


## Logic Modules

	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>▶ The LOGO! family of programmable logic modules offers a cost-effective compact alternative to conventional relays, timers, and counters. Each versatile LOGO! unit is completely self-contained and includes the CPU, power supply, input/output points (I/O), and LCD display. The built-in display allows you to configure the unit quickly, change operating parameters, or display simple operator messages. A wide range of operating voltages is available, including 12/24 V DC, 24V AC, and 115/230V AC.</li> </ul>	<p><b>Ordering Information</b></p> <ul style="list-style-type: none"> <li>▶ Use complete catalog number</li> <li>▶ See page 648 for a list of available models</li> </ul>
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### The Simple Solution

Today, LOGO! is being successfully used all over the world in both commercial and industrial applications. Almost any application that requires basic levels of control can benefit from using LOGO!. Here are just a few examples of LOGO! applications:

- Small machines (presses, conveyors, vending, etc.)
- Compressor & pump control
- Lighting control
- Security and access control
- Gate / door control
- HVAC systems

### Saves Time & Reduces Costs

In a single compact unit, LOGO! replaces a wide range of conventional switching devices at an extremely low price. By integrating the power supply, processor, I/O, and display, LOGO! takes up significantly less room in the control cabinet, reduces the number of parts required, and therefore reduces your logistics costs.

Instead of expensive, time-consuming wiring of different devices, everything can be done at the push of a button or the click of a mouse. Our simple instruction blocks are easy to understand, even for novices who may not be familiar with conventional control programming concepts. And once you've configured LOGO!, you can easily use the program time and time again. Whether you create the program directly on the LOGO!, or with our easy-to-use software, LOGO! configurations are easily stored and retrieved. This can dramatically decrease your production costs and startup time.

### Models

There are several LOGO! models available, with a wide range of voltages and I/O capacity, to suit almost any application:

- LOGO! Basic, AC - 6 in / 4 out
- LOGO! Basic, DC - 8 in / 4 out (2 inputs can be used as 0-10V analog, 8-bit)
- LOGO! Long - 12 in / 8 out
- LOGO! Bus - 12 in / 8 out  
4 AS-Interface slave in  
4 AS-Interface slave out
- LOGO! Pure - same as basic, with out display

See page 648 for a complete list of models.

### Key Features

- Integrated display & keypad for programming / operator messages
- Change parameters during operation
- Expanded memory to 56 blocks
- Built-in EEPROM memory for program and parameters
- Optional memory modules for copying or protecting programs
- Clock / calendar on all LOGO! models with relay outputs
- 10A relays (3A inductive)
- Optional software for programming & documentation
- LOGO! Basic - 72w x 90h x 55d mm (2.84 x 3.54 x 2.17in)
- LOGO! Long - 126w x 90h x 55d mm (4.96 x 3.54 x 2.17in.)





## Logic Modules

### Simple Programming - Just Connect the Dots!

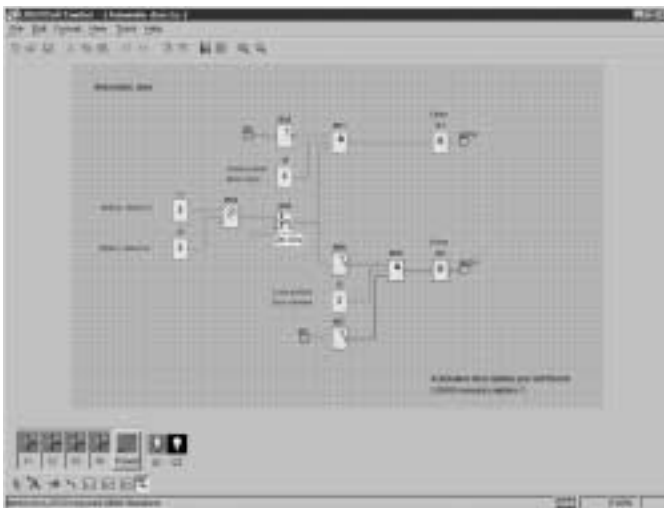
Whether you choose to program directly from the LOGO! keypad and display, or with our easy-to-use LOGO!Soft Comfort software, our powerful instruction blocks allow you to create everything from simple to complex control schemes in a matter of minutes.

