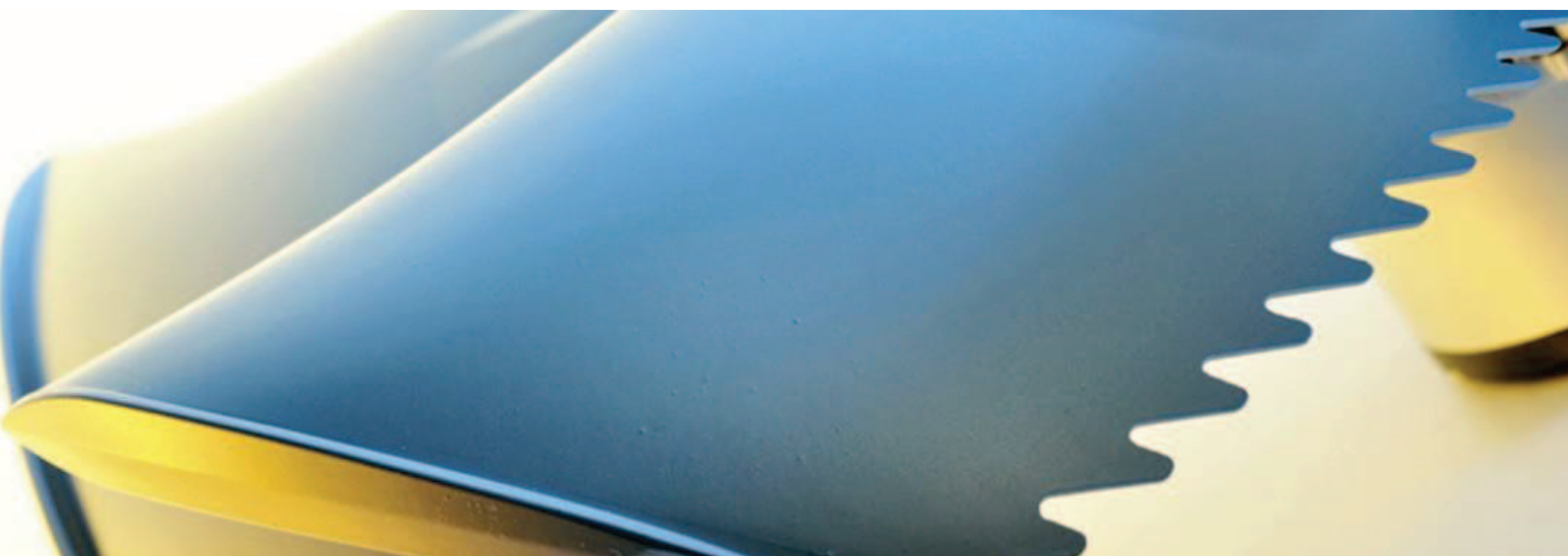


Movement by Perfection



The Royal League in ventilation, control and drive technology



Product documentation

Type
FN045-4DK.2F.V7P2

Article number
157260

Beijing Hengrui Mechanical and Electrical Equipment Co., Ltd
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en.bjhengrui.com

1. Recitals

The Product Specifications contained in this document are final, unless otherwise stated by a separate provision in the "ZIEHL-ABEGG deviation list document" with respect to information provided by the customer (cp. separate Chapter: Attachment).

Other regulations between the parties, regardless of time, form or content, are not part of the subject matter of the contract and the agreement on characteristics/of features (Product Specifications) between the parties.

Compliance with the following specifications is mandatory to ensure the functionality and safety of the product. If the following specifications given especially but not limited for operating conditions, transport, storage, mounting, start-up, maintenance and repair are not observed, the product may not operate safely and may cause a hazard to the life and limb of users and third parties.

