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INDI 4.0

PNOZmulti
Programming and Service

PILZ
THE SPIRIT OF SAFETY

Chapter 5
„Diagnostic Elements“

Overview over Diagnostic elements

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Overview diagnostic elements

Diagnostic Word

- Individual evaluation of the states of elements

Group Diagnostic Message

- Collective evaluation of the states of elements
- Output own collective messages to a PVIS device

Diagnostic Point

- Outputting your own messages to a PVIS device

Mute PVIS Message

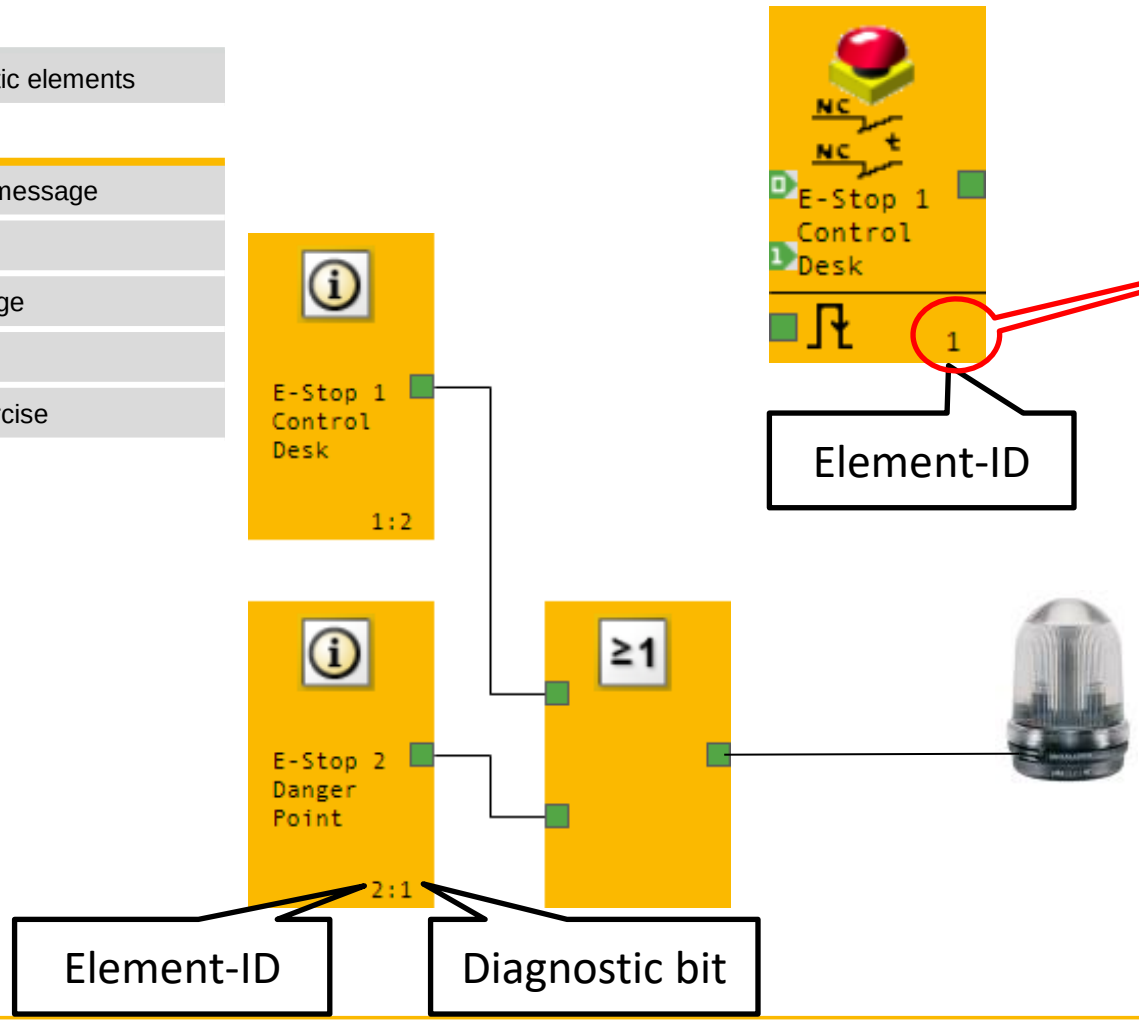
- Dynamic suppression of PVIS messages

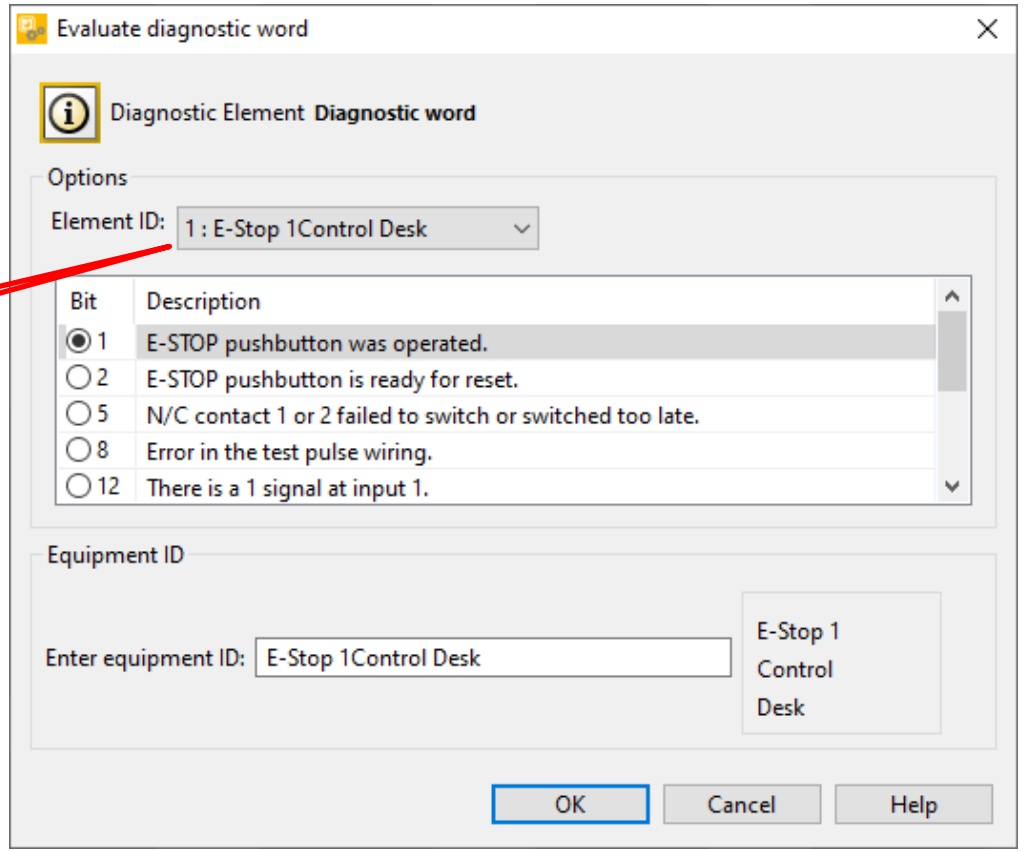
Display Message

- Own messages on PNOZmulti-Mini & 2nd generation display

