

LOGO! 8: Time Switch Function for KNX

LOGO! 8, LOGO! CMK2000

https://support.industry.siemens.com/cs/ww/en/view/109745699

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1 Introduction

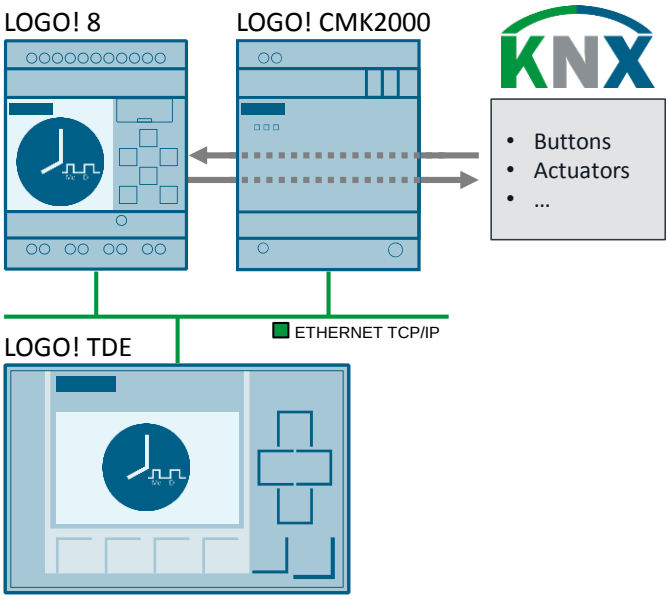
1.1 Overview

With LOGO! 8 and integrated functions such as Astrotimer, Yearly and Weekly Timer, you can quickly and easily solve many automation tasks. The LOGO! text display (TDE) and the integrated web server of LOGO! 8 offer additional possibilities for controlling and monitoring.

For communication in building automation, Siemens offers a solution for LOGO! 8 in form of the communication module CMK2000. The communication module enables communication with any KNX devices via the KNX building system bus.

This application example offers you a complete time switch function for LOGO! 8 and shows you how to mount it into a KNX system via the CMK2000.

Figure 1-1: Hardware setup for the application example



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Advantages

The combination of the time switch function in LOGO! 8 and the CMK2000 module offers you the following advantages:

- Switching of actuators at configurable times
- Configuration of timer via the LOGO! display
- Configuration of timer using the integrated Web server of the LOGO! 8
- Integration of LOGO! inputs and output into a KNX system

Target group

This application example is aimed at experienced KNX users who seek to expand their KNX system with the functionalities of a LOGO! 8.

1.2 Mode of Operation

Time switch function

The time switch function in LOGO! consists of weekly and yearly timers and offers the following scope of functions:

- Standard times:
  Switching on and off on certain days of the week, at certain times.
- Event times:
  Switching on and off on a certain date, at a certain time (e.g. for evening events).
- Times for suppressing the time switch function:
  Date and time at which the standard and event times are inoperative, e.g. during school holidays.
- Central switching on and off:
  Manual switching on and off, regardless of the time settings, e.g. for maintenance work.

Mounting into KNX

Via the LOGO! communication module CMK2000, the time switch function of the LOGO! is integrated into a KNX system.

Via configurable communication channels of the LOGO! CMK2000, the data between the LOGO! and the KNX devices are exchanged bi-directionally.

In this application example, a 3-Gang Button with status LEDs is used as KNX device. A status LED indicates the status of the time switch function.

Operation

The time switch function is configured by the user.
This requires no special programming knowledge. The following options are available:

- Displaying message texts with time and date parameters at the LOGO! TDE
- Displaying message texts with time and date parameters using the integrated web server of the LOGO!

For users with programming experience, the following additional options to configure the LOGO! time switch function are available:

- In LOGO! Soft Comfort during commissioning
- Configuration mode at LOGO! display

Central switching on and off is done via configured KNX buttons, digital inputs of the LOGO!, or function buttons of the LOGO! TDE.

LOGO! TDE is an optional component whose functions (message texts and function buttons) can also be used via the web server. You can also use a LOGO! basic device without display.

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2 Setup and description

2.1 Components used

This application example was created with the following components:

Table 2-1: Hardware and software components for the application example

Component	Number	Article number	Note
LOGO! Soft Comfort V8.1	1	6ED1058-0BA08-0YA1	Upgrade to V8.1 can be found at http://www.siemens.com/logo
ETS5 Demo	1	Download link, see \6\	A maximum of 5 KNX devices per project
LOGO! Power	1	6EP1332-1SH43	-
LOGO! 8 12/24 RCE	1	6ED1052-1MD00-0BA8	-
LOGO! CMK2000	1	6BK1700-0BA20-0AA0	Product data base for ETS4/5: http://www.siemens.com/gamma-td
LOGO! TDE	1	6ED1055-4MH00-0BA1	Optional components
2-Gang Button	1	-	24 V
Siemens GAMMA KNX Power Supply	1	5WG1 125-1AB12	320 mA
Siemens GAMMA KNX bus coupler	1	5WG1 117-2AB12	-
Siemens GAMMA KNX 3-Gang Button	1	5WG1 223-2DB13	Product data base for ETS4/5: http://www.siemens.com/gamma-td
Siemens GAMMA KNX USB Interface	1	5WG1 148-1AB12	Required for the programming of the KNX devices.

This application example consists of the following components:

Table 2-2: Components for the application example

Component	File name	Note
Documentation	109745699_LOGO8_TimeSwitch_KNX_DOC_en.pdf	-
LOGO! 8 Program	109745699_LOGO8_TimeSwitch_CODE_en.lsc	Requirement: LOGO! Soft Comfort V8.1
ETS5 project	109745699_ETS5_LOGO_for_KNX_Project_en.knxproj	-

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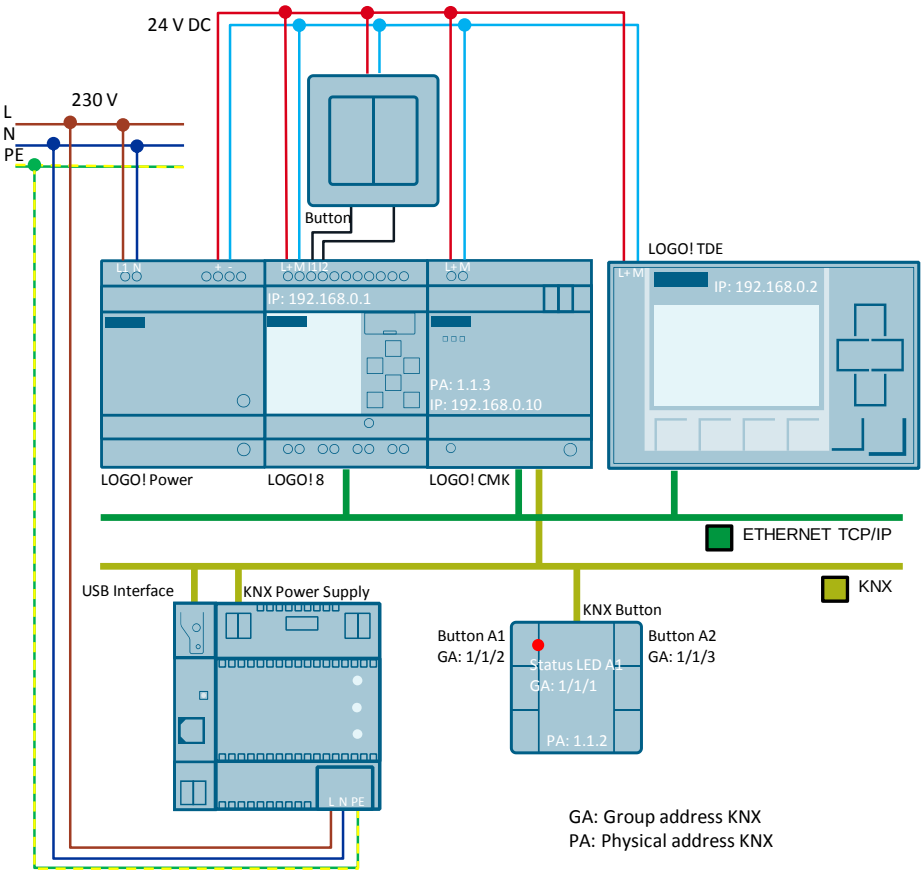
2.2 Hardware setup

The following figure shows the hardware setup for this application example.

Note

LOGO! TDE is an optional component, as you can also use the functions (message texts and function keys) via the integrated LOGO! web server.

Figure 2-1: Hardware setup



2.3 LOGO! program

The time switch function consists of weekly and yearly timer function blocks.

The function blocks are logically linked with each other and with the input signals in order to switch an output on or off at certain times or manually.

Note

A function description of the time switch function can be found in the program commentary in LOGO! Soft Comfort:
“Tools > Select Hardware… > Offline settings > Comment”.

Tip: Under “Tools > Options… > Print”, activate the option box “Comment” for the function description to be printed together with the program.

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2.3.1 Basics

Week timer

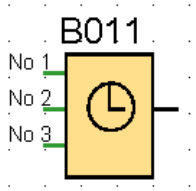
Every week timer has three setting cams via which you can parameterize a time slot each. Via the cams, you can set the switch on and off times (see Table 3-1).

If the output has not yet been set, the week timer will switch it on at a switch-on time.

