Operating instructions
Rotary vane vacuum pumps and compressors
Oil-Lubricated, water cooled

DIN EN ISO 9001
001929 (+FC)

DKW 4

Safety notices

Please note the accident prevention regulations VBG 16 Compressors, in particular section IIIc 'Erection', and IV "Operating" and VBG 4 "Electrical systems and equipment".

High temperatures are created by gas compression: Secure the traffic area by means of suitable protection so people are not endangered by hot surfaces.

Operation and working conditions

The pump works according to the rotary vane compressor principle.

The pump is intended for the production of vacuum or overpressure. Protect against the ingress of mud or water. Otherwise, there is a risk of destruction.
When pumping flammable gases, the flashpoint must be above 260°C. Fit the suction and pressure nozzle with flashback arresters.

The oil pump (23, Fig.2) works automatically. It supplies the working chamber of the pump with lubricating oil via a pipe system (20, Fig.1) The fixed displacement of the pump changes proportionally with the speed of the drive of the pump. Do not disassemble the oil pump. It is designed as a piston pump. It is driven directly from the rotor shaft of the pump.

The temperature of the sucked in air cannot exceed 40°C; there is danger of overheating and the viscosity of the lubricating oil being too low.

The pump is cooled with water. This cooling water washes the cylinder wall. The most favourable cooling water outlet temperature ranges from 60 to 70°C. If there is a danger of frost, add antifreeze to the cooling water. After the end of the frost period, the antifreeze can remain in the cooling water. A change in summer is not required.

A suction filter (F, Fig. 6) is available for the pump. It can be mounted directly on the pump. The filter consists of a screen star cartridge (F, Fig. 7).

The identification plate of the pump (T, Fig. 3) contains the technical data and the serial number for technical queries. Therefore, do not remove it or spray over it with paint.

Installation and drivetrain

Install the pump horizontally in the carriage and in an easily accessible position.

The following must be easily accessible for maintenance:
- Oil inlet (1, Fig. 3)
- Start oiler (Z, Fig. 3)
- Rinsing opening (6, Fig. 3)
- Suction filter (F, Fig. 6)
- Oil level indicator (2, Fig. 9).

Drive: Transfer of torque via a coupling, drive shaft, v-belt or directly by hydraulic motor. No axial forces should be transferred on the pump shaft.

Coupling: The shafts must be aligned flush. Observe the correct distance between the two coupling halves.

Drive shaft: Max. tilt up to 15°. Designed as s a splined shaft.

V-belts: Align the two washers correctly. Belts must be able to be retensioned or maintain a constant tension by use of a roller. The V-belt pulley on the pump should have a minimum diameter of 200 mm. Otherwise, the forces on the drive-side pump bearing (Fig.16-17) are too high. Shaft diameter of pump: 42 mm k6 (tolerance +0.003 to +0.018 mm).
V-belt pulley on the pump: Hole 42mm h7 (tolerance 0 to +0.025 mm)
Secure the pulley on the splined key against axial displacement. The best way to do this is with a screw with a cup point.

Connection piping: Connect suction tube at S (Fig. 5) and pressure line at D (Fig. 5). Provide tubes with a diameter at least according to the connection threads. Tubing cross-sections that are too narrow increase the suction times and strain on the pump. When the tubing length is over 2m, use the next larger diameter. Implement direction changes with large elbows.

Before assembling, thoroughly clean the line inside of pipes from debris and contamination (e.g. hammer welding beads, welding burrs or rust). Install a separation tank (with lateral opening in the lid) with a drain tap at the lowest point of the suction air pipe.

To prevent oversuction of liquid or foam in the intake air pipe, install a ball check valve at the main mud storage tank.

Suction filter F (Fig. 6) on the pump, or install shortly before the vacuum port. This better protects the pump.

To control the vacuum height: Install a spring vacuum meter.
To prevent overload to the pump in continuous operation under maximum vacuum: Install a vacuum safety valve with connection thread R2".

Compressed air line connections: Install an appropriately sized check valve. For installation of thermometer: Weld a bushing R 1/2" in the line near to the compressed air opening of the pump.

To drain accumulated water: Install a drain valve at the lowest point of the compressed air line. To prevent violation of the maximum permissible pressure: Install a safety valve and do not allow it to be shut off from the compressed air line.

The air, along with lubricating oil residue, exits from the pressure nozzle of the pump.
To prevent contamination of the ground: Install a separation tank for lube oil and condensate.

The air flowing from the pump causes low-frequency noises. Especially at higher vacuum, the connected pipe system is stimulated to the emission of strong structure-borne noise. To prevent this, install mufflers vertically between the pressure nozzle of the pump and the four-way valve. Lube oil residues and condensate cannot settle.

Install a Bourdon tube gauge on the compressed air line.
Observe the following when using spring-loaded valves in the suction or compressed air line: When flowing off, the final settling pressure is above the valve response pressure. However, the load and power consumption of the pump are dependent on the actual end pressure.

28100026000 01/18

Gebr. Becker GmbH • Hölker Feld 29 - 31 • D-42279 Wuppertal • Tel. (02 02) - 6 97 - 0 • Fax (02 02) - 66 08 55
E-mail: info@becker-international.com • http://www.becker-international.com

Cooling of the pump: Circulating water cooling with natural water circulation or with circulation pump and radiator.

Natural water circulation without circulation pump (Fig.11): Simple cooling by exploiting different specific weight of both cold and warm water. The size of the water tank is dependent on the suction time: The lower the cooling time, the larger the tank should be. The cooling time must ensure a shortfall of 35°C in the system.

The connecting pipes between the pump and the water tank must be large enough.

Antifreeze in the cooling water, even in summer: Water tank should be 20% larger.

