# Product data sheet
## Characteristics

# ABE7R16S210
## sub-base - soldered electromechanical relays ABE7 - 16 channels - relay 10 mm

Green Premium

Product availability: Stock - Normally stocked in distribution facility

## Main

| | |
|---|---|
| Range of product | Advantys Telefast ABE7 |
| Product or component type | Electromechanical output relay sub-base |
| [Us] rated supply voltage | 24 V DC (PLC end) |
| Number of channels | 16 |
| Number of terminal per channel | 2 |

## Complementary

| | |
|---|---|
| Terminal block type | Removable |
| Polarity distribution | Volt-free |
| Fixing mode | By clips on 35 mm symmetrical DIN rail<br>By screws on solid plate with fixing kit |
| Width | 8.11 in (206 mm) |
| Current per output common | <= 10 A |
| Current per channel | 5 A (preactuator end) |
| Minimum switching current | 10 mA at >= 5 V |
| Drop-out voltage | 2.4 V at 68 °F (20 °C) (PLC end) |
| Switching frequency | <= 0.5 Hz<br><= 10 Hz |
| Threshold tripping voltage | At 40 °C |
| Drop-out current | 1 mA at 68 °F (20 °C) |
| 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 conforming to IEC 60947-5-1<br>30 V DC conforming to IEC 60947-5-1 |
| Electrical durability | 500000 cycles, maximum switching current: 1500 mA at 230 V AC-12 (preactuator end)<br>500000 cycles, maximum switching current: 1500 mA at 24 V DC-12 (preactuator end)<br>500000 cycles, maximum switching current: 600 mA at 24 V DC-13 10 ms (preactuator end)<br>500000 cycles, maximum switching current: 900 mA at 230 V AC-15 (preactuator end) |
| Electrical reliability | 1e-008 |
| Operating time | <= 10 ms between coil energisation and NO closing<br><= 5 ms between coil de-energisation and NO opening |
| Contact bounce time | <= 5 ms 1 NO |
| Operating rate in Hz | 10 Hz no load<br>0.5 Hz at Ie |
| Mechanical durability | 20000000 cycles |
| [Uimp] rated impulse withstand voltage | 2.5 kV conforming to IEC 60947-1 |
| [Ui] rated insulation voltage | 2000 V |
| Installation category | II conforming to IEC 60664-1 |
| Tightening torque | 5.31 lbf.in (0.6 N.m) (withflat Ø 3.5 mm |
| Product weight | 0.89 lb(US) (0.405 kg) |

## Environment

| | |
|---|---|
| Max immunity to microbreaks | <= 5 ms |
| Dielectric strength | 2000 V conforming to IEC 60947-1 |
| Product certifications | BV<br>CSA<br>DNV<br>GL<br>LROS (Lloyds register of shipping)<br>UL |
| IP degree of protection | IP2x conforming to IEC 60529 |
| Protective treatment | TC |
| Resistance to incandescent wire | 1382 °F (750 °C), extinction time: < 30 s conforming to IEC 60695-2-11 |
| Shock resistance | 15 gn 11 ms conforming to IEC 60068-2-27 |
| Resistance to radiated fields | 9.14 V/yd (10 V/m) (26000000...1000000000 Hz) conforming to IEC 61000-4-3 level 3 |
| Resistance to fast transients | 2 kV conforming to IEC 61000-4-4 level 3 |
| Ambient air temperature for operation | 23...140 °F (-5...60 °C) conforming to IEC 61131-2 |
| Ambient air temperature for storage | -40...176 °F (-40...80 °C) conforming to IEC 61131-2 |
| Pollution degree | 2 conforming to IEC 60664-1 |

## Ordering and shipping details

| | |
|---|---|
| Category | 22375 - INTERFACE MODULE(ABA,R,S) |
| Discount Schedule | CP2 |
| GTIN | 00785901285830 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 1.3 |
| Returnability | Y |
| Country of origin | LV |

## Offer Sustainability

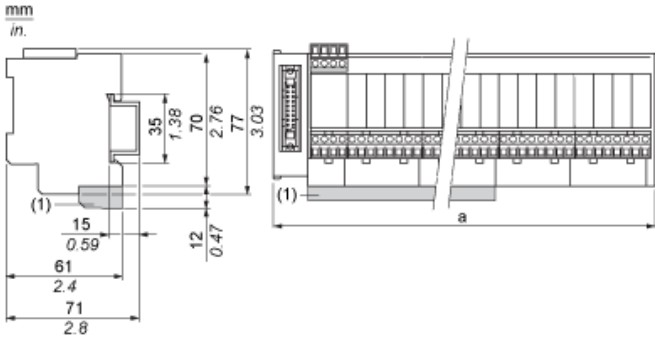
| | |
|---|---|
| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant - since 0841 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity |
| REACh | Reference not containing SVHC above the threshold |
| Product environmental profile | Available |
| Product end of life instructions | Available |
| California proposition 65 | WARNING: This product can expose you to chemicals including: |
| - - - - - - - Substance 1 | Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. |
| - - - - - - - More information | For more information go to www.p65warnings.ca.gov |

## Contractual warranty

| | |
|---|---|
| Warranty period | 18 months |

# ABE7R16S210

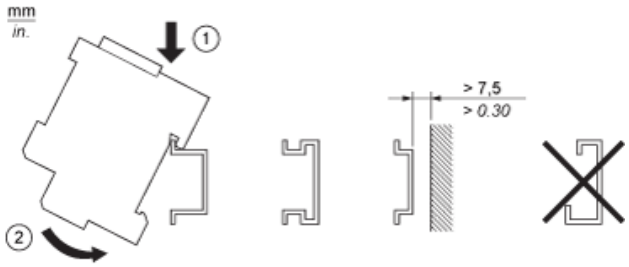
## Dimensions



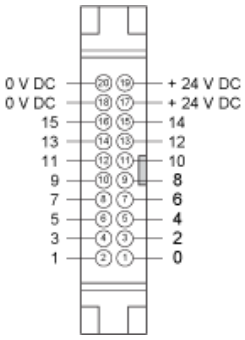

(1) ABE7BV20 / ABE7BV20E

| ABE7 | a in mm | a in in. |
|---|---|---|
| R16S111 / R16S111E | 125 | 4.92 |
| R16S21 / R16S21•E | 206 | 8.11 |