The LOGO! has 8 basic instruction blocks (AND, OR, etc.) and 21 special instruction blocks (On Delay, Off Delay, Clock, etc.). You can have up to 56 blocks in a program, but some combinations are limited by the total memory available. The following options are possible (max):

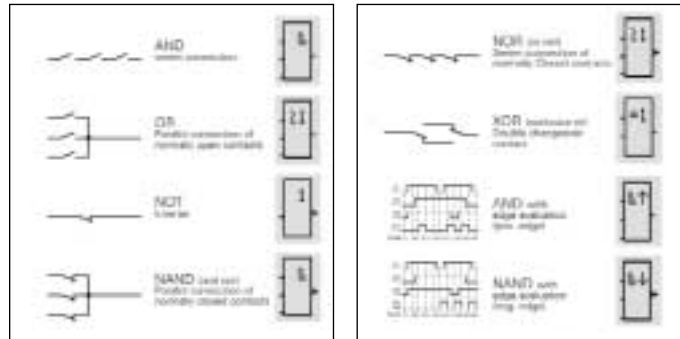
- 16 timers
- 24 counters
- 8 time switches
- 3 operating hours counters
- 42 current impulse relays
- 42 latching relays as well as
- Functions for analog values and message texts

### Programming with LOGO!Soft Comfort

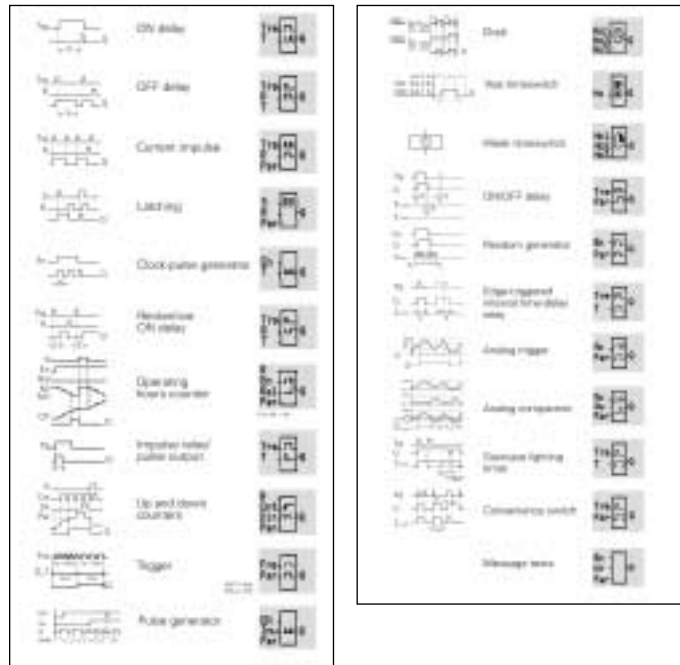
Our Windows-based LOGO!Soft Comfort software allows you to create LOGO! programs quickly and easily with a click of the mouse. You simply select the instructions you want and draw lines between them to build the program logic. It's literally as easy as connecting the dots! LOGO!Soft Comfort will even determine which LOGO! unit is the best fit for your application!



### The 8 integrated basic functions (GF)

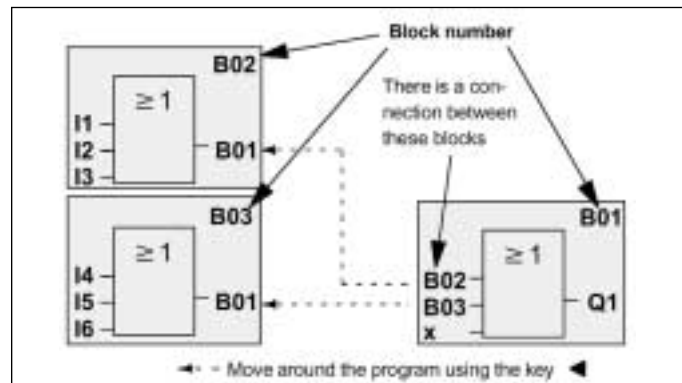


### The 21 integrated special functions (SF)



### Programming from the Display

You can also create/modify programs or change timer/counter values directly from the LOGO! display. Simply use the keypad to select the instruction blocks and to make the connections. LOGO! automatically numbers the instruction blocks as you insert them, which makes it easy to follow the program. The following example shows three LOGO! display screens for a simple program.



Easy program design is only part of the solution. To make startup even easier, LOGO!Soft Comfort offers a powerful simulator that lets you quickly examine the program operation. You can activate inputs, monitor timers and counters, even simulate a power cycle! Once your program is operating the way you want, simply connect the PC cable and download the program.