Diagnostic Word

Using the diagnostic data in the program





Group Diagnostic Messages

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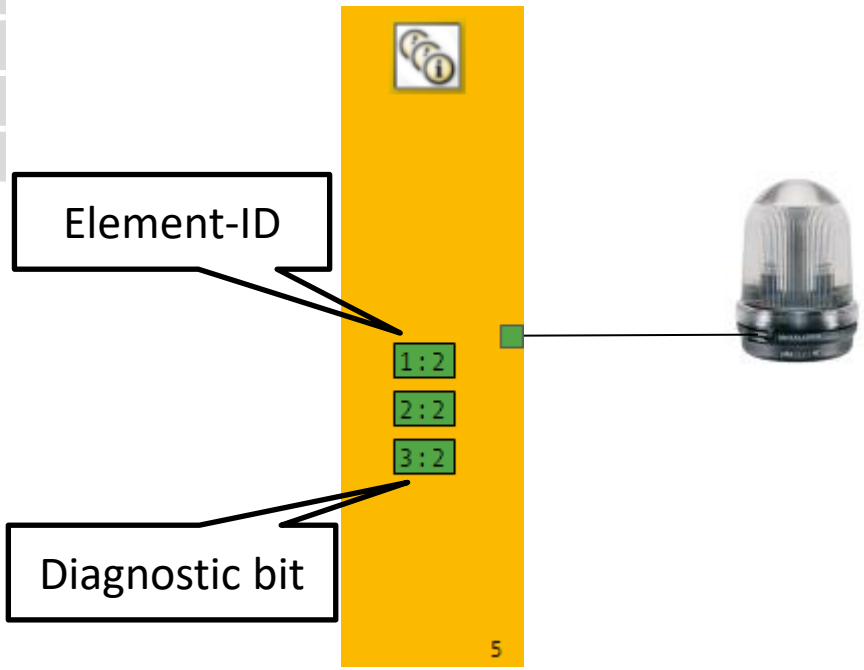
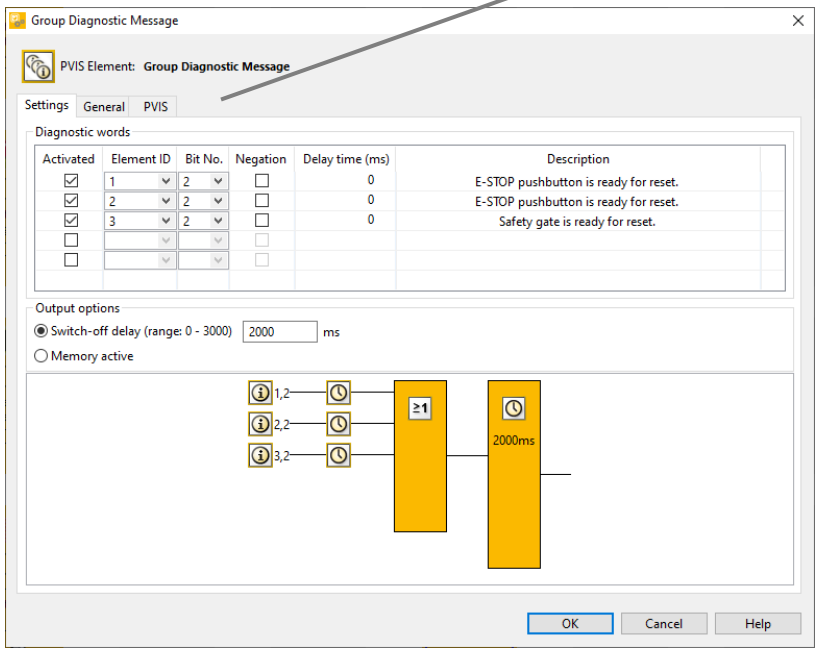
- Summaries of up to 5 diagnostic words in one block
- Adjustable switch-on and switch-off delay
- PVIS messages