If a switch-off time is configured, the output of the week timer will be reset at the switch-off time.

The switching state of the week timer depends on all three cams, No 1, No 2 and No 3.

Figure 2-2: Week timer function block



Yearly timer

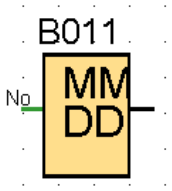
On certain dates, the yearly timer switches the output on or off.
The switch-on time indicates month and day, on which the timer is set.
The switch-off time indicates month and day, on which the timer is reset again.
(see Table 3-2).

The function offers two repeat patterns:

- Yearly:
  Timer output switches on every year at the specified month and day of the switch-on time and remains switched on until the specified month and day of the switch-off time.
- Every month:
  Timer output switches on every month at the specified day of the switch-on time and remains switched on until the specified day of the switch-off time.

The switch-on year specifies the first year in which the timer will be activated.
The switch-off year specifies the last year in which the timer will be switched off.

Figure 2-3: Yearly timer function block



Internal clock buffering

The internal clock of a LOGO! 8 is buffered by an accumulator and continues to run in the event of a power supply failure.

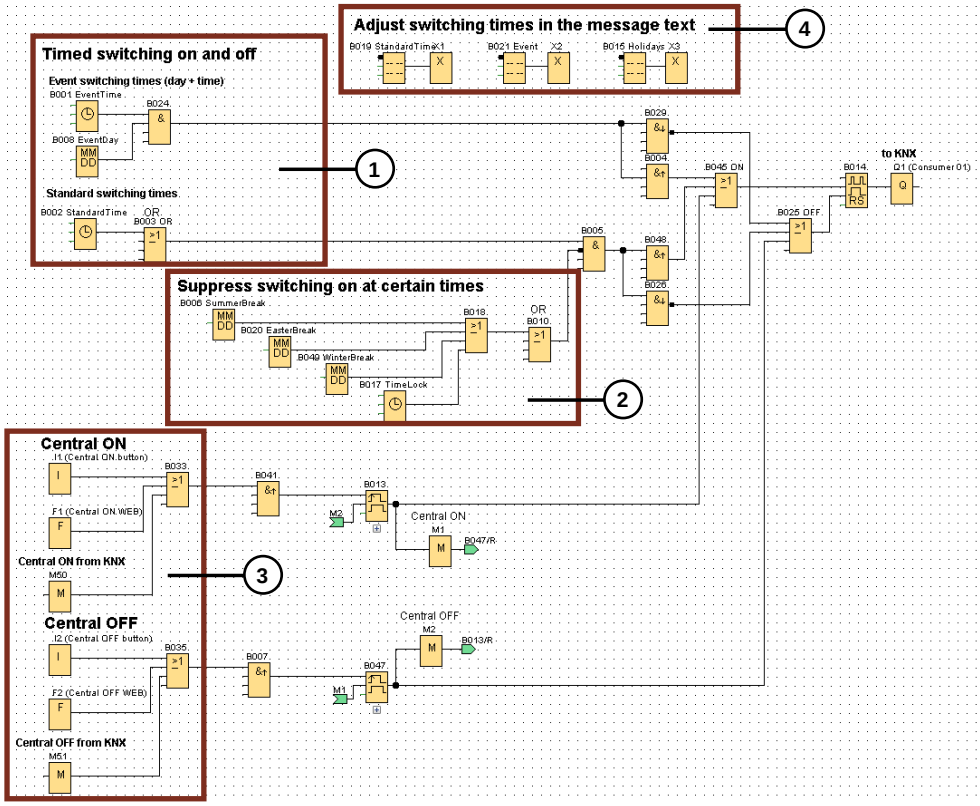
The buffering time is influenced by the ambient temperature. At 25 °C (77 °F), it is around 20 days.

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2.3.2 Functional principle of the switching program

The following figure provides an overview of the entire switching program for the time switch function. The individual positions (1) to (4) will be discussed during the course of this chapter.

Figure 2-4: Overview switching program



The following table shows the input and output signals of the time switch function:

Table 2-3: Signals in the LOGO!

Signals	Function	Description
Input I1	Central switching on of output Q1	Button on the LOGO!
Function key F1		LOGO! TDE or, alternatively, via the LOGO! web server
Flag M50		Connection to KNX
Input I2	Central switching off of output Q1	Button on the LOGO!
Function key F2		LOGO! TDE or, alternatively, via the LOGO! web server
Flag M51		Connection to KNX
Output Q1	Output signal of the time switch function	Switching of a load (e.g. a lamp) and connection to KNX (e.g. actuator)

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1. Time-controlled switching on and off

The combination of different switching times expands the time switch function as follows.

Standard switching time

Via the week timer function block "B002 StandardTime", the standard switching time is defined.

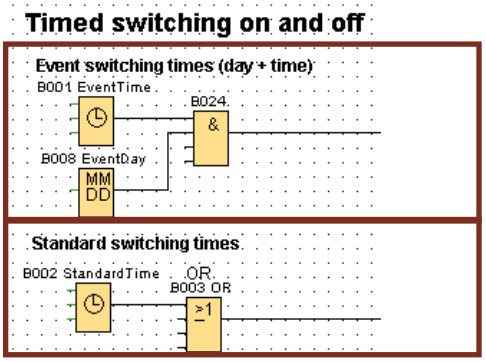
Via the function block, it is set, on which weekdays and at which time the time switch function switches the output Q1 on and off.

Event switching time

By linking the week timer "B001 EventTime" and yearly timer "B008 EventDay" function blocks, an event switching time is defined.

Via the function blocks, the date and time is set for when the time switch function switches the output Q1 on and off.

Figure 2-5: Blocks for time-controlled switching on and off



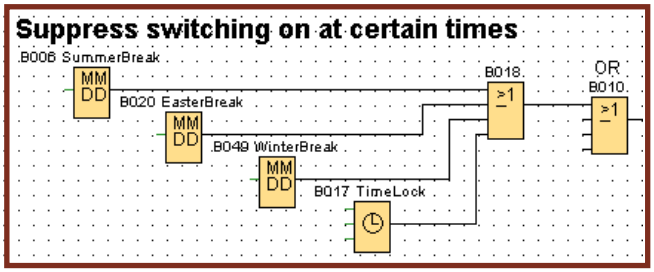
2. Suppress switching on at certain times

With the yearly timers “B006 SummerBreak”, “B020 EasterBreak” and “B049 WinterBreak”, a time period (e.g. holidays) can be defined during which the switch-on via the standard switching times is suppressed.

With the weekly timer “B017 TimeLock”, it can be defined, on which weekdays and at which time the switch-on via the standard switching times is suppressed.

The event switching times are not suppressed and continue to switch. This allows a planned switch-on and off, despite the suppressed standard switching times.

Figure 2-6: Blocks for suppressing standard switching times



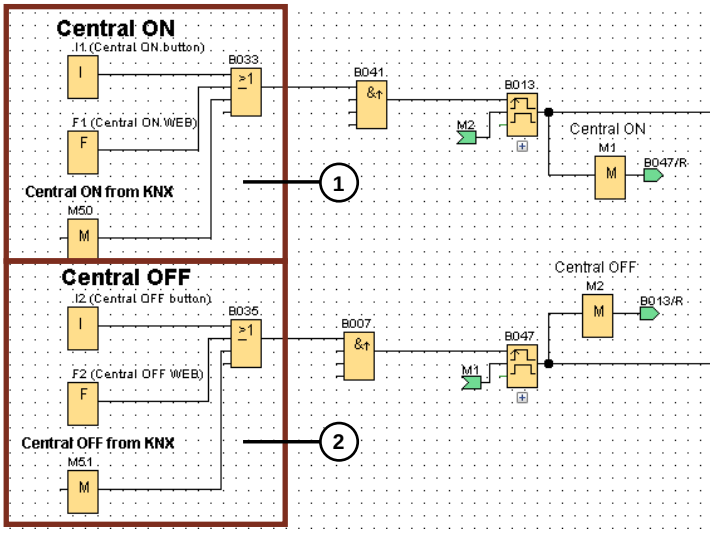
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3. Central switching on and off

1. Via the input I1, the function key F1 or the flag M50 (signal from the KNX), the output of the time switch function is switched on centrally.
2. Via the input I2, the function key F2 or the flag M51 (signal from the KNX), the output of the time switch function is switched off centrally.

The central switching on and off will be overwritten with the next impulse from the set switching times.

Figure 2-7: Blocks for central switching on and off



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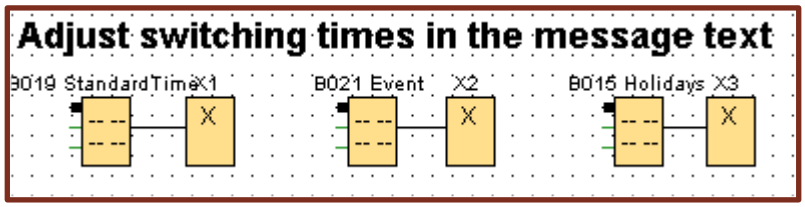
4. Adjust switching times in the message text

To comfortably adjust the switching times, the switching program contains message text blocks. The content of the message texts is displayed at the LOGO! TDE or in the web server (LOGO! TD).

