

# Wassergekühlte Drehstrommotoren

Water-cooled three-phase motors



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| Kupferpreis lt. DEL-Notiz /<br>Copper price<br>€/100 kg | Kupferzuschlag /<br>Price increase<br>% |
|---|---|
| 231,- bis 281,-   | 1,20 %                                  |
| 282,- bis 332,-   | 2,50 %                                  |
| 333,- bis 383,-   | 3,50 %                                  |
| 384,- bis 435,-   | 4,50 %                                  |
| 436,- bis 486,-   | 5,50 %                                  |
| 487,- bis 537,-   | 6,50 %                                  |
| 538,- bis 588,-   | 7,50 %                                  |
| 589,- bis 639,-   | 8,50 %                                  |
| 640,- bis 690,-   | 9,50 %                                  |

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Bei der WK-Motorenreihe handelt es sich um Kurzschlussläufermotoren mit einem wassergekühlten Gehäusemantel.

Die in der Liste angegebenen Leistungswerte der eintourigen Motoren beziehen sich auf die Betriebsart S1 und eine Kühlmittelintrittstemperatur von 20°C. Andere Polzahlen und polumschaltbare Motoren sind auf Anfrage lieferbar.

Die Motoren entsprechen der Schutzart IP 55 nach DIN IEC 34, Teil 5. Höhere Schutzarten auf Anfrage lieferbar.

The water-cooled motors type WK are squirrel-cage induction motors with a water-cooled housing.

The rated output of the single-speed motors in the catalogue relates to a continuous operating mode and a cooling medium inlet-temperature of 20°C. Other rated speeds and pole changing motors are available upon request.

The degree of the protection is IP 55 according to DIN IEC 34, part 5. Increased degrees of protection are available upon request.

## Allgemeine technische Erläuterungen General technical information

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### Verwendungszweck

Wassergekühlte Motoren werden eingesetzt:

- bei extremen Umweltbedingungen wie z. B. Staub, Faserflug, Schmutz- und Feuchtigkeitseinwirkungen
- für besonders geräuscharme Ausführungen
- wenn die Verlustwärme nicht unmittelbar an die Umgebung abgegeben werden darf (klimatisierte Räume)
- bei erhöhter Raumtemperatur bzw. Strahlungstemperatur
- für Anlagen mit Wärmerückgewinnung zur Nutzung der Abwärme des Motors
- für frequenzregelbare Motoren mit konstantem Drehmoment in einem großen Regelbereich
- bei Schutzarten bis IP 67 ohne Leistungsreduzierung
- als Asynchrongeneratoren in Blockheizkraftwerken

### Application

Water-cooled three-phase motors are used:

- at extreme environmental conditions as dust, fibre material, dirt and moisture
- for very low-noise machines
- if the heat loss should not be emitted directly to the ambient atmosphere (air-conditioned rooms)
- at increased ambient temperature or radiant heat.
- for machines with heat exchanger to use the heat loss of the motor
- for operating at frequency converter with constant torque and a wide speed range
- for degree of protection up to IP 67 without power reduction
- as asynchronous generators for combined heat and power modules (CHP modules)

### Motoren nach ausländischen Vorschriften / Motors according to foreign standards

#### Vorschrift / Standard

#### Baugröße / Frame size

#### Zulassung / Certification

CSA Kanada

71–315

CSA report no. LR 34805

UL USA

71–250

Recognized Component File E 189414

## Mechanische Ausführung

### Wassergekühltes Gehäuse

#### Baugröße 71 bis 160:

In einem Gehäuse aus Aluminiumlegierung ist ein Wendel aus Edelstahlrohr eingegossen. Durch die Zwangsführung der Kühlung kann der Motor mit der vorgegebenen Position der Wasseranschlüsse unabhängig von der Einbaulage betrieben werden.

#### Baugröße 180 bis 450:

Das Graugussgehäuse zeichnet sich durch eine Zwangsführung des Kühlmediums aus. Abhängig von der veränderbaren Position der Wasseranschlüsse und der Einbaulage kann eine Entlüftung des Kühlsystems erforderlich sein. Die besondere Konstruktion des Gehäuses erlaubt die Reinigung des Kühlwasserkreislaufes.

## Mechanical design

### Water-cooled frame

#### Frame size 71 to 160:

A spiral tube of stainless steel is casted in a motor housing of aluminium alloy. With the forced water cooling the motor can operate with the standard position of the water connections independent from the mounting position.

#### Frame size 180 to 450:

The characteristic of the grey cast iron housing is a forced water-cooling. Dependent on the variable position of the water connections and the mounting position, it can be necessary to use an air relief valve for the cooling system. The special design of the housing allows the cleaning of the water-cooling circuit.

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### Stahlgeschweißte Gehäuse:

Für besondere Betriebsbedingungen und Anwendungen wie druck- und vakuumdichte Motoren besteht die Möglichkeit, geschweißte Doppelmantelgehäuse aus Stahl oder Edelstahl zu verwenden.

### Anschlußkasten

Die Klemmenkästen sind in Schutzart IP 55 ausgeführt und können um  $4 \times 90^\circ$  gedreht werden. Bis zur Baugröße 132 sind die Klemmenkästen aus Aluminium gefertigt, ab Baugröße 160 aus Grauguß. Bei der Normalausführung sind die Klemmenkästen von der A-Seite gesehen rechts. Ausführungen mit Klemmkasten links oder oben sind ebenfalls lieferbar.

### Wellenende

In der Normalausführung werden die Motoren mit zylindrischem Wellenende nach DIN 748 aus Werkstoff C45 geliefert.

Motorwellen aus rost-, säure- und hitzebeständigen Stählen sind gegen Mehrpreis lieferbar.

Polumschaltbare Motoren mit 2-poligen Drehzahlstufen haben die gleichen Wellenenden und Lagerungen wie eintourige 2-polige Motoren.

### Fabricated steel frame:

For special operating conditions and applications e. g. pressure- and vacuum-tight motors it is possible to use fabricated steel double casings of steel or stainless steel.

### Terminalbox

The terminalboxes have a degree of protection IP 55 and they are rotatable through  $90^\circ$ . Up to frame size 132 the terminal boxes are of aluminium alloy and from frame size 160 of grey cast iron. The terminalbox is alignment in standard version at the right, when looking at drive-end-shaft. Versions with terminalbox at the left or on top are also available.

### Shaft

In standard version the motor shaft is cylindrical according to DIN 748 of material C45.

Motor shafts of stainless, acid- and heat-resistant steel are available at extra price.

Pole-changing motors with two-pole speeds have the same shaft extensions and bearings as single-speed, two-pole motors.

## Lagerung

Die Motoren der Baugröße 71 bis 160 haben dauergeschmierte Wälzlager.

Ab der Baugröße 180 haben die Motoren eine Nachschmiereinrichtung mit Fettmengenregler. Nachschmierfrist, Fettmenge und Fettqualität sind durch ein Zusatzschild am Motor angegeben. Verstärkte Lagerausführung A-Seite für Antriebe mit erhöhten Querkraften sowie Nachschmiereinrichtung ab Baugröße 90 sind gegen Mehrpreis lieferbar.

Die Motoren der Baugröße 71 bis 112 haben serienmäßig Festlager durch Sicherungsringe auf der B-Seite. Ab der Baugröße 132 ist das Festlager auf der B-Seite durch einen Lagerabschlussdeckel angestellt.

Die Lager der Baugröße 71 bis 180 sind durch axial wirkende Wellenbandfedern vorgespannt, ab Baugröße 200 über axial wirkende Druckfedern.

## Bearings

The motor frame sizes 71–160 have permanent grease-lubricated anti-friction bearings.

From frame size 180 the motors have regreasing devices with grease quantity control. Regreasing intervals, quantity of grease and grade of grease are marked on an auxiliary plate on the motor. Heavy-duty bearing arrangements at drive end for increased radial load or regreasing devices from frame size 90 are available at extra price.

The motor frame sizes 71–112 have the locating bearing at non-drive-end by retaining rings. From frame size 132 the locating bearing is at non-drive-end by way of bearing end cover.

Bearings for frame size 71–180 are pre-loaded with axial spring plates, from frame size 200 with axial pre-loading springs.

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## Lagerzuordnung / Bearing and frame size

| Baugröße<br>Frame size | Polzahl<br>No. of poles | AS-Lager<br>DE-bearing | BS-Lager<br>NDE-bearing | Fettmenge<br>Quantity of grease | Nachschmiermenge<br>Quantity of regrease |
|------------------------|-------------------------|------------------------|-------------------------|---------------------------------|--|
| 71                     | ≥ 2                     | 6202 2Z                | 6202 2Z                 |                                 |  |
| 80                     | ≥ 2                     | 6204 2Z                | 6204 2Z                 |                                 |  |
| 90                     | ≥ 2                     | 6205 2Z                | 6205 2Z                 |                                 |  |
| 100                    | ≥ 2                     | 6206 2Z                | 6206 2Z                 |                                 |  |
| 112                    | ≥ 2                     | 6306 2Z                | 6306 2Z                 |                                 |  |
| 132                    | ≥ 2                     | 6308 Z                 | 6308 Z                  |                                 |  |
| 160                    | ≥ 2                     | 6309                   | 6309                    | 65 / 30                         | 16 / 10                                  |
| 180                    | ≥ 2                     | 6313                   | 6311                    | 85 / 50                         | 18 / 14                                  |
| 200                    | ≥ 2                     | 6314                   | 6313                    | 100 / 85                        | 21 / 18                                  |
| 225                    | ≥ 2                     | 6314                   | 6313                    | 100 / 85                        | 21 / 18                                  |
| 250                    | ≥ 2                     | 6316                   | 6314                    | 150 / 100                       | 27 / 21                                  |
| 280                    | 2                       | 6316                   | 6316                    | 150 / 150                       | 27 / 27                                  |
| 280                    | ≥ 4                     | 6317                   | 6316                    | 150 / 150                       | 30 / 27                                  |
| 315                    | 2                       | 6316                   | 6316                    | 150 / 150                       | 27 / 27                                  |
| 315                    | ≥ 4                     | 6319                   | 6317                    | 170 / 150                       | 36 / 30                                  |
| 355                    | ≥ 4                     | 6322                   | 6322                    | 350                             | 35                                       |
| 400                    | ≥ 4                     | 6324                   | 6324                    | 390                             | 42                                       |
| 450                    | ≥ 4                     | 6326                   | 6326                    | 450                             | 50                                       |

### Transportsicherung

Motoren mit eingebauten Rollenlagern sind durch Erschütterungen während des Transports und der Lagerung gefährdet.

Die eingebaute Lagerverriegelung schützt vor Beschädigung der Lager.

Vor der Inbetriebnahme ist die Transportsicherung zu entfernen.

### Wellendichtringe

Flanschmotoren sind in öldichten Ausführungen mit eingebauten Radial-Wellendichtringen lieferbar.

Der Dichtringwerkstoff in Normalausführung ist NBR mit der Kurzbezeichnung nach ISO 1629.

Der gummielastische Außenring garantiert einen einwandfreien Sitz.

Die Schmierung der Dichtstelle muss bereits bei den ersten Wellenumdrehungen sichergestellt sein.

Dichtstellen, die oberhalb des Ölspiegels liegen, müssen durch Sprühöl oder Ölnebel geschmiert werden.

### Shipping brace

Motors with built-in roller bearings are endangered by vibration during transport and storage.

The built-in shipping brace for the bearings protects them from damage.

The shipping brace is to be removed before starting up the motor.

### Shaft seals

Flange motors are available in oil-tight models with built-in radial shaft seals.

The seal material in standard version is NBR with short designation as per ISO 1629.

The flexible rubber outer ring ensures a perfect seat.

Lubrication of the sealing location must be assured as soon as the shaft makes its first revolutions.

Sealing locations lying below the oil level must be lubricated by spray oil or oil mist.

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Je nach den abzudichtenden Medien sowie Medientemperaturen können spezifizierte Dichtringmaterialien eingesetzt werden.

### Anstrich

Der Normalanstrich ist ein Nitro-Combi-Decklack mit Farbton nach RAL 7031, der für die Aufstellung in Innenräumen und für die Außenaufstellung ohne besondere klimatische Anforderungen geeignet ist.

Für besondere klimatische Bedingungen und chemisch aggressive Atmosphäre steht ein Sonderanstrich SA1 zur Verfügung.

Es handelt sich um einen 2-Komponenten-Polyurethan-Anstrich mit Epoxid-Zwischenbeschichtung. Abweichende Farbtöne und Ausführungen sind auf Anfrage lieferbar.

Depending on the media to be sealed and their temperatures, specified seal materials can be used.

### Painting

In standard version the painting is of a nitrocellulose combination finish in colours RAL 7031, for indoor and outdoor installation without special climatic conditions.

For special climatic conditions and chemical abrasive atmospheres a special coat SA1 is available.

It concerns of a two-component polyurethane finish with an epoxy resin sealer.

Other colours and finishes are available upon request.

## Elektrische Ausführung

### Bemessungsspannung und Frequenz

Die wassergekühlten Motoren werden für folgende Bemessungsspannungen geliefert:

3AC, 50 Hz – 400 V, 500 V, 660 V, 690 V  
3AC, 60 Hz – 440 V, 460 V

Andere Bemessungsspannungen sind gegen Mehrpreis lieferbar.

### Wärmeklasse

In der Normalausführung sind die Motoren in Wärme-klasse F ausgeführt.

Die Isolierung der Motoren ist tropenfest. Verstärkter Tropen- und Feuchtschutz ist gegen Mehrpreis lieferbar.

## Electrical design

### Voltage and frequency

The water-cooled motors are available with the following voltages:

3AC, 50Hz–400V, 500V, 660V, 690V  
3AC, 60Hz–440V, 460V

Other voltages upon request at extra price.

### Insulating class

In standard version the stator and rotor winding is of insulating class F.

The insulating of the motors is tropic-proof. Increased tropic- and moisture-proof insulating is available at extra price.

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### Motorschutz

Bei stromabhängigem Motorschutz muss der Schutzschalter auf den am Leistungsschild angegebenen Nennstrom eingestellt werden.

Bei Schalthäufigkeit, Kurzzeitbetrieb, Kühlmittelausfall oder großen Kühlmitteltemperaturschwankungen ist der Motorschutz nur mit direkter Temperaturüberwachung sicher wirksam.

Hierzu bieten sich auf Wunsch folgende Möglichkeiten an:

- **Temperaturschalter als Öffner**  
Bei Erreichen der Grenztemperatur öffnet dieser selbsttätig den Hilfsstromkreis und schaltet erst nach wesentlicher Temperaturänderung wieder ein. Schaltleistung: bei Wechselspannung 250 V 1,6 A.
- **Kaltleiterschutz**  
Die eingebauten Kaltleiter werden in Verbindung mit einem Auslösegerät betrieben. Bei Erreichen der Grenztemperatur ändert der Kaltleiterfühler sprunghaft seinen Widerstand. In Verbindung mit dem Auslösegerät wird diese Wirkung zur Überwachung der Motortemperatur ausgenutzt. Das im Gerät eingebaute Relais verfügt über einen Umschaltkontakt, dessen Öffner und Schließer für die Steuerung benutzt werden können. Vorteil: Schutzeinrichtung überwacht sich selbst; geringe Schalttoleranz; schnelles Wiedereinschalten des Antriebes.

### Motor protection

For current-sensitive motor protection, the protective switch has to be set to the rated current given on the name plate.

This motor protection is inadequate for high number of operations, short-time operation, coolant breakdown or for fluctuations in coolant temperature. In these cases motors should be protected by direct temperature protection (extra price):

- **Thermal protector switch**  
When reaching the limiting temperature, the switch opens the control circuit. The NC-switch closes the circuit when the temperature decreases essential. Contact rating: 1.6A for 250VAC.
- **Thermistor protection**  
The embedded temperature sensors are able to work only in conjunction with a tripping unit. When reaching the limiting temperature, the thermistor changes its resistance almost instantaneously. This action is utilized in conjunction with the tripping unit to monitor motor temperature. The relay incorporated in the device has a change-over contact, in which the contacts can be used for the control system. Advantages: The protection system is self-monitoring; low switching tolerance; quick reconnection of the drive.



### Stillstandsheizung

Bei Motoren, die starken Temperaturschwankungen oder extremen klimatischen Verhältnissen ausgesetzt sind, ist die Motorwicklung durch Kondensatbildung oder Betauung gefährdet. Eine auf Wunsch eingebaute Stillstandsheizung erwärmt die Motorwicklung nach dem Abschalten um einige Kelvin über die Außentemperatur und verhindert einen Feuchtigkeitsniederschlag im Motorinneren. Während des Betriebes darf die Stillstandsheizung nicht eingeschaltet werden. Die Heizbänder müssen separat an die dafür vorgesehene Anschlussspannung angeschlossen werden.

### Anti-condensation heaters

The windings of motors subjected to extreme temperature fluctuations or severe climatic conditions are endangered by the formation of condensation or moisture. The anti-condensation heaters incorporated raise the temperature of the motor winding a few degrees above the outside temperature after shutdown, and thus prevent the formation of moisture inside the motor. The anti-condensation heaters must not be switched on while the motor is running. The heating strips have to be connected separately to the considered voltage.

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### Bremsmotoren

Die in der Liste angegebenen wassergekühlten Motoren können durch Anbau einer Federkraftbremse zu Bremsmotoren erweitert werden.

Die angebaute Einscheiben-Federkraftbremse ist eine Sicherheitsbremse, die durch Federkraft bei abgeschalteter Spannung bremst.

Die Gleichstrom-Bremsspule wird über einen im Klemmenkasten eingebauten Gleichrichter gespeist.

Der Motor darf nur in Verbindung mit der Gleichstrombremse eingeschaltet werden.

### Brake motors

The water-cooled motors listed in the catalogue can be extended to become brake motors by mounting a spring-loaded brake.

The mounted single-disc, spring-loaded brake is a fail-safe brake acting by spring force with the voltage disconnected.

The DC brake coil is supplied via a rectifier fitted in the terminalbox.

The motor may only be switched on together with the DC brake.

## Kühlmittel

Die in der Liste angegebenen Leistungswerte beziehen sich auf die Betriebsart S1 bei einer Kühlmitteltemperatur von 20 °C.

Die angegebenen Wassermengen sind so bemessen, dass zwischen Wassereintrittstemperatur und Austrittstemperatur eine Temperaturerhöhung von max. 20 K entsteht.

Der max. Betriebsdruck des Kühlmittels darf 4000 hPA ( $\times 10^2 \text{ Nm}^2$ ) betragen.

Für andere Wassereintrittstemperaturen und Temperaturerhöhungen muss die angegebene Wassermenge mit dem Faktor k multipliziert werden.

## Cooling medium

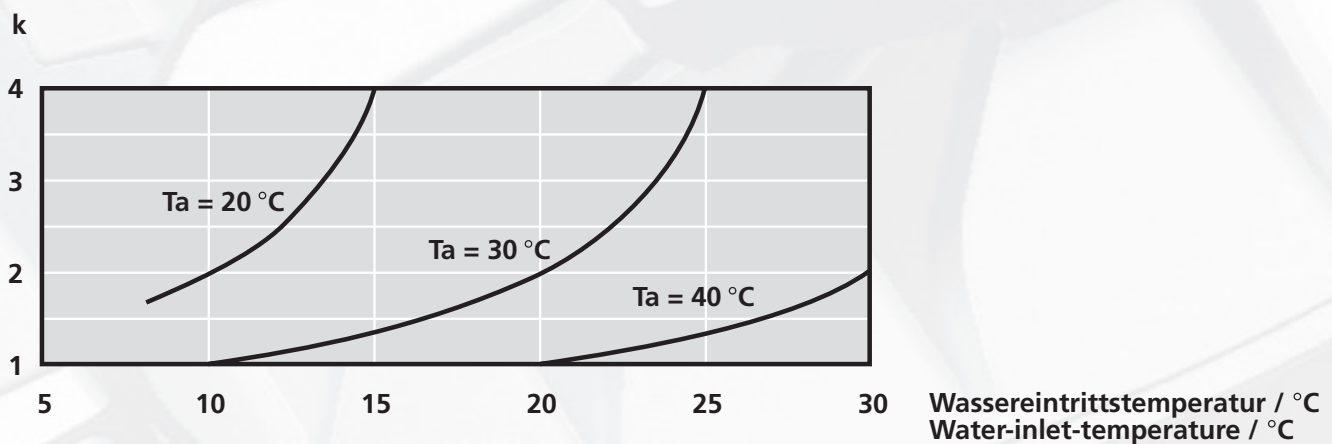
The rated outputs listed in the catalogue are at operating mode S1 and a coolant temperature of 20 °C.

The quantity of the cooling water is calculated, that the difference between run-in temperature and run-out temperature is max. 20K.

The max. operating pressure of the cooling medium is 4000hPA ( $\times 10^2 \text{ Nm}^2$ ).

For different water inlet-temperatures and rise in temperature the listed quantity of coolant has to be multiplied by the factor k.

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### Betrieb mit Frequenzumrichter

Die wassergekühlten Motoren können in einem Regelbereich von 5–50 Hz mit konstantem Bemessungsmoment an einem Frequenzumrichter betrieben werden.

Die Isolierung der Motorwicklung wird bei Umrichterbetrieb stärker beansprucht als bei dem Betrieb am Netz.

Insbesondere bei U-Umrichtern ist die Isolierung durch das schnelle Schalten der Spannungspulse beansprucht. Die Maximalspannung an den Motorklemmen wird von der Spannungsanstiegsgeschwindigkeit der Pulse und von der Leitungslänge zwischen Motor und Umrichter bestimmt. Durch einen Ausgangsfilter am Umrichter lassen sich die Spannungsspitzen gegebenenfalls auf die maximal zulässigen Werte absenken.

Das Bild zeigt die zulässige Spannungsbeanspruchung  $\hat{U}_{LL}$  in Abhängigkeit von der Anstiegszeit  $t_A$ , bei der die Lebensdauer der Isolierung nicht beeinträchtigt wird.

