

- ◆ Suitable for small automated and control systems
- ◆ Quick and easy to program, versatile and expandable
- ◆ Activation of logic control, timer, counter, real time clock, analog comparators functions
- ◆ FBD and LADDER program language logic.

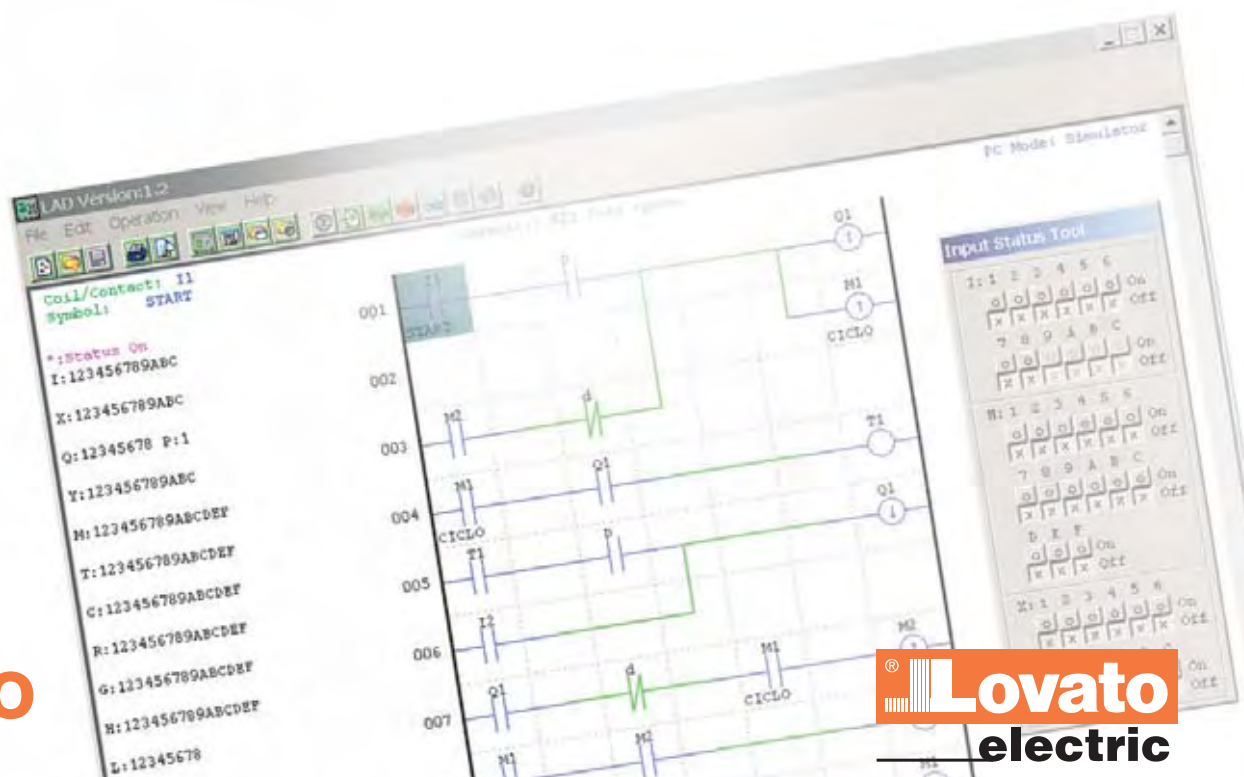


### Programmable logic relays

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Relay modules with RS232 port



LRD10R A240



LRD20R A240



Expansion modules



LRE08R A240



Starter kits



LRDKIT 10R A024



Control power	RTC	Catalog number	Price
			\$ each

Base control modules.

24VDC	Yes	LRD12R D024	295.00
24VDC	Yes	LRD12T D024	288.00
24VDC	Yes	LRD20R D024	435.00
24VDC	Yes	LRD20T D024	420.00
24VAC	Yes	LRD12R A024	310.00
24VAC	Yes	LRD20R A024	435.00
100-240VAC	Yes	LRD10R A240	310.00
100-240VAC	Yes	LRD20R A240	435.00

Expansion modules.

