

SIEMENS

CS1140 Fire detection system

**Commissioning
'EN12094-1 compliant
single-area extinguishing
system'**

EP7F

Building Technologies

Control Products and Systems

Technical specifications and availability subject to change without notice.

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1 About this document

Purpose of the document

This document describes the commissioning of the hardware modules of the control units CS1140 with extinguishing section. The consistent observance of the instructions ensures a trouble-free and safe application.

Scope

This document contains information valid for the software variant EP7F-Z2.

Target group

Group of persons	Activity	Qualification
Commissioning personnel	The configuration of the products, devices or systems for specific customers at the place of installation. They check serviceability and officially clear the product, device or system for use by the operator / customer. They are also responsible for trouble-shooting.	They have had the training appropriate to their function and to the commissioning of the products, devices or systems and have attended the technical training courses for commissioning personnel.

Reference documents

Informationen in	Qualifikation
001260	Description of hardware plug-in modules (CS1140 'Modular')
A6V10225450	Operating instructions AlgoPilot B3Q661 / B3Q681 / B3Q686
009760	Operating instructions Control panel extinguishing SECTION
006516	Inscription strip templates for indication and operation equipment
007023	In-/Output module FDCIO222

Operational and safety regulations



Before persons begin work on the system, they must have read and understood the related documents, in particular Chapter 1 'Safety regulations'.

Disregard of the safety regulations

Before they are delivered, the products are tested to ensure they function correctly when used properly. Siemens disclaims all liability for damage or injuries caused by the incorrect application of the instructions or disregard of warnings of danger contained in the documentation. This applies in particular to:

- Personal injuries or damage caused by improper use and incorrect use;
- Personal injuries or damage caused by disregarding safety instructions in the documentation or on the product;
- Personal injuries or damage caused by poor maintenance or a lack of maintenance.

Standard symbols

(...)	Additional information
'....'	Definition of names
->	Details see page, or document

Document identification

Position		Identification
Title page		<ul style="list-style-type: none">– System names– Product type– Purpose of the document
Last page	bottom left	<ul style="list-style-type: none">– Document number– Data of version
Last page	bottom right	<ul style="list-style-type: none">– Manual– Section

Modification index

Version	Date	Brief description
009853_b_en_--	02.2013	B3Q681/686 added
009853_a_en_--	10.2006	First edition

Training

Siemens offers the training required for all products. Information about courses is available on the Siemens Intranet.

Download

Current documentation is available on the Siemens Intranet

Abbreviations

PSP	Product Support Platform
-----	--------------------------

2 Safety regulations

This chapter describes the danger levels and the relevant safety regulations applicable for the use of our products. Please read the work instructions as well as the chapter 'About this document' before beginning any work.

2.1 Signal words and symbols

2.1.1 Classification and meaning of signal words

The danger level - that is, the severity and probability of danger - is indicated by the signal words listed below. Non-observance may lead to the consequences indicated:

DANGER

Imminent danger!

- May cause danger to life or serious bodily injury!

WARNING

Dangerous situation!

- May cause serious bodily harm.

CAUTION

May cause dangerous situations!

- May cause minor injuries!

NOTE

Possibly harmful situation!

- May cause damage to the product or to objects in the immediate vicinity of the product!

2.1.2 Symbols and their meaning

The symbols listed below indicate the nature and origin of the danger.



Signal word	General dangers
--------------------	-----------------



Signal word	Electrical voltage
--------------------	--------------------

Example of an indication of danger



DANGER External voltage	Disconnect the component from the power supply.
--	---

2.1.3 Classification and meaning of additional symbols



Tips and information



Refers to extremely important or critical decisions to be taken into account before continuing the work.

2.2 Safety-relevant working instructions

Country-specific standards

The products are developed and produced in compliance with the relevant European safety standards. Should additional country-specific, local safety standards or regulations concerning planning, assembly, installation, operation and disposal of the product apply in the place of operation, then these standards or regulations must also be taken into account in addition to the safety regulations mentioned in the product documentation.

Electrical installations



DANGER	Work on electrical installations may only be carried out by qualified electricians or by instructed persons working under the guidance and supervision of a qualified electrician, in accordance with the electrotechnical regulations.
Work on electrical installations	

- Control panels must be disconnected from the power supply during commissioning or maintenance work whenever possible.
- Connection terminals with an external voltage supply must be provided with a sign reading 'DANGER – External voltage'.
- Mains leads to the control panel must be installed separately and provided with a clearly marked fuse.
- Earthing must be carried out in compliance with local safety regulations.
- When work is carried out in explosion-hazardous areas, the appropriate safety precautions must be taken.