### Operating at frequency converter

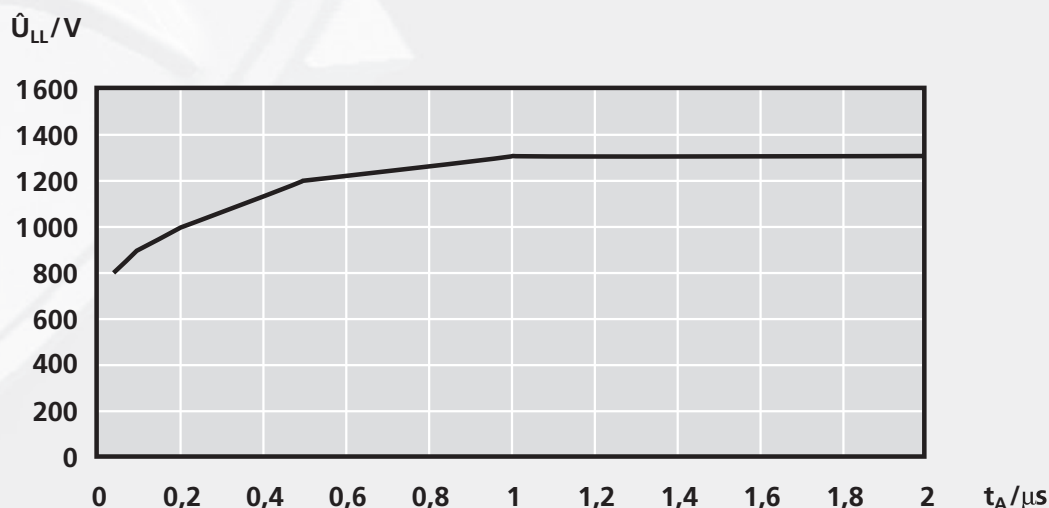
The water-cooled motors can operate at frequency converter constant with his rated torque in a frequency range from 5–50Hz.

The insulation of the motor winding at static converter supply is more stressed than by operating at main supply.

Especially at U-converter supply the insulation is stressed by the quick switch of the voltage pulses. The maximum peak voltage at the motor terminals depends on the rate of voltage rise, and the length of cable between the motor and the converter. If necessary the peak voltage may be reduced to allowed values by an output filter for the converter.

The picture shows the allowed peak voltage  $\hat{U}_{LL}$  per rise time  $t_A$ , when the lifetime of insulation will not be reduced.

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Isolationssysteme für Spitzenspannungen  
 $\hat{U}_{LL} \leq 1800 V$  auf Anfrage erhältlich

Insulating systems for peak voltage  
 $\hat{U}_{LL} \leq 1800 V$  available on request

### Vermeidung von Lagerströmen

Beim Betrieb mit Frequenzumrichtern können durch die steilen Spannungsflanken beim Schalten der IGBTs hochfrequente Wellenspannungen entstehen die zu hohen Lagerströmen führen können.

Zur Vermeidung von Lagerschäden durch zu hohe Lagerströme empfehlen wir bei 2-poligen Motoren ab der Baugröße 315 und bei 4-polig und höherpoligen Motoren ab Baugröße 355 die Isolierung mindestens des BS-Lagers durch Wellenisolation oder isolierte Lager.

### Avoiding of bearing current

When operating with frequency inverters shaft voltages can be generated through the steep flanks of the IGBTs during switching that can lead to high bearing currents.

To prevent bearing damage due to excessive bearing currents, we recommend 2-pole motors from size 315 and 4-pole and higher pole motors from frame size 355 to isolate of at least the NDE bearing by insulating of the shaft or insulated bearings.

# Wassergekühlte Drehstrommotoren 3 000 min<sup>-1</sup> 50 Hz

Schutzart IP 55  
Kühlmitteltemperatur 20°C  
Gehäuse aus Aluminiumlegierung

# Water-cooled three-phase motors 3 000 min<sup>-1</sup> 50 Hz

Degree of protection IP 55  
Cooling medium temperature 20°C  
Housing of aluminium alloy

| Baugröße<br>Frame size | Bemessungsleistung<br>Rated output | Bemessungsdrehzahl<br>Rated speed | Bemessungsstrom bei 400 V<br>Rated current at 400 V | cos φ | Wirkungsgrad<br>Efficiency | Bemessungsmoment<br>Rated torque | Anzugsmoment zu Bemessungsmoment<br>Starting torque to rated torque | Anzugsstrom zu Bemessungsstrom<br>Starting current to rated current | Massenträgheitsmoment<br>Moment of inertia | Kühlwassermenge<br>Quantity of coolant | Gewicht<br>Weight |
|------------------------|------------------------------------|-----------------------------------|---|-------|----------------------------|----------------------------------|---|---|--|--|-------------------|
|                        | kW                                 | min <sup>-1</sup>                 | A   |       | %                          | Nm                               | M <sub>A</sub> /M <sub>N</sub>                                      | I <sub>A</sub> /I <sub>N</sub>                                      | kgm <sup>2</sup>                           | l/min                                  | kg                |
| WK 71/2-50             | 0,55                               | 2760                              | 1,40  | 0,81  | 70                         | 1,90                             | 2,4   | 4,5   | 0,00035                                    | 0,5                                    | 7,5               |
| WK 71/2-65             | 0,75                               | 2760                              | 1,84  | 0,82  | 72                         | 2,60                             | 2,3   | 4,6   | 0,00046                                    | 0,5                                    | 8,5               |
| WK 80/2-60             | 1,1                                | 2740                              | 2,60  | 0,84  | 73                         | 3,85                             | 2,5   | 4,7   | 0,00068                                    | 0,5                                    | 11,5              |
| WK 80/2-80             | 1,5                                | 2760                              | 3,50  | 0,84  | 74                         | 5,2                              | 2,4   | 4,8   | 0,00090                                    | 0,5                                    | 13                |
| WK 90/2-75             | 2,2                                | 2770                              | 4,90  | 0,88  | 74                         | 7,6                              | 2,0   | 4,3   | 0,00137                                    | 1,0                                    | 18                |
| WK 90/2-100            | 3,0                                | 2800                              | 6,6   | 0,87  | 75                         | 10,2                             | 2,5   | 4,6   | 0,00183                                    | 1,0                                    | 20                |
| WK 100/2-90            | 4,0                                | 2810                              | 9,3   | 0,83  | 75                         | 13,6                             | 2,6   | 5,0   | 0,00282                                    | 1,0                                    | 26                |
| WK 112/2-110           | 5,5                                | 2860                              | 11,4  | 0,87  | 80                         | 18,4                             | 2,5   | 6,9   | 0,00556                                    | 1,5                                    | 32                |
| WK 112/2-140           | 7,5                                | 2880                              | 15,5  | 0,84  | 83                         | 25,0                             | 2,2   | 6,8   | 0,00707                                    | 1,5                                    | 37                |
| WK 132/2-90            | 7,5                                | 2860                              | 15,2  | 0,85  | 84                         | 25,0                             | 2,2   | 5,9   | 0,010                                      | 1,5                                    | 52                |
| WK 132/2-120           | 11                                 | 2870                              | 21,5  | 0,86  | 85                         | 36,5                             | 2,3   | 6,0   | 0,013                                      | 1,5                                    | 59                |
| WK 132/2-190           | 15                                 | 2870                              | 30,0  | 0,85  | 85                         | 50,0                             | 2,2   | 6,5   | 0,021                                      | 1,5                                    | 73                |
| WK 160/2-130           | 15                                 | 2920                              | 28,5  | 0,90  | 85                         | 49,0                             | 2,5   | 7,0   | 0,033                                      | 2,0                                    | 180               |
| WK 160/2-180           | 18,5                               | 2920                              | 34,0  | 0,90  | 87                         | 61                               | 2,6   | 6,5   | 0,045                                      | 2,0                                    | 195               |
| WK 160/2-215           | 22                                 | 2920                              | 40,0  | 0,90  | 88                         | 72                               | 2,6   | 7,2   | 0,054                                      | 2,5                                    | 205               |
| WK 160/2-250           | 25                                 | 2920                              | 44,0  | 0,92  | 89                         | 82                               | 2,5   | 7,0   | 0,064                                      | 2,5                                    | 217               |

# Wassergekühlte Drehstrommotoren 3 000 min<sup>-1</sup> 50 Hz

Schutzart IP 55  
Kühlmitteltemperatur 20°C  
Gehäuse aus Grauguss

# Water-cooled three-phase motors 3 000 min<sup>-1</sup> 50 Hz

Degree of protection IP 55  
Cooling medium temperature 20°C  
Housing of grey cast iron

| Baugröße<br>Frame size | Bemessungsleistung<br>Rated output | Bemessungsdrehzahl<br>Rated speed | Bemessungsstrom bei 400 V<br>Rated current at 400 V | cos φ | Wirkungsgrad<br>Efficiency | Bemessungsmoment<br>Rated torque | Anzugsmoment zu Bemessungsmoment<br>Starting torque to rated torque | Anzugsstrom zu Bemessungsstrom<br>Starting current to rated current | Massenträgheitsmoment<br>Moment of inertia | Kühlwassermenge<br>Quantity of coolant | Gewicht<br>Weight |
|------------------------|------------------------------------|-----------------------------------|---|-------|----------------------------|----------------------------------|---|---|--|--|-------------------|
|                        | kW                                 | min <sup>-1</sup>                 | A   |       | %                          | Nm                               | M <sub>A</sub> /M <sub>N</sub>                                      | I <sub>A</sub> /I <sub>N</sub>                                      | kgm <sup>2</sup>                           | l/min                                  | kg                |
| WK 180/2-190           | 30                                 | 2 930                             | 54  | 0,89  | 91                         | 98                               | 2,4   | 7,2   | 0,073                                      | 3,0                                    | 255               |
| WK 180/2-250           | 37                                 | 2 940                             | 65  | 0,90  | 91                         | 120                              | 2,3   | 7,0   | 0,096                                      | 3,0                                    | 280               |
| WK 200 LK/2-200        | 37                                 | 2 950                             | 65  | 0,91  | 91                         | 120                              | 2,4   | 7,5   | 0,12                                       | 3,0                                    | 325               |
| WK 200 LK/2-250        | 45                                 | 2 950                             | 79  | 0,91  | 91                         | 146                              | 2,6   | 7,5   | 0,15                                       | 3,0                                    | 350               |
| WK 200 L/2-290         | 55                                 | 2 955                             | 97  | 0,90  | 91                         | 178                              | 2,5   | 7,4   | 0,18                                       | 3,5                                    | 385               |
| WK 225/2-240           | 55                                 | 2 950                             | 94  | 0,92  | 92                         | 178                              | 2,2   | 7,5   | 0,22                                       | 4,0                                    | 440               |
| WK 225/2-290           | 65                                 | 2 955                             | 112   | 0,91  | 92                         | 210                              | 2,3   | 7,6   | 0,27                                       | 4,0                                    | 500               |
| WK 250/2-240           | 75                                 | 2 960                             | 127   | 0,92  | 93                         | 242                              | 2,0   | 7,0   | 0,36                                       | 5,0                                    | 530               |
| WK 280/2-250           | 90                                 | 2 965                             | 152   | 0,92  | 93                         | 290                              | 2,0   | 7,3   | 0,61                                       | 6,0                                    | 690               |
| WK 280/2-300           | 110                                | 2 965                             | 186   | 0,92  | 93                         | 354                              | 1,9   | 7,0   | 0,70                                       | 6,0                                    | 830               |
| WK 315S/2-275          | 132                                | 2 970                             | 228   | 0,90  | 93                         | 424                              | 1,6   | 6,8   | 1,5  | 7,0                                    | 1080              |
| WK 315S/2-330          | 160                                | 2 970                             | 276   | 0,90  | 93                         | 514                              | 1,5   | 6,8   | 1,7  | 8,0                                    | 1230              |
| WK 315S/2-390          | 200                                | 2 970                             | 345   | 0,90  | 93                         | 643                              | 1,5   | 6,9   | 2,0  | 9,0                                    | 1450              |
| WK 315S/2-420          | 250                                | 2 970                             | 441   | 0,89  | 92                         | 804                              | 1,4   | 6,9   | 2,2  | 10,0                                   | 1570              |

# Wassergekühlte Drehstrommotoren 1500 min<sup>-1</sup> 50 Hz

Schutzart IP 55  
Kühlmitteltemperatur 20°C  
Gehäuse aus Aluminiumlegierung

# Water-cooled three-phase motors 1500 min<sup>-1</sup> 50 Hz

Degree of protection IP 55  
Cooling medium temperature 20°C  
Housing of aluminium alloy

| Baugröße<br>Frame size | Bemessungsleistung<br>Rated output | Bemessungsdrehzahl<br>Rated speed | Bemessungsstrom bei 400 V<br>Rated current at 400 V | cos φ | Wirkungsgrad<br>Efficiency | Bemessungsmoment<br>Rated torque | Anzugsmoment zu Bemessungsmoment<br>Starting torque to rated torque | Anzugsstrom zu Bemessungsstrom<br>Starting current to rated current | Massenträgheitsmoment<br>Moment of inertia | Kühlwassermenge<br>Quantity of coolant | Gewicht<br>Weight |
|------------------------|------------------------------------|-----------------------------------|---|-------|----------------------------|----------------------------------|---|---|--|--|-------------------|
|                        | kW                                 | min <sup>-1</sup>                 | A   |       | %                          | Nm                               | M <sub>A</sub> /M <sub>N</sub>                                      | I <sub>A</sub> /I <sub>N</sub>                                      | kgm <sup>2</sup>                           | l/min                                  | kg                |
| WK 71/4-50             | 0,37                               | 1360                              | 1,23  | 0,69  | 63                         | 2,60                             | 1,8   | 3,3   | 0,00056                                    | 0,5                                    | 7,5               |
| WK 71/4-65             | 0,55                               | 1360                              | 1,77  | 0,70  | 64                         | 3,85                             | 1,9   | 3,5   | 0,00073                                    | 0,5                                    | 8,5               |
| WK 80/4-60             | 0,75                               | 1360                              | 2,05  | 0,73  | 72                         | 5,3                              | 1,9   | 3,4   | 0,00128                                    | 0,5                                    | 11,5              |
| WK 80/4-80             | 1,1                                | 1350                              | 3,05  | 0,74  | 71                         | 7,8                              | 2,5   | 3,6   | 0,00165                                    | 0,5                                    | 13                |
| WK 90/4-75             | 1,5                                | 1380                              | 4,00  | 0,79  | 69                         | 10,4                             | 1,9   | 3,6   | 0,00235                                    | 1,0                                    | 18                |
| WK 90/4-100            | 2,2                                | 1380                              | 5,3   | 0,82  | 73                         | 15,2                             | 2,0   | 4,1   | 0,00313                                    | 1,0                                    | 20                |
| WK 100/4-90            | 3,0                                | 1350                              | 6,9   | 0,79  | 79                         | 21,0                             | 1,8   | 4,6   | 0,0045                                     | 1,0                                    | 26                |
| WK 100/4-120           | 4,0                                | 1370                              | 9,1   | 0,81  | 78                         | 28,0                             | 1,9   | 4,5   | 0,0060                                     | 1,0                                    | 29                |
| WK 112/4-130           | 5,5                                | 1380                              | 12,4  | 0,80  | 80                         | 38,0                             | 2,1   | 5,6   | 0,0119                                     | 1,5                                    | 35                |
| WK 112/4-165           | 7,5                                | 1400                              | 17,4  | 0,77  | 81                         | 51                               | 2,3   | 5,3   | 0,0150                                     | 2,0                                    | 41                |
| WK 132/4-125           | 7,5                                | 1430                              | 16,1  | 0,80  | 84                         | 50                               | 2,3   | 5,5   | 0,023                                      | 2,0                                    | 60                |
| WK 132/4-190           | 11                                 | 1430                              | 22,5  | 0,83  | 85                         | 73                               | 2,4   | 5,6   | 0,035                                      | 2,0                                    | 73                |
| WK 132/4-230           | 15                                 | 1430                              | 31,0  | 0,81  | 86                         | 100                              | 2,7   | 6,1   | 0,042                                      | 2,5                                    | 82                |
| WK 160/4-160           | 15                                 | 1450                              | 29,5  | 0,83  | 88                         | 99                               | 2,2   | 6,0   | 0,062                                      | 2,5                                    | 190               |
| WK 160/4-215           | 18,5                               | 1450                              | 36,0  | 0,83  | 89                         | 122                              | 2,4   | 6,3   | 0,083                                      | 2,5                                    | 205               |
| WK 160/4-250           | 22                                 | 1455                              | 43,0  | 0,83  | 89                         | 144                              | 2,6   | 6,5   | 0,096                                      | 3,0                                    | 217               |
| WK 160/4-290           | 30                                 | 1440                              | 57  | 0,85  | 90                         | 199                              | 2,2   | 6,2   | 0,112                                      | 3,0                                    | 230               |

# Wassergekühlte Drehstrommotoren 1500 min<sup>-1</sup> 50 Hz

Schutzart IP 55  
Kühlmitteltemperatur 20°C  
Gehäuse aus Grauguss

# Water-cooled three-phase motors 1500 min<sup>-1</sup> 50 Hz

Degree of protection IP 55  
Cooling medium temperature 20°C  
Housing of grey cast iron

| Baugröße<br>Frame size | Bemessungsleistung<br>Rated output | Bemessungsdrehzahl<br>Rated speed | Bemessungsstrom bei 400 V<br>Rated current at 400 V | cos φ | Wirkungsgrad<br>Efficiency | Bemessungsmoment<br>Rated torque | Anzugsmoment zu Bemessungsmoment<br>Starting torque to rated torque | Anzugsstrom zu Bemessungsstrom<br>Starting current to rated current | Massenträgheitsmoment<br>Moment of inertia | Kühlwassermenge<br>Quantity of coolant | Gewicht<br>Weight |
|------------------------|------------------------------------|-----------------------------------|---|-------|----------------------------|----------------------------------|---|---|--|--|-------------------|
|                        | kW                                 | min <sup>-1</sup>                 | A   |       | %                          | Nm                               | M <sub>A</sub> /M <sub>N</sub>                                      | I <sub>A</sub> /I <sub>N</sub>                                      | kgm <sup>2</sup>                           | l/min                                  | kg                |
| WK 180/4-200           | 22                                 | 1460                              | 43  | 0,82  | 90                         | 144                              | 2,6   | 6,4   | 0,127                                      | 3,0                                    | 260               |
| WK 180/4-240           | 30                                 | 1455                              | 59  | 0,83  | 89                         | 197                              | 2,8   | 6,5   | 0,153                                      | 3,0                                    | 275               |
| WK 180/4-290           | 37                                 | 1460                              | 72  | 0,82  | 90                         | 242                              | 2,6   | 6,5   | 0,185                                      | 3,0                                    | 295               |
| WK 200 LK/4-220        | 30                                 | 1465                              | 56  | 0,86  | 90                         | 196                              | 2,6   | 7,3   | 0,223                                      | 4,0                                    | 325               |
| WK 200 LK/4-250        | 37                                 | 1465                              | 69  | 0,87  | 89                         | 241                              | 3,1   | 7,2   | 0,249                                      | 4,0                                    | 350               |
| WK 200 LK/4-290        | 45                                 | 1460                              | 80  | 0,89  | 91                         | 294                              | 2,2   | 6,8   | 0,290                                      | 5,0                                    | 370               |
| WK 200 L/4-360         | 55                                 | 1460                              | 99  | 0,88  | 91                         | 360                              | 2,3   | 6,9   | 0,330                                      | 5,0                                    | 420               |
| WK 225/4-240           | 45                                 | 1460                              | 81  | 0,87  | 92                         | 294                              | 2,5   | 6,3   | 0,392                                      | 5,0                                    | 440               |
| WK 225/4-290           | 55                                 | 1460                              | 99  | 0,88  | 91                         | 360                              | 2,6   | 6,4   | 0,474                                      | 5,0                                    | 500               |
| WK 250/4-290           | 75                                 | 1465                              | 135   | 0,89  | 90                         | 489                              | 2,4   | 6,2   | 0,74                                       | 6,0                                    | 580               |
| WK 250/4-330           | 90                                 | 1460                              | 162   | 0,88  | 91                         | 589                              | 2,5   | 6,5   | 0,84                                       | 6,0                                    | 660               |
| WK 280/4-300           | 90                                 | 1470                              | 168   | 0,84  | 92                         | 585                              | 2,4   | 6,5   | 1,22                                       | 6,0                                    | 830               |
| WK 280/4-360           | 110                                | 1475                              | 203   | 0,85  | 92                         | 712                              | 2,5   | 6,5   | 1,46                                       | 7,0                                    | 1000              |
| WK 280/4-400           | 132                                | 1470                              | 230   | 0,89  | 93                         | 858                              | 2,8   | 6,9   | 1,62                                       | 7,0                                    | 1110              |
| WK 315S/4-300          | 132                                | 1480                              | 247   | 0,82  | 94,2                       | 852                              | 1,9   | 6,5   | 2,1  | 7,0                                    | 1180              |
| WK 315S/4-370          | 160                                | 1480                              | 294   | 0,83  | 94,6                       | 1032                             | 1,8   | 6,7   | 2,5  | 8,0                                    | 1380              |
| WK 315S/4-420          | 200                                | 1485                              | 358   | 0,85  | 95,0                       | 1286                             | 1,6   | 6,4   | 3,0  | 10                                     | 1570              |
| WK 315S/4-460          | 250                                | 1480                              | 441   | 0,86  | 95,3                       | 1613                             | 1,7   | 6,7   | 3,3  | 12                                     | 1710              |
| WK 315L/4-620          | 315                                | 1480                              | 548   | 0,87  | 95,5                       | 2033                             | 1,5   | 6,8   | 4,5  | 14                                     | 2320              |
| WK 315L/4-700          | 355                                | 1480                              | 617   | 0,87  | 95,6                       | 2291                             | 1,4   | 6,6   | 5,1  | 15                                     | 2550              |
| WK 315L/4-800          | 400                                | 1480                              | 686   | 0,88  | 95,7                       | 2581                             | 1,4   | 6,6   | 5,8  | 17                                     | 2880              |
| WK 355/4-800           | 450                                | 1485                              | 783   | 0,87  | 95,5                       | 2894                             | 1,3   | 6,9   | 12   | 20                                     | 3700              |
| WK 355/4-900           | 500                                | 1485                              | 859   | 0,88  | 95,6                       | 3215                             | 1,2   | 6,9   | 14   | 22                                     | 4000              |
| WK 400/4-800           | 630                                | 1490                              | 1070  | 0,89  | 95,6                       | 4038                             | 1,2   | 7,0   | 21   | 27                                     | 4850              |
| WK 400/4-900           | 710                                | 1490                              | 1205  | 0,89  | 95,7                       | 4551                             | 1,1   | 7,1   | 23   | 30                                     | 5240              |
| WK 450/4-900           | 850                                | 1490                              | 1440  | 0,89  | 96                         | 5450                             | 1,2   | 7,1   | 38   | 40                                     | 5900              |
| WK 450/4-1100          | 1000                               | 1490                              | 1690  | 0,89  | 96                         | 6410                             | 1,1   | 7,1   | 46   | 50                                     | 6700              |
| WK 450/4-1200          | 1100                               | 1490                              | 1860  | 0,89  | 96                         | 7050                             | 1,1   | 7,1   | 49   | 50                                     | 7100              |

