

# Product data sheet

Specifications



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

ABE7R16T210

**Product availability: Non-Stock - Not normally stocked in distribution facility**

### 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	19...30 V IEC 61131-2
Number of channels	16

### Complementary

supply voltage type	DC
Product Compatibility	ABR7S21
Contacts type and composition	1 NO
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 IEC 60947-1
[Uimp] rated impulse withstand voltage	2.5 kV
Installation category	II IEC 60664-1
Tightening torque	5.3 lbf.in (0.6 N.m) flat Ø 3.5 mm
Net Weight	1.620 lb(US) (0.735 kg)

### Environment

Product Certifications	GL CSA UL DNV EAC
IP degree of protection	IP2X conforming to IEC 60529
Resistance to incandescent wire	1382 °F (750 °C) IEC 60695-2-11
Shock resistance	15 gn 11 ms IEC 60068-2-27
Vibration resistance	2 gn (f= 10...150 Hz) conforming to IEC 60068-2-6

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<b>Resistance to electrostatic discharge</b>	4 kV contact) level 3 IEC 61000-4-2 8 kV air) level 3 IEC 61000-4-2
<b>Resistance to radiated fields</b>	9.1 V/m (10 V/m) 26000000...1000000000 Hz)IEC 61000-4-3 level 3
<b>Resistance to fast transients</b>	2 kV level 3 IEC 61000-4-4
<b>Ambient air temperature for operation</b>	23...140 °F (-5...60 °C) IEC 61131-2
<b>Ambient air temperature for storage</b>	-40...176 °F (-40...80 °C) IEC 61131-2
<b>Pollution degree</b>	2 IEC 60664-1

## Ordering and shipping details

<b>Category</b>	US10CP222375
<b>Discount Schedule</b>	0CP2
<b>GTIN</b>	3389110644630
<b>Returnability</b>	No
<b>Country of origin</b>	LV

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	2.992 in (7.600 cm)
<b>Package 1 Width</b>	3.780 in (9.600 cm)
<b>Package 1 Length</b>	8.583 in (21.800 cm)
<b>Package weight(Lbs)</b>	24.762 oz (702.000 g)
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	12
<b>Package 2 Height</b>	11.811 in (30.000 cm)
<b>Package 2 Width</b>	11.811 in (30.000 cm)
<b>Package 2 Length</b>	15.748 in (40.000 cm)
<b>Package 2 Weight</b>	19.678 lb(US) (8.926 kg)

## Contractual warranty

<b>Warranty</b>	18 months
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Environmental footprint

Carbon footprint (kg CO2 eq, Total Life cycle) 1041

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard No

Packaging without single use plastic No

[EU RoHS Directive](#) Pro-active compliance (Product out of EU RoHS legal scope)

SCIP Number 4e5fc6c0-a6eb-485c-8b9b-e7290afe810f

REACH Regulation [REACH Declaration](#)

California proposition 65 **WARNING:** This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Use Again

### Repack and remanufacture

Circularity Profile [End of Life Information](#)

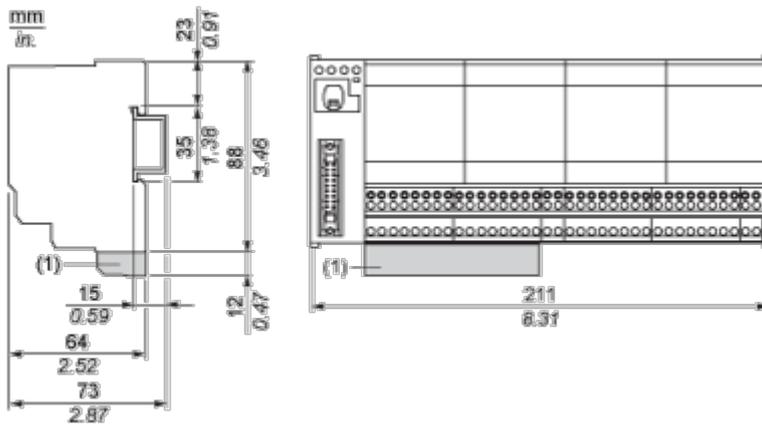
Take-back No

WEEE Label  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Dimensions Drawings

