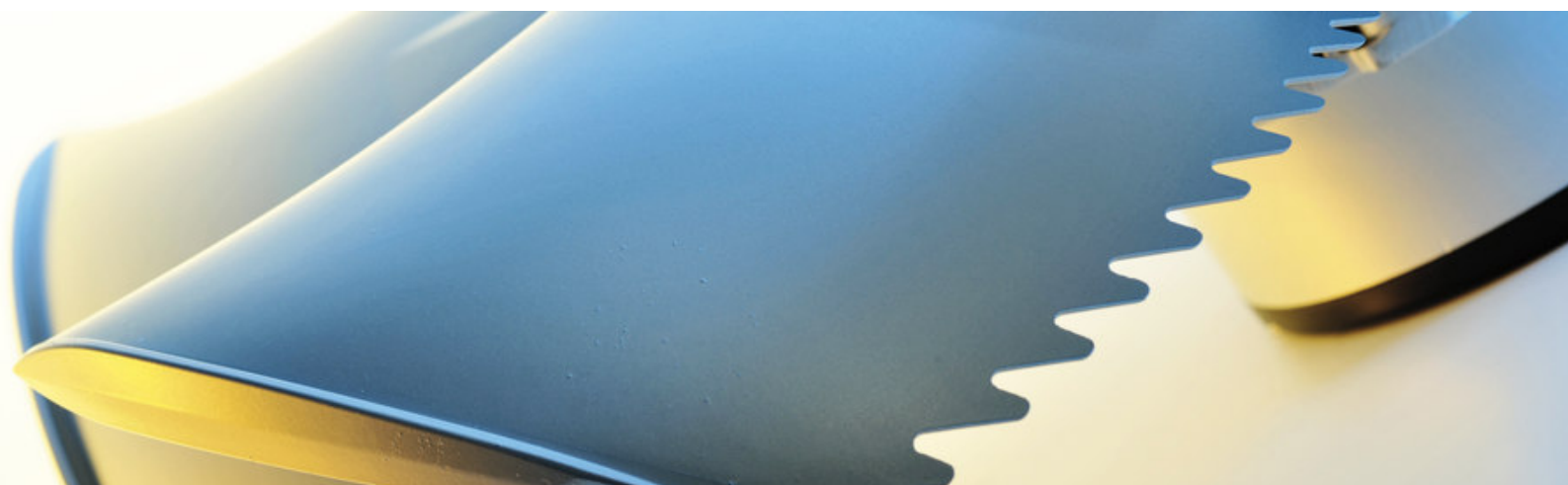
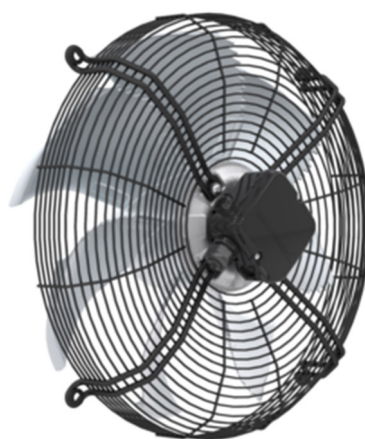


Movement by Perfection



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



[Product documentation](#)

Type
FN050-VDK.4I.V7P1

Article number
153541

Product documentation

Customer
[enter here](#)

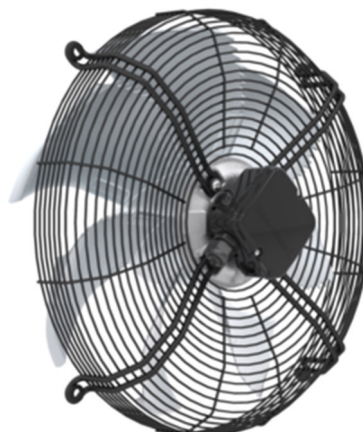
Project
[enter here](#)

ZIEHL-ABEGG Contact
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www.ziehl-abegg.it
info@ziehl-abegg.it

