

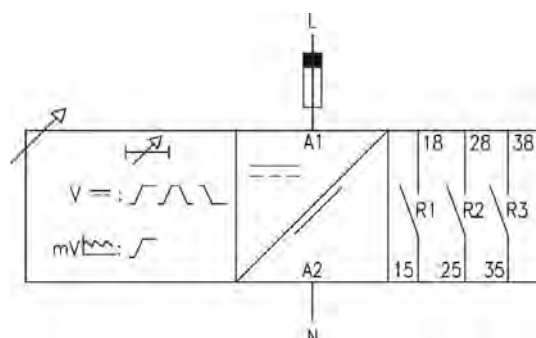
SVC



CONTROL AND VISUALIZATION OF THE VOLTAGE IN DC LINES

Function	Voltage relay for single phase lines in DC. Performs the control of the voltage and the ripple of its own supply voltage.																								
Operating mode	Configurable by the user. Each one of the available relays it is assigned with its own operating mode for one or more magnitudes, reacting by the first one which is produced.																								
Voltage control	<ul style="list-style-type: none"> · Operating margin: $\pm 25\%$ of the nominal voltage. · Operativity by maximum and/or minimum voltage. At each case, adjustment for detection and/or for release. · Reading average value 																								
Ripple control	<ul style="list-style-type: none"> · Operativity by maximum ripple voltage. Adjustment for detection and/or for release. 																								
Timing	<ul style="list-style-type: none"> · Associable to the detection and/or to the release of whichever relay. · Adjustable from 0,01s..999,9h · Repeating precision ± 30 ppm 																								
Repeating precision	Up to 72 VDC: 0,01 V From 125 VDC: 0,1 V																								
Voltage precision	Taken over the read value: 0,7 %																								
Display of the reading value	The value of the read magnitudes is displayed by means of the following status screen: <ul style="list-style-type: none"> · VOLTAGE: Voltage in the line (VAC) · RIPPLE: Ripple voltage standing in the line (mv DC) 																								
Output relay	From 1..3 independent relays, SPST NO. By default, we supply three relays.																								
Output 4-20 mA	It is assigned to the measured voltage to be transmitted through a 4-20 mA current loop, being able to coexist with the relays. Precision: 1% additional to the read value. This kind of output is optional.																								
PC communication	It is possible to establish different types of communication with a computer (see also last page): <ul style="list-style-type: none"> - By telephonic connector that incorporates standard device and CPBZ programming interface. - By a RS232 connection (optional). - By a RS2485 connection and SBAZ converter (optional). 																								
Operating margins according to the range (VDC)	<table border="1"> <thead> <tr> <th></th> <th>-25%</th> <th>Nominal</th> <th>+25%</th> </tr> </thead> <tbody> <tr> <td>9</td> <td>12</td> <td>15</td> <td></td> </tr> <tr> <td>18</td> <td>24</td> <td>30</td> <td></td> </tr> <tr> <td>36</td> <td>48</td> <td>70</td> <td></td> </tr> <tr> <td>82,5</td> <td>110</td> <td>137,5</td> <td></td> </tr> <tr> <td>93,7</td> <td>125</td> <td>156,2</td> <td></td> </tr> </tbody> </table>		-25%	Nominal	+25%	9	12	15		18	24	30		36	48	70		82,5	110	137,5		93,7	125	156,2	
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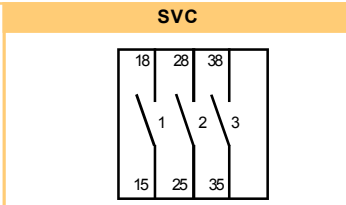
Connection diagram



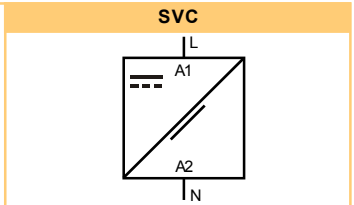
Communication (According options)

Standard Code 0	RS232 Code 3	RS485 Code 8	4-20 mA Code 4

		SVC		
Output relays	Resistive load	AC	-	
		DC	-	
	Inductive load	AC	3 A / 24 V	
		DC	> 10 ⁶ oper.	
	Mechanical life		18.000 operations / hour	
	Max. mech. operations		360 operations / hour	
	Electric life at full load		AgSnO Alloy	
	Contact material		240 VCA (85 °C)	
	Operating voltage		1000 VAC	
	Voltage between contacts		4000 VAC	
	Voltage coil/contact		> 100 MΩ (500 VDC)	
	Isolation resistance		1 red led per relay	
	Indication			

