Product documentation

Type
FN050-VDK.4l.V7P1

Article number
142502
Product documentation

Customer
Actrol

Project
Axial Fan

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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 P1 0,84/0,54kW
1,45/ 0.96A ∆I=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\text{stat}: 34,2 %
Efficiency grade: N\text{actual} = 41,3 / N\text{target} = 40*
*ErP 2015

*** Occasional operation ≤ -20°C and in consideration of lowest temperature according to product documentation permissible. For cooling applications with continuous operation ≤ -20°C cold design on request.
2. Characteristic Curve

FN050-VDK.4I.V7P1  Gemessen in Volldüse ohne Berührgitter 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.
Dimensions in mm
Shown drawing is just to show the dimensions of the fan.
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 overswitch.

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

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 QG, 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

The following harmonized standards are in use:


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 for the overall system for compliance with the EMC Directive 2014/30 / EU.

(Location, date of issue)

ZIEHL-ABEGG SE
Dr. W. Andreis
Technical Director Air Movement Division
(Name, Function)

i. v. W. Andreis
(Signature)
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](#).