

# ABE7P16T318

sub-base for plug-in relay ABE7 - 16 channels - fuses - isolator - relay 12.5 mm



## Main

Range of Product	Modicon ABE7
Product or Component Type	Sub-base for plug-in relay
Sub-base type	Output sub-base
[Us] rated supply voltage	19...30 V IEC 61131-2
Number of Channels	16
Connections - terminals	Screw type terminals, 1 x 0.09...1 x 1.5 mm <sup>2</sup> AWG 28...AWG 16) flexible with cable end Screw type terminals, 1 x 0.14...1 x 2.5 mm <sup>2</sup> AWG 26...AWG 12) solid Screw type terminals, 1 x 0.14...1 x 2.5 mm <sup>2</sup> AWG 26...AWG 14) flexible without cable end Screw type terminals, 2 x 0.09...2 x 0.75 mm <sup>2</sup> AWG 28...AWG 20) flexible with cable end Screw type terminals, 2 x 0.2...2 x 2.5 mm <sup>2</sup> AWG 24...AWG 14) solid
Channel additional information	1 switch disconnecter per channel

## Complementary

Supply voltage type	DC
Product Compatibility	ABS7SC3E ABS7A3M ABE7ACC21 ABR7S33
Status LED	Channel status 1 LED per channel Green) Power ON 1 LED Green)
Polarity distribution	Polarity distribution contact common per 2 groups of 4 channels
Short-circuit protection	1 A internal fuse, 5 x 20 mm, fast blow PLC end) 2 A fuse per channel, 5 x 20 mm, fast blow output circuit)
Fixing mode	By clips 35 mm symmetrical DIN rail) By screws solid plate with fixing kit)
Maximum supply current	1 A
Voltage drop on power supply fuse	0.3 V
Maximum current per output common	16 A
[Ui] rated insulation voltage	300 V coil circuit/contact circuits IEC 60947-1 2000 V terminals/mounting rails
[Uimp] rated impulse withstand voltage	2.5 kV
Installation category	II IEC 60664-1
Tightening torque	5.31 lbf.in (0.6 N.m) flat Ø 3.5 mm
Width	10.71 in (272 mm)
Height	3.50 in (89 mm)
Depth	2.91 in (74 mm)
Net Weight	2.20 lb(US) (1 kg)

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## Environment

Product Certifications	BV CSA UL GL DNV LROS (Lloyds register of shipping) EAC
IP degree of protection	IP2x conforming to IEC 60529
Resistance to incandescent wire	1382 °F (750 °C) 30 s IEC 60695-2-11
Shock resistance	15 gn 11 ms IEC 60068-2-27
Vibration resistance	2 gn 10...150 Hz)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	9.14 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	3389110705126
Nbr. of units in pkg.	1
Package weight(Lbs)	31.92 oz (905 g)
Returnability	No
Country of origin	LV

## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	3.35 in (8.5 cm)
Package 1 width	3.82 in (9.7 cm)
Package 1 Length	11.50 in (29.2 cm)
Unit Type of Package 2	S03
Number of Units in Package 2	6
Package 2 Weight	13.19 lb(US) (5.985 kg)
Package 2 Height	11.81 in (30 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

## 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>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

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Circularity Profile

 [End Of Life Information](#)

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WEEE

The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

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### Contractual warranty

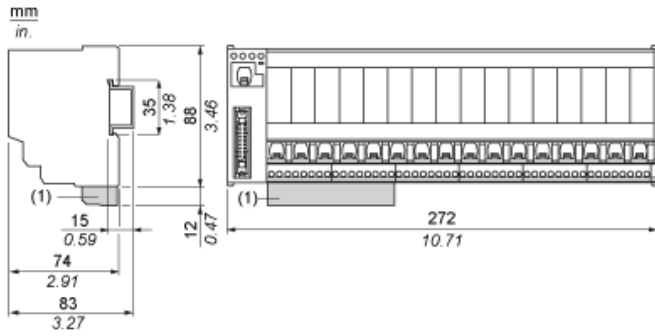
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Warranty