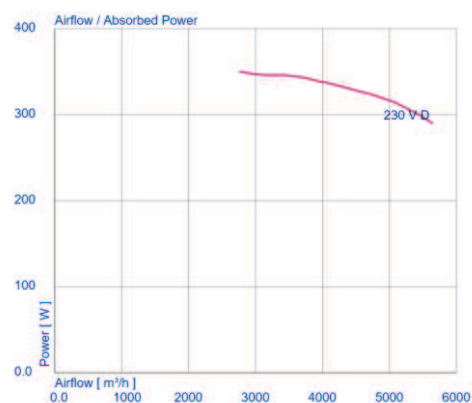
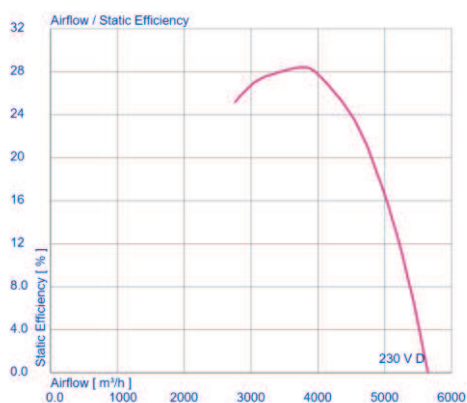
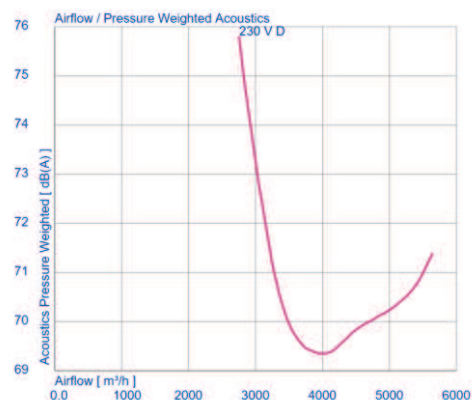
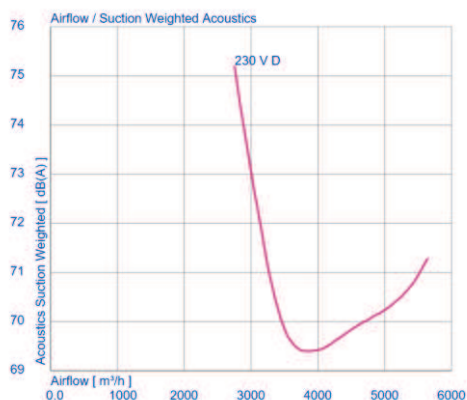
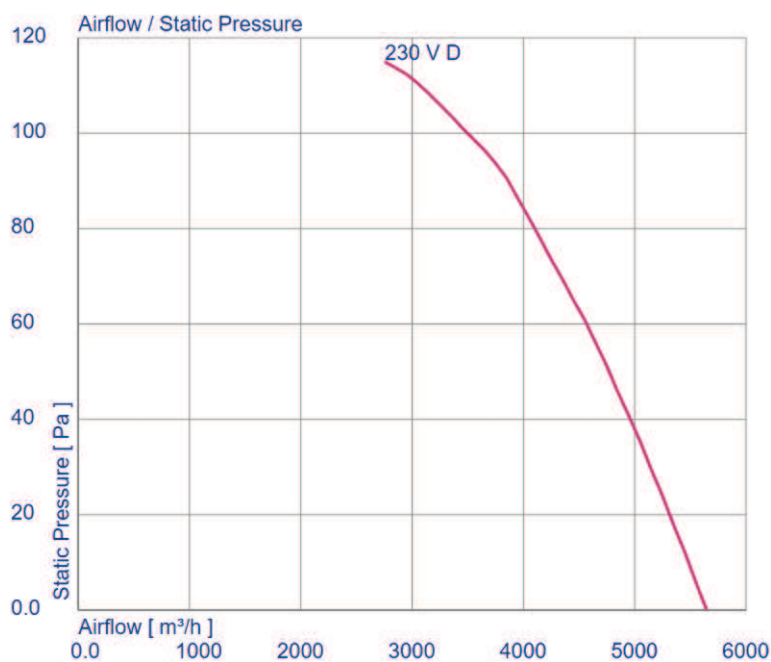
Deviations from the following requirements may therefore lead both to the loss of the statutory material defect liability rights and to the liability of the buyer for the product that has become unsafe due to the deviation from the specifications.