Type
FN050-VDK.4I.V7P1

Article number
153541



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1. Product specification - Technical data

| | |
|----------------------------|--|
| Article number | 153541 |
| Type | FN050-VDK.4I.V7P1 |
| Designation | Axial fan with sickle blades |
| Rated values | 3~400V $\pm 10\%$ D/Y 50Hz P ₁ 0.77/0.49kW 1.7/0.84A $\Delta I=0\%$ 1300/1025/min COSY 0,64 70°C 3~400V $\pm 10\%$ D/Y 60Hz P ₁ 1.10/0.60kW 1.9/1.0A $\Delta I=0\%$ 1400/980/min COSY 0,81 70°C 3~460V $\pm 10\%$ D/Y 60Hz P ₁ 1.20/0.70kW 2.00/ 1.05A $\Delta I=0\%$ 1480/1100/min COSY 0,76 70°C |
| Electrical connection | Terminal box K62 |
| ErP Data | Efficiency η_{statA} : 33.4 % Efficiency grade: $N_{\text{actual}} = 40.7 / N_{\text{target}} = 40^*$ *ErP 2015 |
| Type of protection | IP54 |
| Thermal class | THCL155 |
| Mounting type terminal box | Mounted on Stator |
| Min. operating temperature | -40°C*** |
| Connection diagram | 1360-108XA |
| Rating plate | 1x fixed |
| Fitting position | H/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 Rotor | Aluminium |
| Painting rotor | Rotor unpainted |
| painting stator | Stator unpainted |
| Material blades | Aluminium |
| Painting impeller | Impeller unpainted |
| Guard grille type | ring grill |
| Other | All connecting elements in stainless steel. |
| Painting mot.suspens | Motor suspension powder-coated resistance class 2 (L-TI-0585) |
| colour suspension | RAL 9005 (jet black) |
| Weight | 13.30 kg |

*** 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.

Permissible minimum and maximum ambient temperature for operation:

Please refer to the technical documentation of the product for the minimum and maximum ambient temperature valid for the respective fan. Operation below -25 °C as well as partial load operation for refrigeration applications is only possible with special bearings for refrigeration applications on request. If special bearings for refrigeration applications are installed in the fan, please observe the permissible maximum temperatures in the technical documentation of the product.

2. Characteristic curve

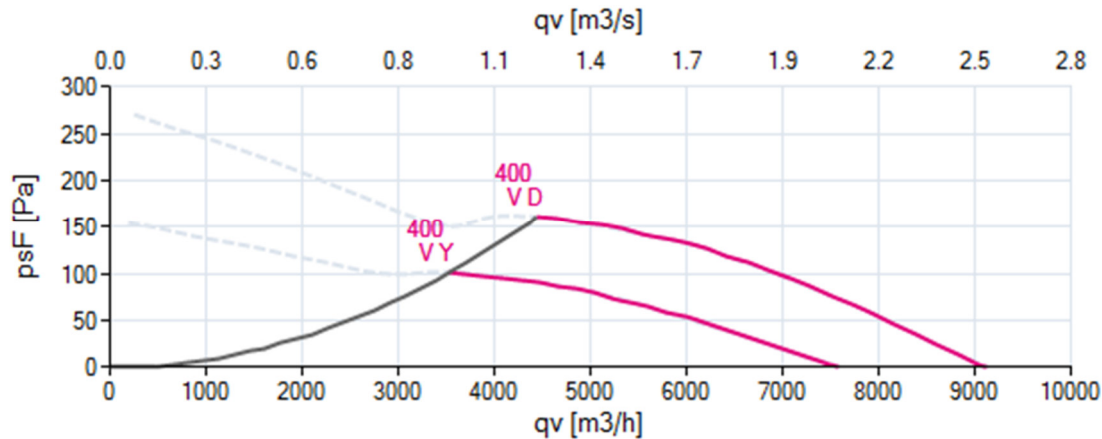
FN050-VDK.4I.V7P1

Measured in full nozzle without guard grille in air flow direction V in installation type A according to ISO5801

