volt-free
Short-Circuit Protection	1 A internal fuse, 5 x 20 mm, fast blow (PLC end)
Fixing Mode	By clips (35 mm symmetrical DIN rail) By screws (solid plate with fixing kit)
Maximum Supply Current	1 A
Voltage Drop On Power Supply Fuse	0.3 V
[Ui] Rated Insulation Voltage	2000 V terminals/mounting rails 300 V coil circuit/contact circuits conforming to IEC 60947-1
[Uimp] Rated Impulse Withstand Voltage	2.5 kV
Installation Category	II conforming to IEC 60664-1
Tightening Torque	0.6 N.m with flat Ø 3.5 mm screwdriver
Net Weight	0.775 kg

## **Environment**

Product Certifications	UL
	GL
	DNV
	CSA
	EAC
Ip Degree Of Protection	IP2X conforming to IEC 60529
Resistance To Incandescent Wire	750 °C conforming to IEC 60695-2-11
Shock Resistance	15 gn for 11 ms conforming to IEC 60068-2-27
Vibration Resistance	2 gn (f= 10150 Hz) conforming to IEC 60068-2-6

Resistance To Electrostatic Discharge	4 kV (contact) level 3 conforming to IEC 61000-4-2 8 kV (air) level 3 conforming to IEC 61000-4-2
Resistance To Radiated Fields	10 V/m (260000001000000000 Hz) conforming to IEC 61000-4-3 level 3
Resistance To Fast Transients	2 kV level 3 conforming to IEC 61000-4-4
Ambient Air Temperature For Operation	-560 °C conforming to IEC 61131-2
Ambient Air Temperature For Storage	-4080 °C conforming to IEC 61131-2
Pollution Degree	2 conforming to IEC 60664-1

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	7.700 cm
Package 1 Width	9.500 cm
Package 1 Length	22.000 cm
Package 1 Weight	745.000 g
Unit Type Of Package 2	S03
Number Of Units In Package 2	12
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	9.500 kg

# **Contractual warranty**

Warranty

18 months

## Sustainability

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

## Well-being performance



Eq

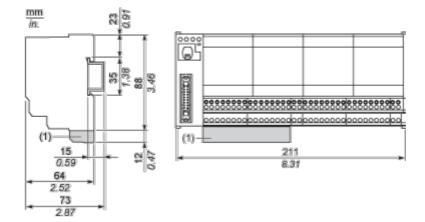
Rohs Exemption Information Yes

## **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Weee Circularity Profile	

### **Dimensions Drawings**

#### Dimensions

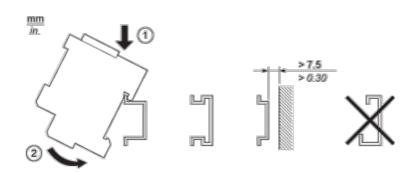


(1) ABE7BV10 / BV20, ABE7BV10E / BV20E

## Product data sheet

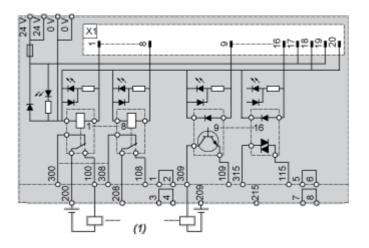
Mounting and Clearance

### Mounting



Connections and Schema

#### Wiring Diagram



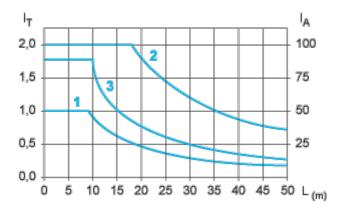
<sup>(1) 16</sup> channels

## ABE7R16T230

### Performance Curves

### Curves for Determining Cable Type and Length According to the Current

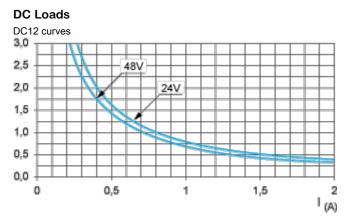
#### 16-channel Sub-base



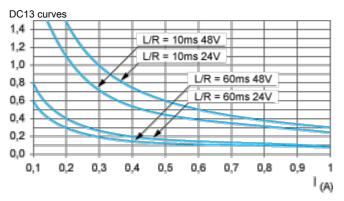
- L Cable length
- I<sub>T</sub> Total current per sub base (A)
- I<sub>A</sub> Average current per channel (mA)
- (1) TSXCDP••2 and ABFH20H••0 cables with c.s.a. 0.08 mm<sup>2</sup> (AWG 28).
- (2) TSXCDP••3 cables with c.s.a.  $0.34 \text{ mm}^2$  (AWG 22).
- (3) Cables with c.s.a. 0.13 mm<sup>2</sup> (AWG 26).

The curves are given for a voltage drop of 1 V in the cable. For n volts tolerance, multiply the length determined from the graph by n.

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

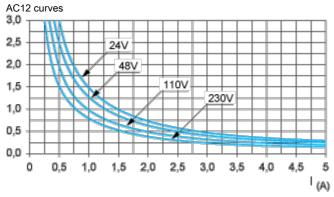


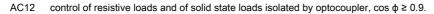
DC12 control of resistive loads and of solid state loads isolated by optocoupler,  $I/R \le 1$  ms.



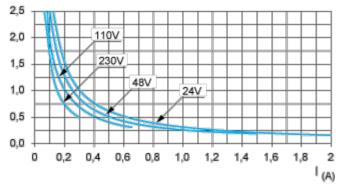
DC13 switching electromagnets,  $L/R \le 2 x$  (Ue x le) in ms, Ue: rated operational voltage, le: rated operational current (with a protective diode on the load, DC12 curves must be used with a coefficient of 0.9 applied to the number in millions of operating cycles)



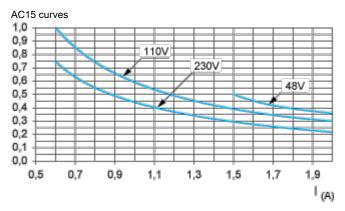




AC14 curves



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



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