



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)
Width	206 mm
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	$\leq 400(U.I)$ 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 $\varnothing 3.5$ mm screwdriver
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

Package 1 Weight	0.459 kg
Package 1 Height	0.800 dm
Package 1 width	2.150 dm
Package 1 Length	0.650 dm

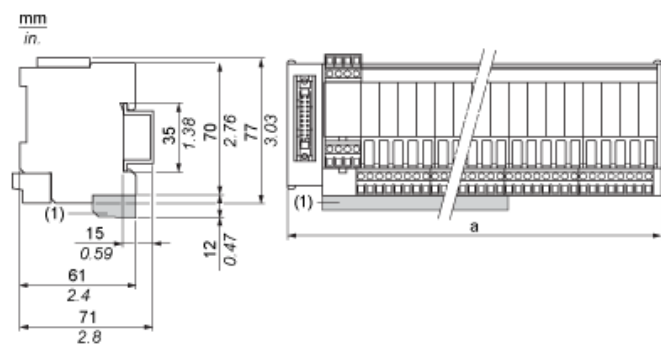
Offer Sustainability

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



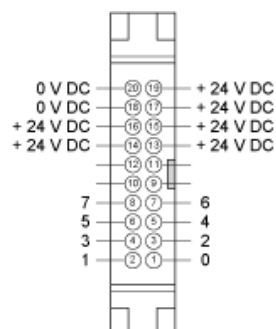
(1) ABE7BV20 / ABE7BV20E

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

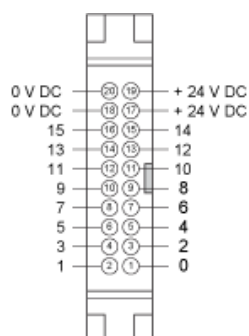
Mounting



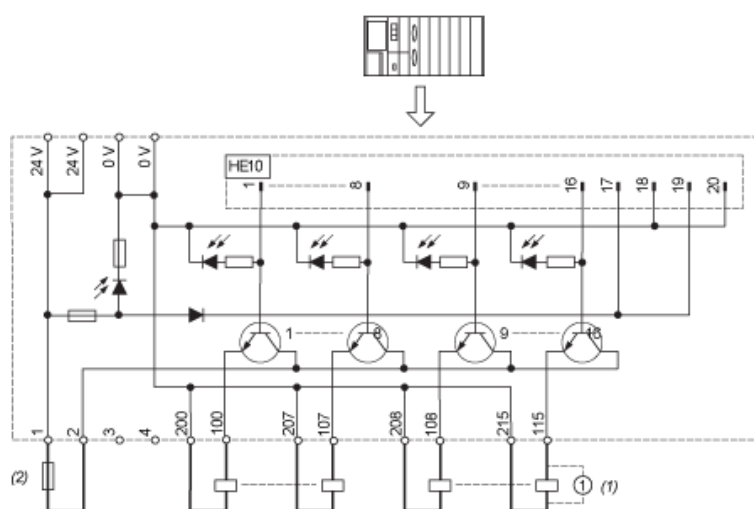
HE10 8 Channels



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.