24VDC	No	LRE08R D024	175.00
24VDC	No	LRE08T D024	165.00
24VAC	No	LRE08R A024	175.00
100-240VAC	No	LRE08R A240	175.00

Starter kits.

LR relay kit complete with 8I/4O 24VDC relay, LRX C00 connecting cable and LRX SW programming / supervision software	LRDKIT 12R D024	405.00
LR relay kit complete with 6I/4O 100-240VAC relay, LRX C00 connecting cable and LRX SW programming / supervision software	LRDKIT 10R A240	420.00
LR relay kit complete with 8I/4O 24VAC relay, LRX C00 connecting cable and LRX SW programming / supervision software	LRDKIT 12R A024	420.00

Kinco can be easily adapted to every type of need. The number of inputs and outputs of the control module can be directly increased by using the expansion modules.

The programmable relay is compact in size and has an excellent performance suitable for the control and supervision of low and medium complexity automatisms.

It can be used in diverse applications, including industrial, commercial and residential. It combines the functions of numerous traditional devices, such as control relays, timers, counters, hour meters and other parts.



Kinco	Expansions	Total number of Inputs/Outputs
LRD10		10 (6 Inputs + 4 Outputs)
	+ LRE08	18 (10 Inputs + 8 Outputs)
	+ LRE08 + LRE08	26 (14 Inputs + 12 Outputs)
	+ LRE08 + LRE08 + LRE08	34 (18 Inputs + 16 Outputs)
LRD12		12 (8 Inputs + 4 Outputs)
	+ LRE08	20 (12 Inputs + 8 Outputs)
	+ LRE08 + LRE08	28 (16 Inputs + 12 Outputs)
	+ LRE08 + LRE08 + LRE08	36 (20 Inputs + 16 Outputs)
LRD20		20 (12 Inputs + 8 Outputs)
	+ LRE08	28 (16 Inputs + 12 Outputs)
	+ LRE08 + LRE08	36 (20 Inputs + 16 Outputs)
	+ LRE08 + LRE08 + LRE08	44 (24 Inputs + 20 Outputs)

INPUTS		OUTPUTS	
Total	Digital/Analog <sup>Ⓢ</sup> (0-10VDC)	Digital	
n°	n°	n°	Type
8	2	4	Relay
8	2	4	Transistor
12	4	8	Relay
12	4	8	Transistor
8	0	4	Relay
12	0	8	Relay
6	0	4	Relay
12	0	8	Relay
4	0	4	Relay
4	0	4	Transistor
4	0	4	Relay
4	0	4	Relay

<sup>Ⓢ</sup> Digital inputs can be used as analog inputs.

General characteristics

Maximum configuration up to 44 inputs/outputs with a control and three expansion modules.

Main features also include:

- RS232 serial interface port for PC or program back-up memory connection
- 4-line 12-character display with backlight
- Programming language logics: Ladder for 200 lines maximum or FBD (Function Block Diagram) for 99 blocks maximum
- On-board programming languages: Italian, English, Spanish, French, German, Portuguese and Chinese
- PC programming languages: Italian, English, Spanish

Operational characteristics

- Control power: 24VDC or 100-240VAC depending on module
- Operating limits: 21.6-26.4VDC; 85-2264VAC
- Digital inputs
  - Input voltage:
    - For state 0: <5VDC / <0.625mA for 24VDC; <40VAC / <0.28mA for LRD10A240 or <0.15mA for LRD20A240
    - For state 1: > 15VDC / >1.875mA for 24VDC; >79VAC / >0.41mA
  - Delay time:
    - 0 to 1: 3-5ms for 24VDC; 45-50ms for 100VAC or 18-22ms for 240VAC
    - 1 to 0: 3-5ms for 24VDC; 45-50ms for 100VAC or 85-90ms for 240VAC
- Analog inputs for 240VDC types
  - Input signal range: 0-10V
  - Display resolution: 0.01V
  - Conversion: 10bit
  - Current consumption at 10VDC: <0.17mA
  - Input impedance: <1kΩ
  - Admissible overload: 28VDC
  - Sampling time: 5-20mA for Ladder; 2-10ms for FBD
  - Maximum cable length: ≤98.4ft (30m) screened type
- Digital outputs
  - Rated current Ith: 8A for relay output; 0.3A 24VDC for transistor output
  - Applied voltage: 24VDC/110VAC/240VAC for relay type; 21.6-26.4VDC for transistor type.
- Ambient conditions:
  - Operating temperature: -4...+131°F (-20...+55°C)
  - Storage temperature: -40...+158°F (-40...+70°C)
  - Relative humidity: 20-90% with no condensation
  - Maximum pollution degree: 2
- Modular version with mounting on 35mm DIN rail (IEC/EC 60715) or M4x15 screw fixing
- Screw termination
- Degree of protection: IP20.