2. Product Specification - Technical Data

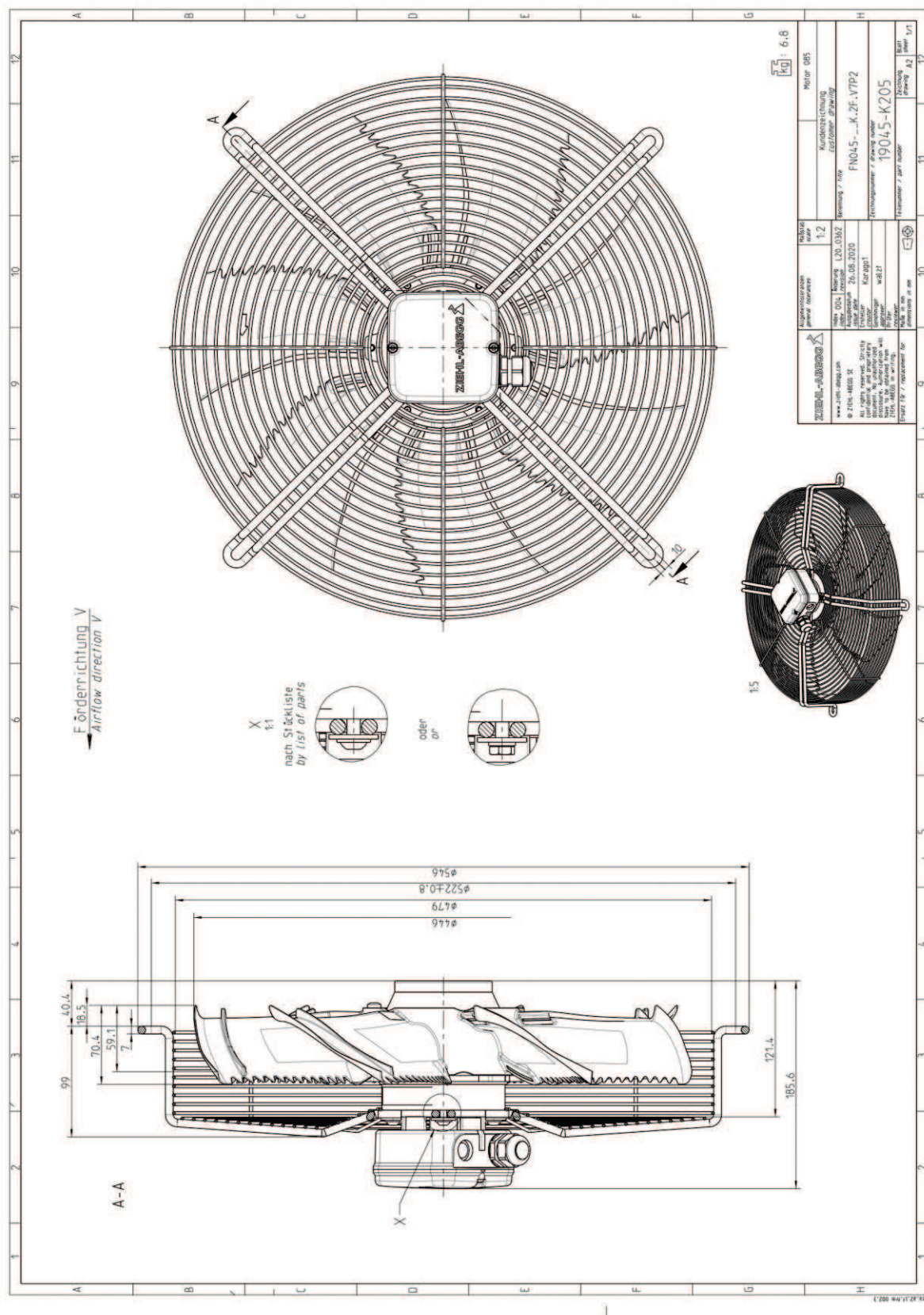
Article number	157260
Type key	FN045-4DK.2F.V7P2
Rated values	3~230/400V D/Y 50Hz P(1) 0.35kW 1.1/0.64A $\Delta I=0\%$ 1280/min COSY 0,79 70°C 3~230/400V D/Y 60Hz P(1) 0.49kW 1.35/0.79A $\Delta I=0\%$ 1350/min COSY 0,89 65°C 3~265/460V P(1) 0.55kW 1.40/ 0.80A $\Delta I=0\%$ 1450/min COSY 0,87 60°C
Electrical connection	Terminal box K05
ErP Data	Measurement category ErP: A Air flow q(v) on Eta opt: 3836 m3/h Pressure increase p(fs) on Eta opt: 91 Pa Input power P(1) on Eta opt: 341 W Efficiency H(statA): 30.9 % Efficiency grade: $N(\text{actual}) = 40.1 / N(\text{target}) = 40^*$ Frequency inverter required *ErP 2015
Thermal class	THCL155
Material impeller	Aluminium
Connection diagram	1360-106XA
Fitting position	H/Vu/Vo
Motor protection	TB
Type of protection	IP54
Impregnation	Moisture and hot climate protection
Quality of bearings	ball bearing with long-time lubrication
Rating plate	1x fixed
Condens. drain holes	Stator/Rotor open
Painting rotor	N1
Colour rotor	RAL 9005
Colour stator	RAL 9005
Material blades	High Performance Composite
Painting impeller	Unpainted
Colour impeller	schwarz
Guard grille type	Ringe
Miscellaneous	All connecting elements in stainless steel.
Colour suspension	RAL 9005
Terminal box,mount.	Mounted on Stator
Operating manual	L-BAL-001
Weight	6.60 kg
Min. operating temperature	-40°C***
Disclaimer CT20/DOE	Selected product is not governed by U.S. DOE and CT20 industrial fan and blower regulations.

