

Product datasheet

Specifications



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

Local distributor code: 402703730 ABE7S16S2B0

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
Number of terminal per channel	2
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	8 A
Current per channel	0.5 A for preactuator end
Minimum switching current	1 mA
Drop-out voltage	0.6 V (preactuator end)
Maximum switching current	500 mA DC-12 500 mA DC-13
Maximum tungsten load	<10 W DC-6
Maximum residual current	0.3 mA preactuator end
Fault type	Overload Short-circuit
Fault indication	Yes
Switchable inductive energy L/R	<= 400(U.I) ms
Maximum circuit breaker threshold	0.75 A

Response time	<= 0.02 ms from state 1 to 0 <= 0.1 ms from state 0 to 1
Switching frequency	< 0.6/LI ² Hz
Installation category	II conforming to IEC 60664-1
Tightening torque	0.6 N.m with flat Ø 3.5 mm screwdriver
Width	206 mm
Net weight	0.405 kg

Environment

Product certifications	UL GL CSA LROS (Lloyds register of shipping) BV DNV 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 (26000000...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 Weight	456 g
Package 1 Height	7 cm
Package 1 width	8.2 cm
Package 1 Length	21 cm
Unit Type of Package 2	S03
Number of Units in Package 2	16
Package 2 Weight	7.971 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

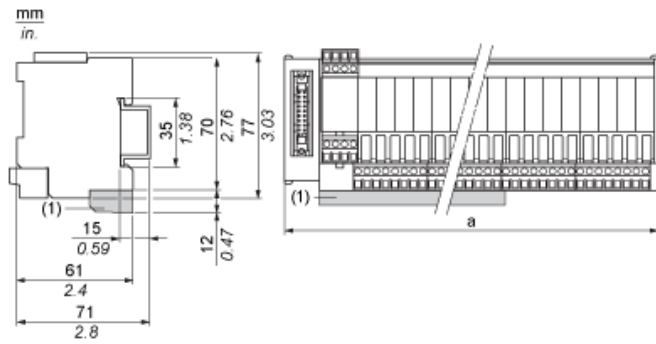
Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration

Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Contractual warranty

Warranty	18 months
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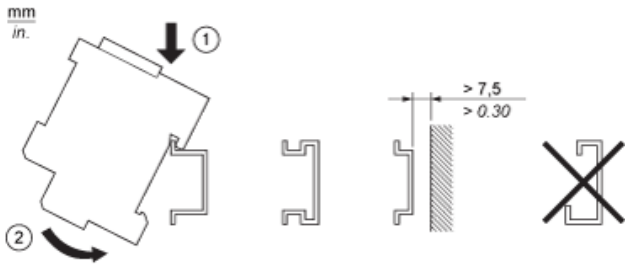
Dimensions



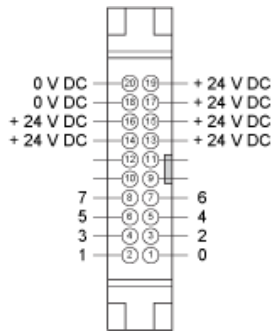
(1) ABE7BV20 / ABE7BV20E

ABE7	a in mm	a in in.
S08S2B0 / S08S2B0E	125	4.92
S08S2B1 / S08S2B1E	206	8.11
S16S2B0 / S16S2B0E	206	8.11

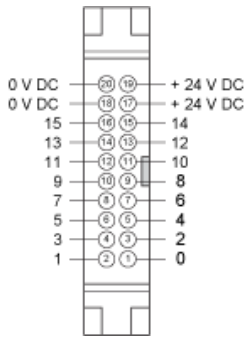
Mounting



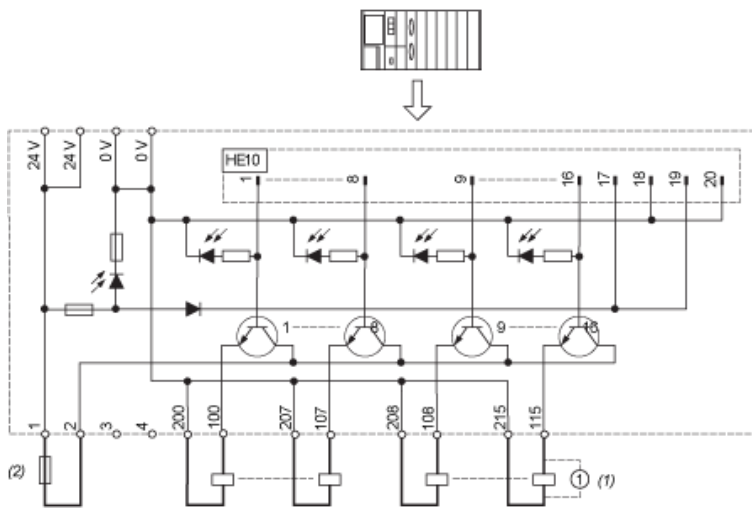
HE10 8 Channels



HE10 16 Channels



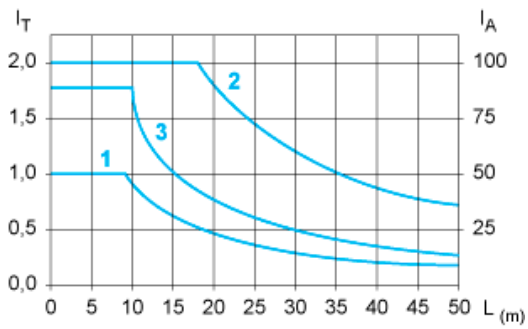
Wiring Diagram



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

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.