Größere Leistungen auf Anfrage / Increased output on request

# Wassergekühlte Drehstrommotoren 1000 min<sup>-1</sup> 50 Hz

Schutzart IP 55  
Kühlmitteltemperatur 20 °C  
Gehäuse aus Aluminiumlegierung

# Water-cooled three-phase motors 1000 min<sup>-1</sup> 50 Hz

Degree of protection IP 55  
Cooling medium temperature 20 °C  
Housing of aluminium alloy

| Baugröße<br>Frame size | Bemessungsleistung<br>Rated output | Bemessungsdrehzahl<br>Rated speed | Bemessungsstrom bei 400 V<br>Rated current at 400 V | cos φ | Wirkungsgrad<br>Efficiency | Bemessungsmoment<br>Rated torque | Anzugsmoment zu Bemessungsmoment<br>Starting torque to rated torque | Anzugsstrom zu Bemessungsstrom<br>Starting current to rated current | Massenträgheitsmoment<br>Moment of inertia | Kühlwassermenge<br>Quantity of coolant | Gewicht<br>Weight |
|------------------------|------------------------------------|-----------------------------------|---|-------|----------------------------|----------------------------------|---|---|--|--|-------------------|
|                        | kW                                 | min <sup>-1</sup>                 | A   |       | %                          | Nm                               | M <sub>A</sub> /M <sub>N</sub>                                      | I <sub>A</sub> /I <sub>N</sub>                                      | kgm <sup>2</sup>                           | l/min                                  | kg                |
| WK 71/6-50             | 0,25                               | 860                               | 1,07  | 0,59  | 57                         | 2,80                             | 1,7   | 3,0   | 0,0009                                     | 0,5                                    | 7,5               |
| WK 71/6-65             | 0,37                               | 870                               | 1,46  | 0,60  | 61                         | 4,05                             | 1,8   | 3,2   | 0,0012                                     | 0,5                                    | 8,5               |
| WK 80/6-70             | 0,55                               | 870                               | 2,15  | 0,60  | 62                         | 6,0                              | 2,0   | 3,2   | 0,0022                                     | 0,5                                    | 12                |
| WK 80/6-90             | 0,75                               | 890                               | 2,40  | 0,67  | 67                         | 8,0                              | 2,1   | 3,5   | 0,0028                                     | 0,5                                    | 13,5              |
| WK 90/6-75             | 1,1                                | 900                               | 3,45  | 0,68  | 68                         | 11,7                             | 1,7   | 3,2   | 0,0037                                     | 1,0                                    | 18                |
| WK 90/6-100            | 1,5                                | 890                               | 4,75  | 0,67  | 68                         | 16,1                             | 1,8   | 3,5   | 0,0050                                     | 1,0                                    | 20                |
| WK 100/6-120           | 2,2                                | 910                               | 5,6   | 0,76  | 75                         | 23,0                             | 2,0   | 4,5   | 0,010                                      | 1,0                                    | 29                |
| WK 112/6-140           | 3,0                                | 930                               | 6,9   | 0,78  | 80                         | 31,0                             | 2,2   | 5,4   | 0,018                                      | 1,5                                    | 37                |
| WK 132/6-125           | 4,0                                | 940                               | 9,7   | 0,73  | 82                         | 40,5                             | 2,1   | 5,3   | 0,031                                      | 2,0                                    | 60                |
| WK 132/6-150           | 5,5                                | 940                               | 13,7  | 0,71  | 82                         | 56                               | 2,2   | 5,5   | 0,038                                      | 2,0                                    | 65                |
| WK 132/6-180           | 7,5                                | 935                               | 16,7  | 0,78  | 83                         | 77                               | 2,2   | 5,6   | 0,045                                      | 2,0                                    | 71                |
| WK 132/6-220           | 9,2                                | 945                               | 21,5  | 0,75  | 83                         | 93                               | 2,1   | 5,3   | 0,055                                      | 2,0                                    | 80                |
| WK 160/6-165           | 11                                 | 955                               | 22,5  | 0,83  | 85                         | 110                              | 2,0   | 6,2   | 0,093                                      | 2,5                                    | 191               |
| WK 160/6-225           | 15                                 | 960                               | 30,5  | 0,82  | 87                         | 149                              | 2,3   | 6,6   | 0,123                                      | 3,0                                    | 211               |
| WK 160/6-250           | 18,5                               | 960                               | 37,0  | 0,82  | 88                         | 184                              | 2,2   | 6,5   | 0,137                                      | 3,0                                    | 217               |



# Wassergekühlte Drehstrommotoren 1 000 min<sup>-1</sup> 50 Hz

Schutzart IP 55  
Kühlmitteltemperatur 20°C  
Gehäuse aus Grauguss

# Water-cooled three-phase motors 1 000 min<sup>-1</sup> 50 Hz

Degree of protection IP 55  
Cooling medium temperature 20°C  
Housing of grey cast iron

| Baugröße<br>Frame size | Bemessungsleistung<br>Rated output | Bemessungsdrehzahl<br>Rated speed | Bemessungsstrom bei 400 V<br>Rated current at 400 V | cos φ | Wirkungsgrad<br>Efficiency | Bemessungsmoment<br>Rated torque | Anzugsmoment zu Bemessungsmoment<br>Starting torque to rated torque | Anzugsstrom zu Bemessungsstrom<br>Starting current to rated current | Massenträgheitsmoment<br>Moment of inertia | Kühlwassermenge<br>Quantity of coolant | Gewicht<br>Weight |
|------------------------|------------------------------------|-----------------------------------|---|-------|----------------------------|----------------------------------|---|---|--|--|-------------------|
|                        | kW                                 | min <sup>-1</sup>                 | A   |       | %                          | Nm                               | M <sub>A</sub> /M <sub>N</sub>                                      | I <sub>A</sub> /I <sub>N</sub>                                      | kgm <sup>2</sup>                           | l/min                                  | kg                |
| WK 180/6-200           | 15                                 | 965                               | 31,0  | 0,80  | 87                         | 148                              | 2,1   | 6,1   | 0,168                                      | 3,0                                    | 260               |
| WK 180/6-240           | 18,5                               | 965                               | 38,0  | 0,80  | 88                         | 183                              | 2,0   | 6,0   | 0,192                                      | 3,0                                    | 275               |
| WK 180/6-290           | 22                                 | 965                               | 44,0  | 0,82  | 88                         | 218                              | 2,6   | 6,9   | 0,232                                      | 4,0                                    | 295               |
| WK 200 LK/6-230        | 22                                 | 970                               | 43,5  | 0,82  | 89                         | 217                              | 2,0   | 6,4   | 0,281                                      | 4,0                                    | 330               |
| WK 200 LK/6-265        | 30                                 | 970                               | 59  | 0,82  | 89                         | 295                              | 2,0   | 6,4   | 0,324                                      | 4,0                                    | 355               |
| WK 200 L/6-300         | 37                                 | 970                               | 74  | 0,81  | 89                         | 364                              | 2,1   | 6,6   | 0,360                                      | 5,0                                    | 390               |
| WK 225/6-290           | 37                                 | 975                               | 72  | 0,82  | 91                         | 362                              | 2,9   | 6,3   | 0,736                                      | 5,0                                    | 500               |
| WK 250/6-290           | 45                                 | 980                               | 86  | 0,82  | 92                         | 439                              | 2,8   | 6,5   | 1,01                                       | 6,0                                    | 580               |
| WK 280/6-240           | 55                                 | 975                               | 103   | 0,84  | 92                         | 539                              | 2,2   | 6,2   | 1,29                                       | 6,0                                    | 770               |
| WK 280/6-300           | 75                                 | 975                               | 136   | 0,86  | 93                         | 735                              | 2,6   | 6,5   | 1,61                                       | 7,0                                    | 830               |
| WK 280/6-360           | 90                                 | 975                               | 164   | 0,86  | 92                         | 882                              | 2,2   | 6,3   | 1,94                                       | 8,0                                    | 1000              |
| WK 280/6-440           | 110                                | 970                               | 194   | 0,89  | 92                         | 1080                             | 2,6   | 6,6   | 2,37                                       | 8,0                                    | 1150              |
| WK 315S/6-290          | 90                                 | 980                               | 163   | 0,85  | 94                         | 877                              | 2,0   | 6,5   | 2,6  | 8,0                                    | 1160              |
| WK 315S/6-340          | 110                                | 980                               | 197   | 0,86  | 94                         | 1070                             | 1,9   | 6,5   | 3,1  | 8,0                                    | 1250              |
| WK 315S/6-420          | 132                                | 980                               | 236   | 0,86  | 94                         | 1290                             | 2,0   | 6,6   | 3,6  | 9,0                                    | 1570              |
| WK 315S/6-460          | 160                                | 985                               | 290   | 0,84  | 95                         | 1550                             | 1,9   | 6,7   | 4,2  | 10                                     | 1710              |
| WK 315L/6-600          | 200                                | 980                               | 376   | 0,81  | 95                         | 1950                             | 1,8   | 6,8   | 5,5  | 12                                     | 2200              |
| WK 315L/6-700          | 250                                | 980                               | 464   | 0,82  | 95                         | 2435                             | 1,8   | 6,8   | 6,6  | 12                                     | 2550              |
| WK 355/6-550           | 315                                | 985                               | 563   | 0,86  | 94                         | 3054                             | 1,7   | 6,8   | 15   | 15                                     | 3400              |
| WK 355/6-700           | 355                                | 985                               | 628   | 0,86  | 95                         | 3442                             | 1,6   | 6,9   | 18   | 16                                     | 3700              |
| WK 355/6-900           | 400                                | 985                               | 699   | 0,87  | 95                         | 3878                             | 1,7   | 6,9   | 24   | 18                                     | 4000              |
| WK 400/6-800           | 450                                | 990                               | 778   | 0,88  | 95                         | 4341                             | 1,4   | 6,8   | 32   | 20                                     | 4850              |
| WK 400/6-900           | 500                                | 990                               | 855   | 0,89  | 95                         | 4823                             | 1,5   | 6,9   | 35   | 24                                     | 5240              |
| WK 450/6-800           | 560                                | 995                               | 950   | 0,89  | 95,5                       | 5375                             | 1,5   | 6,9   | 47   | 30                                     | 5550              |
| WK 450/6-900           | 630                                | 995                               | 1070  | 0,89  | 95,5                       | 6050                             | 1,5   | 6,9   | 53   | 30                                     | 5900              |
| WK 450/6-1100          | 710                                | 995                               | 1210  | 0,89  | 95,5                       | 6815                             | 1,4   | 7,0   | 64   | 40                                     | 6700              |
| WK 450/6-1200          | 800                                | 995                               | 1360  | 0,89  | 95,5                       | 7680                             | 1,4   | 7,0   | 69   | 45                                     | 7100              |

# Wassergekühlte Drehstrommotoren 750 min<sup>-1</sup> 50 Hz

Schutzart IP 55  
Kühlmitteltemperatur 20 °C  
Gehäuse aus Aluminiumlegierung

# Water-cooled three-phase motors 750 min<sup>-1</sup> 50 Hz

Degree of protection IP 55  
Cooling medium temperature 20 °C  
Housing of aluminium alloy

| Baugröße<br>Frame size | Bemessungsleistung<br>Rated output | Bemessungsdrehzahl<br>Rated speed | Bemessungsstrom bei 400 V<br>Rated current at 400 V | cos φ | Wirkungsgrad<br>Efficiency | Bemessungsmoment<br>Rated torque | Anzugsmoment zu Bemessungsmoment<br>Starting torque to rated torque | Anzugsstrom zu Bemessungsstrom<br>Starting current to rated current | Massenträgheitsmoment<br>Moment of inertia | Kühlwassermenge<br>Quantity of coolant | Gewicht<br>Weight |
|------------------------|------------------------------------|-----------------------------------|---|-------|----------------------------|----------------------------------|---|---|--|--|-------------------|
|                        | kW                                 | min <sup>-1</sup>                 | A   |       | %                          | Nm                               | M <sub>A</sub> /M <sub>N</sub>                                      | I <sub>A</sub> /I <sub>N</sub>                                      | kgm <sup>2</sup>                           | l/min                                  | kg                |
| WK 71/8-50             | 0,18                               | 640                               | 0,86  | 0,59  | 51                         | 2,70                             | 1,7   | 2,4   | 0,0009                                     | 0,5                                    | 7,5               |
| WK 71/8-65             | 0,25                               | 650                               | 1,14  | 0,60  | 53                         | 3,65                             | 1,8   | 2,5   | 0,0012                                     | 0,5                                    | 8,5               |
| WK 80/8-70             | 0,37                               | 660                               | 1,65  | 0,61  | 53                         | 5,4                              | 1,8   | 2,8   | 0,0022                                     | 0,5                                    | 12                |
| WK 80/8-90             | 0,55                               | 660                               | 2,20  | 0,63  | 58                         | 8,0                              | 1,6   | 2,5   | 0,0028                                     | 0,5                                    | 13,5              |
| WK 90/8-100            | 0,75                               | 670                               | 2,60  | 0,61  | 68                         | 10,7                             | 1,8   | 3,0   | 0,0050                                     | 1,0                                    | 20                |
| WK 100/8-90            | 1,1                                | 670                               | 3,65  | 0,62  | 70                         | 15,7                             | 1,7   | 3,5   | 0,0077                                     | 1,0                                    | 26                |
| WK 100/8-120           | 1,5                                | 670                               | 5,1   | 0,62  | 69                         | 21,5                             | 1,7   | 3,6   | 0,010                                      | 1,0                                    | 29                |
| WK 112/8-140           | 2,2                                | 690                               | 7,0   | 0,61  | 74                         | 30,5                             | 1,8   | 4,0   | 0,018                                      | 1,5                                    | 37                |
| WK 132/8-100           | 3,0                                | 700                               | 8,4   | 0,67  | 77                         | 41,0                             | 1,8   | 3,5   | 0,029                                      | 2,0                                    | 54                |
| WK 132/8-135           | 4,0                                | 700                               | 10,5  | 0,70  | 79                         | 55                               | 1,8   | 3,6   | 0,039                                      | 2,0                                    | 63                |
| WK 132/8-180           | 5,5                                | 700                               | 14,2  | 0,71  | 79                         | 75                               | 1,7   | 3,7   | 0,054                                      | 2,0                                    | 71                |
| WK 160/8-165           | 7,5                                | 720                               | 19,7  | 0,67  | 82                         | 99                               | 1,9   | 4,6   | 0,079                                      | 2,5                                    | 191               |
| WK 160/8-225           | 9,2                                | 720                               | 23,5  | 0,67  | 84                         | 122                              | 2,1   | 5,0   | 0,143                                      | 2,5                                    | 211               |

# Wassergekühlte Drehstrommotoren 750 min<sup>-1</sup> 50 Hz

Schutzart IP 55  
Kühlmitteltemperatur 20°C  
Gehäuse aus Grauguss

# Water-cooled three-phase motors 750 min<sup>-1</sup> 50 Hz

Degree of protection IP 55  
Cooling medium temperature 20°C  
Housing of grey cast iron

| Baugröße<br>Frame size | Bemessungsleistung<br>Rated output | Bemessungsdrehzahl<br>Rated speed | Bemessungsstrom bei 400 V<br>Rated current at 400 V | cos φ | Wirkungsgrad<br>Efficiency | Bemessungsmoment<br>Rated torque | Anzugsmoment zu Bemessungsmoment<br>Starting torque to rated torque | Anzugsstrom zu Bemessungsstrom<br>Starting current to rated current | Massenträgheitsmoment<br>Moment of inertia | Kühlwassermenge<br>Quantity of coolant | Gewicht<br>Weight |
|------------------------|------------------------------------|-----------------------------------|---|-------|----------------------------|----------------------------------|---|---|--|--|-------------------|
|                        | kW                                 | min <sup>-1</sup>                 | A   | %     | Nm                         | M <sub>A</sub> /M <sub>N</sub>   | I <sub>A</sub> /I <sub>N</sub>                                      | kgm <sup>2</sup>  | l/min                                      | kg                                     |                   |
| WK 180/8-200           | 11                                 | 710                               | 24,5  | 0,75  | 86                         | 148                              | 2,1   | 5,0   | 0,199                                      | 3,0                                    | 260               |
| WK 180/8-240           | 15                                 | 710                               | 33,5  | 0,75  | 86                         | 202                              | 2,1   | 5,2   | 0,239                                      | 3,0                                    | 275               |
| WK 200 LK/8-265        | 18,5                               | 730                               | 37,5  | 0,80  | 89                         | 242                              | 2,0   | 6,3   | 0,433                                      | 4,0                                    | 355               |
| WK 225/8-240           | 22                                 | 725                               | 51  | 0,72  | 87                         | 290                              | 2,5   | 5,0   | 0,61                                       | 5,0                                    | 440               |
| WK 225/8-290           | 30                                 | 725                               | 68  | 0,73  | 87                         | 395                              | 2,6   | 4,9   | 0,74                                       | 5,0                                    | 500               |
| WK 250/8-310           | 37                                 | 720                               | 77  | 0,77  | 90                         | 491                              | 2,0   | 4,6   | 1,20                                       | 6,0                                    | 600               |
| WK 280/8-240           | 45                                 | 725                               | 88  | 0,81  | 91                         | 593                              | 2,0   | 5,3   | 1,29                                       | 6,0                                    | 770               |
| WK 280/8-300           | 55                                 | 725                               | 105   | 0,82  | 92                         | 724                              | 2,4   | 5,5   | 1,61                                       | 6,0                                    | 830               |
| WK 280/8-360           | 75                                 | 725                               | 144   | 0,82  | 92                         | 988                              | 2,0   | 5,3   | 1,94                                       | 7,0                                    | 1000              |
| WK 280/8-440           | 90                                 | 725                               | 176   | 0,81  | 91                         | 1190                             | 2,0   | 5,3   | 2,37                                       | 7,0                                    | 1150              |
| WK 315/8-290           | 75                                 | 730                               | 144   | 0,82  | 92                         | 981                              | 1,7   | 6,4   | 3,3  | 7,0                                    | 1160              |
| WK 315/8-320           | 90                                 | 760                               | 172   | 0,82  | 92                         | 1130                             | 1,7   | 6,4   | 4,4  | 7,0                                    | 1210              |
| WK 315/8-380           | 110                                | 730                               | 208   | 0,82  | 93                         | 1440                             | 1,8   | 6,5   | 4,7  | 8,0                                    | 1420              |
| WK 315/8-460           | 132                                | 730                               | 250   | 0,82  | 93                         | 1730                             | 1,8   | 6,6   | 5,3  | 9,0                                    | 1710              |
| WK 315L/8-600          | 160                                | 730                               | 307   | 0,81  | 93                         | 2090                             | 1,6   | 6,7   | 7  | 10                                     | 2180              |
| WK 315/L8-700          | 200                                | 730                               | 384   | 0,81  | 93                         | 2615                             | 1,5   | 6,7   | 8  | 12                                     | 2380              |
| WK 355/8-550           | 250                                | 735                               | 474   | 0,81  | 94                         | 3250                             | 1,5   | 6,8   | 15   | 12                                     | 3400              |
| WK 355/8-700           | 315                                | 735                               | 591   | 0,82  | 94                         | 4090                             | 1,6   | 6,7   | 18   | 15                                     | 3700              |
| WK 355/8-900           | 355                                | 735                               | 662   | 0,82  | 94,5                       | 4615                             | 1,5   | 6,8   | 24   | 16                                     | 4000              |
| WK 400/8-800           | 400                                | 740                               | 737   | 0,83  | 94,5                       | 5160                             | 1,4   | 6,8   | 32   | 18                                     | 4850              |
| WK 400/8-900           | 450                                | 740                               | 844   | 0,82  | 94                         | 5810                             | 1,4   | 6,9   | 35   | 20                                     | 5240              |
| WK 450/8-800           | 500                                | 740                               | 921   | 0,83  | 94,5                       | 6453                             | 1,4   | 7,0   | 47   | 25                                     | 5550              |
| WK 450/8-900           | 560                                | 740                               | 1032  | 0,83  | 94,5                       | 7227                             | 1,4   | 7,1   | 53   | 30                                     | 5900              |
| WK 450/8-1100          | 630                                | 740                               | 1161  | 0,83  | 94,5                       | 8130                             | 1,3   | 7,1   | 64   | 30                                     | 6700              |
| WK 450/8-1200          | 710                                | 740                               | 1308  | 0,83  | 94,5                       | 9163                             | 1,2   | 7,0   | 69   | 40                                     | 7100              |

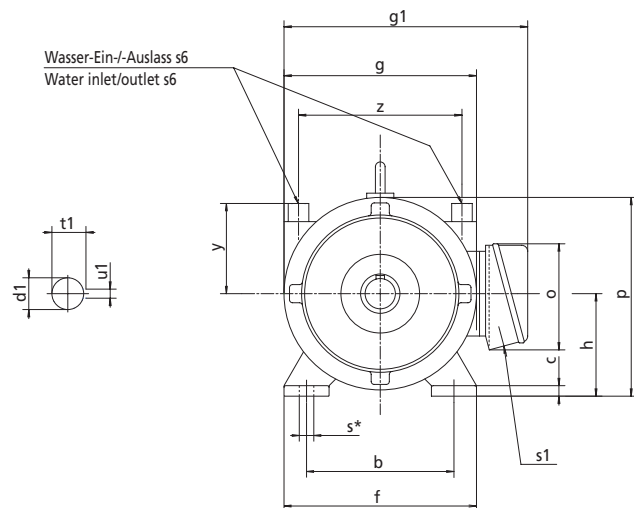
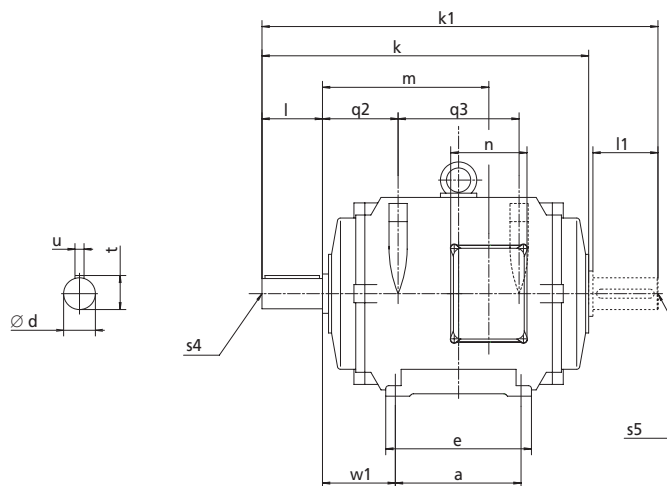
Größere Leistungen auf Anfrage / Increased output on request

