

# Product datasheet

Specifications



## Sub-base with plug-in electromechanical relay ABE7, 16 channels, relay 5 mm

Local distributor code:

402703439

ABE7R16T111

EAN Code: 3389110250800

## 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 conforming to IEC 61131-2
Number of channels	16
Connections - terminals	Screw type terminals, 1 x 0.14...1 x 1.5 mm <sup>2</sup> (AWG 26...AWG 16) flexible with cable end 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, 1 x 0.14...1 x 4 mm <sup>2</sup> (AWG 26...AWG 12) solid Screw type terminals, 2 x 0.14...2 x 0.75 mm <sup>2</sup> (AWG 26...AWG 18) flexible with cable end Screw type terminals, 2 x 0.14...2 x 1.5 mm <sup>2</sup> (AWG 26...AWG 16) solid

## Complementary

supply voltage type	DC
Product compatibility	ABR7S11
Contacts type and composition	1 NO
Status LED	1 LED power ON 1 LED per channel channel status
Polarity distribution	Common distribution group of 4
Short-circuit protection	1 A internal fuse, 5 x 20 mm, fast blow (PLC end)
Mounting mode	By clips (35 mm DIN rail) By screws (surface mount with kit)
Maximum supply current	1 A
Voltage drop on power supply fuse	0.3 V
Maximum current per output common	5 A screw type terminals
[Ui] rated insulation voltage	2000 V between terminals/mounting rails 300 V between coil circuit/contact circuits conforming to IEC 60947-1
Maximum current per module	12 A
[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	0.6 kg

## Environment

<b>Product certifications</b>	CSA UL DNV GL EAC
<b>IP degree of protection</b>	IP2X conforming to IEC 60529
<b>Resistance to incandescent wire</b>	750 °C, extinction time <30 s 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 conforming to IEC 60068-2-6 (f = 10...150 Hz)
<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>	7 cm
<b>Package 1 Width</b>	8.2 cm
<b>Package 1 Length</b>	13.7 cm
<b>Package 1 Weight</b>	312 g
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	24
<b>Package 2 Height</b>	30 cm
<b>Package 2 Width</b>	30 cm
<b>Package 2 Length</b>	40 cm
<b>Package 2 Weight</b>	7.902 kg

## Logistical informations

<b>Country of origin</b>	LV
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## 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

Total lifecycle Carbon footprint 1037

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 1bbe7d20-74c0-4e7e-b98b-d2946f4ab8b4

REACH Regulation [REACH Declaration](#)

### Use Again

#### Repack and remanufacture

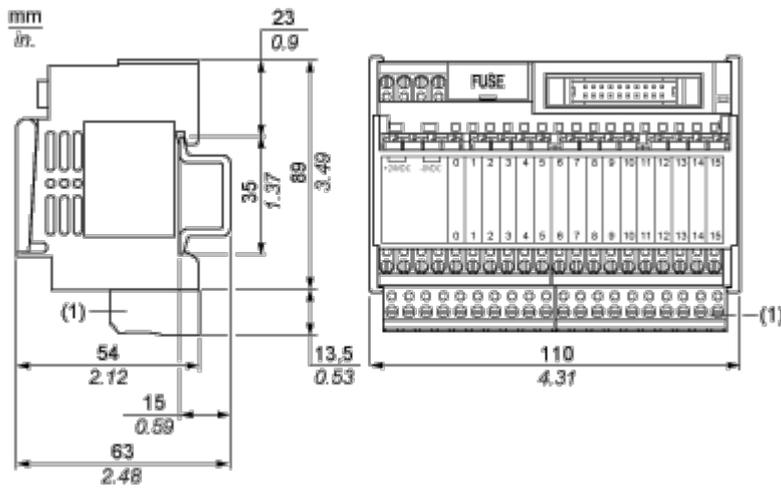
End of life manual availability [End of Life Information](#)

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

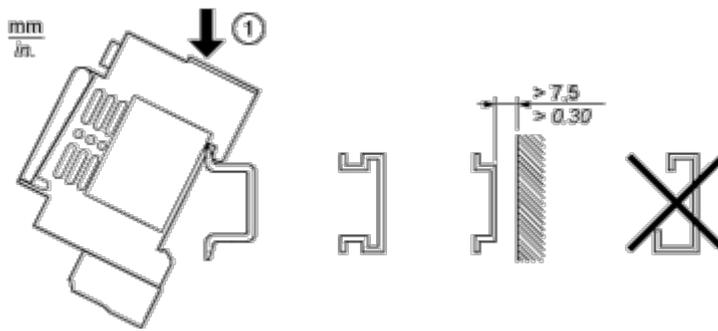


(1) ABE7BV10 / BV20

Mounting and Clearance

Mounting

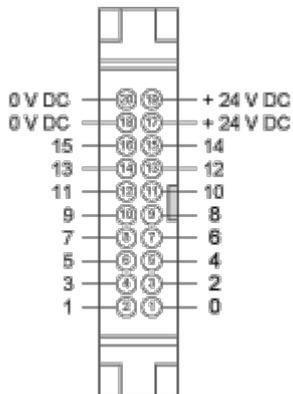
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Connections and Schema