Note

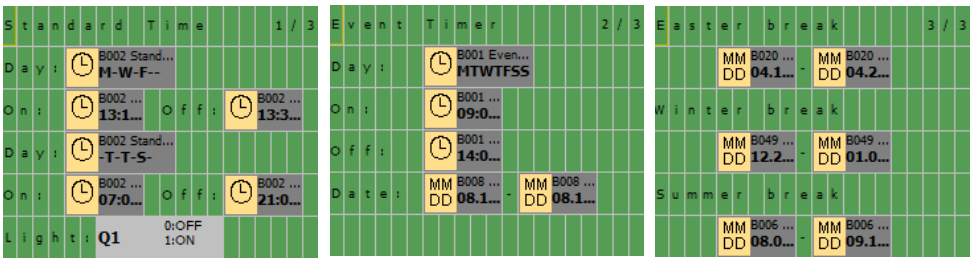
In this application example, the display via the LOGO! TD is preferred, whereby more characters per line are available in the message text than via the LOGO! display.
Additionally, the function keys and message texts of the LOGO! TD can be used via the web server.

Figure 2-8: Message text blocks



In the message texts, individual parameters of the weekly and yearly timers are inserted. The parameters are clearly named for an unequivocal identification. During operation, an operator can select and change a parameter via the message texts at the display or via the web server.(see 4.1.2).

Figure 2-9: Parameters in the message texts



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2.3.3 Simulation mode

With LOGO! Soft Comfort, you can simulate and test the time switch function and the message texts prior to loading them to a LOGO! basic device.

The simulation is already possible with the demo version of LOGO! Soft Comfort.

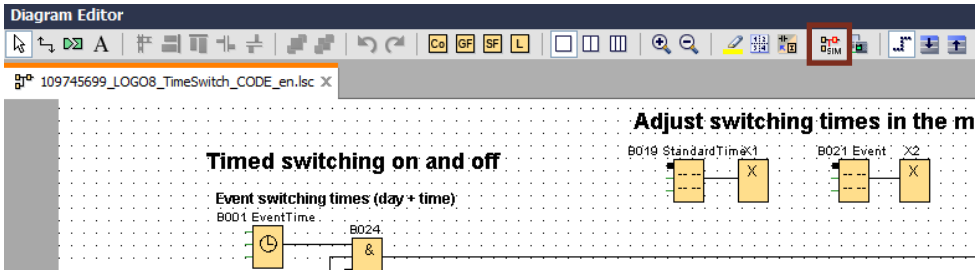
Start the simulation in order to better comprehend the behavior of the switching program and the function of the message texts.

Start simulation

Open the supplied LOGO! program "109745699_LOGO8_TimeSwitch_CODE_de.lsc" with LOGO! Soft Comfort V8.1.

Start the simulation by clicking the "Simulation" button on the "Tool" toolbar of the diagram editor.

Figure 2-10: Start simulation



Simulation mode

Upon starting the simulation mode, LOGO! Soft Comfort displays the simulation bar in the lower window area with the following icons.

Figure 2-11: Simulation bar



Click on the button (1) of the simulation bar from Figure 2-11 to change the current time in LOGO! Soft Comfort. By setting the time shortly before the switching time occurs, you can, for example, test and check the set switching times of a weekly timer.

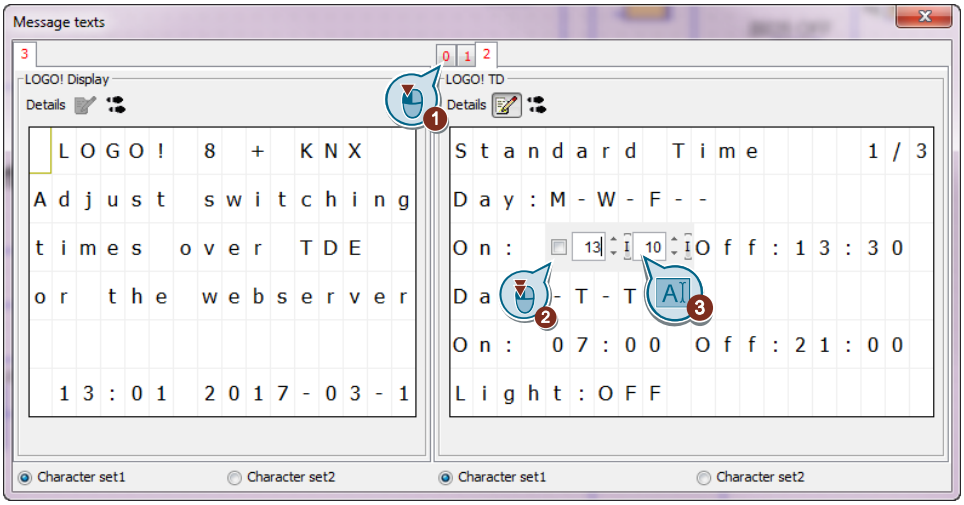
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Via the button (2) of the simulation bar from Figure 2-11, you can open or close the message text window.

In the message text window (Figure 2-12), you can switch between the programmed message texts (1). To open the input field of a parameter in a simulated message text, double-click on the parameter (2). Then, enter a new value for the parameter (3).

Observe the functioning of the program with the changed parameters. If necessary, change the current time in LOGO! Soft Comfort.

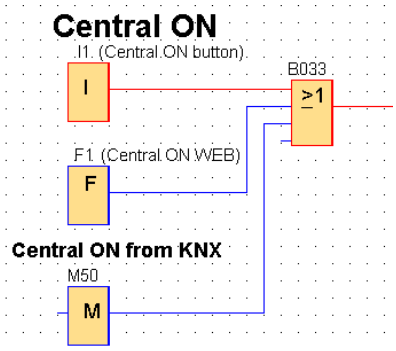
Figure 2-12: –Simulating a message text



Whether the signal "1" or "0" is switched at a connection line can be seen in the color representation (Figure 2-13). In simulation mode, the connection lines with signal “1” are, by default, displayed in red and the connection lines with signal “0” in blue.

To simulate an active signal at input I1, for example, you click on the button (3) of the simulation tab from Figure 2-11, or directly on the input block I1. The described simulation is also possible with the function key, however, not with the flag.

Figure 2-13: Simulate input signal



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2.4 Mounting the LOGO! into KNX

The LOGO! 8 is mounted into a KNX system via the LOGO! communication module CMK2000.

In this, you can define the communication channels in LOGO! CMK2000 from the LOGO! to the KNX and vice versa. For the channels, you parameterize inputs and outputs, flags or variable memories as signal in the LOGO!.

The following table shows the signals of the LOGO! for this application example and the communication direction between LOGO! and KNX.

Table 2-4: Signal exchange between LOGO! and KNX

Signals in the LOGO!	Group address in KNX	Direction	Description
Output Q1	1/1/1	LOGO! → KNX	Status LED A1 at KNX button for the display of the time switch function as substitute for an additional switch actuator.
Flag M50	1/1/2	KNX → LOGO!	Button A! at KNX button for central switching on.
Flag M51	1/1/3	KNX → LOGO!	Button A2 at KNX button for central switching off.

For the sake of completeness, chapters 2.4.1 and 2.4.2 describe the steps for the configuration of the LOGO! CMK2000 and the integration of the LOGO! signals via the ETS5 software. If you want to commence operation with the already configured LOGO! CMK2000 from the supplied ETS5 project, follow the instructions from chapter 3.4.

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2.4.1 LOGO! CMK2000 parameterization

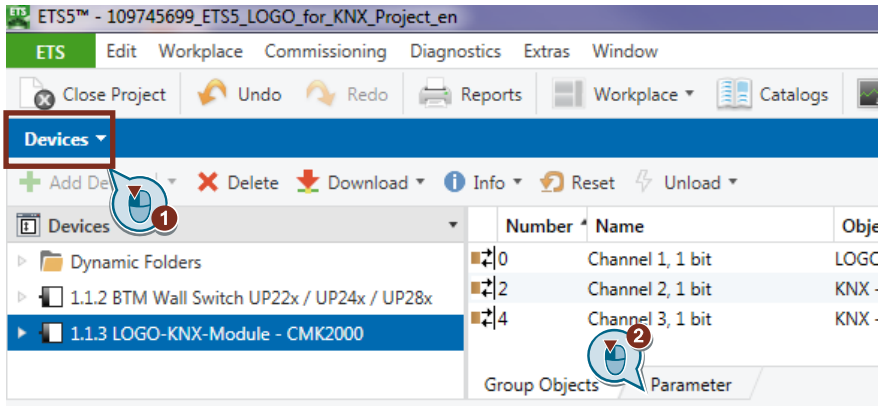
The LOGO! CMK2000 is parameterized via the ETS software.

Note It is assumed that all KNX devices as well as the LOGO! CMK2000 are incorporated as devices in the ETS software.

Parameter

In the “Parameter” window, the general settings of the LOGO! CMK2000 and the settings of the channels for the communication between LOGO! 8 and KNX are made.

