Product data sheet

Specifications



passive connection sub-base ABE7 - 16 inputs or outputs

ABE7H16R20

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Range of Product	Modicon ABE7
Product or Component Type	Passive discrete I/O sub-base
Sub-base type	I/O sub-base
[Us] rated supply voltage	19...30 V 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 mm² AWG 28...AWG 16) flexible with cable end Screw type terminals, 1 x 0.14...1 x 2.5 mm² AWG 26...AWG 12) solid Screw type terminals, 1 x 0.14...1 x 2.5 mm² AWG 26...AWG 14) flexible without cable end Screw type terminals, 2 x 0.09...2 x 0.75 mm² AWG 28...AWG 20) flexible with cable end Screw type terminals, 2 x 0.2...2 x 2.5 mm² AWG 24...AWG 14) solid

Complementary

supply voltage type	DC
Number of horizontal rows	2
Status LED	1 LED (Green) power ON
Polarity distribution	0 V or 24 V
Short-circuit protection	2 A internal fuse, 5 x 20 mm, fast blow PLC end)
Connector Type	SUB-D 15 HE-10 SUB-D 9
Pin number	20 pins
Fixing mode	By clips (35 mm symmetrical DIN rail) By screws (solid plate with fixing kit)
Maximum supply current	1.8 A
Current per channel	0.5 A
Maximum current per output common	1.8 A
Voltage drop on power supply fuse	0.3 V
[Ui] Rated Insulation Voltage	2000 V
Installation category	II IEC 60664-1
Tightening torque	5.3 lbf.in (0.6 N.m) flat Ø 3.5 mm
Width	4.9 in (125 mm)
Product Weight	0.7 lb(US) (0.3 kg)

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

Environment

Product Certifications	GL DNV CSA UL EAC
IP degree of protection	IP2X conforming to IEC 60529
Resistance to incandescent wire	1382 °F (750 °C) IEC 60695-2-11
Shock resistance	15 gn 11 ms 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 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	3389110544954
Returnability	No
Country of origin	LV

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.756 in (7.000 cm)
Package 1 Width	3.228 in (8.200 cm)
Package 1 Length	5.354 in (13.600 cm)
Package weight(Lbs)	10.547 oz (299.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	9
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	6.532 lb(US) (2.963 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	**1 758 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]	**1 749 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 Longer

Lifetime extension

Repair	**No**

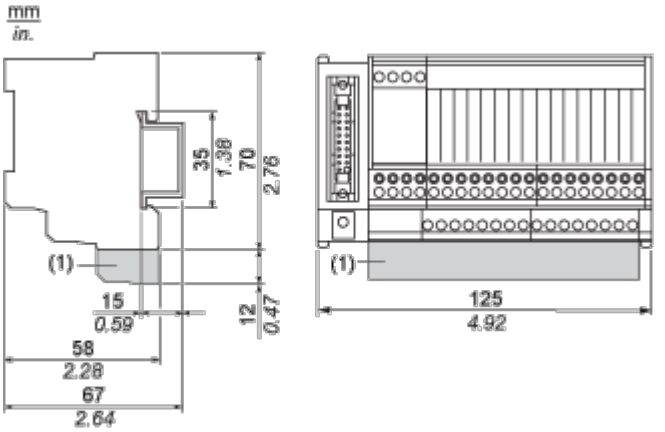
Use Again

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

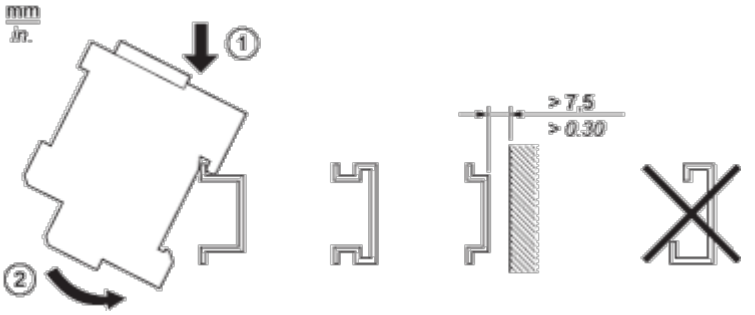
Dimensions



(1) ABE7BV20 / ABE7BV20E

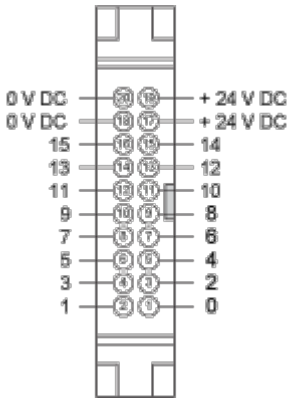
Mounting and Clearance

Mounting

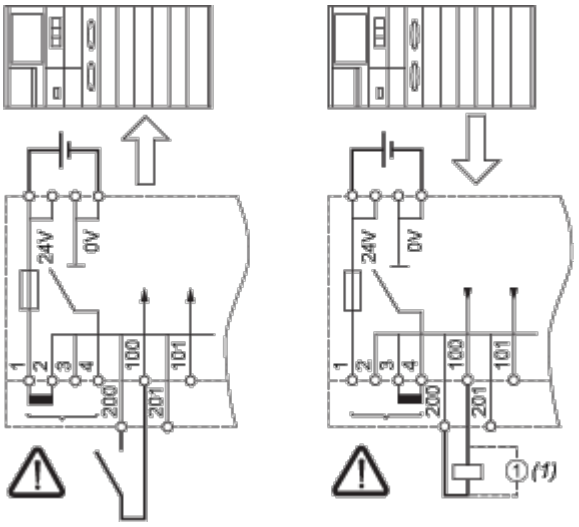


Connections and Schema

HE10 16 Channels



Wiring Diagrams

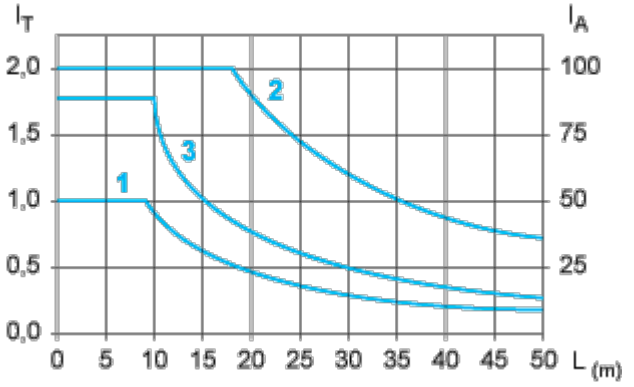


(1) Inductive load

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.

Image of product / Alternate images

Alternative