Water cooling with circulation pump and radiator (Fig.12) suitable for continuous operation: Required:
- smaller water tank
- cooling water circulation pump
- water cooler (e.g. standard car radiator)
- fan in front of the radiator to blow air through the radiator.

Drive the cooling water circulation pump via a single-groove V-belt drive. Fix the fan on the v-belt pulley of the pump or drive with DC motor: Energy supply with the alternator on the vehicle. The speed of the fan drive with DC motor may be higher than with the V-belt pulley: The air quantity and pressure of the cooling air are then much greater.
Arrangement of the fan on the second shaft end of the cooling water circulation pump (higher speed than pump): Only a V-belt drive is required (direct current motor not needed). Select a cooler for an ambient air temperature of 30°C .

Antifreeze in the cooling water, even in summer: Water tank should be 20% larger.

Connect the hot water outlet pipe on the top of the pump housing (4, Fig. 5).
Connect the cold water supply line to the pump housing at the bottom (5, Fig. 5).

Commissioning

Fill with oil: The pump is delivered without oil. It is therefore essential to fill oil before commissioning; unscrew the filler cap (1 or 1.1, Fig. 4) and fill SHELL Vitrea 320 pump oil to overflow. When outside temperatures are below 5°C, the SHELL Vitrea 220 pump oil is suitable. Preheat the oil to start oil pumping.
The delivery rate of the lubricating oil pump is determined by the speed of the pump.

Connect the pump to the cooling water circuit (Fig.11-12) and fill with coolant. Bleed via the unused upper connection.

Open all valves and set any existing four-way valve to suction mode.

With the vehicle engine running, engage the clutch briefly and check the direction of rotation of the pump. Rotation direction arrows are cast on the pump housing (P, Fig. 8).

Fill the **Start-up oiler** (3, Fig.4) with oil and put the tap on the start-up oiler in the vertical position: Oil pump can suck. Repeat this process three times while the pump is running. The lubrication condition inside the pump improves after a while. For additional oiling, place the cock on the start-up oiler in horizontal position.

Initial commissioning: Shutdown the pump after 5 minutes. Thoroughly clean all built-in filters from intake of contamination (rust, welding beads, etc.).

Function check of pressure safety valve: Set the four-way valve to pressure mode position. Close the valve on the main mud storage tank. Allow the pump to run at normal speed. Excess compressed air flows out via the safety valve. Read off the pressure gauge in this condition. The reading should not be above the permissible operating pressure for the main mud storage tank.

Monitoring

Refill the oil: If the oil level is at the MIN mark of the oil level indicator. Pumps with an oil level switch indicate refilling with a warning light. The warning light goes out after refilling.
The multiple, daily checking of the oil level can be omitted if the oil tank is replenished daily.
If not refilled in a timely manner: The oil pump has sucked in air. Release the lubrication lines at the lubrication point and reconnect when oil comes out without air bubbles.

Cooling water circulation: The maximum cooling water temperature is 70°C.
If the temperature rise is too high : Check the cooling water quantity for water loss.
If there is a danger of frost: Check the frost safety of the cooling water.
Add sufficient antifreeze to the cooling water.

Maintenance

Daily maintenance work:

- Check the oil level in the oil tank; check the control lamp.
- Check the temperature in the cooling water circuit.
- Check the V-belt tension.
- Drain the separation tank.
- At the end of the day, flush the pump with flushing oil.
- Clean the filter element of filter F.
- Prime with additional oil before 1st commissioning.

Weekly maintenance work:

- Check the function of the safety valve.

Oversuction of mud or water: If there is even a presumption that mud or water is sucked into the pump in spite of installed safety devices, flush immediately. Unscrew the plugs at the end of the rinsing opening (6, Fig. 3) to do this. Allow diesel oil or petroleum (approximately 1 -2l) to run into the rinsing opening while the pump is running slow. When you flush, the pump should suction-in and blow out without hindrance. After completion of the rinsing process, you must relubricate with 1/2 l normal lube oil.

Diesel oil does not protect the inside of the cylinder against moisture: Metal parts can oxidise.

To ensure a long operating life: Rinse daily.