## Logic Modules

Specification	12/24RC 12/24RCo	24	24RC 24RCo	230RC 230RCo	12RCL	24L	24RCL	230RCL	24RCLB11	230RCLB11
<b>Power Supply</b>	12/24V DC	24V DC	24V AC	115/230V AC	12V DC	24V DC	24V DC	115/230V AC	24V DC	115/230V AC
Input Range	12V: 10.8-15.6V DC 24V: 20.4-28.8V DC	20.4V-28.8V DC	20.4V-26.4V AC	85V-265V AC	10.8-15.6V DC	20.4V-28.8V DC	20.4V-28.8V DC	85V-265V AC	20.4V-28.8V DC	85V-265V AC
Power Dissipation	0.1-1.2W, 12V DC 0.2-1.6W, 24V DC	0.2 - 0.5W	0.3 - 1.8W	1.1-3.5W, 115V AC 2.3 - 4.6W, 230V AC	0.1- 1.2W	0.2 - 0.8W	0.3 - 2.9W	1.7 - 7.5W,	0.3 - 2.9W	1.7 - 7.5W,
Int. Clocks, Backup	8, 80hrs. typ.	—	8, 80hrs. typ.	8, 80hrs. typ.	8, 80hrs. typ.	—	8, 80hrs. typ.	8, 80hrs. typ.	8, 80hrs. typ.	8, 80hrs. typ.
<b>Inputs</b>										
Digital	8	8	6	6	12	12	12	12	12	12
Use for Analog?	2, (0-10V DC)	2, (0-10V DC)	—	—	—	—	—	—	—	—
"0" signal	max. 5V DC	max. 5V DC	max. 5V AC	max. 40V AC	max. 4V DC	max. 5V DC	max. 5V DC	max. 40V AC	max. 5V DC	max. 40V AC
"1" signal	min. 8V DC	min. 12V DC	min. 12V AC	min. 79V AC	min. 8V DC	min. 12V DC	min. 12V DC	min. 79V AC	min. 12V DC	min. 79V AC
Input Current	1.5mA, 12V DC 2.5mA, 24V DC	1.5mA	2.5mA	0.08mA	1.5mA	4.5mA	4.5mA	0.08mA	4.5mA	0.08mA
<b>Outputs</b>										
Digital	4, Relay	4, Transistor	4, Relay	4, Relay	8, Relay	8, Transistor	8, Relay	8, Relay	8, Relay	8, Relay
Continuous Current	10A resistive, 3A inductive	0.3A	10A resistive, 3A inductive	10A resistive, 3A inductive	10A resistive*, 3A inductive*	0.3A	10A resistive*, 3A inductive*	10A resistive*, 3A inductive*	10A resistive*, 3A inductive*	10A resistive*, 3A inductive*
Short-circuit Prot.	External fuse required	Elec. fuse (approx. 1A)	External fuse required	External fuse required	External fuse required	Elec. fuse (approx. 1A)	External fuse required	External fuse required	External fuse required	External fuse required
Switching Freq.	2Hz resistive 0.5Hz inductive	10Hz	2Hz resistive 0.5Hz inductive	2Hz resistive 0.5Hz inductive	2Hz resistive 0.5Hz inductive	10Hz	2Hz resistive 0.5Hz inductive	2Hz resistive 0.5Hz inductive	2Hz resistive 0.5Hz inductive	2Hz resistive 0.5Hz inductive
<b>Connecting Cables</b>	2 x 1.5mm <sup>2</sup> , 1 x 2.5mm <sup>2</sup>									
<b>Ambient Temp.</b>	0 to +55° C									
<b>Storage Temp.</b>	-40 to +70° C									
<b>Noise Suppression</b>	to EN 55011 (Limit Class B)									
<b>Protection</b>	IP20									
<b>Agency Approvals</b>	To VDE 0631, IEC 1131, UL, FM, CSA, Ship Building Approvals									
<b>Installation</b>	35mm DIN rail									
<b>Dimensions</b>	72 w x 90 h x 55 d mm 2.84 w x 3.54 h x 2.17d in				126 w x 90 h x 55 d mm 4.96 w x 3.54 h x 2.17d in					

### LOGO! Accessories

There are several accessories available for use with LOGO!.



#### LOGO! PC Cable

Use with LOGO!Soft Comfort to download and upload LOGO! control programs.



#### Program Modules

The yellow memory card allows you to copy and save programs. The red card adds protection against copying, modifications, etc.



#### LOGO! Contact

With LOGO! Contact, you can switch resistive loads up to 20A and motors up to 4KW.



#### LOGO! Power

There are several 12V DC and 24V DC power supplies available, which are a perfect fit with LOGO!.



#### LOGO! Manual

The LOGO! manual is available in a compact paper format, and is also included electronically with LOGO! Soft Comfort (.pdf format).