Table 2-5: LOGO! CMK2000 - Open parameter settings

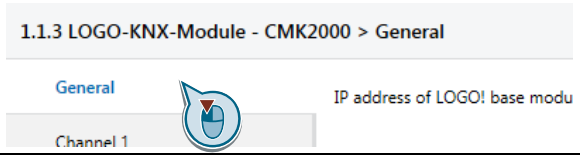
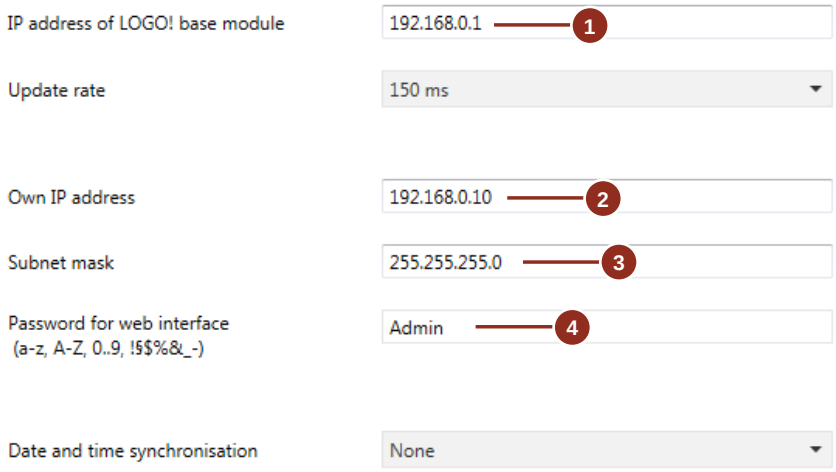
No.	Action
1.	Open the ETS window “Devices” and select LOGO-KNX-Module-CMK2000.
2.	To open the parameter settings, select the “Parameter” tab from the lower tab of the list view. 

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Parameter: General

In the general parameters, you determine, inter alia, the LOGO! base module with which the signal and data exchange is to be performed.

Table 2-6: LOGO! CMK2000 - Editing general parameters

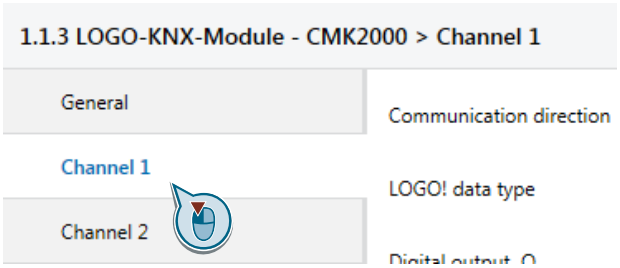
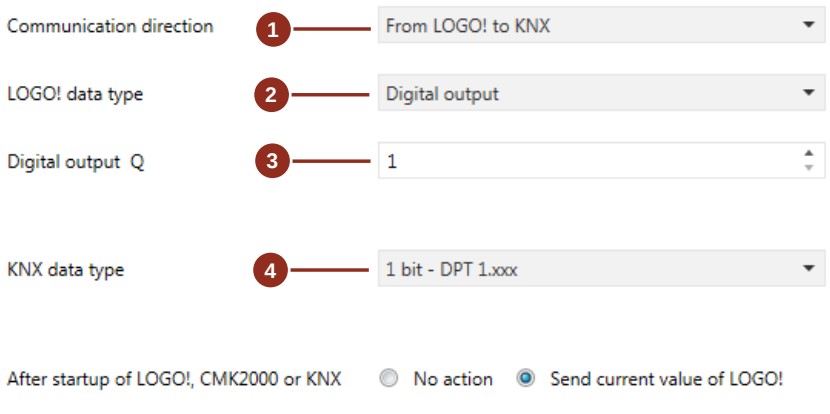
No.	Action
1.	In the parameter settings view, select the “General” tab. 
2.	Make the following settings for the LOGO! CMK2000: 1. Enter the IP address of your LOGO! base module. Information on this matter can be found in the LOGO! Manual in chapter 3.8.1 “Configuring network settings”: https://support.industry.siemens.com/cs/ww/en/view/109741041/89356802699 2. Enter an IP address for the LOGO! CMK2000. 3. Enter a subnet mask for the LOGO! CMK2000. 4. Enter a password for the web interface of the LOGO! CMK2000 (required for firmware updates). 

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Parameter: Channel “From LOGO! to KNX”

The following table shows how to establish a channel for the data exchange from LOGO! to KNX.

Table 2-7: LOGO! CMK2000 parameter: Establishing a channel “From LOGO! to KNX”

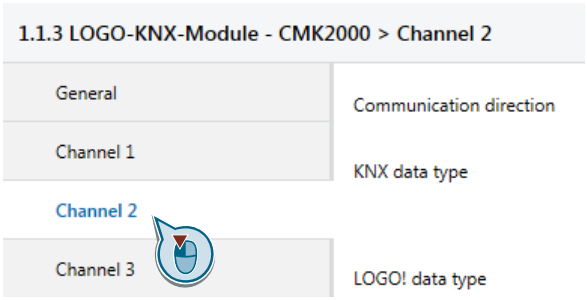
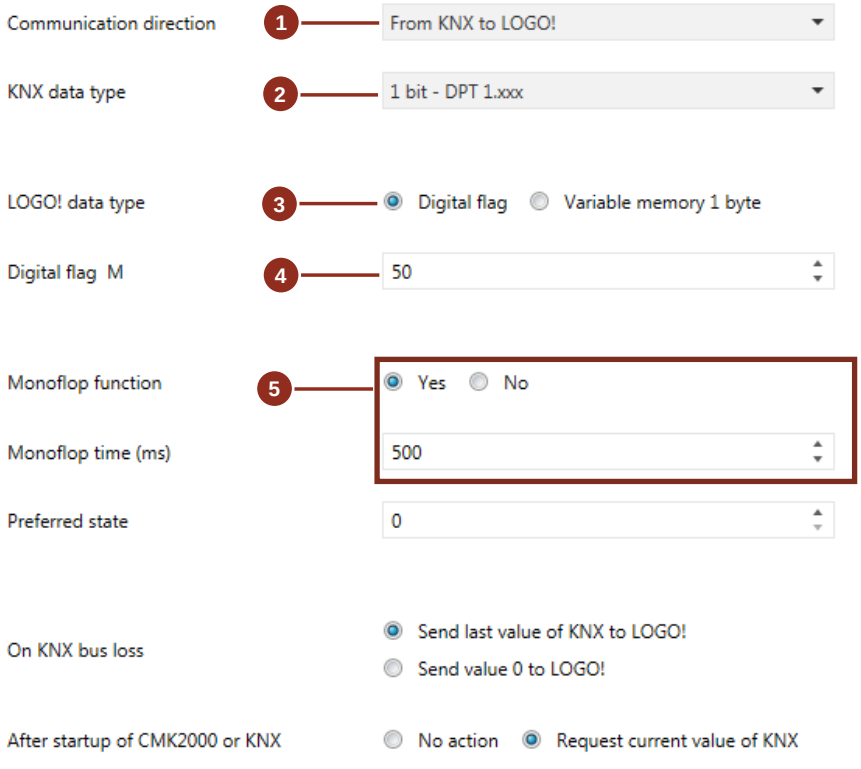
No.	Action
1.	In the list view of the parameter settings, select the tab of a freely available channel (in this application example “Channel 1”). 
2.	1. Set “From LOGO! to KNX” for the transmission direction. 2. Select a LOGO! data type (in this application example “Digital output”). You can choose from inputs, outputs, flags and variable memories (VM) of the LOGO!. 3. Select the address (in this application example “1”) for the selected data type. 4. Select the data type via which the LOGO! signal is interpreted by KNX. 

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Parameter: Channel “From KNX to LOGO!”

The following table shows how to establish a channel for the data exchange from KNX to LOGO!.

Table 2-8: LOGO! CMK2000 parameters: Channel “From KNX to LOGO!”

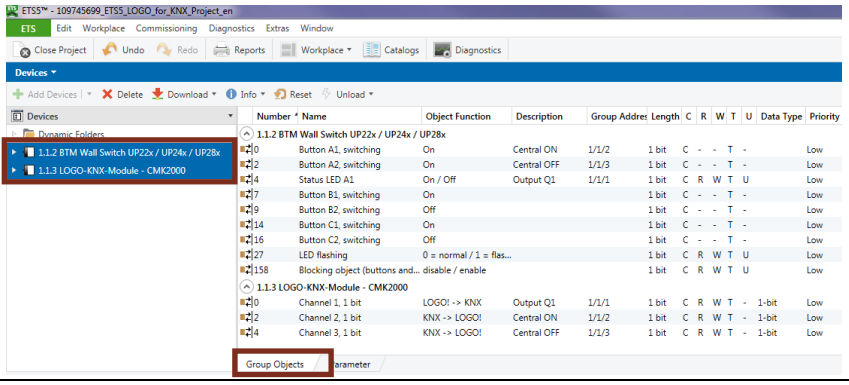
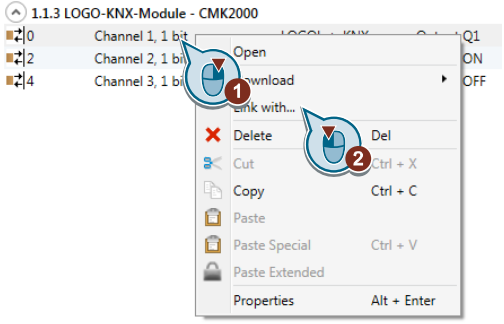
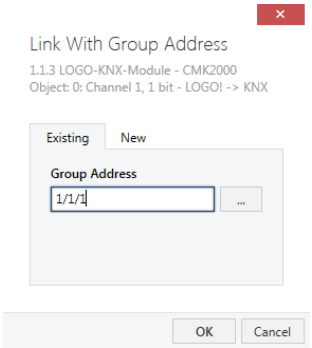
No.	Action
1.	In the list view of the parameter settings, select the tab of a freely available channel (in this application example “Channel 2”). 
2.	1. Set “From KNX to LOGO!” for the transmission direction. 2. Select the KNX data type which is transmitted to LOGO!. 3. Select with which data type (in this application example “Digital flag”) the KNX signal is interpreted in the LOGO!. 4. Select the address (in this application example “50”) for the selected data type, in order to determine how you would like to use the KNX signal in the LOGO! program. 5. Activate the monoflop function and set a monoflop time. This implements a digital trigger from KNX towards LOGO! 8 as a signal with a defined period (automatic reset). 

