

# **SCE Training Curriculum**

Siemens Automation Cooperates with Education | 05/2016

# Additional Module 900-011 LOGO! 0BA8 Startup



#### Suitable SCE trainer packages to accompany these training curriculums

#### **LOGO! Controllers**

- LOGO! 8 12/24V ETHERNET set of 6 Order no.: 6ED1057-3SA20-0YA1
- LOGO! 8 230V ETHERNET set of 6 Order no.: 6ED1057-3SA20-0YB1

Note that these trainer packages will be replaced with successor packages when required. You can find an overview of the currently available SCE packages at: <u>siemens.com/sce/tp</u>

#### **Further education**

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#### **Further information on SCE**

siemens.com/sce

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We would like to thank Michael Dziallas Engineering and all those involved for their support in creating this SCE training curriculum.

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# 1 Objective

The SCE\_EN\_900-011 module provides a quick introduction to the handling of LOGO! 0BA8 logic modules and programming with the LOGO!Soft Comfort V8.0 software.

# 2 Requirement

Nothing is required from other chapters to successfully complete this chapter.

# 3 Theory

### 3.1 Information about the use of LOGO! 0BA8

#### LOGO! is the universal logic module of Siemens.

The LOGO! logic module has an integrated controller with operator control and display unit. You can use the operator control and display unit of LOGO! to create and edit programs and execute system functions.

You can read in external programs from a program module via the Ethernet interface or a PC cable with the LOGO!Soft Comfort programming software. You can use LOGO!Soft Comfort not only to create a program but also to simulate your circuit on the computer and to output overview diagrams to a printer.

Depending on the device type, ready-made commonly-used basic functions, e.g. for delayed switch-on and switch-off, for current-impulse relay, time switch, and binary bit memory and for inputs and outputs, are already contained in the LOGO! logic modules.

#### With LOGO! you solve tasks for

- home automation and installation engineering (e.g. stairway lighting, outside lighting, awnings, roller shutters, show window lighting and much more)
- manufacture of control cabinets, machines and equipment (e.g. gate controls, ventilation systems, industrial water pumps and much more)

LOGO! can also be used for special-purpose control for signal pre-processing.

When connected to AS-Interface, LOGO! can be used as distributed I/O with local intelligence for control of machines and processes. This enables the LOGO! logic module to perform control tasks and reduce the load on the master controller.

For series applications in small machine and equipment manufacturing, control cabinet manufacturing, and installation engineering, special versions without operator control unit are available. A program module or the LOGO!Soft Comfort PC software is required for downloading to these modules.

# 3.2 Setting the IP address of the LOGO! 0BA8

With the LOGO! 0BA8 in Stop mode, navigate to the **Network** menu command. You can find the settings for the IP address, subnet mask and gateway here. Use the ► **cursor** or **OK** to enter **Edit mode of the network settings**. Assign the network settings according to the information from your network administrator.



Note:

In the rows with the ► or ▼ symbol, you can also navigate using the cursor key.

# 3.3 LOGO!Soft Comfort V8.0

The software provides a completely new user interface with the following functions:

- Consistent application menu display
- New network project-based work strategy
- Split display for diagram mode and network mode
- Split display for "Standard" toolbar in the general software interface, "Tool" toolbar is displayed in diagram mode and "Network" toolbar in project mode.
- Split window display with focus switching and drag-and-drop capability
- Work on a network project enables saving, downloading, creating and closing of the network project.
- New access control settings for online access with various access possibilities
- Ability to create connections by configuring NI and NQ function blocks
- New graphic reference for the function block in the parameter field in FBD diagrams
- Ability to configure the screen display for messages, start screen and flags with 4 lines for LOGO! devices before 0BA8 and 6 lines for LOGO! devices starting from 0BA8
- Enhanced system security by assignment of user passwords and access levels in the access control settings

#### 3.3.1 Programming interface

Programming mode in LOGO!Soft Comfort starts with an empty diagram.

The majority of the screen is taken up by the user interface for creating the circuit diagram – in other words, the programming interface. The symbols and logic operations of the circuit program are arranged on this programming interface.

To help you maintain an overview of more extensive circuit programs, scroll bars are provided below and to the right of the programming interface, which can be used to scroll horizontally and vertically in the control program.



- ② "Standard" toolbar
- ③ Mode bar
- ④ "Tool" toolbar

- 6 Status bar
- ⑦ Diagram tree
- ③ Operation tree

#### 3.3.2 Project interface

The LOGO!Soft Comfort project interface displays a network view with the devices and network connections.

After you select "Add New Device", the Diagram Editor window appears.

Only LOGO! devices starting from 0BA7 can be programmed in a network project.

