



# BLOCKLAB



## EMC service

We get electricity into shape – worldwide. All our products, such as transformers, reactors, mains units and radio interference suppression filters are developed and produced with the customer and market in mind. You will find them wherever a reliable mains interface is needed. Our accredited EMC test laboratory functions as an independent business division. The laboratory concentrates on EMC services in the field of industry standards for products in the capital goods industry.

- ▶ Consultancy
- ▶ There right from the start of development
- ▶ EMC interference suppression components
- ▶ DIN EN ISO 9001:2000 certified
- ▶ Mobile EMC-equipment



3.1

3.2

3.3



3.4

3.5



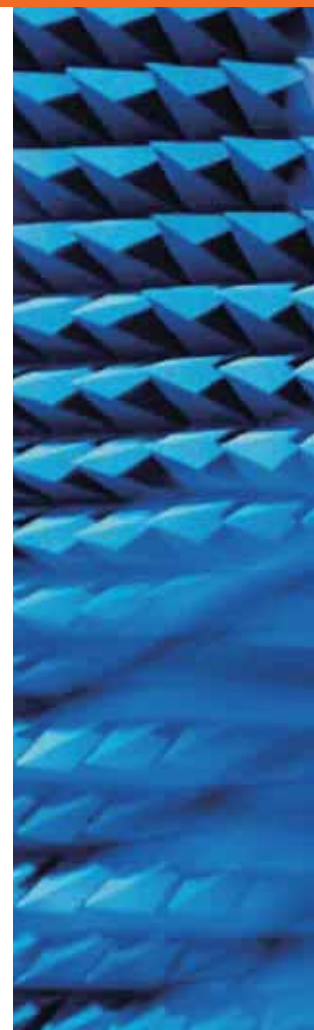
**BLOCKLAB**

# EMC services catalogue

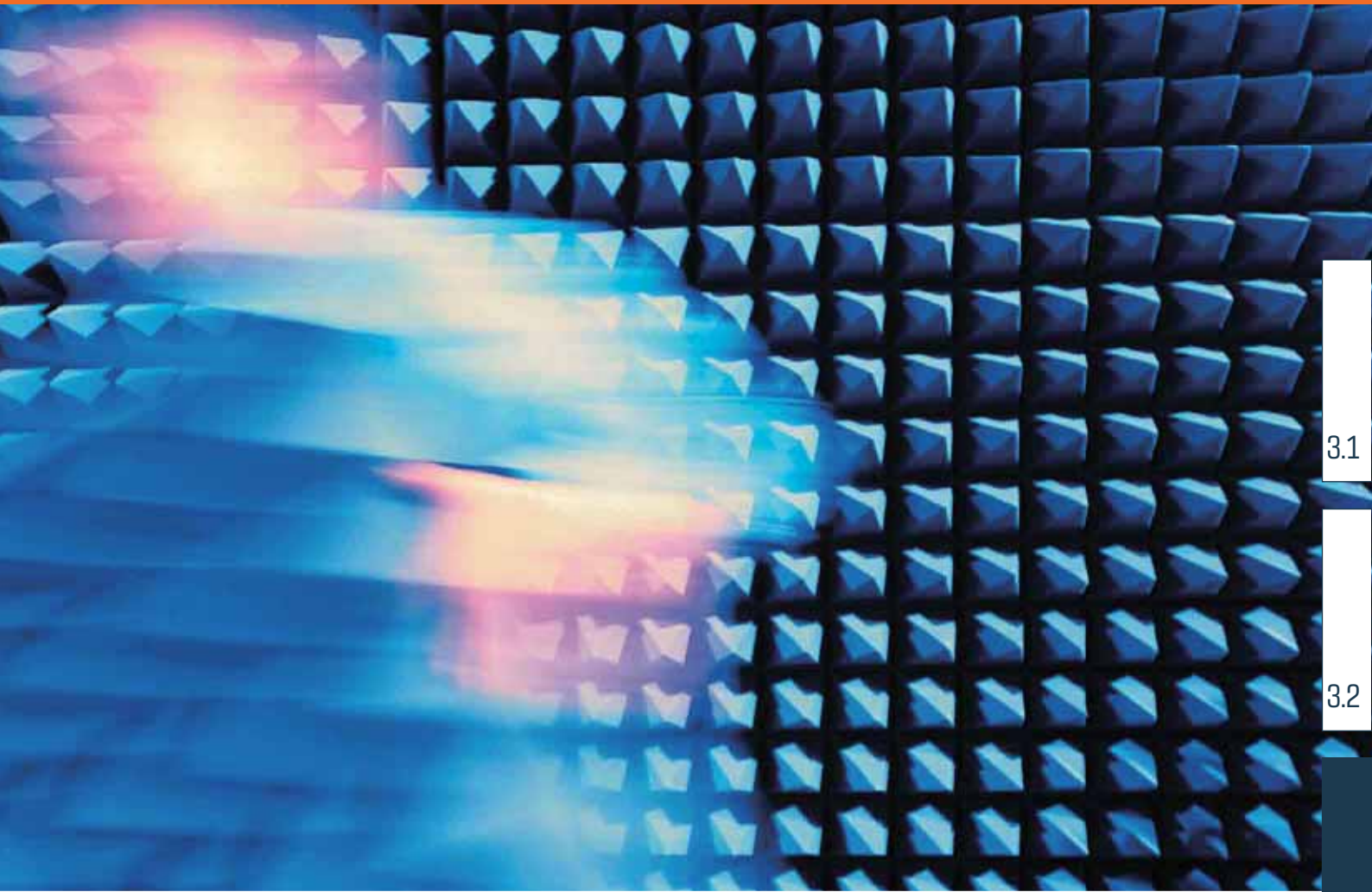
Standard	Test
<b>Interference immunity</b>	
DIN EN 61000-4-2	ESD, discharge of static electricity up to 15 kV
DIN EN 61000-4-3	High-frequency electromagnetic fields 80 MHz–1 GHz, up to 10 V/m (3 m test track), in the absorber booth
DIN EN 61000-4-4	BURST, rapid transient electrical interference parameters, 5/50 ns, 5 kHz repeat frequency, to 4 kV.
DIN EN 61000-4-5	SURGE, surge voltage, 1.2/50 (8/20) $\mu$ s, up to 4 kV
DIN EN 61000-4-6	Line-guided high frequency, 0.15–80 MHz, up to 10 V/140 dB ( $\mu$ V)
DIN EN 61000-4-11	Voltage dips, short-term interruptions, voltage fluctuations
DIN EN 61000-4-13	Harmonics and interharmonics
<b>Interference emissions</b>	
DIN EN 61000-3-2	Line-guided mains feedback, harmonics up to 2 kHz/16 A
DIN EN 61000-3-3	Line-guided mains feedback, flicker up to 16 A
DIN EN 61000-3-11	Line-guided mains feedback, flicker > 16 A up to max 75 A
DIN EN 61000-3-12	Line-guided mains feedback, up to 2 kHz/16 A < I $\leq$ 75 A
DIN EN 55011,	Line-guided mains feedback,
DIN EN 55022	150 kHz – 30 MHz
DIN EN 55011,	Radiated interference,
DIN EN 55022	30 MHz – 1 GHz