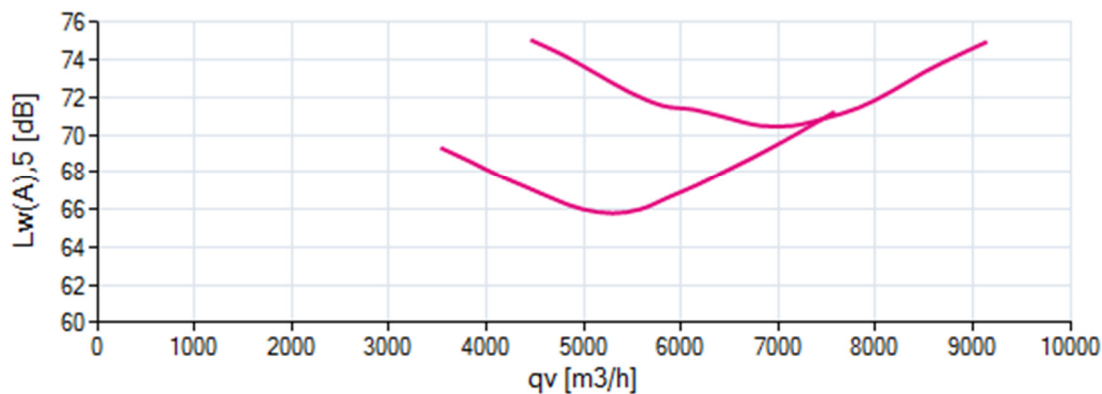
3~ 400V 50Hz D-Y

measurement density 1,16 kg/m³

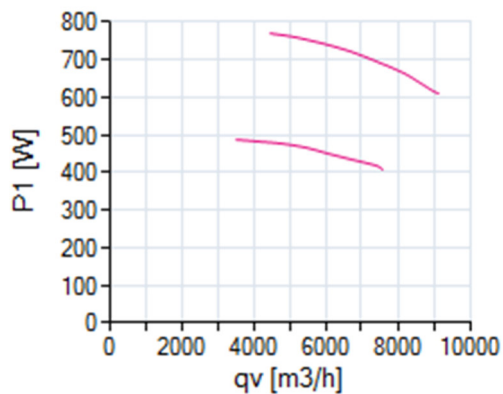
Air performance



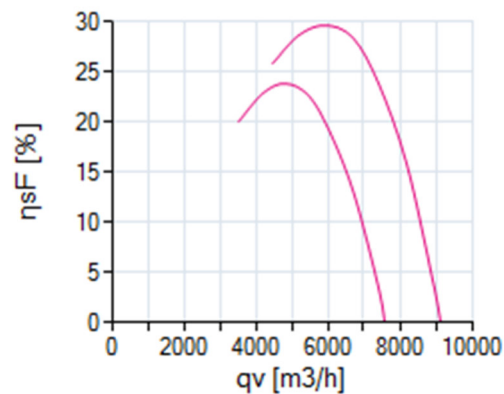
Acoustics



Power input



Efficiency



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

*In doubt please ask your responsible ZIEHL-ABEGG sales contact.



Data of operating point

| | | |
|------------------------|------------------|----|
| frequency (f_{BP}) | 50 | Hz |
| mains supply | 3~ 400V 50Hz D-Y | |
| ErP-conformity | 2015 | |
| guard grille | no | |

FN050-VDK.4I.V7P1

Measured in full nozzle without guard grille in air flow direction V in installation type A according to ISO5801

