



Elektro-Automatik

STATUS  
2023

# CORPORATE DESIGN MANUAL

Guide for visual corporate communication

# FOREWORD

The EA Elektro-Automatik Group is Europe's leading supplier in the area of power electronics for R & D and industrial application. At the headquarters in Germany in the industrial center of North Rhine Westphalia more than 300 qualified associates, in a facility of 19000 m<sup>2</sup>, research, develop and manufacture high-tech devices such as laboratory power supplies, high power supplies and electronic loads with or without power feedback.

Based on these developments, the definition of Corporate Design and Corporate Language Guidelines was a must. Summarized in this CD Manual the guidelines support EA in creating an international and uniform, unique brand image.

They are described in detail in the individual chapters, applications show the exemplary implementation. If further applications arise in EA's communication with its customers and service providers, these guidelines will be added to the manual.

All users of the guidelines are requested to deal with the manual in detail and to implement the guidelines consistently.

## IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT THE MARKETING DEPARTMENT OF EA:

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# 01 COMPANY

The EA Elektro-Automatik Group (EA) is Europe's leading supplier of power electronics for R & D and industrial applications.

At the German headquarters in Viersen, North Rhine Westphalia, more than 300 qualified associates research, develop and manufacture high-tech devices such as laboratory power supplies, high power supplies and electronic loads with and without mains feedback. Specific to power electronics, made by EA, is the wide application spectrum. The units are used across many branches, from batteries, through fuel cell technology, to wind and solar power, from electrochemicals and process technology to telecommunication.

Results and experience from decades of R & D flow continually into new solutions. Automatic test systems with specially developed soft- and hardware assure a consistently high product quality. Flexible production processes support fast reaction to changing customer requirements.

As a mid-size company EA is totally responsible for the production location in Germany but acts globally with branches in China and USA, sales office in Spain and a wide network of partners. Value sharing, mutual respect and open communication characterise our organization.

The foundation of the company in 1974 was based on innovation, a tradition which is maintained today. What started with the development of simple mains adaptors is continued today in the overall concept of technology leadership. With highly specialised power supply systems for a multitude of applications, EA is driving the future of power electronics – technologically excellent for high performance and designed for resource protection and energy saving.



# 02 DESIGN

02.1 LOGO

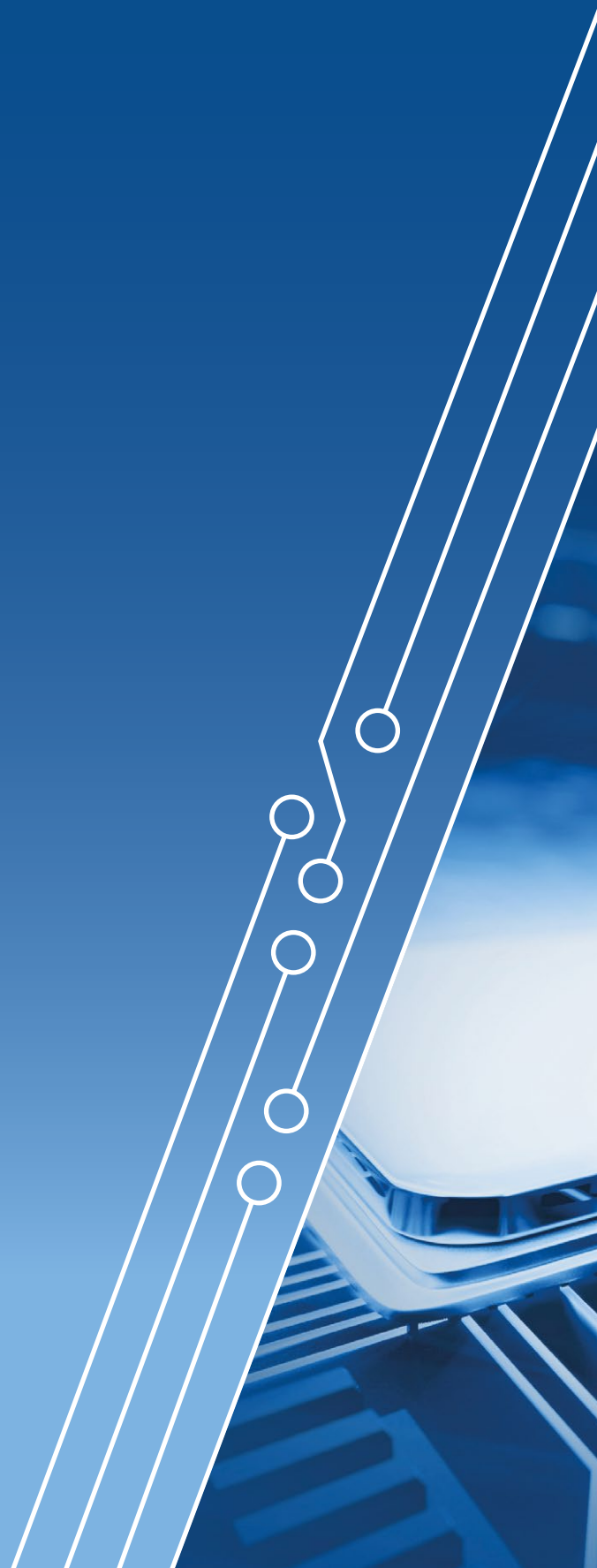
02.2 COLOR CODING

02.3 TYPOGRAPHY

02.4 DESIGN ELEMENTS

02.5 DESIGN GRID

02.6 VISUAL LANGUAGE



## 02.1 LOGO

### REPRESENTATION VARIANTS

The logo for EA Elektro-Automatik consists of a word-picture mark.

Colored and unstable backgrounds should be avoided. The logo may only be scaled proportionally. Distortions, tilts or reflections are not permitted. In all cases, the greatest possible contrast between logo and background is important. Permissible is the display of the logo in the following grafisch variants:

1. the preferred display of the logo is always the 4-color version.
2. In order to be able to present EA more strikingly on narrow surfaces with image and word mark, it is permissible to place image and word mark in a row. However, the preferred presentation remains view 1 and should be used whenever possible. The same guidelines for color presentation apply.
3. If a pure black/white display is required, the logo will be set is set exclusively in 100 % black. The signet is filled in white.
4. If the logo is placed on a dark or black background, the lettering and signet are set in white (negative).
5. In the case of calm, dark backgrounds that provide a good contrast to the corporate colors, the negative display white is permitted in conjunction with the corporate colors.
6. The logo's picture mark can also be used as an independent signet without a word mark. This variant is preferred when space is limited. space. The same guidelines for color representation apply. In the design, it is important to ensure that the company name "EA Elektro-Automatik" appears in writing once in full.

1



**Elektro-Automatik**

2



**Elektro-Automatik**

3



**Elektro-Automatik**

4



**Elektro-Automatik**

5



**Elektro-Automatik**

6



## 02.1 LOGO

### DIMENSIONING AND TRADEMARK PROTECTION SPACE

The defined distances to the logo must be observed as a minimum. These guarantee an undisturbed reproduction of the logo. Any elements such as texts, colorfls, other logos, etc. must not be located in the protective zone of the logo. The protective space to be observed is defined by the height of the picture mark shown.



## 02.1 LOGO

### POSITIONING OF THE LOGO ON WHITE SPACE

In all advertising measures such as print ads, digital banners, brochures and PowerPoint masters, the 4-color logo is placed on a white surface, taking into account the brand protection space on colored backgrounds or image motifs.



Example shelter logo on white surface



Example use of the logo on unsteady backgrounds

## 02.2 COLOUR CODING

### PRIMARY COLORS

Red, blue and gray are defined as the corporate colours. These colours are also implemented in the logo. As far as the technical printing processes allow, the primary colours should always be printed in four-color set (4c, Euroscale).



#### Special colours

Pantone 485 C

#### Process colours (4c, Euroscale)

CMYK 0/95/100/0

#### RGB colours

218/41/28

#### Paint colours (RAL)

3020

#### Web colours

DA291C



#### Special colours

Pantone 541 C

#### Process colours (4c, Euroscale)

CMYK 100/58/9/46

#### RGB colours

0/60/113

#### Paint colours (RAL)

5010

#### Web colours

003C71



#### Special colours

Pantone 424 C

#### Process colours (4c, Euroscale)

CMYK 30/20/19/58

#### RGB colours

112/115/114

#### Paint colours (RAL)

7037

#### Web colours

707372

### TONE VALUES

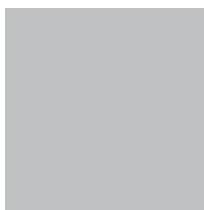
The rastering of the primary colours in the design is done exclusively in the grey tone. The following tonal value gradations are permissible:



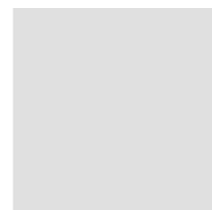
80 %



60 %



40 %



20 %



## 02.2 COLOUR CODING

### SECONDARY COLOURS

As a complement to the primary corporate colours, secondary colours enliven EA's appearance. They are used in infographics and in the striking blue gradient, which can be found in all corporate communication advertising materials.



