



## 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 conforming to 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<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                                                                                                                 |
| Product compatibility                  | ABR7S2.<br>ABS7SA2.<br>ABS7SC2.<br>ABE7ACC20                                                                       |
| Status LED                             | 1 LED per channel (green)channel status<br>1 LED (green)power ON                                                   |
| Polarity distribution                  | Volt-free                                                                                                          |
| Short-circuit protection               | 1 A internal fuse, 5 x 20 mm, fast blow (PLC end)<br>0.5 A fuse per channel, 5 x 20 mm, fast blow (output circuit) |
| 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                                                                                                              |
| Maximum current per output common      | 16 A                                                                                                               |
| [Ui] rated insulation voltage          | 300 V coil circuit/contact circuits conforming to IEC 60947-1<br>2000 V terminals/mounting rails                   |
| [Uimp] rated impulse withstand voltage | 2.5 kV                                                                                                             |
| Installation category                  | II conforming to IEC 60664-1                                                                                       |
| Tightening torque                      | 0.6 N.m with flat Ø 3.5 mm screwdriver                                                                             |
| Net weight                             | 0.675 kg                                                                                                           |

## Environment

|                                       |                                                                                                      |
|---------------------------------------|------------------------------------------------------------------------------------------------------|
| Product certifications                | BV<br>CSA<br>GL<br>DNV<br>LROS (Lloyds register of shipping)<br>UL<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             | 651 g    |
| Package 1 Height             | 8 cm     |
| Package 1 width              | 9.6 cm   |
| Package 1 Length             | 22 cm    |
| Unit Type of Package 2       | S03      |
| Number of Units in Package 2 | 12       |
| Package 2 Weight             | 8.305 kg |
| Package 2 Height             | 30 cm    |
| Package 2 width              | 30 cm    |
| Package 2 Length             | 40 cm    |

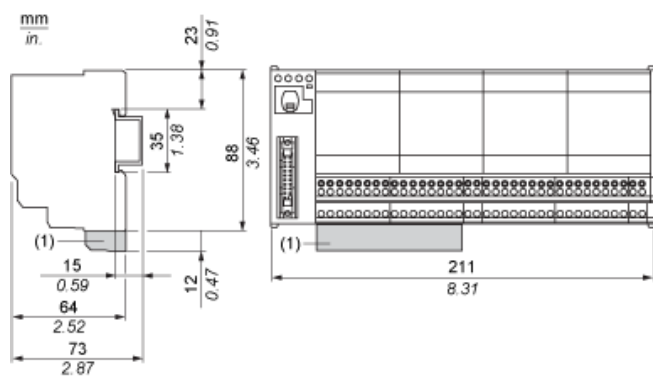
## Offer Sustainability

|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 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 |
|----------|-----------|

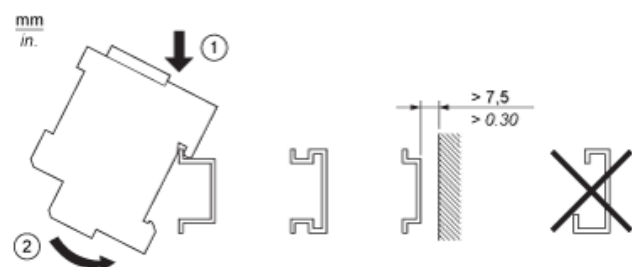
## Dimensions



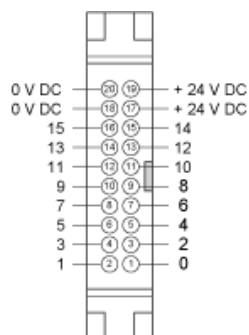
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Mounting

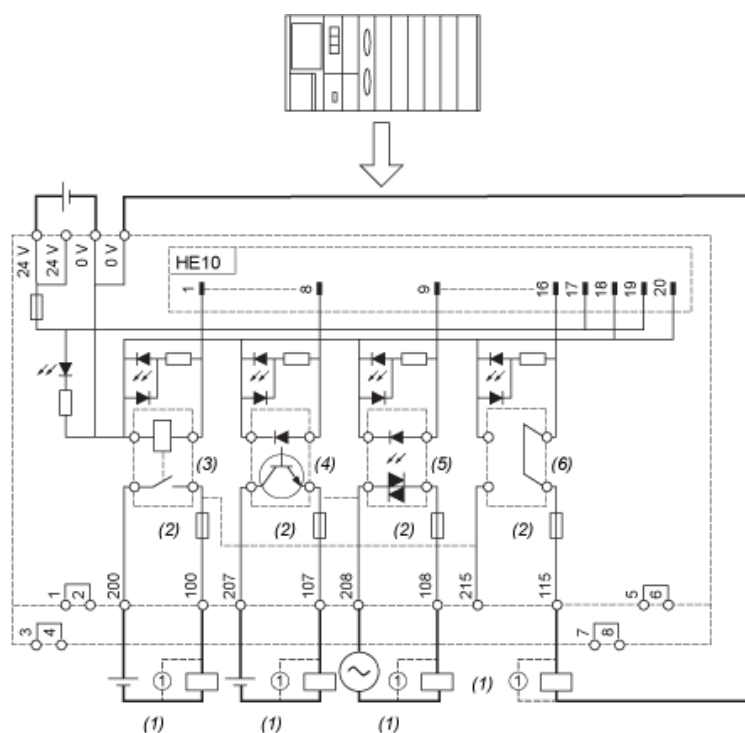
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## HE10 16 Channels



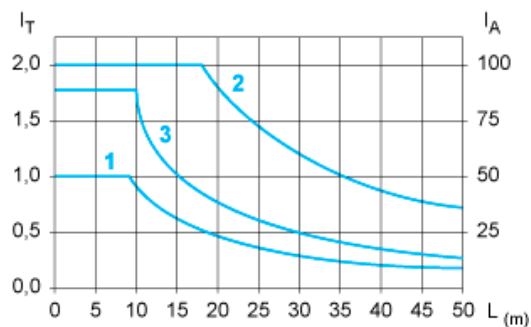
## Wiring Diagram



- (1) Inductive load
- (2) Fuse only for ABE7P16T214
- (3) ABR7S21 (1 "F"/SPDT) (not supplied)
- (4) ABS7SC2E (5...48 VDC) I max. = 0.5 A (not supplied)
- (5) ABS7SA2M (24...240 VAC) I max. = 0.5 A (not supplied)
- (6) ABE7ACC20 (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.

### Temperature Derating Curves