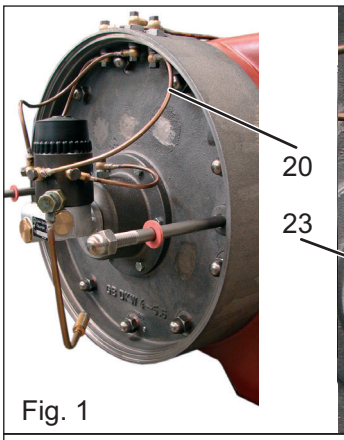


Fig. 1



Fig. 2

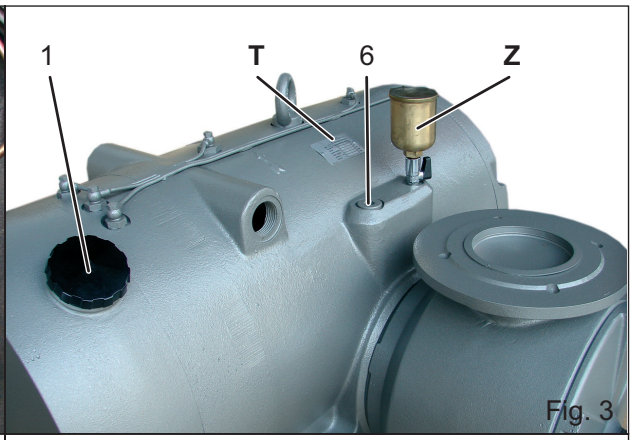


Fig. 3

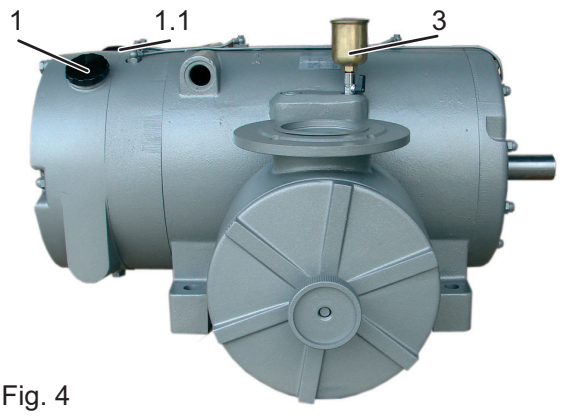


Fig. 4

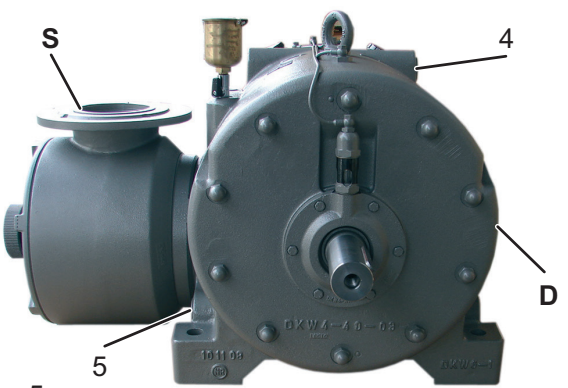


Fig. 5

Fig. 6

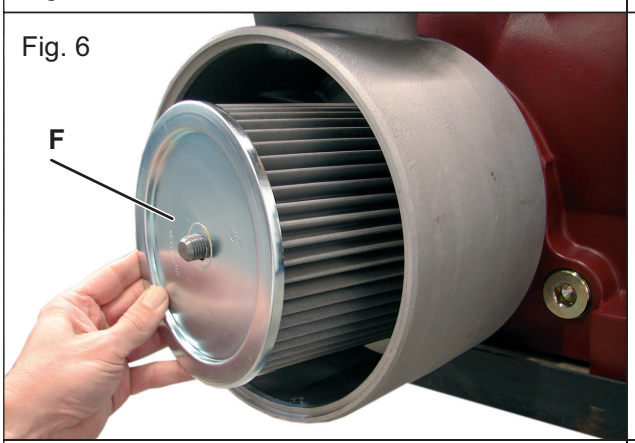




Fig. 7

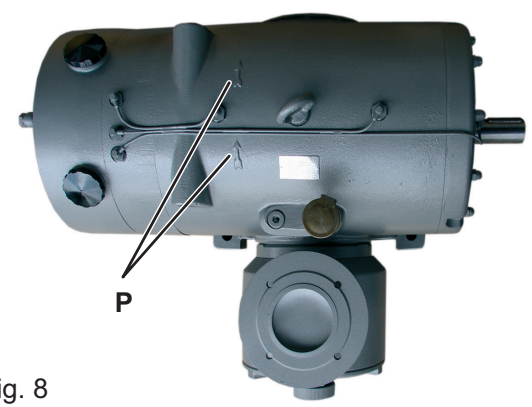


Fig. 8

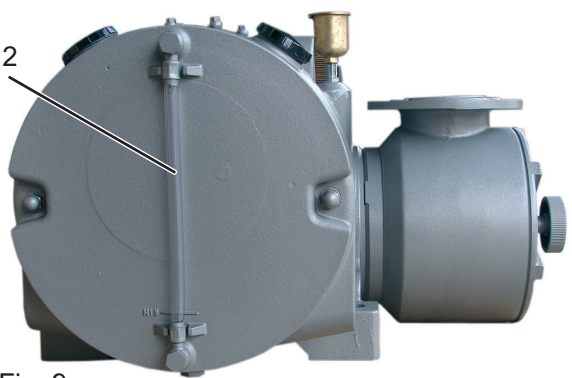


Fig. 9

Gebr. Becker GmbH • Hölker Feld 29 - 31 • D-42279 Wuppertal • Tel. (02 02) - 6 97 - 0 • Fax (02 02) - 66 08 55
E-mail: info@becker-international.com • http://www.becker-international.com

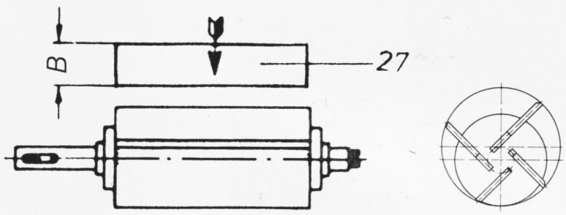


Fig. 10

Natural circulation (thermo-syphon cooling)

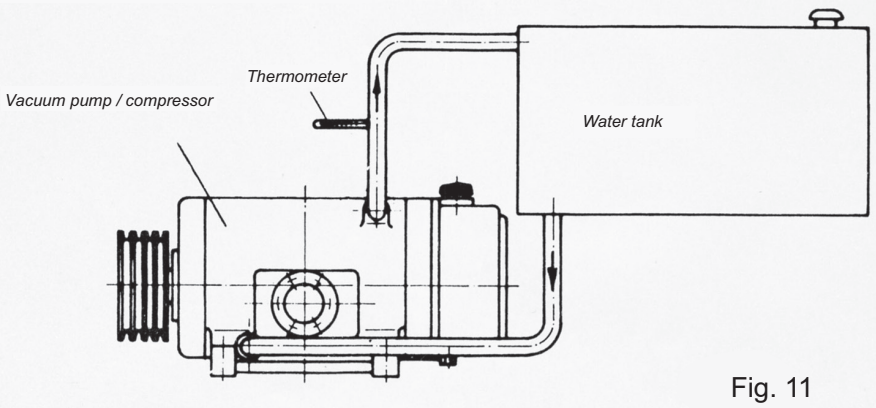


Fig. 11

Forced circulation
(Fan on the compressor shaft)

