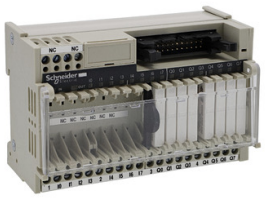
Product data sheet

Specifications



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

ABE7R16M111

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 mm² 26 AWG...16 AWG) flexible with cable end Screw type terminals, 1 x 0.14...1 x 2.5 mm² 26 AWG...14 AWG) flexible without cable end Screw type terminals, 1 x 0.14...1 x 4 mm² 26 AWG...12 AWG) solid Screw type terminals, 2 x 0.14...2 x 0.75 mm² 26 AWG...18 AWG) flexible with cable end Screw type terminals, 2 x 0.14...2 x 1.5 mm² 26 AWG...16 AWG) 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 + 2 inputs common terminals
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 terminals/mounting rails 300 V coil circuit/contact circuits IEC 60947-1
Maximum current per module	12 A
[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	1.3 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.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Product Certifications	UL DNV CSA 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	3389110251067
Returnability	No
Country of origin	LV

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.8 in (7.0 cm)
Package 1 Width	3.2 in (8.2 cm)
Package 1 Length	5.4 in (13.8 cm)
Package weight(Lbs)	9.5 oz (268.0 g)
Unit Type of Package 2	S03
Number of Units in Package 2	12
Package 2 Height	11.8 in (30.0 cm)
Package 2 Width	11.8 in (30.0 cm)
Package 2 Length	15.7 in (40.0 cm)
Package 2 Weight	8.662 lb(US) (3.929 kg)

Contractual warranty

Warranty (in months)	18

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	**980 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**8 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.1 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**972 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.6 kg CO2 eq.**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**1bbe7d20-74c0-4e7e-b98b-d2946f4ab8b4**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
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**

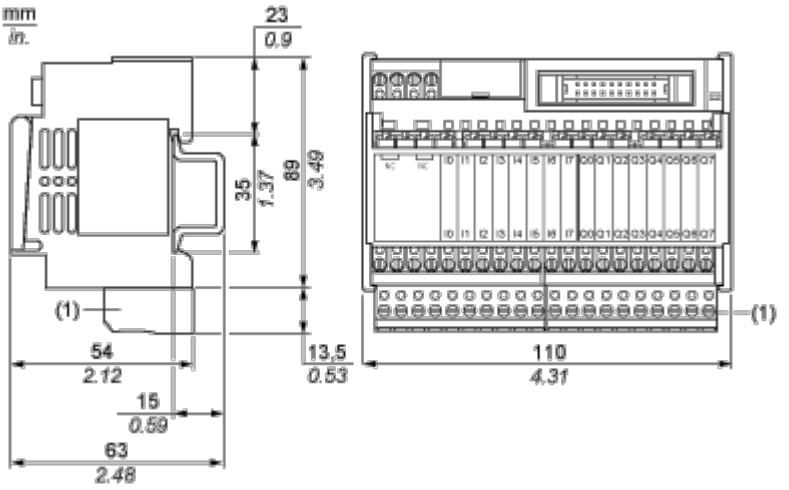
Use Again

Repack and remanufacture

Recyclability potential, in %	**6**
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

