



## Main

|                                |   |
|--------------------------------|---|
| Range of product               | Modicon ABE7  |
| Product or component type      | Passive discrete I/O sub-base   |
| Sub-base type                  | I/O sub-base  |
| [Us] rated supply voltage      | 19...30 V conforming to IEC 61131-2   |
| Number of channels             | 16  |
| Number of terminal per channel | 2   |
| 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<br>Screw type terminals, 1 x 0.14...1 x 2.5 mm <sup>2</sup> (AWG 26...AWG 12) solid<br>Screw type terminals, 1 x 0.14...1 x 2.5 mm <sup>2</sup> (AWG 26...AWG 14) flexible without cable end<br>Screw type terminals, 2 x 0.09...2 x 0.75 mm <sup>2</sup> (AWG 28...AWG 20) flexible with cable end<br>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   |
| Number of horizontal rows         | 2  |
| Status LED                        | 1 LED per channel (green)channel status<br>1 LED (green)power ON                 |
| Polarity distribution             | 0 V or 24 V  |
| Short-circuit protection          | 2 A internal fuse, 5 x 20 mm, fast blow (PLC end)                                |
| Connector type                    | HE-10  |
| Pin number                        | 20 pins  |
| Fixing mode                       | By clips (35 mm symmetrical DIN rail)<br>By screws (solid plate with fixing kit) |
| Maximum supply current            | 1.8 A  |
| Current per channel               | 0.5 A  |
| Maximum current per output common | 1.8 A  |
| Voltage drop on power supply fuse | 0.3 V  |
| [Ui] rated insulation voltage     | 2000 V   |
| Installation category             | II conforming to IEC 60664-1   |
| Tightening torque                 | 0.6 N.m with flat Ø 3.5 mm screwdriver   |
| Width                             | 125 mm   |
| Net weight                        | 0.375 kg   |






## Environment

|                                       |  |
|---------------------------------------|--|
| Product certifications                | GL<br>BV<br>CSA<br>UL<br>DNV<br>LROS (Lloyds register of shipping)<br>EAC                            |
| IP degree of protection               | IP2x conforming to IEC 60529   |
| Resistance to incandescent wire       | 750 °C conforming to IEC 60695-2-11  |
| Shock resistance                      | 15 gn for 11 ms conforming to IEC 60068-2-27   |
| Vibration resistance                  | 2 gn (f= 10...150 Hz) conforming to IEC 60068-2-6  |
| Resistance to electrostatic discharge | 4 kV (contact) level 3 conforming to IEC 61000-4-2<br>8 kV (air) level 3 conforming to IEC 61000-4-2 |
| 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             | 360 g    |
| Package 1 Height             | 7.1 cm   |
| Package 1 width              | 8.2 cm   |
| Package 1 Length             | 13.7 cm  |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 9        |
| Package 2 Weight             | 3.618 kg |
| Package 2 Height             | 15 cm    |
| Package 2 width              | 30 cm    |
| Package 2 Length             | 40 cm    |

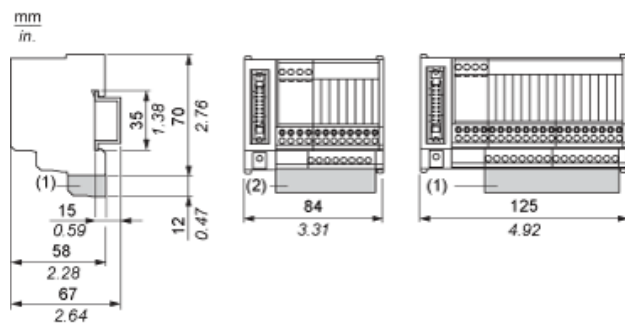
## Offer Sustainability

|                            |  |
|----------------------------|--|
| Sustainable offer status   | Green Premium product  |
| 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>  |
| 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 |
|----------|-----------|

## Dimensions

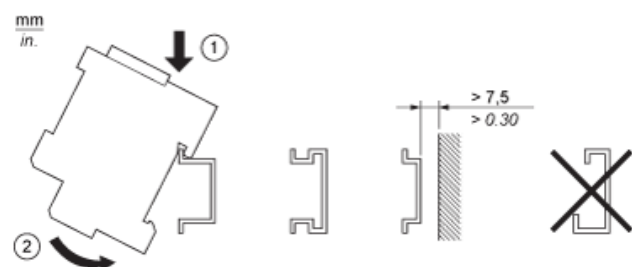


- (1) ABE7BV10 / BV20, ABE7BV10E / BV20E  
(2) ABE7BV10, ABE7BV10E

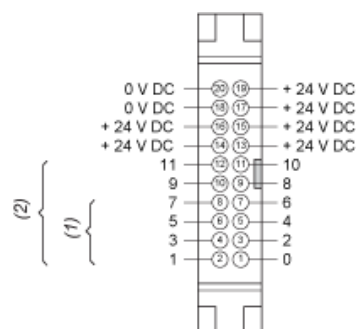
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Mounting

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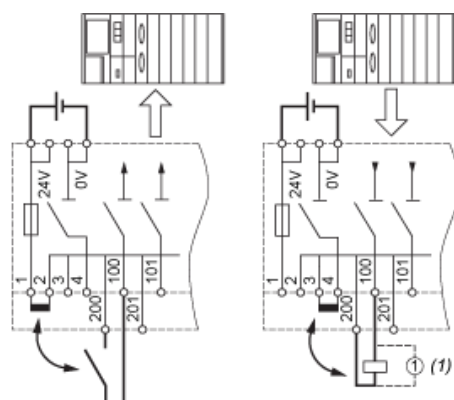


## HE10 8/12 Channels



- (1) 8 channels
- (2) 12 channels

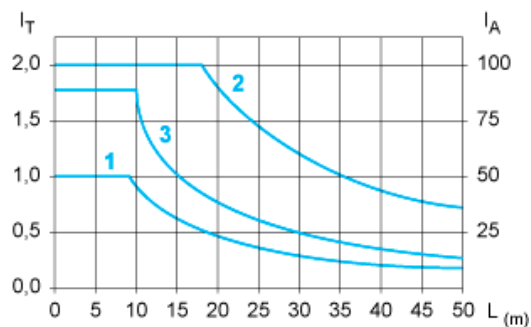
## Wiring Diagram



- (1) Inductive load

## 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.  $0.08 \text{ mm}^2$  (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.