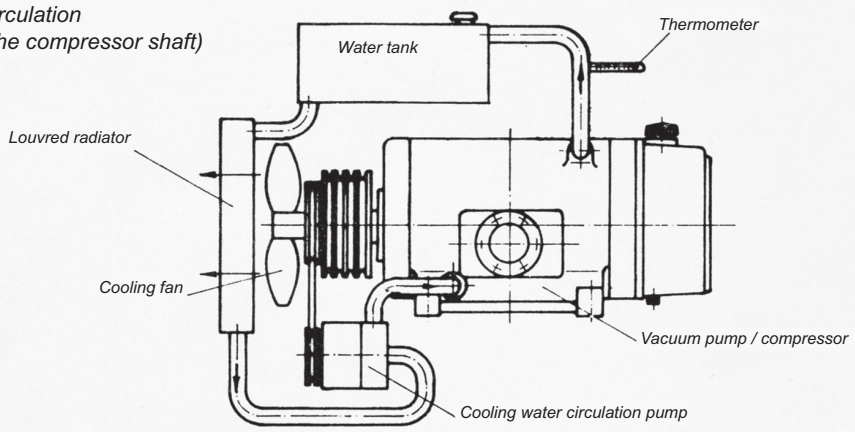


Fig. 12

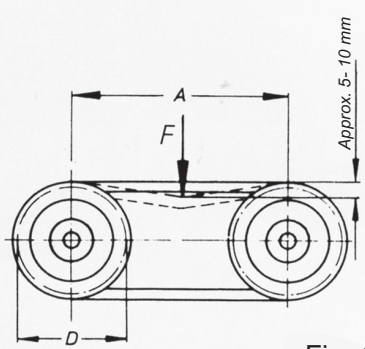


Fig. 13

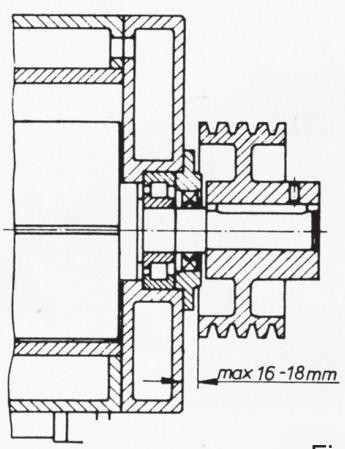


Fig. 14

Gebr. Becker GmbH • Hölker Feld 29 - 31 • D-42279 Wuppertal • Tel. (02 02) - 6 97 - 0 • Fax (02 02) - 66 08 55
E-mail: info@becker-international.com • http://www.becker-international.com

