

Movement by Perfection



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



Product documentation

Type  
FN040-VDK.0F.V7P2

Article number  
156244

### 1. Product specification

#### Technical data

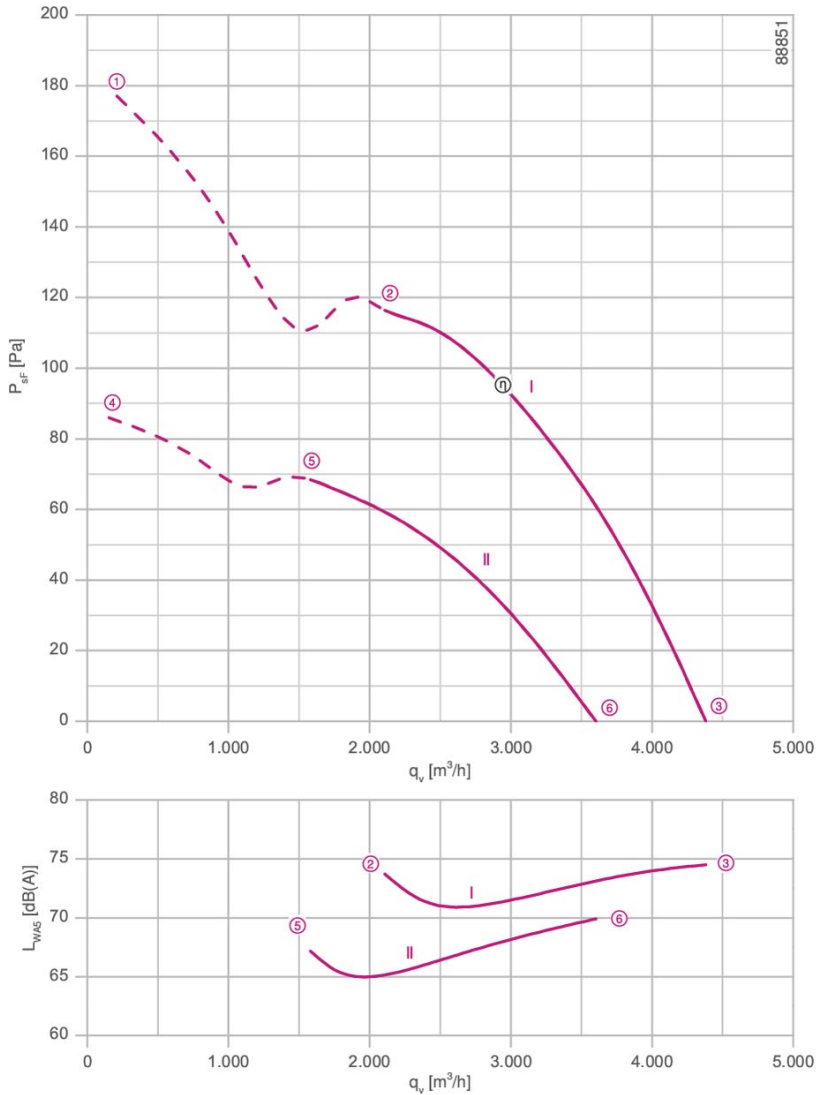
Article number	156244
Type	FN040-VDK.0F.V7P2
Designation	Axial fan with sickle blades
Rated values	3~400V±10% D/Y 50Hz P <sub>1</sub> 260/180W 0.50/ 0.29A ΔI=0% 1340/1020/min COSY 0,77 70°C 3~400V±10% D/Y 60Hz P <sub>1</sub> 360/200W 0.59/ 0.32A ΔI=0% 1470/ 940/min COSY 0,88 PsF max. 95PA 55°C 3~460V±10% D/Y 60Hz P <sub>1</sub> 390/240W 0.58/ 0.34A ΔI=5% 1560/1090/min COSY 0,84 PsF max.100PA 55°C
Electrical connection	Terminal box K05
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	High Performance Composite Material
Painting impeller	unpainted
Colour blades	black
Guard grille type	ring grille
Painting mot.suspens	Motor suspension powder-coated consistency class 2
colour suspension	RAL 9005 (jet black)
Weight kg	5,70
ErP Data	Efficiency $\eta_{\text{statA}}$ : 31.9 % Efficiency: $N_{\text{actual}} = 42.0 / N_{\text{target}} = 40^*$ *ErP 2015

## 2. Characteristic curve

### Characteristic curve

Frequency: 50 Hz

Measured in full bell mouth without guard grille in installation type A according to ISO 5801.