Diagnostic Point

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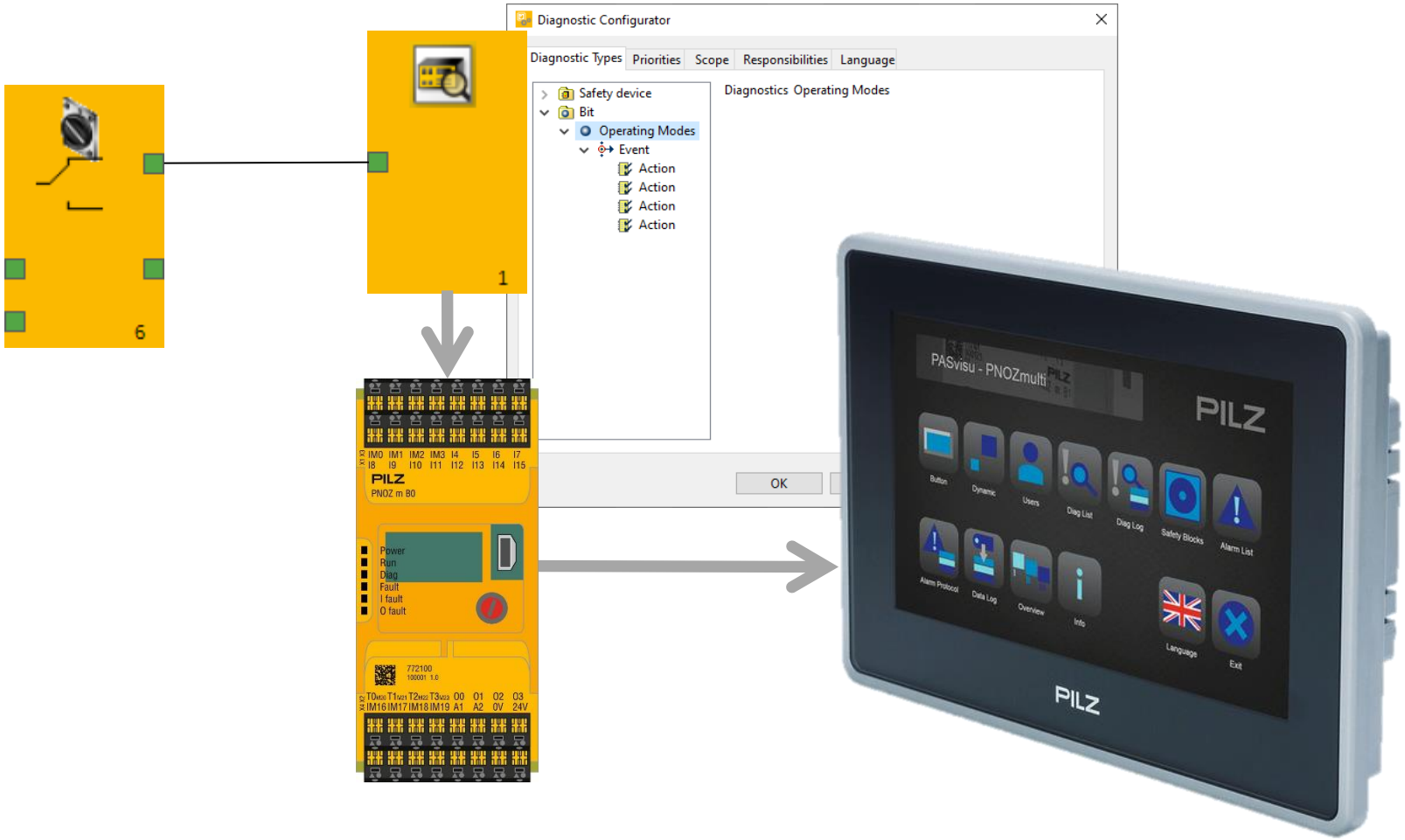
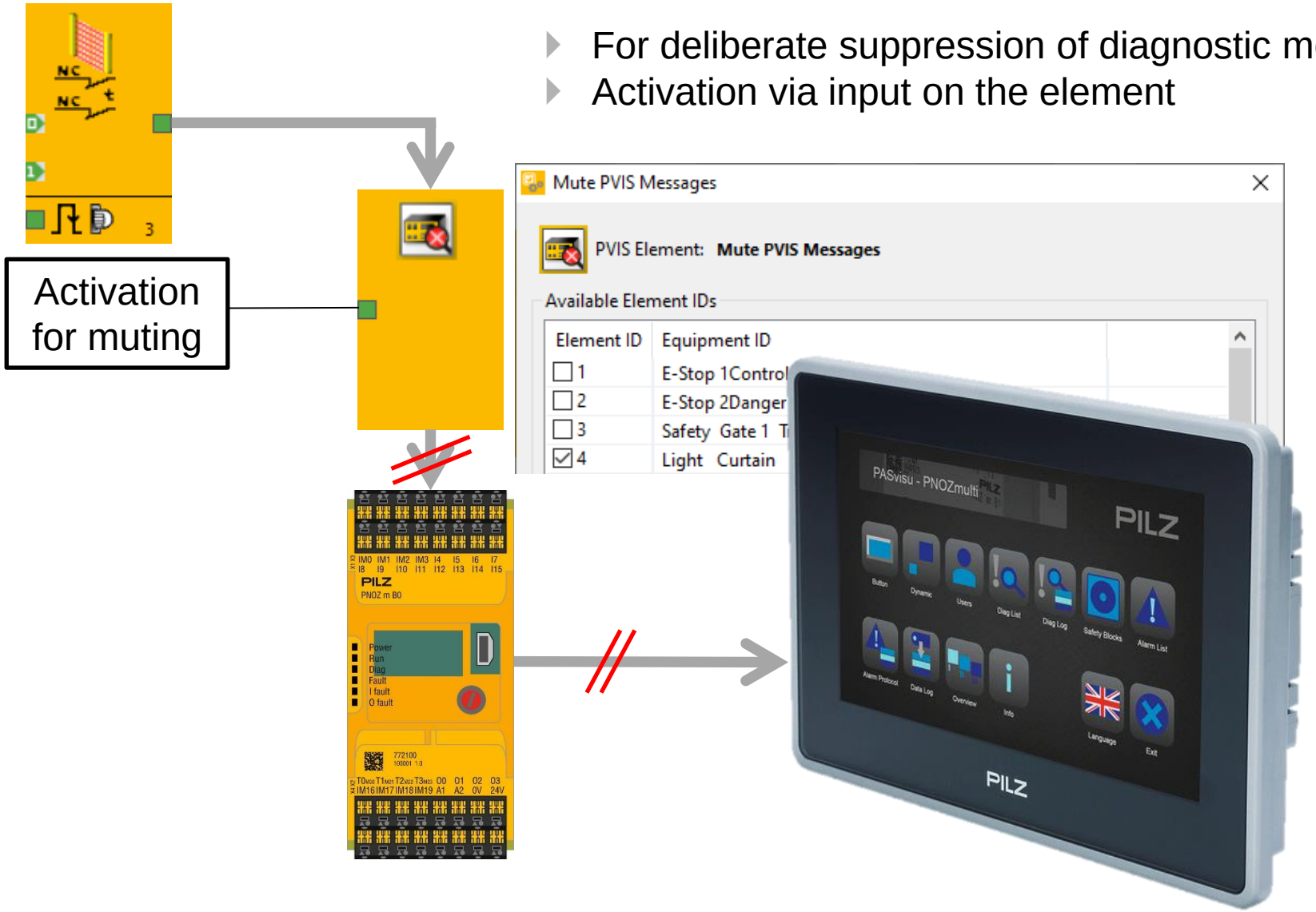
- Overview diagnostic elements
- Diagnostic word
- Group diagnostic message
- **Diagnostic point**
- Mute PVIS message
- Display message
- Programming exercise