3~ 400V 60Hz D-Y

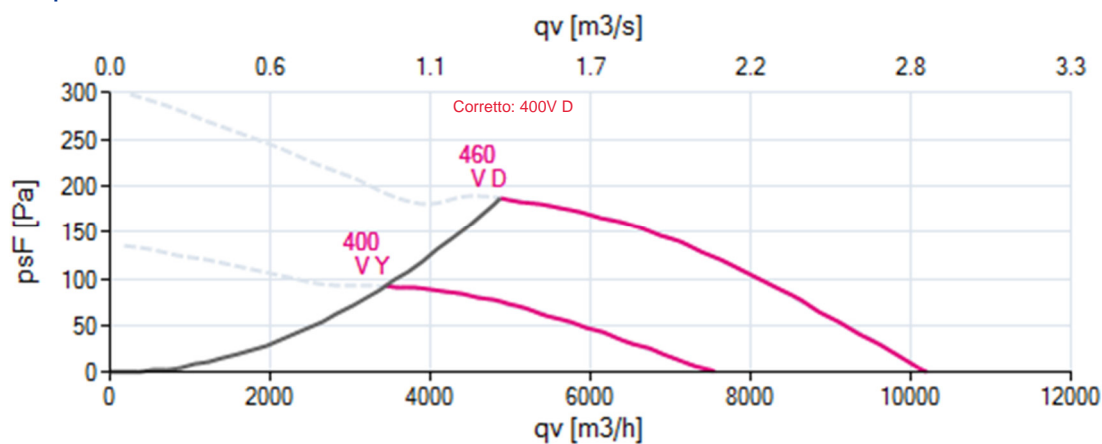
measurement density 1,16 kg/m³

MAIL GIANLUCA ROCCO 04/03/21

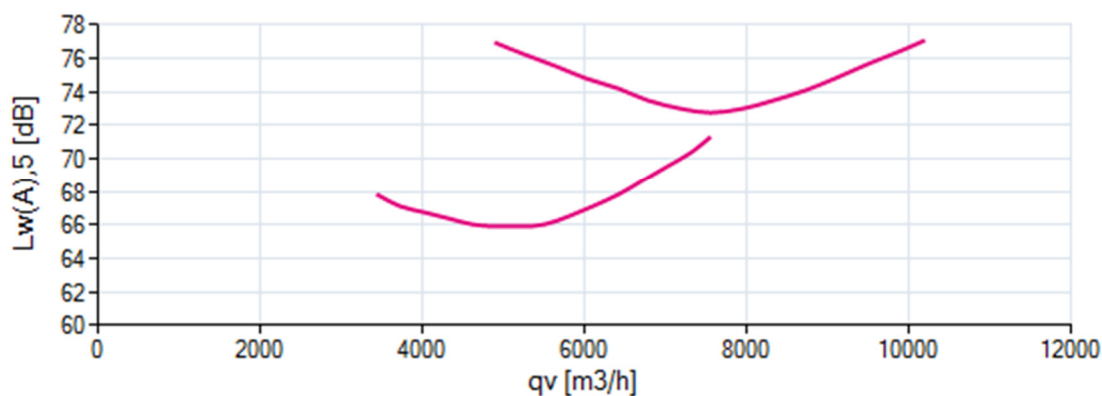
Buongiorno Matteo,
Io so. È un errore nell'etichetta del grafico che non posso correggere. Mi spiace. Le curve sono corrette.

Cordiali saluti

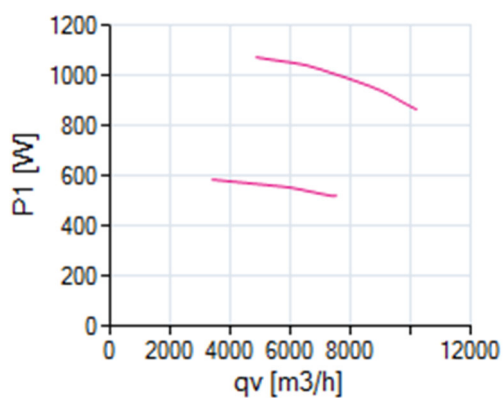
Air performance



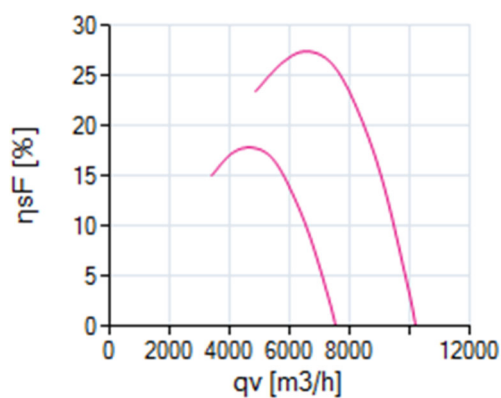
Acoustics



Power input



Efficiency



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

*In doubt please ask your responsible ZIEHL-ABEGG sales contact.