The Diagram Editor displays the program blocks and logic operations of the circuit program. The circuit program is initially empty.

To help you maintain an overview of more extensive circuit projects and programs, scroll bars are provided below and to the right of the network view and programming interface. They can be used to scroll horizontally and vertically in the control program.



① Menu bar

6 "Tool" toolbar

⑦ Programming interface

- ② "Standard" toolbar
- ③ Mode bar

⑤ Network view

- ⑧ Status bar
- ④ "Network" toolbar
- Operation tree

③ Diagram tree

# 4 Task: Factory gate control with LOGO! 0BA8

It is often possible to access a company's premises at more than one location. At each access point, it must be ensured that the gate can be opened and closed using pushbuttons directly on the gate or pull cords from the vehicle.

# 5 Planning

A LOGO! OBA8 is used for the control.

The gate is opened or closed using a cord-operated switch. The gate is fully opened or closed in this case.

In addition, every gate can be opened and closed locally in jog mode using pushbuttons.

A flashing light is activated 5 seconds before the gate movement starts and continues during the gate movement.

A safety pressure strip ensures that no persons are injured and no objects are caught and damaged when the gate closes.



# 5.1 Technology schematic diagram

Here you see the technology schematic diagram with the wiring for the task.



Figure 1: Technology schematic diagram

### 5.2 Reference table

The following signals are required for this task.

DI	ID	Function	NC/NO
11	-S0	OPEN GATE cord switch	NO
12	-S1	CLOSE GATE cord switch	NO
13	-S2	OPEN GATE pushbutton	NO
14	-S3	CLOSE GATE pushbutton	NO
15	-S4	GATE IS OPENED position switch	NC
16	-S5	GATE IS CLOSED position switch	NC
17	-S6	Safety pressure strip	NC

DO	ID	Function	
Q1	-K1	Contactor open gate	
Q1	-K2	Contactor close gate	
Q3	-H1	Warning light	

#### Legend for reference list

DI Digital input

DO Digital output

I Input

Q Output

- NC Normally Closed
- NO Normally Open

# 6 Structured step-by-step instructions

You can find instructions on how to perform planning below. If you already have a good understanding of everything, it is sufficient to focus on the numbered steps. Otherwise, simply follow the steps of the instructions illustrated below.

# 6.1 Starting LOGO!Soft Comfort V8.0 and adding LOGO! 0BA8

 $\rightarrow$  Start the LOGO!Soft Comfort V8.0 software.



 $\rightarrow$  The LOGO!Soft Comfort software opens in diagram mode.

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 $\rightarrow$  Click the Network project tab.

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- $\rightarrow~$  Click on "Add New Device" in the Network view.
- $\rightarrow$  In the device selection window, select LOGO! 0BA8.
- $\rightarrow$  Enter the network settings under Configuration.
- $\rightarrow~$  Confirm your selection with OK.

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		OK Cancel Help	
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### 6.2 LOGO! 0BA8 settings

 $\rightarrow$  Open the LOGO! settings by double-clicking on Settings.



 $\rightarrow$  All offline/online settings of LOGO! 0BA8 can be edited here.

General Hardware type	Hardware type	<u></u>				
I/O settings	Type:	DBA8.Standard				
I/O names						
Program passwor		nstructions/Character		Movimum rocours		
Power on				Maximum resources:		
Message text		Constants/Connectors	<u> </u>	Name	Quantity	
Additional info		Input		Function Blocks	400	-
Statistics		Network input		REM	250	
Comment		-Network analog input		Digital Inputs	24	
		Cursor key		Digital Outputs	20	
		-LOGO! TD Function key		Flag	64	
		Shift register bit		Analog Inputs	8	
		Analog input		Text Box	50	
		Output		Text contents	50	
		-Analog output		Analog outputs	8	
		Open connector		Program memory	8500	
		-Network output		Block names	100	
		Network analog output		Analog flags	64	
		Flag		Cursor keys	4	
		Analog flag		Shift register	4	
		-Status 1 (high)		Shift register bits	32	-
		Status 0 (low)		Open connectors	64	
		Basic Functions		LOGO! TD Func	4	
		AND		Network inputs	64	
		AND (Edge)		Network analog		
		NAND		UDF types	16	
		NAND (Edge)	•	UDF instances	64	
		< III III	>	Data Lon	1	- 1

 $\rightarrow$  I/O settings for the configuration of the analog terminals.