#### Special colours

653 C

#### Process colours (4c, Euroscale)

CMYK 98/71/15/3

#### RGB colours

8/77/141

#### Paint colours (RAL)

5005

#### Web colours

084d8d



#### Special colours

284 C

#### Process colours (4c, Euroscale)

CMYK 54/19/0/0

#### RGB colours

125/179/225

#### Paint colours (RAL)

5024

#### Web colours

7db3e1

### WEIGHTING OF THE COLOURS

The primary and secondary colours define, among other things, the appearance and must therefore not deviate in their values when used. In the design, the ratio must also be taken into account. Blue tones and greyscales take up the largest area. EA red is used as an accent colour.

## 02.2 COLOUR CODING

### FONT COLOUR

For good legibility, a 90% black is used for the typography on a white or light background. This screened grey tone can be printed in 4C without any problems and harmonises with the EA colours. Headlines and sublines are preferably used in the color blue, but can also be placed in red for a special accent.



#### Special colours

Black 7 C

#### Process colours (4c, Euroscale)

CMYK 0/0/0/90

#### RGB colours

60/60/59

#### Paint colours (RAL)

9004

#### Web colours

47494A



#### Special colours

Pantone 541 C

#### Process colours (4c, Euroscale)

CMYK 100/58/9/46

#### RGB colours

0/60/113

#### Paint colours (RAL)

5010

#### Web colours

003C71



#### Special colours

Pantone 485 C

#### Process colours (4c, Euroscale)

CMYK 0/95/100/0

#### RGB colours

218/41/28

#### Paint colours (RAL)

3020

#### Web colours

DA291C

## 02.3 TYPOGRAPHY

### FONTS USED

The typographic appearance of EA Elektro-Automatik in print and web is determined by the Play font family and Roboto. The Play Bold typeface is used for striking emphasis, such as headlines and central messages. Headlines are preferably written in capitals. The Play Regular typeface offers an alternative for headlines, but also provides a good basis for sublines and introductory lines. The Roboto typeface family is used for body text, subheadings or highlighting individual words. Within body text, they can be placed in mixed case. The space-saving Condensed font styles of the family are suitable for tabular overviews.

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**abcdefghijklmnopqrstuvwxyz**  
**1234567890**  
**PLAY BOLD**

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
PLAY REGULAR

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
ROBOTO LIGHT

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**abcdefghijklmnopqrstuvwxyz**  
**1234567890**  
**ROBOTO MEDIUM**

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
ROBOTO CONDENSED LIGHT

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
ROBOTO REGULAR

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**abcdefghijklmnopqrstuvwxyz**  
**1234567890**  
**ROBOTO BOLD**

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
ROBOTO CONDENSED REGULAR

## 02.3 TYPOGRAPHY

### **CORRESPONDENCE FONT**

The system font Arial is used for correspondence and office applications (e.g. Word and PowerPoint). The Bold font is just used for striking emphasis, such as headlines, sublines, central messages and the web address. The Regular font is used as a copy font.

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

**ARIAL REGULAR**

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**

**abcdefghijklmnopqrstuvwxyz**

**1234567890**

**ARIAL BOLD**

## 02.3 TYPOGRAPHY

### CHINESE FONT

For Chinese translations, the font family Noto Sans SC is used. The Noto Sans SC Bold typeface is used for striking emphasis, such as headlines and central messages. The Noto Sans SC Medium and Regular typefaces are suitable for subheadings and highlighting individual words. Noto Sans SC Light is used for body text.

### THAI FONT

The typographic appearance of Thai translations is characterised by the Chakra Petch and Sarabun font families. Chakra Petch is used here as a headline and subline font. The Sarabun font family is used for body text, subheadings or highlighting individual words.

面向未來行業的電力電子產品

NOTO SANS SC LIGHT

面向未來行業的電力電子產品

NOTO SANS SC REGULAR

面向未來行業的電力電子產品

NOTO SANS SC MEDIUM

面向未來行業的電力電子產品

NOTO SANS SC BOLD

อิเล็กทรอนิกส์กำลังสำหรับ  
อุตสาหกรรมแห่งอนาคต

CHAKRA PETCH BOLD

อิเล็กทรอนิกส์กำลังสำหรับ  
อุตสาหกรรมแห่งอนาคต

CHAKRA PETCH REGULAR

อิเล็กทรอนิกส์กำลังสำหรับอุตสาหกรรมแห่งอนาคต

SARABUN EXTRA LIGHT

อิเล็กทรอนิกส์กำลังสำหรับอุตสาหกรรมแห่งอนาคต

SARABUN LIGHT

อิเล็กทรอนิกส์กำลังสำหรับอุตสาหกรรมแห่งอนาคต

SARABUN MEDIUM

อิเล็กทรอนิกส์กำลังสำหรับอุตสาหกรรมแห่งอนาคต

SARABUN SEMIBOLD

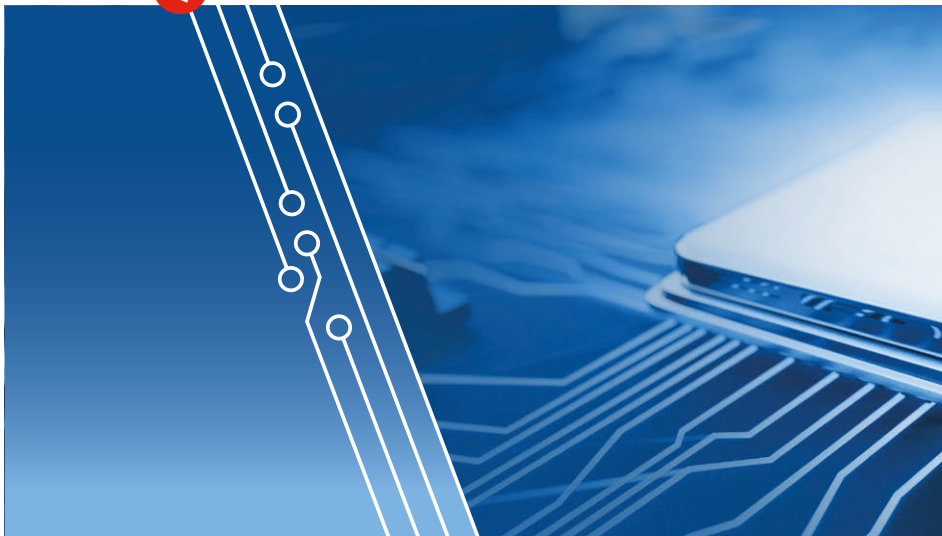
## 02.4 DESIGN ELEMENTS

### LADDER ELEMENT

A central feature of the design is the „ladder element“. Derived and abstracted from the circuit board, it is used in a tonal gradation of 20 % (up to max. 40 %) of the primary colour as graphic support. As a stylistic element and separation between text and image/product motif, the ladder is found on a high-contrast blue gradient as a negative version. The closed line forms the separation from the motif. The element can also be used in a grey tone as a separation between the information and image areas, e.g. in PowerPoint presentations.




White ladder element



### POWER RACKS 24U & 42U

Highest Power Density on the Market

- Heavy Duty 19" Power Racks up to 2000 VDC, 64000A and 2MW
- 24U Racks to host up to 4x30kW (total 120kW) uni./ bi-directional power supplies or electronic loads series
- 42U Racks to host up to 8x30kW (total 240kW) uni/ bi-directional power supplies or electronic loads series
- **Lowest footprint:**
  - 120kW in a 19" 24U, 600 mm wide, 1000 mm deep
  - 240kW in a 19" 42U rack, 600 mm wide, 1000 mm deep



Elektro-Automatik



Design examples ladder element

Grey ladder element

## 02.4 DESIGN ELEMENTS

### ICONS

Individual icons are developed for communication, which serve for a quick of various contents and categories. The graphic appearance is characterized by a reduced, linear style characterizes. Designations under the icons are set in capitals of the Roboto Regular Condensed font.