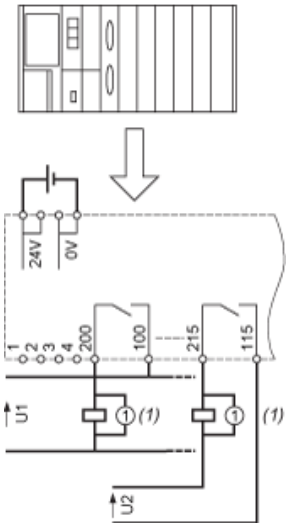
## Mounting



## HE10 16 Channels



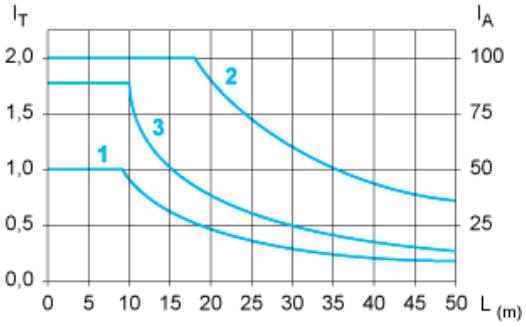

## Wiring Diagram




(1) Inductive load

## Curves for Determining Cable Type and Length According to the Current

### 16-channel Sub-base



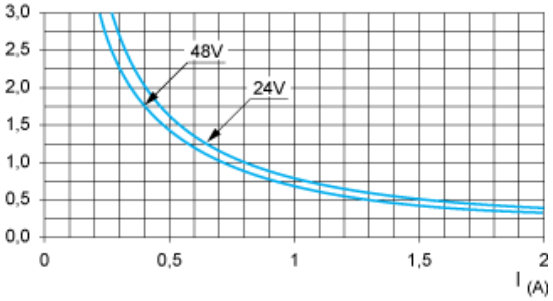

L Cable length
$I_T$ Total current per sub base (A)
$I_A$ Average current per channel (mA)
(1) TSXCDP••2 and ABFH20H••0 cables with c.s.a. 0.08 $mm^2$ (AWG 28).
(2) TSXCDP••3 cables with c.s.a. 0.34 $mm^2$ (AWG 22).
(3) Cables with c.s.a. 0.13 $mm^2$ (AWG 26).

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

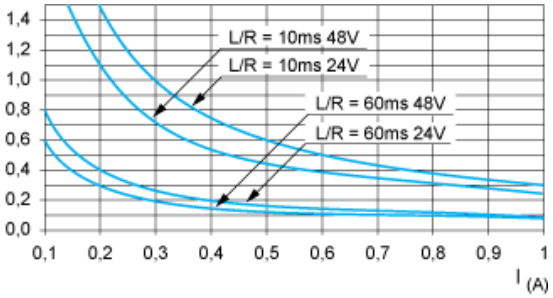
### DC Loads

DC12 curves




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

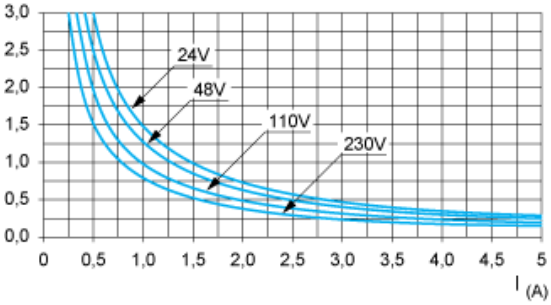
DC13 curves




DC13switching electromagnets, L/R ≤ 2 x (Ue x Ie) in ms, Ue: rated operational voltage, Ie: 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)

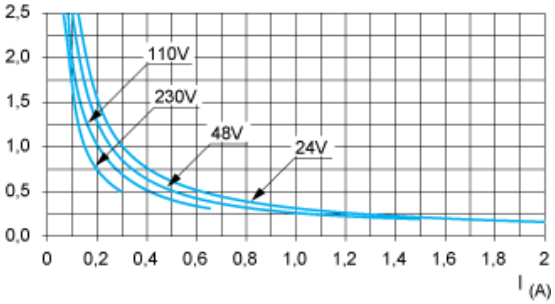
## AC Loads

AC12 curves



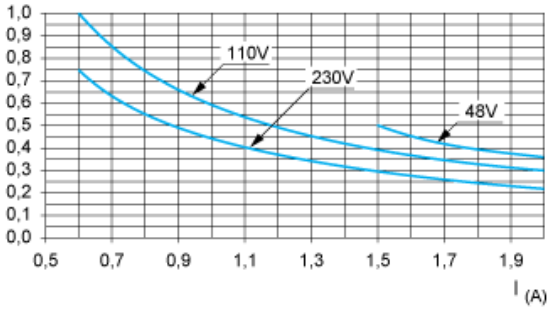

AC12control of resistive loads and of solid state loads isolated by optocoupler, cos ϕ ≥ 0.9.

AC14 curves




AC14control of small electromagnetic loads ≤ 72 VA, make: cos ϕ = 0.3, break: cos ϕ = 0.3.

AC15 curves




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

# Mouser Electronics

Authorized Distributor

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Schneider Electric:

ABE7R16S210