Assembly, installation, commissioning and inspection work

- If any tools or accessories such as ladders are required, safe and suitable devices must be used.
- Spurious activation of the remote transmission must be reliably prevented.
- Always inform the fire brigade before testing the remote transmission.
- The activation of fire controls for test purposes must not cause damage to the system or parts thereof.
- Fire controls must only be activated after the test has been completed and the system has been definitely handed over to the customer.
- Third party systems or devices must only be activated in the presence of the responsible person.
- When work on management stations and system terminals is performed, the safety regulations of the connected sub-systems must be observed. This especially applies when switching off system components.
- In the case of extinguishing systems, always use the "General installation instructions" as a guideline. These guidelines are available on request.

Testing the product operability

- Evacuate and cordon off the extinguishing sector.
- Inform people about the possibility of fogging and noise.
- Inform people before testing alarm devices; take the possibility of panic reactions into account.
- Inform the alarm and fault receiving stations connected to the system before carrying out the tests.

Changes to the system configuration and products

Modifications to a system or to individual products may cause faults or malfunctioning. Please request written approval from us and the relevant authorities concerning intended system modifications and system extensions.

Components and spare parts

- Locally procured components and spare parts must comply with the technical specifications laid down by the manufacturer. This compliance is always ensured with original spare parts.
- Only use fuses with the specified fuse characteristics.
- Wrong battery types and improper battery changing lead to a risk of explosion. Only use the specified battery type or an equivalent battery type recommended by the manufacturer.
- Batteries require environmentally safe disposal. They must be handed in at the local collecting points.
- Please take into account that the extinguishing agent cylinders are pressurized and must be replaced in compliance with the local safety regulations.

3 Procedure

Step	Detail informatiton chapter
1. Preparation of electronic modules → Set switch and resistors on E3G080 → Set switches and resistors on B3Q440 → Insert inscription strips	4.1 4.3 4.4
2. Initial switch-on → First set switch 'S1' on the E3G080 to 'ON' Note: 'S1' → 'ON' = hardware and software blocking of all E3G080 outputs	4.1
3. Measure voltage at E3G080 Check voltage of all peripheral equipment connected to the E3G080 → Ensure rest potential throughout the area	5.1
4. Initialize automatic calibration function on E3G080 This function calibrates the valve current and registers and stores which lines are connected. First ensure that: – no signalling contact is in active mode – all lines are connected including the line termination – the impedance range chosen for the valve lines is correct ('R60/61') → Press key 'S4' (set switch 'S1' to ON) Meaning of LEDs H1....H4 on E3G080	5 4.1 5.2
5. Performance check First ensure, that the user functions have been set correctly → Carry out 'Normal operating condition' control function → Carry out individual control functions Note: – Functions 'Extinguishing REVISION' und 'Extinguishing TEST' – Extent of available functions in SECTION list	6.1 7.1 7.2 8.1 8.2
6. CE identification → Complete the installation plate Extinguishing with a water-proof marker → Directly apply the installation plate Extinguishing next to the installation plate of the fire control panel	9



IMPORTANT

In some countries, with CO2-extinguishing systems with a risk to life (CO2-concentration >5Vol%) a so-called 'Coincidence of the vital functions is required (vital functions must be guaranteed).

Examples

- an electrical and a mechanical/pneumatic delay device in AND operation
 → for this purpose the E3G080 has 2 different valve activating outputs
- Compulsory pre-warning also functions in the event of a fault (e.g. caused by lightning etc.)
 → use pneumatic sirens

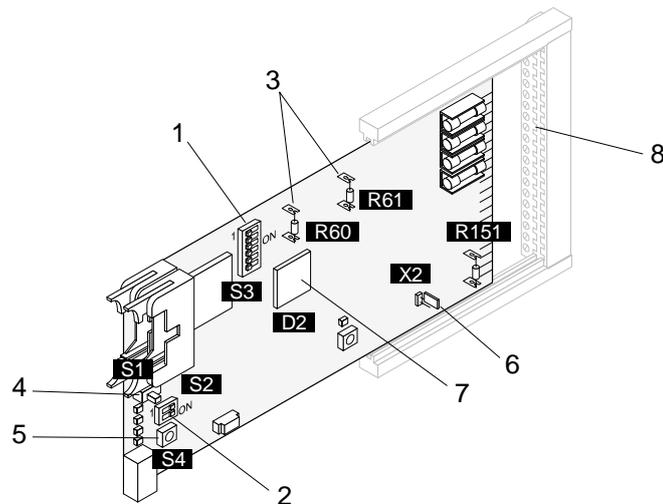


When commissioning, ensure that the local requirements are fully complied with the norm EN12094-1. If the system operator asks for a concept which deviates from the regulations, then he must bear the responsibility.

