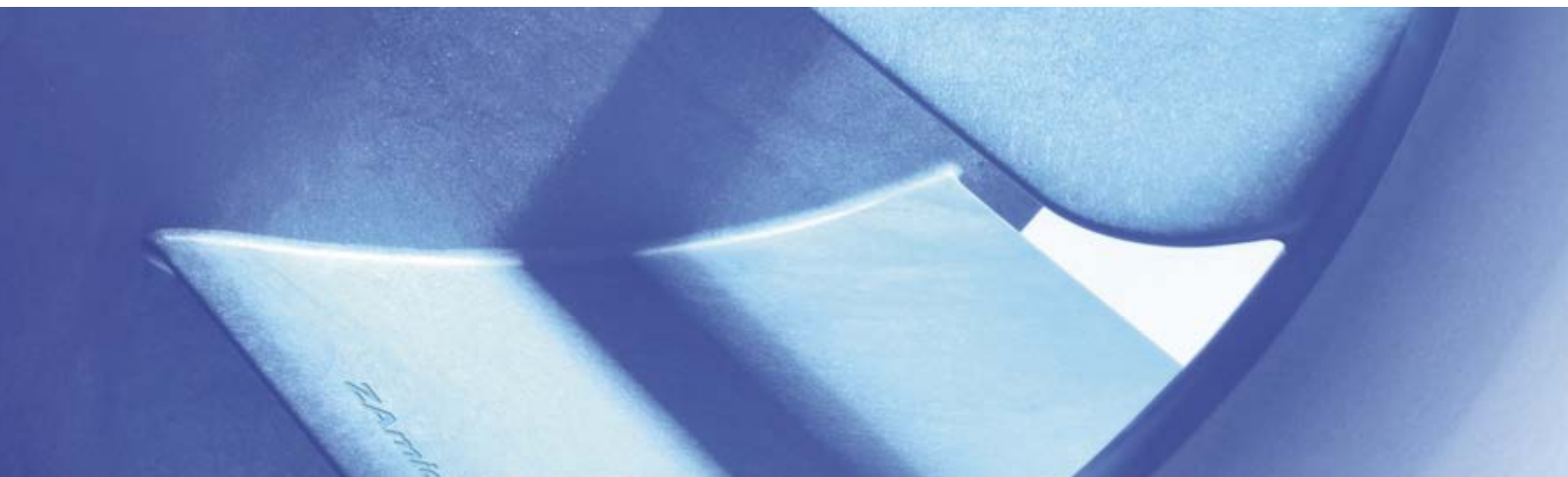


Movement by Perfection



The Royal League in ventilation, control and drive technology



[Product documentation](#)

Type  
**RH25C-6IK.BA.CR**

Article number  
**174659**

## Product documentation

Customer

Project  
Station One

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Type  
RH25C-6IK.BA.CR

Article number  
174659



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### 1. Product specification