AUTOMOTIVE



RAILWAY  
TECHNOLOGY



AVIONIC



MARINE &  
OFFSHORE



AUTOMATIC TESTING  
EQUIPMENT



BATTERY



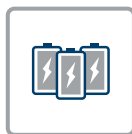
FUEL CELL



RENEWABLE  
ENERGIES



PRODUCTION &  
PROCESS INDUSTRY



BATTERY  
PACKS



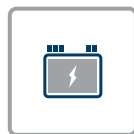
BATTERY  
CELLS



FUEL  
CELLS



EV CHARGING  
SYSTEMS



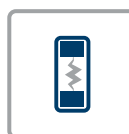
HV-INVERTER



EV / PHEV



ON-BOARD  
CHARGERS



HV-FUSES

## 02.4 DESIGN ELEMENTS

### BUTTONS

Buttons with short, striking statements can be used specifically as eye-catcher with a rotation of 10°. The attention-grabbing accent color red is provided.





## 02.4 DESIGN ELEMENTS

### BLUE GRADIENT

The blue gradient is an essential design element for the entire communication. Whether in the header of the website, in print advertisements or digital media, the blue gradient offers a striking design basis. For this purpose the secondary colours are used. As a rule, the gradient is linear and has a ratio of 70:30. For the „high-lighting“ of a product, the gradient can also be radial and place a spotlight on the product to be advertised.



**EA POWER RACKS**

19" cabinets as modular system up to 42 U, up to 2,000 VDC, 8,000 A, 2 MW

- Autoranging for DC input and output
- Bidirectional (source and sink)
- Power regeneration with an efficiency of up to 96 %
- Machine standard compliant to EN 60204-1

Elektro-Automatik

Phone +49 2162 3785 - 0 · ea1974@elektroautomatik.com · www.elektroautomatik.com

Example Linear gradient

Example Radial gradient

## 02.4 DESIGN ELEMENTS

### RED ACCENTS

Red accents used selectively bring energy into EA's appearance. In addition to red buttons, which can be used in digital communication but also in print as disruptors, there are 2 other firmly defined elements that are regularly used in the corporate colour red:

#### ■ Square bullets:

The size of the squares is aligned with the upper edge of the minuscule (Lower case)



#### ■ Red line:

If the format allows it in height, the red line is always placed in the header area and is only perceived as a narrow band in relation to the medium. It provides support for header images on the web or creates a link to the connection to the logo in digital and print media.



Example use of red line in combination with white space and logo

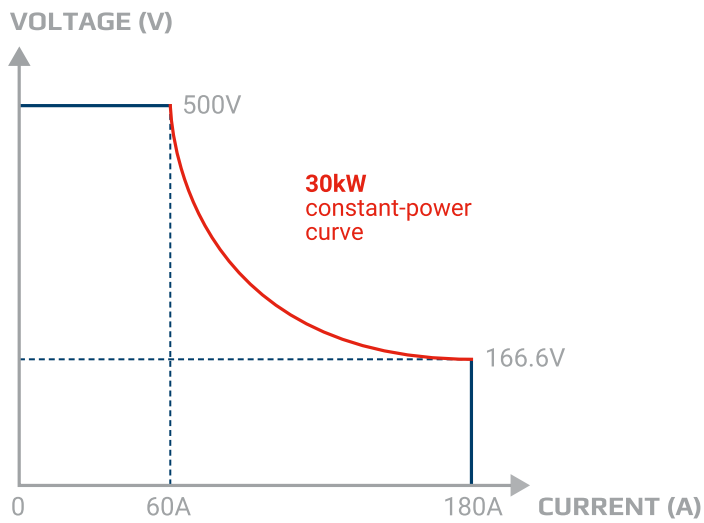


Example of use without logo and white space

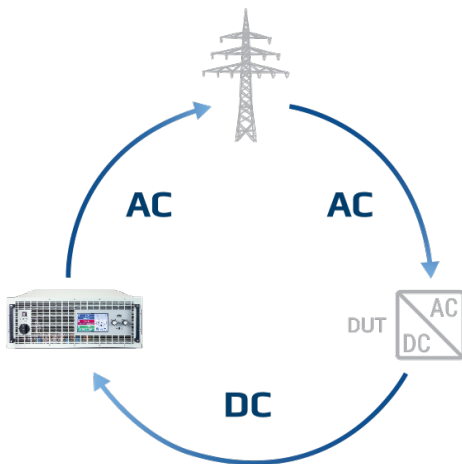
## 02.4 DESIGN ELEMENTS

### INFOGRAPHICS

A linear, clean presentation that takes the corporate colours into account ensures that information is transmitted quickly.



Design example graphic Autoranging

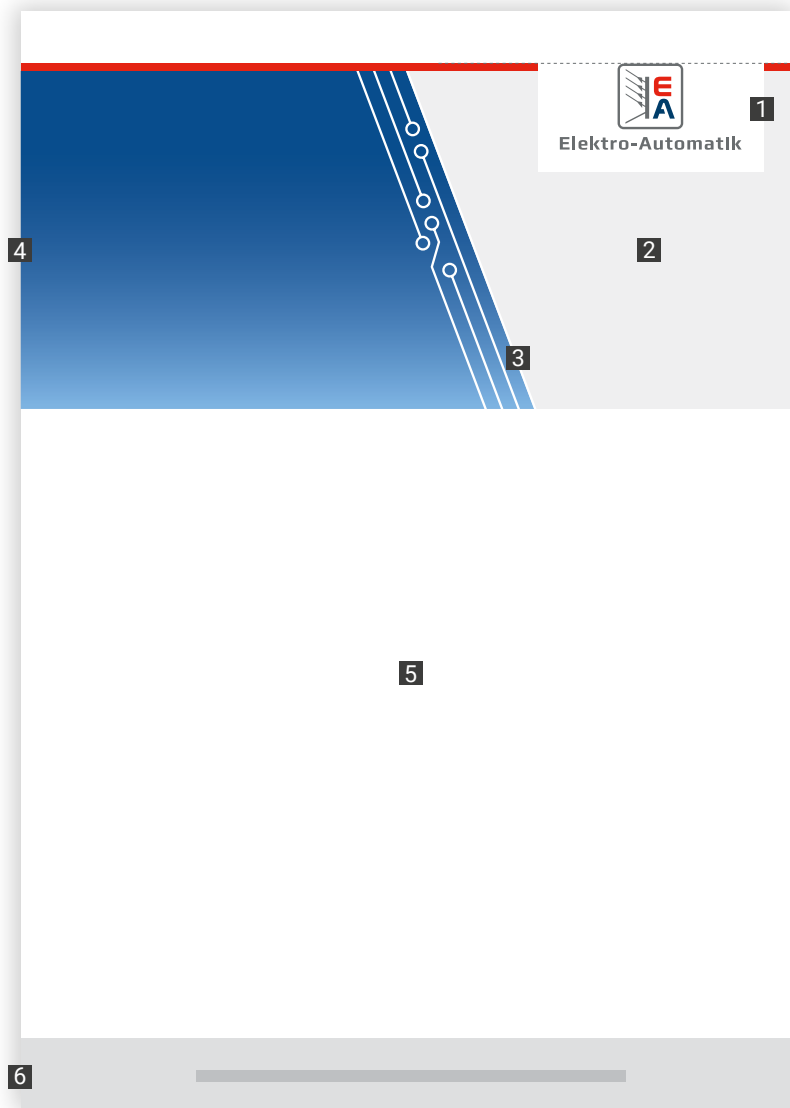


Design example graphic Mains recovery

## 02.5 DESIGN GRID

### PRINT ADS

The basic layout shows the preferred division and placement of all basic elements.