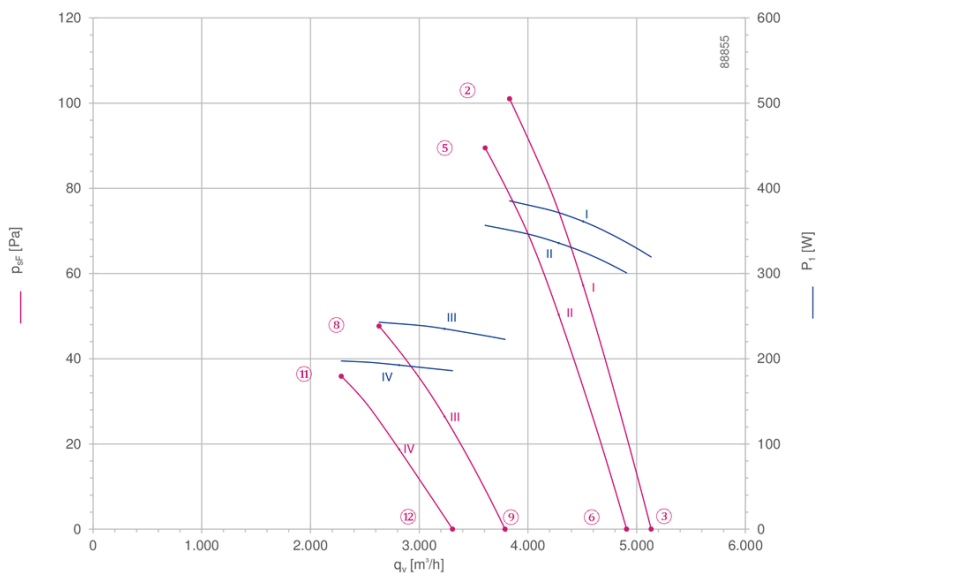
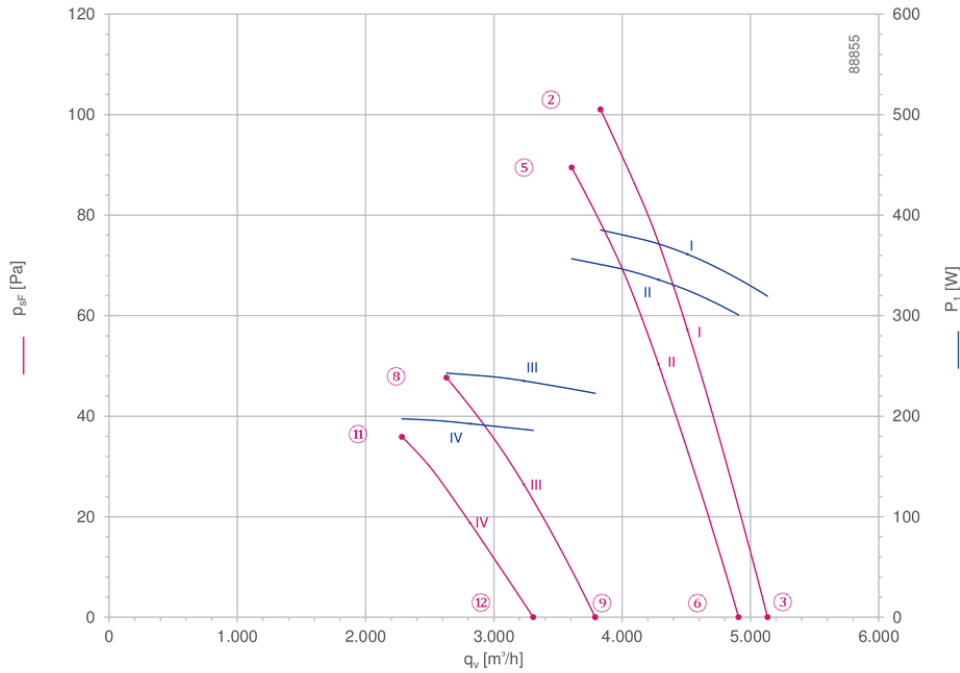
I = 400 V, II = 230 V

