

# Product data sheet

Specifications



sub-base - soldered solid state  
output relay ABE7 - 16 outputs - 0.5  
A

ABE7S16S1B2

## Main

Range of product	Modicon ABE7
Product or component type	Solid state output relay sub-base
[Us] rated supply voltage	24 V DC for PLC end 24 V DC for preactuator end
Number of channels	16
Relay type	Soldered solid state relay

## Complementary

Terminal block type	Removable
Isolation PLC/operative part	No
Fixing mode	By clips (35 mm symmetrical DIN rail) By screws (solid plate with fixing kit)
Current state 0 guaranteed	0.4 mA (PLC end)
Voltage state 0 guaranteed	3.4 V for PLC end
Current state 1 guaranteed	3.1 mA (PLC end)
Voltage state 1 guaranteed	16.9 V for PLC end
Maximum current per output common	9 A
Current per channel	0.5 A for preactuator end
Minimum switching current	1 mA
Drop-out voltage	0.3 V (preactuator end)
Maximum switching current	700 mA DC-12 700 mA DC-13
Maximum tungsten load	<10 W DC-6
Maximum residual current	0.5 mA preactuator end
Fault type	Short-circuit Overload
Fault indication	Without
Switchable inductive energy L/R	<= 400(U.I) ms
Maximum circuit breaker threshold	0.75 A
Response time	<= 0.1 ms from state 1 to 0 <= 0.2 ms from state 0 to 1
Switching frequency	< 0.6/LI² Hz
Installation category	II conforming to IEC 60664-1

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

Tightening torque	0.6 N.m with flat Ø 3.5 mm screwdriver
Width	125 mm
Net weight	0.4 kg

## Environment

Product certifications	GL UL DNV CSA EAC
IP degree of protection	IP2X conforming to IEC 60529
Protective treatment	TC
Resistance to incandescent wire	750 °C, extinction time <30 s conforming to IEC 60695-2-11
Shock resistance	15 gn for 11 ms conforming to IEC 60068-2-27
Resistance to radiated fields	10 V/m (260000000...1000000000 Hz) conforming to IEC 61000-4-3 level 3
Resistance to fast transients	2 kV level 3 conforming to IEC 61000-4-4
Ambient air temperature for operation	-5...60 °C conforming to IEC 61131-2
Ambient air temperature for storage	-40...80 °C conforming to IEC 61131-2
Pollution degree	2 conforming to IEC 60664-1

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	7.1 cm
Package 1 Width	8.3 cm
Package 1 Length	13.6 cm
Package 1 Weight	343.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	9
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	3.431 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	
Total lifecycle Carbon footprint	1038
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

Use Better

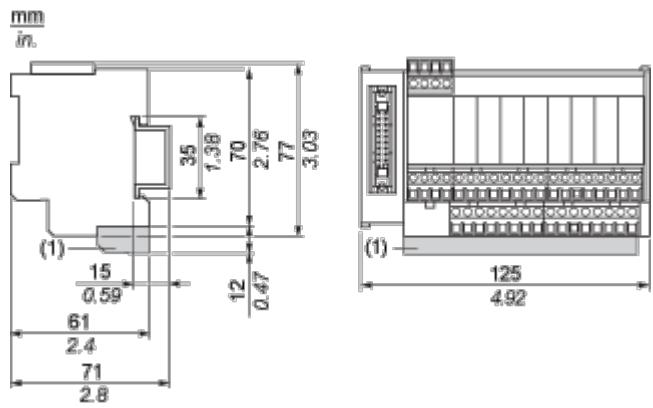
Materials and Substances	
Packaging made with recycled cardboard	No
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	1bbe7d20-74c0-4e7e-b98b-d2946f4ab8b4
REACH Regulation	<a href="#">REACH Declaration</a>
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

Use Again

Repack and remanufacture	
End of life manual availability	<a href="#">End of Life Information</a>
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

