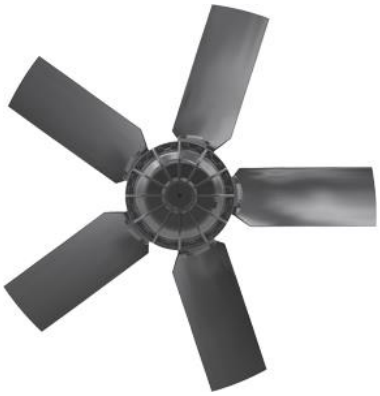
Movement by Perfection

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



Product documentation

Type
FC091-SDS.7Q.V5

Article number
161364

ZIEHL-ABEGG

Product documentation

Customer

ZIEHL-ABEGG Contact
Alessandro Olivato

Project

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FC091-SDS.7Q.V5

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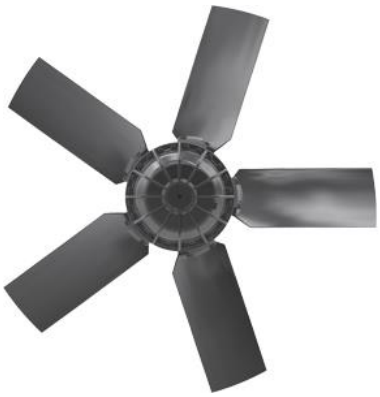


Contents

1. Product specification - Technical data

Article number	161364
Type	FC091-SDS.7Q.V5
Designation	Axial fan with diecast blades
Rated values	3~400V ±10% D/Y 50Hz P_1 2.50/1.60kW 5.0/2.7A 840/660/min COSY 0,74 80°C 3~400V±10% D/Y 60Hz P_1 3.80/1.90kW 6.4/3.3A 890/620/min COSY 0,83 60°C 3~460V±10% D/Y 60Hz P_1 4.20/2.40kW 6.60/ 3.50A950/700/min COSY 0,81 60°C
Electrical connection	Terminal box K07
ErP Data	Efficiency η_{statA}: 36.5 % Efficiency grade: N_{actual} = 40.1 / N_{target} = 40* *ErP 2015
Type of protection	IP54
Thermal class	THCL155
Mounting type terminal box	Mounted on Stator
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 special lubrication
Material Rotor	Aluminium
Painting rotor	Rotor 1 coat paint resistance class 1 (L-TI-0596)
colour rotor	RAL 9005 (jet black)
painting stator	Stator 1 coat paint resistance class 1 (L-TI-0596)
colour stator	RAL 9005 (jet black)
Material blades	Aluminium
Painting impeller	Impeller 1 coat paint resistance class 1 (L-TI-0596)
Colour blades	RAL 9005 (jet black)
Guard grille type	ring grill
Painting mot.suspens	Motor suspension 1 coat paint resistance class 1 (L-TI-0596)
colour suspension	RAL 9005 (jet black)
Weight	50.80

*** Operation mode:
Continuous operation with occasional starts (S1) according to DIN EN 60034-1:2011-02.
Occasional starting between -30 °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

FC091-SDS.7Q.V5 Measured in full nozzle without guard grille in air flow direction V in installation type A according to ISO5801

