

# ABE7R16S111

sub-base - soldered electromechanical relays  
ABE7 - 16 channels - relay 5 mm

Product availability : Stock - Normally stocked in distribution facility



Price\* : 561.00 USD



## 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	1

## Complementary

Terminal block type	Removable
Polarity distribution	Polarity distribution contact common per group of 8 channels
Fixing mode	By clips on 35 mm symmetrical DIN rail By screws on solid plate with fixing kit
Width	4.92 in (125 mm)
Current per output common	$\leq 12$ A
Current per channel	2 A (preactuator end)
Minimum switching current	1 mA at $\geq 5$ V
Drop-out voltage	2.4 V at 68 °F (20 °C) (PLC end)
Switching frequency	$\leq 10$ Hz $\leq 0.5$ Hz
Threshold tripping voltage	At 40 °C
Drop-out current	0.5 mA at 68 °F (20 °C)
Power dissipation per channel in W	$\leq 0.22$ 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 30 V DC conforming to IEC 60947-5-1
Number of channel per common	8
Electrical durability	500000 cycles, maximum switching current: 200 mA at 24 V DC-13 10 ms (preactuator end) 500000 cycles, maximum switching current: 400 mA at 230 V AC-15 (preactuator end)

Disclaimer: 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

500000 cycles, maximum switching current: 600 mA at 230 V AC-12 (preactuator end)  
 500000 cycles, maximum switching current: 600 mA at 24 V DC-12 (preactuator end)

Electrical reliability	1e-008
Operating time	<= 10 ms between coil energisation and NO closing <= 6 ms between coil de-energisation and NO opening
Contact bounce time	<= 5 ms 1 NO
Operating rate in Hz	10 Hz no load 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) (with flat 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	LROS (Lloyds register of shipping) CSA DNV GL BV 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	00785901545279
Nbr. of units in pkg.	1
Package weight(Lbs)	0.7700000000000002
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 <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold <a href="#">Reference not containing SVHC above the threshold</a>
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.

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----- More information

For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

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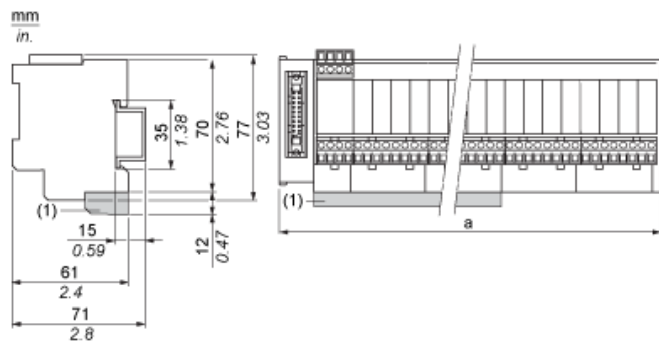
### Contractual warranty

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Warranty period	18 months
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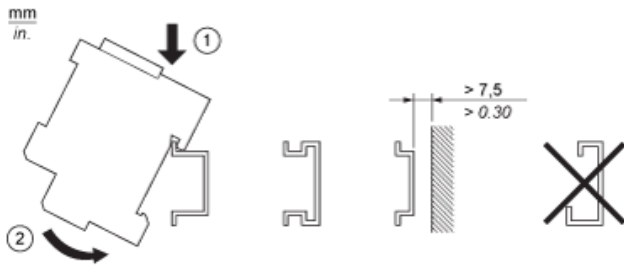
Dimensions



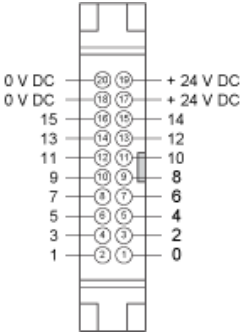
(1) ABE7BV20 / ABE7BV20E

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

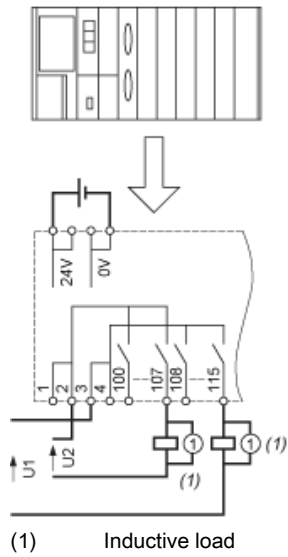
Mounting



HE10 16 Channels

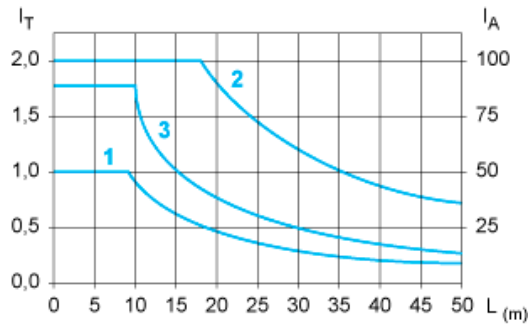


Wiring Diagram



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).