4 Preparation of hardware

4.1 Control module 'Extinguishing' E3G080

Pos.	Component	Preparation	Default
1	Programming switch 'S3': I-Bus address	set according to system documentation	Address 0
2	Programming switch 'S2': Determine emergency operation concept	set according to system documentation S2-1/2 -> 'OFF' = no function if μ P E3G080 mal-functions -> see also description in document 001260	all switches to on 'ON'
3	Resistors 'R60/61'	Activating device 1 is between 16...160 Ω : -> Remove 'R60' (71K5) Activating device 2 is between 16...160 Ω : -> Remove 'R60' (71K5)	'R60/61' inserted -> for activating device 161...320 Ω
4	Maintenance switch 'S1': Test to block all outputs, without real activation (activation test LEDs 'H1'...'H4')	set to 'ON', so that when switching on for the first time, all outputs are blocked (meaning of the LEDs see chapter 5.2)	set to 'OFF'
5	Maintenance switch 'S4': For initialization of commissioning functions	only effective if switch 'S1' is set to 'ON' -> description see chapter 5.2	-
6	Jumper 'X2': Ground fault monitoring 'LON-Bus'	Ground fault monitoring -> see also in document 004594 set as described in document 001260, chapter 'Ground fault monitoring'	removed (inactive)
7	μ P 'D2'	check version, see Release notes docu 004767	inserted
8	Connection level	check that all peripheral equipment planned is connected (according to system documentation)	-



4.2 Additional outputs

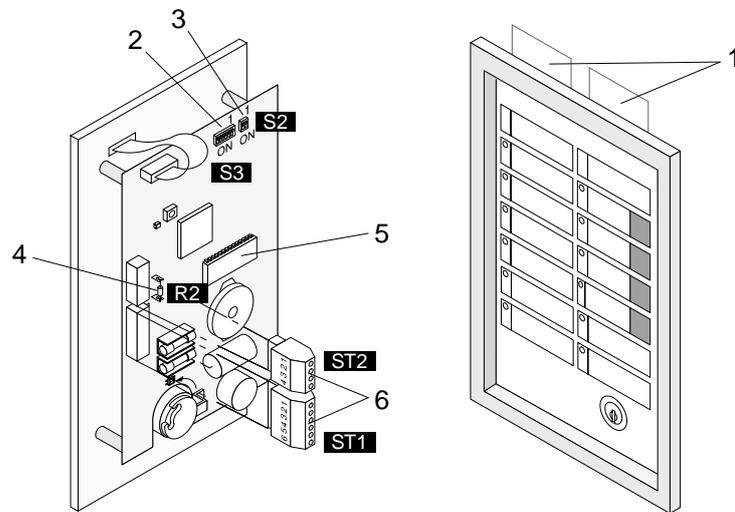
In accordance with the standard EN12094, the outputs

- Extinguishing actuated
- Extinguishing fault
- Extinguishing blocked (optional)
- Extinguishing agent mech. blocked (optional)

are made available by means of a separate control plug-in module (e.g. E3G060, see document no. 1260) or I/O module (e.g. FDCIO222, see document no. 007023).

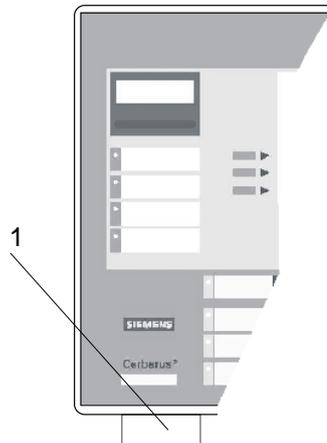
4.3 Operating unit 'Extinguishing' B3Q440

Pos.	Component	Preparation	Default
1	Inscription strips	insert	no insert -> delivered with strips in 'english' for operating unit 'extinguishing B3Q440 and AlgoPilot, or to be created with Word template DOT (document 006516)
2	Programming switch 'S3': Equipment address	set according to system documentation	Adress 1 ('OFF')
3	Programming switch 'S2': Key click, Buzzer	set according to system documentation 'S2-1' -> 'ON' = Key click active 'S2-2' -> 'ON' = Buzzer active	set to 'OFF'
4	Resistor 'R2': Line termination for the communication to E3G080	set according to system documentation, is not the last device, remove resistor 'R2', see description in document 001260 -> E3G080	inserted
5	EPROM 'D1'	check version, see Release notes document 004767	inserted
6	Plug-in terminals 'ST1' / 'ST2'	connect according to system documentation	supplied with B3Q440



4.4 Control terminal AlgoPilot B3Q661/681/686

Pos.	Component	Preparation	Default
1	Inscription strips	insert	-> delivered with strips in 'english' for AlgoPilot B3Q661/681/686, or to be created with Word template (document 006516)



5 Calibration on E3G080

Each output and each input is controlled and set accordingly. In doing so, the relays for the valve actuation are blocked by both the hardware and software; the valves can no longer be activated. The illuminated warning panel and the horn are blocked by the software only. Before initiating the automatic calibration, the tension at the terminals must be checked. All switches must be in "Rest" position (see the following table).