General	Rehavior of analog	outputs in STOP mode	
Hardware type		9 95 S	
I/O settings I/O names		s keep the last value	
		Value range type	Value in STOP mode
Program passwore Power on	AQ1	0-20mA/0-10V 👻	0.00
Message text	AQ2	0-20mA/0-10V -	0.00 💠
Additional info	AQ3	0-20mA/0-10V +	0.00
Statistics	AQ4	0-20mA/0-10V +	0.00
Comment	AQ5	0-20mA/0-10V -	0.00
	AQ6	0-20mA/0-10V -	0.00
	AQ7	0-20mA/0-10V 👻	0.00
	AQ8	0-20mA/0-10V -	0.00
		rted on LOGO!, do you want to atibility with older devices, ena	
	© Enable 0		516 2745.
	0	e available for your circuit pro	gram
	Enable 2	an a	g. s
	9		1
		nd AI2 corresponding to input ed in your circuit program.	terminals I7 and 18
	C Enable 4	Als	
	available	AI2 corresponding to input ter for use in your circuit program ally AI3 and AI4 correspondin	

 $\rightarrow~$  I/O names for designating the input and output terminals.

General Hardware type	I/O names			
I/O settings	I/O names			
I/O names	Input terminals:	Name	Output terminals:	Name
Program passwor	11	^		
Power on	12		Q2	
Message text	13	=	Q3	
Additional info	14		Q4	
Statistics	15		Q5	
Comment	16		Q6	
	17		Q7	
	18		Q8	
	19		Q.9	
	110		Q10	
	111	Q11		
	112		Q12	
	113		Q13	
	114		Q14	
	115		Q15	
	116		Q16	
	117		Q17	
	118		Q18	
	119		Q19	
	120		Q20	
	121		AQ1	
	122	•	A02	

 $\rightarrow~$  Close the LOGO! settings window with OK.

# 6.3 Entering input/output names

 $\rightarrow$  You can also open the I/O names window via the **Edit menu.** 

File	Edit	Format View Tools Window	Help	
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	::	Go to Block	Ctrl+G	
	st.	Bring to Front		Logo8_1
	1	Send to Back		192.168.0.1
		Input/Output Names	9	
		Block Properties		

#### $\rightarrow$ Enter the I/O names of the factory gate control and close the window with OK.

Input	Name		Output	Name	
11	cord switch S0 open gate NO	^	Q1	contactor K1 open gate	
12	cord switch S1 close gate NO		Q2	contactor K2 close gate	
13	pushbutton S2 open gate manual NO	=	Q3	warning light H1	
14	pushbutton S3 close gate manual NO		Q4		
15	position switch S4 gate is opened NC		Q5		
16	position switch S5 gate is closed NC		Q6		
17	safety pressure strip S6 NC		Q7		
18			Q8		
19			Q9		
110			Q10		
111			Q11		
112			Q12		
113			Q13		
114			Q14		
115			Q15		
116			Q16		
117			AQ1		
118			AQ2		
119			X1		
120			X2		
121			X3		
122		~	X4		2

# 6.4 Entering a program in the Diagram Editor

### 6.4.1 Inserting blocks

→ Minimize the network view. Right-click the name of the diagram and select "Rename". Then change the name to gate\_control.

LOGO!Soft Comfort	t				
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p. <u>Harts-Point or</u>	X III III	Open Cut Copy Paste Delete	Ctrl+X Ctrl+C Ctrl+V Delete		
		Rename	F2		~

→ Using drag-and-drop, move 7 inputs to the programming interface and place them in the following order from top to bottom: **I1**, **I3**, **I5**, **I2**, **I4**, **I6** and **I7**.

ols	Network view	8
Network Project	Diagram Editor	_
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Settings		
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		0.000
		:::
	13 (pushbutton S2 open gate manual NO)	
	— [] 1	
		111
	15 (position switch S4 gate is opened NC)	:::
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		:::
	IZ (oord switch, S:1 close gate.NO).	
		111
Instructions		111
Instructions		111
Constants		2.13
🔻 🦳 Digital		
Input		
Cursor key		111
F LOGO! TD Function key	IG (position switch SG gate is closed NC)	
Shift register bit		
Status 0 (low)		
hi Status 1 (high)		111
Q Output		111
·····× Open connector		
- M Flag	i na nava seba seba sena sena seba seba seba seba seba seba seba seb	
👻 🛅 Analog		
<mark>Al</mark> Analog input		
		:::
Analog flag		
- D Network		
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	v	111

#### 6.4.2 Aligning blocks

- $\rightarrow$  Select the inserted inputs using **Ctrl+click**.
- $\rightarrow$  Click the **Align vertically** button.



- $\rightarrow$  Click the **Space vertically** button and enter **50** for the distance value.
- $\rightarrow$  Confirm with **OK**.

