

Product availability: Stock - Normally stocked in distribution facility



Main

Range of product	Advantys Telefast ABE7
Product or component type	Discrete I/O sub-base
[Us] rated supply voltage	24 V DC (controller side) 24 V DC (sensor/controller side)
Number of channels	20
Number of terminal per channel	2
Connections - terminals	Screw type terminals, clamping capacity: 1 x 0.09...1 x 1.5 mm ² AWG 28...AWG 16 flexible with cable end Screw type terminals, clamping capacity: 1 x 0.14...1 x 2.5 mm ² AWG 26...AWG 12 solid 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: 2 x 0.09...2 x 0.75 mm ² AWG 28...AWG 20 flexible with cable end Screw type terminals, clamping capacity: 2 x 0.2...2 x 2.5 mm ² AWG 28...AWG 16 solid
Connector destination	Twido programmable controller

Complementary

Supply voltage limits	19...30 V DC conforming to IEC 61131-2 (controller side) 19...30 V DC conforming to IEC 61131-2 (sensor/controller side)
Discrete input number	12
Discrete input logic	Sink
Discrete output number	2 solid state output(s), 2000 mAat source 6 relay output(s), 3000 mA
Discrete output voltage	110...250 V AC relay output(s) 24 V DC solid state output(s) 5...30 V DC relay output(s)
Discrete output function	1 NO
Product compatibility	TWDLMDA20DTK TWDLMDA40DTK
Status LED	1 LED power ON
Polarity distribution	1 common/12 channels input 1 common/2 channels solid state output 1 common/6 channels relay output
Short-circuit protection	2 A internal fuse, 5 x 20 mm, fast blow (controller side)
Connector type	HE-10
Pin number	26
Fixing mode	By clips on 35 mm symmetrical DIN rail conforming to IEC 60715 By screws
Supply current	<= 2 A
Current per channel	0.0045 A solid state output(s) 0.009 A relay output(s)
Switched current	15 mAfor input 2000 mAfor solid state output 3000 mAfor relay output
Current per output common	10 A relay output 4 A solid state output
Voltage drop on power supply fuse	0.3 V

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Current state 0 guaranteed	0.4 mA solid state output(s) (sensor/controller side)
Voltage state 0 guaranteed	10 V solid state output(s) (sensor/controller side) 2 V relay output(s) (sensor/controller side)
Current state 1 guaranteed	5.5 mA solid state output(s) (sensor/controller side)
Voltage state 1 guaranteed	16 V solid state output(s) (sensor/controller side) 16.8 V relay output(s) (sensor/controller side)
Electrical durability	500000 cycles, maximum switching current: 2000 mA AC-12 relay output(s) (pre-actuator side) 500000 cycles, maximum switching current: 2000 mA DC-12 solid state output(s) (preactuator side) 500000 cycles, maximum switching current: 2000 mA DC-13 solid state output(s) (preactuator side) 500000 cycles, maximum switching current: 3000 mA DC-12 relay output(s) (pre-actuator side) 500000 cycles, maximum switching current: 400 mA AC-15 relay output(s) (pre-actuator side) 500000 cycles, maximum switching current: 500 mA DC-13 relay output(s) (preac-tuator side)
Minimum switching current	1 mA solid state output(s) 100 mA relay output(s)
Response time	<= 0.01 ms from state 0 to 1 solid state output(s) <= 0.4 ms from state 1 to 0 solid state output(s) <= 2.5 ms from state 1 to 0 relay output(s) <= 5 ms from state 0 to 1 relay output(s)
[Uimp] rated impulse withstand voltage	6 kV relay output(s) 2.5 kV solid state output(s)
Switching frequency	20 Hz relay 300 Hz solid state
Mechanical durability	20000000 cycles at 68 °F (20 °C)
[Ui] rated insulation voltage	2000 V between terminals/mounting rails 300 V between coil circuit/contact circuits conforming to IEC 60947-1
Overvoltage 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	0.95 lb(US) (0.43 kg)

Environment

Standards	IEC 61131-2 Type 1
Product certifications	CSA UL
IP degree of protection	IP2x conforming to IEC 60529
Resistance to incandescent wire	1382 °F (750 °C) 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) (80000000...2000000000 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	00785901572251
Nbr. of units in pkg.	1
Package weight(Lbs)	0.7900000000000004
Returnability	Y
Country of origin	LV

