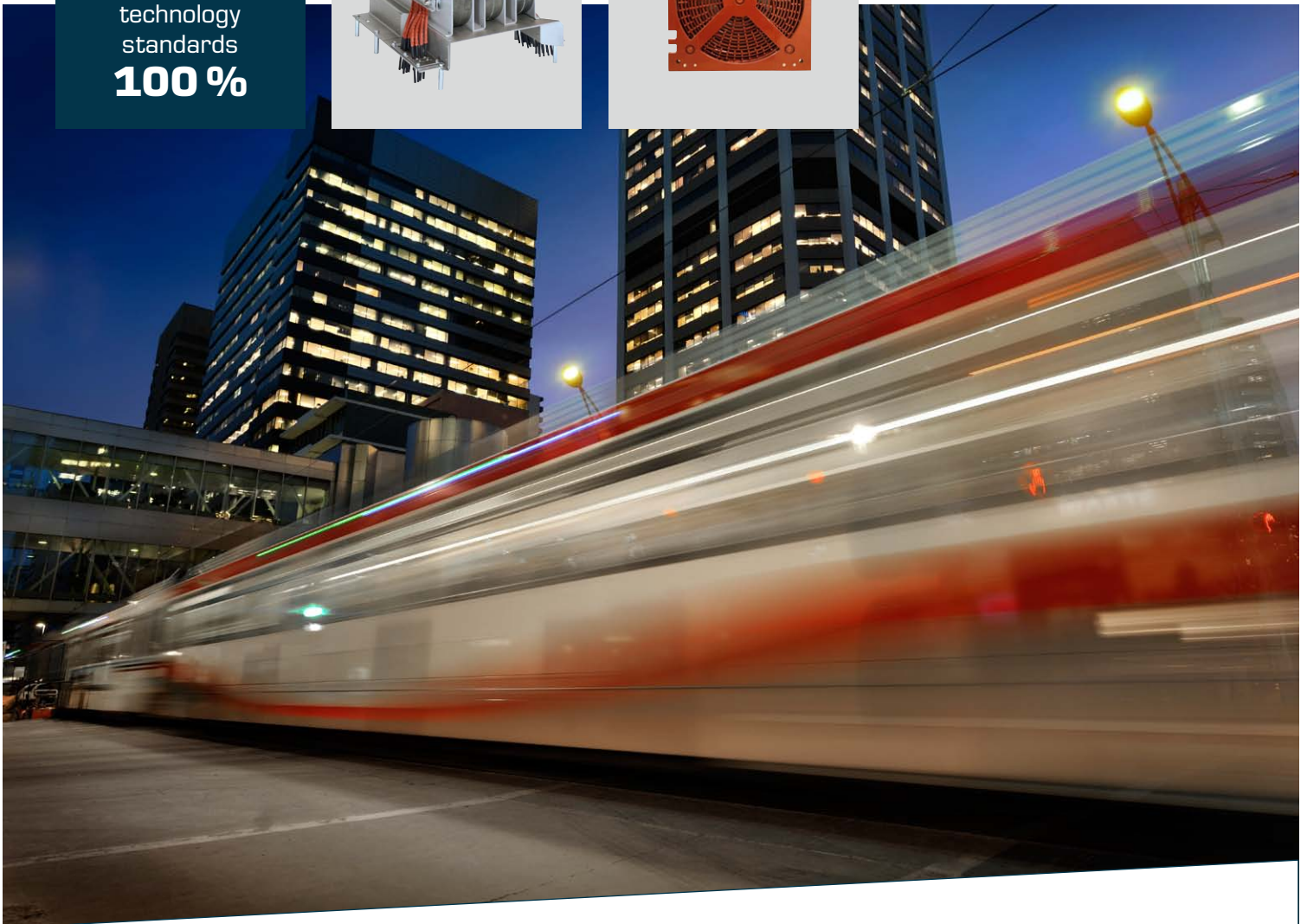
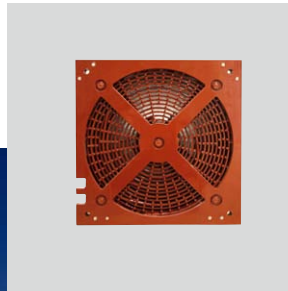
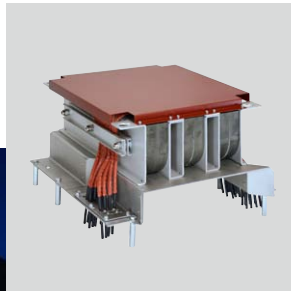