Dimensions

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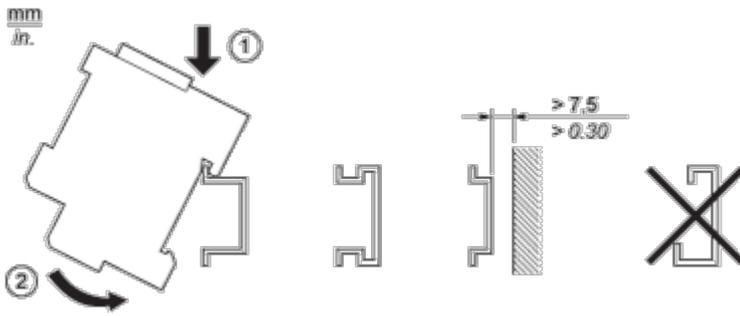


(1) ABE7BV10 / BV20, ABE7BV10E / BV20E

Mounting and Clearance

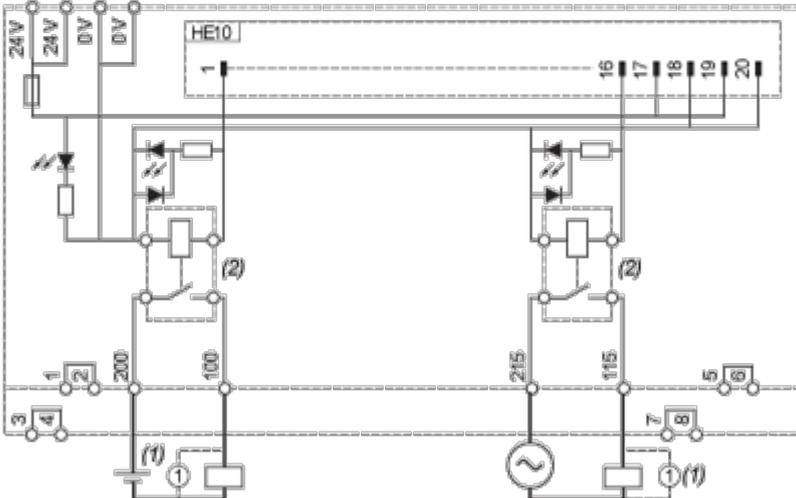
Mounting

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Wiring Diagram

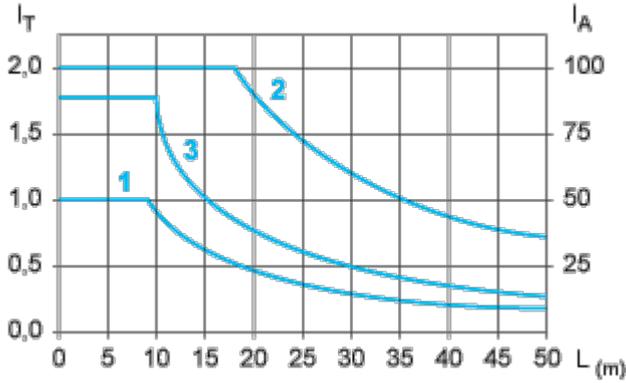


- (1) Inductive load
- (2) ABR7S21 (1 "F" "SPST") Ith = 5 A (supplied)

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)

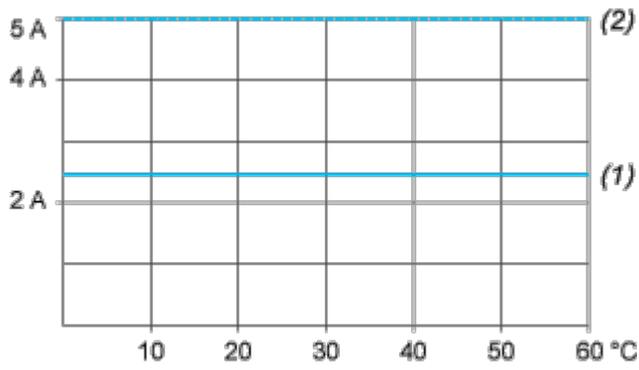
I<sub>A</sub> Average current per channel (mA)

- (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 mm<sup>2</sup> (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.