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/001  
Bauform B3  
Schutzart IP 55  
Klemmenkasten rechts (0°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/001  
Mounting B3  
Degree of protection IP 55  
Terminalbox right (0°)



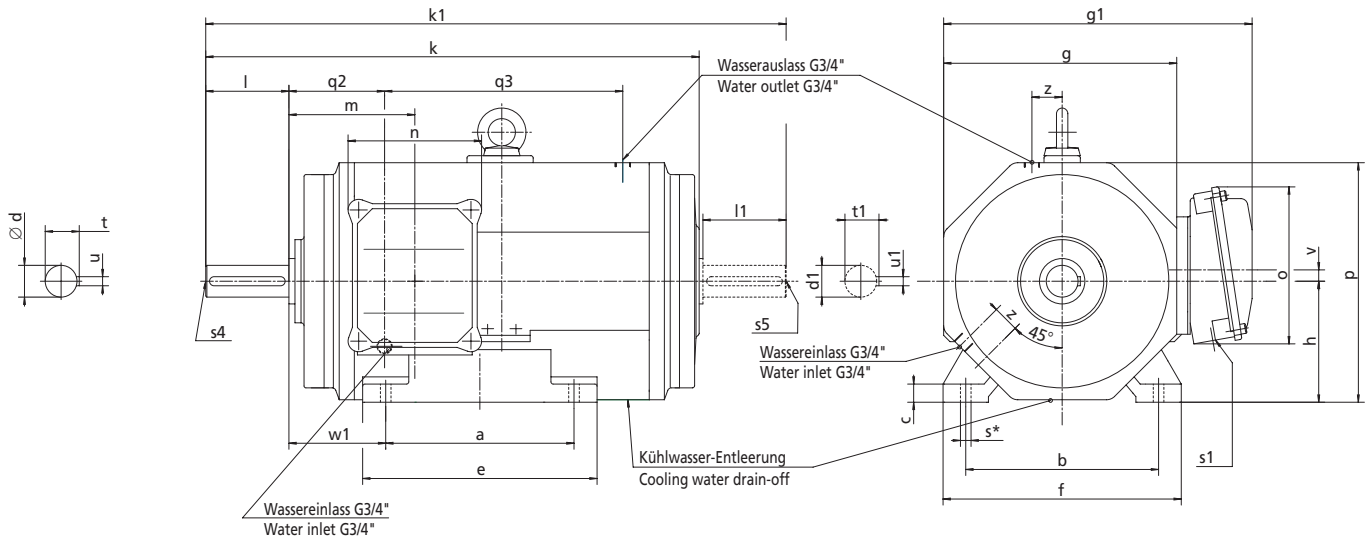
| Baugröße<br>Frame size |    | 71            | 80            | 90            | 100           | 112           | 132           | 160           | Baugröße<br>Frame size  |    | 71 | 80   | 90 | 100 | 112 | 132 | 160 |                                     |  |  |  |  |  |  |  |
|------------------------|----|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---|----|----|------|----|-----|-----|-----|-----|-------------------------------------|--|--|--|--|--|--|--|
| DIN                    | EN |               |               |               |               |               |               |               | DIN   | EN |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| a                      | B  | 90            | 100           | 125           | 140           | 140           | 178           | 254           | d   | D  | 14 | 19   | 24 | 28  | 28  | 38  | 42  | Welle AS<br>drive-end-<br>shaft     |  |  |  |  |  |  |  |
| b                      | A  | 112           | 125           | 140           | 160           | 190           | 216           | 254           | l   | E  | 30 | 40   | 50 | 60  | 60  | 80  | 110 |                                     |  |  |  |  |  |  |  |
| c                      | HA | 10            | 10            | 12            | 14            | 14            | 18            | 20            | t   | GA | 16 | 21.5 | 27 | 31  | 31  | 41  | 45  |                                     |  |  |  |  |  |  |  |
| e                      | BB | 110           | 125           | 150           | 194           | 200           | 208           | 308           | u   | F  | 5  | 6    | 8  | 8   | 8   | 10  | 12  |                                     |  |  |  |  |  |  |  |
| f                      | AB | 140           | 160           | 180           | 200           | 230           | 260           | 314           | d1  | DA | 14 | 19   | 24 | 28  | 28  | 32  | 38  | Welle BS<br>non-drive-<br>end-shaft |  |  |  |  |  |  |  |
| g                      | AC | 138           | 158           | 175           | 192           | 218           | 252           | 305           | l1  | EA | 30 | 40   | 50 | 60  | 60  | 80  | 80  |                                     |  |  |  |  |  |  |  |
| g1                     | AD | 195           | 219           | 236           | 261           | 299           | 339           | 420           | t1  | GC | 16 | 21.5 | 27 | 31  | 31  | 35  | 41  |                                     |  |  |  |  |  |  |  |
| h                      | H  | 71            | 80            | 90            | 100           | 112           | 132           | 160           | u1  | FA | 5  | 6    | 8  | 8   | 8   | 10  | 10  |                                     |  |  |  |  |  |  |  |
| k                      | L  | 240           | 317           | 320           | 380           | 405           | 497           | 635           | Passung d/d1 = ISA k6; ab Ø 55 ISA m6<br>Passfeder u/u1 = DIN 6885<br>Innengewinde s4/s5 = DIN 332 Form D<br>* = Durchgangsbohrung für Gewinde<br>Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6<br>Featherkey u/u1 = DIN 6885<br>Internal thread s4/s5 = DIN 332 Form D<br>* = through-hole for bolts |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| k1                     | LC | 275           | 362           | 372           | 445           | 470           | 586           | 730           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| m                      | /  | 142.5         | 202.5         | 191.5         | 239.5         | 244.5         | 309           | 393           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| n                      | /  | 90            | 105           | 105           | 105           | 140           | 140           | 180           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| o                      | /  | 90            | 105           | 105           | 105           | 140           | 140           | 215           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| p                      | HC | 140           | 157.5         | 177.5         | 196           | 221           | 258           | 313           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| q2                     | /  | 61.5          | 65            | 60            | 74            | 84.5          | 96            | 114           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| q3                     | /  | 90            | 150           | 148           | 180           | 185           | 234           | 312           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| s                      | /  | M6            | M8            | M8            | M10           | M10           | M10           | M12           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| s1                     | /  | 1x<br>M20x1.5 | 1x<br>M25x1.5 | 1x<br>M25x1.5 | 1x<br>M25x1.5 | 2x<br>M25x1.5 | 2x<br>M25x1.5 | 2x<br>M40x1.5 |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| s4                     | DB | -             | -             | M8            | M10           | M10           | M12           | M16           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| s5                     | DC | -             | -             | M8            | M10           | M10           | M12           | M12           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| s6                     | /  | G1/4"         | G1/4"         | G1/4"         | G1/4"         | G1/4"         | G1/2"         | G1/2"         |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| w1                     | C  | 45            | 50            | 56            | 63            | 70            | 89            | 108           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| y                      | /  | 81            | 85            | 85            | 95            | 100           | 117.5         | 137           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| z                      | /  | 108           | 128           | 143           | 165           | 190           | 206.5         | 255           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/001  
 Bauform B3  
 Schutzart IP 55  
 Klemmenkasten rechts (0°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/001  
 Mounting B3  
 Degree of protection IP 55  
 Terminalbox right (0°)



| Baugröße<br>Frame size  | 180 | 200<br>LK              | 200<br>L               | 225                    | 250                    | 280                    |                        |
|-------------------------|-----|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Polzahl<br>No. of poles | ≥ 2 | ≥ 2                    | ≥ 2                    | ≥ 2                    | ≥ 2                    | 2<br>≥ 4               |                        |
| DIN                     | EN  |                        |                        |                        |                        |                        |                        |
| a                       | B   | 279                    | 305                    | 305                    | 311                    | 349                    | 419                    |
| b                       | A   | 279                    | 318                    | 318                    | 356                    | 406                    | 457                    |
| c                       | HA  | 26                     | 30                     | 30                     | 32                     | 35                     | 40                     |
| e                       | BB  | 335                    | 365                    | 365                    | 379                    | 429                    | 529                    |
| f                       | AB  | 345                    | 400                    | 400                    | 435                    | 500                    | 570                    |
| g                       | AC  | 350                    | 392                    | 392                    | 438                    | 484                    | 544                    |
| g1                      | AD  | 493                    | 535                    | 535                    | 582                    | 680                    | 710                    |
| h                       | H   | 180                    | 200                    | 200                    | 225                    | 250                    | 280                    |
| k                       | L   | 740                    | 740                    | 810                    | 820                    | 888                    | 1014<br>1044           |
| k1                      | /   | 860                    | 890                    | 960                    | 970                    | 1038                   | 1164<br>1194           |
| m                       | /   | 184                    | 194                    | 194                    | 205                    | 258                    | 271                    |
| n                       | /   | 200                    | 200                    | 200                    | 200                    | 280                    | 280                    |
| o                       | /   | 250                    | 250                    | 250                    | 250                    | 365                    | 365                    |
| p                       | HC  | 354                    | 395                    | 395                    | 443                    | 491                    | 551                    |
| q2                      | /   | 119                    | 129                    | 129                    | 140                    | 153                    | 165                    |
| q3                      | /   | 370                    | 354                    | 424                    | 424                    | 460                    | 550                    |
| s                       | /   | M12                    | M16                    | M16                    | M16                    | M20                    | M20                    |
| s1                      | /   | 2xM40x1.5<br>2xM16x1.5 | 2xM50x1.5<br>2xM16x1.5 | 2xM50x1.5<br>2xM16x1.5 | 2xM50x1.5<br>2xM16x1.5 | 2xM50x1.5<br>2xM16x1.5 | 2xM63x1.5<br>2xM16x1.5 |
| s4                      | DB  | M20                    | M20                    | M20                    | M20                    | M20                    | M20                    |
| s5                      | DC  | M16                    | M20                    | M20                    | M20                    | M20                    | M20                    |
| v                       | /   | 21                     | 25                     | 25                     | 25                     | 40                     | 40                     |
| w1                      | C   | 121                    | 133                    | 133                    | 149                    | 168                    | 190                    |
| z                       | /   | 45                     | 50                     | 50                     | 57.5                   | 65                     | 75                     |

| Baugröße<br>Frame size | 180 | 200<br>LK | 200<br>L | 225 | 250 | 280  |      |
|------------------------|-----|-----------|----------|-----|-----|------|------|
| DIN                    | EN  |           |          |     |     |      |      |
| d <sub>max</sub>       | D   | 60        | 65       | 65  | 65  | 75   | 75   |
| l                      | E   | 140       | 140      | 140 | 140 | 140  | 140  |
| t                      | GA  | 64        | 69       | 69  | 69  | 79.5 | 79.5 |
| u                      | F   | 18        | 18       | 18  | 18  | 20   | 20   |
| d <sub>1max</sub>      | DA  | 48        | 60       | 60  | 60  | 65   | 75   |
| l1                     | EA  | 110       | 140      | 140 | 140 | 140  | 140  |
| t1                     | GC  | 51.5      | 64       | 64  | 64  | 69   | 79.5 |
| u1                     | FA  | 14        | 18       | 18  | 18  | 18   | 20   |

Welle AS Ø-max  
drive-end-shaft

Welle BS Ø-max  
non-drive-end-shaft

Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
 Passung b1 = ISA h6  
 Passfeder u/u1 = DIN 6885  
 Innengewinde s4/s5 = DIN 332 Form D  
 \* = Durchgangsbohrung für Gewinde

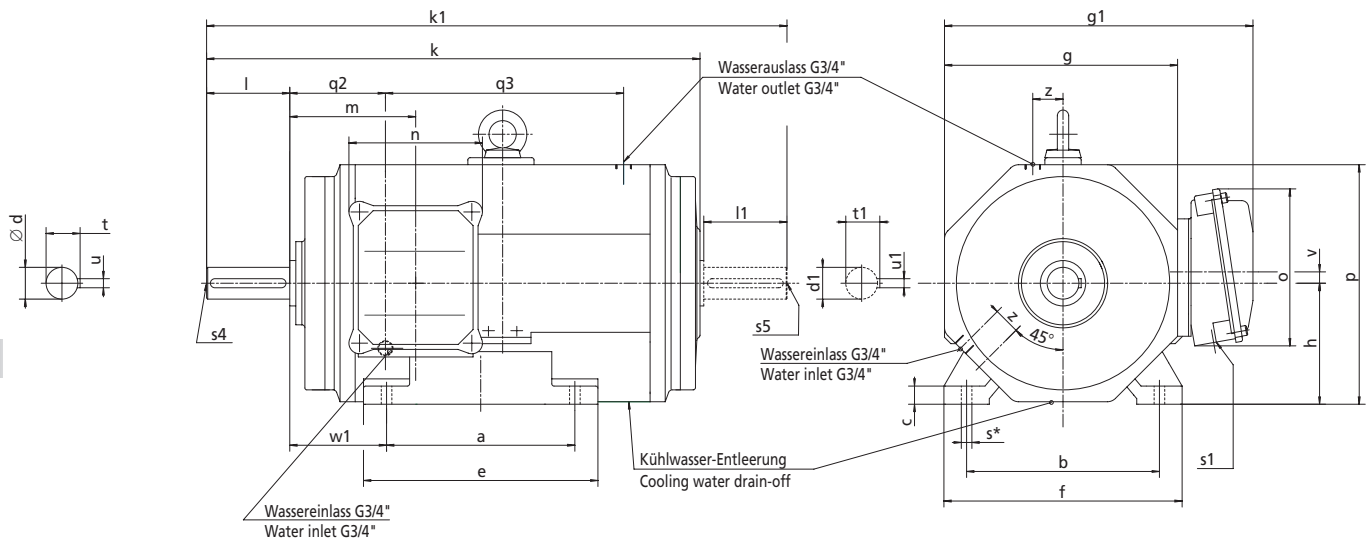
Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
 Fit diam. b1 = ISA h6  
 Featherkey u/u1 = DIN 6885  
 Internal thread s4/s5 = DIN 332 Form D  
 \* = through-hole for bolts

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/001  
 Bauform B3  
 Schutzart IP 55  
 Klemmenkasten rechts (0°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/001  
 Mounting B3  
 Degree of protection IP 55  
 Terminalbox right (0°)



| Baugröße<br>Frame size  |    | 315 S                                 | 315 L                | 355                  | 400                  | 450                  | Baugröße<br>Frame size  |    | 315 S      | 315 L      | 355      | 400      | 450      |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
|-------------------------|----|---------------------------------------|----------------------|----------------------|----------------------|----------------------|---|----|------------|------------|----------|----------|----------|--|--|-----------------------------------|--|--|--|--|--|--|--|---------------------------------------|--|--|--|--|--|
| Polzahl<br>No. of poles |    | 2<br>≥ 4                              | 2<br>≥ 4             | ≥ 4                  | ≥ 4                  | ≥ 4                  | DIN   | EN |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| a                       | B  | 457                                   | 667                  | 765                  | 810                  | 1030                 | d <sub>max</sub>  | D  | 75<br>90   | 75<br>90   | -<br>90  | -<br>100 | -<br>110 |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| b                       | A  | 508                                   | 508                  | 610                  | 686                  | 750                  | l   | E  | 140<br>170 | 140<br>170 | -<br>170 | -<br>210 | -<br>210 |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| c                       | HA | 50                                    | 50                   | 50                   | 50                   | 60                   | t   | GA | 79,5<br>95 | 79,5<br>95 | -<br>95  | -<br>106 | -<br>116 |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| e                       | BB | 551                                   | 760                  | 885                  | 948                  | 1250                 | u   | F  | 20<br>25   | 20<br>25   | -<br>25  | -<br>28  | -<br>28  |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| f                       | AB | 628                                   | 628                  | 710                  | 800                  | 940                  | d <sub>1max</sub>   | DA | 75<br>80   | 75<br>80   | -<br>80  | -<br>90  | -<br>90  |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| g                       | AC | 614                                   | 614                  | 690                  | 790                  | 860                  | l1  | EA | 140<br>170 | 140<br>170 | -<br>170 | -<br>170 | -<br>170 |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| g1                      | AD | 812                                   | 812                  | 917                  | 1130                 | 1205                 | t1  | GC | 79,5<br>85 | 79,5<br>85 | -<br>85  | -<br>95  | -<br>95  |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| h                       | H  | 315                                   | 315                  | 355                  | 400                  | 450                  | u1  | FA | 20<br>22   | 20<br>22   | -<br>22  | -<br>25  | -<br>25  |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| k                       | L  | 1185<br>1215                          | 1465<br>1495         | -<br>1697            | -<br>1748            | -<br>2158            | <table border="0"> <tr> <td colspan="2"></td> <td colspan="6">Welle AS Ø-max<br/>drive-end-shaft</td> </tr> <tr> <td colspan="2"></td> <td colspan="6">Welle BS Ø-max<br/>non-drive-end-shaft</td> </tr> </table> |    |            |            |          |          |          |  |  | Welle AS Ø-max<br>drive-end-shaft |  |  |  |  |  |  |  | Welle BS Ø-max<br>non-drive-end-shaft |  |  |  |  |  |
|                         |    | Welle AS Ø-max<br>drive-end-shaft     |                      |                      |                      |                      |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
|                         |    | Welle BS Ø-max<br>non-drive-end-shaft |                      |                      |                      |                      |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| k1                      | LC | 1335<br>1395                          | 1615<br>1675         | -<br>1882            | -<br>1933            | -<br>2348            |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| m                       | /  | 323                                   | 232                  | 342                  | 352                  | 364                  |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| n                       | /  | 355                                   | 355                  | 355                  | 470                  | 470                  |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| o                       | /  | 427                                   | 427                  | 427                  | 546                  | 546                  |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| p                       | HC | 625                                   | 625                  | 705                  | 795                  | 880                  |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| q2                      | /  | 301                                   | 301                  | 343                  | 353                  | 383                  |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| q3                      | /  | 535                                   | 815                  | 950                  | 950                  | 1250                 |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| s                       | /  | M24                                   | M24                  | M24                  | M30                  | M30                  |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| s1                      | /  | 2xM72x2<br>2xM16x1,5                  | 2xM72x2<br>2xM16x1,5 | 2xM72x2<br>2xM16x1,5 | 3xM72x2<br>2xM16x1,5 | 3xM72x2<br>2xM16x1,5 |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| s4                      | DB | M20<br>M24                            | M20<br>M24           | -<br>M24             | -<br>M24             | -<br>M24             |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| s5                      | DC | M20                                   | M20                  | M20                  | M24                  | M24                  |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| v                       | /  | 40                                    | 40                   | 49,5                 | 49,5                 | 49,5                 |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| w1                      | C  | 216                                   | 216                  | 255                  | 280                  | 364                  |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |
| z                       | /  | 90                                    | 90                   | 90                   | 90                   | 90                   |   |    |            |            |          |          |          |  |  |                                   |  |  |  |  |  |  |  |                                       |  |  |  |  |  |

Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
 Passung b1 = ISA h6  
 Passfeder u/u1 = DIN 6885  
 Innengewinde s4/s5 = DIN 332 Form D  
 \* = Durchgangsbohrung für Gewinde

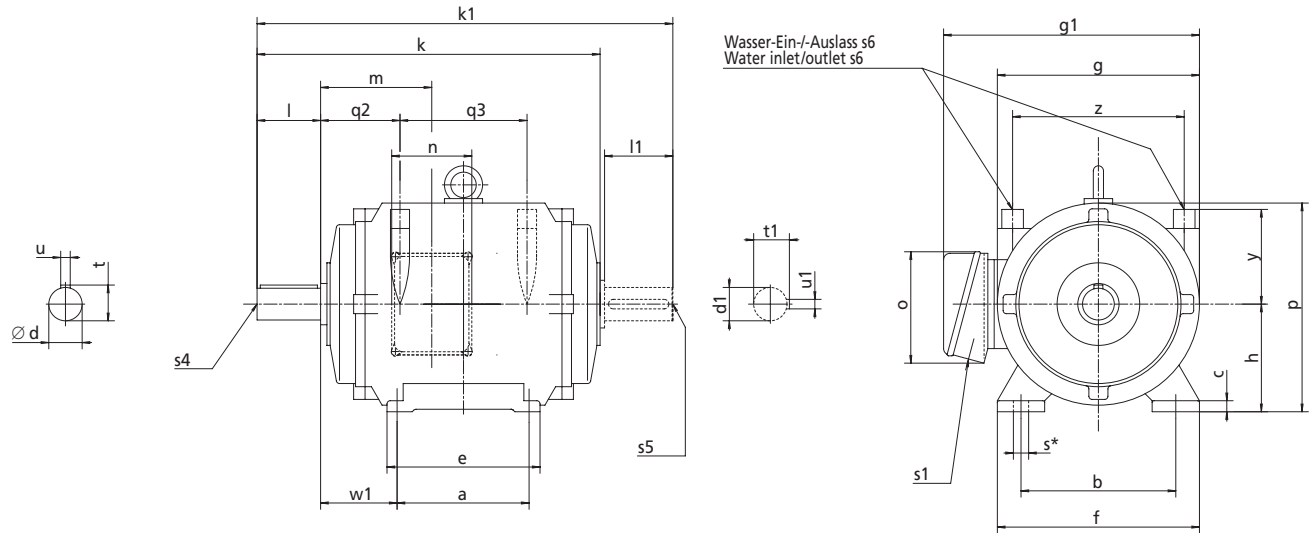
Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
 Fit diam. b1 = ISA h6  
 Featherkey u/u1 = DIN 6885  
 Internal thread s4/s5 = DIN 332 Form D  
 \* = through-hole for bolts

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/002  
Bauform B3  
Schutzart IP 55  
Klemmenkasten links (180°)

# Water-cooled three-phase motors type wk

dimension sheet No. 837/09/002  
mounting B3  
degree of protection IP 55  
Terminalbox left (180°)