# RAILWAY TECHNOLOGY INDUCTIVE COMPONENTS

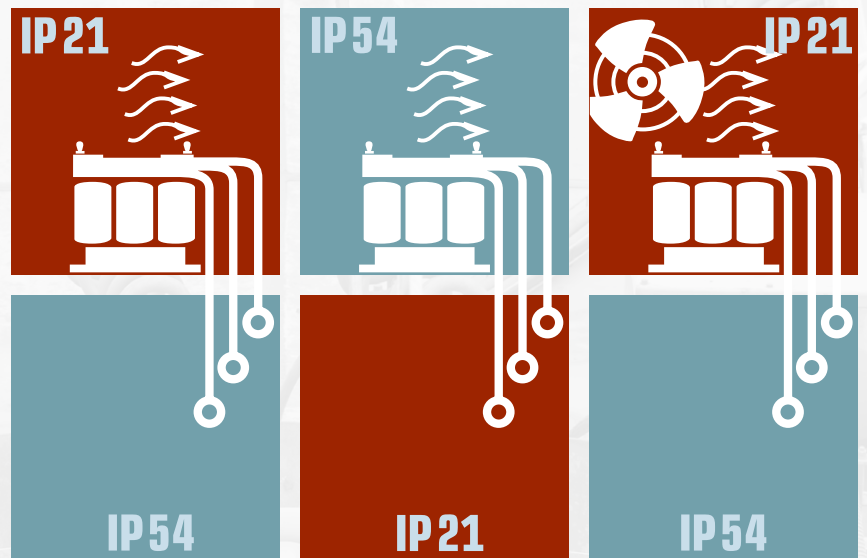
BLOCK custom and standard products for railway technology

Developed  
according to the  
latest railway  
technology  
standards  
**100 %**



# READY FOR ANY REQUIREMENT: PRO-CONNECT

RAILWAY SYSTEMS REQUIRE A ROBUST AND PROVEN TECHNOLOGY FOR THEIR PRODUCTS.  
BLOCK'S FOCUS IS ON SUPPORTING THESE TYPES OF APPLICATIONS.

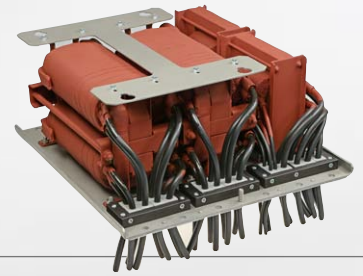


**PRO-CONNECT:** An enclosure design specifically to allow a combination of different IP-rated areas without additional gaskets. This reduces the system's susceptibility to failures and minimizes installation costs.

**PRO CONNECT**

# OUR **SOLUTIONS** TO BOOST YOUR TRANSPORTATION EFFICIENCY

- HIGH RESISTANCE AGAINST HARSH CONDITIONS LIKE WATER, ICE, SNOW AND METAL DUST ACCORDING TO **EN60310**
- POLLUTION DEGREE **PD4**
- FIRE PROTECTION ACCORDING TO **EN45545 HL3**



## **MF-TRANSFORMER**

Medium frequency transformer assembly with four single transformers

### EXAMPLE:

Power: 2 x 100 kVA / 2 x 20 kVA  
Primary voltage: 600 V  
Secondary voltage: 750 V / 150 V  
Frequency: 18 kHz  
Weight: 65 kg  
PRO-CONNECT