Temperature Derating Curves

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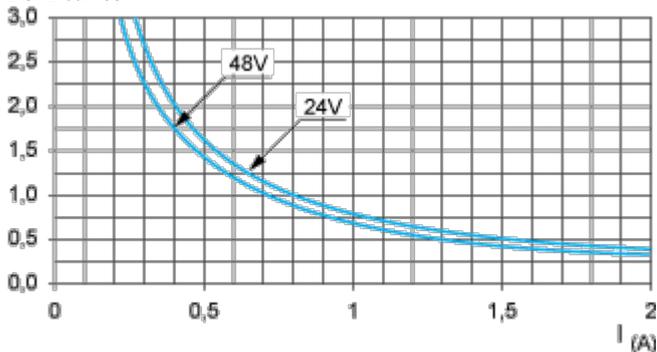


- (1) 100 % of channels used
- (2) 50 % of channels used

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

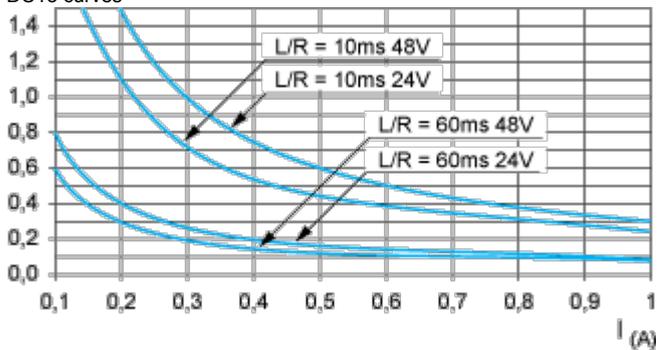
**DC Loads**

DC12 curves



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

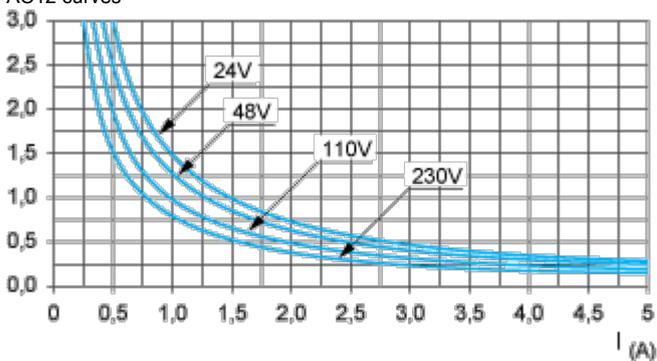
DC13 curves



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)

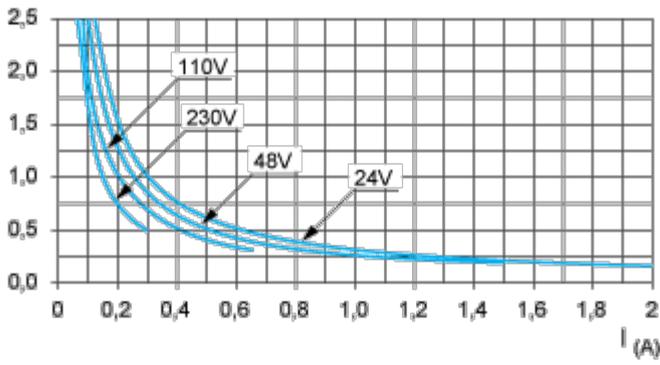
**AC Loads**

AC12 curves



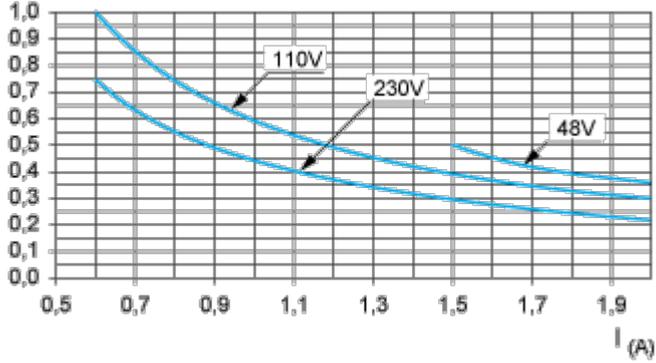
AC12 control of resistive loads and of solid state loads isolated by optocoupler,  $\cos \phi \geq 0.9$ .

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:  $\cos \phi = 0.4$ .

Image of product / Alternate images

Alternative

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