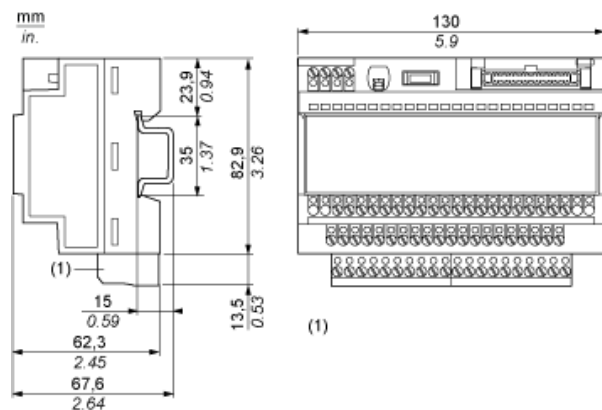
Offer Sustainability

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

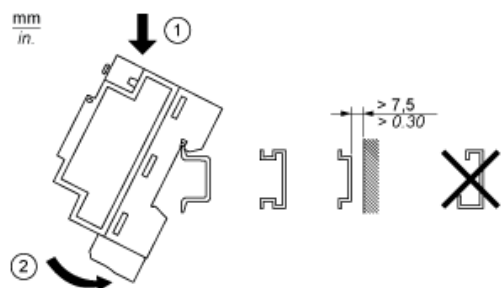
Contractual warranty

Warranty period	18 months
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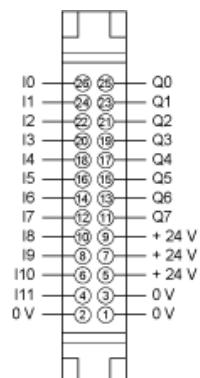
Dimensions



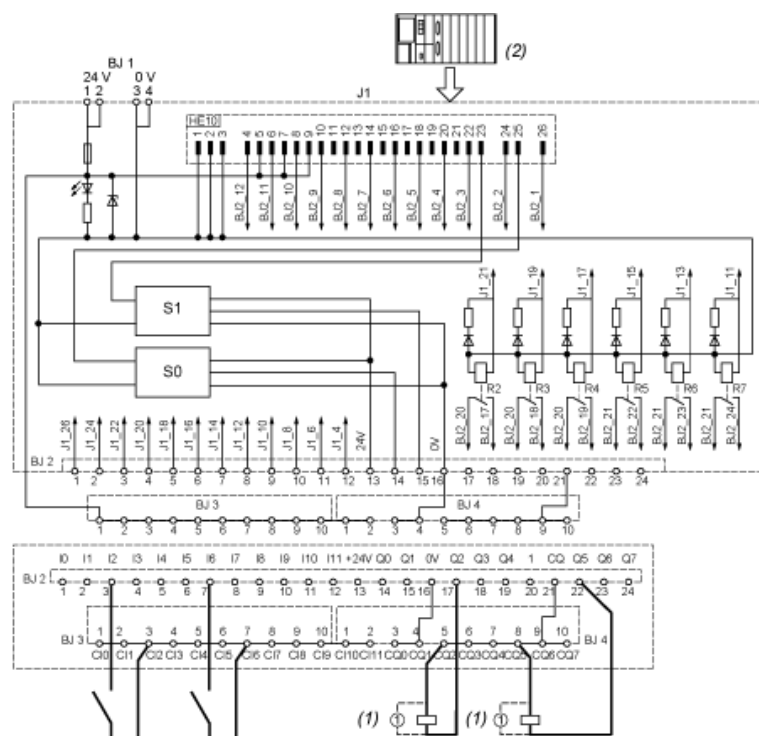
Mounting



HE10 20 Channels

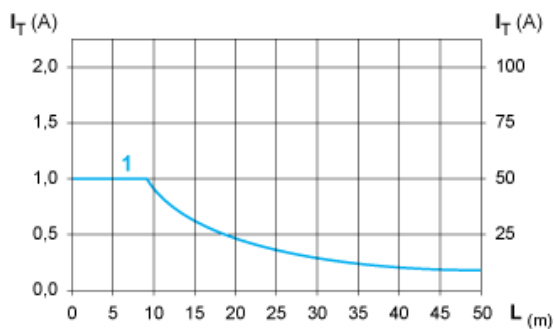


Wiring Diagram



- (1) Inductive load
- (2) Input sink

Curves for Determining Cable Type and Length According to the Current

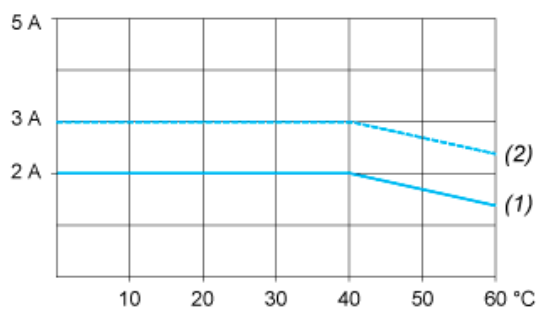


- L Cable length
 I_T Total current per sub base (A)
 I_A Average current per channel (mA)
 (1) Cables ABFT2..... c.s.a. 0.08 mm² (AWG 28)

