

# Product data sheet

Specifications

## sub-base for plug-in relay ABE7 - 16 channels - relay 12.5 mm



ABE7P16F312

### Main

Range of product	Modicon ABE7
Product or component type	Sub-base for plug-in relay
Sub-base type	Input sub-base
[Us] rated supply voltage	19...30 V conforming to IEC 61131-2
Number of channels	16
Number of terminal per channel	2
Connections - terminals	Screw type terminals, 1 x 0.09...1 x 1.5 mm <sup>2</sup> , 0.09...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> , 0.14...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> , 0.14...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> , 0.09...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> , 0.2...2.5 mm <sup>2</sup> (AWG 24...AWG 14) solid

### Complementary

Supply voltage type	DC
Product compatibility	ABR7 ABS7S33E ABS7E
Status LED	1 LED per channel (green) channel status 1 LED (green) power ON
Isolation PLC/operative part	Yes
Polarity distribution	Polarity distribution contact common per group of 4 channels
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
[Uiimp] rated impulse withstand voltage	2.5 kV
[Ui] rated insulation voltage	300 V coil circuit/contact circuits conforming to IEC 60947-1 2000 V terminals/mounting rails
Installation category	II conforming to IEC 60664-1
Tightening torque	0.6 N.m with flat Ø 3.5 mm screwdriver
Net weight	0.85 kg

### Environment

<b>Product certifications</b>	DNV GL CSA EAC
<b>IP degree of protection</b>	IP2X conforming to IEC 60529
<b>Resistance to incandescent wire</b>	750 °C conforming to IEC 60695-2-11
<b>Shock resistance</b>	15 gn for 11 ms conforming to IEC 60068-2-27
<b>Vibration resistance</b>	2 gn (f= 10...150 Hz) conforming to IEC 60068-2-6
<b>Resistance to electrostatic discharge</b>	4 kV (contact) level 3 conforming to IEC 61000-4-2 8 kV (air) level 3 conforming to IEC 61000-4-2
<b>Resistance to radiated fields</b>	10 V/m (26000000...1000000000 Hz) conforming to IEC 61000-4-3 level 3
<b>Resistance to fast transients</b>	2 kV level 3 conforming to IEC 61000-4-4
<b>Ambient air temperature for operation</b>	-5...60 °C conforming to IEC 61131-2
<b>Ambient air temperature for storage</b>	-40...80 °C conforming to IEC 61131-2
<b>Pollution degree</b>	2 conforming to IEC 60664-1

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	8.5 cm
<b>Package 1 Width</b>	10.0 cm
<b>Package 1 Length</b>	29.2 cm
<b>Package 1 Weight</b>	786.0 g
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	6
<b>Package 2 Height</b>	30.0 cm
<b>Package 2 Width</b>	30.0 cm
<b>Package 2 Length</b>	40.0 cm
<b>Package 2 Weight</b>	5.141 kg

## Contractual warranty

<b>Warranty</b>	18 months
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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

Total lifecycle Carbon footprint	1042
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

### Use Better

#### Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	1bbe7d20-74c0-4e7e-b98b-d2946f4ab8b4
REACH Regulation	<a href="#">REACH Declaration</a>
California proposition 65	<b>WARNING:</b> 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 <a href="#">www.P65Warnings.ca.gov</a>

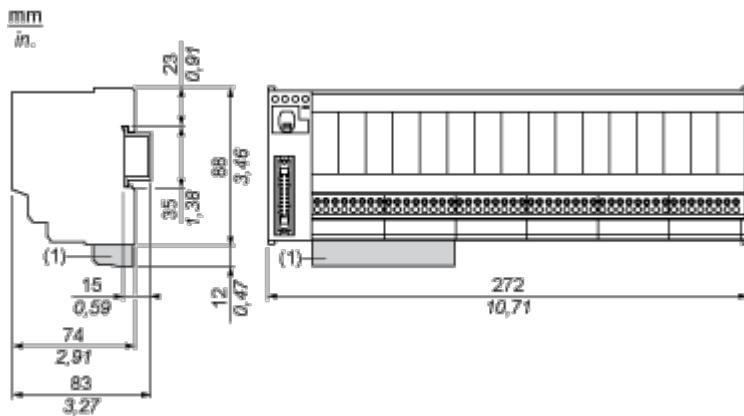
### Use Again

#### Repack and remanufacture

End of life manual availability	<a href="#">End of Life Information</a>
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