3~ 400V 50Hz D measurement density 1,16 kg/m³

FC091-SDS.7Q.V5

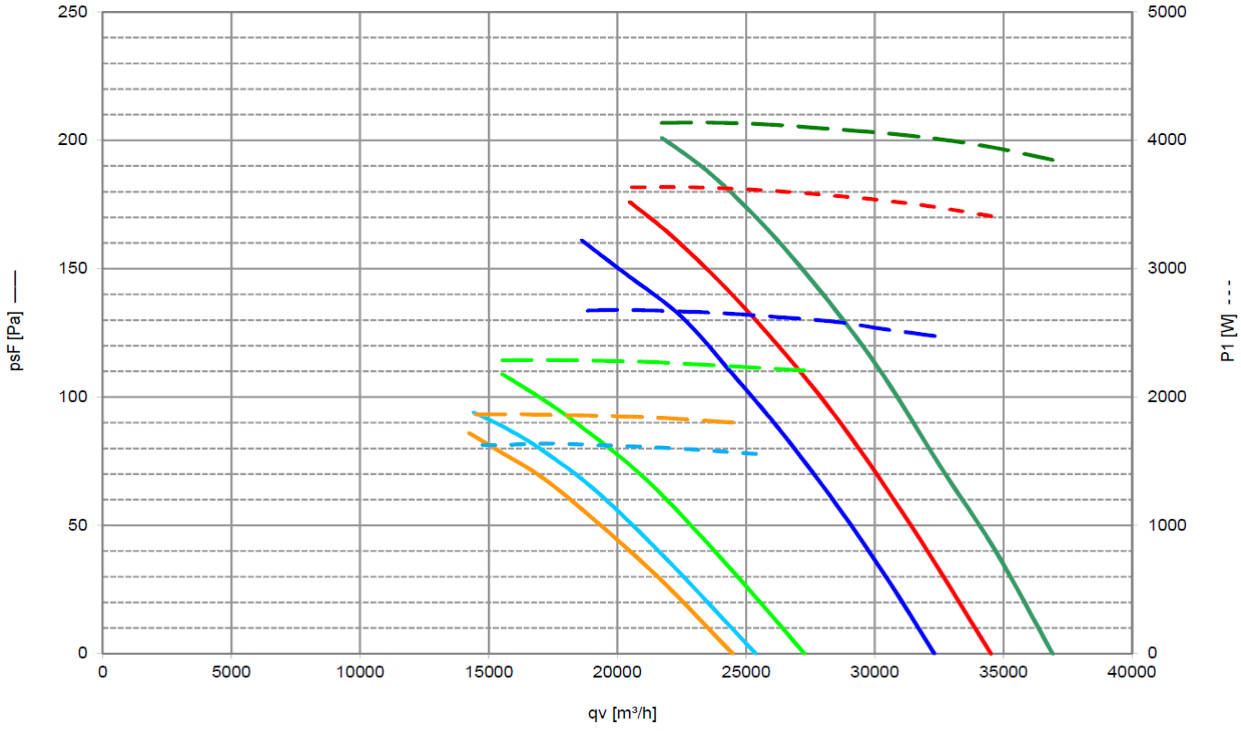
Beschreibung / Description
Typ: FC091-SDS.7Q.V5
3~ 400V ±10% D/Y 50Hz P1 2,5/1,6kW (1,9/0,89kW 2HP)
5,0/2,7A 840/660/MIN COSY 0,74 80°C
3~ 400V ±10% D/Y 60Hz P1 3,8/1,9kW (2,3/0,81kW 3HP)
6,4/3,3A 890/620/MIN COSY 0,83 60°C
3~ 460V ±10% D/Y 60Hz P1 4,2/2,4kW (2,8/1,1kW 4HP)
6,6/3,5A 950/700/MIN COSY 0,81 60°C
IP54 THCL 155

Messaufbau / Assembling:
Ventilator montiert in Volldüse mit druckseitigem Berührschutzgitter.
Fan measured in full bell mouth with guard grille on pressure side.