Basic layout 1/1 ad

#### Header:

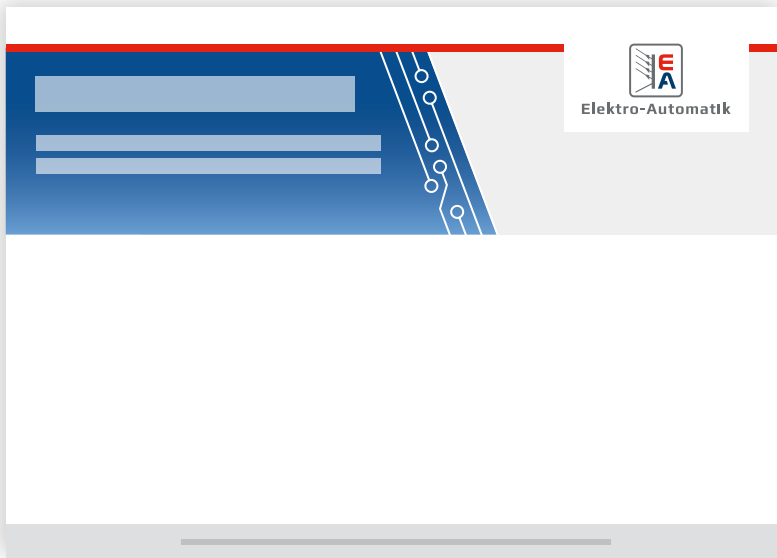
1. The logo should be placed at the top right. On the white space it is aligned with the upper edge of the red line. For narrow portrait formats, centred positioning is also possible.
2. Placement of the image motif. The image motif may also overlap the ladder element and the blue gradient.
3. Ladder element (angle 20.5 degrees)
4. Blue gradient: Product image or alternatively text may be placed here. The distribution/weighting between image motif and gradient is flexible.

#### Content area:

5. Headline, subline, continuous text and bulleted lists as well as infographics and icons find their place in this field. The same applies to product images and detail images.

6. **Footer** with contact information

## 02.5 DESIGN GRID



Basic layout 1/2 ad

For a space-saving layout, the headline and subline may be placed in the blue gradient.



Basic layout 1/3 ad

Headline, subline, body text and bulleted lists are placed in narrow formats in white on the blue gradient. The same applies to the product image. It may be placed flexibly and protrude into the leading element and image motif.

1 mm distance to footer

## 02.5 DESIGN GRID

210 mm

297 mm

**1** Logo

**2** Image or campaign motif

**3** Blue gradient with ladder element

**4** Headline

**5** Subline

**6** Introduction

**7** Bullets

**8** Product images

**9** Footer

**4** LOREM IPSUM DOLOR SIT AMET

**5** Lorem ipsum dolor sit amet, consetetur sadipscing elitr

**6** Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum:

- Lorem ipsum dolor sit amet, consetetur sadipscing elitr
- Sed diam nonumy eirmod tempor invidunt ut labore et dolore
- At vero eos et accusam et justo duo dolores et ea rebum

**8**

**9** Phone +49 2162 3785 - XX . ea1974@elektroautomatik.com . www.elektroautomatik.com

210 mm

110 mm

**1** Logo

**2** Image or campaign motif

**3** Blue gradient with ladder element

**4** Headline

**5** Subline

**6** Introduction

**7** Bullets

**8** Product images

**9** Footer

**4** LOREM IPSUM DOLOR SIT AMET CONSECTETUER

**5** Lorem ipsum dolor sit amet, consetetur adipiscing elit, sed diam nonummy

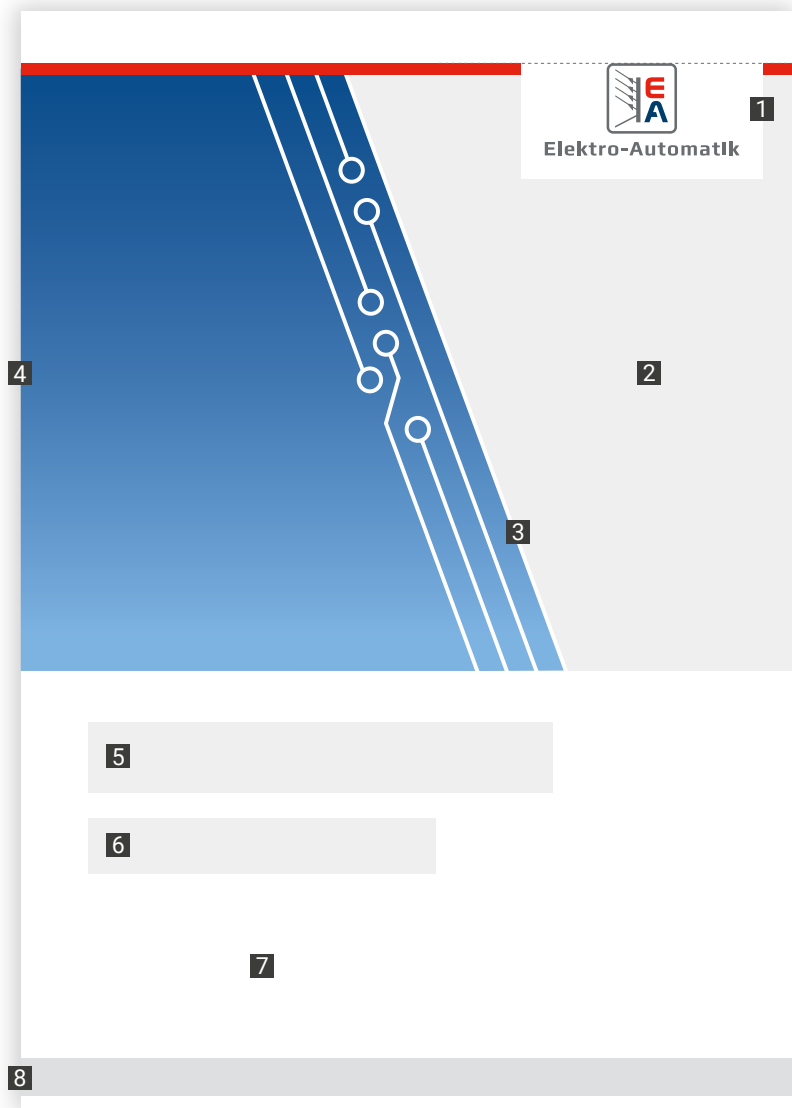
- Lorem ipsum: dolor sit amet, consetetur adipiscing elit
- Lorem ipsum: dolor sit amet, consetetur adipiscing elit

**9** www.elektroautomatik.com

## 02.5 DESIGN GRID

### WHITEPAPER AND BROSCHURES

The basic layout shows the preferred division and placement of all basic elements.

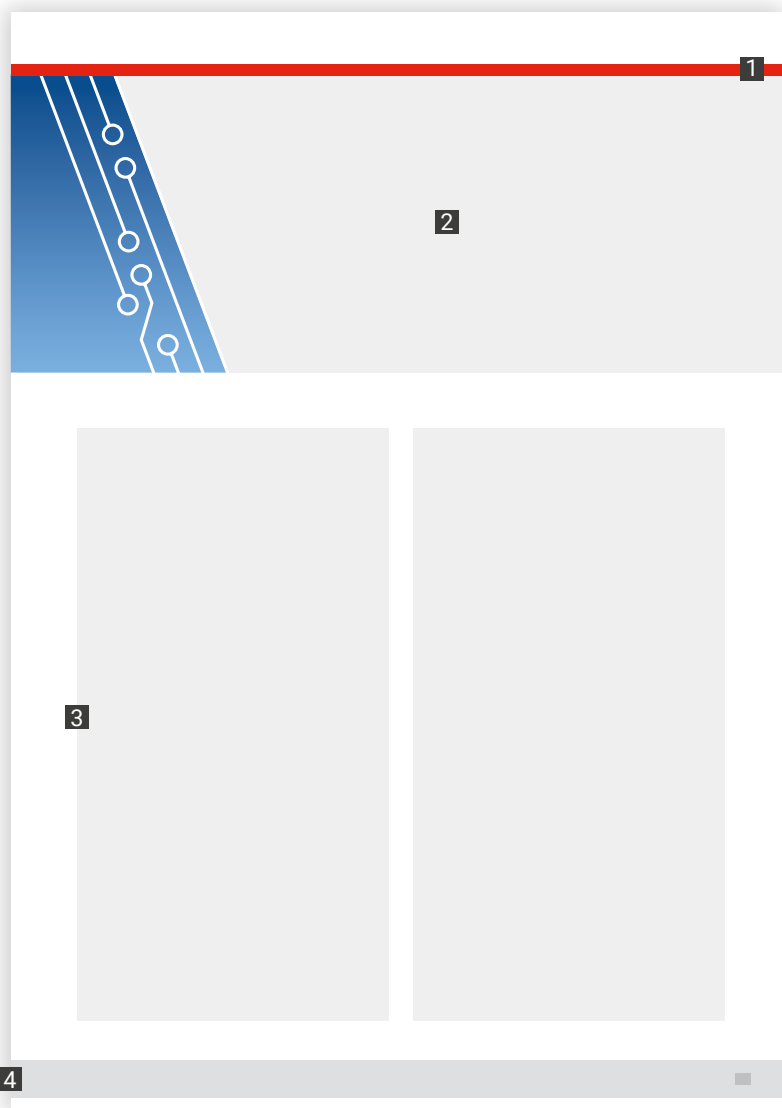


1. The logo should be placed at the top right. On the white space it is aligned with the upper edge of the red line.
2. Placement of the image motif. The image motif may also overlap the ladder element and the blue gradient.
3. Ladder element (angle 20.5 degrees)
4. Blue gradient: The distribution/ weighting between image motif and gradient is flexible.
5. Headline
6. Subline
7. Optional space for icons or complementary product image
8. Slim footer

Basic layout title

## 02.5 DESIGN GRID

The inside pages of a white paper or brochure can be designed flexibly, taking into account the general corporate design guidelines. The header and footer are defined. A two-column layout is recommended for the text.