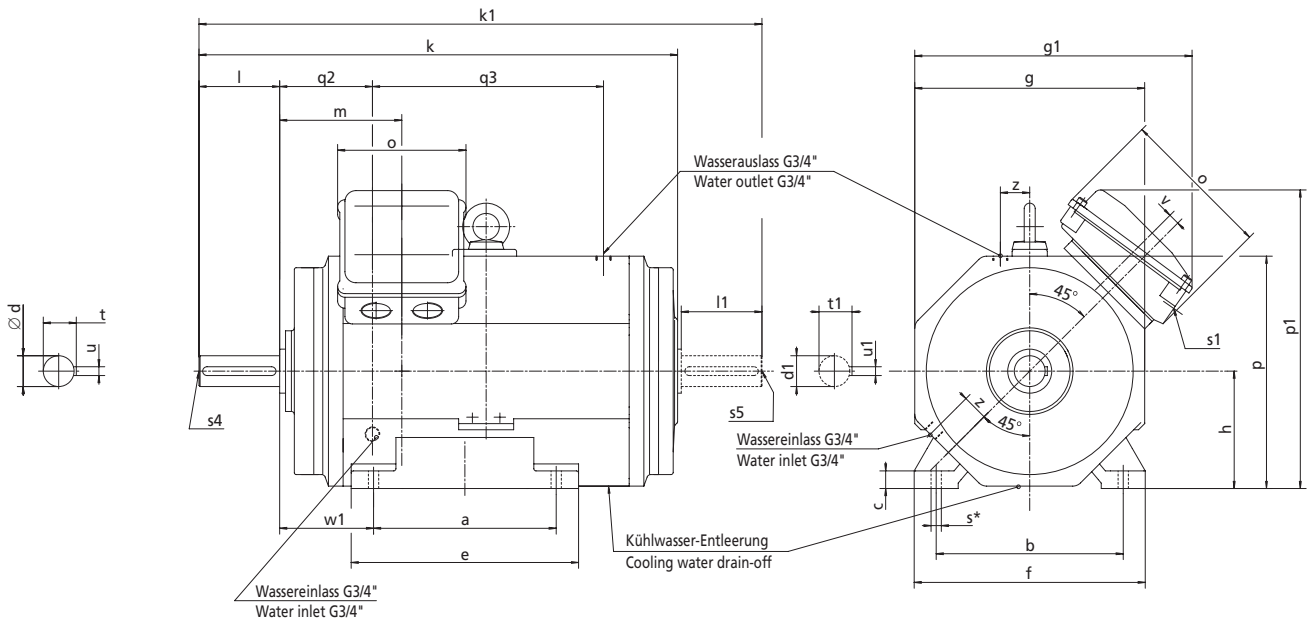
| Baugröße<br>Frame size |    | 71            | 80            | 90            | 100           | 112           | 132           | 160           | Baugröße<br>Frame size  |    | 71 | 80   | 90 | 100 | 112 | 132 | 160 |                                     |  |  |  |  |  |  |  |
|------------------------|----|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---|----|----|------|----|-----|-----|-----|-----|-------------------------------------|--|--|--|--|--|--|--|
| DIN                    | EN |               |               |               |               |               |               |               | DIN   | EN |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| a                      | B  | 90            | 100           | 125           | 140           | 140           | 178           | 254           | d   | D  | 14 | 19   | 24 | 28  | 28  | 38  | 42  | Welle AS<br>drive-end-<br>shaft     |  |  |  |  |  |  |  |
| b                      | A  | 112           | 125           | 140           | 160           | 190           | 216           | 254           | l   | E  | 30 | 40   | 50 | 60  | 60  | 80  | 110 |                                     |  |  |  |  |  |  |  |
| c                      | H1 | 10            | 10            | 12            | 14            | 14            | 18            | 20            | t   | GA | 16 | 21.5 | 27 | 31  | 31  | 41  | 45  |                                     |  |  |  |  |  |  |  |
| e                      | BB | 110           | 125           | 150           | 194           | 200           | 208           | 308           | u   | F  | 5  | 6    | 8  | 8   | 8   | 10  | 12  |                                     |  |  |  |  |  |  |  |
| f                      | AB | 140           | 160           | 180           | 200           | 230           | 260           | 314           | d1  | DA | 14 | 19   | 24 | 28  | 28  | 32  | 38  | Welle BS<br>non-drive-<br>end-shaft |  |  |  |  |  |  |  |
| g                      | AC | 138           | 158           | 175           | 192           | 218           | 252           | 305           | l1  | EA | 30 | 40   | 50 | 60  | 60  | 80  | 80  |                                     |  |  |  |  |  |  |  |
| g1                     | AD | 195           | 219           | 236           | 261           | 299           | 339           | 420           | t1  | GC | 16 | 21.5 | 27 | 31  | 31  | 35  | 41  |                                     |  |  |  |  |  |  |  |
| h                      | H  | 71            | 80            | 90            | 100           | 112           | 132           | 160           | u1  | FA | 5  | 6    | 8  | 8   | 8   | 10  | 10  |                                     |  |  |  |  |  |  |  |
| k                      | L  | 240           | 317           | 320           | 380           | 405           | 497           | 635           | Passung d/d1 = ISA k6; ab Ø 55 ISA m6<br>Paßfeder u/u1 = DIN 6885<br>Innengewinde s4/s5 = DIN 332 Form D<br>* = Durchgangsbohrung für Gewinde   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| k1                     | LC | 275           | 362           | 372           | 445           | 470           | 586           | 730           | Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6<br>Featherkey u/u1 = DIN 6885<br>Internal thread s4/s5 = DIN 332 Form D<br>* = through-hole for bolts |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| m                      | /  | 70.5          | 77.5          | 80.5          | 88.5          | 109.5         | 117           | 147           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| n                      | /  | 90            | 105           | 105           | 105           | 140           | 140           | 180           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| o                      | /  | 90            | 105           | 105           | 105           | 140           | 140           | 215           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| p                      | HC | 140           | 157.5         | 177.5         | 196           | 221           | 258           | 313           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| q2                     | /  | 61.5          | 65            | 60            | 74            | 84.5          | 96            | 114           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| q3                     | /  | 90            | 150           | 148           | 180           | 185           | 234           | 312           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| s                      | /  | M6            | M8            | M8            | M10           | M10           | M10           | M12           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| s1                     | /  | 1x<br>M20x1.5 | 1x<br>M25x1.5 | 1x<br>M25x1.5 | 1x<br>M25x1.5 | 2x<br>M25x1.5 | 2x<br>M25x1.5 | 2x<br>M40x1.5 |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| s4                     | DB | -             | -             | M8            | M10           | M10           | M12           | M16           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| s5                     | DC | -             | -             | M8            | M10           | M10           | M12           | M12           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| s6                     | /  | G1/4"         | G1/4"         | G1/4"         | G1/4"         | G1/4"         | G1/2"         | G1/2"         |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| w1                     | C  | 45            | 50            | 56            | 63            | 70            | 89            | 108           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| y                      | /  | 81            | 85            | 85            | 95            | 100           | 117.5         | 137           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |
| z                      | /  | 108           | 128           | 143           | 165           | 190           | 206.5         | 255           |   |    |    |      |    |     |     |     |     |                                     |  |  |  |  |  |  |  |

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/003  
 Bauform B3  
 Schutzart IP 55  
 Klemmenkasten rechts (315°)

# Water-cooled three-phase motors type wk

dimension sheet No. 837/09/003  
 mounting B3  
 degree of protection IP 55  
 Terminalbox right (315°)



| Baugröße<br>Frame size  |    | 180       | 200<br>LK | 200<br>L  | 225       | 250       | 280       | Baugröße<br>Frame size |  | 180 | 200<br>LK | 200<br>L | 225 | 250 | 280 |  |
|-------------------------|----|-----------|-----------|-----------|-----------|-----------|-----------|------------------------|--|-----|-----------|----------|-----|-----|-----|--|
| Polzahl<br>No. of poles |    | ≥ 2       | ≥ 2       | ≥ 2       | ≥ 2       | ≥ 2       | 2<br>≥ 4  | DIN                    |  | EN  |           |          |     |     |     |  |
| w1                      | C  | 121       | 133       | 133       | 149       | 168       | 190       |                        |  |     |           |          |     |     |     |  |
| z                       | /  | 45        | 50        | 50        | 57.5      | 65        | 75        |                        |  |     |           |          |     |     |     |  |
| d <sub>max</sub>        | D  | 60        | 65        | 65        | 65        | 75        | 75        |                        |  |     |           |          |     |     |     |  |
| l                       | E  | 140       | 140       | 140       | 140       | 140       | 140       |                        |  |     |           |          |     |     |     |  |
| t                       | GA | 64        | 69        | 69        | 69        | 79.5      | 79.5      |                        |  |     |           |          |     |     |     |  |
| u                       | F  | 18        | 18        | 18        | 18        | 20        | 18        |                        |  |     |           |          |     |     |     |  |
| d <sub>1max</sub>       | DA | 48        | 60        | 60        | 60        | 65        | 75        |                        |  |     |           |          |     |     |     |  |
| l1                      | EA | 110       | 140       | 140       | 140       | 140       | 140       |                        |  |     |           |          |     |     |     |  |
| t1                      | GC | 51.5      | 64        | 64        | 64        | 69        | 79.5      |                        |  |     |           |          |     |     |     |  |
| u1                      | FA | 14        | 18        | 18        | 18        | 18        | 20        |                        |  |     |           |          |     |     |     |  |
| a                       | B  | 279       | 305       | 305       | 311       | 349       | 419       |                        |  |     |           |          |     |     |     |  |
| b                       | A  | 279       | 318       | 318       | 356       | 406       | 457       |                        |  |     |           |          |     |     |     |  |
| c                       | HA | 26        | 30        | 30        | 32        | 35        | 40        |                        |  |     |           |          |     |     |     |  |
| e                       | BB | 335       | 365       | 365       | 379       | 429       | 529       |                        |  |     |           |          |     |     |     |  |
| f                       | AB | 345       | 400       | 400       | 435       | 500       | 570       |                        |  |     |           |          |     |     |     |  |
| g                       | AC | 350       | 392       | 392       | 438       | 484       | 544       |                        |  |     |           |          |     |     |     |  |
| g1                      | AD | 448       | 483       | 483       | 529       | 622       | 674       |                        |  |     |           |          |     |     |     |  |
| h                       | H  | 180       | 200       | 200       | 225       | 250       | 280       |                        |  |     |           |          |     |     |     |  |
| k                       | L  | 740       | 740       | 810       | 820       | 888       | 1014      |                        |  |     |           |          |     |     |     |  |
| k1                      | LC | 860       | 890       | 960       | 970       | 1038      | 1164      |                        |  |     |           |          |     |     |     |  |
| m                       | /  | 184       | 194       | 194       | 205       | 258       | 271       |                        |  |     |           |          |     |     |     |  |
| n                       | /  | 200       | 200       | 200       | 200       | 280       | 280       |                        |  |     |           |          |     |     |     |  |
| o                       | /  | 250       | 250       | 250       | 250       | 365       | 365       |                        |  |     |           |          |     |     |     |  |
| p                       | HC | 354       | 395       | 395       | 443       | 491       | 551       |                        |  |     |           |          |     |     |     |  |
| p1                      | /  | 482       | 518       | 518       | 560       | 675       | 725       |                        |  |     |           |          |     |     |     |  |
| q2                      | /  | 119       | 129       | 129       | 140       | 153       | 165       |                        |  |     |           |          |     |     |     |  |
| q3                      | /  | 370       | 354       | 424       | 424       | 460       | 550       |                        |  |     |           |          |     |     |     |  |
| s                       | /  | M12       | M16       | M16       | M16       | M20       | M20       |                        |  |     |           |          |     |     |     |  |
| s1                      | /  | 2xM40x1.5 | 2xM50x1.5 | 2xM50x1.5 | 2xM50x1.5 | 2xM50x1.5 | 2xM63x1.5 |                        |  |     |           |          |     |     |     |  |
| s4                      | DB | M20       | M20       | M20       | M20       | M20       | M20       |                        |  |     |           |          |     |     |     |  |
| s5                      | DC | M16       | M20       | M20       | M20       | M20       | M20       |                        |  |     |           |          |     |     |     |  |
| v                       | /  | 21        | 25        | 25        | 25        | 40        | 40        |                        |  |     |           |          |     |     |     |  |

Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
 Passung b1 = ISA h6  
 Passfeder u/u1 = DIN 6 885  
 Innengewinde s4/s5 = DIN 332 Form D  
 \* = Durchgangsbohrung für Gewinde

Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
 Fit diam. b1 = ISA h6  
 Featherkey u/u1 = DIN 6 885  
 Internal thread s4/s5 = DIN 332 Form D  
 \* = through-hole for bolts

Welle AS Ø-max  
drive-end-shaft

Welle BS Ø-max  
non-drive-end-shaft

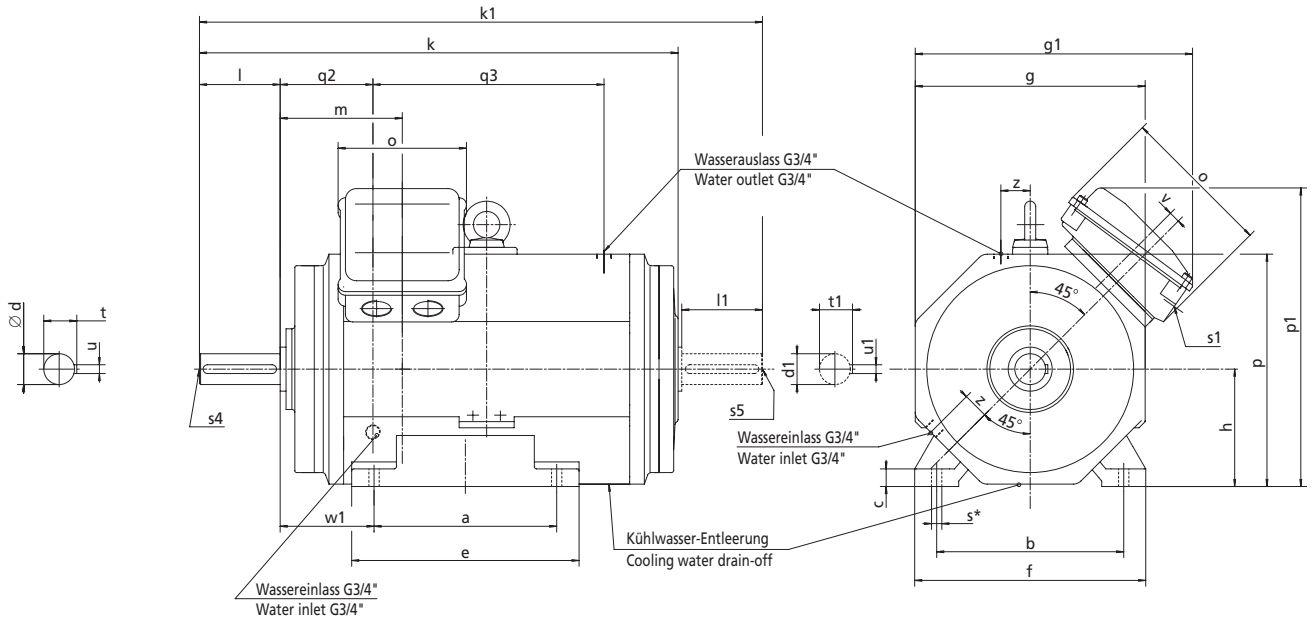


# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/003  
 Bauform B3  
 Schutzart IP 55  
 Klemmenkasten rechts (315°)

# Water-cooled three-phase motors type wk

dimension sheet No. 837/09/003  
 mounting B3  
 degree of protection IP 55  
 Terminalbox right (315°)



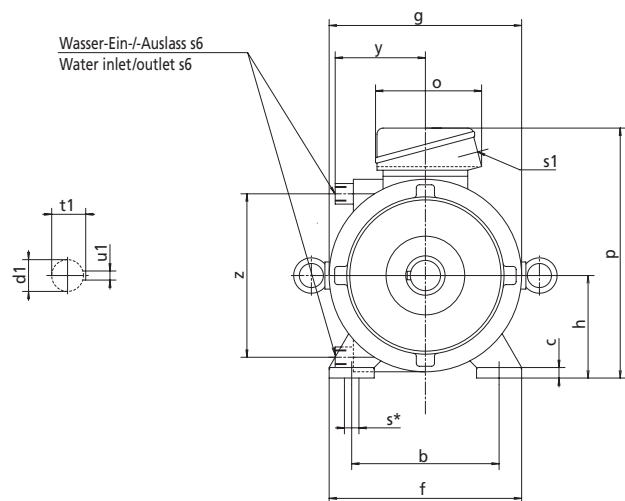
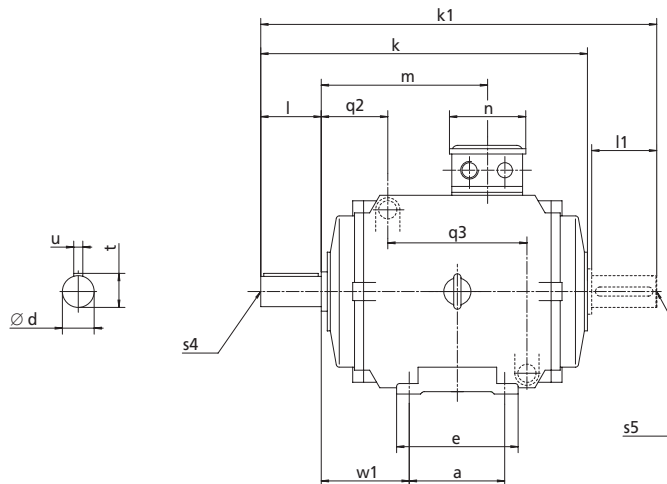
| Baugröße<br>Frame size                |    | 315 S                | 315 L                | 355                  | 400                  | 450                  | Baugröße<br>Frame size   |    | 315 S      | 315 L      | 355      | 400      | 450      |                                   |  |                                       |  |
|---------------------------------------|----|----------------------|----------------------|----------------------|----------------------|----------------------|--|----|------------|------------|----------|----------|----------|-----------------------------------|--|---------------------------------------|--|
| Polzahl<br>No. of poles               |    | 2<br>≥ 4             | 2<br>≥ 4             | ≥ 4                  | ≥ 4                  | ≥ 4                  | DIN  | EN |            |            |          |          |          |                                   |  |                                       |  |
| a                                     | B  | 457                  | 667                  | 765                  | 810                  | 1030                 | d <sub>max</sub>   | D  | 75<br>90   | 75<br>90   | -<br>90  | -<br>100 | -<br>110 |                                   |  |                                       |  |
| b                                     | A  | 508                  | 508                  | 610                  | 686                  | 750                  | l  | E  | 140<br>170 | 140<br>170 | -<br>170 | -<br>210 | -<br>210 |                                   |  |                                       |  |
| c                                     | HA | 50                   | 50                   | 50                   | 50                   | 60                   | t  | GA | 79,5<br>95 | 79,5<br>95 | -<br>95  | -<br>106 | -<br>116 |                                   |  |                                       |  |
| e                                     | BB | 551                  | 760                  | 885                  | 948                  | 1250                 | u  | F  | 20<br>25   | 20<br>25   | -<br>25  | -<br>28  | -<br>28  |                                   |  |                                       |  |
| f                                     | AB | 628                  | 628                  | 710                  | 800                  | 940                  | d <sub>1max</sub>  | DA | 75<br>80   | 75<br>80   | -<br>80  | -<br>90  | -<br>90  |                                   |  |                                       |  |
| g                                     | AC | 614                  | 614                  | 690                  | 790                  | 860                  | l1   | EA | 140<br>170 | 140<br>170 | -<br>170 | -<br>170 | -<br>170 |                                   |  |                                       |  |
| g1                                    | AD | 812                  | 812                  | 917                  | 1130                 | 1205                 | t1   | GC | 79,5<br>85 | 79,5<br>85 | -<br>85  | -<br>95  | -<br>95  |                                   |  |                                       |  |
| h                                     | H  | 315                  | 315                  | 355                  | 400                  | 450                  | u1   | FA | 20<br>22   | 20<br>22   | -<br>22  | -<br>25  | -<br>25  |                                   |  |                                       |  |
| k                                     | L  | 1185<br>1215         | 1465<br>1495         | -<br>1697            | -<br>1748            | -<br>2158            | <table border="0"> <tr> <td>Welle AS Ø-max<br/>drive-end-shaft</td> <td></td> </tr> <tr> <td>Welle BS Ø-max<br/>non-drive-end-shaft</td> <td></td> </tr> </table> <p>Passung d/d1 = ISA k6; ab Ø 55 ISA m6<br/>                     Passung b1 = ISA h6<br/>                     Passfeder u/u1 = DIN 6885<br/>                     Innengewinde s4/s5 = DIN 332 Form D<br/>                     * = Durchgangsbohrung für Gewinde</p> <p>Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6<br/>                     Fit diam. b1 = ISA h6<br/>                     Featherkey u/u1 = DIN 6885<br/>                     Internal thread s4/s5 = DIN 332 Form D<br/>                     * = through-hole for bolts</p> |    |            |            |          |          |          | Welle AS Ø-max<br>drive-end-shaft |  | Welle BS Ø-max<br>non-drive-end-shaft |  |
| Welle AS Ø-max<br>drive-end-shaft     |    |                      |                      |                      |                      |                      |  |    |            |            |          |          |          |                                   |  |                                       |  |
| Welle BS Ø-max<br>non-drive-end-shaft |    |                      |                      |                      |                      |                      |  |    |            |            |          |          |          |                                   |  |                                       |  |
| k1                                    | LC | 1335<br>1395         | 1615<br>1675         | -<br>1882            | -<br>1933            | -<br>2348            |  |    |            |            |          |          |          |                                   |  |                                       |  |
| m                                     | /  | 323                  | 232                  | 342                  | 352                  | 364                  |  |    |            |            |          |          |          |                                   |  |                                       |  |
| n                                     | /  | 355                  | 355                  | 355                  | 470                  | 470                  |  |    |            |            |          |          |          |                                   |  |                                       |  |
| o                                     | /  | 427                  | 427                  | 427                  | 546                  | 546                  |  |    |            |            |          |          |          |                                   |  |                                       |  |
| p                                     | HC | 625                  | 625                  | 705                  | 795                  | 880                  |  |    |            |            |          |          |          |                                   |  |                                       |  |
| p1                                    | /  | 795                  | 795                  | 875                  | 1070                 | 1102                 |  |    |            |            |          |          |          |                                   |  |                                       |  |
| q2                                    | /  | 301                  | 301                  | 343                  | 353                  | 383                  |  |    |            |            |          |          |          |                                   |  |                                       |  |
| q3                                    | /  | 535                  | 815                  | 950                  | 950                  | 1250                 |  |    |            |            |          |          |          |                                   |  |                                       |  |
| s                                     | /  | M24                  | M24                  | M24                  | M30                  | M30                  |  |    |            |            |          |          |          |                                   |  |                                       |  |
| s1                                    | /  | 2xM72x2<br>2xM16x1,5 | 2xM72x2<br>2xM16x1,5 | 2xM72x2<br>2xM16x1,5 | 3xM72x2<br>2xM16x1,5 | 3xM72x2<br>2xM16x1,5 |  |    |            |            |          |          |          |                                   |  |                                       |  |
| s4                                    | DB | M20<br>M24           | M20<br>M24           | -<br>M24             | -<br>M24             | -<br>M24             |  |    |            |            |          |          |          |                                   |  |                                       |  |
| s5                                    | DC | M20                  | M20                  | M20                  | M24                  | M24                  |  |    |            |            |          |          |          |                                   |  |                                       |  |
| v                                     | /  | 40                   | 40                   | 49,5                 | 49,5                 | 49,5                 |  |    |            |            |          |          |          |                                   |  |                                       |  |
| w1                                    | C  | 216                  | 216                  | 255                  | 280                  | 364                  |  |    |            |            |          |          |          |                                   |  |                                       |  |
| z                                     | /  | 90                   | 90                   | 90                   | 90                   | 90                   |  |    |            |            |          |          |          |                                   |  |                                       |  |