Operating point		①	②	③	④	⑤	⑥
Characteristic curve		I	I	I	II	II	II
Connection		$\Delta$	$\Delta$	$\Delta$	Y	Y	Y
Voltage	V	400	400	400	400	400	400
Motor input power	W	330	260	200	200	180	150
Current	A	0,56	0,50	0,44	0,32	0,29	0,24
Speed	$\text{min}^{-1}$	1290	1340	1390	900	1020	1150

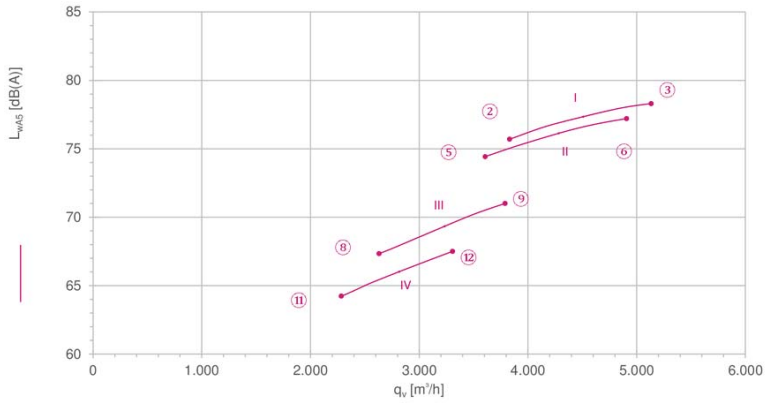
### Characteristic curve

Frequency: 60 Hz

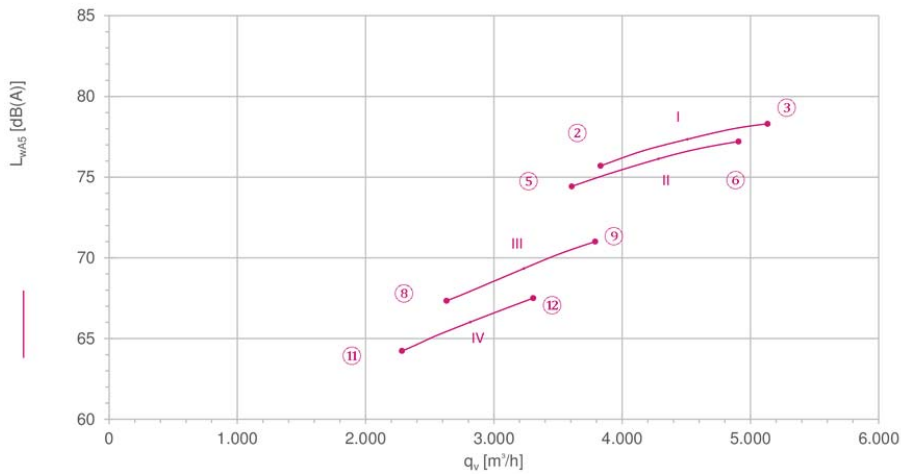
Measured in full bell mouth without guard grille in installation type A according to ISO 5801.