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2.4.2 Connecting communication objects

In the “Group Objects” window, connect the LOGO! CMK communication channels with the group addresses of the KNX devices (buttons, actuators, etc.).

Table 2-9: Communication objects

No.	Action
1.	Open the ETS window “Devices” and select the device “LOGO-KNX-Module-CMK2000” together with the device with which the communication is to be established.
2.	To display the communication objects in the list view, select the “Group Objects” tab from the lower tab of the list view. 
3.	1. Open the context menu for an object of the LOGO-KNX-Module by right-clicking it (in this application example “Channel 1”). 2. Click on “Link with...” to connect the object with a group address. 
4.	Specify the group address (in this application example “1/1/1” for the status LED of the KNX button) of the communication object with which the object “Channel 1” of the LOGO-KNX-Module will be connected with (e.g. “Group address of an actuator”). 

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3 Commissioning

3.1 Setting time and date of the LOGO!

Upon commissioning the LOGO! for the first time, or in the event of loss of the set time, e.g. after a longer power supply failure, you need to set the time and date of the LOGO! again.

A description on how to set the time and date of the LOGO! can be found in the Online Help of LOGO! Soft Comfort or in the “LOGO!” Manual in chapter 8.2.1 “Setting the time of day and date”:
https://support.industry.siemens.com/cs/ww/en/view/109741041/86268056075

3.2 Timer parameterization

This chapter describes, how to already parameterize the weekly and yearly timer in LOGO! Soft Comfort, prior to loading the program into LOGO!.

Note

The parameterization of the weekly and yearly timers in LOGO! Soft Comfort should only be done by experienced LOGO! users, as it includes advances settings that may alter the function of the timer.

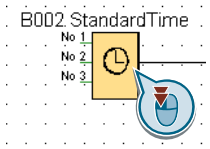
You can skip this chapter, directly load the supplied example project into your LOGO! (see 3.3) and then parameterize the timer via the message texts (see 4.1).

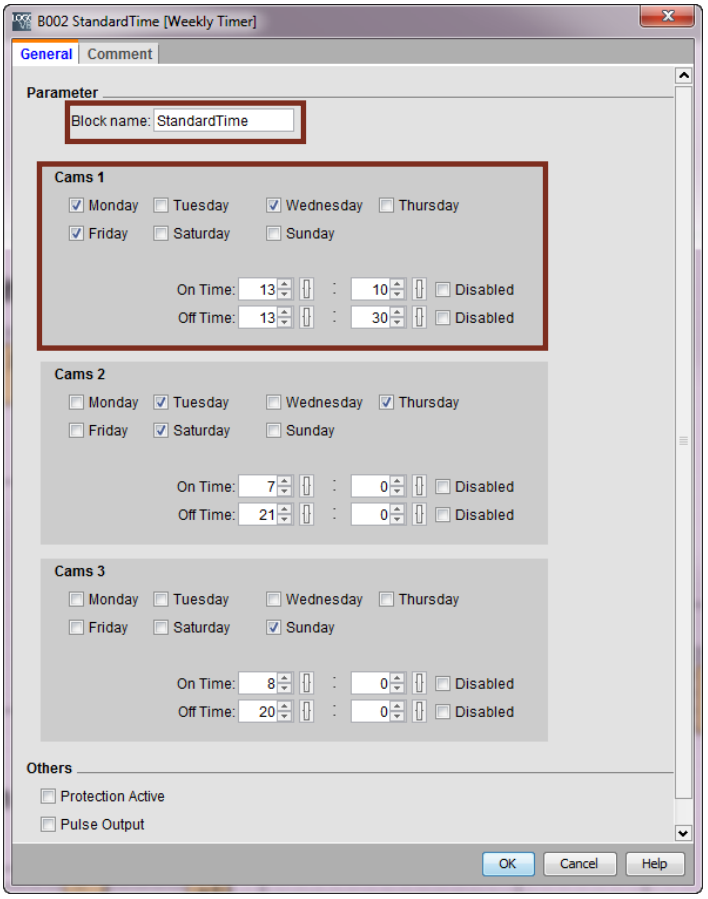
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3.2.1 Weekly timer parameterization

The table below shows how to parameterize a weekly timer in LOGO! Soft Comfort.

Table 3-1: Weekly timer parameterization

No.	Action
1.	Start LOGO! Soft Comfort V8.1 and open the supplied LOGO! program "109745699_LOGO8_TimeSwitch_CODE_en.lsc".
2.	Double-click to open the block properties of a weekly timer for which you would like to parameterize the time. 

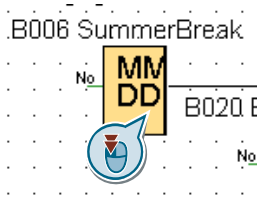
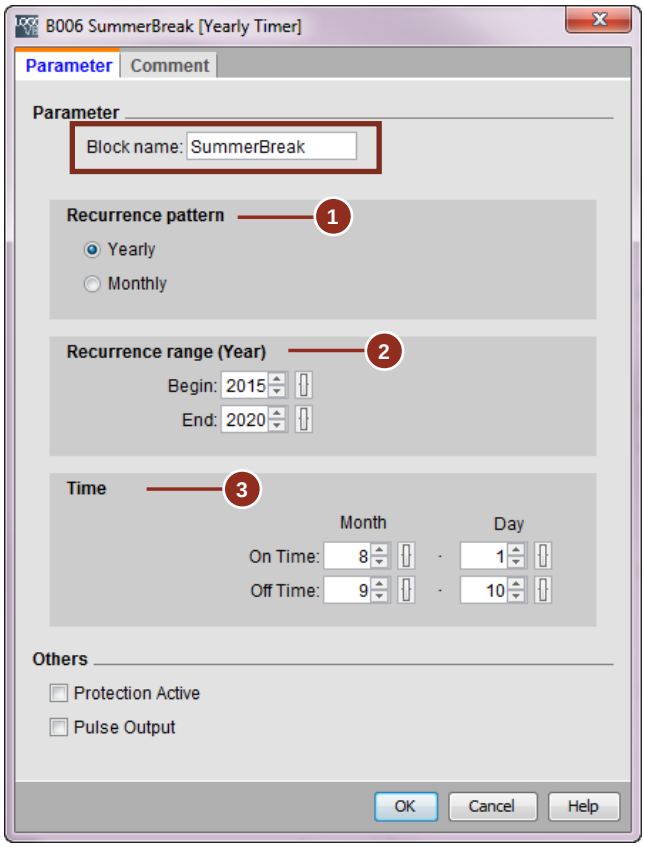
No.	Action
3.	Select the weekdays and the time window during which the weekly timer shall be activated. There are three cams available per weekly timer. **Note:** As a general rule, always make sure that the block names are clearly designated. This simplifies the parameterization of the blocks in the LOGO! parameterization mode (see 4.1.1). 
4.	Confirm the new parameters with "OK".

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3.2.2 Yearly timer parameterization

The table below shows how to parameterize a yearly timer in LOGO! Soft Comfort.

Table 3-2: Yearly timer parameterization

No.	Action
1.	Start LOGO! Soft Comfort V8.1 and open the supplied LOGO! program "109745699_LOGO8_TimeSwitch_CODE_en.lsc".
2.	Double-click to open the block properties of a yearly timer for which you would like to parameterize the date. 
3.	1. Select a repeat pattern for the yearly timer. 2. Enter the repeat range for the yearly repetition. 3. Set the switching on and off date, e.g. the duration of the summer holidays. **Note:** As a general rule, always make sure that the block names are clearly designated. This simplifies the parameterization of the blocks in the LOGO! parameterization mode (see 4.1.1). 
4.	Confirm the new parameters with "OK".

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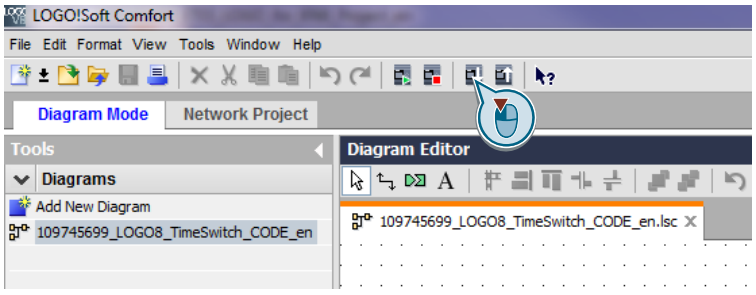
3.3 Downloading the program to the LOGO!