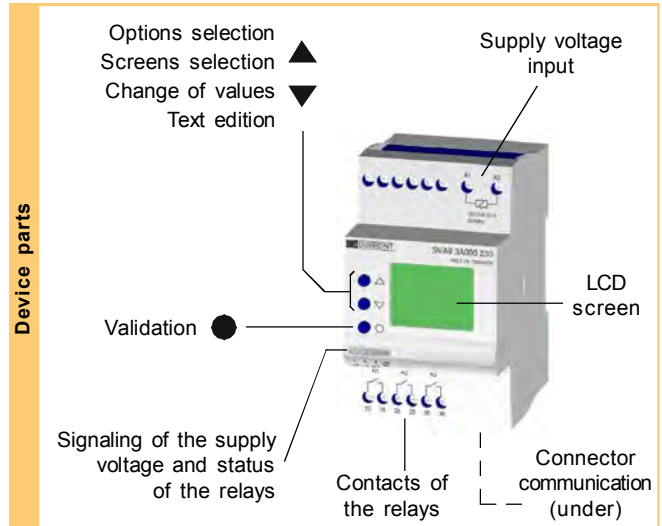


		SVC		
Supply voltage	Range (VDC)	12	24 / 48	72 / 125
	Galvanic isolation	No	2500 V	
	Operating margins	±25%		
	Consumption	2,2 W		3,3 W
	Start-up time	80 ms	180 ms	
	Detection time	40 ms		
	Reset	30 ms		
	Indication	Green led		



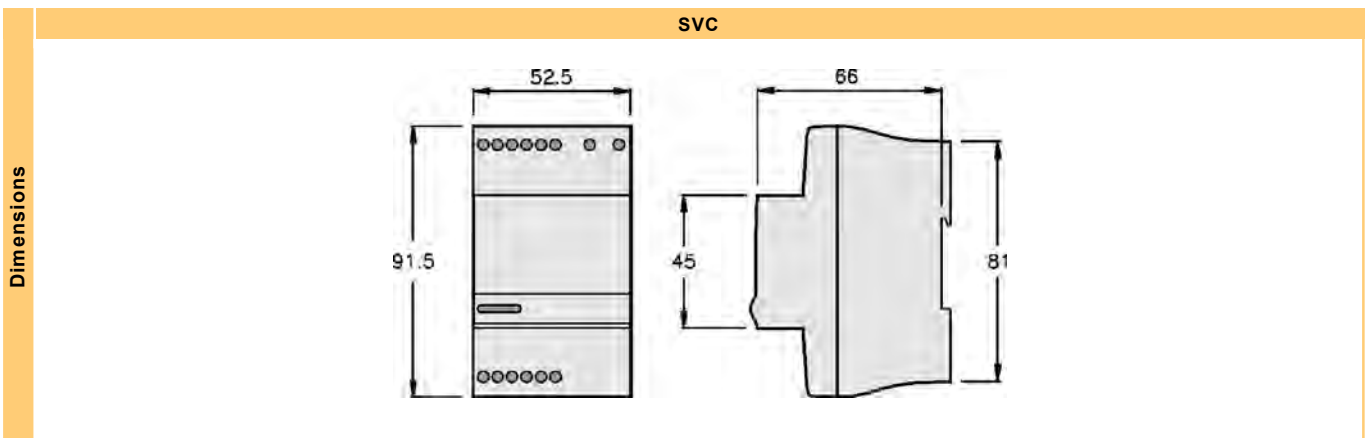
Constructive and environmental data	Voltage phase-neutral	300 V
	Overvoltage category	III
	Shock voltage	4 kV
	Pollution degree	2 (EN61010)
	Protection	IP 20
	Approx. weight	280 g
	Store temperature	-30..+80°C
	Operating temperature	-20..+50°C
	Humidity	< 95% HR
	Housing	Cyclopy - Light grey
	Leds window	Lexan - Transparent
	Buttons, connector, clamp	Technyl - Dark blue
	Connector's terminals	Brass
	Screws torque	0,8 Nm

Designed and manufactured under EEC normative.
 Directives referred:
 Electromagnetic compatibility: EMC 2004/108/EEC.
 Low voltage: LVD 2006/95/EEC.
 Hazardous substances: 2011/65/EEC
 Plastics: UL 91 V0