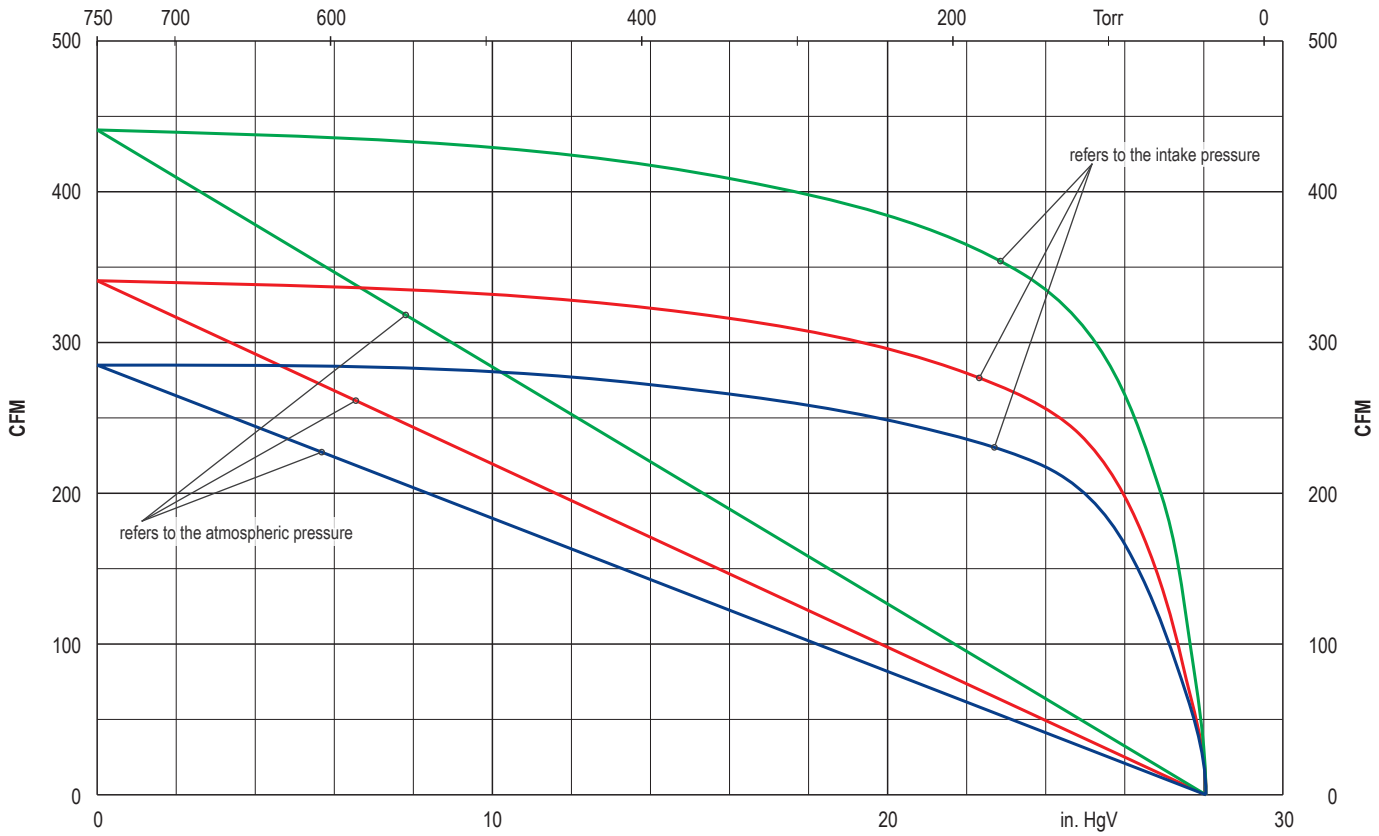
Technical data

Type			Unit	DKw F4	
Speed			1/min	1000	1500
Suction capacity at atmospheric pressure			m³/h	480	750
Suction capacity at 0.6 bar vacuum			m³/h	450	700
Suction capacity at 0.8 bar vacuum			m³/h	430	650
Delivery quantity at 0.5 bar overpressure			m³/h	455	725
Power requirement at 0.9 bar vacuum			(kW)	10.2	16.8
Power requirement at 0.5 bar vacuum			(kW)	11.0	21.0
Max. load	Vacuum	Permanent operation Short-term operation up to 25 minutes.	bar	-0.75 -0.9	-0.75 -0.9
	Pressure		bar	1.0	1.0
Heat quantity to be dissipated with cooling water at 0.9 bar vacuum			kcal/h	4816	7224
			kJ/h	20163	30245
Min. bore diameter of the cooling water lines			Pipe thread Inches	R 1“	R 1“
Recommended water tank contents with natural cooling water circulation (Thermo-syphon cooling) at running time 0.5 h			L	50	80
At run time 1.0 h			L	100	160
At run time 1.5 h			L	150	240
Recommended water tank contents with water cooling with cooler and forced circulation			L	10	10
Circulation pump			L/min	10	10
Lubricating oil consumption			cm³/h	118	178
Oil tank contents			cm³	9500	9500
Oil container filling is sufficient for ... operating hours			h	72	47
Recommended minimum diameter of the air line connections on the suction and pressure side			Nominal diameter mm	100	100
			Pipe thread Inches	4“	4“
Connection widths available at the compressor			DIN 2501	DN 100 PN 6	DN 100 PN 6
Mass moment of inertia i			Nm²	4.7	
Weight			kg	260	
Minimum valve width			mm	63	

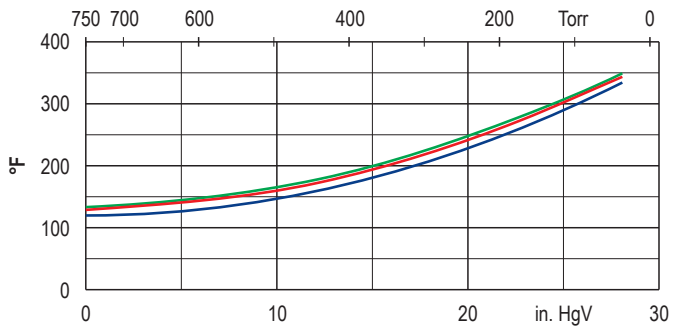
Gebr. Becker GmbH • Hölker Feld 29 - 31 • D-42279 Wuppertal • Tel. (02 02) - 6 97 - 0 • Fax (02 02) - 66 08 55
E-mail: info@becker-international.com • http://www.becker-international.com

rpm	CFM	in. HgV / Torr for continuous operation	in. HgV / Torr for short time operation (≤ 25 min.)	hp	dB(A) DIN EN ISO 3744 (KpA = 3 dB(A))
970	285	22.1 / 187.5	26.6 / 75.0	14.8	80
1160	341	22.1 / 187.5	26.6 / 75.0	17.7	82
1470	441	22.1 / 187.5	26.6 / 75.0	24.8	84

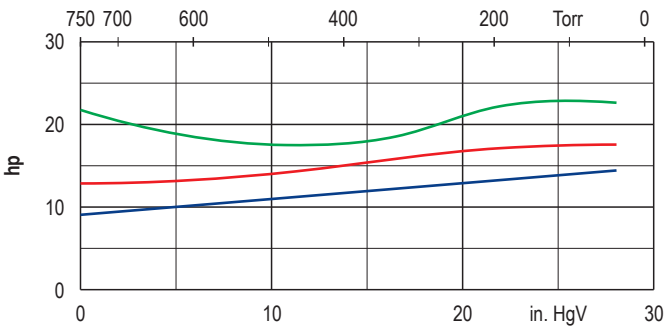
Suction air rate



Exhaust air temperature



Motor shaft power



970 rpm
1160 rpm
1470 rpm

1) relative
2) absolute
- Reference data (atmosphere): 0 in. HgV, 68°F
- Tolerance: ±10 %

EC Declaration of Conformity

according to 2006/42/EC (Machinery Directive)

Manufacturer: Gebr. Becker GmbH
Hölker Feld 29-31
D-42279 Wuppertal

Documentation manager: Dr. Rudolf Bahnen

We hereby declare that the machines of the model series:

DKW 4
DKW 6
DKW 7

conform with all pertinent regulations of the EC Machinery Directive 2006/42/EC and the EMC Guideline 2014/30/EU.

