



## Series XC695

Digital displays for work safety

Operating instructions

---

**Table of contents**


---

<b>1 Safety instructions</b>	<b>4</b>
Qualified staff.....	5
Grounding.....	5
EMV measures.....	5
Disposal.....	6
<b>2 Important information</b>	<b>7</b>
Copyright.....	7
Disclaimer.....	7
Liability.....	7
Cleaning.....	7
Display accuracy.....	7
<b>3 Overview</b>	<b>8</b>
Network settings in delivery state and network integration.....	8
IP address in case of missing DHCP server: 169.254.6.90/16.....	8
Call the web page of the display.....	8
<b>4 PC Software XCplus Device Search</b>	<b>9</b>
Access web page via XCplus Device Search.....	9
<b>5 Call via the display name</b>	<b>10</b>
<b>6 Call via the IP address</b>	<b>10</b>
<b>7 Service IP address in delivery state: 169.254.213.90/16</b>	<b>10</b>
<b>8 Log on to the display</b>	<b>11</b>
First Start Wizard.....	11
Users.....	11
Changing the IP settings by the user 'admin'.....	11
<b>9 Data input</b>	<b>13</b>
Simple data input: Layout / Input.....	13
Complete data input: Layout / Advanced Input.....	13
<b>10 Meaning of the fields</b>	<b>14</b>
Accidents per year.....	14
Days without accidents.....	14
The record number of days without accidents.....	14
Text.....	14
Current date.....	14
Current time.....	14
Temperature and humidity.....	14
Paging element.....	15

<b>11 Factory settings</b>	<b>16</b>
<b>12 Network resources</b>	<b>16</b>
<b>13 Technical data</b>	<b>17</b>
<b>14 Dimensions</b>	<b>19</b>
Series XC695/1 .....	19
Series XC695/2 .....	20
Series XC695/3 .....	21
Special equipment weather protection hood .....	22

## 1 Safety instructions

### Important information

Read these operating instructions before starting the unit. They provide you with important information on the use, safety and maintenance of the units. This helps you to protect yourself and prevent damage to the unit.

During the lifetime of the unit keep the operating instructions in an accessible place at all times. Hand over the operating instructions to any future owner of the unit. It is to be considered as part of the product.

The manufacturer is not liable if the information in these operating instructions are not complied with.

### Warning notice

Information intended to help you to avoid death, bodily harm or considerable damage to property is highlighted by the warning triangle shown here; it is imperative that this information be properly heeded.



#### DANGER!

Disregarding this warning notice leads to death or serious bodily harm.



#### WARNING!

Disregarding the warning notice can lead to death or serious bodily harm.



#### CAUTION!

Disregarding the warning notice can lead to minor physical injuries or property damage.

### Intended use

During configuring, installing, testing, commissioning and maintenance of the unit, the applicable standards and safety regulations have to be observed.

Trouble-free, safety operation of the unit requires proper transport, storage, installation, mounting and careful operation and maintenance of the unit.

### Special safety precautions for installation



#### CAUTION!

Carefully seal the electrical equipment for safety reasons after commissioning.

### Montage und Installation

The attachment options for the units were conceived in such a way as to ensure safe, reliable mounting.

The user must ensure that the attachment hardware, the unit carrier and the anchoring at the unit carrier are sufficient to securely support the unit under the given surrounding conditions.

The units are to be mounted in such a way that they can be opened up while mounted. Sufficient space for the cables must be available in the unit near the cable entries.

Sufficient space is to be kept clear around the units to ensure air circulation and to prevent the build-up of heat resulting from use. The relevant information must be heeded in the case of units ventilated by other means.

When the housing fasteners are opened, the front frame of the housing hinges out upward or downward (depending on the unit version) automatically).

## Qualified staff

The operating instructions are intended for trained professional electricians, familiar with the safety standards of electrical technology and industrial electronics.

Components inside the unit are voltage-carrying during operation. For this reason mounting and maintenance work may only be performed by professionally trained personnel while observing the corresponding safety regulations.

For safety reasons and due to the required compliance with the documented unit properties the repair and replacement of components and modules may only be carried out by the manufacturer or an authorized specialized company.

## Grounding

The unit is equipped with a metal housing. It complies with safety class I and requires a protective earth connection. The connecting cable for the operating voltage must contain a protective earth wire of a sufficient cross section (DIN VDE 0106 part 1, DIN VDE 0411 part 1).

The unit has no power switch. It is in operation immediately after applying operating voltage.

## EMV measures

The devices comply with the current EU Directive (EMC Directive) and provide the required interference immunity. Observe the following when connecting the operating voltage and data cables:

Use shielded data cables.

