

Product data sheet

Specifications



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

ABE7R16T111

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
Connections - terminals	Screw type terminals, 1 x 0.14...1 x 1.5 mm ² AWG 26...AWG 16) flexible with cable end Screw type terminals, 1 x 0.14...1 x 2.5 mm ² AWG 26...AWG 14) flexible without cable end Screw type terminals, 1 x 0.14...1 x 4 mm ² AWG 26...AWG 12) solid Screw type terminals, 2 x 0.14...2 x 0.75 mm ² AWG 26...AWG 18) flexible with cable end Screw type terminals, 2 x 0.14...2 x 1.5 mm ² 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
[U _i] rated insulation voltage	2000 V terminals/mounting rails 300 V coil circuit/contact circuits IEC 60947-1
Maximum current per module	12 A
[U _{imp}] 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
Product Weight	1.3 lb(US) (0.6 kg)

Environment

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

Product Certifications	CSA UL DNV GL EAC
IP degree of protection	IP2X conforming to IEC 60529
Resistance to incandescent wire	1382 °F (750 °C) 30 s IEC 60695-2-11
Shock resistance	15 gn 11 ms IEC 60068-2-27
Vibration resistance	2 gn 10...150 Hz)IEC 60068-2-6
Resistance to electrostatic discharge	4 kV contact) level 3 IEC 61000-4-2 8 kV air) level 3 IEC 61000-4-2
Resistance to radiated fields	9.1 V/m (10 V/m) 26000000...1000000000 Hz)IEC 61000-4-3 level 3
Resistance to fast transients	2 kV level 3 IEC 61000-4-4
Ambient air temperature for operation	23...140 °F (-5...60 °C) IEC 61131-2
Ambient air temperature for storage	-40...176 °F (-40...80 °C) IEC 61131-2
Pollution degree	2 IEC 60664-1

Ordering and shipping details

Category	US10CP222375
Discount Schedule	0CP2
GTIN	3389110250800
Returnability	No
Country of origin	LV

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.76 in (7 cm)
Package 1 Width	3.23 in (8.2 cm)
Package 1 Length	5.39 in (13.7 cm)
Package weight(Lbs)	11.005 oz (312 g)
Unit Type of Package 2	S03
Number of Units in Package 2	24
Package 2 Height	11.81 in (30 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	17.421 lb(US) (7.902 kg)

Contractual warranty

Warranty	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) 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](#)

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

Use Again

Repack and remanufacture

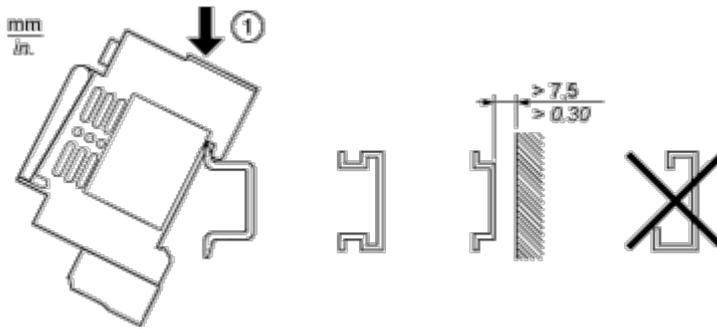
Circularity Profile [End of Life Information](#)

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.