- Create your own diagnostic messages
- Display via PVIS



Mute PVIS Messages

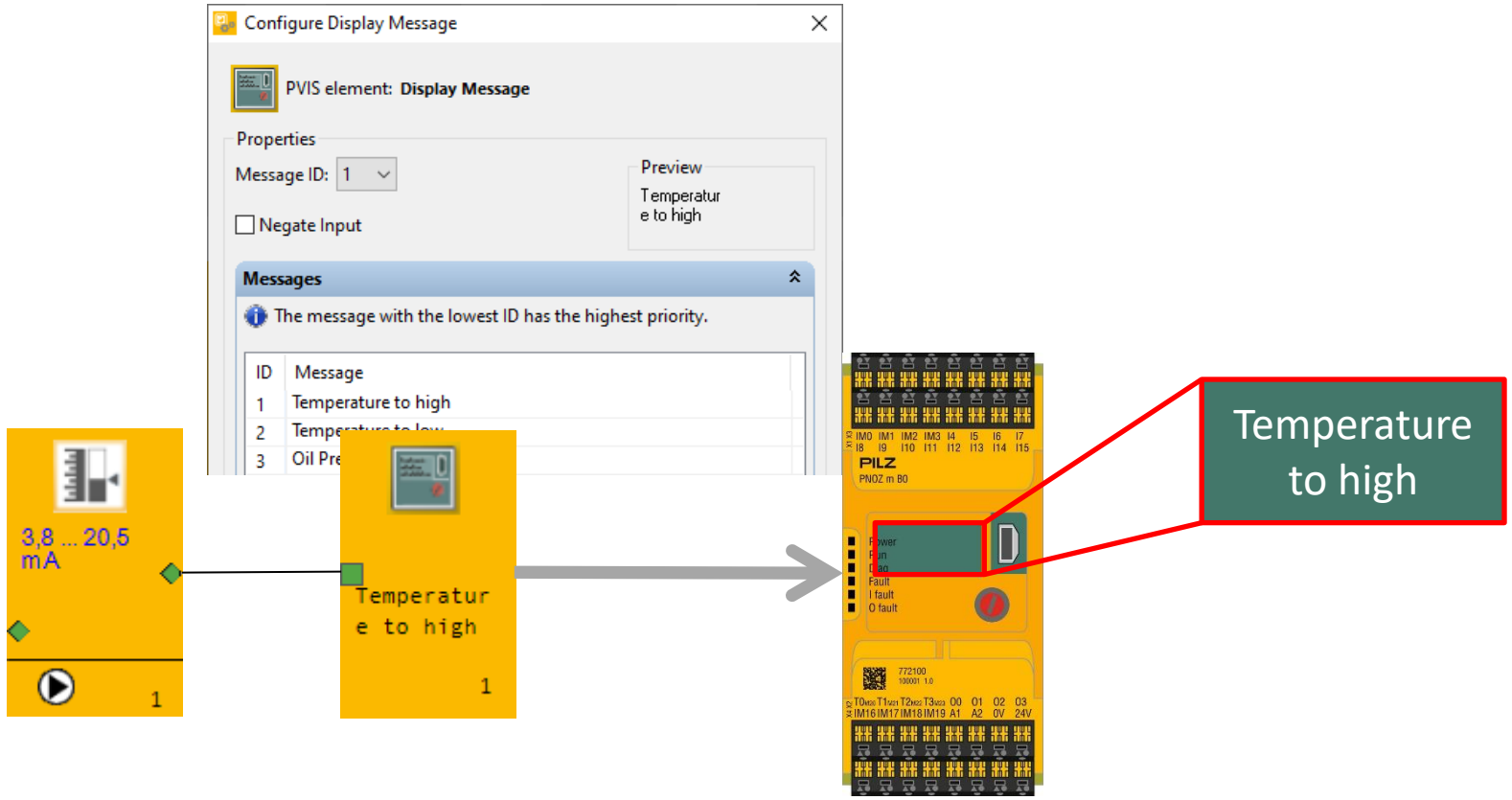


- For deliberate suppression of diagnostic messages
- Activation via input on the element

Display Message

PILZ | 05-6

- Create your own text messages on the display of the base unit
- Activation of the message via input on the element
- Can be used for base units with display



Programming Exercise 3
Specification

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No.	Description	PLr	Max. Reaktion Time	Priority
SF1	E-STOP (control console) (as in programming exercise no. 2)	d	100 ms	High
SF2	E-STOP (control console) (as in programming exercise no. 2)	d	100 ms	High
SF3	Safety gate (control console) (as in programming exercise no. 2)	d	100 ms	Med.
SF4	Light curtain (as in programming exercise no. 2)	d	40 ms	Med.
AF1	Plant stop (as in programming exercise no. 1)	-	100 ms	Low_2
AF2	Plant stop (as in programming exercise no. 1)	-	100 ms	Low_2
AF3	**Ready to start: If the machine is ready to start, the illuminated pushbutton "Machine Start" is to flash (1 Hz). As soon as the drive is running, this lamp will be lit continuously.**	d	100 ms	Low_3
AF4	**Ready to reset: If the safety functions "E-STOP" and/or "Safety gate" are ready to reset, the illuminated pushbutton "Quit" is to flash (1 Hz).**	d	100 ms	Low_3