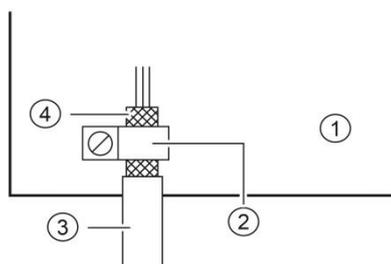
The data and operating voltage cables must be laid separately. They may not be laid together with heavy-current cables or other interference-producing cables.

The cable thickness must be properly assessed (DIN VDE 0100 Part 540).

The cable lengths inside the units are to be kept as short as possible to prevent interference. This applies especially to unshielded operating voltage cables. Shielded cables are also to be kept short due to any interference which might be emitted by the shielding.

Neither excessively long cables nor cable loops may be placed inside the units.

The connection of the cable shielding to the functional ground (PE) must be as short and low-impedance as possible. It should be made directly to the mounting plate over a large area with a conductive clip:



- |                  |                    |
|------------------|--------------------|
| ① mounting plate | ② conductive clamp |
| ③ data lines     | ④ cable shielding  |

The cable shielding is to be connected at both cable ends. If equipotential bonding currents are expected due to the cable arrangement, electrical isolation is to be performed on one side. In this case, capacitive connection (approx. 0.1µF/600 V AC) of the shielding on the isolated side must occur.

### **Disposal**

The unit is made of low-emission materials and is therefore recyclable. For an environmentally safe recycling contact a certified waste management enterprise. Units or parts which are no longer needed are to be disposed of in accordance with the regulations in effect in your country.

---

## 2 Important information

---

### Copyright

This documentation is protected by copyright. All rights are reserved.

No part of this documentation may be translated without written permission by Siebert Industrieelektronik GmbH. No part of this documentation may be reproduced in any form by print, photocopy or other methods, or processed by using electronic systems, duplicated or disseminated.

Siebert<sup>®</sup>, LRD<sup>®</sup> and XC-Board<sup>®</sup> are registered trade marks of Siebert Industrieelektronik GmbH. As far as other product names or company names are mentioned in this documentation they may be trade marks or trade names of their respective owners.

### Disclaimer

This documentation has been prepared with utmost care. For any mistakes we can not accept any liability. Corrections, improvement suggestions, criticism and suggestions are welcome. Please write to: [editing@siebert-group.com](mailto:editing@siebert-group.com)

### Liability

Availability and technical specifications of the product are subject to change. The data specified is indicated solely for product description. They are not intended to be guaranteed in a legal sense.

### Cleaning

For the care of the front panel use a scratch-free cloth. Do not push in the front pane during cleaning.

The unit must not be cleaned with a steam cleaner.

### Display accuracy

Fields to which you have given the "automatic increment" property during configuration with the 'SafetyDisplayConfigurator' are incremented by one at around midnight every day. Typically, this is the counter for accident-free days.

This function requires that the display is operated all around the clock. In the event of a power failure, the time of automatic counting will be postponed by this downtime.

Each time you make a change with the 'SafetyDisplayConfigurator', the time will be reset to midnight.

---

### 3 Overview

---

#### Network settings in delivery state and network integration

To configure the display you need a PC with network card or an already configured network.

Consult a member of your IT department for the integration of the display into your network, if possible.

To integrate the display into an existing network, it must be connected to the network. In the delivery state, the device will automatically get an IP address via DHCP and can be reached under this address. This ensures that plugging the display into your network does not cause any address conflicts.

For all possibilities described in the following, the following applies in principle:



If the website does not work, the reason could be that the display and the laptop have IP addresses that are located in different networks.

In this case, change the IP address of your laptop or consult your IT department.

#### IP address in case of missing DHCP server: 169.254.6.90/16

If the display is set to DHCP, as it is in the delivery state, but there is no DHCP server in the network, then the display gives itself the fixed IP address 169.254.6.90 with the subnet mask 255.255.0.0.

This constellation occurs, for example, when the display is directly connected to a laptop.

#### Call the web page of the display

After the network connection exists, the display can be operated via its web page. There are several ways to do this:

via the PC Program "XCplus Device Search"

via the name of the display

via the IP address of the display

## 4 PC Software XCplus Device Search

Siebert displays with XCplus Technology can be found in local networks using the XCplus Device Search PC software.

For Windows computers, this method is the easiest in most cases.

### Access web page via XCplus Device Search

First download the software 'XCplus Device Search' free of charge from the Siebert Homepage: <https://www.siebert-group.com/de/product-xc50-downloads.php>

The software is available as a zip file that can be simply unzipped anywhere, e.g. on the desktop or directly in the download directory. The software does not need to be installed.

In the unzipped directory you will find the file XCplusDeviceSearch.exe:



Simply start the search by double-clicking this file and confirm any Windows security warning that may appear by clicking the 'Run' button



#### Tip

The appearance and scope of this warning depends on the Windows version and the security settings on your computer. Make sure you share access to the correct networks (private, domain, public).