1. Red line

2. **Optionally**, header images can be used. The distribution/weighting between image motif and gradient is flexible.

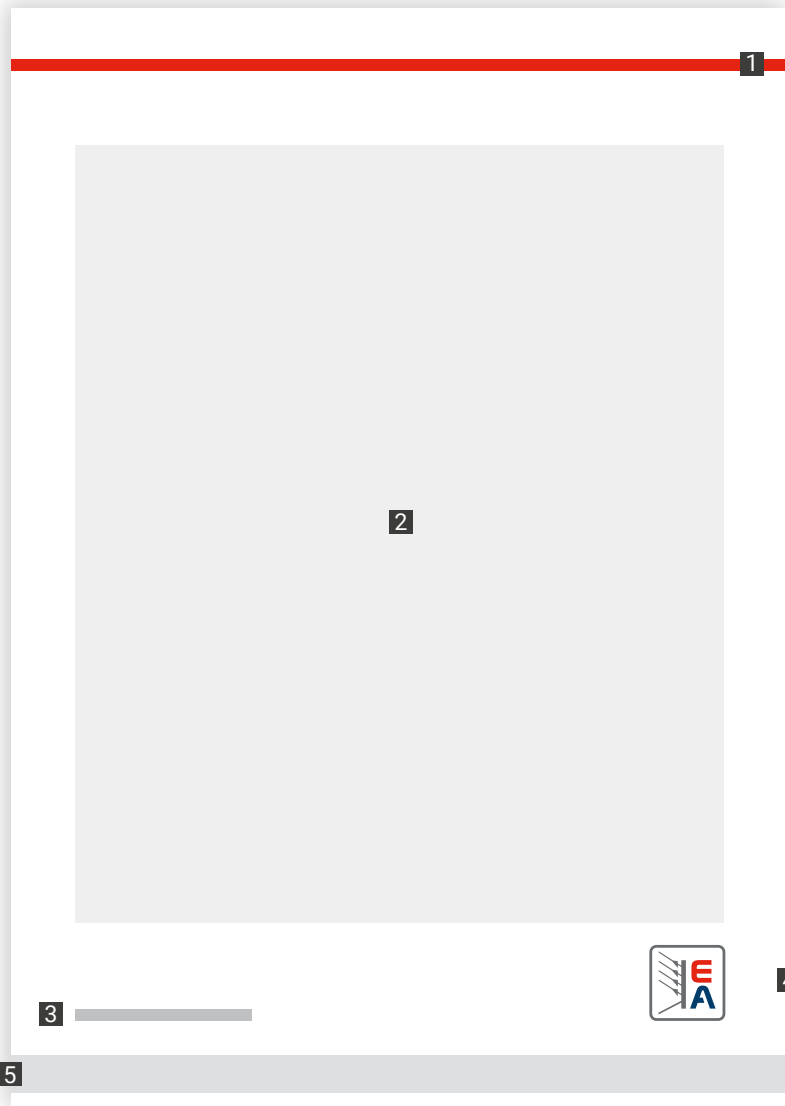
3. A two-column text grid is recommended. Striking headlines and sublines, product images and infographics may break through the grid and can be used flexibly for a dynamic design.

4. Slim footer with optional space for pagination

Basic layout inner page



## 02.5 DESIGN GRID



1. Red line
2. Content area
3. Web address
4. Logo: Signet version
5. Slim footer

Basic layout back title

# 02.5 DESIGN GRID

**Elektro-Automatik**

## EFFICIENTLY AND EASILY TEST FUEL CELLS

Supporting advances in climate-neutral energy

The pseudo-AC measurement is known as the current interrupt method. This method as the name describes, creates a DC to AC conversion by changing the load current from steady state value to 0A. The fall-off voltage rises to its open-circuit voltage from the voltage reduction by the increase of the load current and the fall-on resistance. Figure 3 shows a voltage pulse resulting from the reenergizing of the current. While only an electronic load is required for this method, it has the disadvantage of creating a large current in the load.

Figure 3 shows an ideal voltage for illustration, but cable inductance is also, creates ripples on the edges of the voltage pulse when the current transitions. The cable inductance causes an accurate reading of the voltage peak off-ramp. Keeping test cables between the load and test cell and ordering an short as possible can reduce the ringing effect. Figure 4 shows the test setup for the current interrupt test. The second disadvantage of this method is that it overestimates the resistance of the test by 3 to 10%.

**Voltage (V)**

$V_{OC}$

$\Delta V$

$V_{load}$

**Time,  $\mu s$**

Figure 3: Actual load cell response to a load current interrupt. The actual output would have had faster charging and discharging rates and the voltage pulse has to be the duration of the testing. The rise time is an AC effect to the cables and the air LC resonance loss during the transition of the test.

**SERVICE FOR YOU WORLDWIDE.**

At the headquarter in Germany in the industrial center of North Rhine Westphalia more than 300 qualified associates in a facility of 10000 m<sup>2</sup> research, develop and manufacture high-tech equipment for laboratory power supply, high-power motor adaptation and electronic loads with an efficient power feedback. The sales network includes branches in China and USA, sales offices in Spain and an extensive partner network.

[www.elektroautomatik.com](http://www.elektroautomatik.com)

Example Whitepaper "Efficiently and easily test fuel cells"

**Elektro-Automatik**

## WE MAKE BATTERY RECYCLING EASY & EFFICIENT

State-of-the-art capability with regenerative electronic loads and bidirectional power supplies from EA

### Second-Life use for batteries

Battery testing made easy with bidirectional programmable DC power supplies

**Testing for Second-Life use**

**What is the residual capacity of the battery?**

The potential users of second-life batteries from electric vehicles are many and varied. The applications range from home storage, emergency power supplies and power buffers energy storage for solar power or wind energy.

**Bidirectional programmable DC laboratory power supplies**

For this application, it makes sense to use bidirectional laboratory power supplies for further investigation. With only one device, it is possible to test whether older batteries from electrically powered vehicles can still be used in other applications. If these applications are predominantly static and if the residual capacity is sufficient, these batteries will find their second-life use e.g. in stationary energy storage systems.

In this test, the battery is first fully charged with the bidirectional power supply and then discharged in a controlled manner with the same device. The capacity (SOC) and state of aging (SOA) are measured and the energy is fed back into the power grid with an efficiency of over 90%.

**SERVICE FOR YOU WORLDWIDE.**

At the headquarter in Germany in the industrial center of North Rhine Westphalia more than 300 qualified associates in a facility of 10000 m<sup>2</sup> research, develop and manufacture high-tech equipment for laboratory power supply, high-power motor adaptation and electronic loads with an efficient power feedback. The sales network includes branches in China and USA, sales offices in Spain and an extensive partner network.

[www.elektroautomatik.com](http://www.elektroautomatik.com)

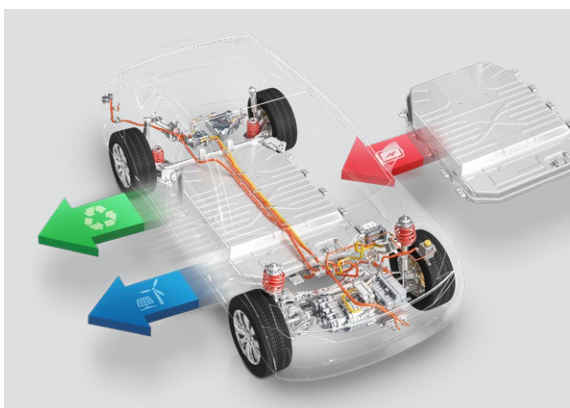
Example Whitepaper "We make battery recycling easy & efficient"

## 02.6 VISUAL LANGUAGE

In order to create a memorable visual language with a high recognition value, it must be ensured that a uniform visual world is created and maintained when using different photographers and selecting image database material. Generally, a distinction is made between image motifs and product representation.