Diagram Editor			- 8
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- $\rightarrow$  Move the Q1, Q2 and Q3 outputs to the programming interface using drag-and-drop.
- $\rightarrow$  Select the inserted outputs using **Ctrl+click**.
- $\rightarrow$  Click the **Align vertically** button.
- $\rightarrow$  Click the **Space vertically** button.
- $\rightarrow$  Enter **200** for the distance value.
- $\rightarrow$  Confirm with **OK**.

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	Spacing
	13 (pushbutton S2 open gate manual NO). Distance: 200 🛱 👔
	Use as Default
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-	
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Shift register bit	
Status 0 (low)	
hi Status 1 (high)	
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× Open connector	IB (position pwitch S5 gate is closed NC)
- Analog	
Analog input	23 (warning light H1).
Analog output	. I7. (safety pressure strip S6 NC)
Analog flag	
▼ Network	
Network input	A state of the state of

### 6.4.3 Setting parameters

- $\rightarrow$  Using drag-and-drop, place an On-delay in front of output **Q1**.
- $\rightarrow\,$  Double-click on B001 (On-delay) and set the time to 5 seconds.

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	Diagram Editor	
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	[ [ ] ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]	
	IS (position and Parameter Comment	
	Parameter	
	Block name:	
✓ Instructions		D2 (contactor K2 close gate)
Special functions		Laz (Contractor N2. close gate) .
Timer	On-Delay	· - Q - · · · · · · · · · · · ·
On-Delay	5 ♣ 0 0 € 1 Seconds (s:1/1 ▼	
Retentive On-Delay		
	Contraction Contra	
	Protection Active	
Asynchronous Pulse Genera		
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H Multiple function switch		
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 $\rightarrow$  The block functions in the programming interface can be shown using buttons.



 $\rightarrow~$  Place the remaining blocks B002 to B016 and set the times for B007 and B016.



#### 6.4.4 Connecting blocks

 $\rightarrow$  To complete the circuit, the individual blocks still have to be connected to one another.

For this purpose, select the <sup>1</sup> button for the block connection in the Tool toolbar.



- 6.4.5 Saving the finished circuit diagram of the gate control as a network project
  - $\rightarrow$  To save, click the diskette button  $\blacksquare$  and enter **gate\_control** for the file name.

Save in:	🔒 LOGO_pr	ojects	- 😥 📂 🛄 -	,
<u>G</u>	💸 gate_cor	trol.Inp		
_				
B				
(în	File name:	gate_control		Sav
0	Files of type:	Network Project (*.lnp)		Can

### 6.5 Simulation of the circuit

Program simulation allows you to test a circuit program and change its parameter assignment. In this way you can ensure that you transfer a functional and optimized circuit program to your LOGO!

- $\rightarrow$  The input signals should be preset for the simulation. Double-click on input **I1**.
- $\rightarrow\,$  Go to the Simulation tab and select Momentary pushbutton (make).
- $\rightarrow$  Also set inputs I2, I3 and I4 to Momentary pushbutton (make) under Simulation.

Parameter	Comment	Simul	ation		
Mode					
S	witch				
() 0 M	omentary pu	shbutto	on (make)		
© M	omentary pu	shbutto	on (break)		
🔘 Fi	requency				
	Value:		0 +	Hz	
Va	lue range				
	Min.:		0 🗘 🚹	Hz	
	Max.:	9	999 🖨 🚹	Hz	
		✓ Auto	omatic Rai	nge Of Val	ues

- $\rightarrow$  Double-click on input **I5**.
- $\rightarrow$  Go the Simulation tab and select the **Momentary pushbutton (break)**.
- → Also set inputs I6 and I7 to Momentary pushbutton (break) under Simulation.

Comment	Simulation		
Switch			
Iomentary pu	shbutton (mak	e)	
Iomentary pu	shbutton (brea	k)	
requency			
Value:	0 +	Hz	
alue range			
Min.:	0 -	<b>⊕</b> Hz	
Max.:	9999 🌩	<pre>   Hz </pre>	
	✓ Automatic F	Range Of Values	
	Switch fomentary pus frequency Value: alue range Min.: Max.:	Iomentary pushbutton (mak Iomentary pushbutton (brea Frequency Value: 0 + alue range Min.: 0 + Max: 9999 +	Switch Iomentary pushbutton (make) Iomentary pushbutton (break) Frequency Value: 0+ 1 Hz alue range

 $\rightarrow$  Save your circuit diagram.

 $\rightarrow$  To start the simulation, click the **simulation** button in the Tool toolbar. You are then in simulation mode.



# 6.6 Transferring the tested program to LOGO!

 $\rightarrow$  Once you have tested your program with LOGO!Soft Comfort simulation, you can

transfer it from **PC -> LOGO!** with the **U** button.

 $\rightarrow$  Click the **Refresh button**  $\bowtie$  to display the accessible LOGO! devices.