Order code	Control - Interface	Number of relays	Type of relays	Communication	Version	Supply		Range	
SVC	With display Default languages: · Spanish · English · French · Catalan (Other on request)	0 - No relays 3 - 3 relays	0 - No relays A - SPST NO	0 - No bus 4 - 4-20 mA 3 - RS232 8 - RS485	00..99	[712]	12 VDC	[12V]	9..15 VDC
						[903]	15..70 VDC	[24V]	18..30 VDC
						[903]	15..70 VDC	[48V]	36..60 VDC
						[904]	60..240 VDC	[72V]	54..90 VDC
						[904]	60..240 VDC	[125]	93,7..156,2 VDC
	Without display Without communication	(By default, 3)	(By default, A)	(By default, 0)	(By default, 00)				
	Without display Communication RS232 / RS485								

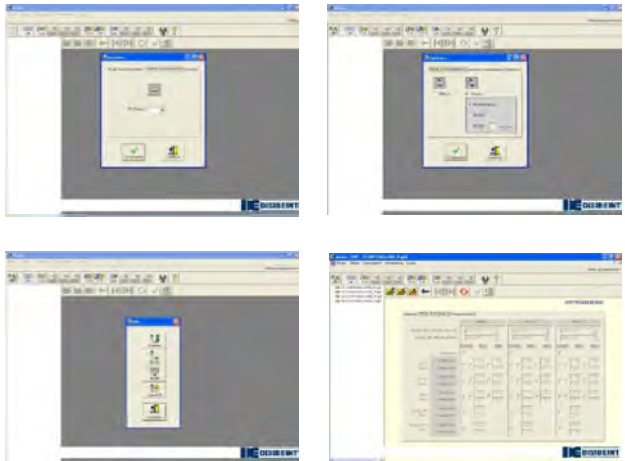
To compose a reference, select one option of each one of the columns. Example: SVC9 3A000 400



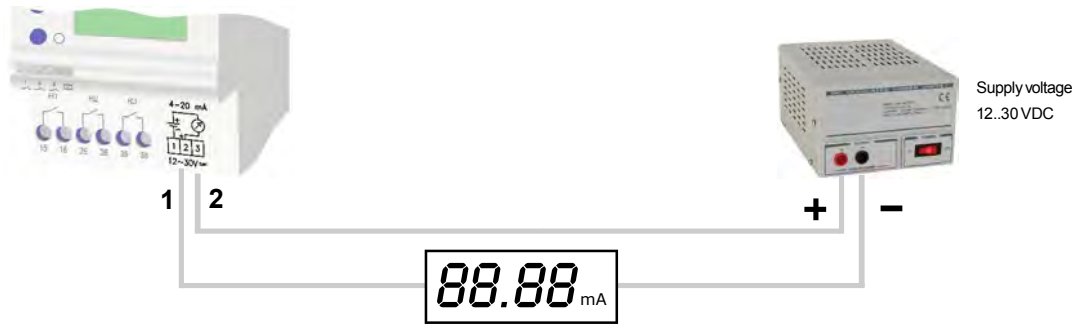
GENERAL CHARACTERISTICS OF THE DIGITAL CONTROL RELAYS

User's manual	For a wide knowledgment of the options offered by the digital control relays, the own User's Manual for each model must be read. Although an issue is given with every purchased device, a copy can be downloaded in our web site (www.disibeint.com).
How to programm	The digital control relays can be indistinctly programmed either with the buttons placed in the front of the housing or with a personal computer. Please refer at the end of this page to learn more about the PC programming alternative.
Types of screens	Status: They show the actual values of the magnitudes controlled by the relay. User: Where the user can write a customized text to help to the relay identification. Options: For accessing to the menus for the options selection. Informatives for values: They show the information of the different set parameters. Change of value: For modifying the values of the different values. Screens menus: Group of screens related under the same concept and that can contain whichever type of the screens previously described.
Interactive menus	For an ease programming, into the menus only the options that can be set are the ones visible. The rest of the options are not visible. This feature is interactive, ie., it is produced automatically according whether other functions are activated or not.
Changing values	The screens for changing the values contain the margins between such value can be adjusted. These margins can depend of other options and this is because different margins could be displayed according to other previous relations.
User's programm	Provided by factory two programs with options and pre-configured settings for quick start-up team. In most cases, these parameters should be tweaked to suit the characteristics of each installation. The user can create your own program and store it on your computer.
Display lighting	The display remains backlighthed while it is accessed to the different screens. If any button is not pressed for longer than 30 seconds, the light turns off. In order to turn the light on, it is enough to press any button only once.
Value added	<ul style="list-style-type: none"> - Four languages available in each relay - Graphic bar for the intuitive visualization of the displayed value - Historical control of the maximum values obtained by the relay - Screen's refresh selectable between 1 and 8 times per second - Possibility of locking the keyboard to avoid any undesired modification - Complementary timing functions