After that the operating window of the program Siebert XCplus DeviceSearch Software appears. After a short time the display should be found.

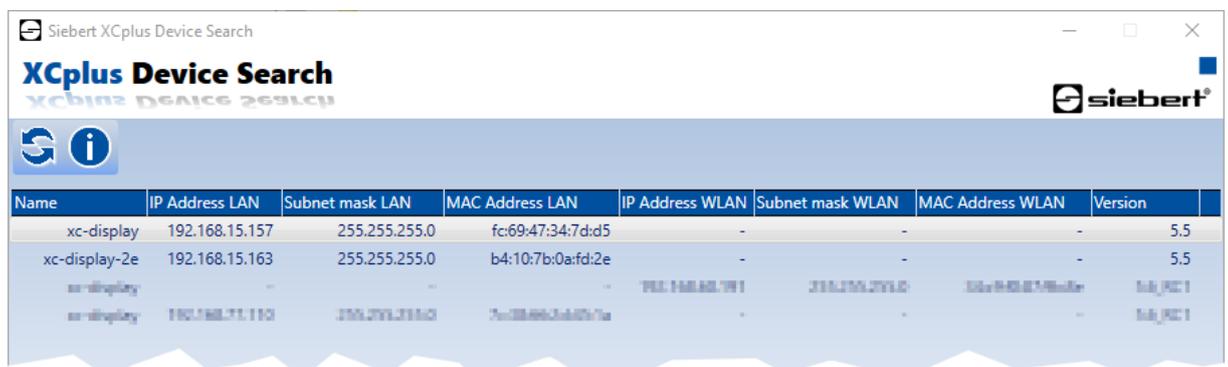


#### Tip

The search covers all networks accessible from the laptop. If the computer is additionally connected via Ethernet to a network with XC50/XC55 displays, these displays are also shown.

The search uses UDP broadcasts. For technical reasons, displays that can only be reached via routers cannot be found.

In the following example, for example, four displays are found. The display with the name 'xc-display' shows the IP address 192.168.15.157 which was assigned by a DHCP server.



Name	IP Address LAN	Subnet mask LAN	MAC Address LAN	IP Address WLAN	Subnet mask WLAN	MAC Address WLAN	Version
xc-display	192.168.15.157	255.255.255.0	fc:69:47:34:7d:d5	-	-	-	5.5
xc-display-2e	192.168.15.163	255.255.255.0	b4:10:7b:0a:fd:2e	-	-	-	5.5
xc-display	-	-	-	192.168.15.157	255.255.255.0	fc:69:47:34:7d:d5	5.5
xc-display	192.168.15.157	255.255.255.0	fc:69:47:34:7d:d5	-	-	-	5.5

By double-clicking on the desired display, the web browser with the appropriate address is called up and the start screen of the display with the login dialog opens up.



#### Tip

If the website does not work, the reason could be that the display and the laptop have IP addresses in different networks.

In this case, change the IP address of your laptop or consult your IT department.

---

## 5 Call via the display name

---

In delivery state the display has the name 'xc-display'.

If your network is configured correctly, then you can reach the display under this name. To do this enter <http://xc-display> in your web browser.



### Tip

You can change the name of the display.

If the call by name does not work, then it could be that the name has already been changed.

---

## 6 Call via the IP address

---

If the display is allocated with an IP address by a DHCP server and this IP address is known, then the web page can be called directly.

Please enter `http://<IP>/` in your web browser and replace `<IP>` by the correct IP address.



### Tip

If the website does not work, the reason could be that the display and the laptop have IP addresses in different networks.

In this case, change the IP address of your laptop or consult your IT department.

---

## 7 Service IP address in delivery state: 169.254.213.90/16

---

If all possibilities mentioned so far fail, there is still the possibility to call the display via its service IP:

State	IP address(es)
Delivery	169.254.213.90/16
Alternatives	10.20.6.90/8, 192.168.132.90/24, 192.128.20.10/24, 169.254.11.90/16

The service IP address can be changed by the user. However, it must always be one of the five alternatives mentioned. Thus, a display can always be found by trying out the five possible addresses.



### Tip

The service IP address can only be used if there is only one Siebert display in the network.

If you operate several Siebert displays in a network, they will have the same service IP address and the address can no longer be clearly assigned to a device. To use the service IP address in this case, the relevant display must be operated alone with a laptop.