Test Target IP address: 192.168. 0. 1 Address book GOI: IP Address Subnet Mask Gateway MAC address Status	terface					
Target IP address: 192.168. 0. 1 Address book GOI: IP Address Subnet Mask Gateway MAC address Status	Connect	hrough: Ethernet	• [In	tel(R) Ethernet Con	nection I217-LM	-
Target IP address: 192.168. 0. 1 Address book GOI: IP Address Subnet Mask Gateway MAC address Status						
Target IP address: 192.168. 0. 1 Address book GOI: IP Address Subnet Mask Gateway MAC address Status	irget					
Target IP address: 192.168. 0. 1 Address book GOI: IP Address Subnet Mask Gateway MAC address Status						
Target IP address: 192.168. 0. 1 Address book GOI: IP Address Subnet Mask Gateway MAC address Status				~		
Target IP address: 192.168. 0. 1 Address book GOI: IP Address Subnet Mask Gateway MAC address Status						
GO!: 21 IP Address Subnet Mask Gateway MAC address Status				Test		and the second second
GO!: 21 IP Address Subnet Mask Gateway MAC address Status						
IP Address Subnet Mask Gateway MAC address Status						
		Target IP a	address: 192.168. 0	). 1	Address book	
168.0.1 255.255.255.0 0.0.0.0 E0-DC-A0-01-44-3E Yes	Accessib		address: 192.168. 0	). 1	Address book	ß
	Accessib Name	le LOGO!: IP Address	Subnet Mask	Gateway	MAC address	
	Accessib		address: 192.168. 0	). 1	Address book	
		le LOGO!:	Subnet Mask	Gateway	MAC address	Status
		le LOGO!: IP Address	Subnet Mask	Gateway	MAC address	Status
card	Name	le LOGO!: IP Address	Subnet Mask	Gateway	MAC address	Status

 $\rightarrow$  Confirm the next window with **OK** or **Yes**.

-					
?	The device is in Change to STC				
	Yes	No	]		
PC -	-> LOGO!			_	×
-					
		61	%	_	
GGO!		61	%	-	
DGO!	The device is in Change to RUN	STOP mode.	<b>x</b>	-	

### 6.7 Online test

 $\rightarrow$  With the online test button  $\stackrel{1}{12}$ , the circuit program can be tested in connection with the LOGO!. The states of the inputs and outputs and logic operations are displayed.



 $\rightarrow$  Click the **Online test button** to start monitoring.

# 6.8 Checklist

No.	Description	Completed
1	Project created	
2	LOGO! controller detected and entered in the project	
3	Successful download of the program to the LOGO! without error message	
4	Actuate open gate cord switch (I1 = 1), warning light flashes $\rightarrow$ Q3 = 0-1-0-1	
5	After 5 s, the gate opens (I6 = 1) $\rightarrow$ Q1 = 1	
6	Gate is opened (I5 = 0) $\rightarrow$ Q1 = 0, Q3 = 0	
7	Actuate close gate cord switch (I2 = 1), warning light flashes $\rightarrow$ Q3 = 0-1-0-1	
8	After 5 s, the gate closes (I5 = 1) $\rightarrow$ Q2 = 1	
9	Gate is closed (I6 = 0) $\rightarrow$ Q2 = 0, Q3 = 0	
10	Actuate open gate pushbutton (I3 = 1), warning light flashes $\rightarrow$ Q3 = 0-1-0-1	
11	After 5 s, the gate opens (I6 = 1) $\rightarrow$ Q1 = 1	
12	Release open gate pushbutton (I3 = 0) $\rightarrow$ Q1 = 0, Q3 = 0	
13	Actuate pushbutton close gate (I4 = 1), warning light flashes $\rightarrow$ Q3 = 0-1-0-1	
14	After 5 s, the gate closes (I5 = 1) $\rightarrow$ Q2 = 1	
15	Release close gate pushbutton (I4 = 0) $\rightarrow$ Q2 = 0, Q3 = 0	
16	Actuate close gate cord switch (I2 = 1), warning light flashes $\rightarrow$ Q3 = 0-1-0-1	
17	After 5 s, the gate closes (I5 = 1) $\rightarrow$ Q2 = 1	
18	Actuate safety strip (I7 = 0)	
19	Gate stops $\rightarrow$ Q2 = 0, Q3 = 0	
20	Actuate pushbutton close gate (I4 = 1), warning light flashes $\rightarrow$ Q3 = 0-1-0-1	
21	After 5 s, the gate closes (I5 = 1) $\rightarrow$ Q2 = 1	
22	Actuate safety strip (I7 = 0)	
23	Gate stops $\rightarrow$ Q2 = 0, Q3 = 0	

# 7 Task: Message text

### 7.1 Task

In this task, you expand the gate control program to include a message text function. The expanded diagram is to be planned, programmed and tested. In addition, the status of the gate will be displayed on the LOGO! display. In order for the message text to also be displayed via a Web browser, the Web browser is selected as an additional message destination.