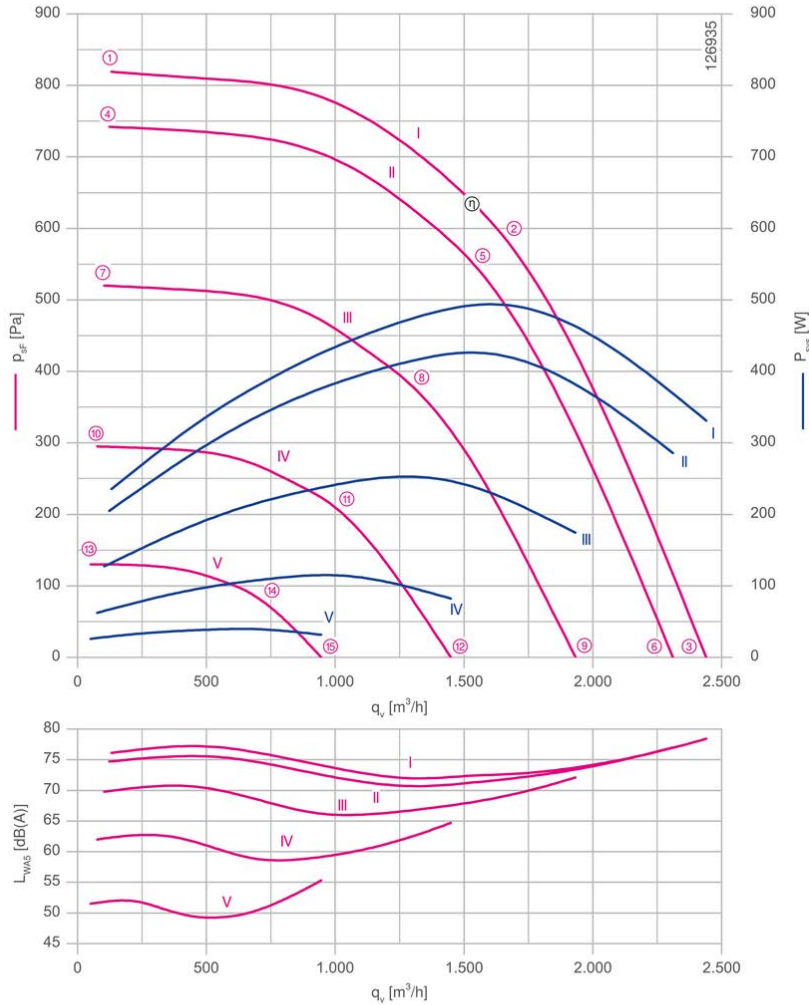
#### Technical data

<b>Article number</b>	174659
<b>Type</b>	RH25C-6IK.BA.CR
<b>Designation</b>	Single inlet impeller with backward curved blades.
<b>Rated values</b>	DC110V Hz P <sub>1</sub> 0,50kW 4,40A 3030min <sup>-1</sup> 55°C
<b>Electrical connection</b>	Integrated controller
<b>Min. operating temperature °C</b>	-35***
<b>Control</b>	ECblue basic (inclusive MODBUS)
<b>Painting stator</b>	Stator unpainted
<b>coating rotor</b>	Rotor with 2 coatpaint
<b>Colour sheet rotor</b>	1K RAL 5002 (ultramarine blue)
<b>Material impeller</b>	Impeller made of ZAMid
<b>Painting impeller</b>	unpainted
<b>Colour impeller</b>	black
<b>Connection diagram</b>	1360-384
<b>Installation position</b>	H/Vu/Vo
<b>Motor protection</b>	integrated active temperaturemanagement
<b>Type of protection</b>	IP54
<b>Thermal class</b>	Thermal class 155
<b>Impregnation</b>	Moisture and hot climate protection
<b>Balancing</b>	6,3
<b>Quality of bearings</b>	ball bearing with long-time lubrication
<b>Special bearing</b>	Ballbearing in special design
<b>Field of application</b>	Conceived for individual application in railways. Bahnbetrieb.
<b>Labelling UL/CSA</b>	zzz_xx
<b>Other</b>	Connecting elements made of stainless steel.
<b>Other</b>	Impeller parts secured with Loctite.
<b>Weight kg</b>	4,80
<b>ErP Data</b>	Efficiency $\eta_{statA}$ : 62,5 % Efficiency grade: $N_{actual} = 76,3 / N_{target} = 62^*$ *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

Measured with full nozzle without inlet guard grille



I = 3030/min, II = 2890/min, III = 2420/min, IV = 1820/min, V = 1210/min

Operating point	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮
Characteristic curve	I	I	I	II	II	II	III	III	III	IV	IV	IV	V	V	V
Connection	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Voltage	V	110	110	110	110	110	110	110	110	110	110	110	110	110	110
Current	A	2,10	4,40	3,00	1,85	3,90	2,60	1,15	2,30	1,60	0,56	1,05	0,74	0,24	0,36
Speed	min <sup>-1</sup>	3030	3030	3030	2890	2890	2890	2420	2420	2420	1820	1820	1820	1210	1210
Suction side sound power level	dB(A)	76	73	78	75	71	77	70	67	72	62	59	65	52	50

## 3. Drawing

ohne Lüfterrad und Düse dargestellt  
shown without impeller and inlet ring

Masse und Darstellung ohne Befestigungsteile  
weight and illustration without mounting parts

Typ type	MOTOR motor	B2	DA	DD	DL	DN	D1_	E1	H	H1	H2	H5	H6	H7	U	Z	W	MIR_MASSE kg	GES_MASSE kg
RH25C-6IK.BA.CR	MK090-25	76.0	277.0	290.0	163.7	290.0	201.8	257.0	233.5	47.0	113.5	142.4	186.9	118.4	2.5	6	60.0	4.8	5.5
RH28C-6IK.BA.CR	MK090-25	85.0	303.0	322.0	181.8	322.0	225.3	283.0	250.5	52.0	126.0	154.9	203.9	132.0	3.0	6	60.0	5.2	6.0
RH31C-6IK.BA.CR	MK092-25	95.0	343.0	360.0	203.8	360.0	253.2	317.0	271.0	58.5	140.0	168.9	224.4	146.5	3.0	8	45.0	5.6	6.7
RH31C-6IK.BD.CR	MK090-40	95.0	343.0	360.0	203.8	360.0	253.2	317.0	271.0	58.5	140.0	168.9	224.4	146.5	3.0	8	45.0	6.2	7.3

Bestellung schematisch gezeichnet -  
Kopierungen vorbehalten  
schematic drawing image -  
subject to modifications

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obligation of these documents, application and communication of these contents are binding, unless otherwise expressly agreed.