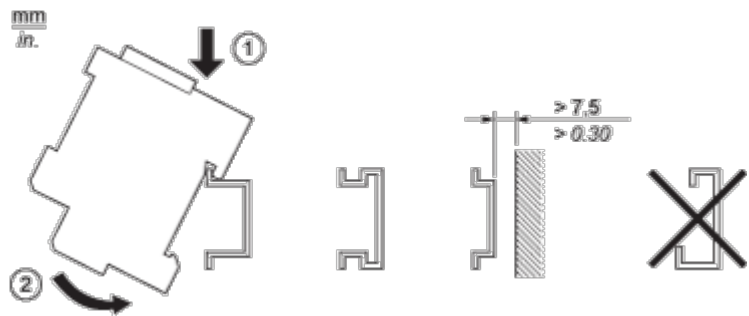


(1) ABE7BV20 / ABE7BV20E

Mounting and Clearance

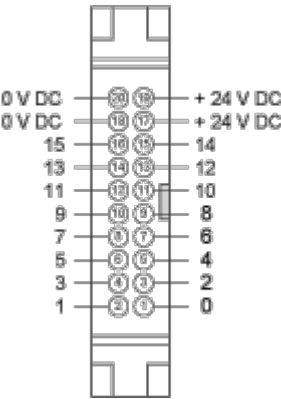
Mounting

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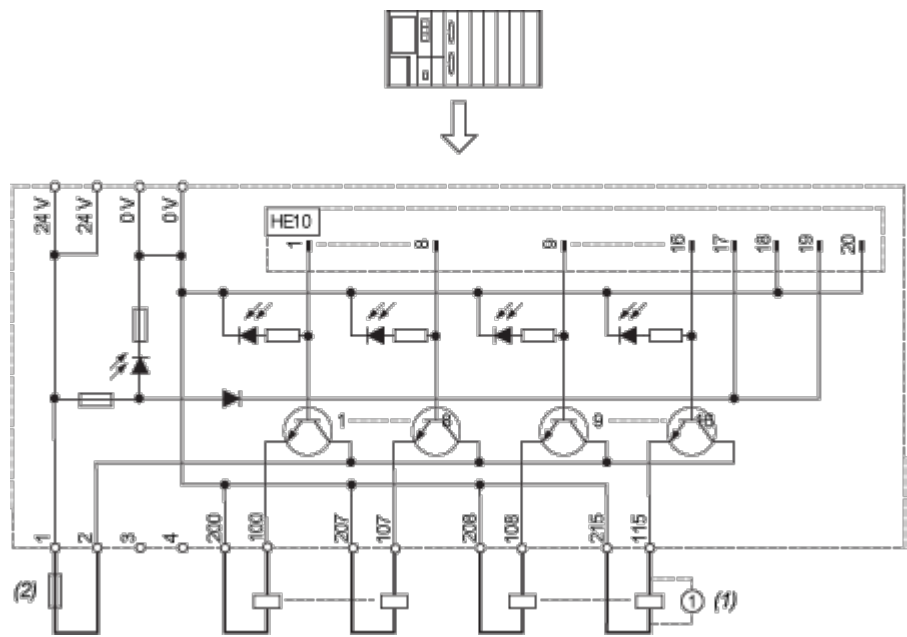


Connections and Schema

HE10 16 Channels



Wiring Diagram

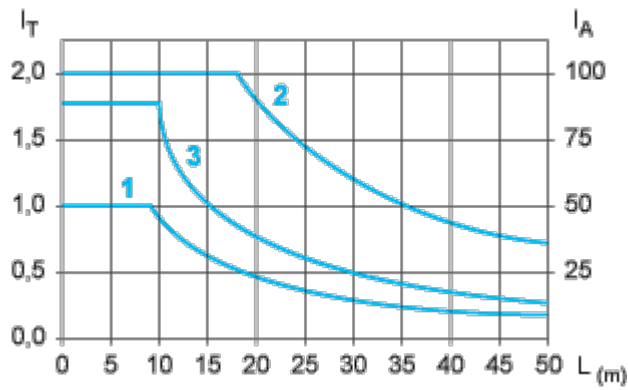


- (1) Inductive load
- (2) AB1FUSE435U5X + quick acting FUSE 5 x 20 type F.

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.