## More services

- Material tests
- Shock and vibration tests
- Climatic testing







3.1

3.2

## Material tests

- Partial discharge test
- Pall thrust test
- Temperature rise test max. 80 Channels
- Power quality test up to 24 h monitoring incl. estimation of values
- Power quality test weekly monitoring incl. estimation of values



3.3

3.4

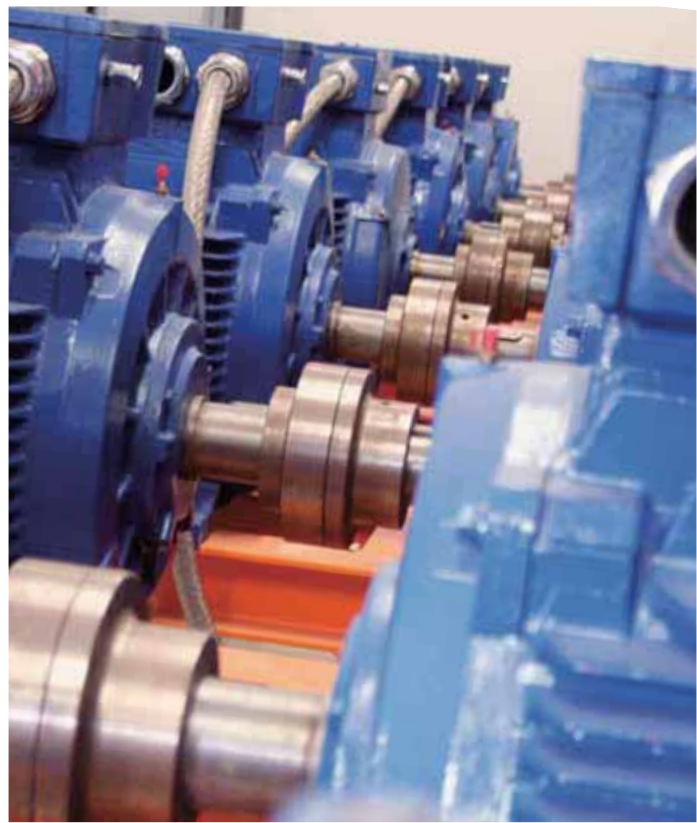
3.5



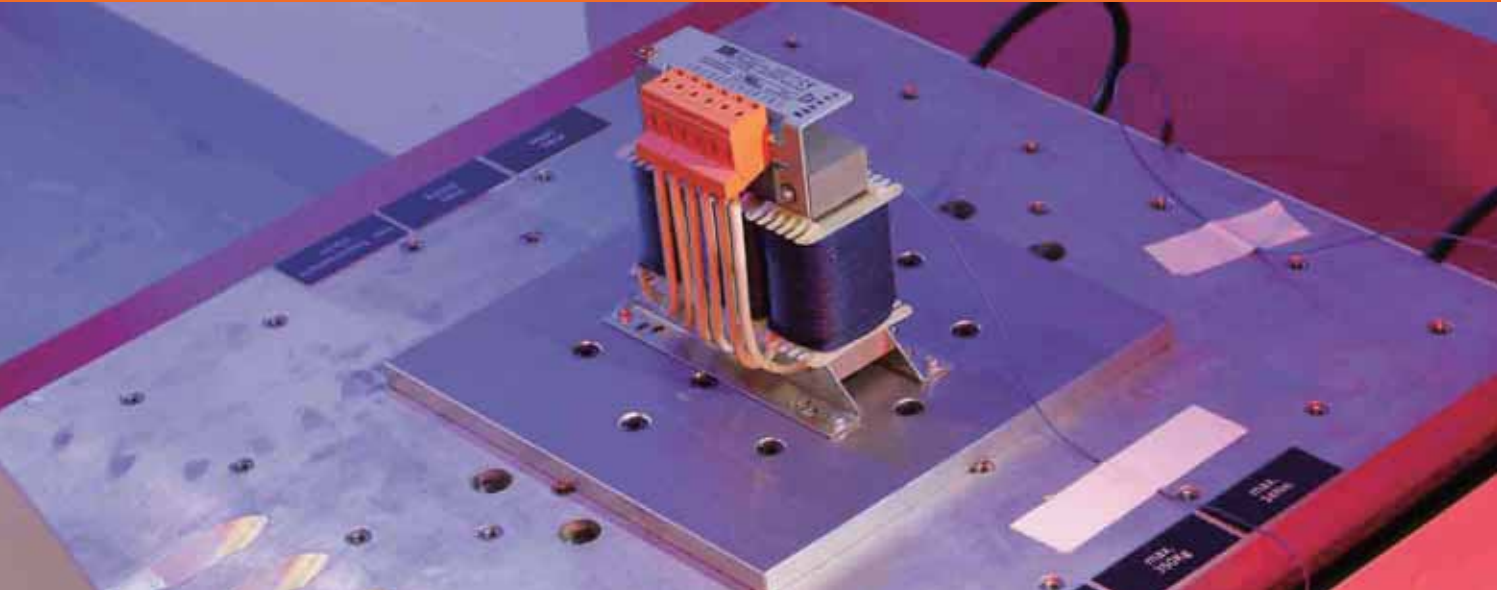
**45 kilo volt-ampere** AC voltage source with a power of up to 45 kVA. For structuring computer-controlled test systems for the application of standards in the field of EMC and power supply quality.

## 1 megawatt

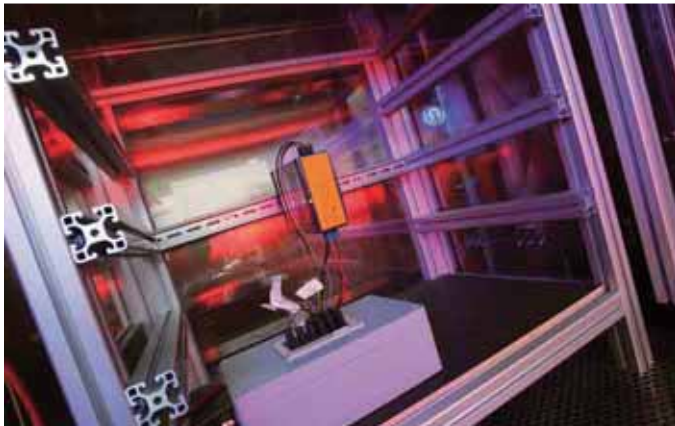
Loading bay for testing and optimising our products under actual conditions







3.1



3.2

### Schock and vibrationstests

max. weight of DUT up to 350 kg  
Swept Sine, Shock and Random

- Max. Peak-Force  
22.2 kN
- Max. Acceleration  
Sine 40 g (60 g vertical)
- Shock (half-sine)  
150 g
- Random (RMS)  
30 g
- Max. Velocity  
2 m/s

3.3

### About our products and services

BLOCK has many years of design engineering experience and works in partnership with its customers, providing a variety of sources of support for proving the reliability of products when subject to environmental and operational loads. We will be at your side at every stage of the product creation process, helping you to select suitable trials and even carrying out in-process reliability tests.

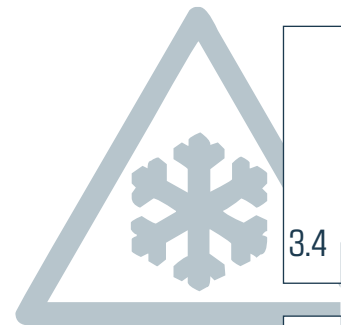
- **EMC service**
- **Climatic testing**
- **Shock and vibration testing**
- **Partial discharge measuring**
- **RoHS screening**



### Thermal simulation

- Temperature range  
-45 – +180 °C
- Humidity  
0 – 100 %

3.4



3.5