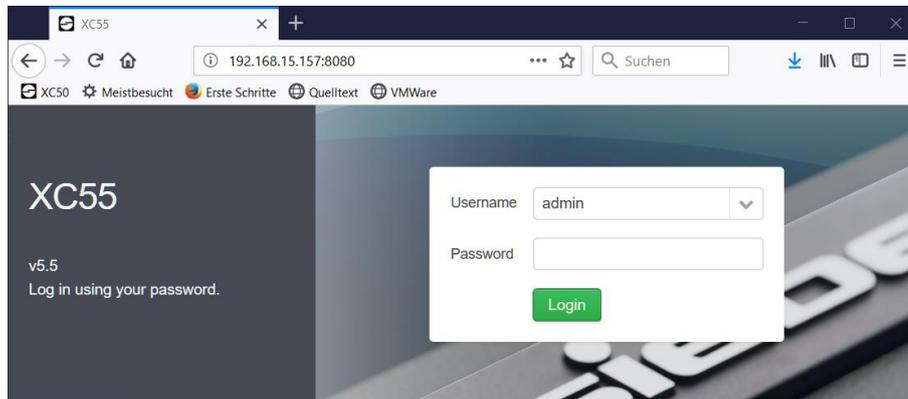
---

## 8 Log on to the display

---

Now the start page of the display can be called via one of the described possibilities.

The admin password in delivery state is: xc-admin



### Tip

If the website does not work, the reason could be that the display and the laptop have IP addresses in different networks.

In this case, change the IP address of your laptop or consult your IT department.

### First Start Wizard

At the very first start a dialog appears after logging in in which you are requested to change the passwords for security reasons.

The passwords can be changed at any time later if necessary.

### Users

Two users are set by default in the delivery state.

User	Password
admin	xc-admin
user	xc-user

The 'admin' user has full access to all settings and can change the display data in its full extent.

The user 'user' is only authorized to modify the data of the display in a limited extent.

The rights of the user 'user' can be individually adjusted by the admin. New users with individual rights can be added by the admin.

### Changing the IP settings by the user 'admin'

As user 'admin' you can modify the IP settings on the web page 'Settings/Network' to the requirements of your network.

For displays with Wifi, you will find the corresponding settings under 'Settings/Wireless'.

You can change the default IP address of the display under 'Settings/System'.

 **siebert**

> Settings   Date and time   **Network**   Wireless   Users   Preview   Updates   System   Logout

Start

Layout

Data

Utilities

Functions

Settings

### Network settings

DHCP enabled

Static IP address

Network mask

Gateway address

DNS server address

Device name

MAC address 7c:38:66:f1:b:b4

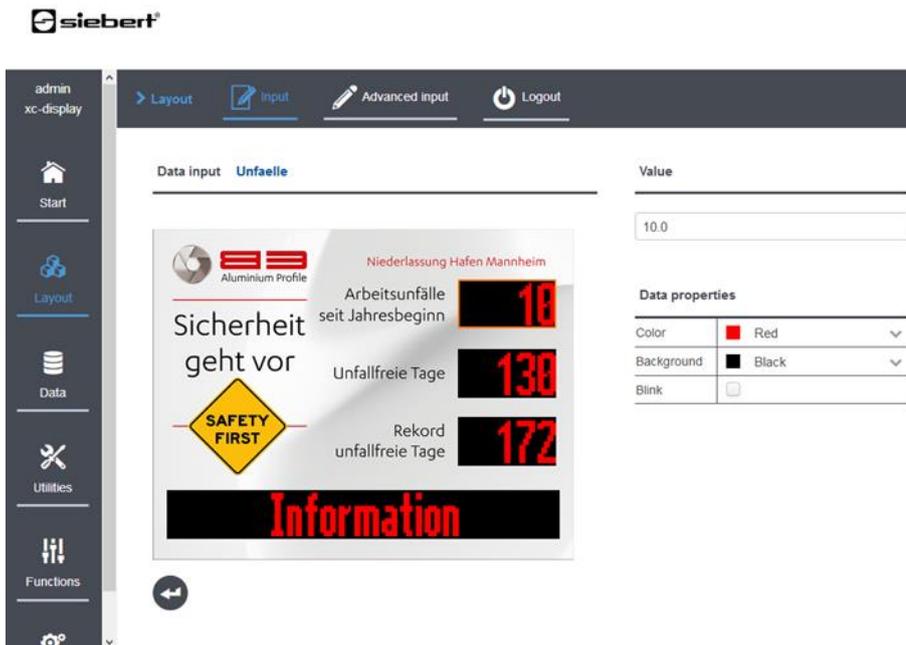
 

## 9 Data input

The data input is done via the web interface and can be reached via the menu 'Layout'. The menu items and the data input depend on the rights of the respective user.

### Simple data input: Layout / Input

Under 'Layout / Input' you will find a preview of your display. Clicking on the different fields brings up a list on the right side with the most important properties that can be changed for the clicked element.