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/004  
Bauform B3  
Schutzart IP 55  
Klemmenkasten oben (270°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/004  
Mounting B3  
Degree of protection IP 55  
Terminalbox on top (270°)



| Baugröße<br>Frame size |    | 71      | 80      | 90      | 100     | 112     | 132     | 160     | Baugröße<br>Frame size |    | 71 | 80   | 90 | 100 | 112 | 132 | 160 |
|------------------------|----|---------|---------|---------|---------|---------|---------|---------|------------------------|----|----|------|----|-----|-----|-----|-----|
| DIN                    | EN |         |         |         |         |         |         |         | DIN                    | EN |    |      |    |     |     |     |     |
| a                      | B  | 90      | 100     | 125     | 140     | 140     | 178     | 254     | d                      | D  | 14 | 19   | 24 | 28  | 28  | 38  | 42  |
| b                      | A  | 112     | 125     | 140     | 160     | 190     | 216     | 254     | l                      | E  | 30 | 40   | 50 | 60  | 60  | 80  | 110 |
| c                      | HA | 10      | 10      | 12      | 14      | 14      | 18      | 20      | t                      | GA | 16 | 21.5 | 27 | 31  | 31  | 41  | 45  |
| e                      | BB | 110     | 125     | 150     | 194     | 200     | 208     | 308     | u                      | F  | 5  | 6    | 8  | 8   | 8   | 10  | 12  |
| f                      | AB | 140     | 160     | 180     | 200     | 230     | 260     | 314     | d1                     | DA | 14 | 19   | 24 | 28  | 28  | 32  | 38  |
| g                      | AC | 138     | 158     | 175     | 192     | 218     | 252     | 305     | l1                     | EA | 30 | 40   | 50 | 60  | 60  | 80  | 80  |
| h                      | H  | 71      | 80      | 90      | 100     | 112     | 132     | 160     | t1                     | GC | 16 | 21.5 | 27 | 31  | 31  | 35  | 41  |
| k                      | L  | 240     | 317     | 320     | 380     | 405     | 497     | 635     | u1                     | FA | 5  | 6    | 8  | 8   | 8   | 10  | 10  |
| k1                     | LC | 275     | 362     | 372     | 445     | 470     | 586     | 730     |                        |    |    |      |    |     |     |     |     |
| m                      | /  | 142.5   | 202.5   | 191.5   | 239.5   | 244.5   | 309     | 393     |                        |    |    |      |    |     |     |     |     |
| n                      | /  | 90      | 105     | 105     | 105     | 140     | 140     | 180     |                        |    |    |      |    |     |     |     |     |
| o                      | /  | 90      | 105     | 105     | 105     | 140     | 140     | 215     |                        |    |    |      |    |     |     |     |     |
| p                      | HC | 197     | 220     | 239     | 265     | 302     | 345     | 428     |                        |    |    |      |    |     |     |     |     |
| q2                     | /  | 61.5    | 65      | 60      | 74      | 84.5    | 96      | 114     |                        |    |    |      |    |     |     |     |     |
| q3                     | /  | 90      | 150     | 148     | 180     | 185     | 234     | 312     |                        |    |    |      |    |     |     |     |     |
| s                      | /  | M6      | M8      | M8      | M10     | M10     | M10     | M12     |                        |    |    |      |    |     |     |     |     |
| s1                     | /  | 1x      | 1x      | 1x      | 1x      | 2x      | 2x      | 2x      |                        |    |    |      |    |     |     |     |     |
|                        | DB | M20x1.5 | M25x1.5 | M25x1.5 | M25x1.5 | M25x1.5 | M25x1.5 | M40x1.5 |                        |    |    |      |    |     |     |     |     |
| s4                     | DB | -       | -       | M8      | M10     | M10     | M12     | M16     |                        |    |    |      |    |     |     |     |     |
| s5                     | DC | -       | -       | M8      | M10     | M10     | M12     | M12     |                        |    |    |      |    |     |     |     |     |
| s6                     | /  | G1/4"   | G1/4"   | G1/4"   | G1/4"   | G1/4"   | G1/2"   | G1/2"   |                        |    |    |      |    |     |     |     |     |
| w1                     | C  | 45      | 50      | 56      | 63      | 70      | 89      | 108     |                        |    |    |      |    |     |     |     |     |
| y                      | /  | 81      | 85      | 85      | 95      | 100     | 117.5   | 137     |                        |    |    |      |    |     |     |     |     |
| z                      | /  | 108     | 128     | 143     | 165     | 190     | 206.5   | 255     |                        |    |    |      |    |     |     |     |     |

Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
 Passfeder u/u1 = DIN 6885  
 Innengewinde s4/s5 = DIN 332 Form D  
 \* = Durchgangsbohrung für Gewinde

Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
 Featherkey u/u1 = DIN 6885  
 Internal thread s4/s5 = DIN 332 Form D  
 \* = through-hole for bolts

Welle AS  
drive-end-  
shaft

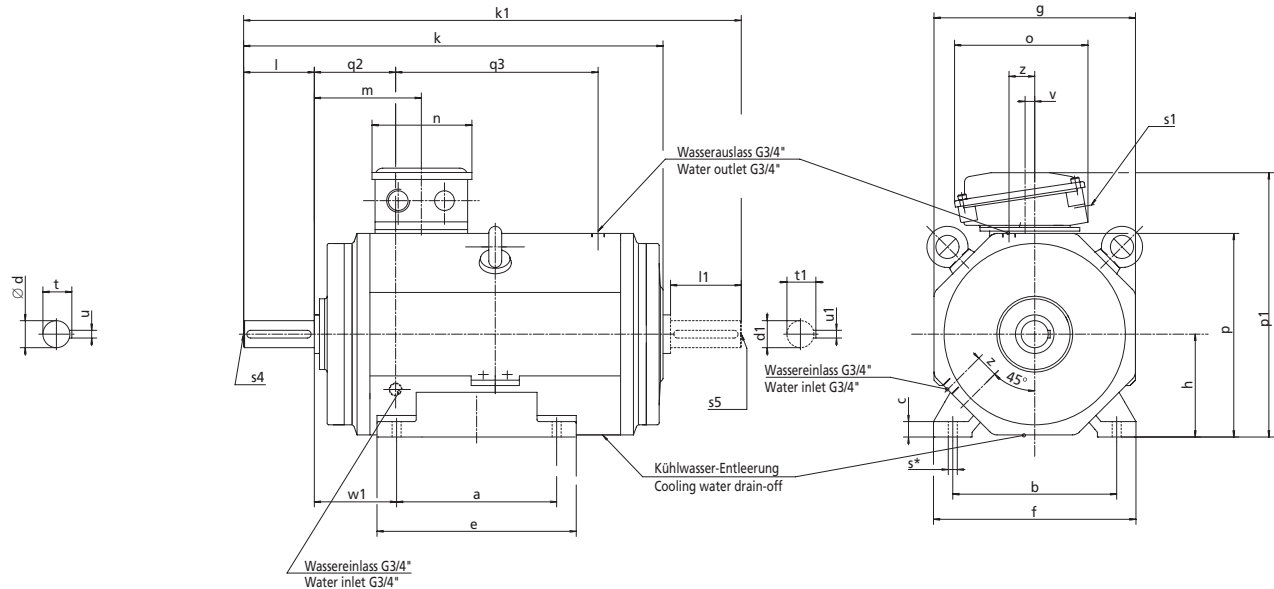
Welle BS  
non-drive-  
end-shaft

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/004  
 Bauform B3  
 Schutzart IP 55  
 Klemmenkasten oben (270°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/004  
 Mounting B3  
 Degree of protection IP 55  
 Terminalbox on top (270°)



| Baugröße       |              | 180       | 200       | 200       | 225       | 250       | 280       | Baugröße          |    | 180  | 200 | 200 | 225 | 250  | 280  |                                       |
|----------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-------------------|----|------|-----|-----|-----|------|------|---------------------------------------|
| Frame size     |              | LK        | L         | L         | L         | L         | L         | Frame size        |    | LK   | L   | L   | L   | L    | L    |                                       |
| Polzahl        | No. of poles | ≥ 2       | ≥ 2       | ≥ 2       | ≥ 2       | ≥ 2       | 2         | DIN               | EN |      |     |     |     |      |      |                                       |
|                |              |           |           |           |           |           | ≥ 4       | d <sub>max</sub>  | D  | 60   | 65  | 65  | 65  | 75   | 75   |                                       |
| a              | B            | 279       | 305       | 305       | 311       | 349       | 419       | l                 | E  | 140  | 140 | 140 | 140 | 140  | 140  | Welle AS Ø-max<br>drive-end-shaft     |
| b              | A            | 279       | 318       | 318       | 356       | 406       | 457       | t                 | GA | 64   | 69  | 69  | 69  | 79.5 | 79.5 |                                       |
| c              | HA           | 26        | 30        | 30        | 32        | 35        | 40        | u                 | F  | 18   | 18  | 18  | 18  | 20   | 18   |                                       |
| e              | BB           | 335       | 365       | 365       | 379       | 429       | 529       | d <sub>1max</sub> | DA | 48   | 60  | 60  | 60  | 65   | 75   |                                       |
| f              | AB           | 345       | 400       | 400       | 435       | 500       | 570       | l <sub>1</sub>    | EA | 110  | 140 | 140 | 140 | 140  | 140  | Welle BS Ø-max<br>non-drive-end-shaft |
| g              | AC           | 350       | 392       | 392       | 438       | 484       | 544       | t <sub>1</sub>    | GC | 51.5 | 64  | 64  | 64  | 69   | 79.5 |                                       |
| h              | H            | 180       | 200       | 200       | 225       | 250       | 280       | u <sub>1</sub>    | FA | 14   | 18  | 18  | 18  | 18   | 20   |                                       |
| k              | L            | 740       | 740       | 810       | 820       | 888       | 1014      |                   |    |      |     |     |     |      |      |                                       |
| k <sub>1</sub> | LC           | 860       | 890       | 960       | 970       | 1038      | 1164      |                   |    |      |     |     |     |      |      |                                       |
| m              | /            | 184       | 194       | 194       | 205       | 258       | 271       |                   |    |      |     |     |     |      |      |                                       |
| n              | /            | 200       | 200       | 200       | 200       | 280       | 280       |                   |    |      |     |     |     |      |      |                                       |
| o              | /            | 250       | 250       | 250       | 250       | 365       | 365       |                   |    |      |     |     |     |      |      |                                       |
| p              | HC           | 354       | 395       | 395       | 443       | 491       | 551       |                   |    |      |     |     |     |      |      |                                       |
| p <sub>1</sub> | /            | 482       | 518       | 518       | 560       | 675       | 725       |                   |    |      |     |     |     |      |      |                                       |
| q <sub>2</sub> | /            | 119       | 129       | 129       | 140       | 153       | 165       |                   |    |      |     |     |     |      |      |                                       |
| q <sub>3</sub> | /            | 370       | 354       | 424       | 424       | 460       | 550       |                   |    |      |     |     |     |      |      |                                       |
| s              | /            | M12       | M16       | M16       | M16       | M20       | M20       |                   |    |      |     |     |     |      |      |                                       |
| s <sub>1</sub> | /            | 2xM40x1.5 | 2xM50x1.5 | 2xM50x1.5 | 2xM50x1.5 | 2xM50x1.5 | 2xM63x1.5 |                   |    |      |     |     |     |      |      |                                       |
| s <sub>4</sub> | DB           | M20       | M20       | M20       | M20       | M20       | M20       |                   |    |      |     |     |     |      |      |                                       |
| s <sub>5</sub> | DC           | M16       | M20       | M20       | M20       | M20       | M20       |                   |    |      |     |     |     |      |      |                                       |
| v              | /            | 21        | 25        | 25        | 25        | 40        | 40        |                   |    |      |     |     |     |      |      |                                       |
| w <sub>1</sub> | C            | 121       | 133       | 133       | 149       | 168       | 190       |                   |    |      |     |     |     |      |      |                                       |
| z              | /            | 45        | 50        | 50        | 57.5      | 65        | 75        |                   |    |      |     |     |     |      |      |                                       |

Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
 Passung b1 = ISA h6  
 Passfeder u/u1 = DIN 6885  
 Innengewinde s4/s5 = DIN 332 Form D  
 \* = Durchgangsbohrung für Gewinde

Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
 Fit diam. b1 = ISA h6  
 Featherkey u/u1 = DIN 6885  
 Internal thread s4/s5 = DIN 332 Form D  
 \* = through-hole for bolts

# Wassergekühlte Drehstrommotoren Baureihe WK

# Water-cooled three-phase motors type wk

Maßblatt Nr. 837/09/004

Bauform B3

Schutzart IP 55

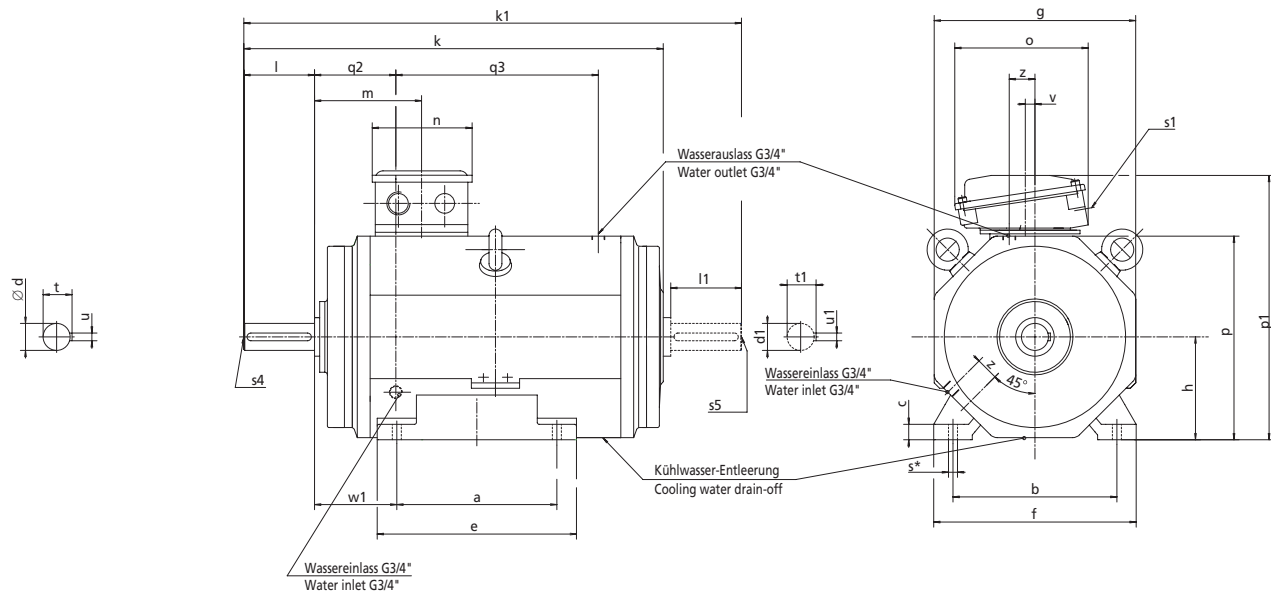
Klemmenkasten oben (270°)

Dimension sheet No. 837/09/004

Mounting B3

Degree of protection IP 55

Terminalbox on top (270°)



28

| Baugröße<br>Frame size  |    | 315 S                | 315 L                | 355                  | 400                  | 450                  | Baugröße<br>Frame size |    | 315 S      | 315 L      | 355      | 400      | 450      |                                       |
|-------------------------|----|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|----|------------|------------|----------|----------|----------|---------------------------------------|
| Polzahl<br>No. of poles |    | 2<br>≥ 4             | 2<br>≥ 4             | ≥ 4                  | ≥ 4                  | ≥ 4                  | DIN                    | EN |            |            |          |          |          |                                       |
| a                       | B  | 457                  | 667                  | 765                  | 810                  | 1030                 | d <sub>max</sub>       | D  | 75<br>90   | 75<br>90   | –<br>90  | –<br>100 | –<br>110 | Welle AS Ø-max<br>drive-end-shaft     |
| b                       | A  | 508                  | 508                  | 610                  | 686                  | 750                  | l                      | E  | 140<br>170 | 140<br>170 | –<br>170 | –<br>210 | –<br>210 |                                       |
| c                       | HA | 50                   | 50                   | 50                   | 50                   | 60                   | t                      | GA | 79,5<br>95 | 79,5<br>95 | –<br>95  | –<br>106 | –<br>116 |                                       |
| e                       | BB | 551                  | 760                  | 885                  | 948                  | 1250                 | u                      | F  | 20<br>25   | 20<br>25   | –<br>25  | –<br>28  | –<br>28  |                                       |
| f                       | AB | 628                  | 628                  | 710                  | 800                  | 940                  | d <sub>1max</sub>      | DA | 75<br>80   | 75<br>80   | –<br>80  | –<br>90  | –<br>90  |                                       |
| g                       | AC | 614                  | 614                  | 690                  | 790                  | 860                  | l <sub>1</sub>         | EA | 140<br>170 | 140<br>170 | –<br>170 | –<br>170 | –<br>170 | Welle BS Ø-max<br>non-drive-end-shaft |
| h                       | H  | 315                  | 315                  | 355                  | 400                  | 450                  | t <sub>1</sub>         | GC | 79,5<br>85 | 79,5<br>85 | –<br>85  | –<br>95  | –<br>95  |                                       |
| k                       | L  | 1185<br>1215         | 1465<br>1495         | –<br>1697            | –<br>1748            | –<br>2158            | u <sub>1</sub>         | FA | 20<br>22   | 20<br>22   | –<br>22  | –<br>25  | –<br>25  |                                       |
| k <sub>1</sub>          | LC | 1335<br>1395         | 1615<br>1675         | –<br>1882            | –<br>1933            | –<br>2348            |                        |    |            |            |          |          |          |                                       |
| m                       | /  | 323                  | 232                  | 342                  | 352                  | 364                  |                        |    |            |            |          |          |          |                                       |
| n                       | /  | 355                  | 355                  | 355                  | 470                  | 470                  |                        |    |            |            |          |          |          |                                       |
| o                       | /  | 427                  | 427                  | 427                  | 546                  | 546                  |                        |    |            |            |          |          |          |                                       |
| p                       | HC | 625                  | 625                  | 705                  | 795                  | 880                  |                        |    |            |            |          |          |          |                                       |
| p <sub>1</sub>          | /  | 810                  | 810                  | 917                  | 1130                 | 1205                 |                        |    |            |            |          |          |          |                                       |
| q <sub>2</sub>          | /  | 301                  | 301                  | 343                  | 353                  | 383                  |                        |    |            |            |          |          |          |                                       |
| q <sub>3</sub>          | /  | 535                  | 815                  | 950                  | 950                  | 1250                 |                        |    |            |            |          |          |          |                                       |
| s                       | /  | M24                  | M24                  | M24                  | M30                  | M30                  |                        |    |            |            |          |          |          |                                       |
| s <sub>1</sub>          | /  | 2xM72x2<br>2xM16x1,5 | 2xM72x2<br>2xM16x1,5 | 2xM72x2<br>2xM16x1,5 | 3xM72x2<br>2xM16x1,5 | 3xM72x2<br>2xM16x1,5 |                        |    |            |            |          |          |          |                                       |
| s <sub>4</sub>          | DB | M20<br>M24           | M20<br>M24           | –<br>M24             | –<br>M24             | –<br>M24             |                        |    |            |            |          |          |          |                                       |
| s <sub>5</sub>          | DC | M20                  | M20                  | M20                  | M24                  | M24                  |                        |    |            |            |          |          |          |                                       |
| v                       | /  | 40                   | 40                   | 49,5                 | 49,5                 | 49,5                 |                        |    |            |            |          |          |          |                                       |
| w <sub>1</sub>          | C  | 216                  | 216                  | 255                  | 280                  | 364                  |                        |    |            |            |          |          |          |                                       |
| z                       | /  | 90                   | 90                   | 90                   | 90                   | 90                   |                        |    |            |            |          |          |          |                                       |

Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
 Passung b1 = ISA h6  
 Passfeder u/u1 = DIN 6885  
 Innengewinde s<sub>4</sub>/s<sub>5</sub> = DIN 332 Form D  
 \* = Durchgangsbohrung für Gewinde