The following harmonised norms were applied:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28 April 2017

Ulrich Wilkesmann, Managing Director Sales
Dr.-Ing. Sven Hilfert, Managing Director Engineering

☐ Original Declaration of Conformity
☑ Translation of the Declaration of Conformity

GB

EG-Konformitätserklärung

nach 2006/42/EG (Maschinenrichtlinie)

Hersteller: Gebr. Becker GmbH, Hölker Feld 29-31, 42279 Wuppertal
Dokumentationsbevollmächtigter: Dr. Rudolf Bahnen

Hiermit erklären wir, dass die Maschinen der Baureihen:

DKW 4
DKW 6
DKW 7

mit allen einschlägigen Bestimmungen der EG-Maschinenrichtlinie 2006/42/EG und der EMV-Richtlinie 2014/30/EU in Übereinstimmung sind.

Folgende harmonisierte Normen wurden angewendet:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28. April 2017

Ulrich Wilkesmann, Managing Director Sales
Dr.-Ing. Sven Hilfert, Managing Director Engineering

☑ Original-Konformitätserklärung
☐ Übersetzung der Konformitätserklärung

DE

Déclaration CE de conformité

selon la Directive Machines 2006/42/CE

Contructeur: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Mandataire de la documentation: Dr. Rudolf Bahnen

Nous déclarons par la présente que les machines des séries:

DKW 4
DKW 6
DKW 7

sont conformes aux dispositions applicables selon la Directive Machines 2006/42/CE et la Directive CEM 2014/30/UE.

Les normes harmonisées suivantes ont été appliquées en particulier:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, le 28 avril 2017

Ulrich Wilkesmann, Directeur général des ventes
Dr.-Ing. Sven Hilfert, Directeur général de technique

☐ Original de la Déclaration CE de conformité
☑ Traduction de la Déclaration CE de conformité

FR

Dichiarazione di conformità CE

ai sensi della Direttiva Macchine 2006/42/CE

Fabbricante: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Responsabile per la documentazione: Dr. Rudolf Bahnen

Con la presente si dichiara che le macchine serie:

DKW 4
DKW 6
DKW 7

soddisfano tutti i requisiti fissati dalla Direttiva Macchine 2006/42/CE e dalla Direttiva EMC 2014/30/UE.

Sono state applicate inoltre le seguenti norme armonizzate:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28 aprile 2017

Ulrich Wilkesmann, Direttore generale vendite
Dr.-Ing. Sven Hilfert, Direttore generale tecnico

☐ Originale della dichiarazione di conformità CE
☑ Traduzione dichiarazione di conformità

IT

Declaración de conformidad CE

según directiva de máquinas 2006/42/CE

Fabricante: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Responsable de la documentación: Dr. Rudolf Bahnen

Por la presente declaramos que las máquinas de las series:

DKW 4
DKW 6
DKW 7

cumplen todas las disposiciones pertinentes de la directiva de máquinas europea 2006/42/CE y de la directiva de CEM 2014/30/UE.

Se han aplicado las siguientes normas armonizadas:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28 de abril de 2017

Ulrich Wilkesmann, Director de Ventas
Dr.-Ing. Sven Hilfert, Director Gerente Técnico

☐ Declaración de conformidad original
☑ Traducción de la declaración de conformidad

ES

Declaração de conformidade CE

conforme Directiva de Máquinas 2006/42/CE

Fabricante: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Responsável pela documentação: Dr. Rudolf Bahnen

Mediante esta declaramos que as máquinas das séries:

DKW 4
DKW 6
DKW 7

estão em conformidade com todos os regulamentos aplicáveis da Directiva de Máquinas 2006/42/CE e da Directiva de CEM 2014/30/UE.

As seguintes normas harmonizadas foram aplicadas:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28 de Abril de 2017

Ulrich Wilkesmann, Director de Tecnologia
Dr.-Ing. Sven Hilfert, Director de Tecnologia

☐ Original da Declaração de conformidade CE
☑ Tradução da Declaração de conformidade CE

PT

EG-conformiteitsverklaring

conform 2006/42/EG (machinerichtlijn)

Fabrikant: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Documentatiegemachtigde: Dr. Rudolf Bahnen

Hiermee verklaren wij dat de machines van de bouwseries:

DKW 4
DKW 6
DKW 7

in overeenstemming zijn met alle geldende bepalingen van EG-machinerichtlijn 2006/42/EG en EMV-richtlijn 2014/30/EU.

De volgende geharmoniseerde normen werden toegepast:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28 april 2017

Ulrich Wilkesmann, Managing Director Sales
Dr.-Ing. Sven Hilfert, Managing Director Engineering

☐ Originele-conformiteitsverklaring
☑ Vertaling van de conformiteitsverklaring

NL

EU-konformitetserklærin

i henhold til maskindirektiv 2006/42/EF

Producent: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Dokumentationsansvarlig: Dr. Rudolf Bahnen

Hermed erklærer vi, at maskinerne i serien:

DKW 4
DKW 6
DKW 7

er i overensstemmelse med alle relevante bestemmelser i EU-maskindirektiv 2006/42/EF og EMC-direktiv 2014/30/EU.

Der blev anvendt følgende harmoniserende normer:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28. april 2017

Ulrich Wilkesmann, Administrerende direktør salg
Dr.-Ing. Sven Hilfert, Administrerende direktør af teknologi

☐ Original-konformitetserklæring
☑ Oversættelse af konformitetserklæringen

DK

EG-försäkran om överensstämmelse

enligt maskindirektiv 2006/42/EG

Tillverkare: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Dokumentationsförvaltare: Dr. Rudolf Bahnen

Härmed försäkrar vi att maskiner i komponentserien:

DKW 4
DKW 6
DKW 7

uppfyller alla gällande normer i EG-maskindirektiv 2006/42/EG och EMV-riktlinje 2014/30/EU.