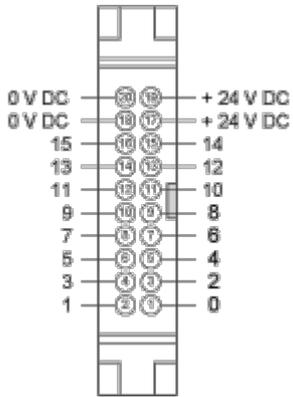
Mounting and Clearance

Mounting

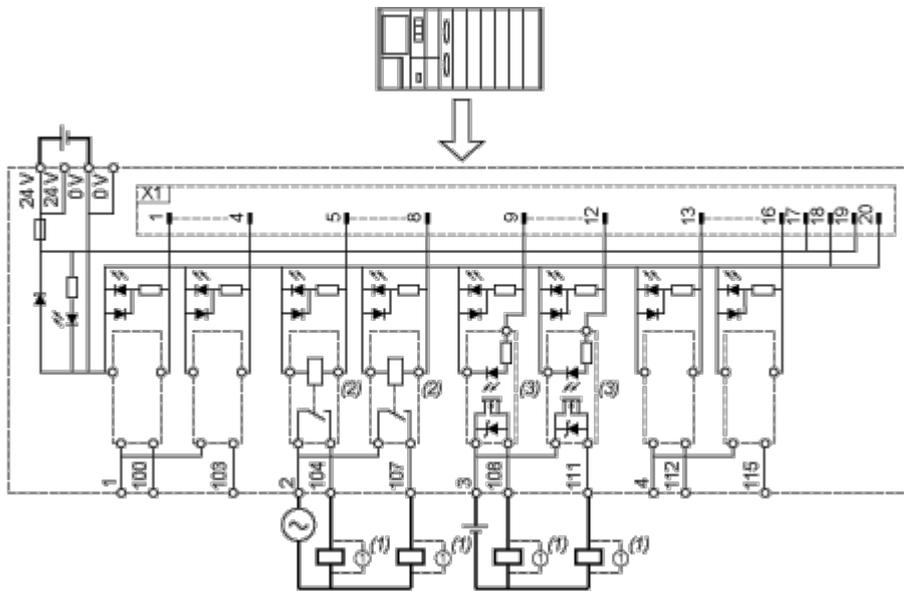


Connections and Schema

HE10 16 Channels



Wiring Diagram

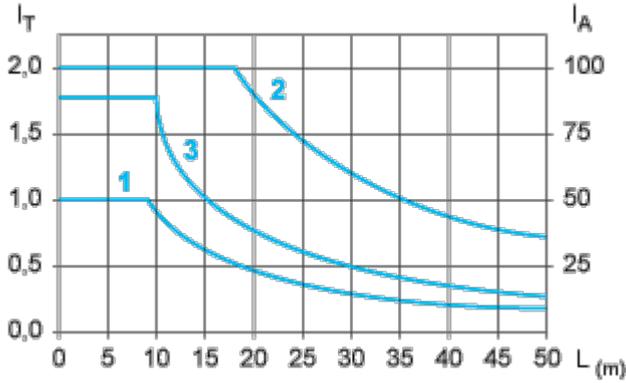


- (1) Inductive load
- (2) ABR7S11 (1F) - N/O I_{th} = 6 A (supplied for ABE7R16T111 and not supplied for ABE7P16T111)
- (3) ABS7SC1B 24 V DC I_{max.} = 2 A (not supplied)

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)

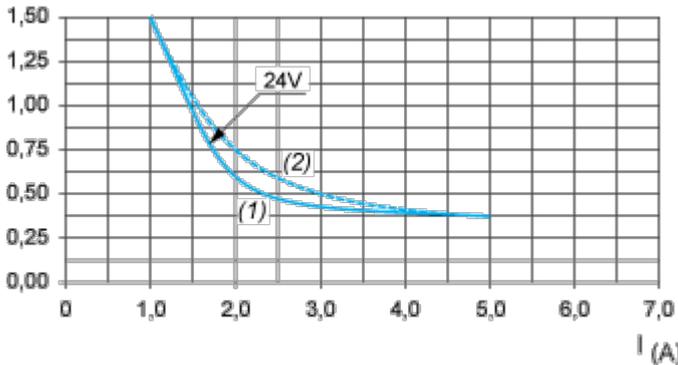
- (1) TSXCDP••2 and ABFH20H••0 cables with c.s.a. 0.08 mm² (AWG 28).
- (2) TSXCDP••3 cables with c.s.a. 0.34 mm² (AWG 22).
- (3) Cables with c.s.a. 0.13 mm² (AWG 26).

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

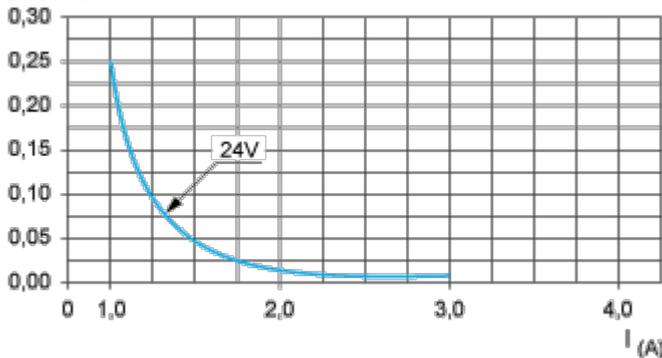
DC12 curves



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

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

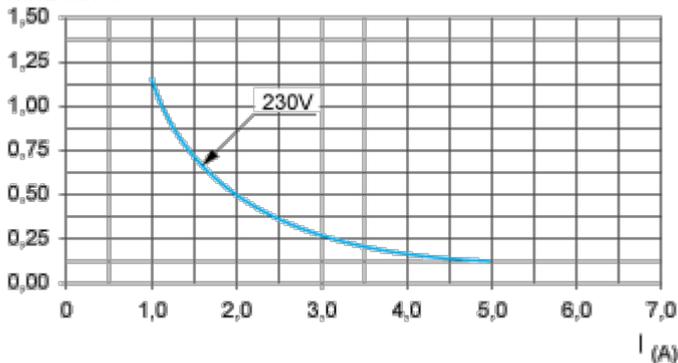
DC13 curves



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)

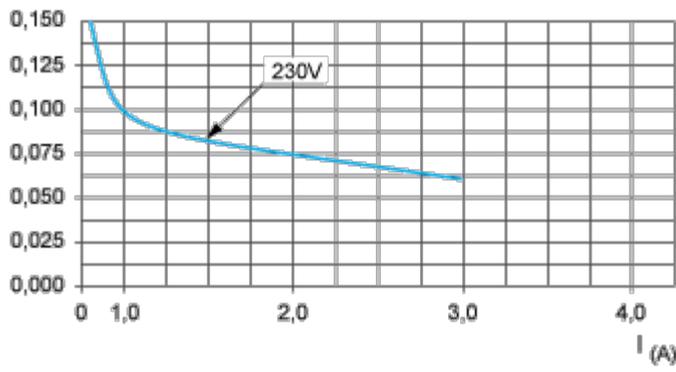
AC Loads

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