Article number
153541

The Royal League

Die Königsklasse

Data of operating point

| | | |
|------------------------|------------------|----|
| frequency (f_{BP}) | 60 | Hz |
| mains supply | 3~ 400V 60Hz D-Y | |
| guard grille | no | |

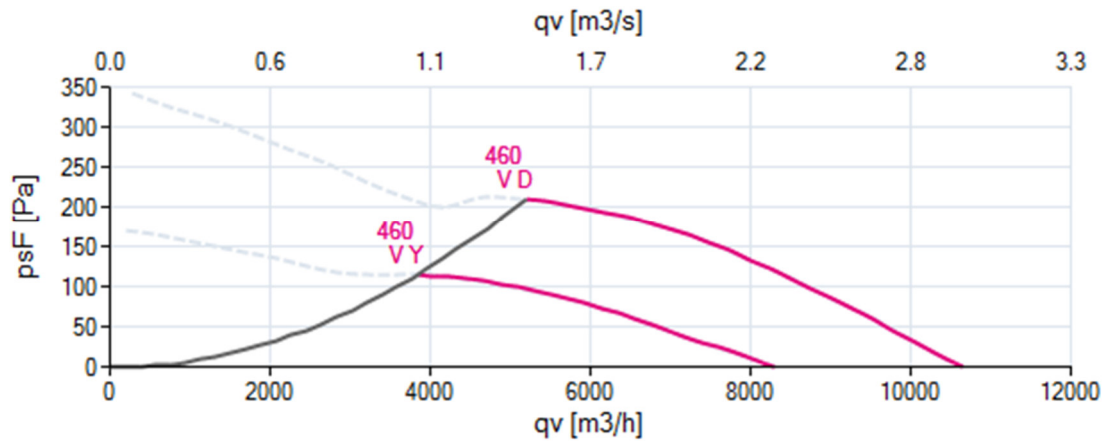
FN050-VDK.4I.V7P1

Measured in full nozzle without guard grille in air flow direction V in installation type A according to ISO5801