Note

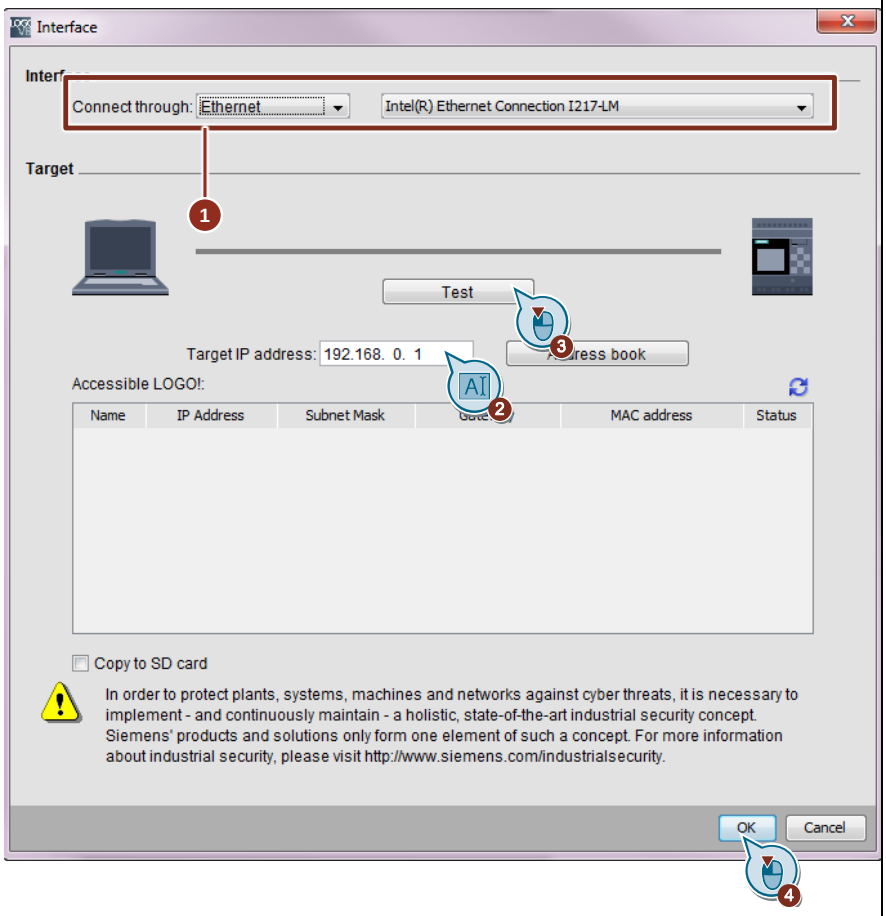
It is assumed that the IP address of the LOGO! is set to “192.168.0.1” and that the LOGO! is connected to your PC.

Information on how to set the IP address of a LOGO! 8 can be found in the LOGO! Manual in chapter 3.8.1 “Configuring network settings”:
https://support.industry.siemens.com/cs/ww/en/view/109741041/89356802699

Table 3-3: Downloading the program to the LOGO!

No.	Action
1.	Start LOGO! Soft Comfort V8.1 and open the supplied LOGO! example program "109745699_LOGO8_TimeSwitch_CODE_en.lsc".
2.	Click on the “PC -> LOGO!” button in the toolbar of LOGO! Soft Comfort, or press <Ctrl + D> to transfer the program to LOGO!. 

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No.	Action
3.	1. Select the interface of your PC. 2. Enter the destination IP address of the LOGO!. 3. Click “Test” to test the connection to LOGO!. When the connection is shown in green, you can communicate with the LOGO!. If the test fails, check the physical network connection and the network settings (IP addresses need to be clear and the participants need to be in the same subnet). 4. After a successful test, click on “OK” to transfer the program into the LOGO!. 
4.	Confirm the operating mode switch of the LOGO! from “RUN” to “STOP” and from “STOP” to “RUN” with “Yes” for each case.

3.4 Loading the KNX application program

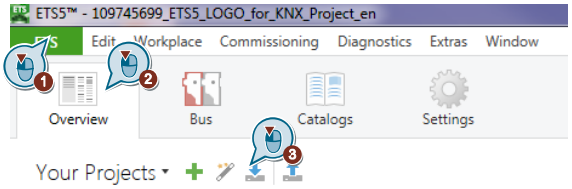
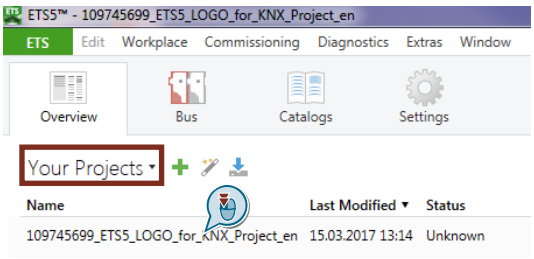
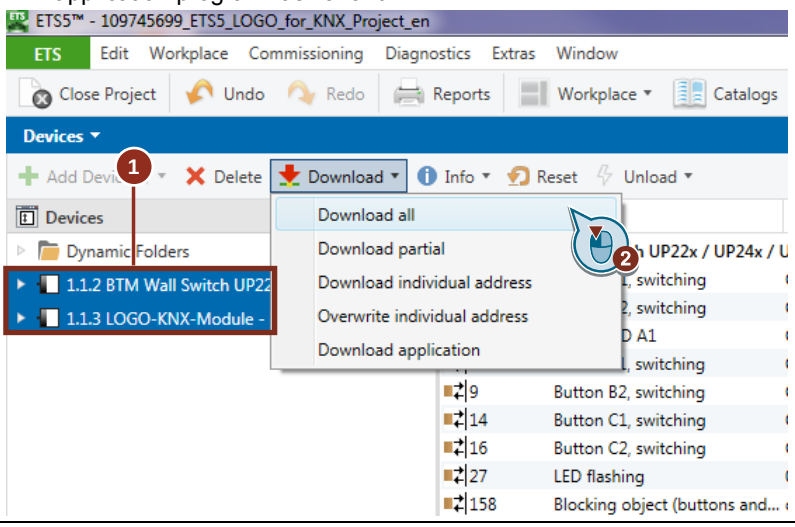
The following requirements have to be met to load the KNX application:

- The physical addresses “1.1.2” and “1.1.3” are freely available in your KNX system.
- A communication interface of the ETS has been defined.
  (Menu bar: "ETS > Bus")
- A bus connection with KNX participants has been established.
  (e.g. via the USB interface)

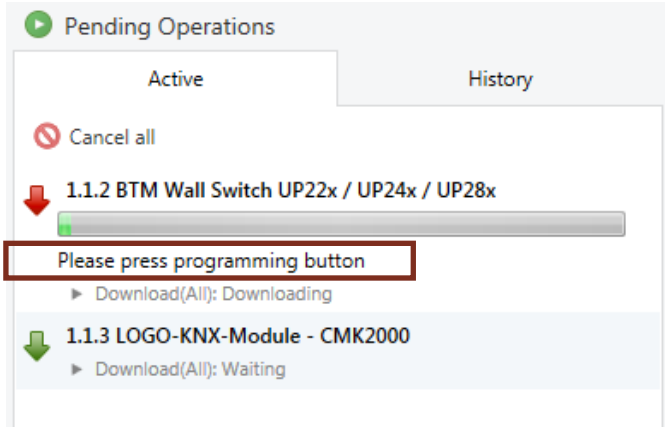
The table below describes how to load the application program from the supplied ETS5 project into the KNX devices.

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Table 3-4: Loading the application program

No.	Action
1.	Start the ETS5 software.
2.	1. Click “ETS” in the ETS5 menu bar. 2. Select the “Overview” tab. 3. Click the “Import project" icon. 
3.	Navigate to the location of the supplied KNX project "109745699_ETS5_LOGO_for_KNX_Project_en.knxproj" and open the project.
4.	After finishing the import, open the KNX project in the list of your projects with a double-click. 
5.	1. In the “Device” window, mark the button and the LOGO! CMK2000. 2. Click on the “Programming” button and select “Physical address & application program” as variant. 

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No.	Action
6.	Follow the instructions in the container “Running operations” and press the programming button of the respective device. Information on the programming button can be found in the corresponding manual: • LOGO! Manual CMK2000: https://support.industry.siemens.com/cs/ww/en/view/109481657 • Technical product information GAMMA KNX 3-Gang Button https://support.industry.siemens.com/cs/ww/en/view/87668166 (commissioning key “F9”) 

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4 Operation

4.1 Setting time

4.1.1 Parameter assignment mode at LOGO! Display

Via the LOGO! display or the LOGO! TDE, you can activate the parameterization mode of the function blocks and set the parameters, e.g. switching on and off time.

A detailed description of the parameterization mode of the LOGO! can be found in the LOGO! Manual in chapter 8.1 “Selecting parameter assignment mode”: https://support.industry.siemens.com/cs/ww/en/view/100761780/67026258187

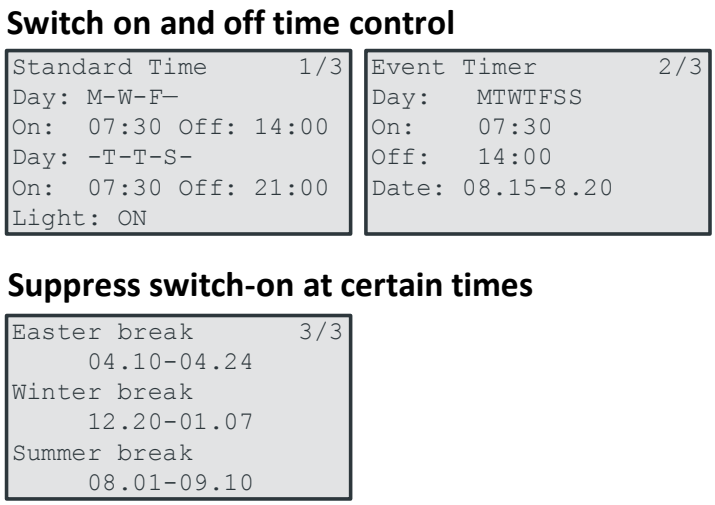
Note Only experienced LOGO! users should parameterize the weekly and yearly timer in the parameterization mode. It includes advanced settings that may alter the function of the timer.

