Product data sheet

Specifications



passive connection sub-base ABE7 - 16 inputs or outputs - Led - isolator

ABE7H16S21

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 28 AWG...16 AWG) flexible with cable end Screw type terminals, 1 x 0.14...1 x 2.5 mm² 26 AWG...12 AWG) solid Screw type terminals, 1 x 0.14...1 x 2.5 mm² 26 AWG...14 AWG) flexible without cable end Screw type terminals, 2 x 0.09...2 x 0.75 mm² 28 AWG...20 AWG) flexible with cable end Screw type terminals, 2 x 0.2...2 x 2.5 mm² 24 AWG...14 AWG) solid
Channel additional information	1 switch disconnector per channel

Complementary

supply voltage type	DC
Number of horizontal rows	2
Status LED	1 LED per channel (Green) channel status 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	HE-10
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)
Net Weight	0.827 lb(US) (0.375 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 CSA UL DNV 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	3389110644517
Returnability	No
Country of origin	LV

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.795 in (7.100 cm)
Package 1 Width	3.228 in (8.200 cm)
Package 1 Length	5.394 in (13.700 cm)
Package weight(Lbs)	12.628 oz (358.000 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	7.853 lb(US) (3.562 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	**1 760 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**10 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.1 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]	**0.8 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

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**

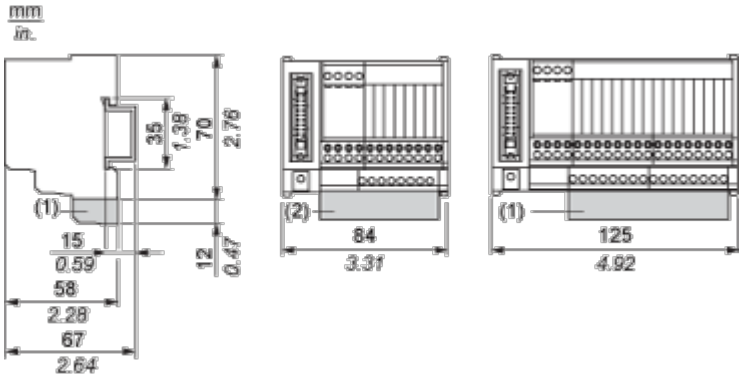
Use Again

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

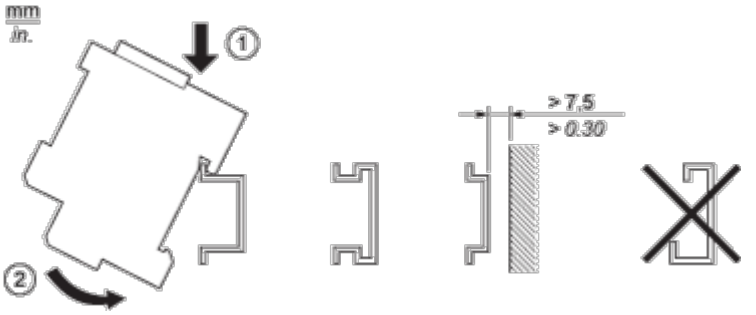


(1) ABE7BV10 / BV20, ABE7BV10E / BV20E

(2) ABE7BV10, ABE7BV10E

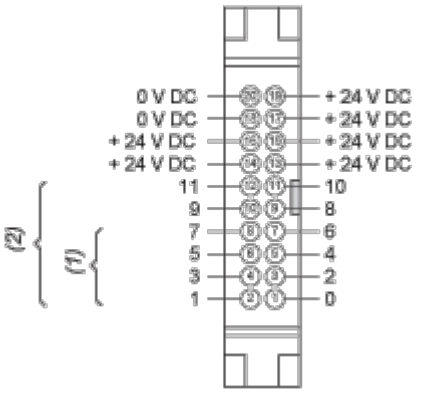
Mounting and Clearance

Mounting



Connections and Schema

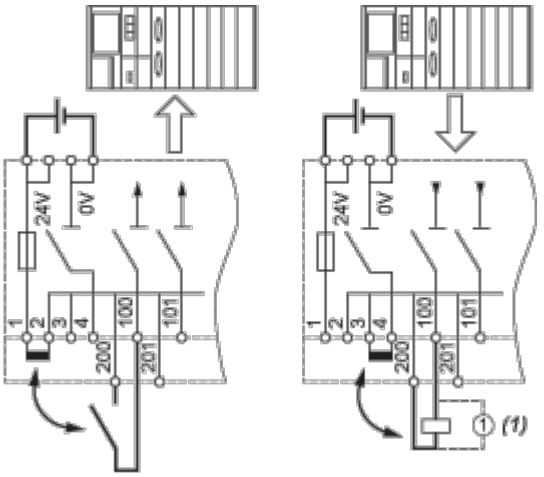
HE10 8/12 Channels



(1) 8 channels

(2) 12 channels

Wiring Diagram

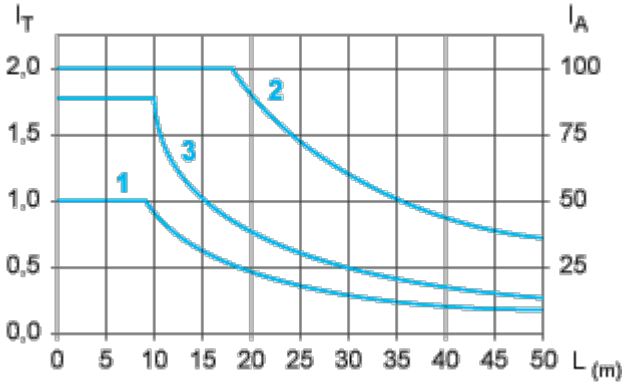


(1) Inductive load

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).

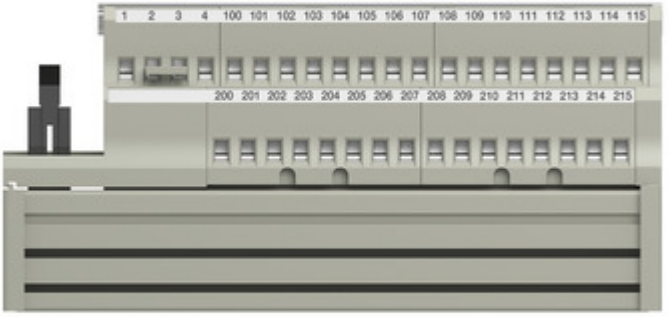
(3) Cables with c.s.a. 0.13 mm^2 (AWG 26).

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






Schneider Electric
Modicon ABE7 - H16S21
30Vdc max, 0.1A max/chan, 1.6A max/com.
Made in Xxxxxx
PP-yyyy-Www
DE 97828
Marktheidenfeld




Schneider Electric
+24VDC
0VDC
I0 → I15
Q0 → Q15
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
1 2 3 4
100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115
200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215