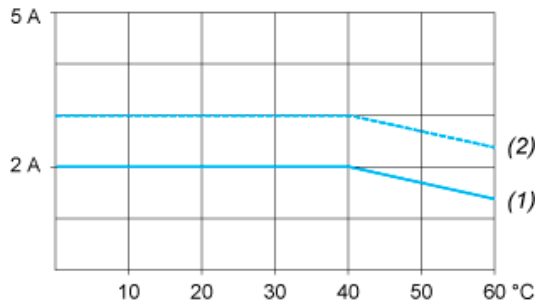
The curves are given for a voltage drop of 1 V in the cable. For n volts tolerance, multiply the length determined from the graph by n.



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Temperature Derating Curves

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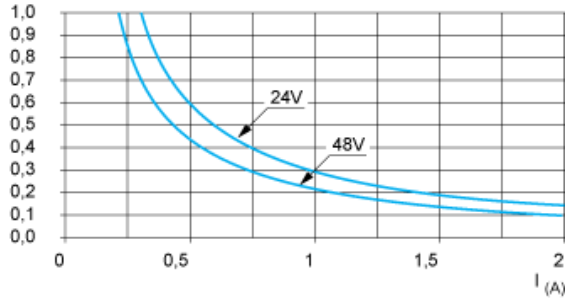


- (1) 100 % of channels used
- (2) 50 % of channels used

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

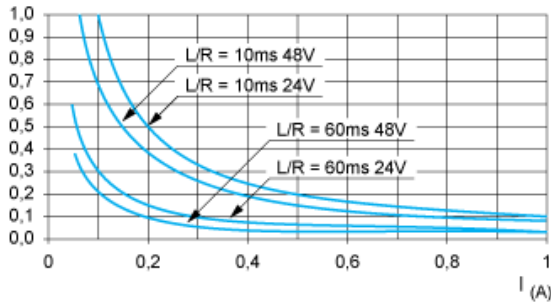
DC Loads

DC12 curves



DC12 control of resistive loads and of solid state loads isolated by optocoupler,  $I/R \leq 1$  ms.

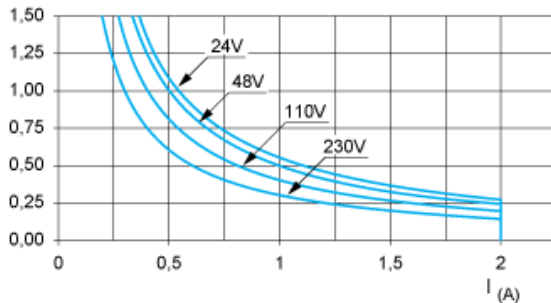
DC13 curves



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, DC)

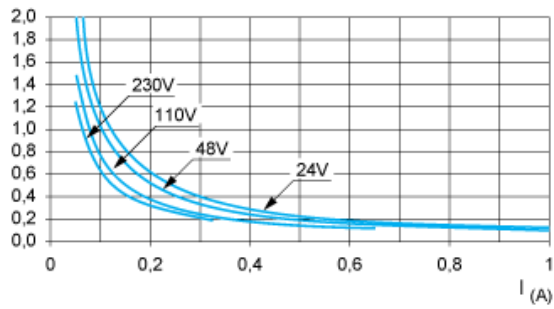
AC Loads

AC12 curves



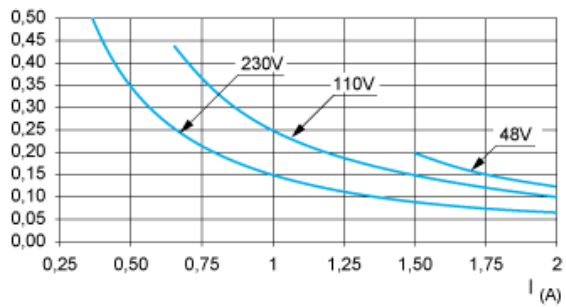
AC12 control of resistive loads and of solid state loads isolated by optocoupler,  $\cos \phi \geq 0.9$ .

### AC14 curves



AC14 control of small electromagnetic loads  $\leq 72$  VA, make:  $\cos \phi = 0.3$ , break:  $\cos \phi = 0.3$ .

### AC15 curves



AC15 control of electromagnetic loads  $> 72$  VA, make:  $\cos \phi = 0.7$ , break:  $\cos \phi = 0.4$ .