4.1.2 Settings via the message text

As operator, you can set the times of the time switch function via the message texts.

The message texts (Figure 4-1) contain the most essential parameters for this. You can view and change the parameters in the message texts via the LOGO! TDE display, or, alternatively, via the web server.

Figure 4-1: Message texts



LOGO! TDE

The following table shows, how to set a time in the LOGO! TDE message text, using the example of standard time.

If you have not connected LOGO! TDE, you can also make the settings via the integrated web server of the LOGO!.

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Table 4-1: Message text of the LOGO! TDE

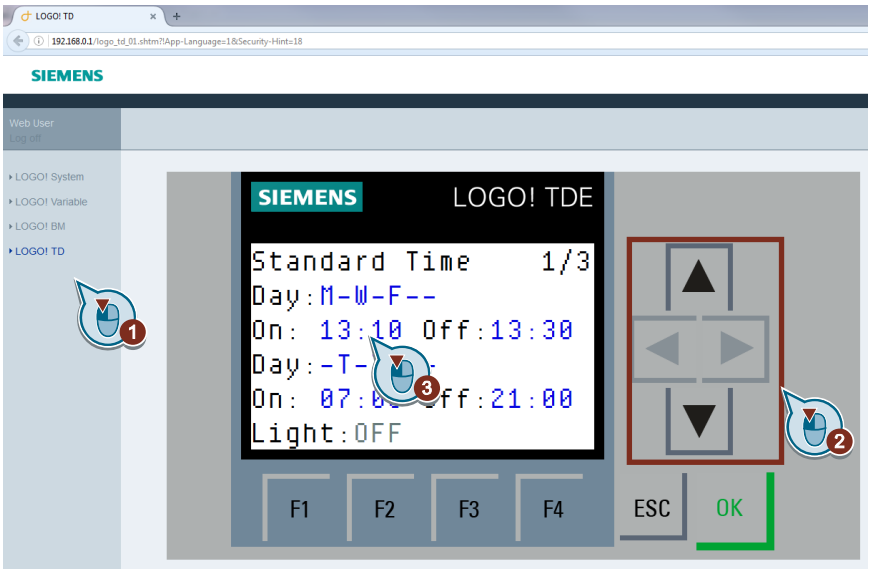
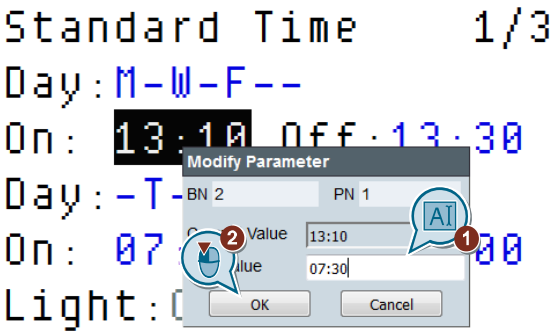
No.	Action
1.	With the ▲ or ▼ arrow keys of the LOGO! TDE, select the message text with the standard time. Standard Time 1/3 Day: M-W-F— On: 07:30 Off: 14:00 Day: -T-T-S- On: 07:30 Off: 21:00 Light: ON
2.	Press the “ESC” button at least for one second to call up the change mode. The change mode is active when a parameter is highlighted in dark. Standard Time 1/3 day: M-W-F-- On: 07:30 Off: 14:00 Day: -T-T-S- On: 07:30 Off: 21:00 Light: ON
3.	With the ◄ or ► key, select the relevant parameter. Standard Time 1/3 Day: M-W-F-- On: 07:30 Off: 14:00 Day: -T-T-S- On: 07:30 Off: 21:00 Light: ON
4.	Press “ENTER” to change the parameter. Standard Time 1/3 Day: M-W-F-- On: 07:30 Off: 14:00 Day: -T-T-S- On: 07:30 Off: 21:00 Light: ON
5.	Change the parameter with the ▲ and ▼ keys. With the ► key, you get to the next position of the parameter. Standard Time 1/3 Day: M-W-F-- On: 17:30 Off: 14:00 Day: -T-T-S- On: 07:30 Off: 21:00 Light: ON
6.	Confirm your changes with “ENTER”.
7.	Press “ESC” to exit change mode.

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Web server

The following table shows, how to set a time in the message text via the web server, using the example of standard time.

Table 4-2: Changing the switching times via the web server

No.	Action
1.	Enter the IP address of the LOGO into your default browser to open the web server. **Note** It is assumed that your PC or mobile device is connected to the LOGO! basic device via a network (LAN or WLAN via router) and is located in the same subnet as the LOGO!.
2.	Log on with the web server password. The default password is “LOGO”.
3.	1. In the web server menu, select the display for the LOGO! TD. 2. With the ▲ or ▼ arrow keys, select the message text of the standard time. 3. Click the parameter you would like to change. 
4.	1. Enter a new value for the parameter. 2. Confirm with “OK”. 

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4.2 Switching the time switch function on and off centrally

The following options are available to centrally switch the output of the time switch function on or off:

- Button at the LOGO! inputs I1 and I2
- Function keys F1 and F2 of the LOGO! TD
- KNX button
- Function keys F1 and F2 of the LOGO! TD via the integrated web server

KNX button

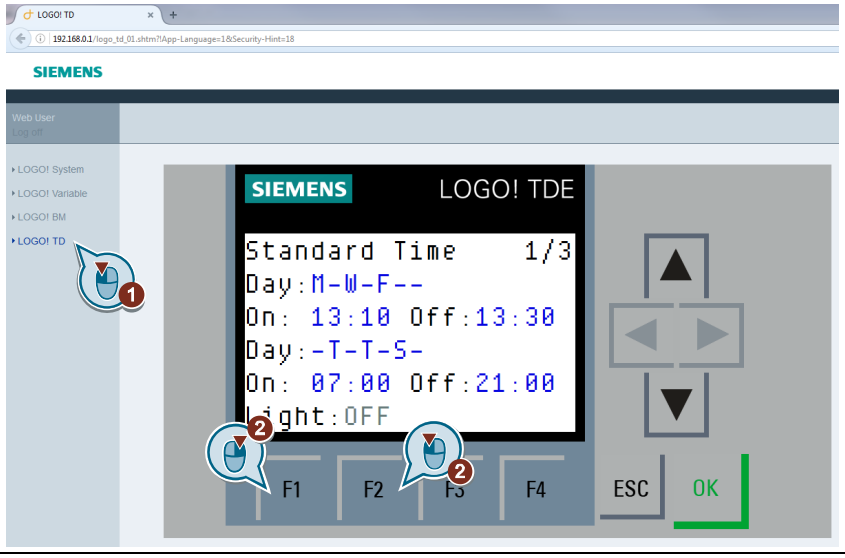
Press the A1 button of the KNX button, for example, to centrally switch on the loader at the output Q1 of the LOGO! or the object linked to the KNX system.

Press the A2 button of the KNX button, for example, to centrally switch off the loader at the output Q1 of the LOGO! or the object linked to the KNX system.

Web server

As an alternative to the function keys present in the hardware of the LOGO! TDE, you can use the integrated LOGO! web server.

Table 4-3: Switching on and off via web server

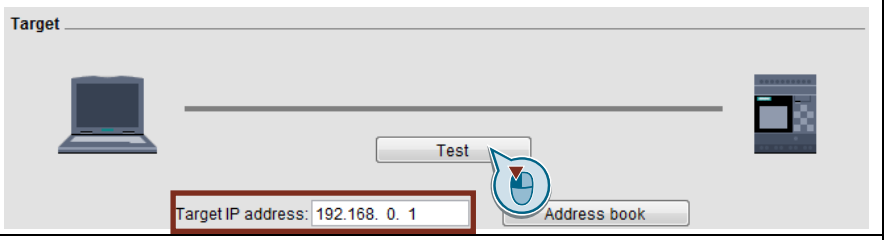
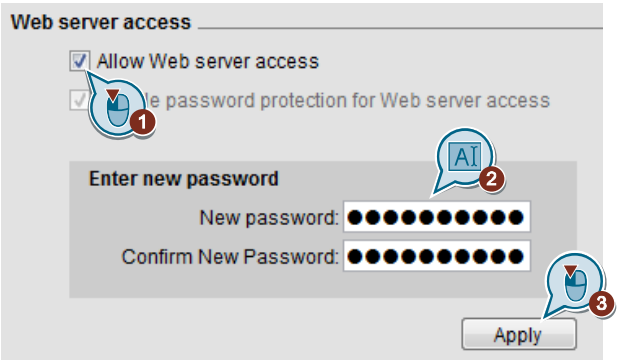
No.	Action
1.	Enter the IP address of the LOGO into your default browser to open the web server. **Note:** It is assumed that your PC or mobile device is connected to the LOGO! basic device via a network (LAN, WLAN via router) and is located in the same subnet as the LOGO!.
2.	Log on with the web server password. The default password is “LOGO”.
3.	1. In the menu, select the display for the LOGO! TD (text display). 2. To manually switch on the load, click the “F1” field. To manually switch off the load, click the “F2” field. 

