

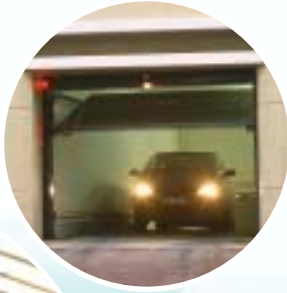
Telemecanique **Zelio Logic**

Logically *advanced!...*



Zelio Logic...

a *host* of functions,
for a *multitude* of applications



Zelio Logic is designed for use in **small automation systems:**

- Simple machines in both the industrial and commercial sectors.

▶ With Zelio Logic, opt for a **competitive** and **easy** to set-up logic programming solution:

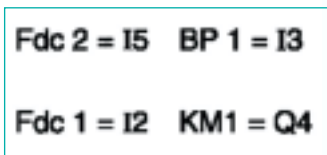
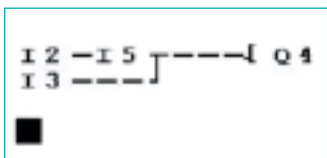
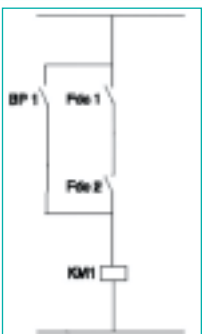
- A **small investment** for a host of functions.
- An **advanced** solution that takes into account specification variations, due to simple and quick programming.
- **Compact**, Zelio Logic helps to reduce the size of your enclosures and integrates perfectly in your installations.
- The **reduced cabling** and **setting-up** times provide savings both for installation and maintenance.



▶ **Intuitive programming** directly on front face or by PC

- The simplicity of its programming, assured by the universality of the **contact language** (the closest to electrical diagram representation), meets the demands of the automation engineer and the requirements of the electrician.

- Programming can be performed:
 - **locally**, using buttons and display screen on the front face of the smart relay,
 - on a **PC**, using «Zelio Soft» multilingual software,
 - on universal assistant **Pocket PC**, using «Zelio Soft Pocket PC» software.



A *complete* and *high performance* range



- ▶ Standards and certifications
UL / CSA / C-Tick / GL
CE marking

▶ Smart relays with display (10 to 20 I/O)

- The simplicity of programming directly on the front of the product, due to the ergonomics of the buttons, reduces the usage of documentation to a minimum.

Smart relays without display and without buttons (10 to 12 I/O)

- These provide not only a competitively priced solution, but also confidentiality of applications.

Smart relays with integrated AS-i interface

- Designed to allow the creation of local automation sequences.



Smart relays with relay or transistor outputs

- Relay outputs: high breaking capacity (8 A),
- Transistor outputs: for direct control of contactors and integral protection against short-circuits and overloads.

Range of supply voltages available:

- 12 V DC, 24 V AC, 24 V DC, 100 to 240 V AC,
- Supply modules specifically for sensors/actuators.

- ▶ A **host** of functions:

Functions

- Up to 10 timers, each configurable from a choice of 8 different types (0.1 seconds to 100 hours),
- Up to 10, 4-digit, up/down counters (0 to 9999),
- 8 analogue comparators, each configurable from a choice of 7 types of comparison,
- 4 clocks, each with 4 channels,
- 15 auxiliary relays,
- Diversity of coil functions; with memory (set/reset), remote switch, normal.

Modes

Parametering mode

- Enables the parameter values of the function blocks to be adjusted.

Display mode

- Enables display of the current values of the various function blocks.

Diagnostic mode

- In RUN mode, view the I/O status.

BP 1 Fdc 1

Fdc 2

KM1

I 2 - I 3 I 4

I 3

C85

R112

Q4

C85

Q4

C85

Q4

C85

Q4

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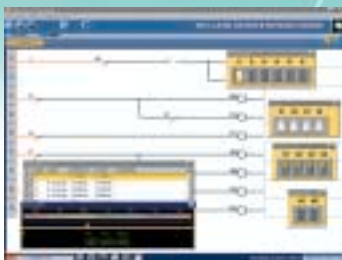
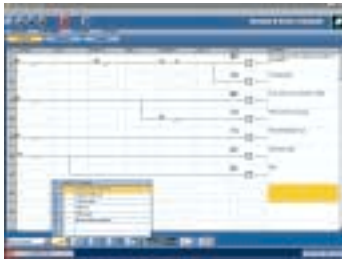
Q4

C85





Zelio Soft... *Intuitive* programming!



▶ Zelio Soft **multilingual** software enables:

■ **Inputting of control schemes:**

- Very user-friendly due to the «free input» mode: 3 alternative languages can be used, Zelio symbols, Ladder symbols and electrical symbols.
- Capable of programming 60 lines minimum of control schemes.
- Savings in time due to automatic tracing of links between contacts and coil.