#### 7.2 Insert message texts

You can use drag-and-drop to move message texts under **Miscellaneous** to the diagram and interconnect them.

- $\rightarrow$  Move two message texts to the programming interface.
- → Interconnect the message texts with input I6 (gate is closed NC)



→ Negate the interconnection at block B017.

#### Note:

The message text in the block:

- B017 is displayed when the gate is closed.
- In contrast, B018 appears when the gate is open.

#### 7.3 Enter message text

→ Double-click on message text block B017. The window for parameter assignment of the message text opens.

Each message text has a priority. If multiple message texts are pending, the text with the higher priority is always displayed.

- $\rightarrow$  Select LOGO! display and Web server as message destinations.
- $\rightarrow$  Enter **gate closed** as the message text.
- $\rightarrow$  Click **OK** to close the window.

B017 [Message texts] arameter Comment	
arameter   Comment	
Parameter	
Block name:	
essage Text Setting	
Priority: 0	Current character set selection
C Acknowledge Message	O Character set 1: ISO8859_1
	Character set 2: ISO8859_1 Enabled
ontents	
lock	Parameter
B001 [On-Delay]	
B007 [On-Delay]	
B016 [Asynchronous Pulse Generator]	
	Current time Current date
	Message enable time
	Message enable date
Ticker setting	🕂 Insert Parameter
Ocharacter by character:	
🔿 Line by line:	Message Text
Line1 Line2 Line3 Line4 Line5	☐ °C
Message Destination	
● LOGO! Display ◯ LOGO! TD ◯ Both 🔽 We	b server g a t e
с.,, с. с. <u>с</u>	
	c I o s e d
Protection Active	
Protection Active	
Protection Active	

- → Double-click on message text block B018. The window for parameter assignment of the message text opens.
- $\rightarrow$  Select LOGO! display and Web server as message destinations.
- $\rightarrow$  Enter **gate open** as the message text.
- $\rightarrow$  Click **OK** to close the window.

B018 [Message texts]	
Parameter Comment	
Parameter	
Block name:	
Nessage Text Setting	
Priority: 1	Current character set selection     Orbaracter set 1: ISO8859_1
Contents	Character set 2: ISO8859_1 Enabled
Block	Parameter
B001 [On-Delay]	
B007 [On-Delay]	
POIS [Asymphonesus Dulas Constants]	
UU B016 [Asynchronous Pulse Generator]	
	Current time
	Current date
	Message enable time
	Message enable date
and the second	Insert Parameter
Character by character:	
○ Line by line:	Insert Parameter  Message Text  C  AI ON/OFF Symbol 00:00 Edit manually
Character by character:	Insert Parameter  Message Text  C  AI ON/OFF Symbol 00:00 Edit manually
Character by character: Cline by line: Line 1 Line 2 Line 3 Line 4 Line 5	Insert Parameter  Message Text  C  AI ON/OFF Symbol 00:00 Edit manually
Character by character: Line by line: Line 1 Line 2 Line 3 Line 4 Line 5 Message Destination	Line6
Character by character: Line by line: Line 1 Line 2 Line 3 Line 4 Line 5 Message Destination	Line6
Character by character: Line by line: Line 1 Line 2 Line 3 Line 4 Line 5 Message Destination	Line6
Character by character: Line by line: Line 1 Line 2 Line 3 Line 4 Line 5 Message Destination OLOGO! Display LOGO! TD Both V	Line6
Character by character: Line by line: Line 1 Line 2 Line 3 Line 4 Line 5 Message Destination OLOGO! Display LOGO! TD Both V Me	Line6 Line6 g a t e
Character by character: Line by line: Line 1 Line 2 Line 3 Line 4 Line 5 Message Destination	Line6 Line6 g a t e

#### Note:

Information on further use of message texts can be found in the online help.

# 7.4 Assign backlighting of the message text

Backlighting on the LOGO! display can be specified using flags.

Parameter	Comment
Parameter	
Flag	Number: M25
Specia	al flag background
M8 =	= Initialization Flag
M25	= LOGO! displays white backlight
M26	= LOGO! TD white backlight
M27	= Message Character Set Flag
M28	= LOGO! displays the amber backlight
M29	= LOGO! displays red backlight
M30	= LOGO! TD amber backlight
M31	= LOGO! TD red backlight
	OK Cancel Help

→ Set flag 25 for white backlighting after the message text (B017) and flag 28 for yellow backlighting after the message text (B018).