## Logic Modules

Model	Version				Description	Order Qty	Catalog No	Price \$
	Relay	Long	Clock	AS-i				
LOGO! 12RCL	X	X	X		12 VDC, 12I/80, relay outputs	1	6ED1053-1BB00-0BA2	275.
LOGO! 12/24C	X		X		12/24 VDC, 8I/40, 2 Analog inputs, relay outputs	1	6ED1052-1MD00-0BA2	160.
LOGO! 12/24RCo	X		X		12/24RCo VDC units, 8I/40, 2 analog inputs, relay outputs, without display	1	6ED1052-2MD00-0BA2	130.
LOGO! 24					24 VDC, 6I/40, transistor outputs, clock functions not available	1	6ED1052-1CC00-0BA2	155.
LOGO! 24RC	X		X		24 VAC, 6I/40, relay outputs	1	6ED1052-1HB00-0BA2	160.
LOGO! 24RCo	X		X		24 VAC, 6I/40, relay outputs, without display	1	6ED1052-2HB00-0BA2	130.
LOGO! 24L		X			24 VDC, 12I/80, transistor outputs, clock functions not available	1	6ED1053-1CA00-0BA2	240.
LOGO! 24RCL	X	X	X		24 VDC, 12I/80, relay outputs	1	6ED1053-1HB00-0BA2	270.
LOGO! 24RCLB11	X	X	X	X	24 VDC, 12I/80, relay outputs, +4 I/O AS-Interface	1	6ED1053-1HH00-0BA2	299.
LOGO! 230RC	X		X		115/230 VAC, 6I/40, relay outputs	1	6ED1052-1FB00-0BA2	175.
LOGO! 230RCo					115/230 VAC, 6I/40 without display, relay outputs	1	6ED1052-2FB00-0BA2	145.
LOGO! 230RCL	X	X	X		115/230 VAC, 12I/80, relay outputs	1	6ED1053-1FB00-0BA2	245.
LOGO! 230RCLB11	X	X	X	X	115/230 VAC, 12I/80, relay outputs, +4 I/O AS-Interface	1	6ED1053-1FH00-0BA2	299.
LOGO! 12/24 Starter Kit	X		X		12/24 VDC, 8I/40, with 2 analog inputs, relay outputs starter kit	1	6ED1057-2BA00-0BA1	219.
LOGO! 230RC Starter Kit	X		X		115/230 VAC, 6I/40, relay outputs starter kit	1	6ED1057-3AA00-0BA6	225.
LOGO! Manual					User's Manual, updated version	1	6ED1050-1AA00-0BE3	15.
LOGO! Soft Comfort, V2.0					"Drag and drop" programming	1	6ED1058-0BA00-0YC1	79.
Comfort Upgrade, V2.0					Upgrade from V1.0 to V2.0	1	6ED1058-0CA00-0YC0	25.
LOGO! PC Cable					Moves programs between LOGO! and PC	1	6ED1057-1AA00-0BA0	79.
Yellow LOGO! Card					Copies and saves programs	1	6ED1056-1BA00-0AA0	25.
Red LOGO! Card					Adds lockout protection	1	6ED1056-4BA00-0AA0	25.
LOGO! Contact 24					Compact relay—20 A resistive, 8.4 A inductive, 24 VDC coil, 3hp @ 230 VAC, 5hp @ 460 VAC	1	6ED1057-4CA00-0AA0	30.
LOGO! Contact 230					Compact relay—20 A resistive, 8.4 A inductive, 24 VAC coil, 3hp @ 230 VAC, 5hp @ 460 VAC	1	6ED1057-4EA00-0AA0	25.
LOGO! Power 1.3					Switch-mode power supply—1.3 A Converts 115/230 VAC to 24 VDC	1	6EP1331-1SH01	120. <sup>①</sup>
LOGO! Power 1.9					Switch-mode power supply—1.9 A Converts 115/230 VAC to 12 VDC	1	6EP1321-1SH01	143. <sup>①</sup>
LOGO! Power 2.5					Switch-mode power supply—2.5 A Converts 115/230 VAC to 24 VDC	1	6EP1332-1SH41	180. <sup>①</sup>
LOGO! Power 4.5					Switch-mode power supply—4.5 A Converts 115/230 VAC to 12 VDC	1	6EP1322-1SH01	186. <sup>①</sup>
LOGO! Bracket					Front panel mounting bracket for LOGO! basic units only	1	7LF9003	19.

①Discount Code: SITOP

Questions? Try our Microsystems Hotline 1-800-333-7421