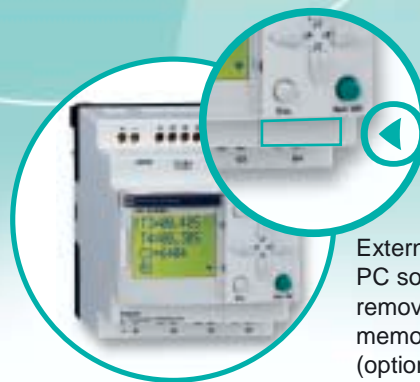
■ Detection in the event of programming errors via its **coherence test** function:

savings in time plus reliability: at the slightest input error, Zelio Soft turns red. The problem can be located by simply clicking the mouse.

■ **Inputting of messages** for display on Zelio Logic: configuration of 4 or 6 Text function blocks.

■ **Programme testing:** reduce your debugging costs!

- The **simulation mode** makes it possible to test all the programmes, without a smart relay, simulate the application programme in real time or accelerated time and dynamically display in red the various active elements of the programme.
- The **supervision mode** makes it possible to test the programme executed by the smart relay:
 - on-line viewing of programme,
 - force inputs and outputs, auxiliary relays and current values of function blocks,
 - adjust the time,
 - switch from STOP mode to RUN mode and vice versa.



External back-up using PC software or removable EEPROM memory cartridge (optional).

▶ Zelio Soft software for PC

Description	Reference
Connecting cable smart relay to PC, length 1.8 m	SR1 CBL01
Kit comprising: Zelio Soft programming software + cable	SR1 KIT01
Zelio Soft multilingual programming software for PC including on-line user's guide for the PC	SR1 SFT01

Programming software for Pocket PC...

programming and setting-up
within hands reach!



- ▶ ■ **Save in time and reduce maintenance costs** by performing programming or parametering of the module on site.
- ▶ ■ The Pocket PC thus avoids moving either a PC or smart relays in order to transfer and set-up applications.

Install the programming software in your Pocket PC and carry-out simple «Drag and Drop» operations for:

- full input of control schemes,
- transfer of programmes created with Zelio Soft on a PC to the Pocket PC and vice versa,
- transfer of programmes created on PC or on Pocket PC to any smart relay of the range and vice versa, as well as debugging programmes in module connected or non connected mode.

▶ Zelio Soft software for Pocket PC

Description	Reference
Connecting cable Pocket PC Sub-D-9 connector to smart relay	SR1 CBL02
Programming software for Pocket PC (also including the Zelio Soft multilingual software for PC)	SR1 SFT02

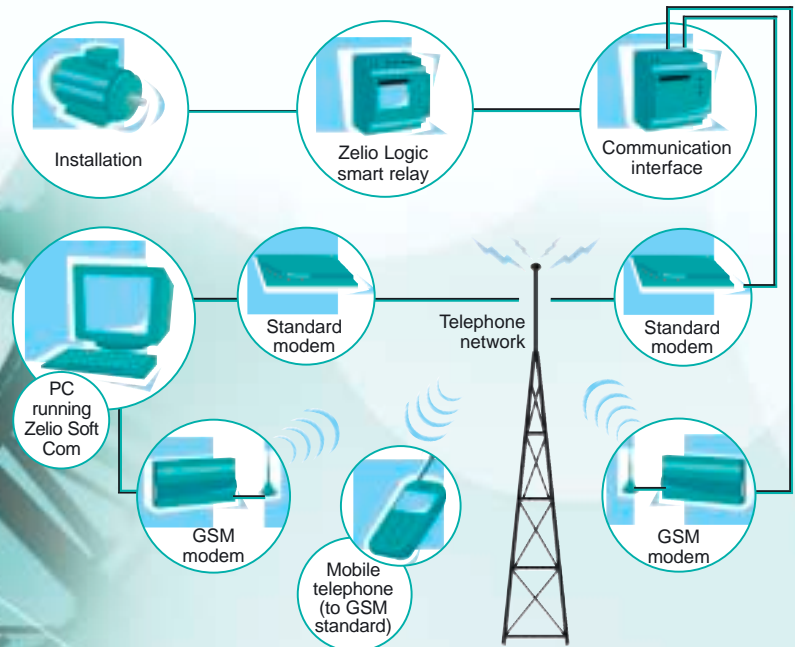
Recommended Pocket PCs (order from appropriate distributor):
Hewlett Packard "Jornada 525, 545 and 548", Compaq "Ipaq" 3630, Casio Casiopeia EM 505.

Communication interface ...

Control and monitor your installations *remotely!*

▶ Using the new Zelio Logic **communication offer**, monitor and remotely control your unmanned installations and **reduce your maintenance costs**:

- Avoid unnecessary intervention by your maintenance personnel.
- Define your maintenance priorities.
- Perform pre-diagnostics.