*** Operation mode: Continuous operation with occasional starts (S1) according to DIN EN 60034-1:2011-02. Occasional starting between -40 °C and -25 °C is permissible. Continuous operation below -25 °C only with special bearings for refrigeration applications on request.

3. Characteristic Curve



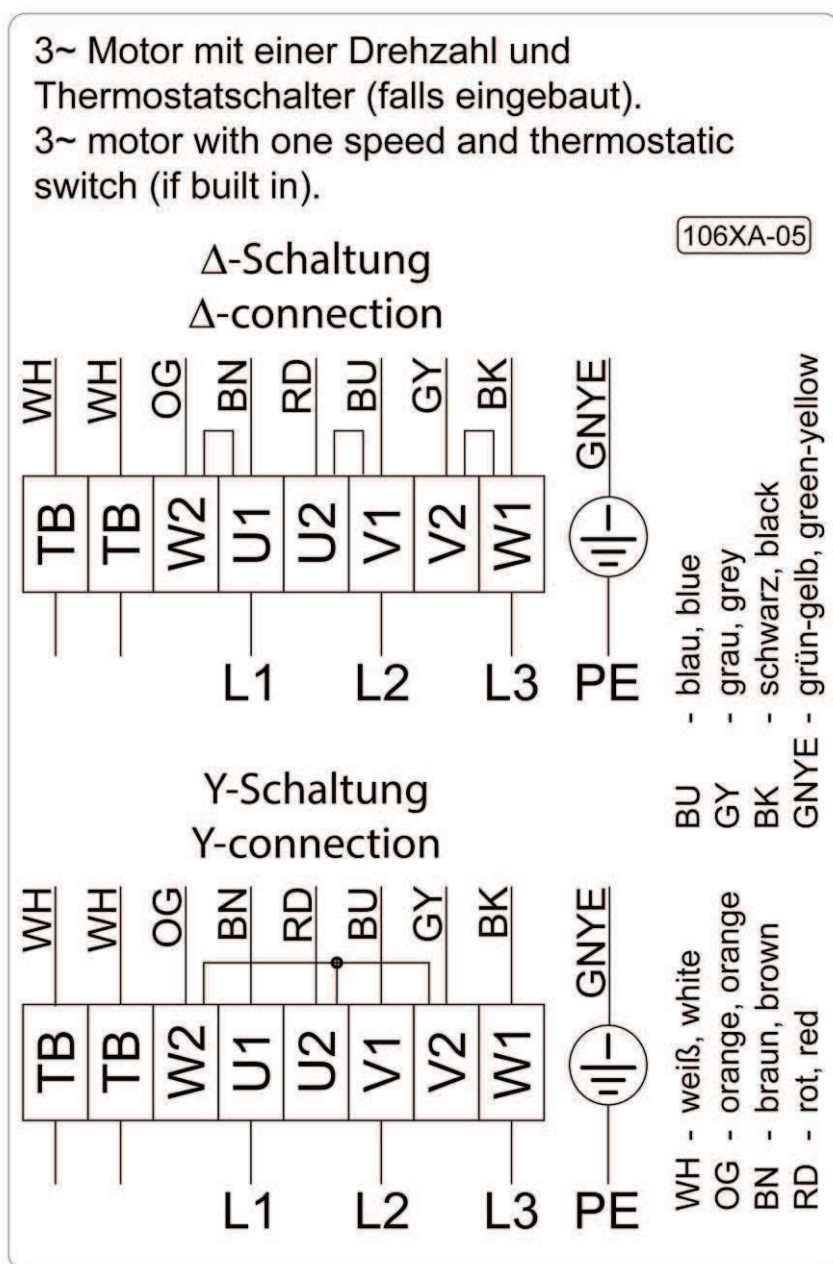
4. Drawing



Dimensions in mm

The illustrations shown make no claim to completeness and are for orientation purposes only.

5. Connection Diagram



6. EU-Declaration of Conformity

EU declaration of conformity

- Translation -
(english)

ZA75-GB 2022/47 Index 019

Manufacturer: ZIEHL-ABEGG SE
Heinz-Ziehl-Straße
74653 Künzelsau
Germany

The manufacturer is solely responsible for issuance of the declaration of conformity.

The products:

- External rotor motor MK..., MW...
- Axial fan DN..., FA..., FB..., FC..., FE..., FF..., FG..., FH..., FL..., FN..., FP..., FS..., FT..., FV..., VN..., VR..., ZC..., ZF..., ZG..., ZN...
- Centrifugal fan ER..., GR..., HR..., RA..., RD..., RE..., RF..., RG..., RH..., RK..., RM..., RR..., RZ..., WR...
- Cross-flow fan QG..., QK..., QR..., QT...