### IMAGE MOTIFS

EA's image motifs are characterised by striking imagery with a reference to the industry. Attention should be paid to a consistent style in the selection of material from image databases. The colours must blend harmoniously with EA's colour scheme.

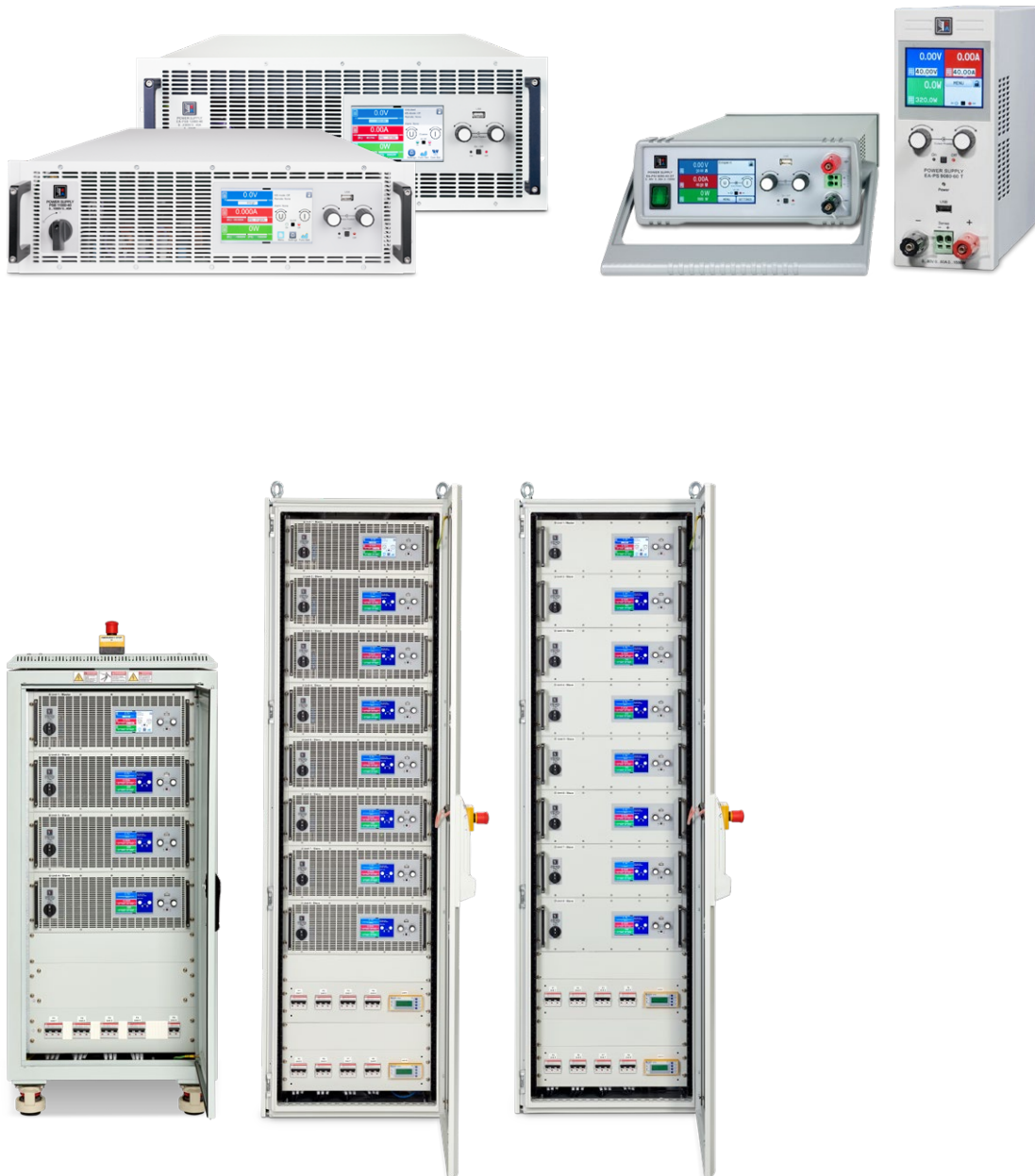


Example of visual language image motifs

## 02.6 VISUAL LANGUAGE

### PRODUCT PRESENTATION

A clean presentation of the products, photographed frontally or from a lateral perspective, is the distinguishing feature of the product presentation. Attention must be paid to perfect illumination and markless execution. The products are used with a shadow.



# 04 DIGITAL MEDIA

04.1 POWERPOINT SLIDE MASTER

04.2 NEWSLETTER

04.3 SCREEN DESIGN

04.4 DIGITAL ADVERTS



# 04.1 POWERPOINT SLIDE MASTER

The PowerPoint slide masters ensure uniform corporate presentation in accordance with the guidelines of the CD Manual. Various PowerPoint slide masters in 16:9 format provide binding slide layouts for text, image and graphic elements. This basic layout may not be changed.

**DEVELOPING TODAY THE VISIONS OF TOMORROW ...**  
Current, voltage and electronic loads for the battery systems of the future

**RESPONSIBILITY FOR PEOPLE AND THE ENVIRONMENT**  
Value oriented business culture

- Respect in dealing with customers, partners and employees
- Investment in training and continued development
- Engagement in conservation of natural resources
- Optimal energy efficiency in production and products
- Green Loads: regenerative generation of power and loads

**BUSINESS PILES**  
EA Elektro-Automatik's distribution concept

- Strategic Accounts & OEMs**
  - Large strategic accounts
  - Custom branding and products made to specification
- Global Distributors**
  - Large globally operating catalog and web distributors
- Specialised Distributors**
  - National distributors specialising in project business and system integration

**POWER RACKS 24U & 42U**  
Highest Power Density on the Market

- Heavy Duty 19" Power Racks up to 2000 VDC, 64000A and 2MW
- 24U Racks to host up to 4x30kW (total 120kW) uni-/bi-directional power supplies or electronic loads series
- 42U Racks to host up to 8x30kW (total 240kW) uni-/bi-directional power supplies or electronic loads series
- Lowest footprint:**
  - 120kW in a 19" 24U, 600 mm wide, 1000 mm deep
  - 240kW in a 19" 42U rack, 600 mm wide, 1000 mm deep

**PRODUCT LINEUP**  
Programmable DC Power Supply

	PSI 10000 4U	PS 9000 1U-3U	PSE 9000 3U	PSI 9000 2U-3U	PSI 9000 DT	PS 9000 T	PSI 9000 T	PS 3000 C
Max. Voltage	2000V	1500V	1500V	1500V	750V	500V	500V	80V
Max. Current	1000A	510A	510A	510A	60A	60A	60A	40A
Power Range	30kW	1k-15kW	5/10/15kW	1k-15kW	320-1500W	320-1500W	320-1500W	160-640W
Internal Function Generator & CR mode (Event Setting, V/F & UCR)	✓	—	—	✓	✓	—	✓	—
True Master-Slave	✓	—	✓	✓	—	—	—	—
USB Logging and Profile Loading	✓	—	—	✓	—	—	✓	—
Ethernet Port (Bus-In)	✓	✓	—	—	—	—	—	—
Optional Digital Interface (USB, LAN & CAN)	✓	(USB, LAN & CAN)	✓	✓	(USB, LAN & CAN)	✓	✓	✓

**BIDIRECTIONAL POWER SUPPLY**  
EA-PSB 10000 4U 30kW

- TFT Touch colour display and encoder
- Operation similar to PSB 9000 3U
- Digital control, U / I / P / R
- Operating modes CV, CC, CP, CR
- New Share-Bus, galvanically isolated
- Master/Slave-Bus for up to 64 devices
- Anybus-interface module (slot)
- LAN / USB / Analog -interfaces
- Function generator, simulations
- High Efficiency & regenerative in load mode

Voltage Range	Current Range	Power Range	Max. No. of Units in Rack
0...2000V	+/- 0...1000A	+/- 0...30kW	64 (1.52MW)
P/V Simulation EN 50530 & Sandia	Battery Simulation (SOC)	Fuel Cell Simulation	Automotive Voltage Test LV 123, etc.