- ▶ The **communication interface** makes it possible to store messages, telephone numbers and calling conditions.
- ▶ With the **Zelio Soft Com** software you have access to all the Zelio Soft software functions, plus the following possibilities:
 - configuring the **warning conditions** (programme element to monitor, number to call, message to send),
 - **receiving warning messages**,
 - **remote supervision of the application**,
 - **remote forcing** of the programme elements status (inputs, outputs, auxiliary relays, time delay or counting values, etc.),
 - **transferring programmes** in a remote smart relay via the SR1 COM01 interface,
 - **downloading a programme** of a remote smart relay via the SR1 COM01 interface.

▶ Communication interface ⁽¹⁾

Description	Supply voltage	Reference
Communication interface	12-24 V	SR1 COM01
Programming software ⁽²⁾ (including "Zelio Soft Com" programming software and GSM "SIM Config" modem configuration software).		SR1 SFT03
Standard modem		SR1 MOD01
GSM modem		SR1 MOD02
GSM accessories Kit		SR1 KIT02
Connecting cables		
Smart relay to communication interface		SR1 CBL01
Communication interface to standard modem or standard modem to PC		SR1 CBL03
Communication interface to PC		SR1 CBL04





⁽¹⁾ Available 1st quarter 2003 (only with smart relays version 1.7).

⁽²⁾ Also enables programming of any smart relay of the SR1 range, even if they are used without a communication interface.




Zelio Logic *selection guide*



	Supply voltage	Number of discrete inputs ⁽¹⁾	Number of outputs	Clock*	Reference
Smart relays  	≡ 12 V	8 ⁽²⁾	4 O relay	Yes	SR1 B121JD
	≡ 24 V	6	4 O relay	No	SR1 A101BD
		8 ⁽²⁾	4 O relay	Yes	SR1 B121BD
		8 ⁽²⁾	4 O transistor	Yes	SR1 B122BD
		12	8 O relay	No	SR1 A201BD
		12 ⁽²⁾	8 O relay	Yes	SR1 B201BD
	~ 24 V	6	4 O relay	Yes	SR1 B101B
		12	8 O relay	Yes	SR1 B201B
	~ 100/240 V	6	4 O relay	No	SR1 A101FU
		6	4 O relay	Yes	SR1 B101FU
		12	8 O relay	No	SR1 A201FU
		12	8 O relay	Yes	SR1 B201FU
Smart relays without display & without buttons 	≡ 24 V	6	4 O relay	No	SR1 D101BD
		8	4 O relay	Yes	SR1 E121BD
	~ 100/240 V	6	4 O relay	No	SR1 D101FU
		6	4 O relay	Yes	SR1 E101FU
Smart relays with integrated AS-i interface ⁽³⁾ 	≡ 24 V	8 ⁽²⁾	6 O relay	Yes	ASI SR1470R
		8 ⁽²⁾	6 O transistor	Yes	ASI SR1470T


- ▶ ⁽¹⁾ The supply voltage of the inputs is the same as that of the smart relay
- ⁽²⁾ Including 2 configurable analogue inputs
- ⁽³⁾ Available 1st quarter 2003

Power supply	Input voltage	Nominal output voltage	Nominal output current	Reference
	100 to 240 V 47/63 Hz	≡ 12 V	1.9 A	ABL 7RM1202
		≡ 24 V	1.4 A	ABL 7RM2401

Accessories	EEPROM back-up memory	SR1 MEM01
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Documentation	Zelio user's guide for direct programming on the logic smart relay	SR1 MAN01**
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To order the desired language for the user's guide, replace the ** in the reference by: **EN for English, **FR** for French, **DE** for German, **ES** for Spanish, **IT** for Italian.

Starter pack 	≡ 24 V pack, including software disk, connecting cable and SR1 B121BD smart relay	SR1 PACKBD
	~ 100/240 V pack, including software disk, connecting cable and SR1 B101FU smart relay	SR1 PACKFU
	≡ 24 V pack, including software disk, connecting cable and SR1 B201BD smart relay	SR1 PACK2BD
	~ 100/240 V pack, including software disk, connecting cable and SR1 B201FU smart relay	SR1 PACK2FU



* All smart relays (version 1.7) with clock provide extended functions:

■ **Simplified starting-up:**

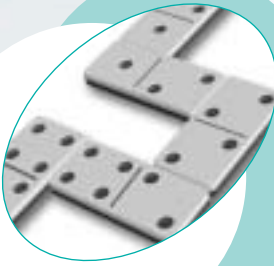
maintained in RUN mode in event of time circuit failure.

■ **Back-up function in event of power failure:**

- time backed-up for 150 hours
- back-up of 5 counters
- back-up of 2 timers
- status of all auxiliary relays

■ **More possibilities** with additional function blocks:

- 2 additional timers (10 total)
- 2 additional counters (10 total)
- 2 additional text blocks (6 total)



Zelio Relay



Zelio Count



Zelio Time



Zelio Control



Zelio Logic

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Owing to the changes in standards and equipment, the characteristics given in the text and images in this document are not binding until they have been confirmed with us.