Certifications and compliance

UL listed for USA and Canada, file E300049; pending for 24VAC control power modules. Compliant with standards: IEC/EN 61131-2.

## Accessories



LRX 1V3 D024

moduLo

Description	Catalog number	Price
		\$ each
Modbus® protocol communication module	LRE P00	480.00
Power supply switching module, 100-240VAC/24VDC 1.3A	LRX 1V3 D024	150.00
PC ↔ LRD module connecting cable, 5.9ft (1.8m) long	LRX C00	140.00
User's manual in Italian in CD format	LRX D00	40.00
User's manual in English in CD format	LRX D01	40.00
User's manual in Spanish in CD format	LRX D02	40.00
Program back-up memory	LRX M00	40.00
Programming and supervision software for PC, in CD format	LRX SW	50.00

### General characteristics

The power supply module produces a direct-current voltage needed to supply the control and expansion modules when a 24VDC power source is not available. It can also be used to power eventual other 24VDC auxiliary circuits.

The backup memory allows the user's program to be saved and then simply and quickly transferred to other Kinco control modules.

The communication module implements Modbus® protocol.

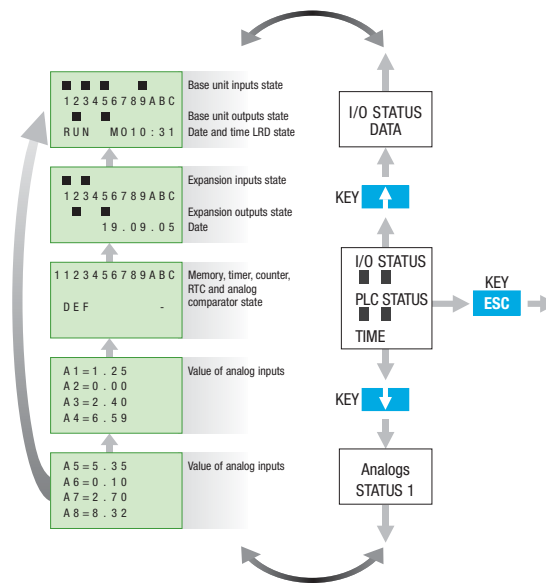
Kinco can be set up and reprogrammed to satisfy new requirements or to enhance the operation of a system. Programming is simple and intuitive, can be done either directly on the relay keypad or by personal computer, connected by the interface cable, using the relative LRX SW software.

Kinco has a simulator option. The user can control the exactness of the implemented program in off-line simulation, directly on the PC, before on-line testing and system setup are carried out.

### Certifications and compliance

UL listed for USA and Canada, file E300049, for power supply module only.

Compliant with standards: IEC/EN 61131-2.

