

Movement by Perfection



The Royal League in ventilation, control and drive technology



[Product documentation](#)

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

Article number
[57240281](#)

Product documentation

Customer
Actrol

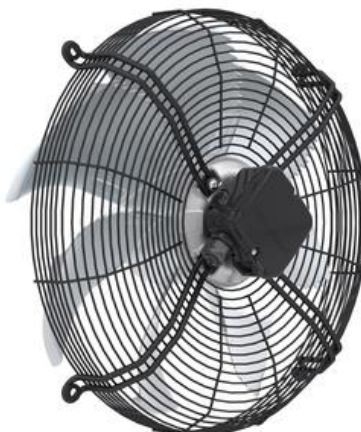
ZIEHL-ABEGG Contact
Kenz Zacharias

Project
Axial Fan

ZIEHL-ABEGG Subsidiary

Type
FN050-VDK.4I.V7P1

Article number
57240281



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1. Product specification

Technical data

Article number	57240281
Type	FN050-VDK.4I.V7P1
Designation	Axial fan with sickle blades
Rated values	3~400V±10% D/Y 50Hz P ₁ 0,84/0,54kW 1.45/ 0.96A ΔI=15% 1340/ 940/min COSY 0,80 70°C

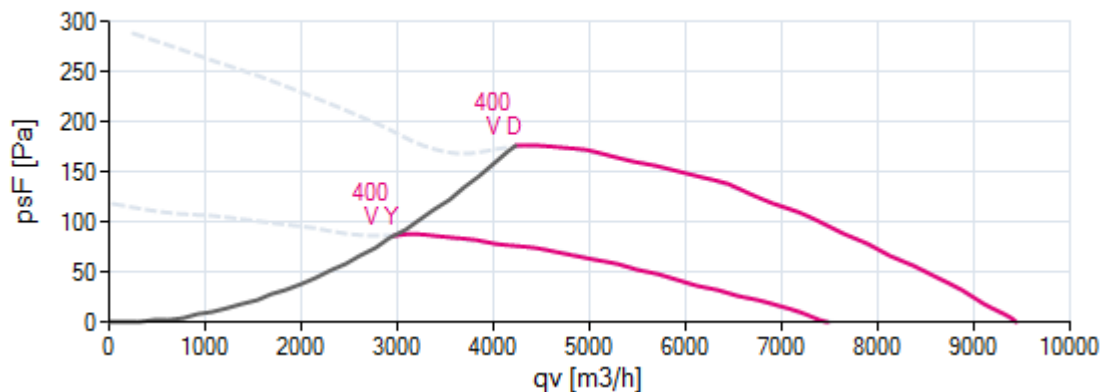
Electrical connection	Terminal box K62
Min. operating temperature °C	-40***
Mounting type terminal box	Mounted on Stator
Type of protection	IP54
Thermal class	THCL155
Connection diagram	1360-108XA
Rating plate	1x fixed
Fitting position	H/Vu/Vo
Motor protection	thermal contact
Impregnation	Moisture and 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 η_{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.