Följande harmoniserade normer har använts:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28 april 2017

Ulrich Wilkesmann, Verkställande direktör försäljning
Dr.-Ing. Sven Hilfert, Verkställande direktör teknik

☐ Försäkran om överensstämmelse i original
☑ Översättning av försäkran om överensstämmelse

SE

EY-vaatimustenmukaisuusvakuutus

konedirektiivin 2006/42/EY mukaisesti

Valmistaja: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Dokumentaatiosta vastaava henkilö: Dr. Rudolf Bahnen

Vakuutamme täten, että seuraavin mallisarjoihin kuuluvat koneet:

DKW 4
DKW 6
DKW 7

täyttävät kaikki EY:n konedirektiivin 2006/42/EY ja sähkömagneettista yhteensopivuutta (EMC) koskevan direktiivin 2014/30/EU asiaankuuluvat vaatimukset.

Sovelletut harmonisoidut standardit:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28. huhtikuuta 2017

Ulrich Wilkesmann, Toimitusjohtaja sales
Dr.-Ing. Sven Hilfert, Toimitusjohtaja tekniikan

☐ Alkuperäinen vaatimustenmukaisuusvakuutus
☑ Vaatimustenmukaisuusvakuutuksen käännös

FI

EU-overensstemmelseserklæring

Int. maskindirektiv 2006/42/EØF

Producent: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Dokumentasjonsansvarlig: Dr. Rudolf Bahnen

Herved erklærer vi at maskinene i seriene:

DKW 4
DKW 6
DKW 7

overensstemmer med alle relevante bestemmelser i EU-maskindirektivet 2006/42/EØF og EMC-direktivet 2014/30/EU.

Følgende harmoniserte normer er brukt:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28. april 2017

Ulrich Wilkesmann, Administrerende direktør salg
Dr.-Ing. Sven Hilfert, Administrerende direktør teknisk

☐ Original overensstemmelseserklæring
☑ Oversettelse av overensstemmelseserklæringen

NO

EÜ-vastavuskinnitus

Masinate direktiivi 2006/42/EÜ alusel

Tootja: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Volitatud dokumendihaldur: Dr. Rudolf Bahnen

Käesolevaga kinnitame, et alljärgnevate tootesarjade masinad:

DKW 4
DKW 6
DKW 7

on kooskõlas 2006/42/EÜ Masinate direktiivi ja 2014/30/EL Elektromagnetilise ühilduvuse direktiivi kõigi asjakohaste sätetega.

Alljärgnevad harmoniseeritud normid olid kasutusel:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28. aprillist 2017. a.

Ulrich Wilkesmann, Tegevdirektor Müük
Dr.-Ing. Sven Hilfert, Tegevdirektor ehitus

☐ Originaal-vastavuskinnitus
☑ Vastavuskinnituse tõlge

EE

EB atitikties deklaracija

pagal mašinų direktyvą 2006/42/EB

Gamintojas: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Asmuo, įgaliotas tvarkyti dokumentus: Dr. Rudolf Bahnen

Šiuo pareiškiame, kad šių serijų mašinos:

DKW 4
DKW 6
DKW 7

atitinka EB mašinų direktyvos 2006/42/EB ir EMS direktyvos 2014/30/ES nuostatas.

Taikytos tokios vieningosios normos:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Vupertalis, 2017 m. balandžio 28 d.

Ulrich Wilkesmann, Generalinis direktorius pardavimų
Dr.-Ing. Sven Hilfert, Generalinis direktorius inžinerija

☐ Atitikties deklaracijos originalas
☑ Atitikties deklaracijos vertimas

LT

ES atbilstības apliecinājums

atbilstoši 2006/42/EK (mašīnu direktīva)

Izgatavotājs: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Dokumentācijas pilnvarotais: Dr. Rudolf Bahnen

Ar šo apliecinam, ka tipu rindas mašīnas:

DKW 4
DKW 6
DKW 7

atbilst visiem noteikumiem, kas norādīti ES mašīnu direktīvā 2006/42/EK un EMV direktīvā 2014/30/ES.

Ir pielietotas sekojošās harmonizētās normas:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28. aprīlis 2017 g.

Ulrich Wilkesmann, Rīkotājdirektors pārdošanas
Dr.-Ing. Sven Hilfert, Rīkotājdirektors inženierzinātnes

☐ Oriģinālais atbilstības apliecinājums
☑ Atbilstības apliecinājuma tulkojums

LV

Deklaracja zgodności WE

wg Dyrektywy Maszynowej 2006/42/WE

Producent: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Pełnomocnik ds. dokumentacji: Dr. Rudolf Bahnen

Niniejszym oświadczamy, że maszyny serii:

DKW 4
DKW 6
DKW 7

spełniają wszystkie wymagania Dyrektywy Maszynowej 2006/42/WE oraz Dyrektywy EMC 2014/30/UE dotyczącej kompatybilności elektromagnetycznej.

Zastosowano następujące zharmonizowane normy:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28 kwietnia 2017 r.

Ulrich Wilkesmann, Dyrektor Zarządzający do spraw sprzedaży
Dr.-Ing. Sven Hilfert, Dyrektor Zarządzający do spraw technologii

☐ Oryginalna deklaracja zgodności
☑ Przekład deklaracji zgodności

PL

EK-konformitási nyilatkozat

a 2006/42/EK Gépek irányelv szerint

Gyártó: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Dokumentációs meghatalmazott: Dr. Rudolf Bahnen

Jelen nyilatkozattal igazoljuk, hogy az alábbi gyártási sorozat gépei:

DKW 4
DKW 6
DKW 7

a gépekre vonatkozó 2006/42/EK irányelv valamint a 2014/30/EU EMC-irányelv összes vonatkozó előírásának megfelelnek.

Az alábbi harmonizált szabványok kerültek alkalmazásra:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 2017. április 28.