HE10 16 Channels

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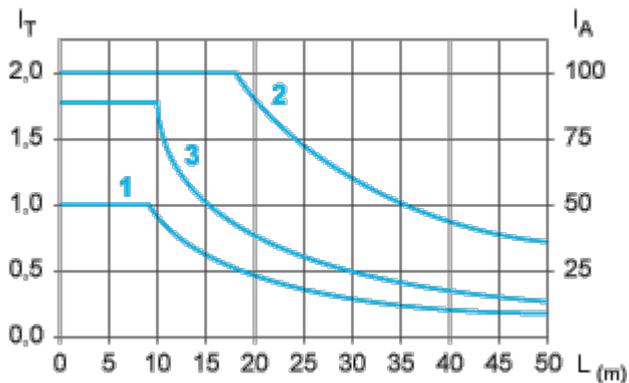




Performance Curves

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)

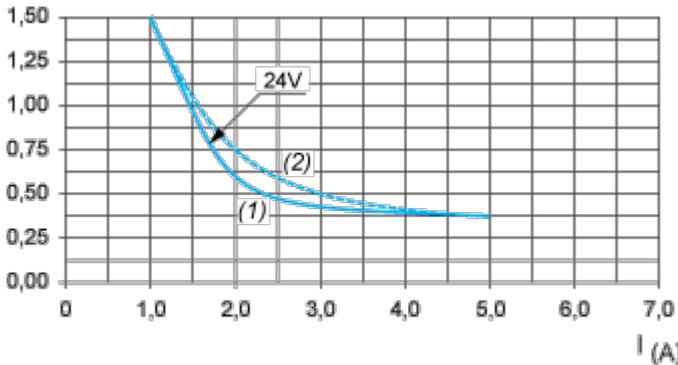
- (1) TSXCDP••2 and ABFH20H••0 cables with c.s.a. 0.08 mm<sup>2</sup> (AWG 28).
- (2) TSXCDP••3 cables with c.s.a. 0.34 mm<sup>2</sup> (AWG 22).
- (3) Cables with c.s.a. 0.13 mm<sup>2</sup> (AWG 26).

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.

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

**DC Loads**

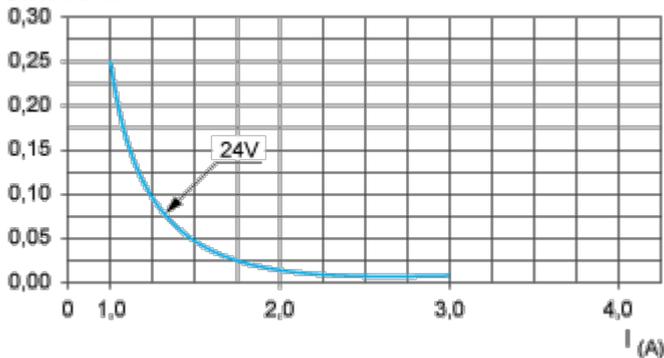
DC12 curves



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

- (1) Resistive loads
- (2) Inductive loads

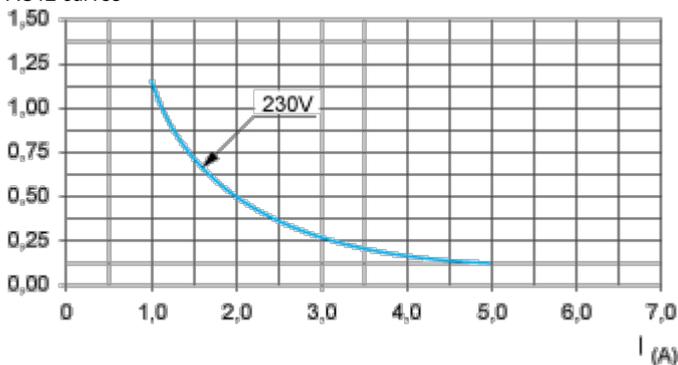
DC13 curves



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)

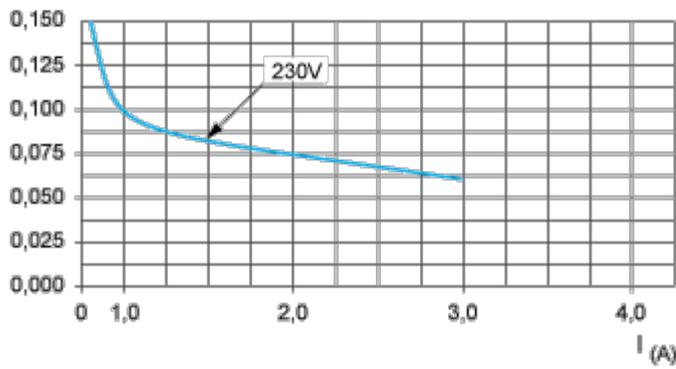
**AC Loads**

AC12 curves



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

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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