

Movement by Perfection



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



Product documentation

Type
DN90V-4DF.K7.29.G9_15kW

The Royal League

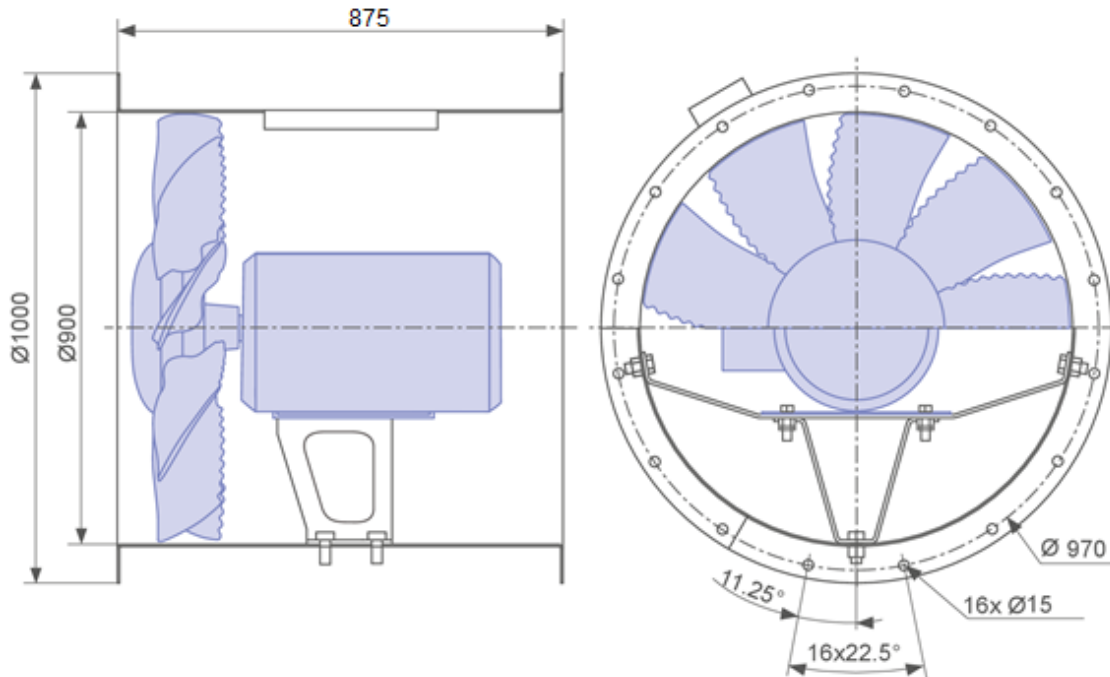
Die Königsklasse

Product specification

Technical data

Article number	-
Type	DN90V-4DF.K7.29.G9
Designation	Medium pressure axial fan
Rated values	3~400/690V D/Y 50Hz; 15kW 28,70/16,64A; 1465/min
Electrical connection	Terminal box on motor
Approx. weight kg	254,00kg
min. operating temp.	-20 ~ +50°C
Type of protection	IP55
Thermal class	Thermal class 155
Fitting position	Fitting position horizontal / vertical
Number of blades	9
Corrosion protection	Hot Dip Galvanized Steel
Motor protection	Motor protection through PTC
Balancing quality	Balancing quality G6,3
Material blades	ZAmid
Painting impeller	Without
Colour blades	Blue
certificated	GOST certified, ...
Painting housing	Unpainted casing
ErP Data	Efficiency η_{statA} : 44,1 % Efficiency grade: N = 43,8 (actual) / N = 40 (target)* *ErP 2015

Drawing



Dimensions in mm

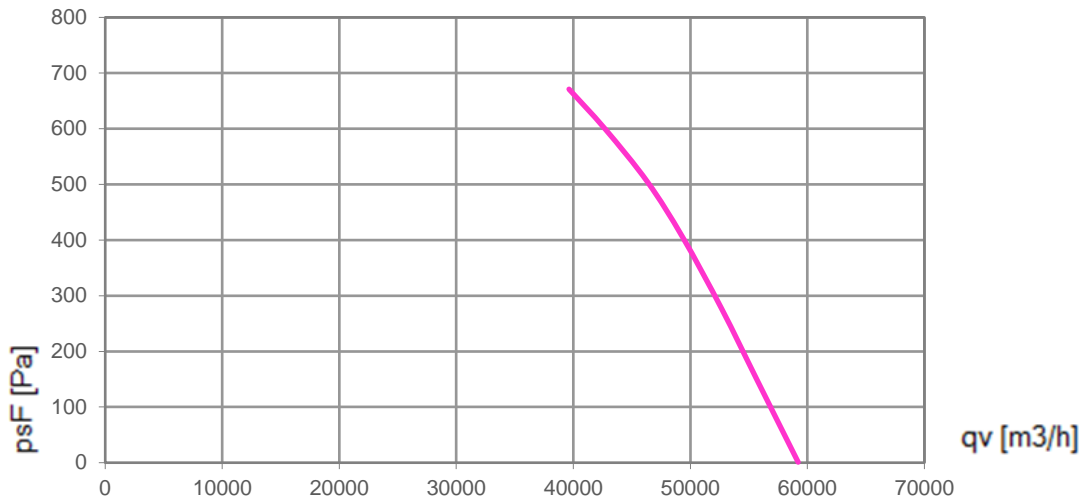
Shown drawing is just to show the dimensions of the fan.