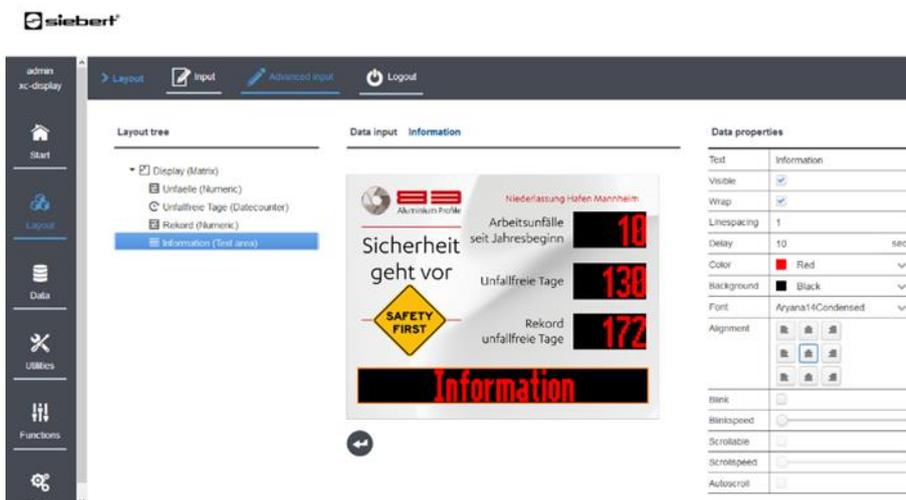


The screenshot shows the Siebert web interface with the 'Layout / Input' menu selected. The main content area displays a preview of a safety dashboard for 'Niederlassung Hafen Mannheim'. The dashboard includes a logo for 'Aluminium Profile', a 'SAFETY FIRST' sign, and three data points: 'Arbeitsunfälle seit Jahresbeginn' (10), 'Unfallfreie Tage' (130), and 'Rekord unfallfreie Tage' (172). A red 'Information' banner is at the bottom. On the right, the 'Data input' configuration panel is open, showing a 'Value' field set to 10.0 and 'Data properties' for Color (Red), Background (Black), and Blink (unchecked).

Note: Symbol image, the appearance of the web page depends on the display.

### Complete data input: Layout / Advanced Input

Under 'Layout / Advanced Input' you will find, in addition to the preview of your display, the object tree in which all elements of the layout are displayed hierarchically. By clicking on a field of the preview or an element in the object tree, a list opens on the right side with all properties that can be changed for the clicked element.



The screenshot shows the Siebert web interface with the 'Layout / Advanced Input' menu selected. The 'Layout tree' on the left shows a hierarchy: Display (Matrix) > Unfaelle (Numeric) > Unfallfreie Tage (Datecounter) > Rekord (Numeric) > Information (Text area). The 'Data input' configuration panel on the right is open for the 'Information' element, showing properties such as Text (Information), Visible (checked), Wrap (checked), Line spacing (1), Delay (10 sec), Color (Red), Background (Black), Font (Anyana16Condensed), Alignment (center), Blink (unchecked), Blink speed, Scrollable (checked), Scroll speed, and Autoscroll (checked).

Note: Symbol image, the appearance of the web page depends on the display.

---

## 10 Meaning of the fields

---

Siebert XC-Boards<sup>®</sup> are manufactured according to customer specifications. The following overview of the displayable fields may differ from your display.

Click in the field of the display whose data you want to change. On the right side the properties of the field are listed and can be changed.

After you have made all the changes click the Enter button so that the changes are adopted.



### Accidents per year

To enter the 'Accidents per year' set the 'Value' property of this field to the corresponding value.

### Days without accidents

To set the 'Days without accidents' set the property 'Date' of the field. As date, set the date of the last accident. The days without accident are calculated as difference from the system date of the display.

### The record number of days without accidents

The 'Record' is calculated from the maximum of the 'Days without accidents'. To set a start value or reset the record, set the property 'Value' of the field.

### Text

To enter text information, set the property 'Text' of the field.

If the property 'Wrap' of the field is activated, an automatic line break occurs if the text does not fit into a line. A line break can be forced by entering '\n' in the text. If the number of lines exceeds the line size of the field, then the lines are scrolled. The scrolling interval is set in the property 'Delay'.

If the property 'Wrap' is deactivated, the text is displayed as a single line. If the property 'Scrollable' is additionally activated, the text will be displayed as a scrolling text.



#### Tip

In case of display problems in text fields check the settings 'Wrap' and 'Scrollable'.

### Current date

This element allows to display the current date. In Advanced Input there are a variety of formatting options for the date.

### Current time

This element allows to display the current time. In Advanced Input there are a variety of formatting options for the time.

### Temperature and humidity

If your display is equipped with a temperature- and humidity sensor, then you can use this element to format the output. In Advanced mode you can set a color change when a certain temperature is reached.