18 months

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Dimensions

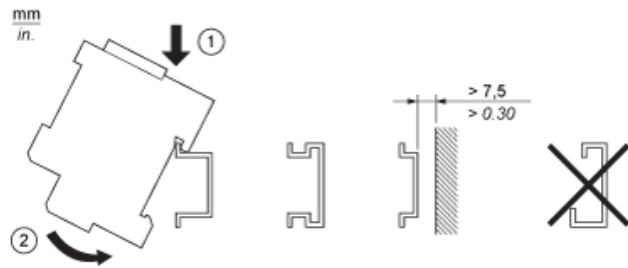


(1) ABE7BV10 / BV20, ABE7BV10E / BV20E

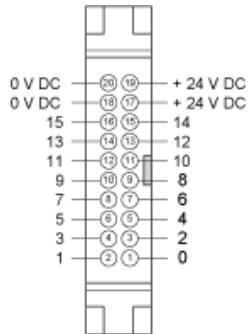
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Mounting

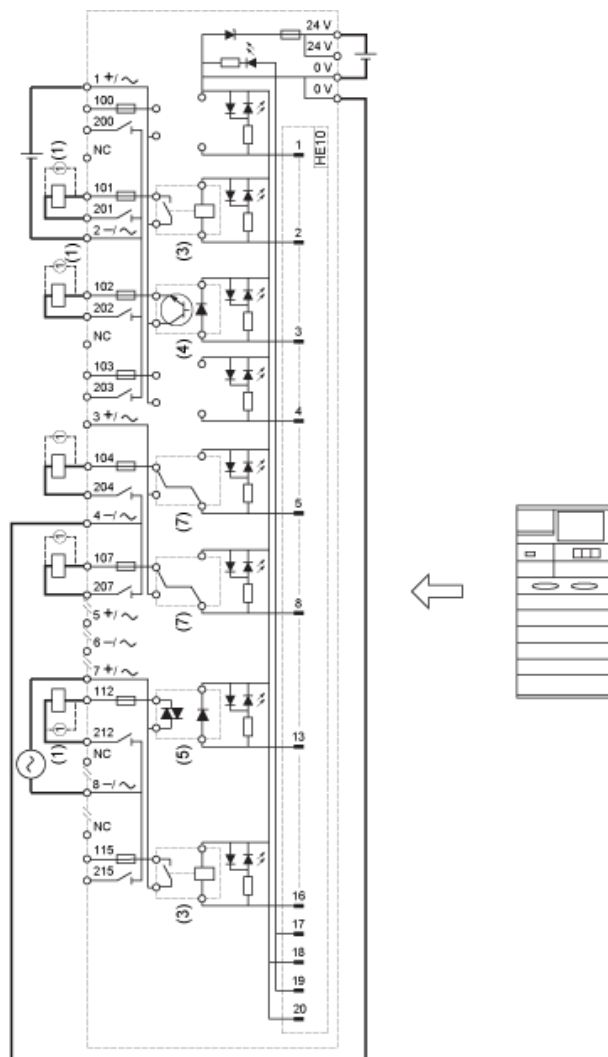
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HE10 16 Channels



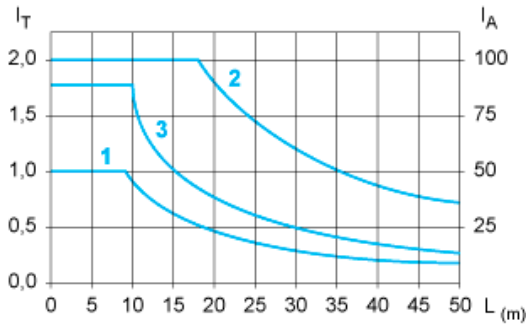
Wiring Diagram



- (1) Inductive load
- (3) ABR7S33 (1 "OF" "DPDT") Ith = 10 A (supplied)
- (4) ABS7SC3E (5...48 VDC) I<sub>max.</sub> = 1.5 A (not supplied)
- (5) ABS7SA3M (24...240 VAC) I<sub>max.</sub> = 1.5 A (not supplied)
- (7) ABE7ACC21 (24 VDC) I<sub>max.</sub> = 0.5 A (not supplied)