The Royal League

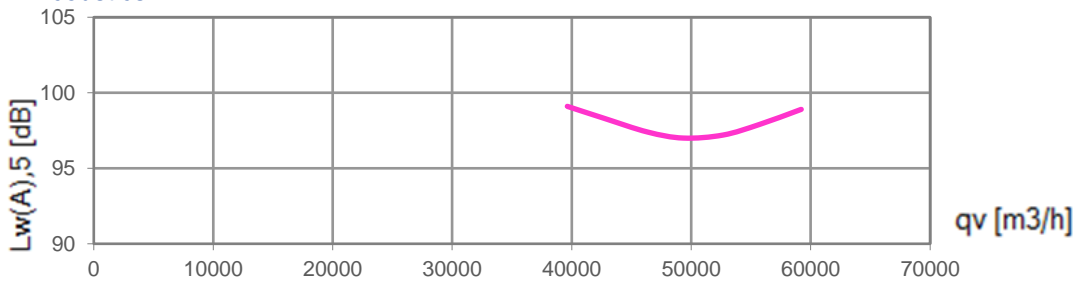
Die Königsklasse

Characteristic curve

Air performance



Acoustics



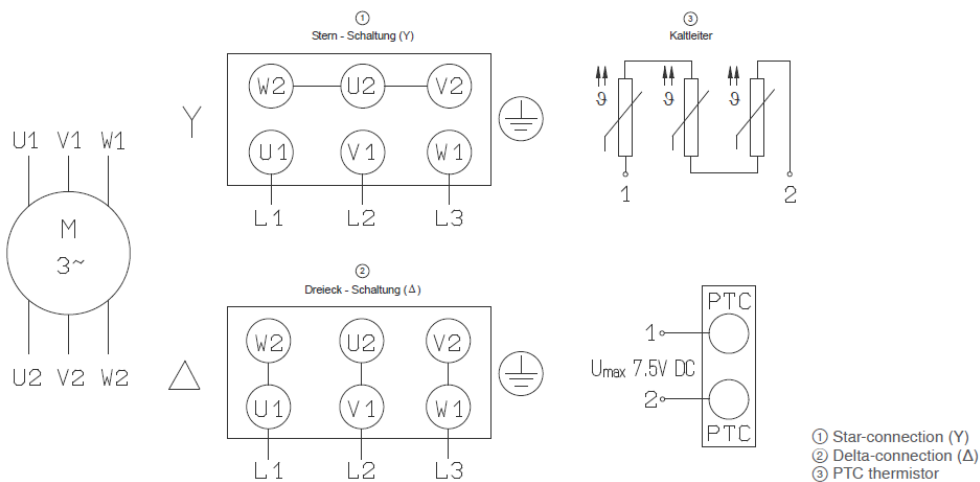
Measured in long casing with inlet bell mouth without guard grille in installation type A air flow impeller/motor according to ISO 5801.

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

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

Measurements based on Motors with efficiency class IE3

Connection diagram



Reversible rotation by interchanging phases

Rated voltage:
Motor size ≤ 90: 230 V Δ / 400 V Y
Motor size ≥ 100: 400 V Δ / 690 V Y



Optional accessories

Frequency inverter FXDM32A 308078

400V 32A 15kW IP54 386x525x283



Setting of the desired speed through device or by external default, e.g. 0~10V



Connecting pressure sensors, e.g. 0~30 bar, 0~50 bar



Connection of thermistors e.g. sensors type TF, sensors type MTG



Connecting differential pressure sensors e.g. type MPG 0~6000Pa



Connecting air velocity sensors e.g. type MAL, measuring range 0~1 m/s, 0~10 m/s



Connecting additional sensors e.g. CO₂, sensors signal 0~10V / 0~20mA / 4~20 mA

Motor protection

MSR220K – T2211775 (with reset) – 2U, AC 220-240V



- Electronic reclosing lock
- Integrated RESET-button
- Link for external RESET
- Automatic RESET at voltage recovery
- LEDs for power ON (green) and alarm (red) in reset – button
- UL Recognized Component
- Option: other supply-voltages

Accessories:

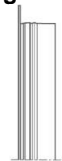
Inlet ring – 00500365



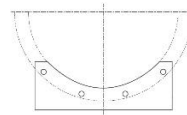
Flexible connector – 00500446



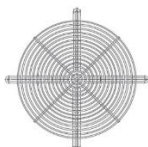
Mating flange – 00500349



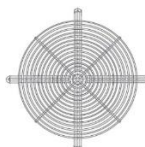
Mounting feet – 00500379



Guard grille (Mesh 10mm) on the suction side – 00500149



Guard grille (Mesh 20mm) on the engine side – 00500548



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)

i.v. W. Angelis

(Signature)

ZIEHL-ABEGG 