## **Paging element**

A paging element contains further elements that are displayed 'scrolled through' one after the other. The scrolling time can be changed in both, the simple and the extended input.

You can change the properties of the elements that make up the paging element only in Advanced Input.

## 11 Factory settings

The displays are delivered with the following settings:

Property	Value	Changeable
Password for user	See section user management	Yes
IP adresse	DHCP	Yes
IP address without DHCP	169.254.6.90	No
Name of unit	xc-display	Yes
Service IP addresses	169.254.213.90/16	One out of five possible addresses

As service IP address one of the five alternatives can be chosen:

10.20.6.90/24, 192.168.132.90/24, 192.128.20.10/24, 169.254.11.90/16, 169.254.213.90/16

## 12 Network resources

The display requires the following network protocols and port numbers for correct function:

Port	TCP/UDP	Protocol	Utilization
22	TCP/UDP	ssh	sftp, scp
80	TCP	http	Forwarding
123	UDP	ntp	NTP client
137	TCP	nbns	Windows sharing
138	UDP	nbns	Windows sharing
139	UDP	nbns	Windows sharing
445	TCP	cifs	Windows sharing
1900	UDP	ssdp	Bonjour
5350	UDP	nat-pmp-status	Bonjour
5351	UDP	nat-pmp	Bonjour
5353	UDP	mdns	Bonjour
8080	TCP	http	Web interface
9000	TCP	raw	User data



### Tip

In case of network problems, first check your firewall and router settings. Consult a colleague from the IT department.

## 13 Technical data

### Display

Technology	Brilliantly luminous LED dot matrix in SMD technology
LED color scale	Red, green, blue, yellow, cyan, magenta, weiss, turquoise, orange
Equidistant fonts	Metric 7 Regular, Metric 14 Regular
Proportional fonts	Aryana 7 Regular, Aryana 7 Bold, Aryana 14 Regular, Aryana 14 Bold, Aryana 14 Condensed
Brightness adjustment	Stepless via Web interface
Brightness control	Automatically, minimal/maximal brightness via Web interface adjustable

### Numeric display

Resolution	32 x 16 pixels per numeric display
Character height	110 mm (font Aryana 14 Condensed)
Number of digits	Max. 4 per numeric display (font Aryana 14 Condensed)

### Text display

Resolution	128 x 16 pixels
Character height	55 or 110 mm (depending on typeface)
Display options	Text formatting, running text, blinking

### Connectivity

Control	Ethernet TCP/IP, optional WLAN IEEE 802.11 b/g/n
Web connectivity	■

### Functions

Integrated Web server	■
Configuration	Via Web interface

### Housing

Construction	Flat housing in professional industrial design Front frame opening upwards with gas-pressure springs
Mounting type	Wandmontage mit innenliegenden Befestigungselementen
Material	Steel sheet powder-coated, optionally stainless steel (material no 1.4301)
Weight	approx. 52 kg
Housing color	Light gray (RAL 7035), front frame laminated with weatherproof foil in customer-specific design
Protection type	IP54
Temperature controlled heating	■
Climate compensation	■

### Electrical properties

Operating voltage	230 V AC $\pm 15\%$ , 50/60 Hz
Power consumption	approx. 200 W

### Ambient conditions

Operating temperature	-25...50 °C
Storage temperaturer	-25...70 °C
Relative humidity	< 90 %, non-condensing

