



### Main

Range of Product	Modicon ABE7
Product or Component Type	Electromechanical output relay sub-base
[Us] rated supply voltage	24 V DC PLC end
Number of Channels	8
Number of terminal per channel	2

### Complementary

Terminal block type	Removable
Polarity distribution	Volt-free
Fixing mode	By clips 35 mm symmetrical DIN rail) By screws solid plate with fixing kit)
Maximum current per output common	10 A
Current per channel	5 A preactuator end
Minimum switching current	10 mA $\geq$ 5 V
Drop-out voltage	2.4 V 68 °F (20 °C) PLC end)
Switching frequency	$\leq$ 0.5 Hz $\leq$ 10 Hz
Threshold tripping voltage	19.7 V 104 °F (40 °C)
Drop-out current	1 mA 68 °F (20 °C)
Maximum power dissipation per channel in W	0.36 W PLC end)
Contacts type and composition	1 NO preactuator end
Maximum switching voltage	250 V AC 50/60 Hz IEC 60947-5-1 30 V DC IEC 60947-5-1
Electrical durability	500000 Cycles 600 mA 24 V DC-13 10 ms preactuator end) 500000 Cycles 1500 mA 230 V AC-12 preactuator end) 500000 Cycles 1500 mA 24 V DC-12 preactuator end) 500000 cycles 900 mA 230 V AC-15 preactuator end)
Electrical reliability	1e-008
Operating time	$\leq$ 10 ms coil energisation and NO closing $\leq$ 5 ms coil de-energisation and NO opening
Contact bounce time	$\leq$ 5 ms 1 NO
Operating rate in Hz	10 Hz no load 0.5 Hz at le
Mechanical durability	20000000 cycles
[Uimp] rated impulse withstand voltage	2.5 kV IEC 60947-1
[Ui] Rated Insulation Voltage	2000 V
Installation category	II IEC 60664-1
Tightening torque	5.31 lbf.in (0.6 N.m) flat $\varnothing$ 3.5 mm
Width	4.92 in (125 mm)
Net Weight	0.99 lb(US) (0.448 kg)

## Environment

Max immunity to microbreaks	5 ms
Dielectric strength	2000 V IEC 60947-1
Product Certifications	UL[RETURN]DNV[RETURN]CSA[RETURN]GL[RETURN]EAC
IP degree of protection	IP2X conforming to IEC 60529
Protective treatment	TC
Resistance to incandescent wire	1382 °F (750 °C) 30 s IEC 60695-2-11
Shock resistance	15 gn 11 ms IEC 60068-2-27
Resistance to radiated fields	9.14 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	22375-INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	3389110545265
Returnability	No
Country of origin	LV

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.83 in (7.2 cm)
Package 1 Width	3.23 in (8.2 cm)
Package 1 Length	5.39 in (13.7 cm)
Package 1 Weight	12.52 oz (355.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	9
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	7.87 lb(US) (3.572 kg)

## Offer Sustainability

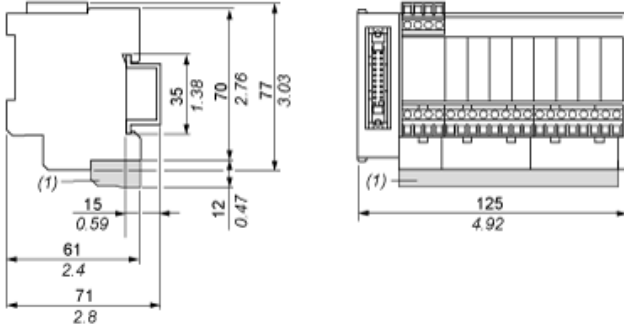
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
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

mm  
in.

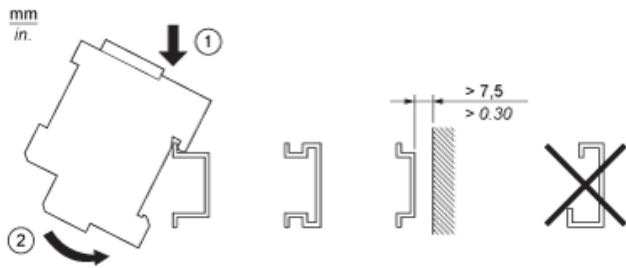


(1) ABE7BV10 / ABE7BV10E

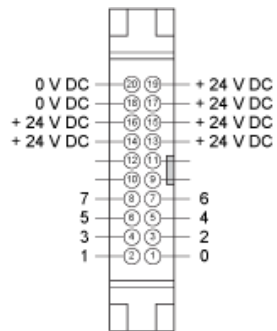
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Mounting

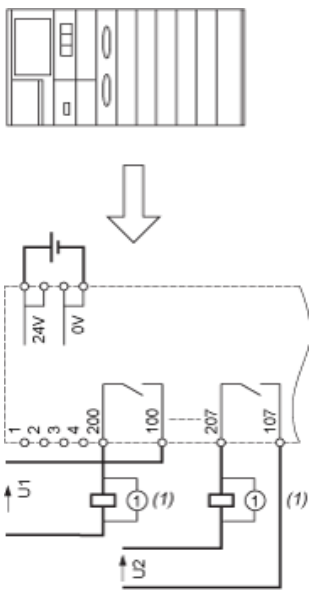
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HE10 8 Channels