Ulrich Wilkesmann, Ügyvezető igazgató Értékesítés
Dr.-Ing. Sven Hilfert, Ügyvezető igazgató Műszaki

☐ Eredeti konformitási nyilatkozat
☑ A konformitási nyilatkozat fordítása

HU

ES Prohlášení o shodě

ve smyslu směrnice 2006/42/ES o strojních zařízeních

Výrobce: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Pracovník pověřený dokumentací: Dr. Rudolf Bahnen

Prohlašujeme, že stroje typových řad:

DKW 4
DKW 6
DKW 7

vyhovují všem příslušným požadavkům směrnic Evropského parlamentu a Rady 2006/42/ES o strojních zařízeních a 2014/30/EU o elektromagnetické kompatibilitě.

Byly použity následující harmonizované normy:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal dne 28. dubna 2017

Ulrich Wilkesmann, Generální ředitel prodeje
Dr.-Ing. Sven Hilfert, Generální ředitel inženýrství

☑ Původní verze prohlášení o shodě
☑ Překlad

CZ

Izjava o skladnosti, veljavna za EU

po 2006/42/ES za stroje

Proizvajalec: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Pooblaščeni za podpis dokumentacije: Dr. Rudolf Bahnen

Izjavljamo, da so stroji serij:

DKW 4
DKW 6
DKW 7

skladni z vsemi zadevnimi določili Direktive za stroje EU 2006/42/ES in Direktive EMV 2014/30/EU.

Uporabljeni so bili naslednji usklajeni standardi:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28. april 2017

Ulrich Wilkesmann, Generalni direktor prodaje
Dr.-Ing. Sven Hilfert, Generalni direktor inženirstvo

☐ Izjava o skladnosti v originalu
☑ Prevod izjave o skladnosti

SI

Prehlásenie o zhode

v zmysle smernice 2006/42/ES o strojových zariadeniach

Výrobca: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Pracovník poverený dokumentáciou: Dr. Rudolf Bahnen

Vyhlasujeme, že stroje typových radov:

DKW 4
DKW 6
DKW 7

spĺňajú všetky príslušné požiadavky smerníc Európskeho parlamentu a Rady 2006/42/ES o strojových zariadeniach a 2014/30/EÚ o elektromagnetickej kompatibilite.

Použili sme nasledujúce harmonizované normy:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal dňa 28. apríla 2017

Ulrich Wilkesmann, Generálny riaditeľ predaja
Dr.-Ing. Sven Hilfert, Generálny riaditeľ inžinierstva

☐ Originál prehlásenia o zhode
☑ Preklad

SK

Declarație de conformitate CE

conform 2006/42/CE (Directiva Masini)

Producător: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Împuternicit cu documentația: Dr. Rudolf Bahnen

Declarăm prin prezenta că mașinile din serille:

DKW 4
DKW 6
DKW 7

corespund tuturor dispozițiilor în vigoare din directiva CE privind echipamentele tehnice 2006/42/CE și directivei privind compatibilitatea electromagnetică 2014/30/EU.

Au fost aplicate următoarele norme armonizate:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28 aprilie 2017

Ulrich Wilkesmann, Gestionarea director de vânzări
Dr.-Ing. Sven Hilfert, Gestionarea director inginerie

☐ Declarație de conformitate originală
☑ Traducere a declarației de conformitate

RO

ЕО-Декларация за съответствие

според 2006/42 ЕО Машини

Производител: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Оторизирано лице за документацията: Dr. Rudolf Bahnen

С настоящето декларираме, че машините от конструктивни серии:

DKW 4
DKW 6
DKW 7

съответстват на всички относящи се до тях разпоредби на Директива за машини 2006/42 ЕО и на Директива за ЕМС 2014/30/ЕС.

Използвани са следните хармонизирани норми:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Вупертал, 28 април 2017

Ulrich Wilkesmann, Изпълнителен Директор Продажби
Dr.-Ing. Sven Hilfert, Управляващ директор Инженеринг

☐ Оригинална Декларация за съответствие
☑ Превод на Декларация за съответствие

BG

Δήλωση συμμόρφωσης ΕΚ

κατά την οδηγία 2006/42/ΕΚ περί μηχανημάτων

Κατασκευαστής: Gebr. Becker GmbH, Hölker Feld 29-31, D-42279 Wuppertal
Εξουσιοδοτημένος αντιπρόσωπος τεκμηρίωσης: Dr. Rudolf Bahnen

Με την παρούσα δηλώνουμε πως τα μηχανήματα των σειρών:

DKW 4
DKW 6
DKW 7

συμμορφώνονται προς όλες τις σχετικές διατάξεις της οδηγίας περί μηχανημάτων 2006/42/ΕΚ και της οδηγίας περί ΗΜΣ 2014/30/ΕΕ.

Εφαρμόσθηκαν τα παρακάτω εναρμονισμένα πρότυπα:

EN 1012-1:	2010
EN 1012-2:	1996+A1:2009
EN ISO 12100:	2010
EN 60204-1:	2006+A1:2009
EN ISO 3744:	2010

Wuppertal, 28 Απριλίου 2017

Ulrich Wilkesmann, Διευθύνων Σύμβουλος Πωλήσεων
Dr.-Ing. Sven Hilfert, Διευθύνων Σύμβουλος Μηχανικών

☐ Πρωτότυπη δήλωση συμμόρφωσης
☑ Μετάφραση της δήλωσης συμμόρφωσης

GR

Gebr. Becker GmbH • Hölker Feld 29 - 31 • D-42279 Wuppertal • Tel. (02 02) - 6 97 - 0 • Fax (02 02) - 66 08 55
E-mail: info@becker-international.com • http://www.becker-international.com