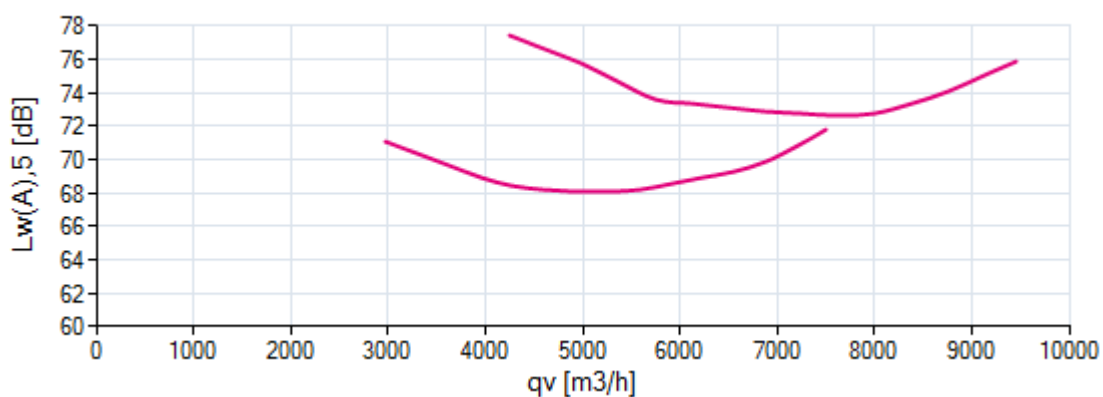
2. Characteristic Curve

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

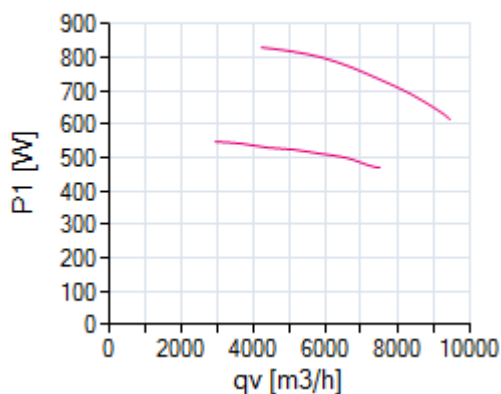
Air performance



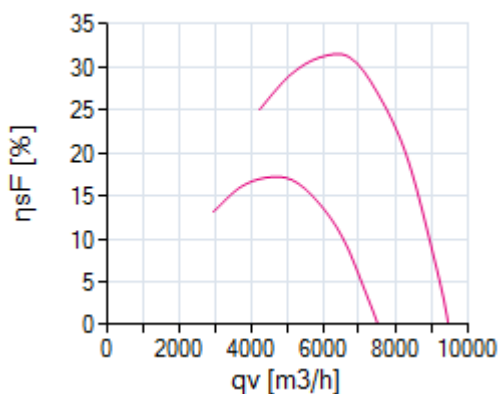
Acoustics



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.

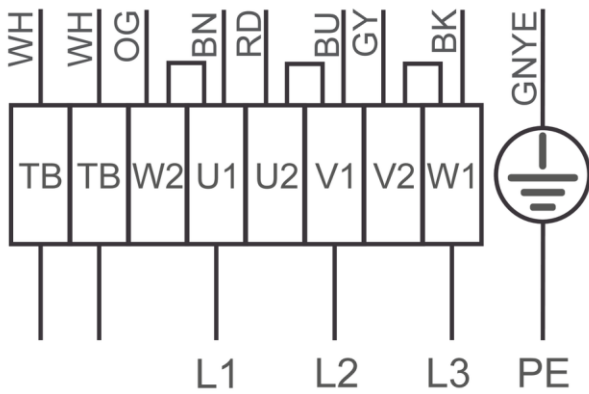
4. Connection diagram

1360-108XA

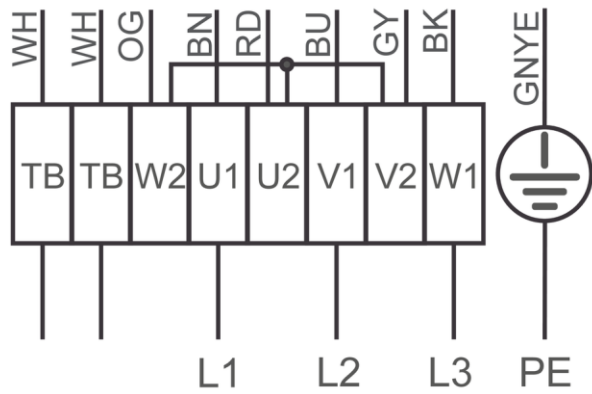
3~ motor, 2 speeds (Δ/Y switch over) with thermostatic switch (if built in). Without bridge when using speed change-over switch.

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

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](#).