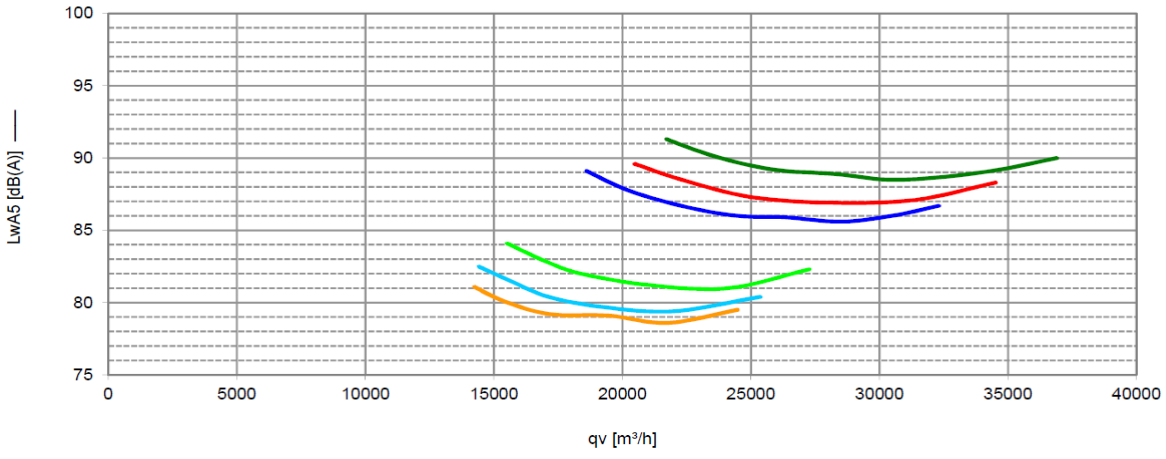
Legende / Legend
A) 3~ 400V 50Hz D [ID 87345]
B) 3~ 400V 50Hz Y [ID 87345]
C) 3~ 400V 60Hz D [ID 87346]
D) 3~ 400V 60Hz Y [ID 87346]
E) 3~ 460V 60Hz D [ID 87346]
F) 3~ 460V 60Hz Y [ID 87346]
Gemessen mit üblichen Toleranzen / Measured with normal tolerances

Luftdichte während Messung 1,185 kg/m³

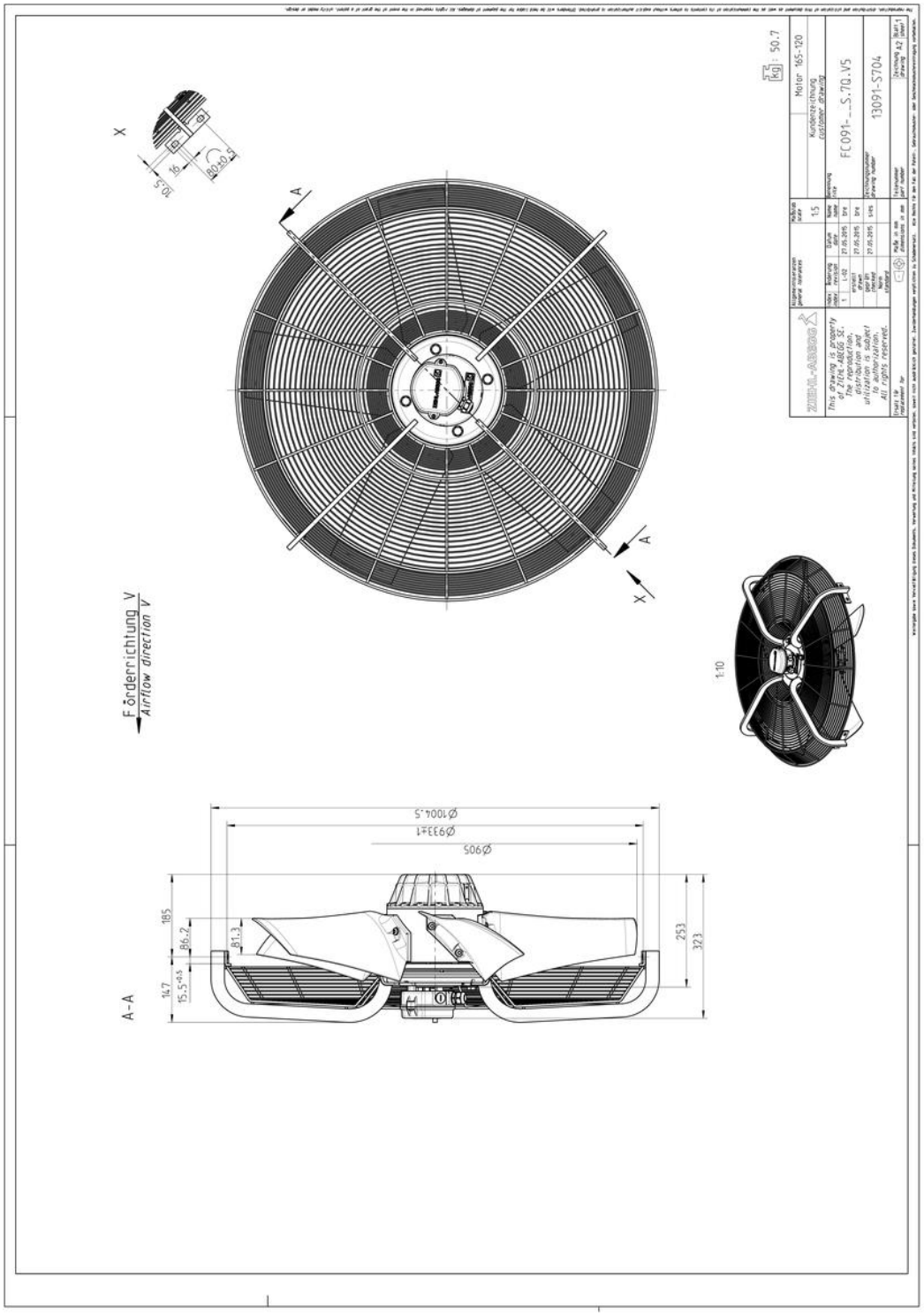
1. Diagramm / Chart : Volumenstrom - Druckerhöhung - elektr. Leistungsaufnahme / Airflow - Pressure - Electr. Power Input