5.1 Line voltages E3G080 from the device version 06

-> Details see document 001260

5.2 Automatic calibration

System power up

1. Press '**S4**' key once (service switch 'S1' must be in position ON)
 - Situation A:
When all in-/outputs are in order, or when there is no change to the configuration, or when the monitoring has been deactivated, all LEDs '**H1**'...'H4' are flashing simultaneously during approx. 5 seconds; afterwards the **deactivated control lines** are briefly displayed in sequence in short time intervals (see table below). The initialisation (calibration) is completed; proceed to step 5.
 - Situation B:
When in-/outputs are faulty, or when the configuration has been changed, the LEDs '**H1**'/'H3' and '**H2**'/'H4' are flashing alternately during approx. 5 seconds, then the faulty and **deactivated control lines** are briefly displayed in sequence in short time intervals (see table below).
2. Remedy fault and/or change configuration
3. Press service key 'S4' once to read in the new situation
 - the LEDs react in accordance with situation B
4. Press service key 'S4' once to acknowledge the new situation
 - the LEDs react in accordance with situation A
5. Set service switch 'S1' to OFF
 - The extinguishing activation is ready for operation.

5.2.1 Status indication on E3G080



Each pending fault signal is visible approx. 4 sec. (sequential display)

Function In-/Output	LED				De-activated	Short circuit	Open line
	'H1'	'H2'	'H3'	'H4'			
Sector valve delayed	•				continuously on	rapid flashing	slow flashing
Main valve non-delayed		•					
Horn	•	•					
Illuminated warning panel			•				
Manual actuation (spec. button yellow)	•		•				
Emergency stop-/Blocking key		•	•				
Loss of extinguishing agent	•	•	•				
Extinguishing blocked				•			
Extinguishing released	•			•			

The LEDs marked by black spots stand for the in-/output concerned; e.g. control line Extinguishing released -> LED 'H1' + 'H4' flash or light up simultaneously

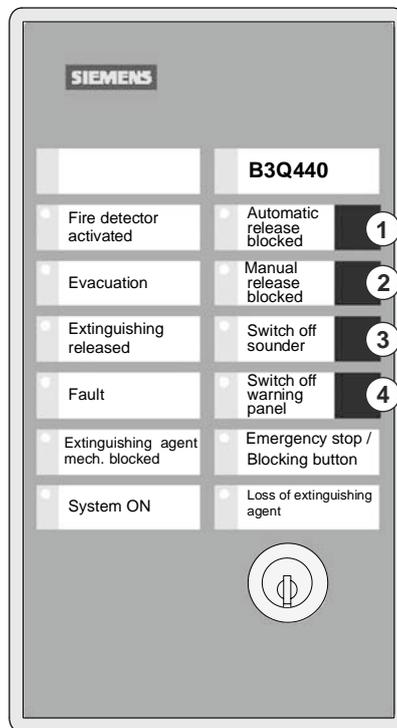


IMPORTANT

When an extinguishing command has missed prior to the calibration and has been reported as faulty, this fault is deleted afterwards.

6 User function

6.1 Notes for parameterization 'Extinguishing' (E3G080) via AlgoWorks



Function, Outline description	Action on system	AlgoWorks	
		Value	Default
Acknowledgement 'Extinguishing released' – Acknowledgement active (confirmation message) – Acknowledgement inactive	autom. acknowledgement –	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/>
Detection line 'Stop-/Blocking button' – Emergency stop – Emergency abort	no extinguishing release no extinguishing release	0 2	0
Activation time Permissible operating time main valve Value 0...240: -> active for 0...240 sec. Value 255: -> active until reset	–	0..240 255	255
Flooding time Permissible operating time sector valve Value 0...300: -> active for 0...300 sec. Value 301: -> active until reset	–	0..300 301	30
Evacuation time Delay sector valve 0...240 sec.	–	0..240	16
Evacuation time upon STOP – new start (Evacuation time is reset) – no restart (Evacuation time is not reset)	time is restarted time continues running	0 1	1
Activation and running mode of alarm horn – Pre-alarm/evacuation/actuated -> continuous – Pr-alarm -> pulsating/evacuation/actuated -> continuous – Pre-alarm -> continuous/evacuation/actuated -> pulsating – Pre-alarm/evacuation/actuated -> pulsating – Evacuation/actuated -> continuous – Evacuation/actuated -> pulsating	Horn activated according to programming	0 8 16 24 1 17	1
Switch off alarm horn – switch off via AlgoPilot 'CT' or 'B3Q440' ③ – switch off via 'B3Q440' ③ only	Horn turned off Horn turned off	0 2	2