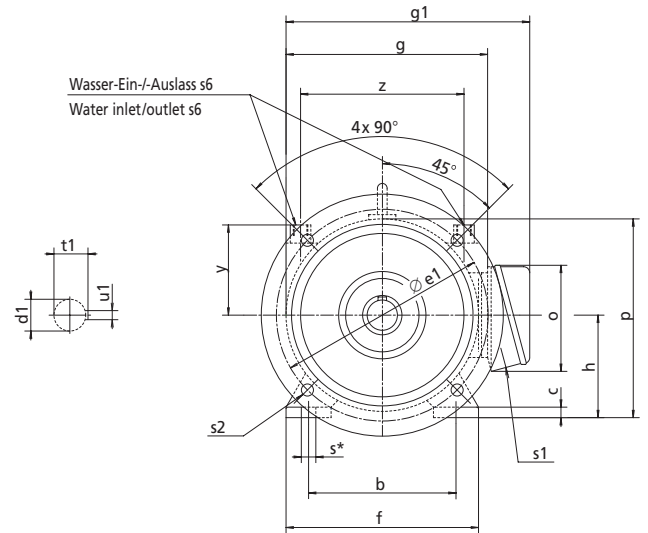
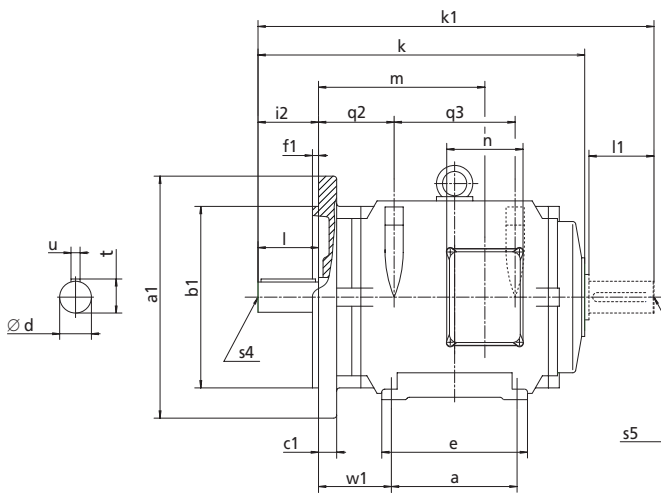
Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
 Fit diam. b1 = ISA h6  
 Featherkey u/u1 = DIN 6885  
 Internal thread s<sub>4</sub>/s<sub>5</sub> = DIN 332 Form D  
 \* = through-hole for bolts

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/005  
 Bauform B3/B5  
 Schutzart IP 55  
 Klemmenkasten rechts (0°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/005  
 Mounting B3/B5  
 Degree of protection IP 55  
 Terminalbox right (0°)



| Baugröße<br>Frame size |    | 71            | 80            | 90            | 100           | 112           | 132           | 160           |
|------------------------|----|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| DIN                    | EN |               |               |               |               |               |               |               |
| a                      | B  | 90            | 100           | 125           | 140           | 140           | 178           | 254           |
| b                      | A  | 112           | 125           | 140           | 160           | 190           | 216           | 254           |
| c                      | HA | 10            | 10            | 12            | 14            | 14            | 18            | 20            |
| e                      | BB | 110           | 125           | 150           | 194           | 200           | 208           | 308           |
| f                      | AB | 140           | 160           | 180           | 200           | 230           | 260           | 314           |
| a1                     | P  | 160           | 200           | 200           | 250           | 250           | 300           | 350           |
| b1                     | N  | 110           | 130           | 130           | 180           | 180           | 230           | 250           |
| c1                     | LA | 10            | 12            | 12            | 16            | 16            | 20            | 20            |
| e1                     | M  | 130           | 165           | 165           | 215           | 215           | 265           | 300           |
| f1                     | T  | 3.5           | 3.5           | 3.5           | 4             | 4             | 4             | 5             |
| g                      | AC | 138           | 158           | 175           | 192           | 218           | 252           | 305           |
| g1                     | AD | 195           | 219           | 236           | 261           | 299           | 339           | 420           |
| h                      | H  | 71            | 80            | 90            | 100           | 112           | 132           | 160           |
| k                      | L  | 240           | 317           | 320           | 380           | 405           | 497           | 635           |
| k1                     | LC | 275           | 362           | 372           | 445           | 470           | 586           | 730           |
| m                      | /  | 142.5         | 202.5         | 191.5         | 239.5         | 244.5         | 309           | 393           |
| n                      | /  | 90            | 105           | 105           | 105           | 140           | 140           | 180           |
| o                      | /  | 90            | 105           | 105           | 105           | 140           | 140           | 215           |
| p                      | HC | 140           | 157.5         | 177.5         | 196           | 221           | 258           | 313           |
| q2                     | /  | 61.5          | 65            | 60            | 74            | 84.5          | 96            | 114           |
| q3                     | /  | 90            | 150           | 148           | 180           | 185           | 234           | 312           |
| s                      | /  | M6            | M8            | M8            | M10           | M10           | M10           | M12           |
| s1                     | /  | 1x<br>M20x1.5 | 1x<br>M20x1.5 | 1x<br>M25x1.5 | 1x<br>M25x1.5 | 2x<br>M25x1.5 | 2x<br>M25x1.5 | 2x<br>M40x1.5 |
| s2                     | S  | 9             | 11            | 11            | 14            | 14            | 14            | 18            |
| s4                     | DB | -             | -             | M8            | M10           | M10           | M12           | M16           |

| Baugröße<br>Frame size |    | 71    | 80    | 90    | 100   | 112   | 132   | 160   |
|------------------------|----|-------|-------|-------|-------|-------|-------|-------|
| DIN                    | EN |       |       |       |       |       |       |       |
| s5                     | DC | -     | -     | M8    | M10   | M10   | M12   | M12   |
| s6                     | /  | G1/4" | G1/4" | G1/4" | G1/4" | G1/4" | G1/2" | G1/2" |
| w1                     | C  | 45    | 50    | 56    | 63    | 70    | 89    | 108   |
| y                      | /  | 81    | 85    | 85    | 95    | 100   | 117.5 | 137   |
| z                      | /  | 108   | 128   | 143   | 165   | 190   | 206.5 | 255   |
| d                      | D  | 14    | 19    | 24    | 28    | 28    | 38    | 42    |
| i2                     | /  | 30    | 40    | 50    | 60    | 60    | 80    | 110   |
| l                      | E  | 30    | 40    | 50    | 60    | 60    | 80    | 110   |
| t                      | GA | 16    | 21.5  | 27    | 31    | 31    | 41    | 45    |
| u                      | F  | 5     | 6     | 8     | 8     | 8     | 10    | 12    |
| d1                     | DA | 14    | 19    | 24    | 28    | 28    | 32    | 38    |
| l1                     | EA | 30    | 40    | 50    | 60    | 60    | 80    | 80    |
| t1                     | GC | 16    | 21.5  | 27    | 31    | 31    | 35    | 41    |
| u1                     | FA | 5     | 6     | 8     | 8     | 8     | 10    | 10    |

Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
 Passung b1 = ISA j6  
 Passfeder u/u1 = DIN 6885  
 Innengewinde s4/s5 = DIN 332 Form D  
 \* = Durchgangsbohrung für Gewinde

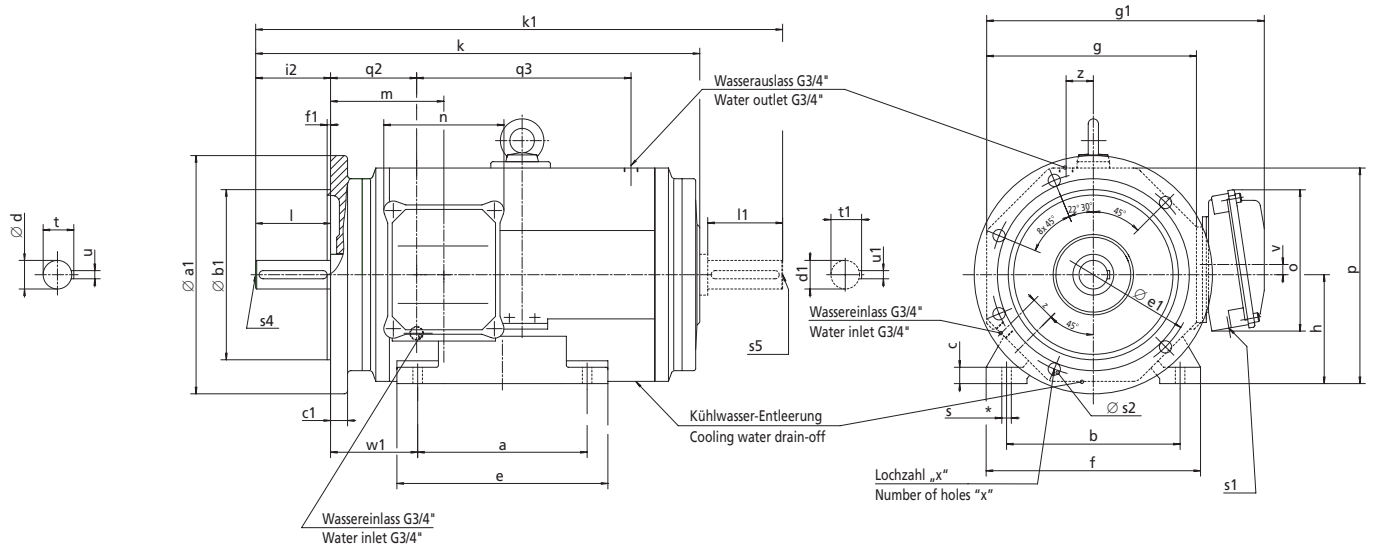
Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
 Fit diam. b1 = ISA j6  
 Featherkey u/u1 = DIN 6885  
 Internal thread s4/s5 = DIN 332 Form D  
 \* = through-hole for bolts

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/005  
Bauform B3/B5  
Schutzart IP 55  
Klemmenkasten rechts (0°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/005  
Mounting B3/B5  
Degree of protection IP 55  
Terminalbox right (0°)



| Baugröße<br>Frame size  | 180 | 200<br>LK | 200<br>L  | 225       | 250       | 280       |
|-------------------------|-----|-----------|-----------|-----------|-----------|-----------|
| Polzahl<br>No. of poles | ≥ 2 | ≥ 2       | ≥ 2       | ≥ 2       | ≥ 2       | 2<br>≥ 4  |
| DIN                     | EN  |           |           |           |           |           |
| a1                      | B   | 400       | 450       | 450       | 550       | 660       |
| b1                      | A   | 300       | 350       | 350       | 500       | 550       |
| c1                      | HA  | 20        | 22        | 22        | 24        | 24        |
| e1                      | BB  | 350       | 400       | 400       | 450       | 600       |
| x                       | /   | 4         | 8         | 8         | 8         | 8         |
| f1                      | AB  | 5         | 5         | 5         | 5         | 6         |
| a                       | P   | 279       | 305       | 305       | 311       | 349       |
| b                       | N   | 279       | 318       | 318       | 356       | 406       |
| c                       | LA  | 26        | 30        | 30        | 32        | 35        |
| e                       | M   | 335       | 365       | 365       | 379       | 429       |
| f                       | T   | 345       | 400       | 400       | 435       | 500       |
| g                       | AC  | 350       | 392       | 392       | 438       | 484       |
| g1                      | AD  | 493       | 535       | 535       | 582       | 680       |
| h                       | H   | 180       | 200       | 200       | 225       | 250       |
| k                       | L   | 740       | 740       | 810       | 820       | 888       |
|                         |     |           |           |           |           | 1014      |
|                         |     |           |           |           |           | 1044      |
| k1                      | LC  | 860       | 890       | 960       | 970       | 1038      |
|                         |     |           |           |           |           | 1164      |
|                         |     |           |           |           |           | 1194      |
| m                       | /   | 184       | 194       | 194       | 205       | 258       |
| n                       | /   | 200       | 200       | 200       | 200       | 280       |
| o                       | /   | 250       | 250       | 250       | 250       | 365       |
| p                       | HC  | 354       | 395       | 395       | 443       | 491       |
| q2                      | /   | 119       | 129       | 129       | 140       | 153       |
| q3                      | /   | 370       | 354       | 424       | 424       | 460       |
| s                       | /   | M12       | M16       | M16       | M16       | M20       |
| s1                      | /   | 2xM40x1.5 | 2xM50x1.5 | 2xM50x1.5 | 2xM50x1.5 | 2xM50x1.5 |
|                         |     | 2xM16x1.5 | 2xM16x1.5 | 2xM16x1.5 | 2xM16x1.5 | 2xM16x1.5 |
| s2                      | S   | 18        | 18        | 18        | 18        | 22        |

| Baugröße<br>Frame size | 180 | 200<br>LK | 200<br>L | 225 | 250  | 280  |
|------------------------|-----|-----------|----------|-----|------|------|
| DIN                    | EN  |           |          |     |      |      |
| s4                     | DB  | M20       | M20      | M20 | M20  | M20  |
| s5                     | DC  | M16       | M20      | M20 | M20  | M20  |
| v                      | /   | 21        | 25       | 25  | 25   | 40   |
| w1                     | C   | 121       | 133      | 133 | 149  | 168  |
| z                      | /   | 45        | 50       | 50  | 57.5 | 65   |
| d <sub>max</sub>       | D   | 60        | 65       | 65  | 65   | 75   |
|                        |     |           |          |     |      | 80   |
| i2                     | /   | 140       | 140      | 140 | 140  | 140  |
|                        |     |           |          |     |      | 170  |
| l                      | E   | 140       | 140      | 140 | 140  | 140  |
|                        |     |           |          |     |      | 170  |
| t                      | GA  | 64        | 69       | 69  | 69   | 79.5 |
|                        |     |           |          |     |      | 85   |
| u                      | F   | 18        | 18       | 18  | 18   | 20   |
|                        |     |           |          |     |      | 22   |
| d1 <sub>max</sub>      | DA  | 48        | 60       | 60  | 60   | 65   |
|                        |     |           |          |     |      | 75   |
| l1                     | EA  | 110       | 140      | 140 | 140  | 140  |
| t1                     | EA  | 51.5      | 64       | 64  | 64   | 69   |
| u1                     | FA  | 14        | 18       | 18  | 18   | 20   |

Welle AS Ø-max  
drive-end-shaft

Welle BS Ø-max  
non-drive-end-shaft

Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
Passung b1 = ISA h6  
Passfeder u/u1 = DIN 6885  
Innengewinde s4/s5 = DIN 332 Form D  
\* = Durchgangsbohrung für Gewinde

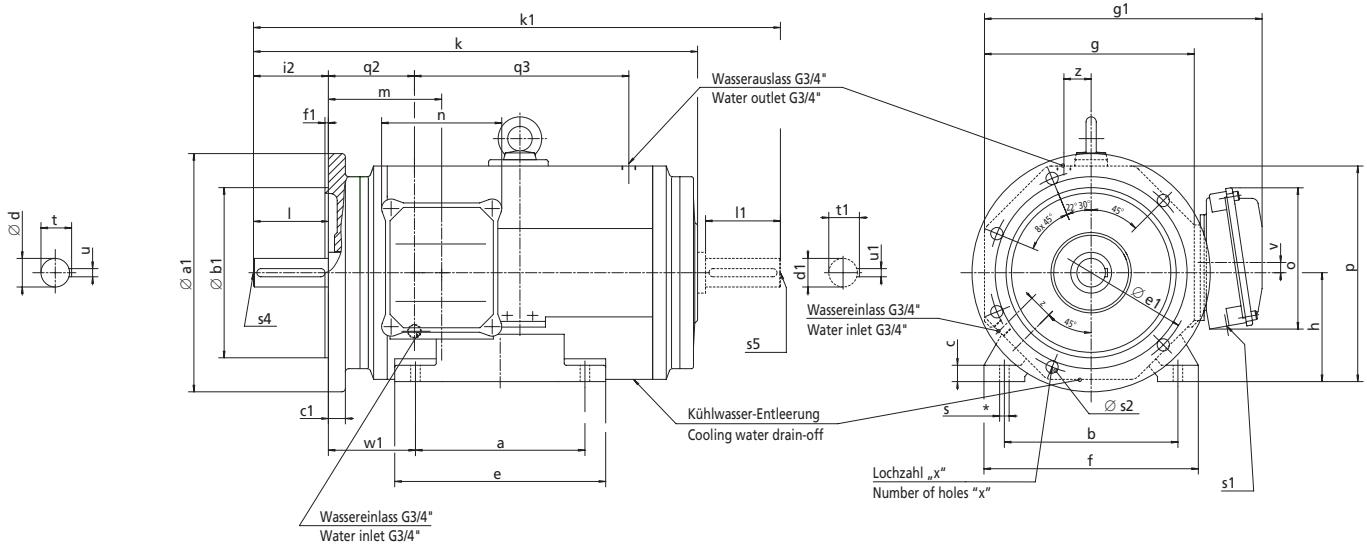
Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
Fit diam. b1 = ISA h6  
Featherkey u/u1 = DIN 6885  
Internal thread s4/s5 = DIN 332 Form D  
\* = through-hole for bolts

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/005  
Bauform B3/B5  
Schutzart IP 55  
Klemmenkasten rechts (0°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/005  
Mounting B3/B5  
Degree of protection IP 55  
Terminalbox right (0°)



| Baugröße<br>Frame size  |    | 315 S    | 315 L    | 355  | 400  | 450  | Baugröße<br>Frame size |    | 315 S | 315 L | 355  | 400  | 450  |
|-------------------------|----|----------|----------|------|------|------|------------------------|----|-------|-------|------|------|------|
| Polzahl<br>No. of poles |    | 2<br>≥ 4 | 2<br>≥ 4 | ≥ 4  | ≥ 4  | ≥ 4  | DIN                    | EN |       |       |      |      |      |
| s4                      | DB | M20      | M20      | -    | -    | -    |                        |    | M20   | M20   | M24  | M24  | M24  |
| s5                      | DC | M20      | M20      | M20  | M24  | M24  |                        |    | M20   | M20   | M20  | M24  | M24  |
| v                       | /  | 40       | 40       | 49,5 | 49,5 | 49,5 |                        |    | 40    | 40    | 49,5 | 49,5 | 49,5 |
| w1                      | C  | 216      | 216      | 255  | 280  | 364  |                        |    | 216   | 216   | 255  | 280  | 364  |
| z                       | /  | 90       | 90       | 90   | 90   | 90   |                        |    | 90    | 90    | 90   | 90   | 90   |
| d <sub>max</sub>        | D  | 75       | 75       | -    | -    | -    |                        |    | 75    | 75    | -    | -    | -    |
|                         |    | 90       | 90       | 90   | 100  | 110  |                        |    | 90    | 90    | 90   | 100  | 110  |
| l                       | E  | 140      | 140      | -    | -    | -    |                        |    | 140   | 140   | -    | -    | -    |
|                         |    | 170      | 170      | 170  | 210  | 210  |                        |    | 170   | 170   | 170  | 210  | 210  |
| i2                      | /  | 140      | 140      | -    | -    | -    |                        |    | 140   | 140   | -    | -    | -    |
|                         |    | 170      | 170      | 170  | 210  | 210  |                        |    | 170   | 170   | 170  | 210  | 210  |
| t                       | GA | 79,5     | 79,5     | -    | -    | -    |                        |    | 79,5  | 79,5  | -    | -    | -    |
|                         |    | 95       | 95       | 95   | 106  | 116  |                        |    | 95    | 95    | 95   | 106  | 116  |
| u                       | F  | 20       | 20       | -    | -    | -    |                        |    | 20    | 20    | -    | -    | -    |
|                         |    | 25       | 25       | 25   | 28   | 28   |                        |    | 25    | 25    | 25   | 28   | 28   |
| d <sub>1max</sub>       | DA | 75       | 75       | -    | -    | -    |                        |    | 75    | 75    | -    | -    | -    |
|                         |    | 80       | 80       | 80   | 90   | 90   |                        |    | 80    | 80    | 80   | 90   | 90   |
| l1                      | EA | 140      | 140      | -    | -    | -    |                        |    | 140   | 140   | -    | -    | -    |
|                         |    | 170      | 170      | 170  | 170  | 170  |                        |    | 170   | 170   | 170  | 170  | 170  |
| t1                      | GC | 79,5     | 79,5     | -    | -    | -    |                        |    | 79,5  | 79,5  | -    | -    | -    |
|                         |    | 85       | 85       | 85   | 95   | 95   |                        |    | 85    | 85    | 85   | 95   | 95   |
| u1                      | FA | 20       | 20       | -    | -    | -    |                        |    | 20    | 20    | -    | -    | -    |
|                         |    | 22       | 22       | 22   | 25   | 25   |                        |    | 22    | 22    | 22   | 25   | 25   |

Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
 Passung b1 = ISA h6  
 Passfeder u/u1 = DIN 6885  
 Innengewinde s4/s5 = DIN 332 Form D  
 \* = Durchgangsbohrung für Gewinde

Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
 Fit diam. b1 = ISA h6  
 Featherkey u/u1 = DIN 6885  
 Internal thread s4/s5 = DIN 332 Form D  
 \* = through-hole for bolts

Welle AS Ø-max  
drive-end-shaft

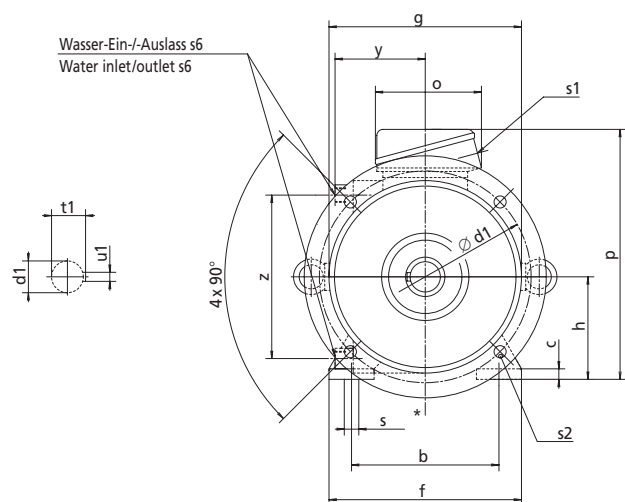
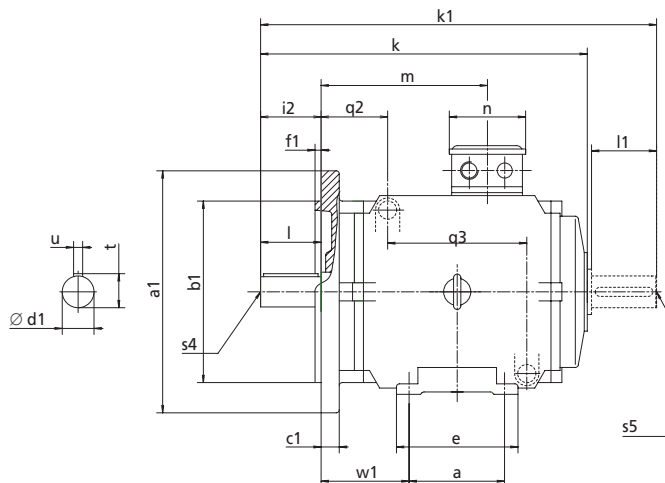
Welle BS Ø-max  
non-drive-end-shaft