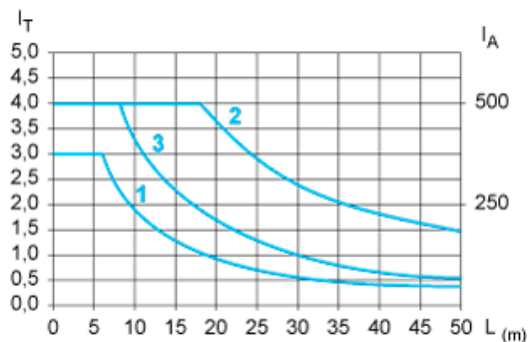
Wiring Diagram



(1) Inductive load

Curves for Determining Cable Type and Length According to the Current

8-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.  $0.08 \text{ mm}^2$  (AWG 28).

(2) TSXCDP••3 cables with c.s.a.  $0.34 \text{ mm}^2$  (AWG 22).

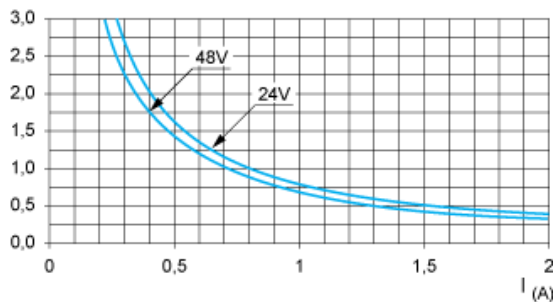
(3) Cables with c.s.a.  $0.13 \text{ mm}^2$  (AWG 26).

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.

Electrical Durability (in Millions of Operating Cycles) Conforming to IEC 60947-5-1

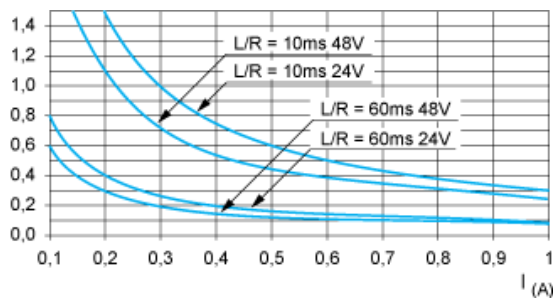
DC Loads

DC12 curves



DC12control of resistive loads and of solid state loads isolated by optocoupler,  $I/R \leq 1 \text{ ms}$ .

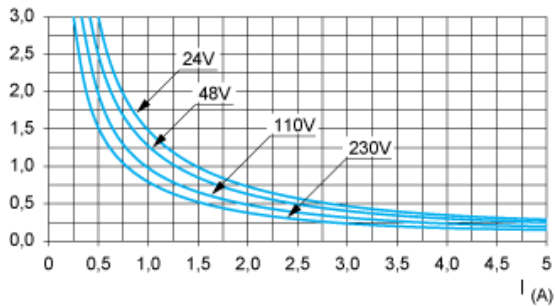
DC13 curves



DC13switching electromagnets,  $L/R \leq 2 \times (U_e \times I_e)$  in ms,  $U_e$ : rated operational voltage,  $I_e$ : rated operational current (with a protective diode on the load, DC12 curves must be used with a coefficient of 0.9 applied to the number in millions of operating cycles)

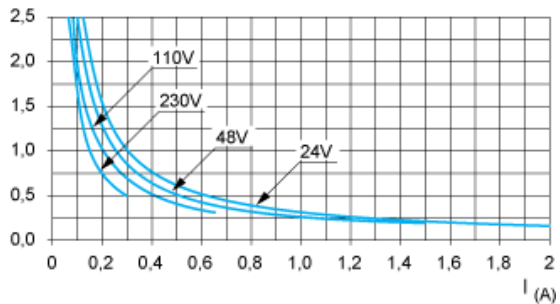
## AC Loads

### AC12 curves



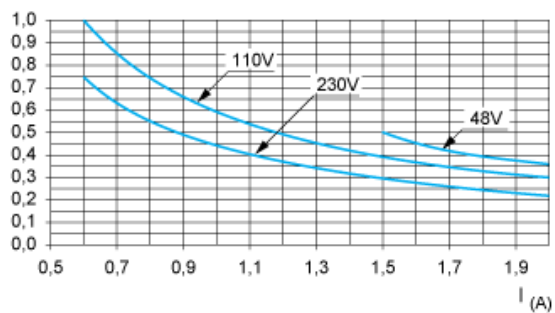
AC12control of resistive loads and of solid state loads isolated by optocoupler,  $\cos \phi \geq 0.9$ .

### AC14 curves



AC14control of small electromagnetic loads  $\leq 72$  VA, make:  $\cos \phi = 0.3$ , break:  $\cos \phi = 0.3$ .

### AC15 curves



AC15control of electromagnetic loads  $> 72$  VA, make:  $\cos \phi = 0.7$ , break:  $\cos \phi = 0.4$ .