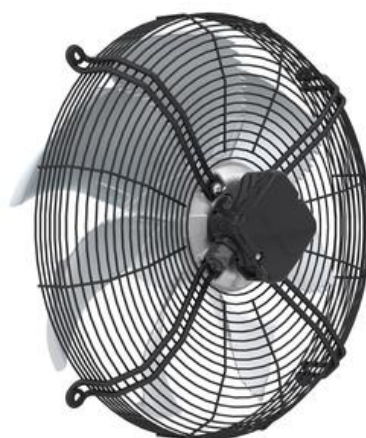


Movement by Perfection



The Royal League in ventilation, control and drive technology



[Product documentation](#)

Type  
[FN050-VDK.4I.V7P1](#)

Article number  
[142502](#)

## Product documentation

Customer  
Actrol

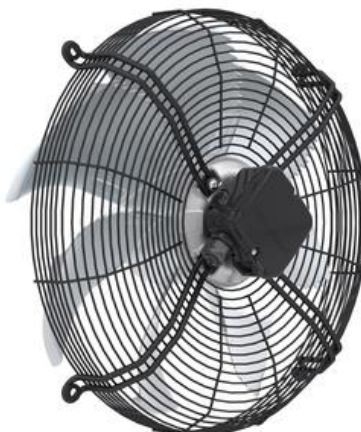
Project  
Axial Fan

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info@ziehl-abegg.com.au

Type  
FN050-VDK.4I.V7P1

Article number  
142502



### Contents

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### 1. Product specification

#### Technical data

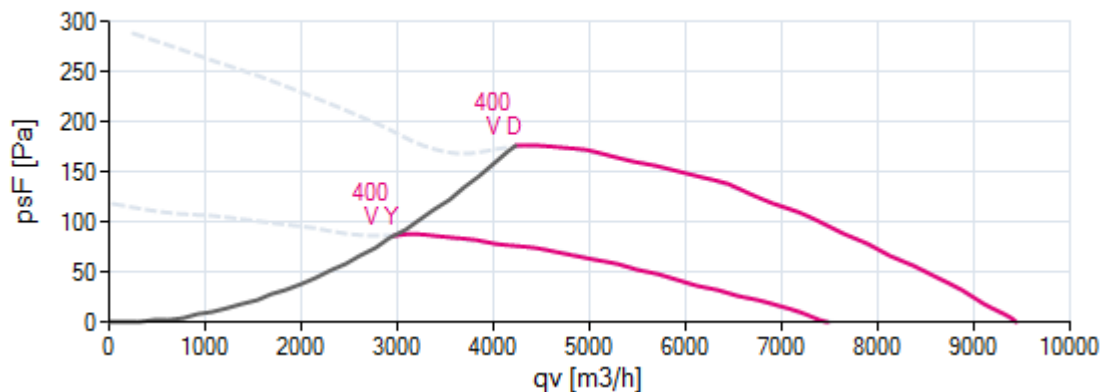
Article number	142502
Type	FN050-VDK.4I.V7P1
Designation	Axial fan with sickle blades
Rated values	3~400V±10% D/Y 50Hz P <sub>1</sub> 0,84/0,54kW 1.45/ 0.96A ΔI=15% 1340/ 940/min COSY 0,80 70°C
Electrical connection	Terminal box K62
Min. operating temperature °C	-40***
Mounting type terminal box	Mounted on Stator
Type of protection	IP54
Thermal class	THCL155
Connection diagram	1360-108XA
Rating plate	1x fixed
Fitting position	H/Vu/Vo
Motor protection	thermal contact
Impregnation	Moisture and hot climate protection
Quality of bearings	ball bearing with long-time lubrication
Material Rotor	Aluminium
Painting rotor	Rotor 1 coat painted
colour rotor	RAL 9005 (jet black)
Material blades	Aluminium
Painting impeller	1 coat painted
Colour blades	RAL 9005 (jet black)
Guard grille type	ring grill
Control	--
Other	Balancing quality G 4,0
Painting mot.suspens	Motor suspension 1 coat paint
colour suspension	RAL 9005 (jet black)
Weight kg	13,30
ErP Data	Efficiency $\eta_{\text{statA}}$ : 34,2 % Efficiency grade: $N_{\text{actual}} = 41,3 / N_{\text{target}} = 40^*$ *ErP 2015

\*\*\* Occasional operation  $\leq -20^{\circ}\text{C}$  and in consideration of lowest temperature according to product documentation permissible. For cooling applications with continuous operation  $\leq -20^{\circ}\text{C}$  cold design on request.