Examples device presentation

## 04.2 NEWSLETTER

A uniform corporate presentation is also ensured in the newsletter in accordance with the guidelines of the CD manual. A single-column grid (600px width) consisting of individual image-text modules provides the opportunity to cover current topics.

[Click here to display in browser](#)



**Sources, loads & bidirectional power supplies**  
State-of-the-Art solutions made in Germany with exceptional performance!



**EA-PSB 10000:**  
**30kW bidirectional power in the smallest footprint**

Bidirectional, true autoranging, waveform function generator, energy recovery: The EA-PSB 10000 offers users many advantages. This powerful solution not only achieves 30kW in 4U, the highest power density in the market, but also up to 1.92MW in racks. Touchscreen control and built-in test routines round out the performance advantages.

[WATCH VIDEO NOW](#)




**EA-ELR 10000:**  
**Regenerative electronic load**

The EA-ELR 10000 offers 30kW input power in 4U, with up to 1.92MW achievable in the rack. Power regeneration reduces energy costs and reduces heat generation. The units feature a TFT touch display for intuitive operation, setup and programming.

[WATCH VIDEO NOW](#)


Example Newsletter



**Our wide product range**

Programmable DC power supplies, electronic loads and power racks: Discover our state-of-the-art solutions for the industries of the future now!

[DISCOVER OUR SOLUTIONS](#)




**About our company**

EA Elektro-Automatik is Europe's leading supplier for high performance programmable DC power supplies, electronic loads and power racks. Discover the world of EA.

Do you have questions about our products or would you like to make an inquiry? Get in touch with our experts now.

[CONTACT US](#)



**Elektro-Automatik**

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# 04.3 SCREEN DESIGN

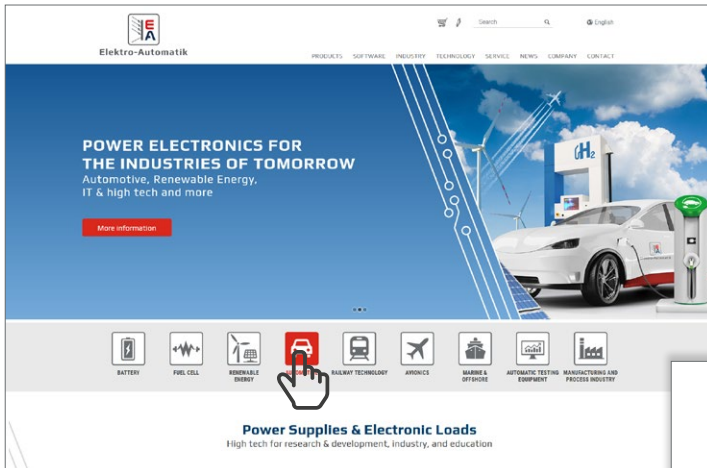
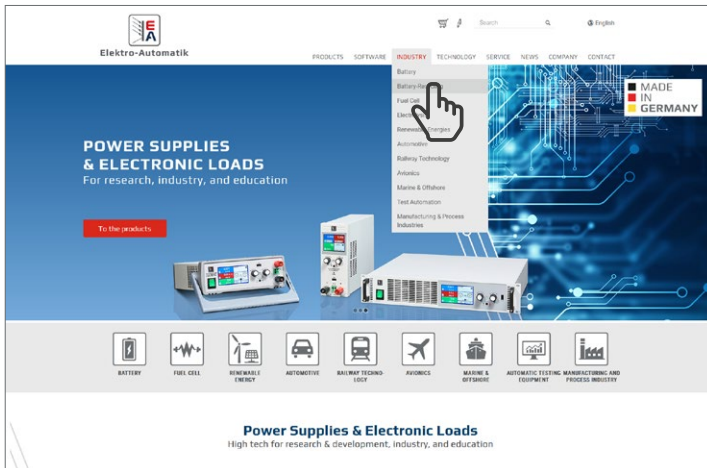
EA's new screen design adapts the guidelines to the internet. By using the corporate colours and the basic elements, a uniform corporate presentation is guaranteed.





# 04.3 SCREEN DESIGN

## NAVIGATION



### The Company

Power electronics "made in Germany"

The EA Elektro-Automatik Group is Europe's leading supplier in the area of power electronics for R & D and industrial application. At the headquarter in Germany in the industrial centre of North Rhine Westphalia more than 300 qualified associates, in a facility of 19000 m<sup>2</sup>, research, develop and manufacture high-tech equipment for laboratory power supply, high power mains adaptors and electronic loads with or without power feedback.

[About us](#) [Quality management](#) [Mission statement](#)  
[Reference list](#) [Assembly](#)

# 04.3 SCREEN DESIGN

## FOLLOWING PAGES

**EA Turnkey DC Power Rack & Cabinet Systems**  
High-performance system integration for conventional or water-cooled EA supplies

**True Autoringing - Advantages for Test**

All EA power supplies provide true autoringing during full power across a larger operating range to test more devices with just one supply. Autoringing enables the power supply to automatically adjust its higher output voltage when there is a smaller current or handle higher currents when there is a lower voltage. This true autoringing can reduce full power draw to 55% of rated output voltage.

- Save budget and space
- Reducing supply
- One supply tests more
- Variable for future needs

**Regenerative Energy Recovery**

The PSE Series DC power supply is bidirectional, meaning it can source (provide or sink) current and regenerate and return to the local power grid with up to 95% efficiency. Similarly, the EA Series DC electronic loads regenerate with the same energy recovery performance. This makes either solution an environmentally friendly choice on top of reducing investment and test equipment space.

- Save electricity + costs
- Efficiency approx. 95%
- Quick return to investment
- Environmentally friendly

**Swappable Anybus Remote Control**

EA "Anybus" modules are easily installed by the user and can be swapped out with just a few minutes and a screwdriver when different communication protocols are desired. For computer or remote control, you have many choices, such as Ethernet, USB, EtherCAT, Profibus, Modbus, CAN, CANopen, RS485, Devicenet and RS232C interfaces.

**Device Types and Series**

**Cabinet Systems with 15 Height Units (15 U)**  
Power range from 15 - 52kW

**Features**

- For 200 V, 400 V and 800 V AC
- With bidirectional power supplies with regenerative power supply (PSE) or power hardware (PH)
- Inline operation through the multilingual color TFT touch panel
- Extensive function generator
- Application for photovoltaics, battery, fuel cell and many more
- Extensive protective functions (DIP, OVP, OTC, ...)
- USB, Ethernet, and analog interfaces as standard
- Plug & Play slot for digital interfaces
- All interfaces galvanically isolated
- Optional: water cooling
- Optional: emergency stop system without I/O protection
- Optional: Controller
- Optional: Inclusion Monitor
- Control software EA Power Control
- Simulation software EA Battery Simulator (PSE)
- LabVIEW or User Library
- For other packages
- SOFT and hardware protocol
- Up to 120 800°C cabinet in 24 HE