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

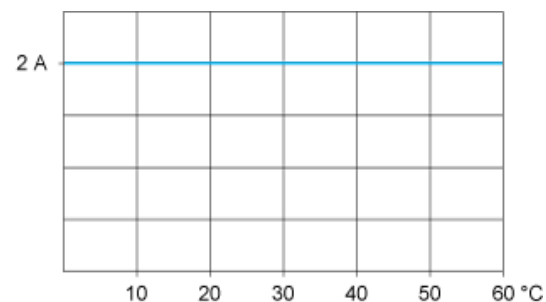
Electromechanical Relay Outputs



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

Temperature Derating Curves

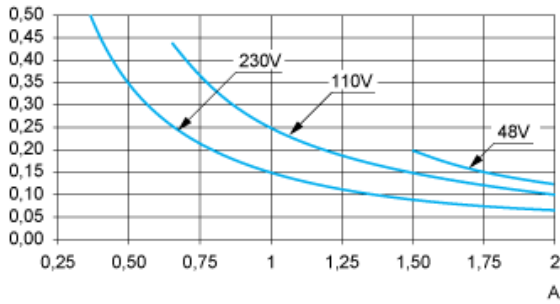
Solid State Outputs



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

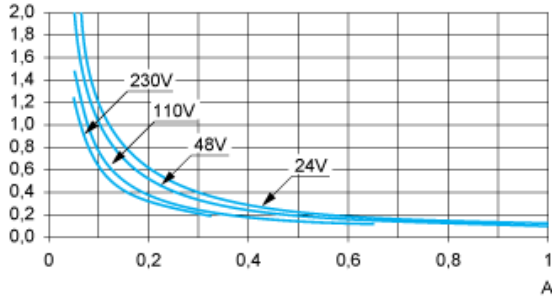
DC Loads

DC12 curves



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

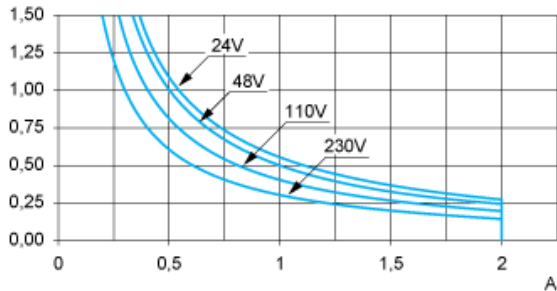
DC13 curves



DC13switching 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)

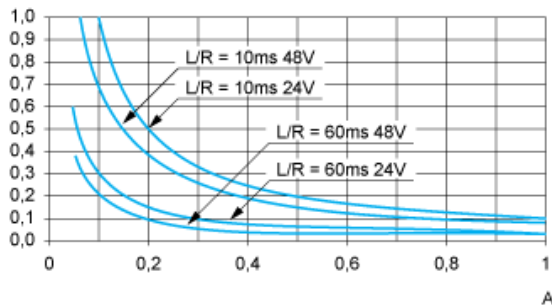
AC Loads

AC12 curves



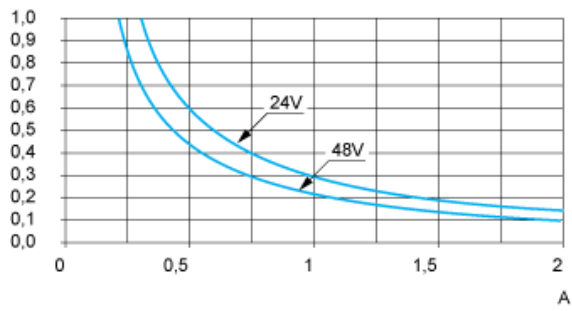
AC12control of resistive loads and of solid state loads isolated by optocoupler, $\cos \phi \geq 0.9$.

AC14 curves



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

AC15 curves



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

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