2. Diagramm / Chart : Volumenstrom - Akustik / Airflow - Acoustics



3. Drawing



Dimensions in mm

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

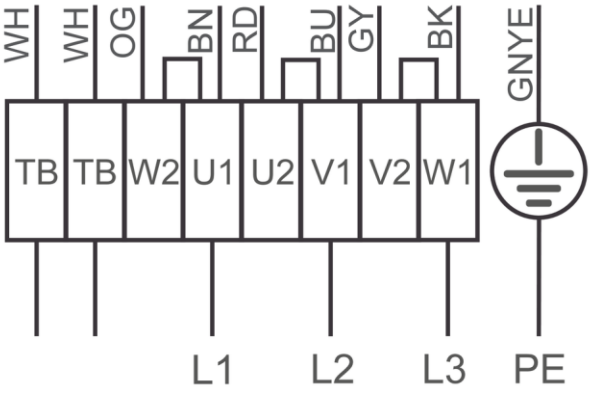
4. Connection diagram

1360-108XA

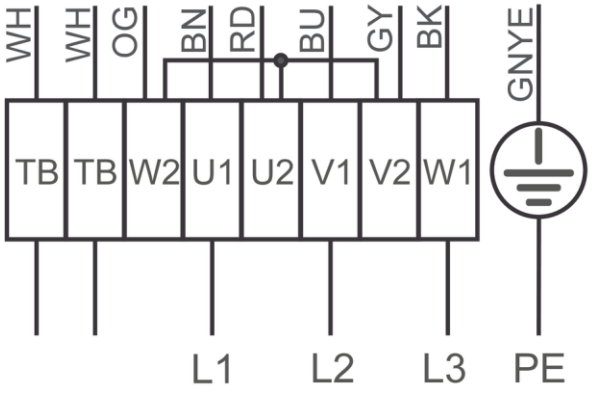
3~ motor, 2 speeds (Δ/Y switch over) with thermostatic switch (if built in).Without bridge when using speed change-overswitch.

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

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 60204-1:2006 + A1:2009 + AC:2010
EN 60529:1991 + A1:2000 + A2:2013
EN 61000-6-3:2007 + A1:2011 + AC:2012
EN 61000-6-2:2005 + AC:2005

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)

i.V. W. Angelis

(Signature)

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

i. V. David Kappel

(Signature)

ZIEHL-ABEGG

00296702-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..,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
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
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

i.V. W. Angelis

ZAZA87-GB-1750 Index 007

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english

ZIEHL-ABEGG

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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We would like to welcome you on our worldwide exhibitions. Please find our next exhibitions here.