

# Product data sheet

Specifications



## sub-base for plug-in relay ABE7 - 16 channels - relay 10 mm

ABE7P16T230

### Main

Range of product	Modicon ABE7
Product or component type	Sub-base for plug-in relay
Sub-base type	Output sub-base
[Us] rated supply voltage	19...30 V conforming to IEC 61131-2
Number of channels	16
Connections - terminals	Screw type terminals, 1 x 0.09...1 x 1.5 mm <sup>2</sup> (AWG 28...AWG 16) flexible with cable end Screw type terminals, 1 x 0.14...1 x 2.5 mm <sup>2</sup> (AWG 26...AWG 12) solid Screw type terminals, 1 x 0.14...1 x 2.5 mm <sup>2</sup> (AWG 26...AWG 14) flexible without cable end Screw type terminals, 2 x 0.09...2 x 0.75 mm <sup>2</sup> (AWG 28...AWG 20) flexible with cable end Screw type terminals, 2 x 0.2...2 x 2.5 mm <sup>2</sup> (AWG 24...AWG 14) solid

### Complementary

Supply voltage type	DC
Product compatibility	ABE7ACC20 ABS7SA2. ABR7S2. ABS7SC2.
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
Maximum current per output common	16 A
[Ui] rated insulation voltage	300 V coil circuit/contact circuits conforming to IEC 60947-1 2000 V terminals/mounting rails
[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	0.655 kg

## Environment

Product certifications	CSA DNV GL UL EAC
IP degree of protection	IP2X conforming to IEC 60529
Resistance to incandescent wire	750 °C, extinction time <30 s conforming to IEC 60695-2-11
Shock resistance	15 gn for 11 ms conforming to IEC 60068-2-27
Vibration resistance	2 gn (f= 10...150 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 (26000000...1000000000 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	-5...60 °C conforming to IEC 61131-2
Ambient air temperature for storage	-40...80 °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	8.0 cm
Package 1 Width	9.5 cm
Package 1 Length	22.0 cm
Package 1 Weight	628.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	12
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	8.06 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

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**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)

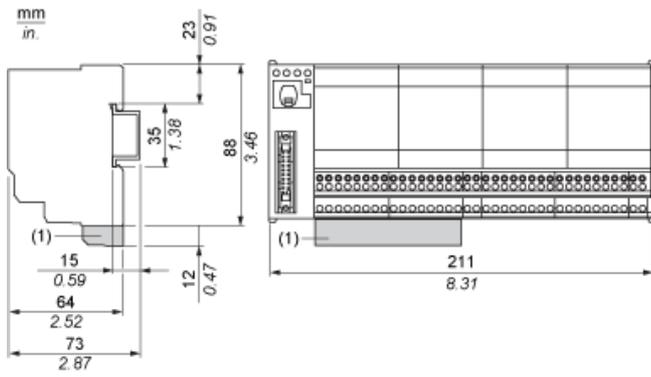
**Contractual warranty**

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Warranty 18 months

## Dimensions

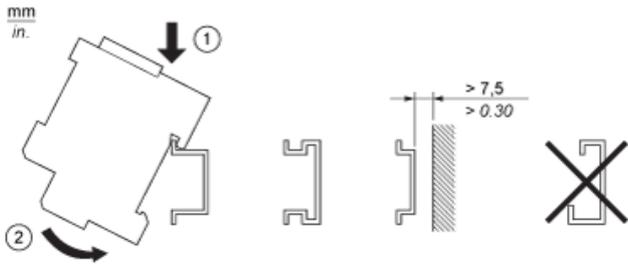
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(1) ABE7BV10 / BV20, ABE7BV10E / BV20E

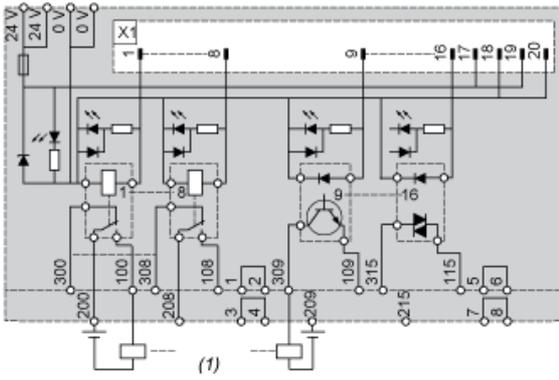
Mounting

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## Wiring Diagram

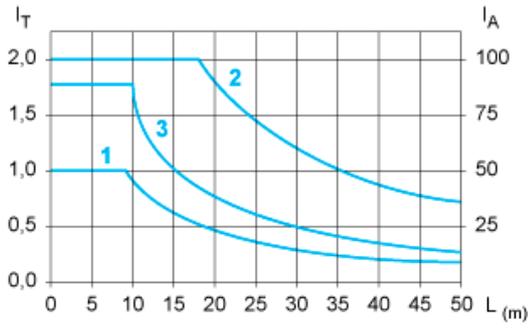
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(1) 16 channels

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

**16-channel Sub-base**

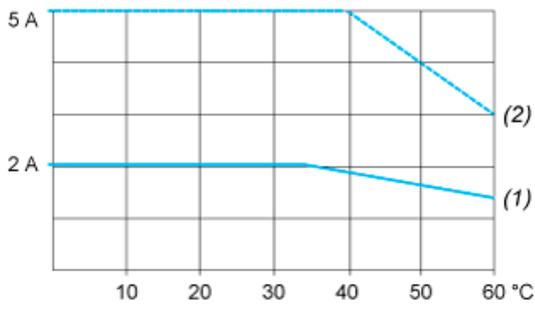


- L Cable length
- I<sub>T</sub> Total current per sub base (A)
- I<sub>A</sub> Average current per channel (mA)
- (1) TSXCDP••2 and ABFH20H••0 cables with c.s.a. 0.08 mm<sup>2</sup> (AWG 28).
- (2) TSXCDP••3 cables with c.s.a. 0.34 mm<sup>2</sup> (AWG 22).
- (3) Cables with c.s.a. 0.13 mm<sup>2</sup>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

**Recommended replacement(s)**