

## Movement by Perfection





## Product documentation

Type FN045-4EK.4I.V7P1

Article number 167804



Article number 167804

# The Royal League Die Königsklasse

# **Product documentation**

Customer ZIEHL-ABEGG Contact

-

**Project** 

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Article number 167804



# 1. Product specification - Technical data

Article number 167804

**Type** FN045-4EK.4I.V7P1

**Designation** Axial fan with sickle blades

**Rated values** 1~230V ±10% 50Hz P<sub>1</sub> 0.60kW

2.9A ΔI=25% 1390/min 14.0uF/400V 70°C

**Electrical connection** Terminal box K62

**ErP Data** Efficiency η<sub>statA</sub>: 34.0 %

Efficiency grade: Nactual = 41.8 / Ntarget = 40\*

\*ErP 2015

Type of protection IP54
Thermal class THCL155

Mounting type terminal box Mounted on Stator

Min. operating temperature -25°C

Connection diagram1360-104XARating plate1x fixedFitting positionH/Vu/Vo

Motor protection thermal contact

**Impregnation** Moisture and hot climate protection

**Condensation** Condensation water holes in stator/rotor open

Quality of bearings ball bearing with long-time lubrication

Material RotorAluminiumPainting rotorunpaintedMaterial bladesAluminiumPainting impellerunpaintedGuard grille typering grill

Painting mot.suspens Motor suspension powder-coated consistency class 2

colour suspension RAL 9005 (jet black)

Weight 12.60kg





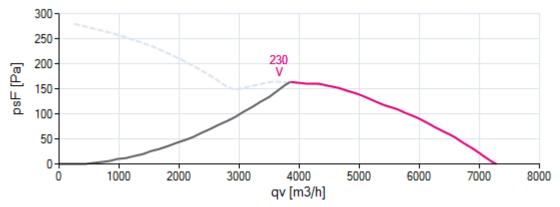
### 2. Characteristic Curve

FN045-4EK.4I.V7P1 Measured in full nozzle without guard grille in air flow direction V in installation

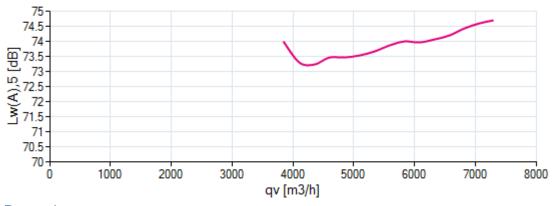
type A according to ISO5801

1~ 230V 50Hz measurement density 1,16 kg/m<sup>3</sup>

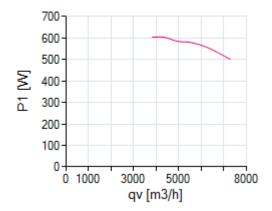
# Air performance



#### **Acoustics**



### Power input



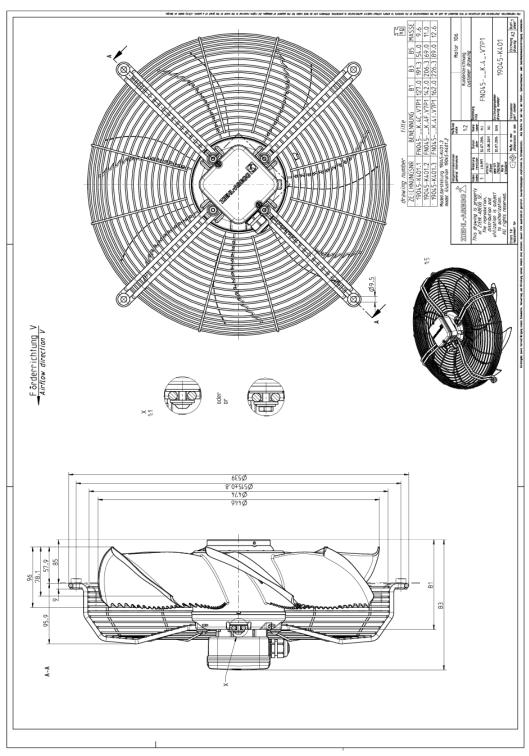
Please note: It's not allowed to use this fan in the stall area!\*



<sup>\*</sup>In doubt please ask your responsible ZIEHL-ABEGG sales contact.