Programming Exercise 3
Side structure

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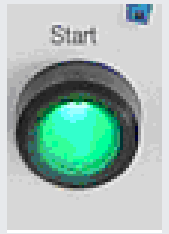
The following table shows the page structure with designation and functional description.

Main program	Functional description	Graphic
Page 1	See programming exercise no. 2	
Page 2 (Start-Stop)	**Extension to programming exercise no. 2: The signal lamp "Start" is used for operator guidance and for minimal diagnostics on the machine. This is where readiness to start is signalled.**	
Page 3 (signal lamp Quit)	**The signal lamp "Quit" is used for operator guidance and for minimal diagnostics on the machine. This is where readiness to reset is signalled.**	

Programming Exercise 3
Display of the program – page 2

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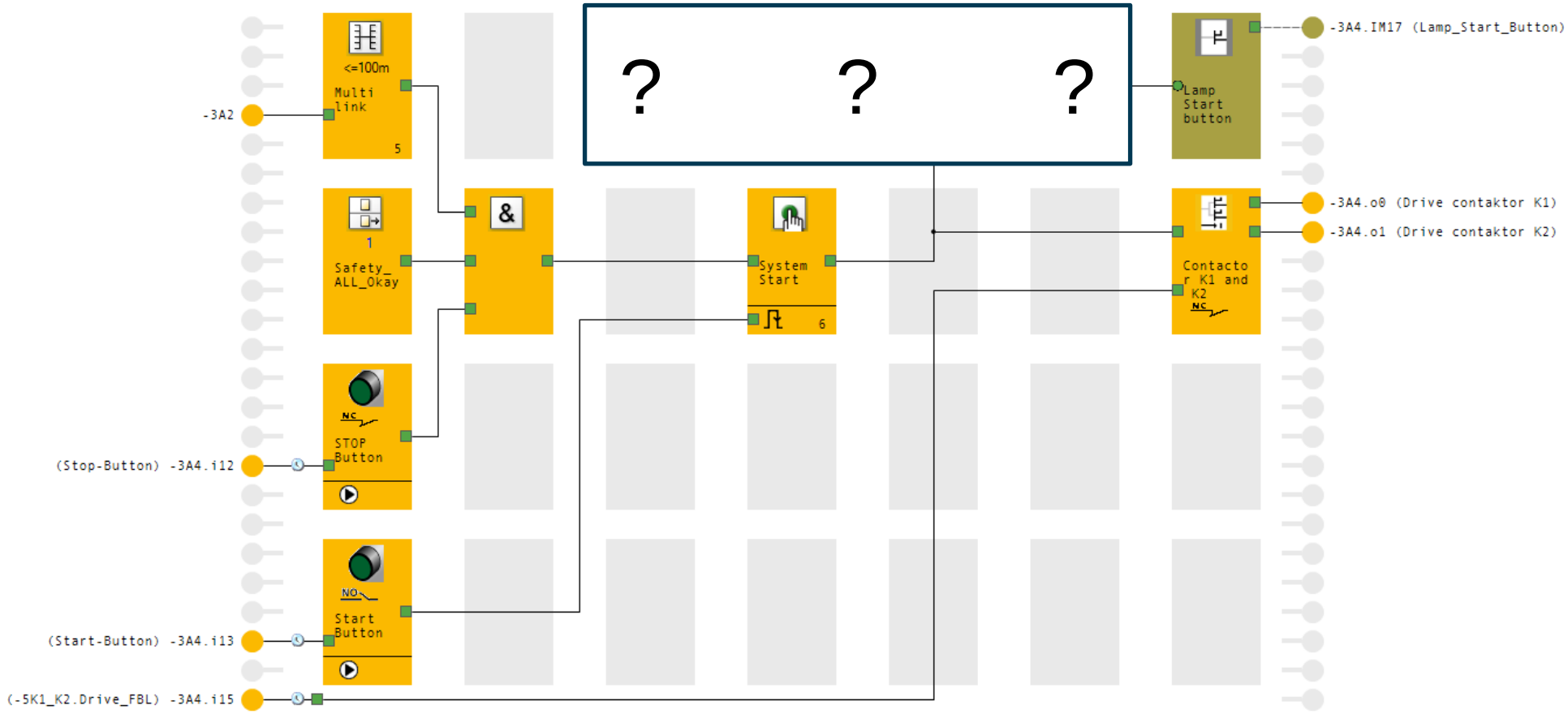
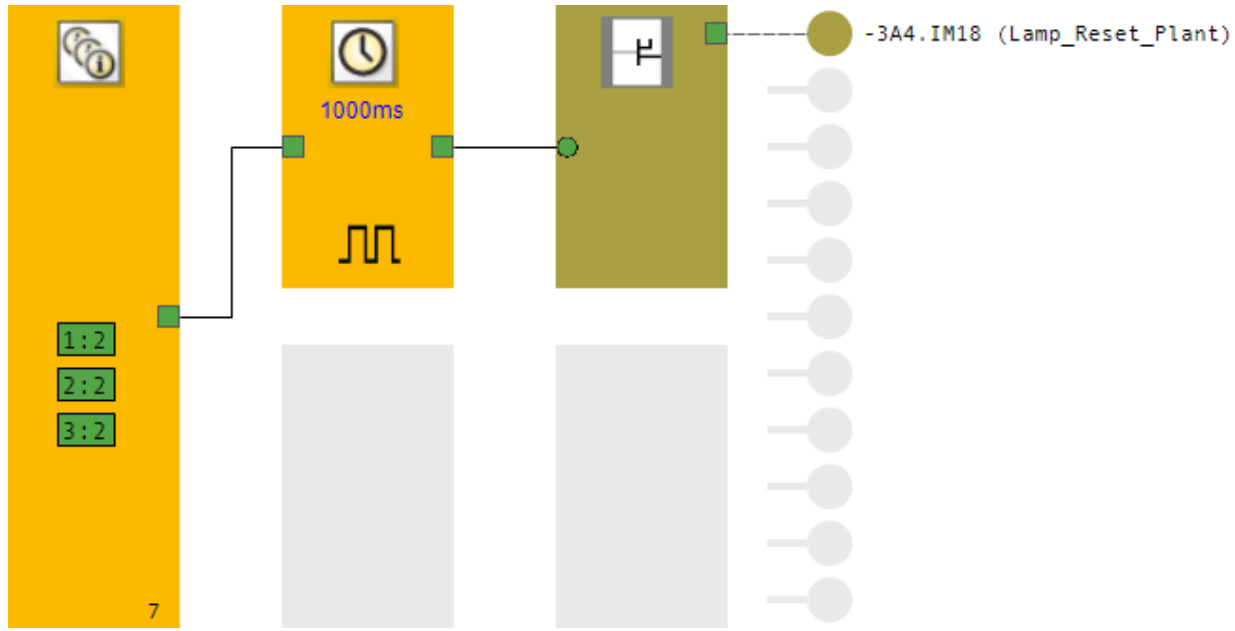
- Overview diagnostic elements
- Diagnostic word
- Group diagnostic message
- Diagnostic point
- Mute PVIS message
- Display message
- **Programming exercise**



Programming Exercise 3
Display of the program – page 3

PILZ | 05-8

- Overview diagnostic elements
- Diagnostic word
- Group diagnostic message
- Diagnostic point
- Mute PVIS message
- Display message
- **Programming exercise**



Automatisierungs-
technik

COMPONENTS
SYSTEMS
SERVICES

innovativ ökologisch
sicher wirtschaftlich

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