

Main

Range of product	Advantys Telefast ABE7
Product or component type	Sub-base with plug-in electromechanical 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, clamping capacity: 1 x 0.14...1 x 2.5 mm ² AWG 26...AWG 14 flexible without cable end Screw type terminals, clamping capacity: 1 x 0.14...1 x 1.5 mm ² AWG 26...AWG 16 flexible with cable end Screw type terminals, clamping capacity: 1 x 0.14...1 x 4 mm ² AWG 26...AWG 12 solid Screw type terminals, clamping capacity: 2 x 0.14...2 x 0.75 mm ² AWG 26...AWG 18 flexible with cable end Screw type terminals, clamping capacity: 2 x 0.14...2 x 1.5 mm ² AWG 26...AWG 16 solid

Complementary

Supply circuit type	DC
Product compatibility	ABR7S11
Contacts type and composition	1 NO
Status LED	1 LED power ON 1 LED per channel channel status
Polarity distribution	Common distribution group of 4
Short-circuit protection	1 A internal fuse, 5 x 20 mm, fast blow (PLC end)
Mounting mode	By clips on 35 mm DIN rail By screws on surface mount with kit
Supply current	<= 1 A
Voltage drop on power supply fuse	0.3 V
Current per output common	<= 5 A screw type terminals
[Ui] rated insulation voltage	2000 V between terminals/mounting rails 300 V between coil circuit/contact circuits conforming to IEC 60947-1
Current per module	<= 12 A
[Uimp] rated impulse withstand voltage	2.5 kV
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	1.32 lb(US) (0.6 kg)

Environment

product certifications	BV CSA DNV GL LROS (Lloyds register of shipping) UL
IP degree of protection	IP2x conforming to IEC 60529
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
vibration resistance	2 gn (f = 10...150 Hz) conforming to IEC 60068-2-6
resistance to electrostatic discharge	4 kV (contact) conforming to IEC 61000-4-2 level 3

	8 kV (air) conforming to IEC 61000-4-2 level 3
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

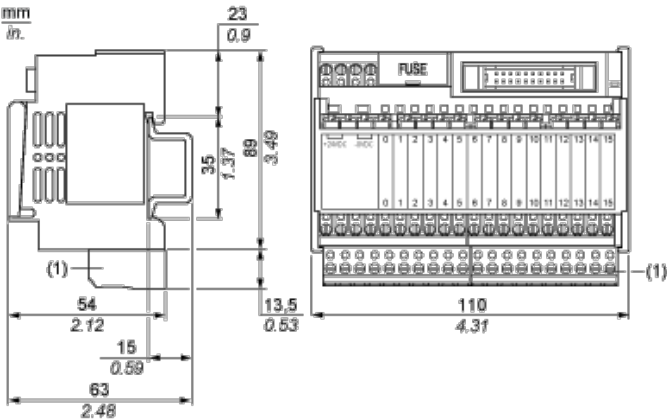
Offer Sustainability

Green Premium product	Green Premium product
Compliant - since 0841 - Schneider Electric declaration of conformity	Compliant - since 0841 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Available	Available
WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:
Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.	Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.
For more information go to www.p65warnings.ca.gov	For more information go to www.p65warnings.ca.gov

Contractual warranty

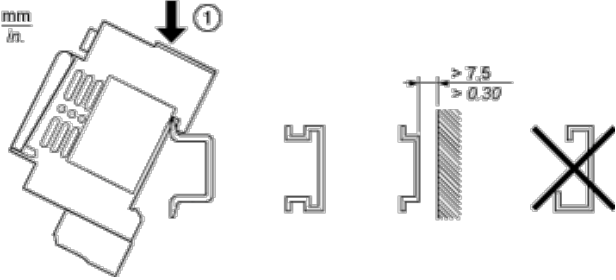
Warranty period	18 months
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Dimensions