## **REACTOR**

Ferrite core input reactor with cooling channels for natural air cooling

### EXAMPLE:

Inductance: 230  $\mu$ H  
Current DC: 70 A  
Current AC: 110 A  
Main current harmonic frequency: 5 kHz



## **REACTOR**

Air core reactor to minimize the effects of voltage sags and to limit peak currents  
Prepared for forced air cooling with 3 m/s

### EXAMPLE:

Inductance: 2,3 mH  
Current RMS: 300 A  
Current peak: 210 A (discontinuous mode)  
Frequency: 30 kHz

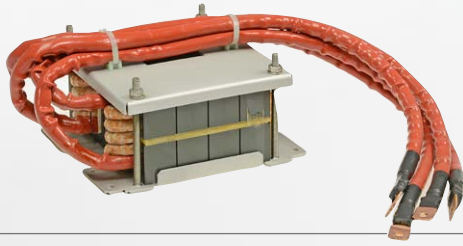


## **REACTOR**

Three-phase sine filter reactor with cooling channels for natural air cooling

### EXAMPLE:

Inductance: 110  $\mu$ H  
Current RMS: 100 A  
Fundamental frequency: 50 Hz  
Main current harmonic frequency: 7400 Hz



### REACTOR

Ferrite core reactor for boost converters, which can be mounted on heat sink or cool plate

#### EXAMPLE:

Inductance: 12  $\mu$ H

Current RMS: 110 A

Current peak: 210 A (discontinuous mode)

Frequency: 30 kHz



### REACTOR

EMC filter reactor for differential mode with integrated ferrite cores for common mode

#### EXAMPLE:

Inductance: 2 x 1,0 mH

Current DC: 90 A

PRO-CONNECT



### MF-TRANSFORMER

Encapsulated medium frequency transformer for mounting on heat sink or into container wall

#### EXAMPLE:

Power: 40 kVA

Primary voltage: 500 V

Secondary voltage: 600 V

Frequency: 8 kHz

Weight: 20 kg



### MF-TRANSFORMER

Modular medium frequency transformer with scalable power rating  
Prepared for forced air cooling with 3 m/s

#### EXAMPLE:

9 Modules

Power: 250 kVA

Primary voltage: 600 V

Secondary voltage: 750 V

Frequency: 20 kHz

Weight: 60 kg

PRO-CONNECT



#### EXAMPLE:

2 Modules

Power: 55 kVA

Primary voltage: 600 V

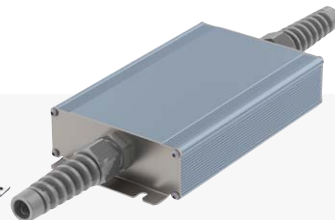
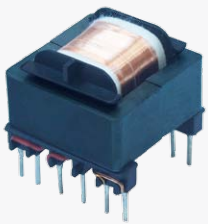
Secondary voltage: 750 V

Frequency: 20 kHz

Weight: 15 kg

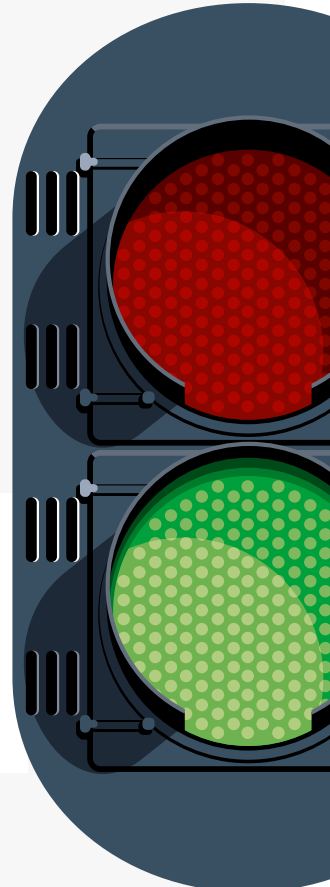
# BEST-IN-CLASS POWER COMPONENTS FOR SIGNAL TECHNOLOGY

We guarantee proven product reliability and longevity through the highest quality levels in compliance with railway standards. This is our contribution for better safety in railway transportation.

