



## Main

|                                |  |
|--------------------------------|--|
| Range of product               | Modicon ABE7   |
| Product or component type      | Sub-base for plug-in relay   |
| Sub-base type                  | Input 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> , 0.09...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> , 0.14...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> , 0.14...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> , 0.09...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> , 0.2...2.5 mm <sup>2</sup> (AWG 24...AWG 14) solid |

## Complementary

|  |  |
|--|--|
| Supply voltage type                    | DC   |
| Product compatibility                  | ABS7S33E<br>ABR7<br>ABS7E  |
| Status LED                             | 1 LED per channel (green)channel status<br>1 LED (green)power ON                                 |
| Isolation PLC/operative part           | Yes  |
| Polarity distribution                  | Volt-free  |
| Short-circuit protection               | 1 A internal fuse, 5 x 20 mm, fast blow (PLC end)  |
| Fixing mode                            | By clips (35 mm symmetrical DIN rail)<br>By screws (solid plate with fixing kit)                 |
| Maximum supply current                 | 1 A  |
| Voltage drop on power supply fuse      | 0.3 V  |
| [Uimp] rated impulse withstand voltage | 2.5 kV   |
| [Ui] rated insulation voltage          | 300 V coil circuit/contact circuits conforming to IEC 60947-1<br>2000 V terminals/mounting rails |
| Installation category                  | II conforming to IEC 60664-1   |
| Tightening torque                      | 0.6 N.m with flat Ø 3.5 mm screwdriver   |
| Net weight                             | 0.85 kg  |

## Environment

|                                       |  |
|---------------------------------------|--|
| Product certifications                | GL<br>DNV<br>LROS (Lloyds register of shipping)<br>CSA<br>UL<br>BV<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             | 774 g   |
| Package 1 Height             | 8.5 cm  |
| Package 1 width              | 10 cm   |
| Package 1 Length             | 29.2 cm |
| Unit Type of Package 2       | S03     |
| Number of Units in Package 2 | 6       |
| Package 2 Weight             | 5.29 kg |
| Package 2 Height             | 30 cm   |
| Package 2 width              | 30 cm   |
| Package 2 Length             | 40 cm   |

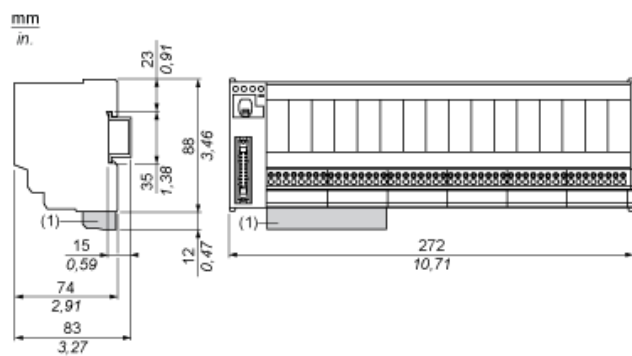
## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <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

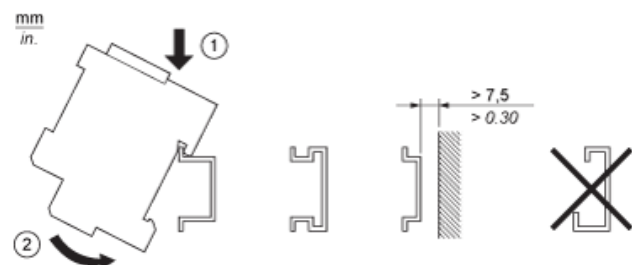


(1) ABE7BV10 / BV20, ABE7BV10E / BV20E

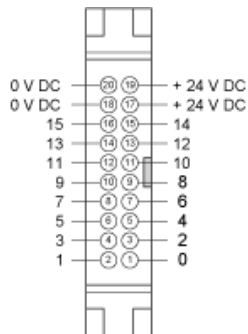
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Mounting

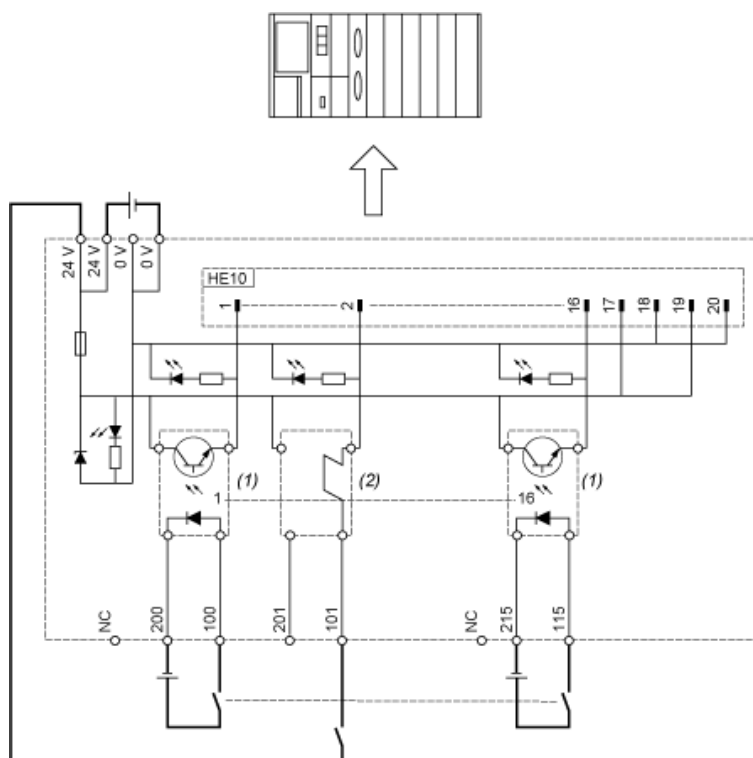
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## HE10 16 Channels



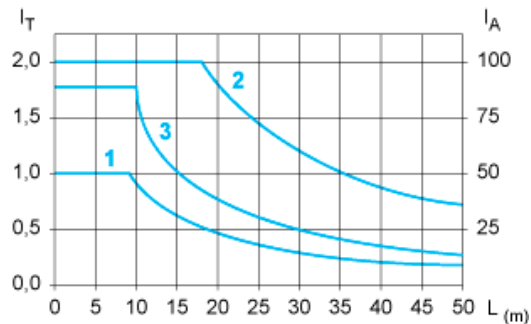
## Wiring Diagram



- (1) ABS7EC3AL (5 VDC TTL) / ABS7EC3B2 (24 VDC) / ABS7EC3E2 (48 VDC) / ABS7EA3E5 (48 VAC) / ABS7EA3F5 (110/130 VAC) / ABS7EA3M5 (230/240 VAC) (not supplied)
- (2) ABE7ACC21 (24 VDC) (not supplied / not isolated)

## 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.