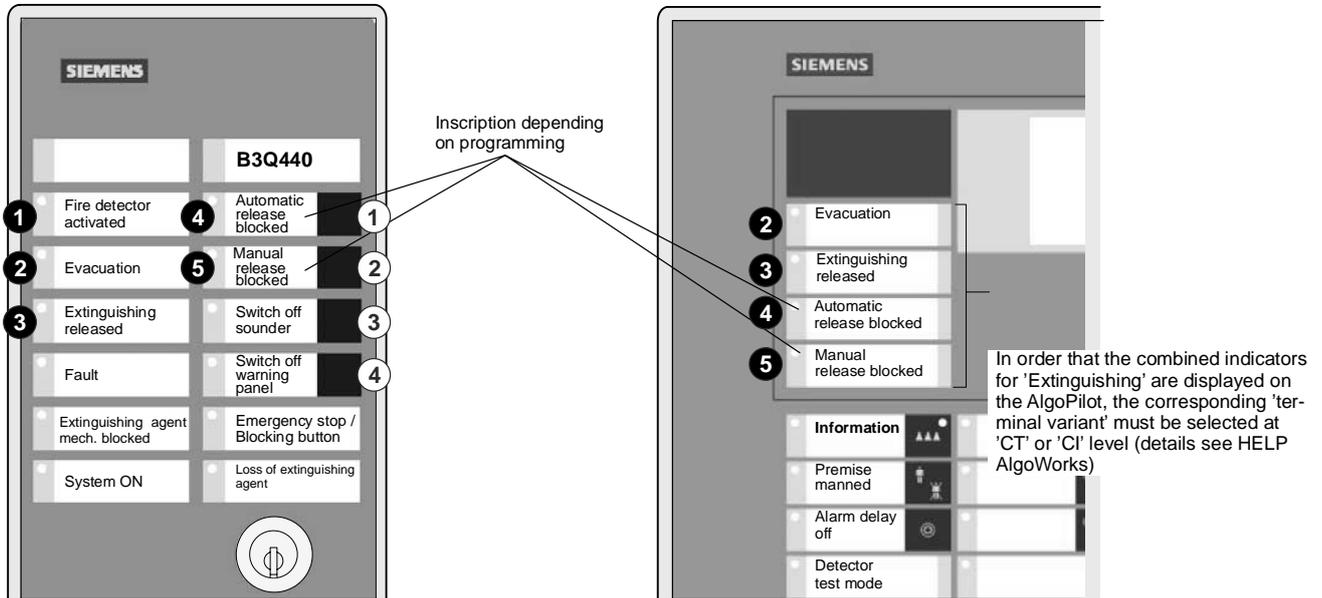
User function

Deactivating and running mode of warning panel – active until reset → continuous on – active until reset → flashing – continuous on until switch off via 'B3Q440' ④ – flashing until switch off via 'B3Q440' ④	warning panel activated according to programming	1 9 4 12	1
Extinguishing agent LOSS – – fault only	extinguishing actuation is possible	1	1
Lines fault (open line, short circuit) Stop button // Exting. manual call point – –Message only // Message only	Stop button: Extinguishing is in process, however, the sector valve is not actuated. Exting. manual call point: extinguishing actuation is possible	2	2
LED 'Operation' – inactive upon 'Fault' or 'Extinguishing blocked' – always active	–	0 1	1
Key 'Switch off sounder' ③ – always operating – only if key switch is turned on	–	0 1	1
LED 'Power supply fault' – active if supply fault in CC/CI (control unit) – not used	–	0 1	1
Line input 'Extinguishing blocked / Emergency stop' – Extinguishing blocking – Extinguishing blocking / stop – Extinguishing mechanical blocking	blocking only blocking and stop only indication on B3Q440, extinguishing actuation is possible	0 1 2	2
Exting. manual call point – no funktion if extinguishing is blocked – manual fire alarm if extinguishing is blocked	no extinguishing release no extinguishing release	0 1	0
Emergency stop → Reset blocked – Emergency stop active – Emergency stop inactive	cannot be reset after emerg. stop –	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/>
Function Blocking keys ①, ② – blocking – blocking / emergency stop – emergency stop – no funktion	no extinguishing release no extinguishing release no extinguishing release extinguishing release possible	0 1 2 3	0
Function output "Main valve" – operation as main valve – operation as additional main valve	–	0 1	0
Firmware version E3G080 – < EP7F–Z2, not conform with EN12094–1 – EP7F–Z2, conform with EN12094–1	see Document 005109	0 1	1