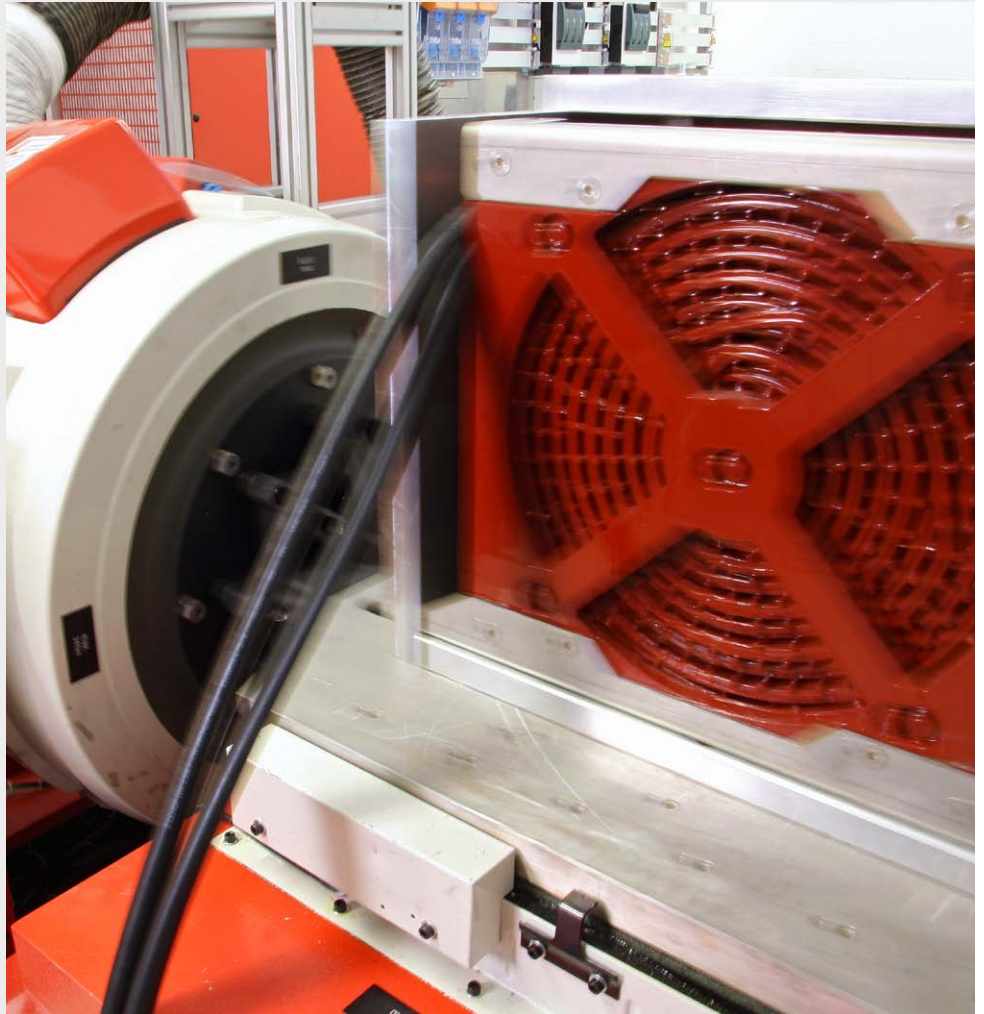


For example

- **CURRENT CONVERTERS**
- **PCB TRANSFORMERS**
- **ISOLATING TRANSFORMERS**
- **LED DRIVER FOR TRACK FIELD LIGHTING**



RAILWAY TECHNOLOGY  
STANDARDS  
100%



EN

EN 45545-2  
EN 50124-1  
EN 60310



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