# The Royal League Die Königsklasse

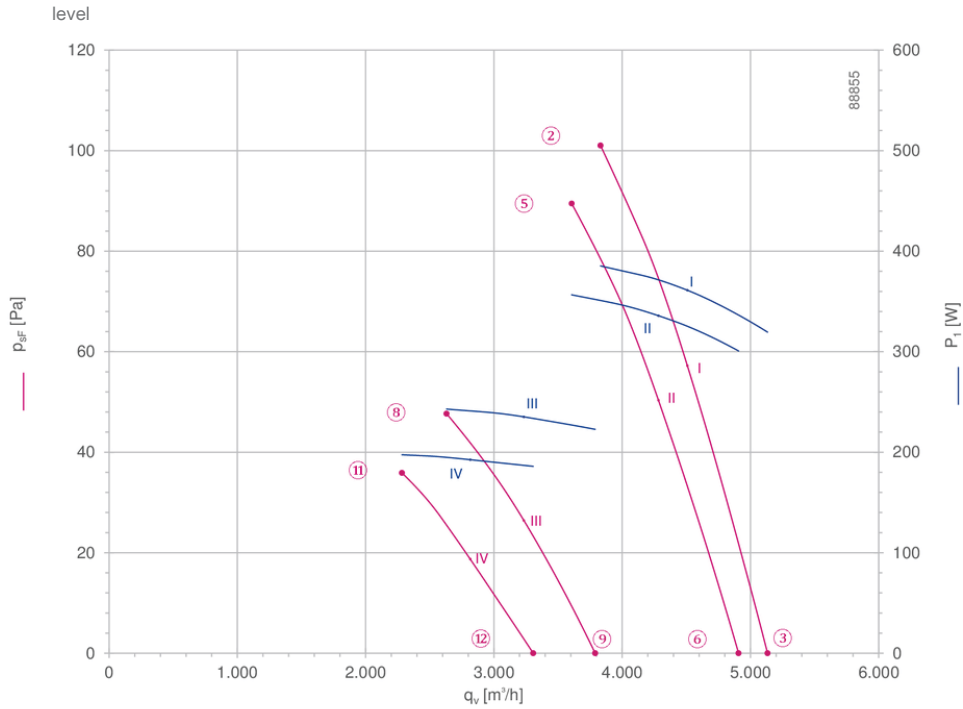


I = 460 V, II = 400 V, III = 265 V, IV = 230 V

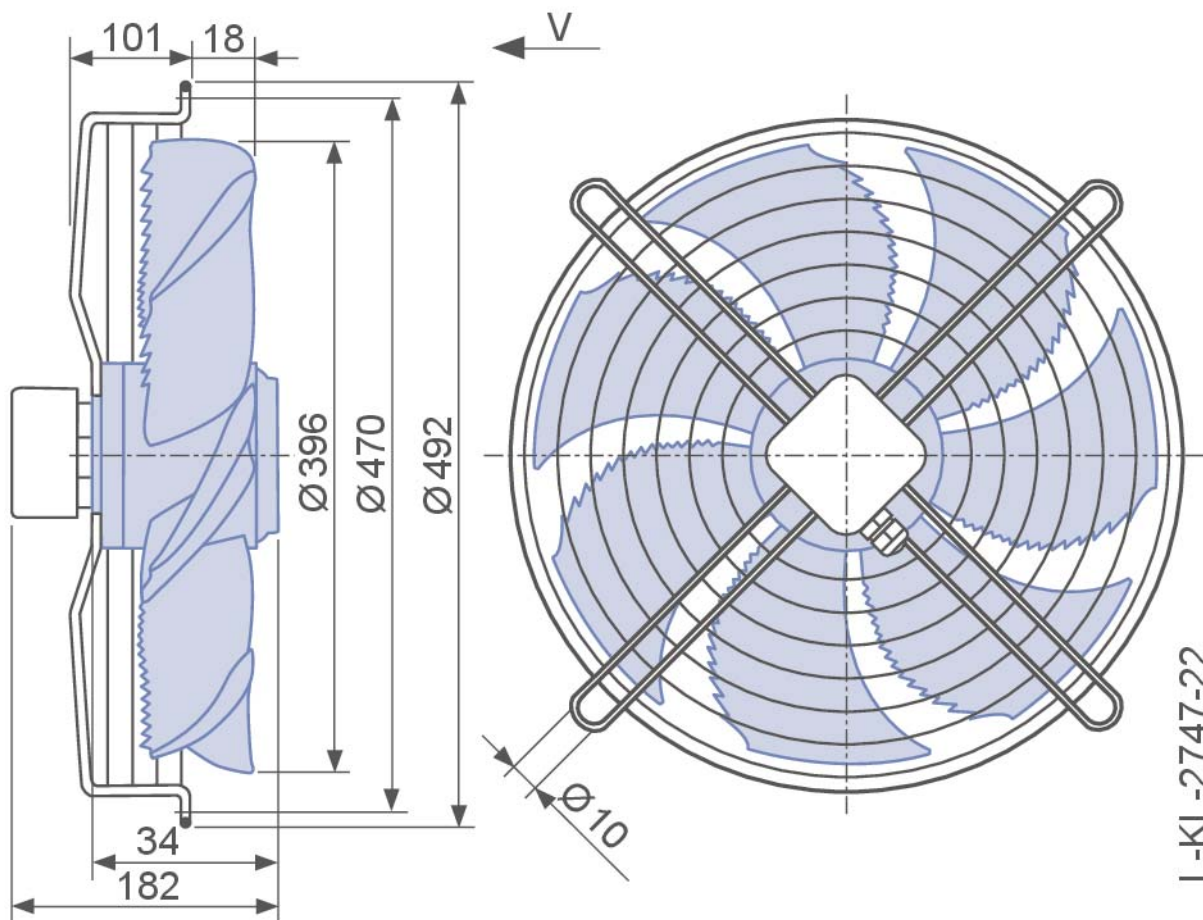


Operating point	②	③	⑤	⑥	⑧	⑨	⑪	⑫
Characteristic curve	I	I	II	II	III	III	IV	IV
Connection	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Voltage V	460	460	400	401	265	265	230	230
Motor input power W	390	320	360	300	240	220	200	190