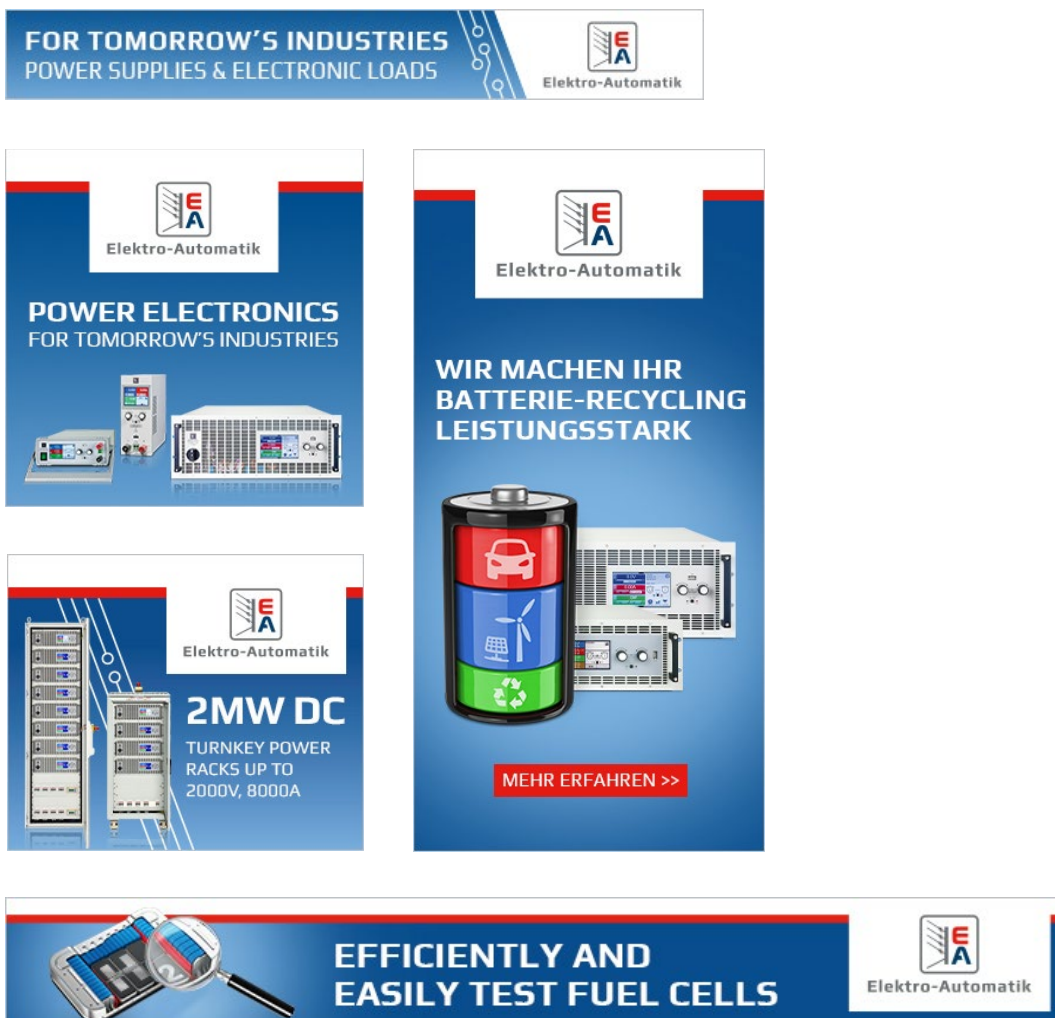
**Cabinet Systems with 24 Height Units (24 U)**  
Power range from 15 - 120kW

**Features**

- For 200 V, 400 V and 800 V AC
- With bidirectional power supplies with regenerative power supply (PSE) or power hardware (PH)
- Inline operation through the multilingual color TFT touch panel
- Extensive function generator
- Application for photovoltaics, battery, fuel cell and many more
- Extensive protective functions (DIP, OVP, OTC, ...)
- USB, Ethernet, and analog interfaces as standard
- Plug & Play slot for digital interfaces
- All interfaces galvanically isolated
- Optional: water cooling
- Optional: Inclusion Monitor
- Optional: emergency stop system without I/O protection
- Control software EA Power Control
- Simulation software EA Battery Simulator (PSE)
- LabVIEW or User Library
- For other packages
- SOFT and hardware protocol
- Up to cabinet in 15 HE
- Expandable to up to 6 devices per cabinet

## 04.4 DIGITAL ADVERTS

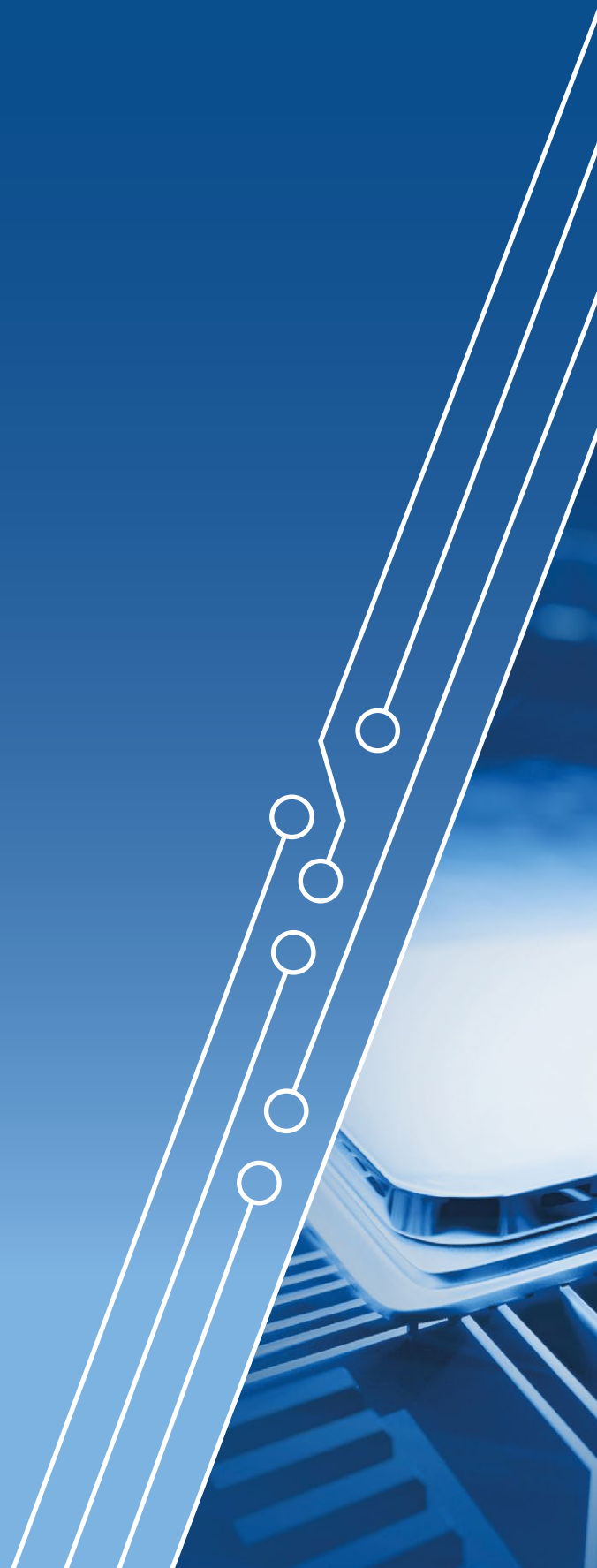
Advertising banners and newsletter ads must transport content in small formats. Taking the basic elements into account, a flexible design is possible. In very narrow formats, the red line as well as the concise logo field may be omitted, alternatively the ladder element. The logo, however, is always placed on a white background, taking into account the brand protection space, and is used in the positive version. Through targeted animation increases the user's attention.



Examples Banner & Newsletter Ads

# 05 CORPORATE LANGUAGE

## 05.1 SPELLINGS



## 05.1 SPELLINGS

The corporate language specifications apply worldwide.

### THE COMPANY NAME

#### CORRECT SPELLINGS:

- The company name with company form:

EA Elektro-Automatik GmbH & Co. KG

EA Elektro-Automatik Co., Ltd.

EA Elektro-Automatik, Inc.

- The company name:

EA Elektro-Automatik

- The short form:

EA

#### Use long form/short form:

- Before the short form (EA) is used in texts, the long form of the company name must have been used once before, with or without the company form.

#### The following spellings may not be used:

- the EA Elektro-Automatik (with article without company form)
- EA Elektro Automatik (without hyphen)
- Elektro-Automatik (without EA)
- Elektro Automatik (without EA and without hyphen)
- Elektroautomatik (written as one word)

## 05.1 SPELLINGS

### **NUMBERS AND UNITS**

There is a space between the number and the unit of measurement.

Ex. 120 kW, 2500 W, 60 V, 20 A

### **BULLETED LISTS/BULLET POINTS**

In bulleted lists, the first letter of the first word after the bullet point is uniformly capitalized, regardless of whether it starts with a noun or a verb.

#### **Example:**

- Bidirectional (Charge & Discharge)
- Autoranging for DC In- and Output
- Battery & fuel cell simulation
- Integrated function generator

## 05.1 SPELLINGS

In addition to the internationally valid specifications, some regulations must be defined specifically in terms of language.

### **GERMAN:**

#### **COUPLINGS WITH THE COMPANY NAME**

The company name is linked to subsequent words with a hyphen. This corresponds to the rules of the German language and clarifies the references within a sentence.

#### **Ex:**

- EA Elektro-Automatik-Mitarbeiter
- EA-Mitarbeiter

#### **Also possible are rewrites:**

- Die Mitarbeiter von EA Elektro-Automatik
- Die Mitarbeiter von EA

#### **GENDER-SENSITIVE LANGUAGE**

The following spelling should be used consistently within a text:

- Mitarbeiterin und Mitarbeiter (Enumeration/Pairs)
- Mitarbeiterinnen und Mitarbeiter (Enumeration/Pairs)