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# 3. Drawing



Dimensions in mm

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



# 4. Connection diagram

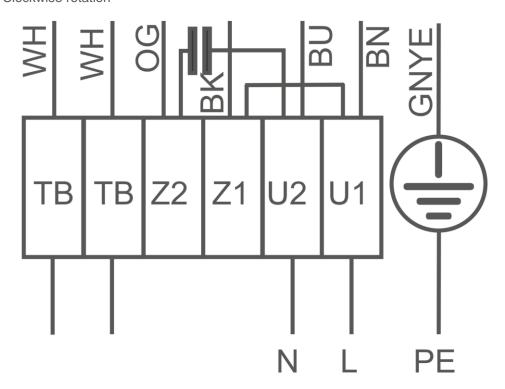
#### 1360-104XA

1~Motor with capacitor and thermostatic switch (if built in).

BN brown
BU blue
BK black
OG orange
WH white

GNYE green-yellow

#### Clockwise rotation







# 5. EU-Declaration of conformity

#### EU declaration of conformity

- Translation -(enalish)

ZA75-GB 1910 Index 015

ZIEHL-ABEGG SE Manufacturer:

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.., FS.., FT.., FV.., VN.., VR.., ZC.., ZF.., ZG.., ZN..
- Centrifugal fan ER.., GR.., RA.., RD.., RE.., RF.., RG.., RH.., RK.., RM.., RR.., RZ.., WR..
- Cross-flow fan QG.., QK.., QR.., QT..

#### The 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 with integrated EC controller

#### These products comply with the following EU directives:

- 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 harmonised standards have been used:

EN 60034-1:2010 + Cor.:2010 EN 61000-6-3:2007 + A1:2011 + AC:2012

EN 60204-1:2006 + A1:2009 + AC:2010 EN 61000-6-2:2005 + AC:2005

EN 60529:1991 + A1:2000 + A2:2013

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, 05.03.2019 (location, date of issue)

ZIEHL-ABEGG SE Dr. W. Angelis

iv. W. Angelis

Technical Director Air Movement Division

(name, function)

(Signature)

ZIEHL-ABEGG SE Dr. D. Kappel

Deputy Head of Electrical Systems

i. V. luid happel

(name, function)

(Signature)





# 30296702-GB

### EC Declaration of Incorporation

as defined by the EC Machinery Directive 2006/42/EC, Annex II B The design of the incomplete machine:

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

#### 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 EG Machinery Directive 2006/42/EG.

#### Manufacturer

ZIEHL-ABEGG SE Heinz-Ziehl-Strasse D-74653 Künzelsau

#### The following harmonised standards have been used:

EN 60204-1:2006+A1:2009 Safety of machinery; electrical equipment of machines; Part 1: General

requirements

ENISO 12100:2010 Safety of machinery - General principles for design - Risk assessment and risk

reduction

EN ISO 13857:2008 Safety of machinery; safety distances to prevent danger zones being reached by

the upper limbs

The maintenance of the EN ISO 13857:2008 relates only to the installed accidental Note:

contact protection, provided that it is part of the scope of delivery.

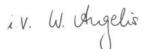
The specific technical documentation in accordance with Appendix VII B has been written and is available in its

The person authorised for compiling the specific technical documentation is: Dr. W. Angelis, address see above. The specific documentation will be transmitted to the official authorities on justified request. The transmission can be electronic, on data carriers or on paper. All industrial property rights remain with the above-mentioned

It is prohibited to commission this incomplete machine until it has been secured that the machine into which it was incorporated complies with the stipulations of the EC Machinery Directive.

Künzelsau, 12.12.2017

Dr. W. Angelis - Technical Director Ventilation Division



ZAZA87-GB-1750 Index 007

english

ZIEHL-ABEGG A



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# 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.