Current A	0,58	0,50	0,58	0,50	0,60	0,54	0,56	0,52
Speed min <sup>-1</sup>	1570	1620	1470	1550	1090	1210	940	1050
Suction side sound power dB(A)	76	78	74	77	67	71	64	68

# The Royal League Die Königsklasse



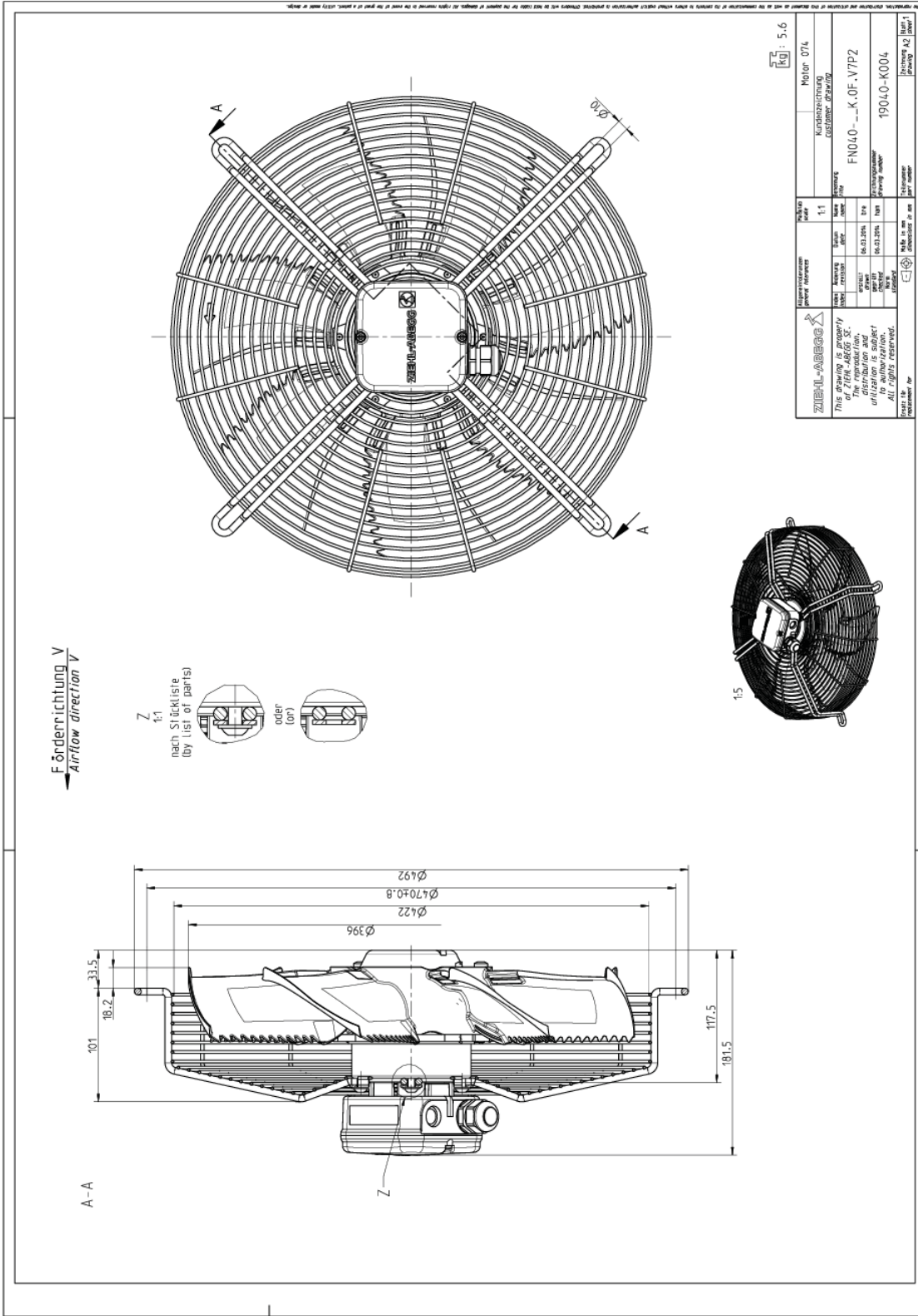
### 3. Drawing





# The Royal League

## Die Königsklasse



Dimensions in mm  
Shown drawing is just to show the dimensions of the fan.

