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



Product availability: Stock - Normally stocked in distribution facility



iviain	
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	<= 12 A	
Current per channel	2 A (preactuator end)	
Minimum switching current	1 mA at >= 5 V	
Drop-out voltage	2.4 V at 68 °F (20 °C) (PLC end)	
Switching frequency	<= 0.5 Hz <= 10 Hz	
Threshold tripping voltage	At 40 °C	
Drop-out current	0.5 mA at 68 °F (20 °C)	
Power dissipation per channel in W	<= 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) 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 le	
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	Il conforming to IEC 60664-1	

5.31 lbf.in (0.6 N.m) (withflat Ø 3.5 mm
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 CSA DNV GL LROS (Lloyds register of shipping) 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) (260000001000000000 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	23140 °F (-560 °C) conforming to IEC 61131-2	
Ambient air temperature for storage	-40176 °F (-4080 °C) conforming to IEC 61131-2	
Pollution degree	2 conforming to IEC 60664-1	

## Ordering and shipping details

0 11 0	
Category	22375 - INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	00785901545279
Nbr. of units in pkg.	1
Package weight(Lbs)	0.7700000000000002
Returnability	Υ
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 car cer and birth defects or other reproductive harm.	
More information	For more information go to www.p65warnings.ca.gov	

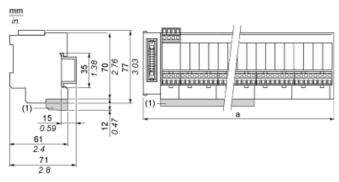
## Contractual warranty

Warranty period	18 months

# Product data sheet Dimensions Drawings

# ABE7R16S111

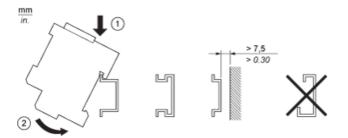
## **Dimensions**



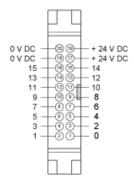
## (1) ABE7BV20 / ABE7BV20E

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

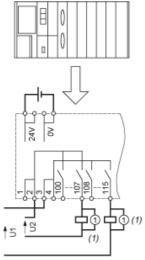
## Mounting



## HE10 16 Channels

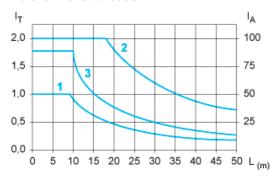


## Wiring Diagram



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

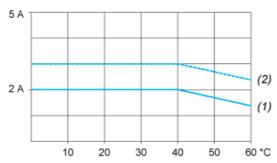
## 16-channel Sub-base



- L Cable length
- I<sub>T</sub> Total current per sub base (A)
- I<sub>A</sub> Average current per channel (mA)
- (1) TSXCDP••2 and ABFH20H••0 cables with c.s.a. 0.08 mm<sup>2</sup> (AWG 28).
- (2) TSXCDP••3 cables with c.s.a. 0.34 mm<sup>2</sup> (AWG 22).
- (3) Cables with c.s.a. 0.13 mm<sup>2</sup> (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**

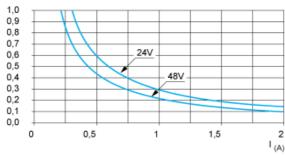


- (1) 100 % of channels used
- (2) 50 % of channels used

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

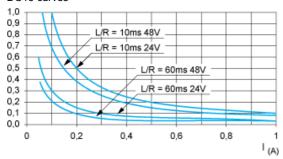
#### DC Loads

## DC12 curves



DC12control of resistive loads and of solid state loads isolated by optocoupler,  $I/R \le 1$  ms.

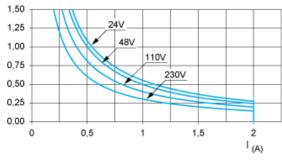
#### DC13 curves



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

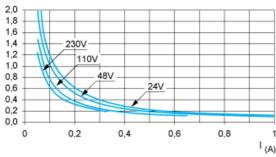
## AC Loads

#### AC12 curves



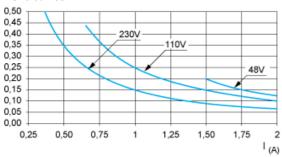
AC12control of resistive loads and of solid state loads isolated by optocoupler,  $\cos \phi \ge 0.9$ .

#### AC14 curves



AC14control of small electromagnetic loads  $\leq$  72 VA, make:  $\cos \varphi = 0.3$ , break:  $\cos \varphi = 0.3$ .

## AC15 curves



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

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