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• •	•		$\cdots$		1		÷.		•	•	in	- :			÷.	·		2	• •				۰.		1		•	•	•	•	÷.
• •	•				· 5	101	4	•	•	•	M2	) C	LU	GI	U!	aı	sp	Lay	ys i	Νħ	ite	D	a ci	KII	gn	IJ	•		•	•	9
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2223	35	1	Southeast .	2002/03/2002	-						N		1.	8	12	23	500	2	203	3.5	12	10	12.5	100	1	50	23	10		22	22
• •	•		Dela -		-				•	•					•	•	•		• •	•	•		•	•	•	•	•	•	•	•	÷.
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#### Note:

The output of the message text block must be interconnected. Alternatively, you can also interconnect an open terminal here.

# 7.5 Simulation of the message texts

 $\rightarrow$  To start the simulation, click the simulation icon in the Tool toolbar. You are then in simulation mode.



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### 7.6 Online test of the message texts



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# 7.7 "Message text" checklist

No.	Description	Complet ed
1	Project created	
2	LOGO! controller detected and entered in the project	
3	Successful download of the program to the LOGO! without error message	
4	Message text on LOGO! display "Gate closed" with white background	
5	Actuate open gate cord switch (I1 = 1), warning light flashes $\rightarrow$ Q3 = 0-1-0-1	
6	After 5 s, the gate opens (I6 = 1) $\rightarrow$ Q1 = 1	
7	Message text on LOGO! display "Gate open" with yellow background	
8	Gate is opened (I5 = 0) $\rightarrow$ Q1 = 0, Q3 = 0	
9	Actuate close gate cord switch (I2 = 1), warning light flashes $\rightarrow$ Q3 = 0-1-0-1	
10	After 5 s, the gate closes (I5 = 1) $\rightarrow$ Q2 = 1	
11	Gate is closed (I6 = 0) $\rightarrow$ Q2 = 0, Q3 = 0	
12	Message text on LOGO! display "Gate closed" with white background	
13	Actuate open gate pushbutton (I3 = 1), warning light flashes $\rightarrow$ Q3 = 0-1-0-1	
14	After 5 s, the gate opens (I6 = 1) $\rightarrow$ Q1 = 1	
15	Message text on LOGO! display "Gate open" with yellow background	
16	Release open gate pushbutton (I3 = 0) $\rightarrow$ Q1 = 0, Q3 = 0	
17	Actuate pushbutton close gate (I4 = 1), warning light flashes $\rightarrow$ Q3 = 0-1-0-1	
18	After 5 s, the gate closes (I5 = 1) $\rightarrow$ Q2 = 1	
19	Release close gate pushbutton (I4 = 0) $\rightarrow$ Q2 = 0, Q3 = 0	
20	Actuate close gate cord switch (I2 = 1), warning light flashes $\rightarrow$ Q3 = 0-1-0-1	
21	After 5 s, the gate closes (I5 = 1) $\rightarrow$ Q2 = 1	
22	Actuate safety strip (I7 = 0)	
23	Gate stops $\rightarrow$ Q2 = 0, Q3 = 0	
24	Actuate pushbutton close gate (I4 = 1), warning light flashes $\rightarrow$ Q3 = 0-1-0-1	
25	After 5 s, the gate closes (I5 = 1) $\rightarrow$ Q2 = 1	
26	Actuate safety strip (I7 = 0)	
27	Gate stops $\rightarrow$ Q2 = 0, Q3 = 0	

# 8 Displaying message texts via a Web browser

### 8.1 Activating the Web server in LOGO!

To display message texts of the LOGO! via a Web browser, the Web server must first be activated in the online settings of LOGO!.

- $\rightarrow$  Double-click on **Settings** in the network project.
- $\rightarrow$  Select the **Online Settings** tab in the LOGO! settings window.

Tools		Network view		/
✓ N	etwork Project	📑 Add New Device ጆ Go Online 🔊	🛙 Go Offline 🔍 Zoom In 🔍 Z	Coom Out
gate_control		Local PC	LOGO! settings	
T	Logo8_1 [LOGO! 0BA8]		Offline settings Onl General Hardware type	Name settings Device name: Logo8_1
		Logo8_1 192.168.0.1	I/O names Program passwork Power on	Program Name:
			Message text Additional info Statistics Comment	IP Address: 192.168. 0. 1 Subnet Mask: 255.255.255. 0 Default gateway

 $\rightarrow$  Click **Connect** to activate the online settings of LOGO!.