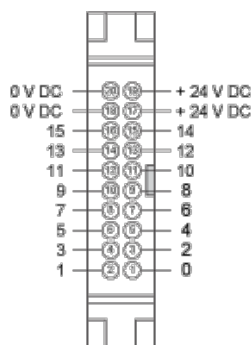


(1) ABE7BV10 / BV20

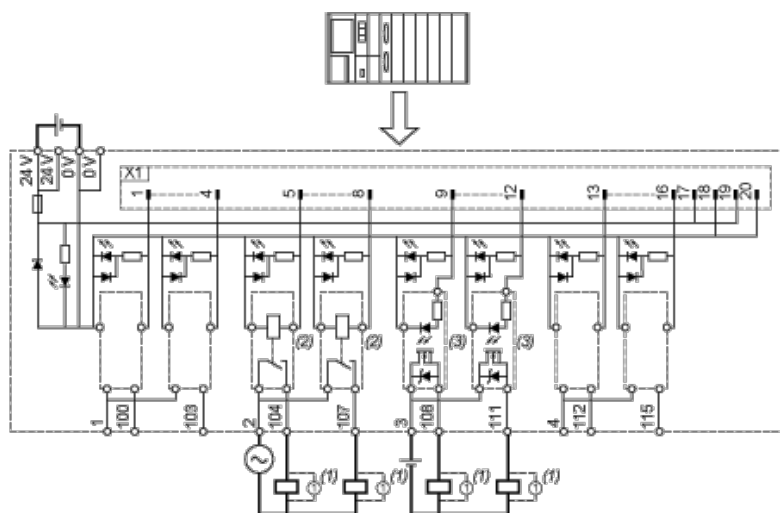
Mounting



HE10 16 Channels



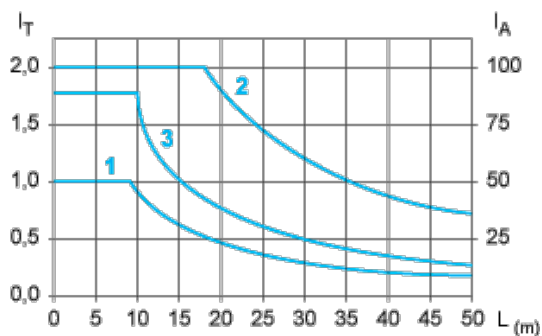
Wiring Diagram



- (1) Inductive load
- (2) ABR7S11 (1F) - N/O Ith = 6 A (supplied for ABE7R16T111 and not supplied for ABE7P16T111)
- (3) ABS7SC1B 24 V DC I_{max.} = 2 A (not supplied)

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)

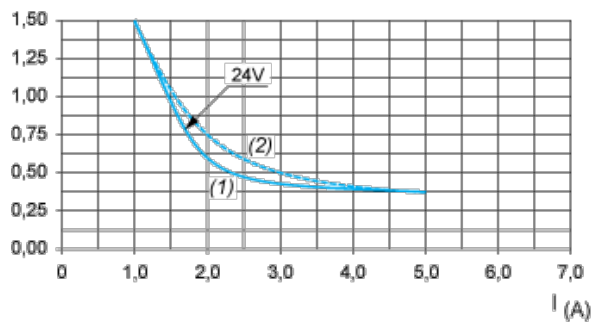
- (1) TSXCDP••2 and ABFH20H••0 cables with c.s.a. 0.08 mm² (AWG 28).
- (2) TSXCDP••3 cables with c.s.a. 0.34 mm² (AWG 22).
- (3) Cables with c.s.a. 0.13 mm² (AWG 26).

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

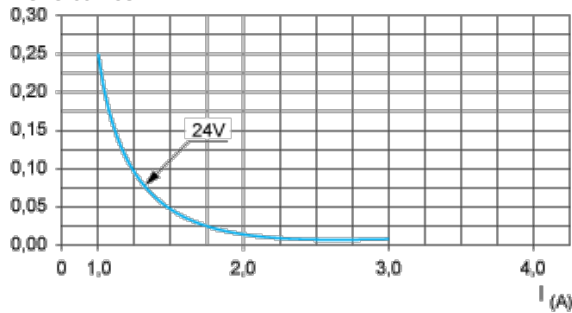
DC12 curves



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

- (1) Resistive loads
- (2) Inductive loads

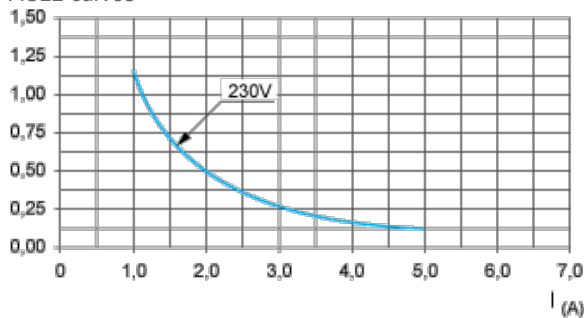
DC13 curves



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, DC12 curves must be used with a coefficient of 0.9 applied to the number in millions of operating cycles)

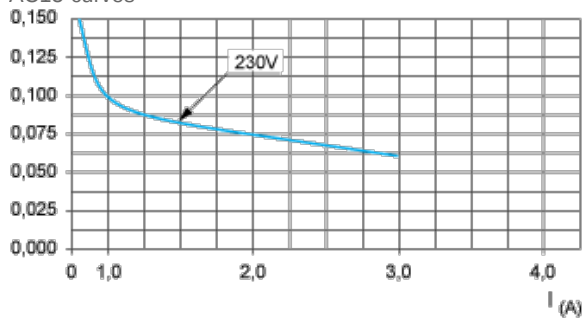
AC Loads

AC12 curves



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

AC15 curves



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