PC COMMUNICATION

deCom	<ul style="list-style-type: none"> · Communication and programming software for the digital control relays. · It allows the interactivity between the different types of communication: through the CBPZ interface, RS232 or RS485. · It displays the complete data related to the relay, grouped by concepts and easing the intuitive programming. · It has control tools to do not exceed the operating margins of each model according to its range. · It is provided with templates to facilitate the programming of each model. · It allows to store the own settings. <p>Windows XP operative system (.NET Framework required).</p>	
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CURRENT LOOP 4-20 mA



ACCESSORIES

CBPZ



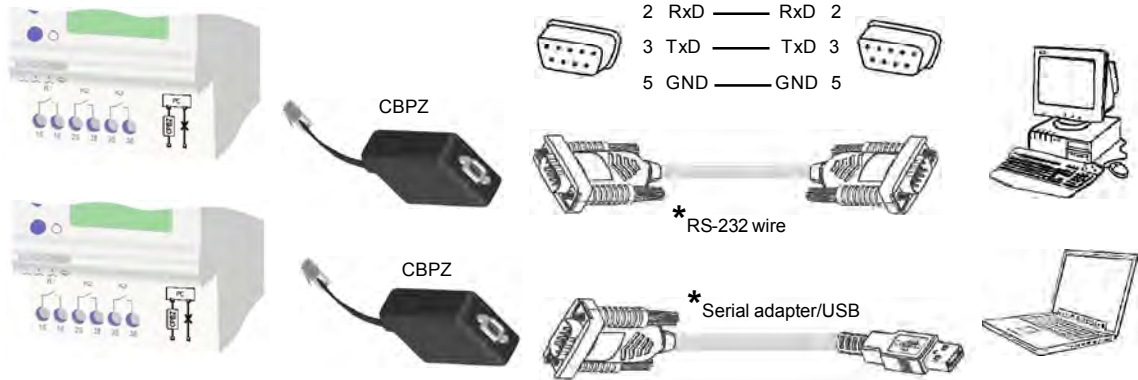
Interface for remote programming from a PC.
It allows the connection between whichever digital relay not provided with bus and a PC.
Not required for devices provided with bus RS232, RS485 or with 4-20mA output.

SBAZ



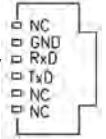
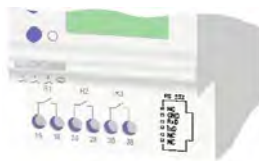
RS485 to RS232 signal converter for the remote programming or for the data capture and visualization from a PC.
It allows the connection of up to 31 digital control relays provided with RS485 communication bus, to get an unique codified RS232 output.

OUTPUTS COMMUNICATIONS
STANDARD MODE



REMOTE PROGRAMMING
RS232 COMMUNICATION

* Connector RJ 12 (6 pins)
Seen from the cable entry

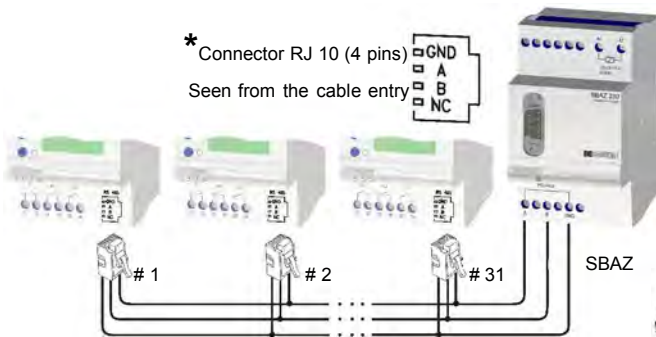


TxD — RxD 2
RxD — TxD 3
GND — GND 5

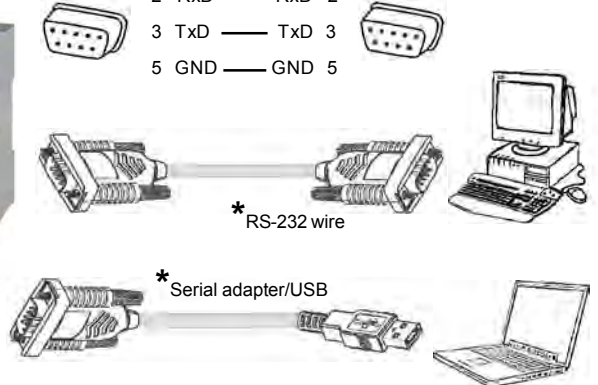


RS485 COMMUNICATION

* Connector RJ 10 (4 pins)
Seen from the cable entry



2 RxD — RxD 2
3 TxD — TxD 3
5 GND — GND 5



* Disibeint not supply cables or connectors.
You can find these products in stores specializing in computer equipment.