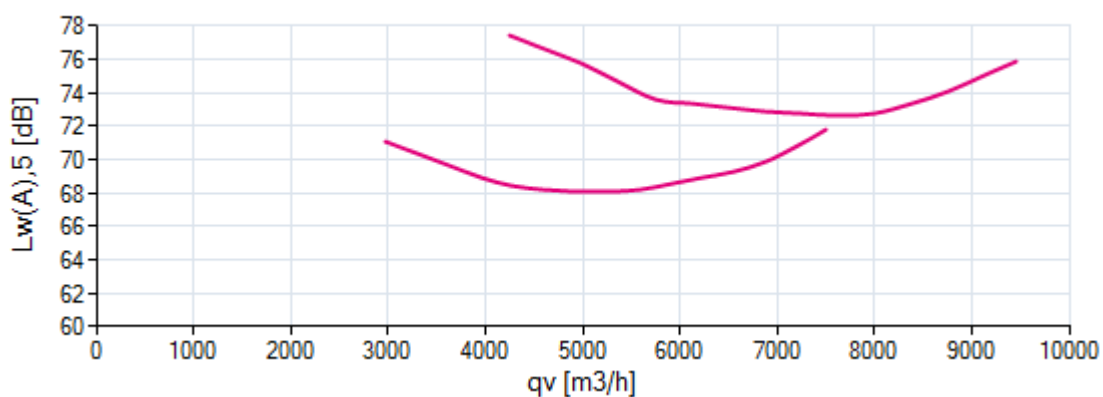
## 2. Characteristic Curve

FN050-VDK.4I.V7P1    Gemessen in Volldüse ohne Berührungsgitter in Einbauart A nach ISO 5801  
3~ 400V 50Hz D    Messdichte 1,16

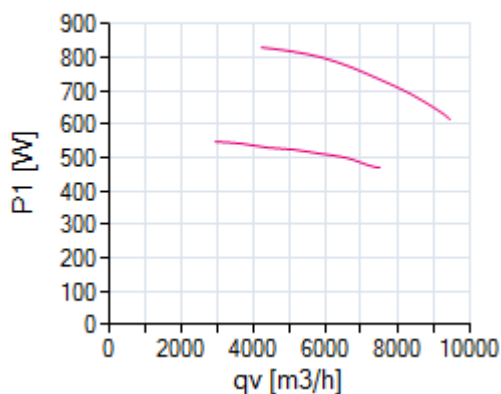
### Air performance



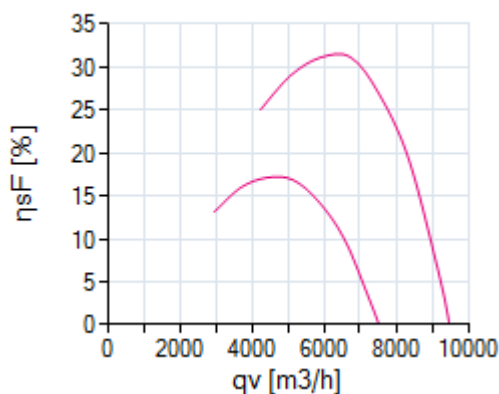
### Acoustics



### 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.



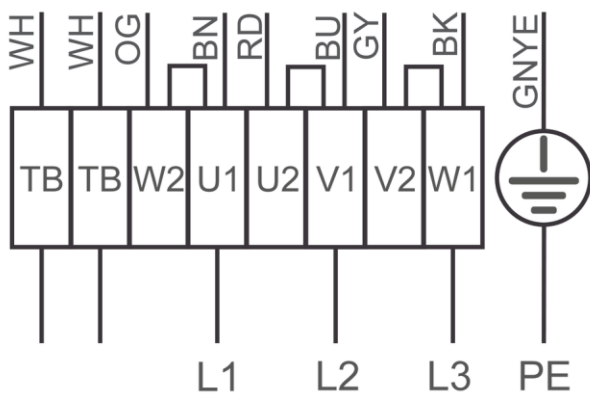
### 4. Connection diagram

#### 1360-108XA

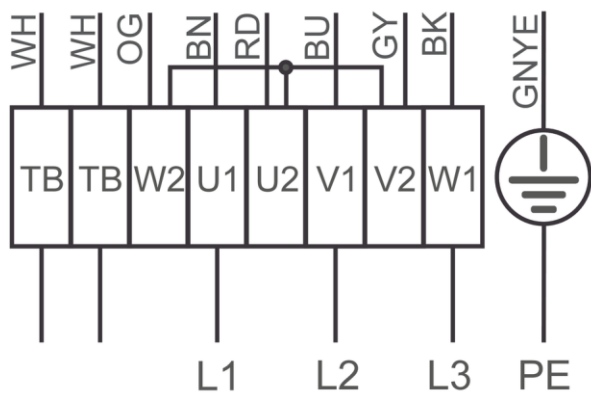
3~ motor, 2 speeds ( $\Delta/Y$  switch over) with thermostatic switch (if built in). Without bridge when using speed change-over switch.

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

#### EC-Declaration of conformity

- Translation -  
(english)

ZA75-GB 1616 Index 011  
00285644-GB

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

**The engine type:**

- Asynchronous internal or external rotor motor
- Asynchronous internal or external rotor motor with integrated frequency inverter, except EDP system
- Electronically commutated (EC) internal or external rotor motor
- Electronically commutated internal or external rotor motor with integrated EC Controller, except EDP system

**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 harmonized standards are in use:**

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 (eg. sensing controls) and operated , the manufacturer or operator is responsible of the overall system for compliance with the EMC Directive 2014/30 / EU .

Künzelsau, 20.04.2016  
(Location, date of issue)

ZIEHL-ABEGG SE  
Dr. W. Angelis  
Technical Director Air Movement Division  
(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](#).