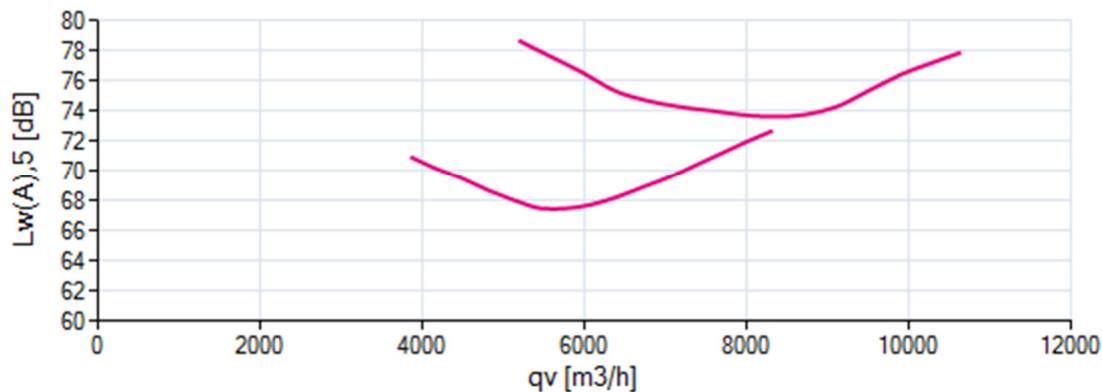
3~ 460V 60Hz D-Y

measurement density 1,16 kg/m³

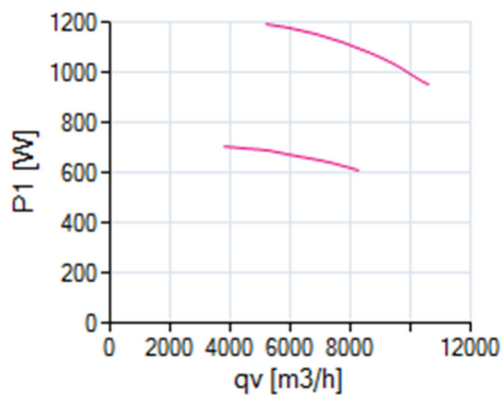
Air performance



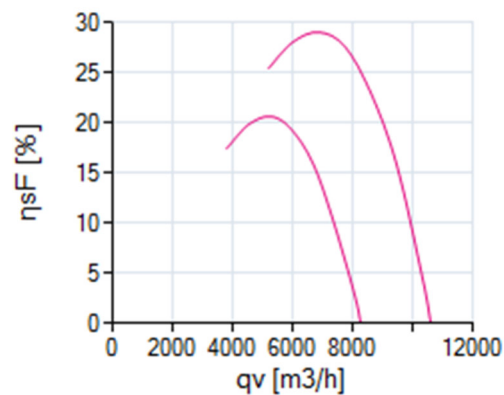
Acoustics



Power input



Efficiency



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

*In doubt please ask your responsible ZIEHL-ABEGG sales contact.

Article number
153541

The Royal League

Die Königsklasse

Data of operating point

| | | |
|------------------------|------------------|----|
| frequency (f_{BP}) | 60 | Hz |
| mains supply | 3~ 460V 60Hz D-Y | |
| guard grille | no | |

[illegible]

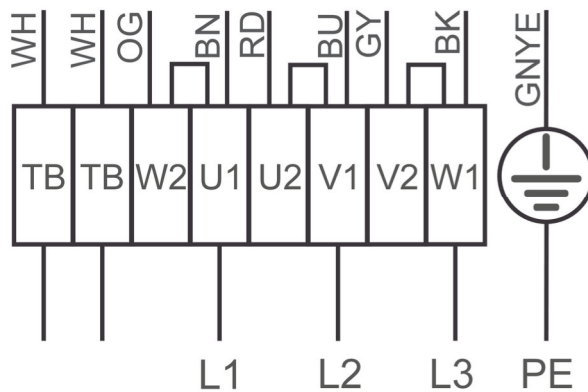
4. Connection diagram

wiring diagram: 1360-108XA

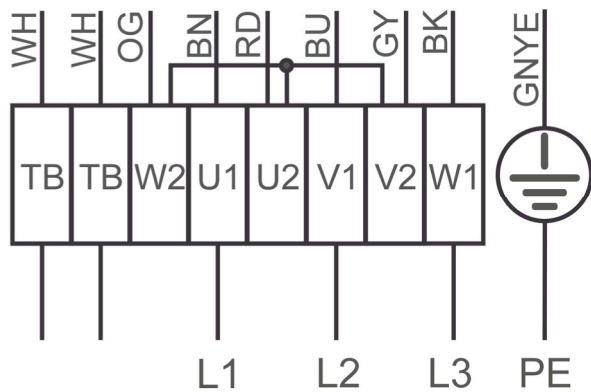
3~ motor, 2 speeds (Δ/Y switch over) with thermostatic switch (if built in). Without bridge when using speed change-over switch.

BN brown
BU blue
BK black
RD red
GY grey
OG orange
WH white
GNYE green-yellow

High speed/D-connection



Low speed/Y-connection



5. EU-Declaration of conformity

EU declaration of conformity

- Translation -
(english)

ZA75-GB 1910 Index 015

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..., 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

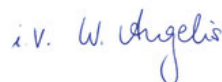
Compliance with the ErP Directive 2009/125/EC does not refer to external rotor motors MK..., MW...

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
Technical Director Air Movement Division
(name, function)



(Signature)

ZIEHL-ABEGG SE
Dr. D. Kappel
Deputy Head of Electrical Systems
(name, function)



(Signature)

ZIEHL-ABEGG 

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.., FG.., 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 |
| EN ISO 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 |
| Note: | The maintenance of the EN ISO 13857:2008 relates only to the installed accidental 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 entirety.

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 manufacturer.

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

Dr. W. Angelis

ZAZA87-GB-1750 Index 007

1

english

ZIEHL-ABEGG 

00296702-GB





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

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