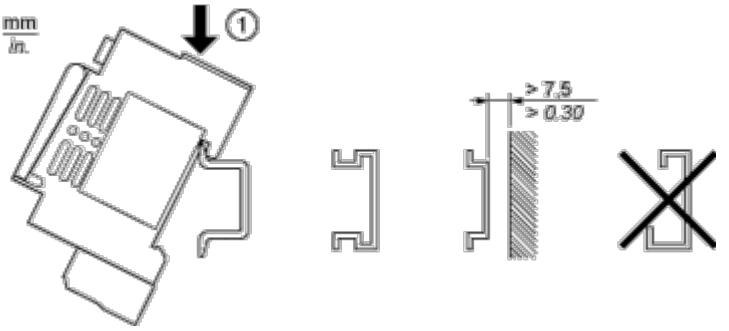
Dimensions



(1) ABE7BV10 / BV20

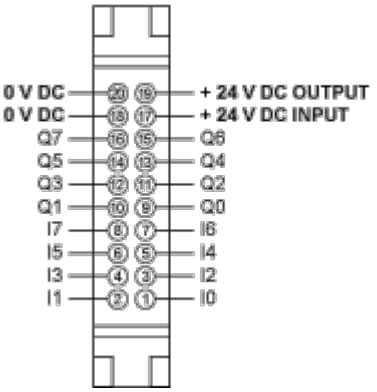
Mounting and Clearance

Mounting



Connections and Schema

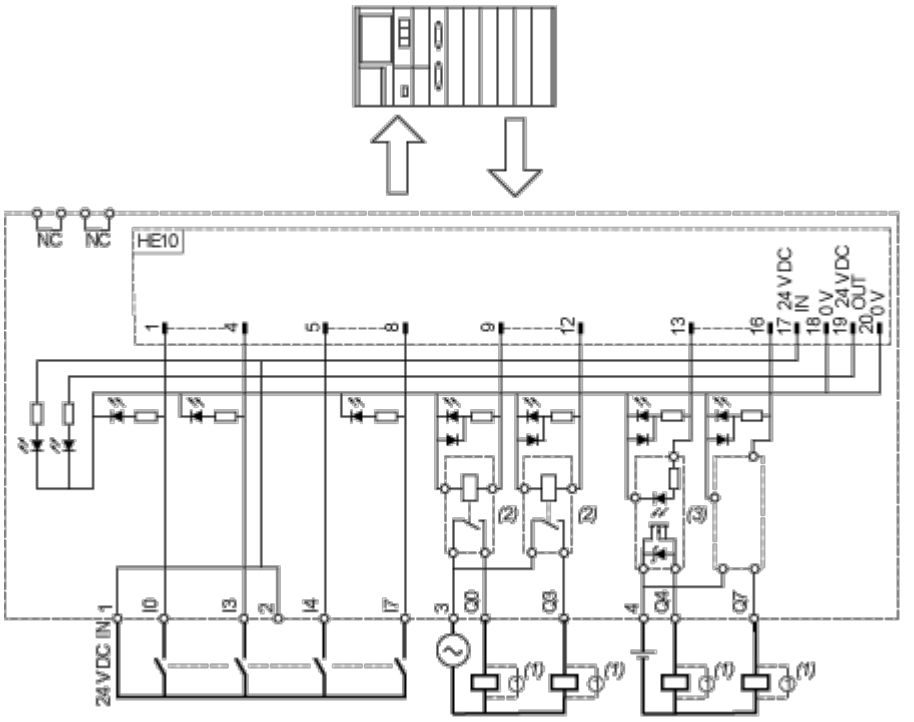
Wiring channels



Qx Outputs

Ix Inputs

Wiring Diagram



(1) Inductive load

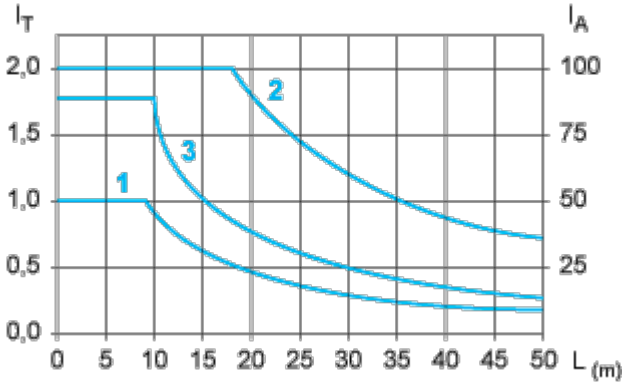
(2) ABR7S11 (1F) - N/O Ith = 6 A (supplied for ABE7R16M111 and not supplied for ABE7P16M111)

(3) ABS7SC1B 24 VDC Imax. = 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 mm^2 (AWG 28).

(2) TSXCDP••3 cables with c.s.a. 0.34 mm^2 (AWG 22).