ffline settings Online settings						
Connect to LOGO!						
Show FW version	Interface					
Assign IP address	Connect through	n: Ethernet	<ul> <li>Intel(R)</li> </ul>	) Ethernet Connect	ion I217-LM	-
Set clock						
Operating mode	Target					
Clear program and password						
TD power-on screen						
Hours Counter				1		
Upload data log		-				
Diagnostics						
Summer/Winter time	100 C		L	Connect		A
Access control settings						
Dynamic server IP filter	5	Target IP address: 1	92.168. 0. 1	Ad	ldress book	
						0
Clock Sync with EM Switch	Accessible LOG	0!:				
Clock Sync with EM Switch			net Mask	Gateway	MAC address	Status
Clock Sync with EM Switch			net Mask	Gateway	MAC address	Status
Clock Sync with EM Switch			et Mask	Gateway	MAC address	
Clock Sync with EM Switch			net Mask	Gateway	MAC address	
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Clock Sync with EM Switch			net Mask	Gateway	MAC address	
Clock Sync with EM Switch			net Mask	Gateway	MAC address	
Clock Sync with EM Switch			iet Mask	Gateway	MAC address	
Clock Sync with EM Switch			iet Mask	Gateway	MAC address	
Clock Sync with EM Switch	Name IF		et Mask	Gateway	MAC address	

- $\rightarrow~$  Click on Access control settings.
- $\rightarrow$  Confirm the change to **STOP** mode.

🜃 LOGO! settings		23
Offline settings Online settings		
Connect to LOGO! Show FW version	Remote access	
Assign IP address Set clock Operating mode Clear program and password	Allow remote access Enable password protection for remote access	
TD power-on screen Hours Counter Upload data log	Enter new password New password:	=
Diagnostics Summer/Winter time Access control settings Dynamic server IP filter Clock Sync with EM Switch	Allow LOGO!	
	Enter new password New password: Confirm New Password:	
	Apply Web server access	
		OK Cancel Help

 $\rightarrow$  Select the Allow Web server access check box and click Apply.

LOGO! settings		×
Offline settings Online settings		
Connect to LOGO!	New password:	
Show FW version	Confirm New Password:	
Assign IP address		
Set clock		
Operating mode	Apply	
Clear program and password	Web server access	
TD power-on screen	Allow Web server access	
Hours Counter	Enable password protection for Web server access	
Upload data log		
Diagnostics		
Summer/Winter time	Enter new password	Г
Access control settings	New password:	
Dynamic server IP filter	Confirm New Password:	
Clock Sync with EM Switch	Committee Password.	
	Apply	
	Control operation from the LOGO! TD	
	✓ Allow operation control from the LOGO! TD	
	Enable password protection for operation control	
	Enter new password	
	New password:	
	Confirm New Password:	
		OK Cancel Help

The Web server is activated and the LOGO! changes back to RUN mode.

 $\rightarrow$  Confirm the change to RUN mode.

Mage LOGO! settings		23
Offline settings Online settings		
Connect to LOGO!	New password:	
Show FW version	Confirm New Password:	
Assign IP address		
Set clock		
Operating mode		
Clear program and password	Web server The device is in STOP mode.	
TD power-on screen	☑ Alle Change to RUN?	
Hours Counter		
Upload data log	Yes No	
Diagnostics		
Summer/Winter time	Enter new password	_
Access control settings	New password:	
Dynamic server IP filter	Confirm New Password:	
Clock Sync with EM Switch	Contirm New Password:	
	Apply	
	Control operation from the LOGO! TD	
	Allow operation control from the LOGO! TD	
	Enable password protection for operation control	
	Enter new password	
	New password:	
	Confirm New Password:	•
		OK Cancel Help

 $\rightarrow$  Click **OK** to close the LOGO! settings window.

### 8.2 LOGO! in the Web browser

 $\rightarrow$  Start Internet Explorer and enter the IP address of the LOGO!.



 $\rightarrow$  Set the language to **English** and click "Log on".

Web User Log off			
LOGO! System	L+ M 11 12 13 14 15 16 17 18	System	
LOGO! Variable		Device Series	0BA8
LOGO! BM	and the second se	Device Type	12/24RCE
		FW Version	V1.08.01
LOGO! TD	SIEMENS LOGO!	IP Address	192.168.0.1
		Status	Running

 $\rightarrow~$  Click on LOGO! BM to show the LOGO! display in the Web browser.





Note:

Information on further use of the Web view can be found in the online help.

# **9** Additional information

In the "Instructions" folder of this training curriculum 900-011, you can find additional information on programming and handling of LOGO!, such as online help, LOGO! product manual and LOGO! presentations. See link below.

You can also find a helpful collection of links such as: **LOGO! Web Based Training**, Getting Started, Videos, Tutorials, Apps, Manuals, Programming Guidelines and Trial Software/Firmware, at the following link :

www.siemens.com/sce/logo