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5 Adjustments and expansions

5.1 Enabling the web server and changing the password

Table 5-1: Enabling the web server and changing the password

No.	Action
1.	In LOGO! Soft Comfort in the menu tab under “Tools > Transfer”, select the point “Access control…”.
2.	In the “Interface” window, enter the target IP address of your LOGO! and click “Test” to test the connection to the destination LOGO!. 
3.	If the test result is positive, the connection is shown in green. Then click “OK” to confirm the connection to LOGO!. If the test fails, check the physical network connection and the network settings. IP addresses need to be clear and all participants need to be located in the same subnet.
4.	If LOGO! is in the “RUN” operating mode, confirm the switch to the “STOP” operating mode with “Yes”.
5.	1. To activate the web server, tick the “Allow Web server access” checkbox under “Web server access”. 2. Assign a new password and confirm it by entering it again. 3. Click on “Apply” to apply the changes to the LOGO!. 
6.	Confirm the switch to the “RUN” operating mode with “Yes”.

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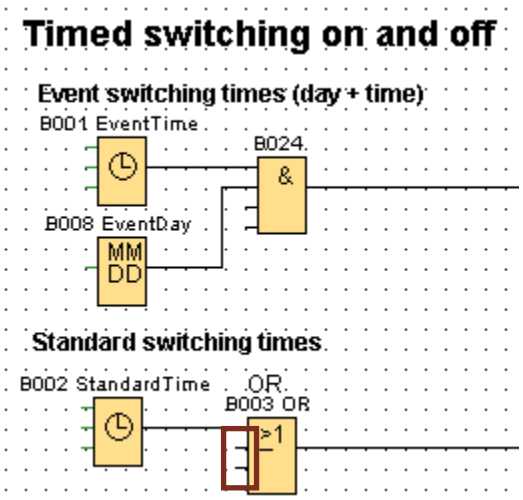
5.2 Expansion options

You have the option to expand the function of the timer by further weekly and yearly timers.

Adding weekly timers

If the three cams of the already interconnected “B002 StandardTime” weekly timer do not suffice for setting standard switching times, you can interconnect additional weekly times at the free contacts of the “OR” connection (B003).

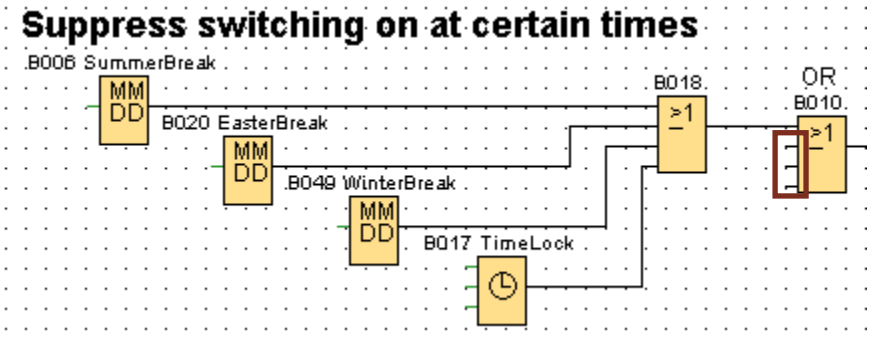
Figure 5-1: Extending the switching times



Adding yearly timers

If the already interconnected yearly timers (suppress switching on at certain times) do not suffice, you can interconnect additional yearly timers at the free contacts of the “OR” connection (B010).

Figure 5-2: Expansion for suppressing switching times

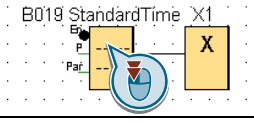
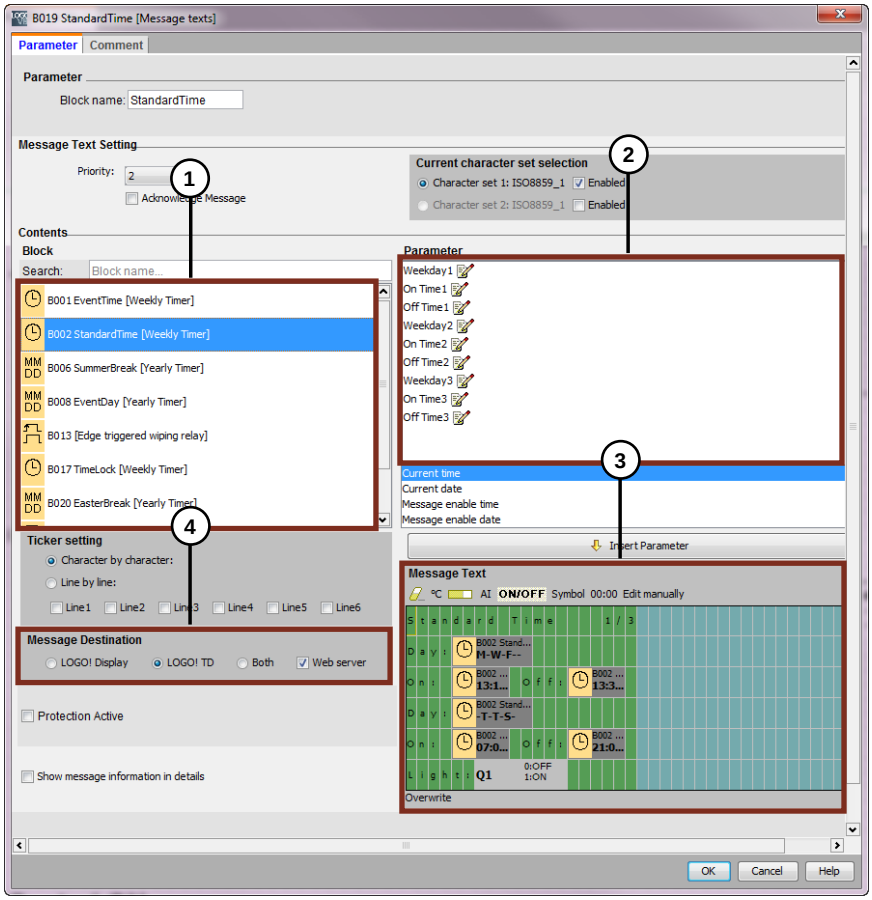


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5.3 Adjusting message texts

In the message texts, you can place parameters of individual function blocks to later display or change them via the display of the LOGO! base module or the LOGO! TD (alternatively via the web server).

Table 5-2: Adjusting message texts

No.	Action
1.	Double-click the message text to open the block properties of the function block. 
2.	1. From the list of the blocks interconnected in the program, select the “B002 StandardTime” block, for example. 2. Select the parameter of the block which you want to display and adjust via the message text. Use drag & drop to move this parameter to the desired position in the message text (3). 3. Edit the message text by entering, for example, a description of the added parameter. 4. Select, via which device the message text is to be displayed. Tick the “Web server” checkbox, if the message text is also to be displayed via the web server. 
3.	Confirm your modification with “OK”.

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6 Appendix

6.1 Service and Support

Industry Online Support

Do you have any questions or need support?

Siemens Industry Online Support offers access to our entire service and support know-how as well as to our services.

Siemens Industry Online Support is the central address for information on our products, solutions and services.

Product information, manuals, downloads, FAQs and application examples – all information is accessible with just a few mouse clicks at
https://support.industry.siemens.com/

Technical Support

Siemens Industry's Technical Support offers quick and competent support regarding all technical queries with numerous tailor-made offers – from basic support to individual support contracts.

Please address your requests to the Technical Support via the web form:
www.siemens.com/industry/supportrequest

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Service offer

Our service offer comprises, among other things, the following services:

- Product Training
- Plant Data Services
- Spare Parts Services
- Repair Services
- On Site and Maintenance Services
- Retrofit & Modernization Services
- Service Programs and Agreements

Detailed information on our service offer is available in the Service Catalog:
https://support.industry.siemens.com/cs/sc

Industry Online Support app

Thanks to the "Siemens Industry Online Support" app, you will get optimum support even when you are on the move. The app is available for Apple iOS, Android and Windows Phone.
https://support.industry.siemens.com/cs/ww/en/sc/2067

6.2 Links and Literature

Table 6-1: Links and literature

No.	Topic
\1\	Siemens Industry Online Support https://support.industry.siemens.com
\2\	This entry https://support.industry.siemens.com/cs/ww/en/view/109745699
\3\	LOGO! 8 Manual https://support.industry.siemens.com/cs/ww/en/view/109741041
\4\	LOGO! Manual CMK2000 https://support.industry.siemens.com/cs/ww/en/view/109481657
\5\	Technical product information GAMMA KNX 3-Gang Button https://support.industry.siemens.com/cs/ww/en/view/87668166
\6\	Download ETS5 Demo https://www.knx.org/knx-en/software/ets/download/index.php

6.3 Change documentation

Table 6-2: Document version and change history

Version	Date	Modifications
V1.0	04/2017	First version

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