1) The default values comply with the standard EN12094–1

7 Performance checks

7.1 Performance check in 'Normal operating condition'



	Test functions	The following devices are activated
1	Activate 1 fire detector in extinguishing SECTION	→ Alarm organization control unit (in mode 'manned' V1/V2) - LED ❶ 'Fire detector activated' - Extinguishing horn - Fire control installations, if existing After 'Reset': → Alarm- and reference messages must be erased
2	Activate 1,2 or 3 fire detectors in the same ZONE depending on configuration Note: Detectors must be simultaneously on 'Danger level 3' in order that 'Evacuation' is generated.	→ Alarm organization control unit (->Remote transmission) - LED ❶ 'Fire detector activated' - LED ❷ 'Evacuation' - Extinguishing horn - Illuminated warning panel - Fire control installations, if existing - Main valve Upon expiry of the delay period: → Sector valve Message and LED ❸ 'Extinguishing released' (after acknowledgement) After 'Reset': → all alarm- and reference messages must be erased possibly fault 'Extinguishing NOT ready'
3	Activate manually	→ Alarm organization control unit (1 Remote transmission) - LED ❷ 'Evacuation' - Extinguishing horn - Illuminated warning panel - Fire control installations, if existing - Main valve Upon expiry of the evacuation period: → Sector valve - Message and LED ❸ 'Extinguishing released' (after acknowledgement) After 'Reset': → all alarm- and reference messages must be erased possibly fault 'extinguishing NOT ready' + 'Glass broken'
4	Activate signal 'Extinguishing activated' (if existing)	→ Alarm organization control unit (-> Remote transmission) - LED ❸ 'Extinguishing released' - Extinguishing horn - Illuminated warning panel - Fire control installations, if existing After 'Reset': → all alarm- and reference messages must be erased possibly fault 'extinguishing NOT ready'

7.2 Individual control functions

	Control functions	Comment
1	Check evacuation time	Dependent on parameterization → must correspond to the parameterized time
2	Check alarm horn switch-off function	Dependent on parameterization → may only be possible either from the operating unit extinguishing 'B3Q440' or the operating unit extinguishing 'B3Q440' and AlgoPilot 'CT11' → Switch-off must always be possible except during the 'Evacuation' → Check whether alarm horn cannot be switched off during 'Evacuation'
3	Check illuminated warning panel switch-off function	Dependent on parameterization → either active until 'Reset' or active until switched off separately via the operating unit extinguishing 'B3Q440'
4	Check the duty cycle of main-/and sector valve	Dependent on parameterization → either active until 'Reset' or active during the time specified
5	Check line monitoring	→ Induce a short circuit or open line for all peripheral equipment in quiescent state connected and check whether in each case a fault results → With 'valve lines' it is essential to induce open line and short circuit
6	Check ZONE affiliation	→ In each detector ZONE belonging to the extinguishing SECTION activate 1 detector and check whether the extinguishing horn is activated Dependent on parameterization → In each detector ZONE belonging to the extinguishing SECTION, activate 2 (or 3) detectors and check whether the 'Evacuation' phase is initiated
7	Check 'Blocking' function via AlgoPilot 'CT11' / list of functions 'SECTION'	→ choose list of functions 'SECTION' and check following functions: – Manual activation of extinguishing BLOCKING / ENABLE – Automatic activation of extinguishing BLOCKING / ENABLE – Extinguishing -> REVISION / terminate – Extinguishing -> TEST / terminate Here the corresponding LEDs ①, ② at the operating unit extinguishing 'B3Q440' and AlgoPilot 'CT11' must always on
8	Check 'Blocking' function via operating unit extinguishing / keys ①, ②	→ Check at the extinguishing control panel whether by means of both keys ①, ② activation at extinguishing can be blocked accordingly Here the corresponding LEDs ①, ② at the operating unit extinguishing 'B3Q440' and AlgoPilot 'CT11' must always on

7.3 Notes

Use of valve actuators

Ensure that the minimum trigger current (comply with manufacturers' instructions) can also be achieved without difficulty even with emergency power operation (operating voltage 23.5V). Balance the difference between the 'internal resistance valve actuators' (e.g. 1.5 Ω) and the 'minimum line impedance' (16Ω) with series resistor.