## 14 Dimensions

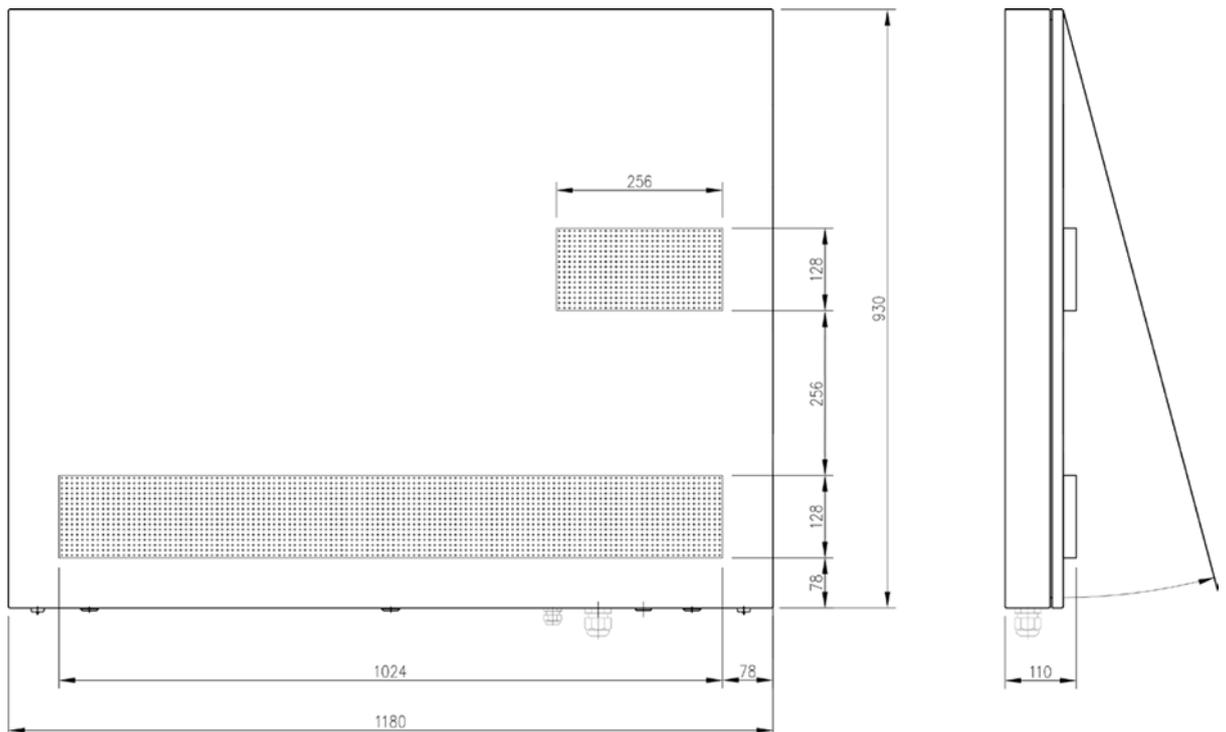
The following figures show the dimensions of the displays (dimensions in mm).

### Series XC695/1

Numerical display for the number of accident-free days

Text display for individual information

Individual graphic design



XC695/1 -  -   -

Housing sheet steel powder-coated

C

Housing stainless steel powder-coated

G

Ethernet control

0 5

Control WLAN

0 7

Coding of the graphic (done in the factory)

X X X X

Example of order:

XC695/1-C-05-xxxx

Display of accident-free days, powder-coated sheet steel housing, Ethernet control, individual graphics

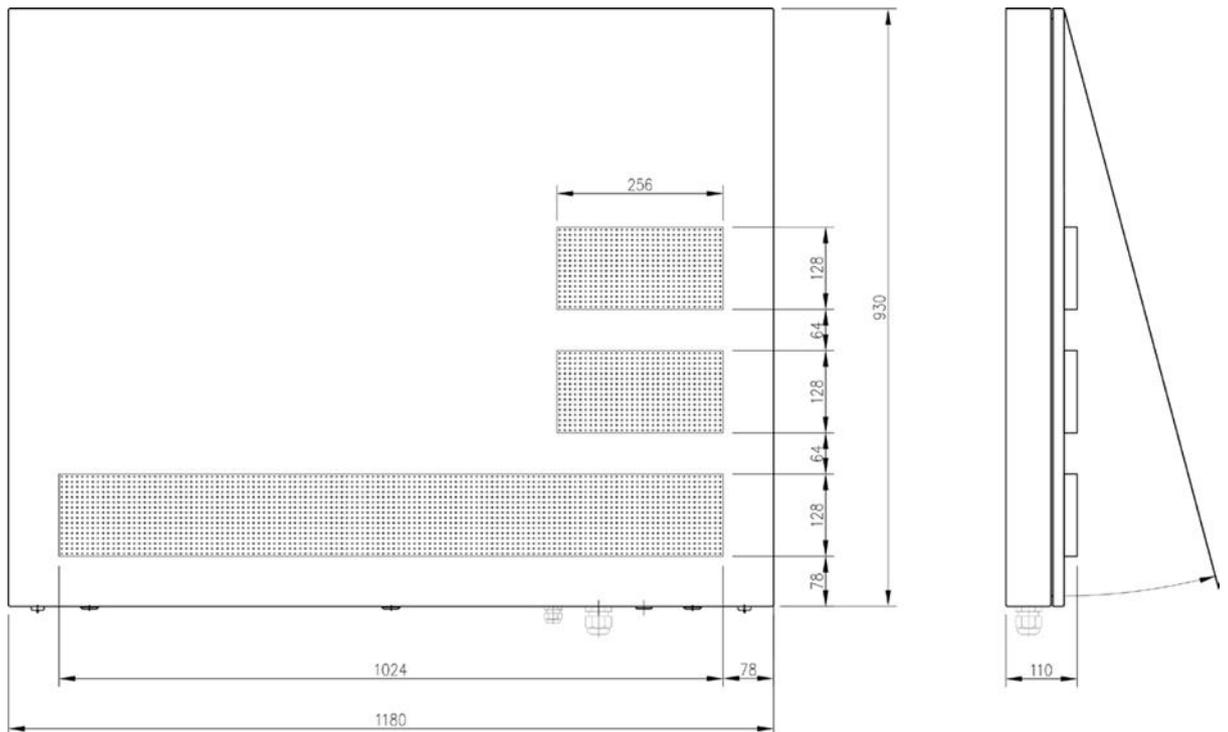
**Series XC695/2**

Numerical display for the number of accident-free days

Additional numerical display for another key figure of your choice from the accident statistics