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

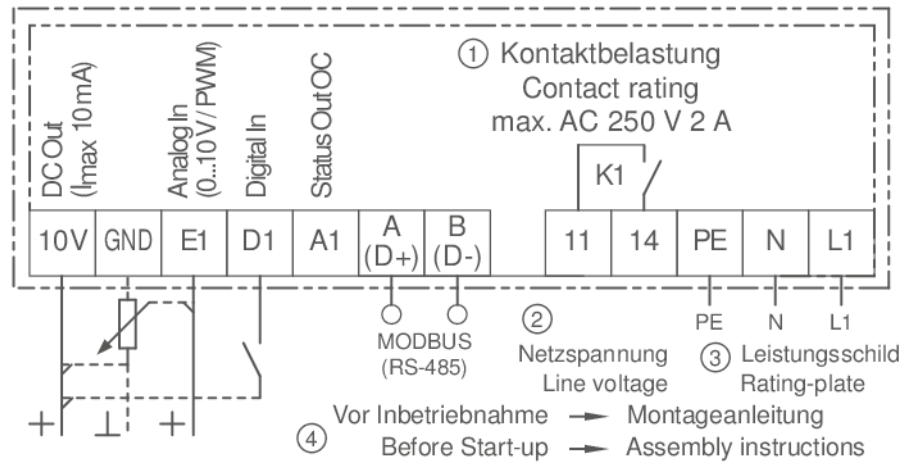
### 4. Connection diagram

1360-384



⑤ Vor Nässe und Schmutz schützen  
Keep dry and protect from dirt

00298951 / 16.11.2011



### 5. General product and handling description

#### **Operating conditions:**

The product is designed for conveying non-aggressive, non-explosive, non-fluid, non-adherent, non-abrasive, dust and article-free gaseous media, air-like mixtures und air.

For AC standard fans: The product only works properly with a suitable frequency converter with integrated all-pole active sine filter. The product can be damaged if it's used without an all-pole sine filter between the motor and the frequency converter. Voltage peaks and voltage fluctuations can destroy the product.

To provide error-free operation and prevent damage to the product, the product may only be operated in the admissible operating area according to the above mentioned data sheets and air performance curves.

The formation of small rusty spots during usage in accordance with the product specification and this general product and handling description can occur and does not affect the functionality of the product.

The product must never be used in obviously damaged condition.

Continuous intentional change of direction of rotation is not allowed.

Reverse current braking is not allowed.

#### **Assembly:**

The assembly has to meet the requirements of the assembly instructions to enable error-free operation.

#### **Commissioning:**

Commissioning should be done by appropriately qualified technical personnel according to the specifications in the operating and assembly instructions.

#### **Documentation:**

In case of defective parts or products or in case of any warranty, it may be necessary to analyse the root cause of the defect.

Therefore, ZIEHL-ABEGG may ask for documentation of proper life-cycle handling according to the instructions and the general product and handling description. ZIEHL-ABEGG may ask for appropriate documentation records in order to assess root cause of the defect.

#### **Maintenance and inspection:**

Any maintenance and inspection should be carried out in accordance with the operating and assembly instructions.

#### **Packaging, storage and transport:**

Packaging, storage and transport should be carried out in accordance with the operating and assembly instructions to avoid product damage.

Condensate formation inside the packaging can lead to formation of rust.

Long-term storage of the product should take place in dry environment. Shocks during storage can lead to product damage. Bearing streams should be avoided.

#### **Spare parts:**

In all warranty cases repairs has to be carried out by ZIEHL-ABEGG. In all other cases spare parts shall meet the specifications of the original installed parts to ensure error-free operation. Use of original ZIEHL-ABEGG spare parts is recommended.

#### **Specific application/Intended purpose:**

Suitability of the product for the specific application is beyond control of ZIEHL-ABEGG. Therefore, customer is necessarily obliged to test and approve the product in the application. ZIEHL-ABEGG will not warrant or guarantee any suitability of the product for customer's specific application or intended purpose.

# 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](#).