Motor type:

- Asynchronous internal or external rotor motor
- Asynchronous internal or external rotor motor with integrated frequency inverter
- Electronically commutated internal or external rotor motor
- Electronically commutated internal or external rotor motor (also with integrated EC controller)

The above mentioned products of this declaration fulfil all relevant provisions of the following Directives of the Union:

- EMC Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- ErP Directive 2009/125/EC, in conjunction with Regulation (EU) no. 327/2011

The following harmonized standards have been applied:

- EN 60034-1:2010 + AC:2010
- EN 60204-1:2018
- EN 60529:1991 + A1:2000 + A2:2013 + AC:1993 + AC:2016 + AC:2019
- EN IEC 61000-6-2:2019
- EN IEC 61000-6-3:2021

Compliance with the ErP Directive 2009/125/EC does not refer to external rotor motors MK..., MW...

All ErP-relevant information comprises measurements which are determined using a standardised measurement set-up. More details can be obtained from the manufacturer.

Compliance with the EMC Directive 2014/30/EU refers only to those products when they are connected by mounting / operating instructions. If these products are integrated into a system or supplemented with other components (e.g. sensing controls) and operated, the manufacturer or operator is responsible of the overall system for compliance with the EMC Directive 2014/30/EU.

Künzelsau, 24.11.2022
(Location, date of issue)

ZIEHL-ABEGG SE
Moritz Krämer
Director Product Development
Ventilation Technology
(name, function)



(signature)

ZIEHL-ABEGG SE
Ralf Oesselke
Director Projects & Series Development
Ventilation Technology
(name, function)



(signature)

ZIEHL-ABEGG 

EC Declaration of Incorporation

- Translation -
(english)

as defined by the EC Machinery Directive 2006/42/EC, Annex II B

ZA87-GB 2023/47 Index 013

The design of the partly completed machine:

- Axial fan DN..., FA..., FB..., FC..., FE..., FF..., FG..., FH..., FL..., FN..., FP..., FS..., FT..., FV..., SG..., VN..., VR..., ZC..., ZF..., ZG..., ZN...
- Centrifugal fan ER..., GR..., HR..., RA..., RD..., RE..., RF..., RG..., RH..., RK..., RM..., RR..., RZ..., WR...
- Cross-flow fan QD..., QG..., QK..., QR..., QT...

Motor type:

- Induction internal or external rotor motor (also with integrated frequency inverter)
- Electronically commutated internal or external rotor motor (also with integrated EC controller)

Complies with the requirements in Appendix I, Articles 1.1.2, 1.1.5, 1.4.1, 1.5.1 in EC Machinery Directive 2006/42/EC.

Manufacturer: ZIEHL-ABEGG SE
Heinz-Ziehl-Straße
D-74653 Künzelsau

The following harmonized standards have been applied:

EN 60204-1:2018	Safety of machinery – Electrical equipment of machines – Part 1: General requirements
EN ISO 12100:2010	Safety of machinery – General principles for design – Risk assessment and risk reduction
EN ISO 13857:2019	Safety of machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs
Note:	Compliance with EN ISO 13857:2019 relates only to the installed contact protection if it is part of the scope of delivery.

The special technical documents in accordance with Appendix VII B have been created and are available in full.

The following persons are authorized to compile the technical documents, address see above.

Upon reasonable request, the special documents shall be transmitted to the public authority. The transfer can be made electronically, on data carriers or on paper. All property rights remain with the aforementioned manufacturer.

Start-up of this incomplete machine is prohibited until it is ensured that the machine in which it has been installed complies with the provisions of the EC Machinery Directive.

Künzelsau, 22.11.2023
(Location, date of issue)

ZIEHL-ABEGG SE
Moritz Krämer
Director Product Development
Ventilation Technology
(name, function)



(signature)

ZIEHL-ABEGG SE
Ralf Oesselke
Director Projects & Series Development
Ventilation Technology
(name, function)



(signature)

ZIEHL-ABEGG 



The Royal League

Die Königsklasse



The Royal League in ventilation, **control** and drive technology

Intelligent control technology for any application

ZIEHL-ABEGG system capabilities:

Everything from a single source – perfectly matched for optimal performance

Please contact us. We would be pleased to design an individual solution for your requirements.

We would like to welcome you on our worldwide exhibitions. Please find our next exhibitions here.

[ZIEHL-ABEGG EVENTS](#)