Text display for individual information

Individual graphic design



	XC695/2 -		-			-				
Housing sheet steel powder-coated	C									
Housing stainless steel powder-coated	G									
Ethernet control		0	5							
Control WLAN		0	7							
Coding of the graphic (done in the factory)								X	X	X

Example of order:

XC695/2-C-07-xxxx

Display of the accident-free days and another key figure of the accident statistics, powder-coated sheet steel housing, WLAN control, individual graphics

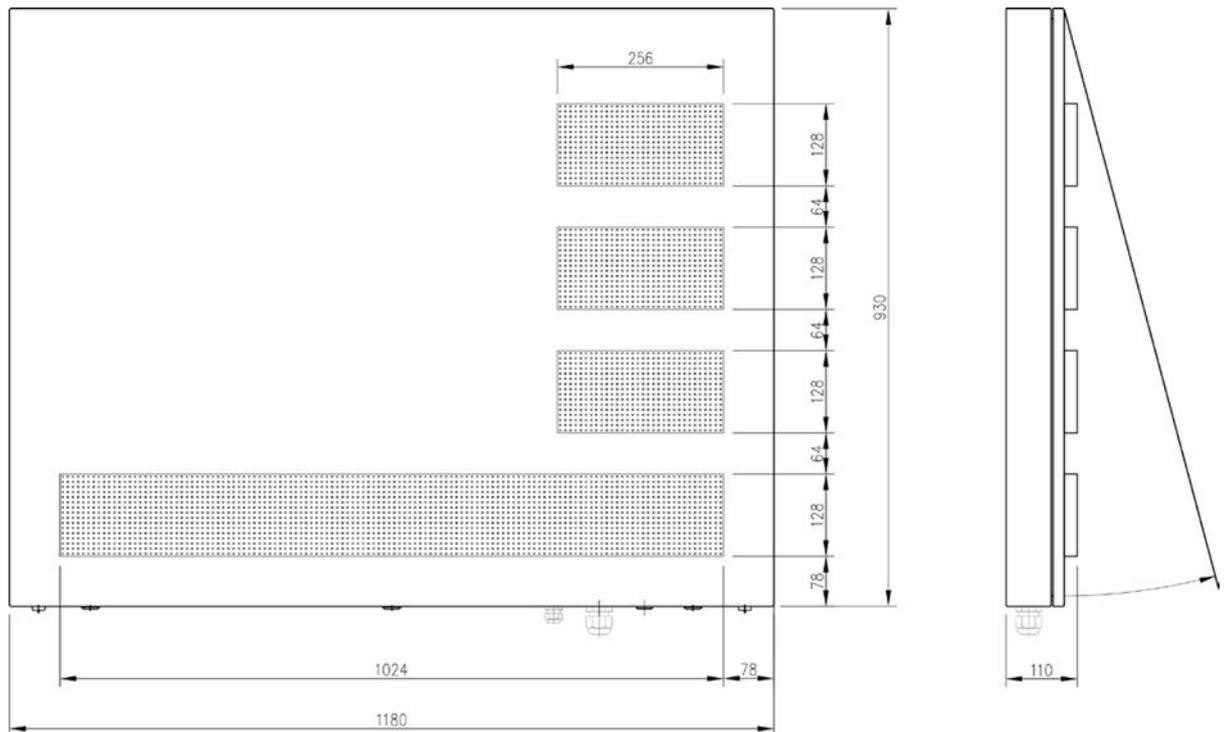
### Series XC695/3

Numerical display for the number of accident-free days

Two additional numerical displays for further key figures of your choice from the accident statistics

Text display for individual information

Individual graphic design



	XC695/3 -		-			-				
Housing sheet steel powder-coated	C									
Housing stainless steel powder-coated	G									
Ethernet control		0	5							
Control WLAN		0	7							
Coding of the graphic (done in the factory)								X	X	X

Example of order:

XC695/3-G-05-xxxx

Display of the accident-free days and 2 further key figures of the accident statistics, stainless steel powder-coated housing, Ethernet control, individual graphics.

### Special equipment weather protection hood

The following figure shows a display with weather protection hood (dimensions in mm, weight of weather protection hood approx. 5 kg).