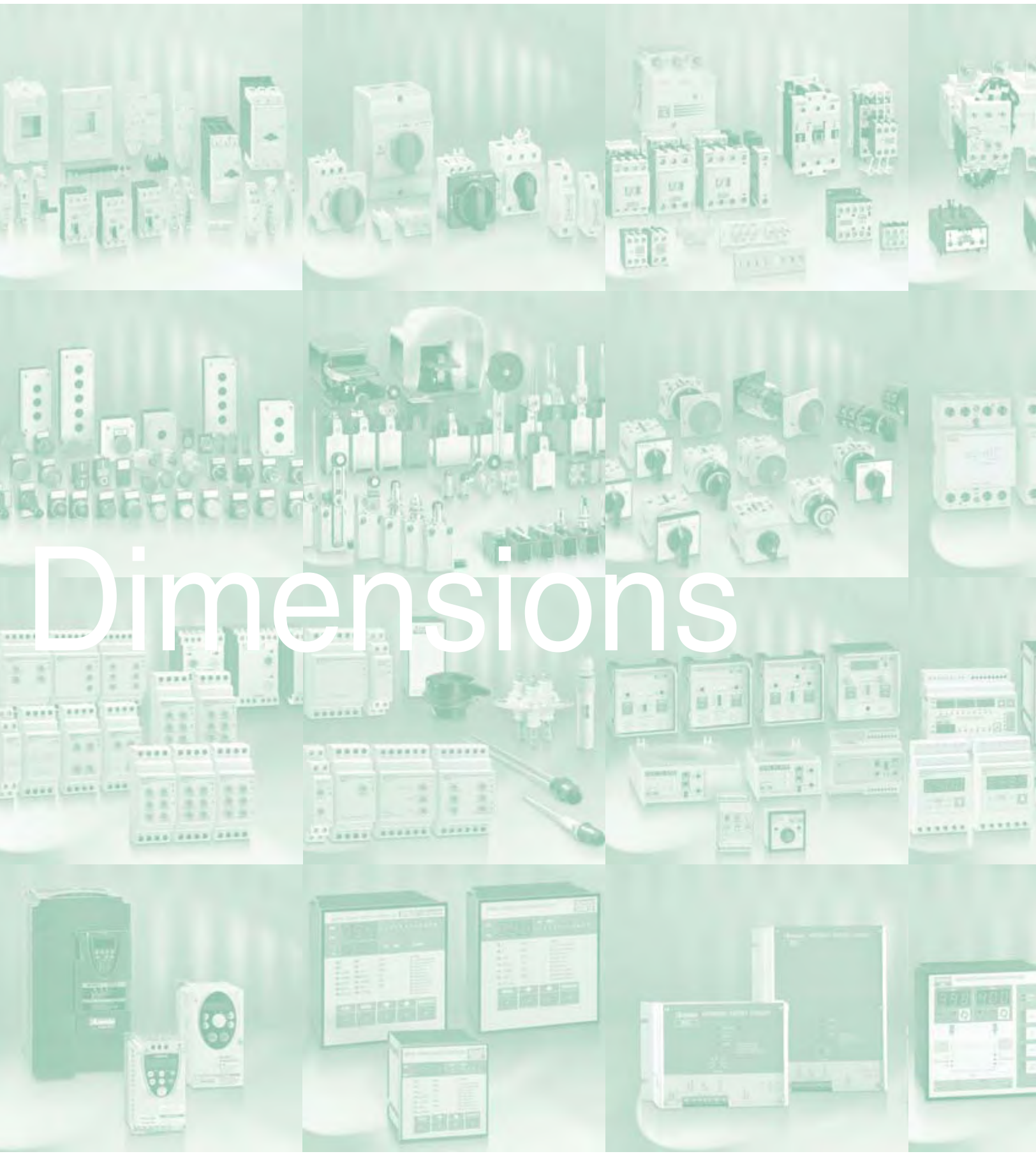


**MENU**

LADDER..... 1	SET..... 7
FBD..... 2	RTC SET..... 8
RUN..... 3	ANALOG SET..... 9
CLEAR PROG..... 4	PASSWORD..... 10
WRITE..... 5	LANGUAGE..... 11
READ..... 6	INITIAL..... 12

1	11] M1 - - - (O1 12]	01 - m1 - - - (T1	7	ID SET..... 01 REMOTE I/O N BACKLIGHT x M KEEP..... √ I/O NUMBER: 0 I/O ALARM: √ C KEEP..... x
2	1 10.00] -T1		8	RTC SET V1.4 05.09.19 MO 13:43
3	RUN PROG.		9	A1=GAIN:010 OFFSET:+00 A2=GAIN:010 OFFSET:+00 A3=GAIN:010 OFFSET:+00 A4=GAIN:010 OFFSET:+00
4	> YES NO		10	PASSWORD x 0000
5	CLEAR PROG.		11	ENGLISH FRANCAIS ESPANOL ITALIANO DEUTCH PORTUGUES CHINESE
6	WRITE		12	INITIAL > LADDER FBD



# Dimensions