8 Overview of operating functions

8.1 Functions 'Extinguishing control -> Revision' and 'Extinguishing control -> Test'

Function	Purpose	achieved	blocked
Extinguishing control -> REVISION	Permits activation of sequence of functions without horn, illuminated warning panel and valves ('active' status visible at maintenance LEDs E3G080 see following table chapter 8.1.1) Permits the disconnection of the path 'Extinguishing released' via AlgoPilot, e.g. for the testing of third party extinguishing systems etc.	→ via AlgoPilot 'CT11' → via switch 'S1' on E3G080	→ Valves → Illuminated warning panel → Alarm horn → Path 'Extinguishing released'
Extinguishing control -> TEST	Normal sequence is possible, however, without the actuation of the (delayed) sector valve.	→ via AlgoPilot 'CT11'	→ Valves

8.1.1 Display test LEDs

LED	State	Active	Short circuit	Open line
H1	Sector valve	continuously on	rapid flashing	slow flashing
H2	Main valve			
H3	Alarm horn			
H4	Illuminated warning panel			

LEDs H1...H4 are always active

8.2 AlgoPilot 'CT11' list of functions 'SECTION'

Function list SECTION 'extinguishing' (based on standard text 'english international')	Notes
BLOCKING autom. extinguishing	→ also possible at operating unit extinguishing 1)
ENABLING autom. extinguishing	
BLOCKING manual exting. release	
ENABLING manual exting. release	→ also possible at operating unit extinguishing 1)
all DETECTOR zones -> OFF	
all DETECTOR zones -> ON	
all DETECTOR zones -> TEST	
all DETECTOR zones -> TEST OFF	
all DETECTOR zones -> INSTALL. TEST	→ concerns all detectors in the extinguishing SECTION
all DETECTOR zones -> INSTALL. TEST OFF	
Extinguishing control -> REVISION Extinguishing control -> REVISION OFF	→ blocks valves, horn, illuminated warning panel, acknowledgement Is also possible on E3G080 by means of switch 'S1'
Extinguishing control -> TEST Extinguishing control -> TEST OFF	→ blocks sector valve
Initiate TEST 'horn'	→ briefly activates alarm horn (approx. 5 sec.)
Initiate TEST 'warning panel'	→ briefly activates illuminated warning panel (approx. 5 sec.)

1) Blocking and enabling also possible 'alternating'

Blocking via AlgoPilot 'CT11' and enabling via 'B3Q440' or vice versa

9 CE identification

The installation plate Extinguishing is enclosed with the control plug-in module Extinguishing E3G080. It must be completed with a water-proof marker and must be applied directly next to the installation plate of the fire control panel.

Siemens Switzerland Ltd. Gubelstr. 22, CH-6301 Zug 06 0786 - CPD - 20250	
EN 12094-1 Electrical automatic control and delay device E3G080	
Environmental class A Single flooding zone Extinguishing agent: <u>Nitrogen</u>	
Provided options:	
<input checked="" type="checkbox"/>	Delay of extinguishing signal
<input checked="" type="checkbox"/>	Signal representing the flow of extinguishing agent
<input type="checkbox"/>	Monitoring of status of components
<input checked="" type="checkbox"/>	Emergency hold device
<input checked="" type="checkbox"/>	Control of flooding time from 0 s to 300 s
<input checked="" type="checkbox"/>	Triggering signals of equipment within the system
<input type="checkbox"/>	Triggering of equipment outside the system
<input type="checkbox"/>	Emergency abort device
Reponse delay activated condition	maximum 3 s
Response delay triggering of outputs	maximum 1 s
A5Q00023389	

Additional installation plates Extinguishing can be ordered with the item no. A5Q00023388A (German) or A5Q000389A (English).

10 Error diagnosis

All faults at the inputs/outputs of the E3G080 are individually displayed at the AlgoPilot. For each of the 4 outputs an LED is provided on the E3G080 for error diagnosis (see chapter 4.2). Separate LEDs are not provided for the inputs, but a special mode enables the identification of each faulty or deactivated input and output.