Curves for Determining Cable Type and Length According to the Current

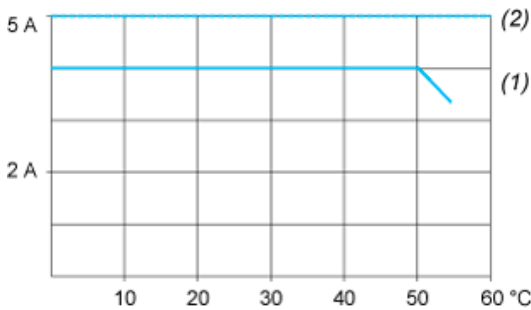
16-channel Sub-base



- 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.

Temperature Derating Curves

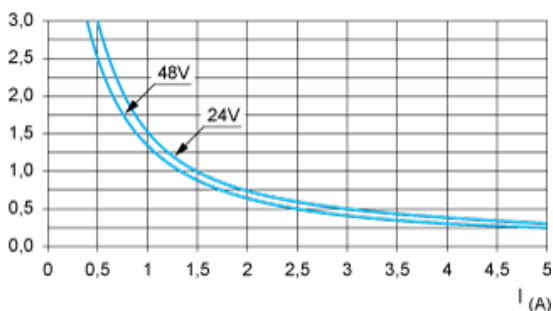


- (1) 100 % of channels used
- (2) 50 % of channels used

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

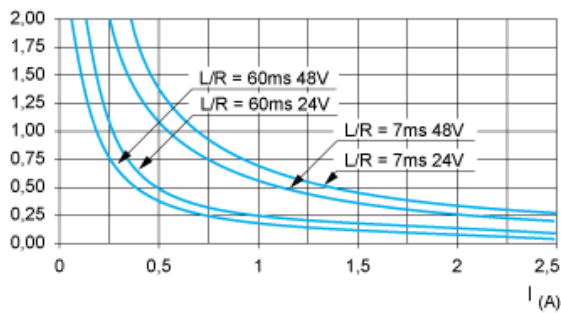
DC Loads

DC12 curves



DC12control of resistive loads and of solid state loads isolated by optocoupler, I/R ≤ 1 ms.

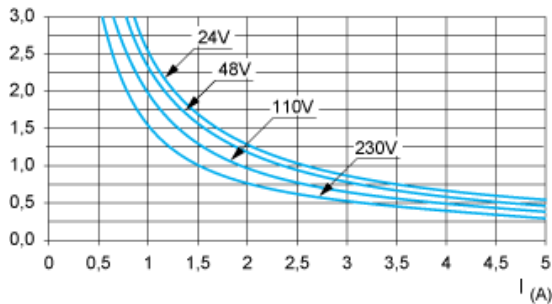
### DC13 curves



DC13 Switching 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)

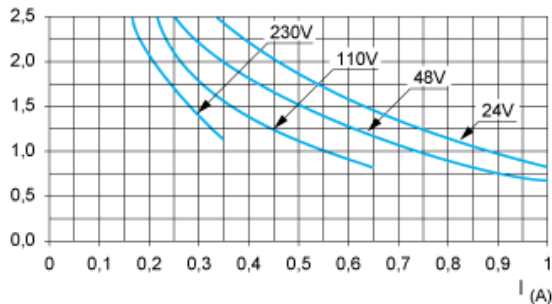
### AC Loads

#### AC12 curves



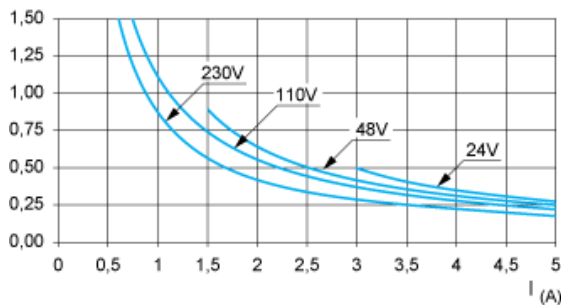
AC12control of resistive loads and of solid state loads isolated by optocoupler,  $\cos \phi \geq 0.9$ .

#### AC14 curves



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

#### AC15 curves



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