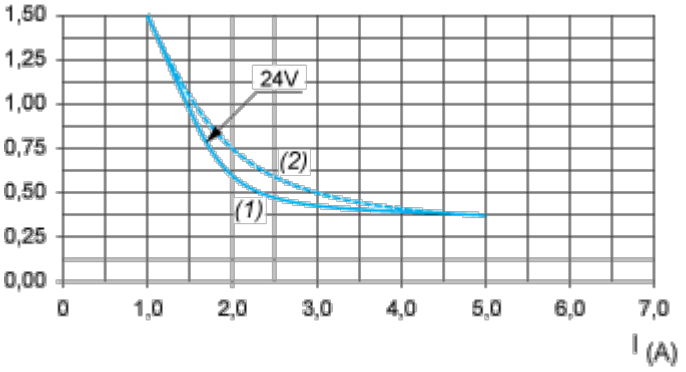
(3) Cables with c.s.a. 0.13 mm^2 (AWG 26).

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.

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

DC Loads

DC12 curves

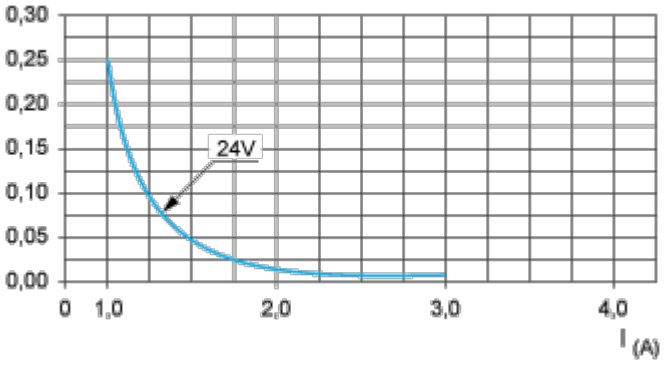


DC12 control of resistive loads and of solid state loads isolated by optocoupler, l/R ≤ 1 ms.

(1) Resistive loads

(2) Inductive loads

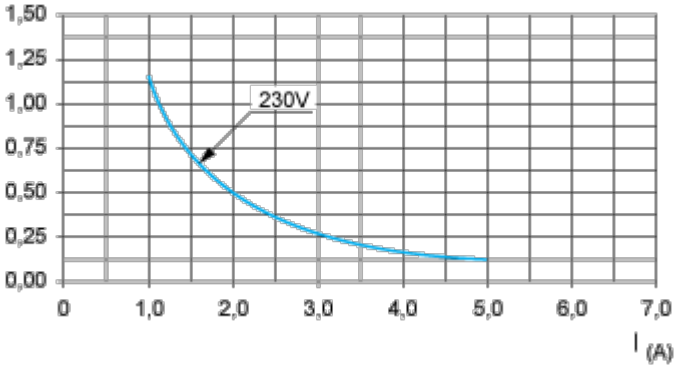
DC13 curves



DC13 switching electromagnets, L/R ≤ 2 x (Ue x Ie) in ms, Ue: rated operational voltage, Ie: 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)

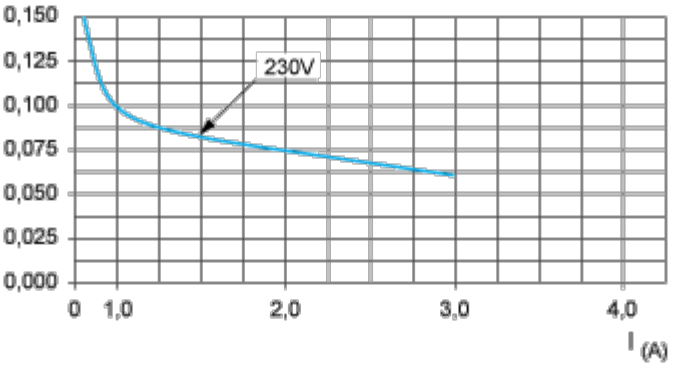
AC Loads

AC12 curves



AC12 control of resistive loads and of solid state loads isolated by optocoupler, cos ϕ ≥ 0.9.

AC15 curves



AC15 control of electromagnetic loads > 72 VA, make: cos ϕ = 0.7, break: cos ϕ = 0.4.

Image of product / Alternate images

Alternative