10.1 Fault identification at the operation unit extinguishing B3Q440

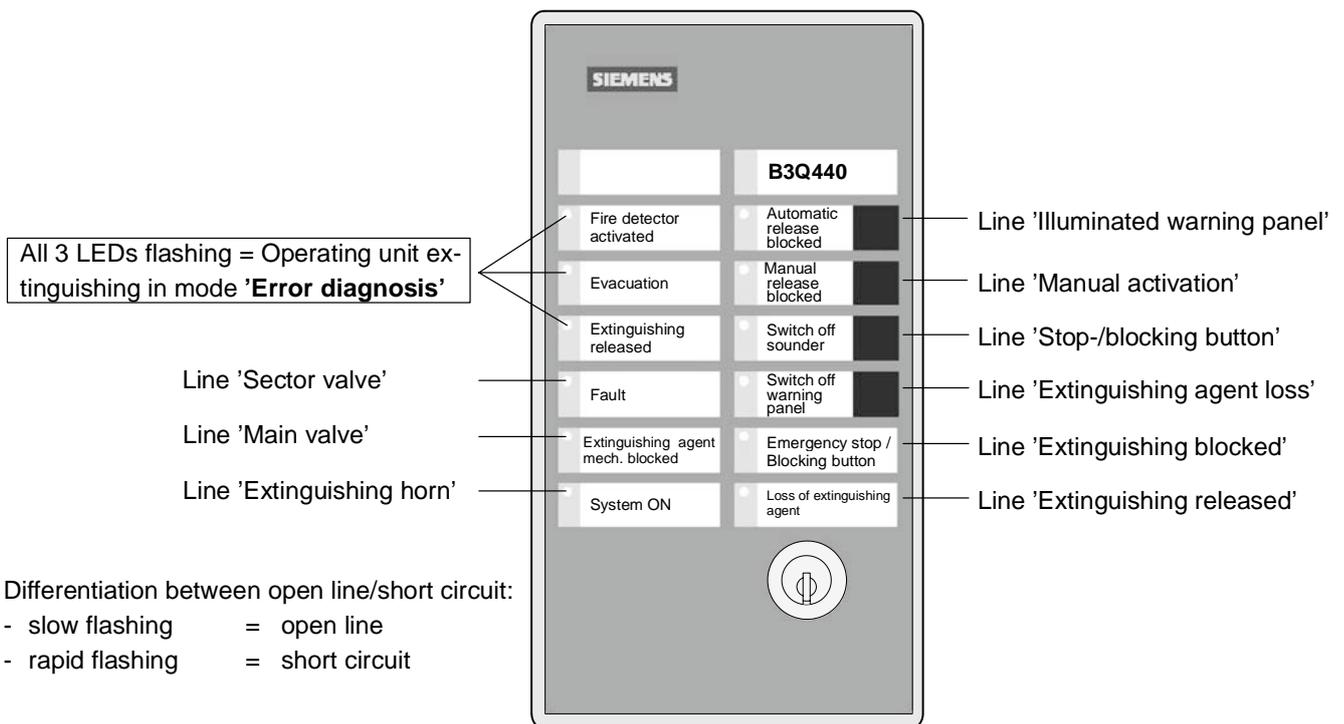


NOTE

Functions only when a fault is pending

Procedure

1. If fault set switch 'S1' (E3G080) to 'ON'
2. Press 'S4' key (E3G080) **once**
3. LEDs 'Fire detector activated' / 'Evacuation' and 'Extinguishing released' **flash** simultaneously
4. Identify the input/output concerned according to the diagram below



5. Cancelling function: Set switch 'S1' to 'OFF'

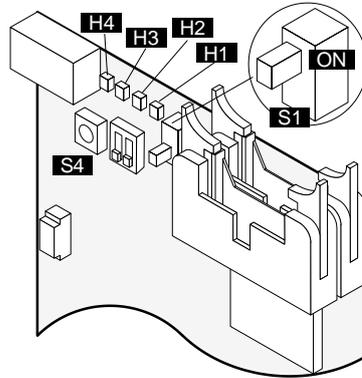
10.2 Identification of fault at the E3G080



NOTES

Functions only when a fault is pending

Vorgehen:



1. If fault, set switch 'S1' (E3G080) to 'ON'
2. Press key 'S4' (E3G080) **once**
3. LED H1, H3 and H2, H4 flash in push-pull circuit for approx. 3 sec.
4. Identify the inputs/outputs concerned according to table below
5. Set switch 'S1' to 'OFF'

Note: Each pending fault signal is visible approx. 4 sec. (sequential display)

Function In-/Output	LED				De-activated	Short circuit	Open line
	'H1'	'H2'	'H3'	'H4'			
Sector valve delayed	•				continuously on	rapid flashing	slow flashing
Main valve non-delayed		•					
Horn	•	•					
Illuminated warning panel			•				
Manual actuation (spec. button yellow)	•		•				
Emergency stop-/Blocking key		•	•				
Loss of extinguishing agent	•	•	•				
Extinguishing blocked				•			
Extinguishing released	•			•			

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Section 6