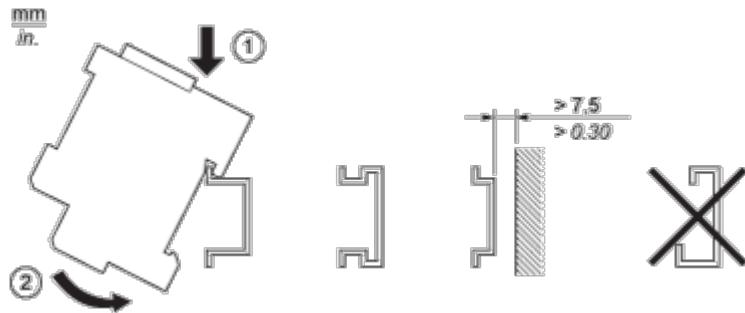
## Dimensions Drawings

## Dimensions

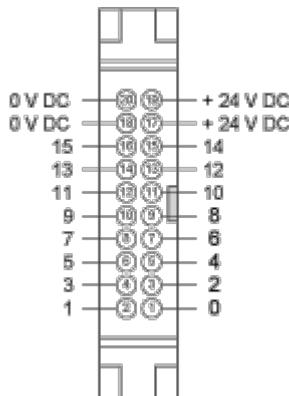


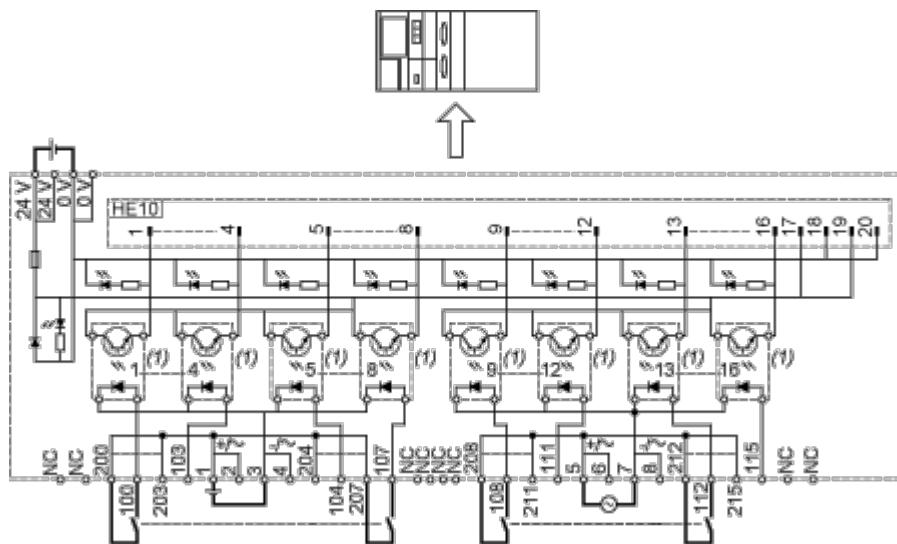
(1) ABE7BV10 / BV20, ABE7BV10E / BV20E

## Mounting and Clearance

Mounting

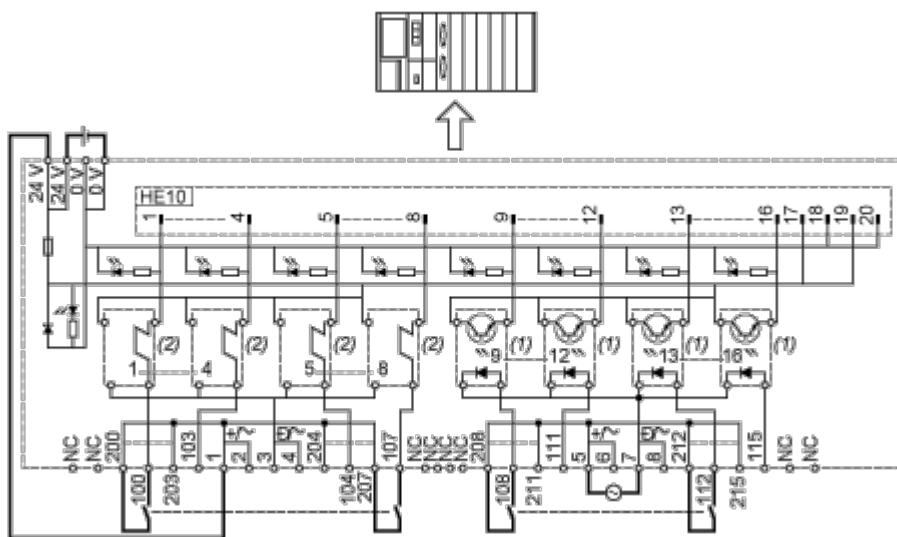
## Connections and Schema

HE10 16 Channels

Wiring Diagram

(1) ABS7EC3AL (5 VDC TTL) / ABS7EC3B2 (24 VDC) / ABS7EC3E2 (48 VDC) / ABS7EA3E5 (48 VAC) / ABS7EA3F5 (110/130 VAC) / ABS7EA3M5 (230/240 VAC) (not supplied)

## Wiring Diagram



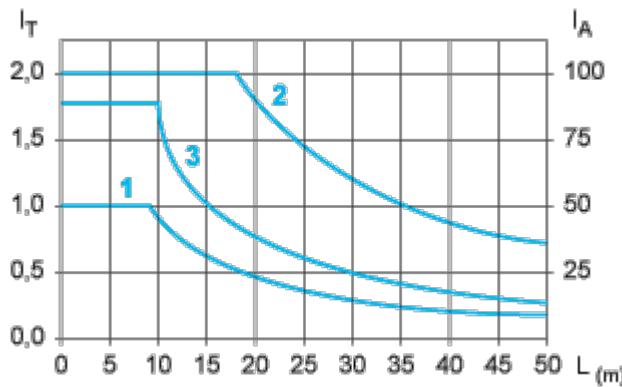
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(2) ABE7ACC21 (24 VDC) (not supplied / not isolated)

## Performance Curves

Curves for Determining Cable Type and Length According to the Current

## 16-channel Sub-base



L Cable length

$I_T$  Total current per sub base (A)

$I_A$  Average current per channel (mA)

(1) TSXCDP•2 and ABFH20H•0 cables with c.s.a.  $0.08 \text{ mm}^2$  (AWG 28).

(2) TSXCDP•3 cables with c.s.a.  $0.34 \text{ mm}^2$  (AWG 22).

(3) Cables with c.s.a.  $0.13 \text{ mm}^2$  (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.

Image of product / Alternate images

Alternative

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