### 4. Connection diagram

#### Connection diagram

**1360-108XA**

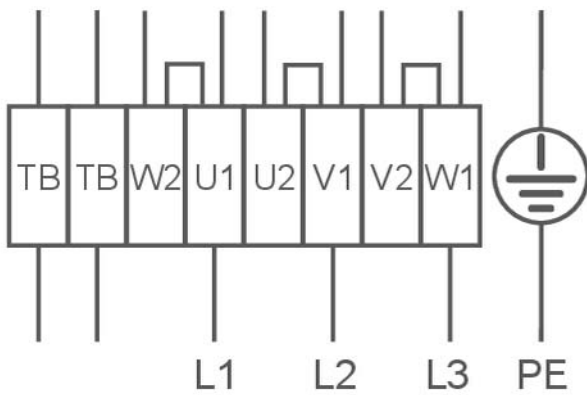
#### Description

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

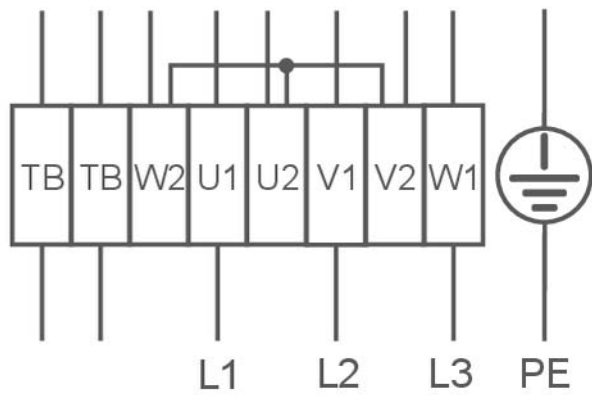
#### Cable colours

U1	brown
V1	blue
W1	black
U2	red
V2	grey
W2	orange
TB	white

#### High speed/D-connection



#### Low speed/Y-connection





## 5. EU-Declaration of conformity

### EC-Declaration of conformity

as defined by the EC Low Voltage Directive 2006/95/EC, the EMC guideline 2004/108/EC, as well as ErP guideline 2009/125/EG.

**The type of machinery:**

- External rotor motor MK.., MW..
- Axial fan FA.., FB.., FC.., FE.., FF.., FS.., FT.., FH.., FL.., FN.., VR.., VN.., ZC.., ZF.., ZN..
- Centrifugal fan RA.., RD.., RE.., RF.., RG.., RH.., RK.., RM.., RR.., RZ.., GR.., ER..

**Motor type:**

- Asynchronous internal or external rotor motor with integrated frequency inverter for EDP system
- Electronically commutated internal or external rotor motor with integrated EC controller for EDP system

is developed, designed and manufactured in accordance with the EC Directives 2006/95/EC, 2004/108/EC and 2009/125/EC, on the own responsibility of

**ZIEHL-ABEGG SE**  
Heinz-Ziehl-Strasse  
D-74653 Kuenzelsau

**The following standards are applied:**

EN 60034-1:2010+Cor.:2010, EN 60204-1:2006, EN 60529:1991 + A1:2000, EN 61000-6-4:2007, EN 61000-6-2:2005

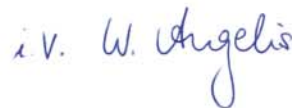
Compliance with the ErP Directive 2009/125/EC does not refer to external rotor motors MK.., MW..

Compliance with the EMC Directive 2004/108/EEC only applies to this product if it is connected according to the operating instructions. If this product is integrated in a system or complemented and operated with other components (e.g., switching and control equipment), the manufacturer of or company operating the overall plant is responsible for compliance with the EMC Directive 2004/108/EEC.

The complete technical documentation is available.

22.11.2013

Dr. W. Angelis - Technical Director Air Movement  
Division



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**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**

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](#).