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/006  
Bauform B3/B5  
Schutzart IP 55  
Klemmenkasten oben (270°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/006  
Mounting B3/B5  
Degree of protection IP 55  
Terminal box on top (270°)



| Baugröße<br>Frame size |    | 71            | 80            | 90            | 100           | 112           | 132           | 160           |
|------------------------|----|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| DIN                    | EN |               |               |               |               |               |               |               |
| a                      | B  | 90            | 100           | 125           | 140           | 140           | 178           | 254           |
| b                      | A  | 112           | 125           | 140           | 160           | 190           | 216           | 254           |
| c                      | HA | 10            | 10            | 12            | 14            | 14            | 18            | 20            |
| e                      | BB | 110           | 125           | 150           | 194           | 200           | 208           | 308           |
| f                      | AB | 140           | 160           | 180           | 200           | 230           | 260           | 314           |
| a1                     | P  | 160           | 200           | 200           | 250           | 250           | 300           | 350           |
| b1                     | N  | 110           | 130           | 130           | 180           | 180           | 230           | 250           |
| c1                     | LA | 10            | 12            | 12            | 16            | 16            | 20            | 20            |
| e1                     | M  | 130           | 165           | 165           | 215           | 215           | 265           | 300           |
| f1                     | T  | 3.5           | 3.5           | 3.5           | 4             | 4             | 4             | 5             |
| g                      | AC | 138           | 158           | 175           | 192           | 218           | 252           | 305           |
| h                      | H  | 71            | 80            | 90            | 100           | 112           | 132           | 160           |
| k                      | L  | 240           | 317           | 320           | 380           | 405           | 497           | 635           |
| k1                     | LC | 275           | 362           | 372           | 445           | 470           | 586           | 730           |
| m                      | /  | 142.5         | 202.5         | 191.5         | 239.5         | 244.5         | 309           | 393           |
| n                      | /  | 90            | 105           | 105           | 105           | 140           | 140           | 180           |
| o                      | /  | 90            | 105           | 105           | 105           | 140           | 140           | 215           |
| p                      | HC | 197           | 220           | 239           | 265           | 302           | 345           | 428           |
| q2                     | /  | 61.5          | 65            | 60            | 74            | 84.5          | 96            | 114           |
| q3                     | /  | 90            | 150           | 148           | 180           | 185           | 234           | 312           |
| s                      | /  | M6            | M8            | M8            | M10           | M10           | M10           | M12           |
| s1                     | /  | 1x<br>M20x1.5 | 1x<br>M20x1.5 | 1x<br>M25x1.5 | 1x<br>M25x1.5 | 2x<br>M25x1.5 | 2x<br>M25x1.5 | 2x<br>M40x1.5 |
| s2                     | S  | 9             | 11            | 11            | 14            | 14            | 14            | 18            |
| s4                     | DB | -             | -             | M8            | M10           | M10           | M12           | M16           |
| s5                     | DC | -             | -             | M8            | M10           | M10           | M12           | M12           |

| Baugröße<br>Frame size |    | 71    | 80    | 90    | 100   | 112   | 132   | 160   |
|------------------------|----|-------|-------|-------|-------|-------|-------|-------|
| DIN                    | EN |       |       |       |       |       |       |       |
| s6                     | /  | G1/4" | G1/4" | G1/4" | G1/4" | G1/4" | G1/2" | G1/2" |
| w1                     | C  | 45    | 50    | 56    | 63    | 70    | 89    | 108   |
| y                      | /  | 81    | 85    | 85    | 95    | 100   | 117.5 | 137   |
| z                      | /  | 108   | 128   | 143   | 165   | 190   | 206.5 | 255   |
| d                      | D  | 14    | 19    | 24    | 28    | 28    | 38    | 42    |
| i2                     | /  | 30    | 40    | 50    | 60    | 60    | 80    | 110   |
| l                      | E  | 30    | 40    | 50    | 60    | 60    | 80    | 110   |
| t                      | GA | 16    | 21.5  | 27    | 31    | 31    | 41    | 45    |
| u                      | F  | 5     | 6     | 8     | 8     | 8     | 10    | 12    |
| d1                     | DA | 14    | 19    | 24    | 28    | 28    | 32    | 38    |
| l1                     | EA | 30    | 40    | 50    | 60    | 60    | 80    | 80    |
| t1                     | GG | 16    | 21.5  | 27    | 31    | 31    | 35    | 41    |
| u1                     | FA | 5     | 6     | 8     | 8     | 8     | 10    | 10    |

Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
 Passung b1 = ISA j6  
 Passfeder u/u1 = DIN 6885  
 Innengewinde s4/s5 = DIN 332 Form D  
 \* = Durchgangsbohrung für Gewinde

Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
 Fit diam. b1 = ISA j6  
 Featherkey u/u1 = DIN 6885  
 Internal thread s4/s5 = DIN 332 Form D  
 \* = through-hole for bolts

Welle AS  
drive-end-  
shaft

Welle BS  
non-drive-  
end-shaft

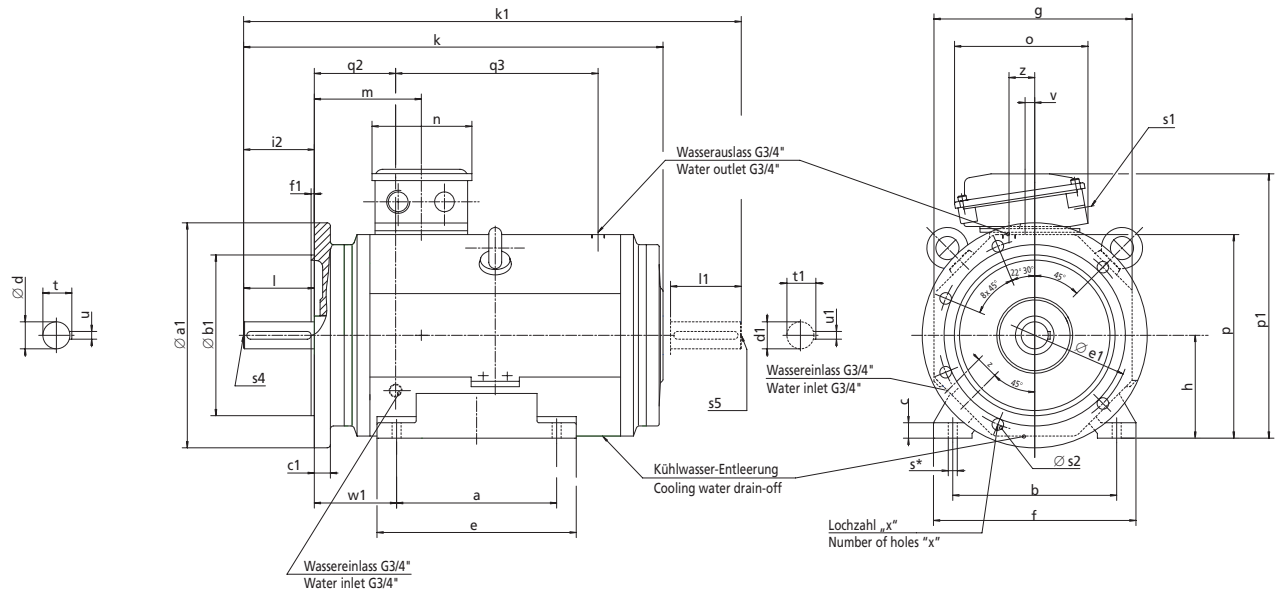


# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/006  
 Bauform B3/B5  
 Schutzart IP 55  
 Klemmenkasten oben (270°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/006  
 Mounting B3/B5  
 Degree of protection IP 55  
 Terminal box on top (270°)



| Baugröße<br>Frame size  | 180 | 200<br>LK | 200<br>L  | 225       | 250       | 280       |
|-------------------------|-----|-----------|-----------|-----------|-----------|-----------|
| Polzahl<br>No. of poles | ≥ 2 | ≥ 2       | ≥ 2       | ≥ 2       | ≥ 2       | 2<br>≥ 4  |
| DIN                     | EN  |           |           |           |           |           |
| a1                      | P   | 400       | 450       | 450       | 550       | 660       |
| b1                      | N   | 300       | 350       | 350       | 500       | 550       |
| c1                      | LA  | 20        | 22        | 22        | 24        | 24        |
| e1                      | M   | 350       | 400       | 400       | 450       | 600       |
| x                       | /   | 4         | 8         | 8         | 8         | 8         |
| f1                      | T   | 5         | 5         | 5         | 5         | 6         |
| a                       | B   | 279       | 305       | 305       | 311       | 349       |
| b                       | A   | 279       | 318       | 318       | 356       | 406       |
| c                       | HA  | 26        | 30        | 30        | 32        | 35        |
| e                       | BB  | 335       | 365       | 365       | 379       | 429       |
| f                       | AB  | 345       | 400       | 400       | 435       | 500       |
| g                       | AC  | 350       | 392       | 392       | 438       | 484       |
| h                       | H   | 180       | 200       | 200       | 225       | 250       |
| k                       | L   | 740       | 740       | 810       | 820       | 888       |
| k1                      | LC  | 860       | 890       | 960       | 970       | 1038      |
| m                       | /   | 184       | 194       | 194       | 205       | 258       |
| n                       | /   | 200       | 200       | 200       | 200       | 280       |
| o                       | /   | 250       | 250       | 250       | 250       | 365       |
| p                       | HC  | 354       | 395       | 395       | 443       | 491       |
| p1                      | /   | 498       | 539       | 539       | 588       | 688       |
| q2                      | /   | 119       | 129       | 129       | 140       | 153       |
| q3                      | /   | 370       | 354       | 424       | 424       | 460       |
| s                       | /   | M12       | M16       | M16       | M16       | M20       |
| s1                      | /   | 2xM40x1.5 | 2xM50x1.5 | 2xM50x1.5 | 2xM50x1.5 | 2xM63x1.5 |
| s2                      | S   | 18        | 18        | 18        | 18        | 22        |

| Baugröße<br>Frame size | 180 | 200<br>LK | 200<br>L | 225 | 250  | 280  |
|------------------------|-----|-----------|----------|-----|------|------|
| DIN                    | EN  |           |          |     |      |      |
| s4                     | DB  | M20       | M20      | M20 | M20  | M20  |
| s5                     | DC  | M16       | M20      | M20 | M20  | M20  |
| v                      | /   | 21        | 25       | 25  | 25   | 40   |
| w1                     | C   | 121       | 133      | 133 | 149  | 168  |
| z                      | /   | 45        | 50       | 50  | 57.5 | 65   |
| d <sub>max</sub>       | D   | 60        | 65       | 65  | 65   | 75   |
| i2                     | /   | 140       | 140      | 140 | 140  | 140  |
| l                      | E   | 140       | 140      | 140 | 140  | 140  |
| t                      | GA  | 64        | 69       | 69  | 69   | 79.5 |
| u                      | F   | 18        | 18       | 18  | 18   | 20   |
| d <sub>1max</sub>      | DA  | 48        | 60       | 60  | 60   | 65   |
| l1                     | EA  | 110       | 140      | 140 | 140  | 140  |
| t1                     | GC  | 51.5      | 64       | 64  | 64   | 69   |
| u1                     | FA  | 14        | 18       | 18  | 18   | 20   |

Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
 Passung b1 = ISA h6  
 Passfeder u/u1 = DIN 6885  
 Innengewinde s4/s5 = DIN 332 Form D  
 \* = Durchgangsbohrung für Gewinde

Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
 Fit diam. b1 = ISA h6  
 Featherkey u/u1 = DIN 6885  
 Internal thread s4/s5 = DIN 332 Form D  
 \* = through-hole for bolts

Welle AS Ø-max  
drive-end-shaft

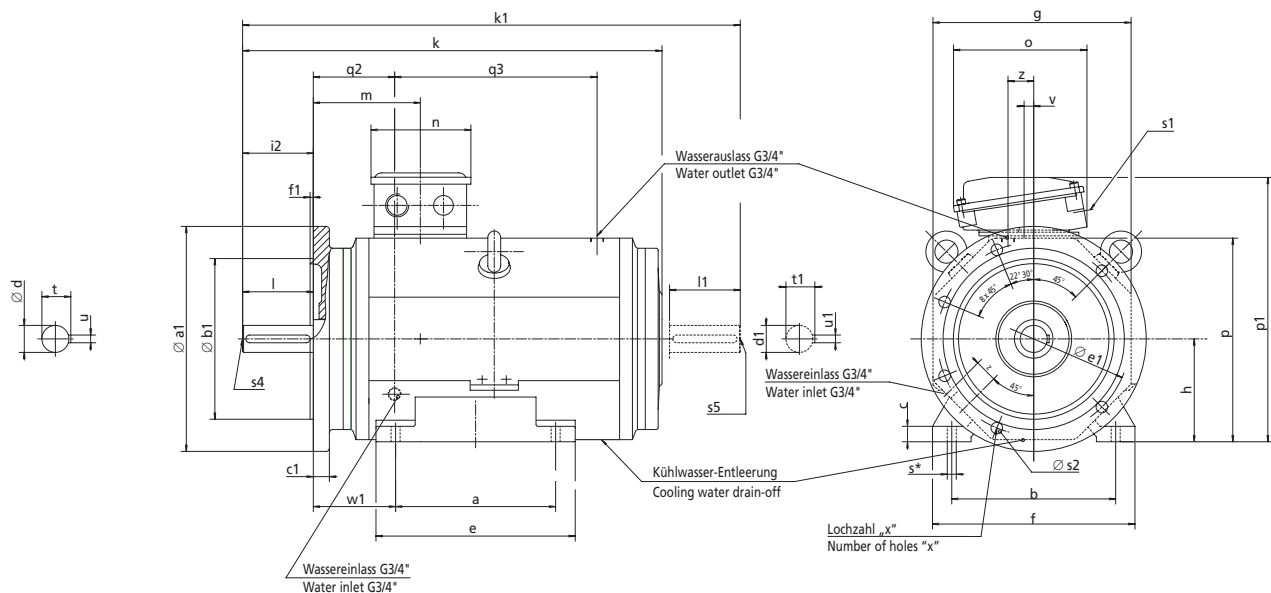
Welle BS Ø-max  
non-drive-end-shaft

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/006  
Bauform B3/B5  
Schutzart IP 55  
Klemmenkasten oben (270°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/006  
Mounting B3/B5  
Degree of protection IP 55  
Terminalbox on top (270°)



| Baugröße<br>Frame size  |    | 315 S    | 315 L    | 355     | 400     | 450     | Baugröße<br>Frame size            |    | 315 S | 315 L | 355  | 400  | 450  |
|-------------------------|----|----------|----------|---------|---------|---------|-----------------------------------|----|-------|-------|------|------|------|
| Polzahl<br>No. of poles |    | 2<br>≥ 4 | 2<br>≥ 4 | ≥ 4     | ≥ 4     | ≥ 4     | DIN                               | EN |       |       |      |      |      |
| DIN                     | EN |          |          |         |         |         | s4                                | DB | M20   | M20   | –    | –    | –    |
| a1                      | P  | 660      | 660      | 800     | 1000    | 1150    |                                   |    | M24   | M24   | M24  | M24  | M24  |
| b1                      | N  | 550      | 550      | 680     | 880     | 1000    | s5                                | DC | M20   | M20   | M20  | M24  | M24  |
| c1                      | LA | 25       | 25       | 25      | 28      | 30      | v                                 | /  | 40    | 40    | 49,5 | 49,5 | 49,5 |
| e1                      | M  | 600      | 600      | 740     | 940     | 1080    | w1                                | C  | 216   | 216   | 255  | 280  | 364  |
| x                       | /  | 8        | 8        | 8       | 8       | 8       | z                                 | /  | 90    | 90    | 90   | 90   | 90   |
| f1                      | T  | 6        | 6        | 6       | 6       | 6       | d <sub>max</sub>                  | D  | 75    | 75    | –    | –    | –    |
| a                       | B  | 457      | 667      | 765     | 810     | 1030    |                                   |    | 90    | 90    | 90   | 100  | 110  |
| b                       | A  | 508      | 508      | 610     | 686     | 750     | i2                                | /  | 140   | 140   | –    | –    | –    |
| c                       | HA | 50       | 50       | 50      | 50      | 60      |                                   |    | 170   | 170   | 170  | 210  | 210  |
| e                       | BB | 551      | 760      | 885     | 948     | 1250    | l                                 | E  | 140   | 140   | –    | –    | –    |
| f                       | AB | 628      | 628      | 710     | 800     | 940     |                                   |    | 170   | 170   | 170  | 210  | 210  |
| g                       | AC | 614      | 614      | 690     | 790     | 860     | t                                 | GA | 79,5  | 79,5  | –    | –    | –    |
| h                       | H  | 315      | 315      | 355     | 400     | 450     |                                   |    | 95    | 95    | 95   | 106  | 116  |
| k                       | L  | 1185     | 1465     | –       | –       | –       | u                                 | F  | 20    | 20    | –    | –    | –    |
| k1                      | LC | 1335     | 1615     | –       | –       | –       |                                   |    | 25    | 25    | 25   | 28   | 28   |
| m                       | /  | 323      | 232      | 342     | 352     | 364     | d <sub>1max</sub>                 | DA | 75    | 75    | –    | –    | –    |
| n                       | /  | 355      | 355      | 355     | 470     | 470     |                                   |    | 80    | 80    | 80   | 90   | 90   |
| o                       | /  | 427      | 427      | 427     | 546     | 546     | l1                                | EA | 140   | 140   | –    | –    | –    |
| p                       | HC | 625      | 625      | 705     | 795     | 880     |                                   |    | 170   | 170   | 170  | 170  | 170  |
| p1                      | /  | 810      | 810      | 917     | 1130    | 1205    | t1                                | GC | 79,5  | 79,5  | –    | –    | –    |
| q2                      | /  | 301      | 301      | 343     | 353     | 383     |                                   |    | 85    | 85    | 85   | 95   | 95   |
| q3                      | /  | 535      | 815      | 950     | 950     | 1250    | u1                                | FA | 20    | 20    | –    | –    | –    |
| s                       | /  | M24      | M24      | M24     | M30     | M30     |                                   |    | 22    | 22    | 22   | 25   | 25   |
| s1                      | /  | 2xM72x2  | 2xM72x2  | 2xM72x2 | 3xM72x2 | 3xM72x2 | Welle AS Ø-max<br>drive-end-shaft |    |       |       |      |      |      |
| s2                      | S  | 22       | 22       | 22      | 28      | 28      |                                   |    |       |       |      |      |      |

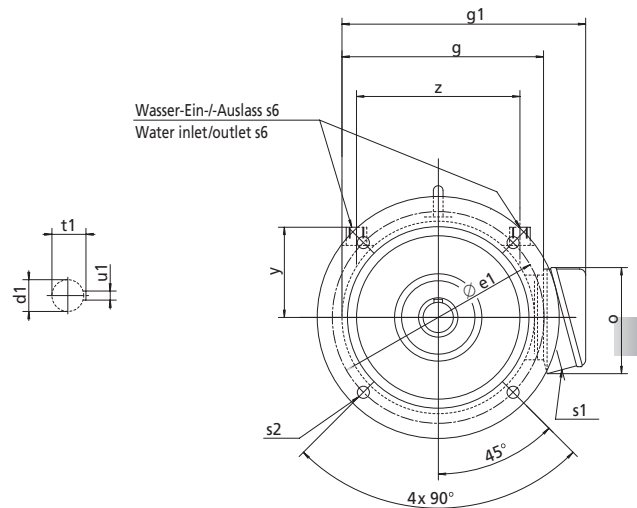
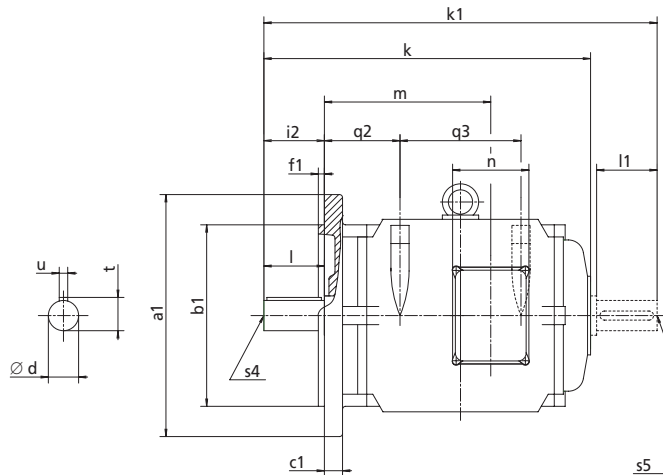
Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
 Passung b1 = ISA h6  
 Passfeder u/u1 = DIN 6885  
 Innengewinde s4/s5 = DIN 332 Form D  
 \* = Durchgangsbohrung für Gewinde  
 Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
 Fit diam. b1 = ISA h6  
 Featherkey u/u1 = DIN 6885  
 Internal thread s4/s5 = DIN 332 Form D  
 \* = through-hole for bolts

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/007  
Bauform B5  
Schutzart IP 55  
Klemmenkasten rechts (0°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/007  
Mounting B5  
Degree of protection IP 55  
Terminalbox right (0°)



| Baugröße<br>Frame size |    | 71            | 80            | 90            | 100           | 112           | 132           | 160           |
|------------------------|----|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| DIN                    | EN |               |               |               |               |               |               |               |
| a1                     | P  | 160           | 200           | 200           | 250           | 250           | 300           | 350           |
| b1                     | N  | 110           | 130           | 130           | 180           | 180           | 230           | 250           |
| c1                     | LA | 10            | 12            | 12            | 16            | 16            | 20            | 20            |
| e1                     | M  | 130           | 165           | 165           | 215           | 215           | 265           | 300           |
| f1                     | T  | 3.5           | 3.5           | 3.5           | 4             | 4             | 4             | 5             |
| g                      | AC | 138           | 158           | 175           | 192           | 218           | 252           | 305           |
| g1                     | AD | 195           | 219           | 236           | 261           | 299           | 339           | 420           |
| k                      | L  | 240           | 317           | 320           | 380           | 405           | 497           | 635           |
| k1                     | LC | 275           | 362           | 372           | 445           | 470           | 586           | 730           |
| m                      | /  | 142.5         | 202.5         | 191.5         | 239.5         | 244.5         | 309           | 393           |
| n                      | /  | 90            | 105           | 105           | 105           | 140           | 140           | 180           |
| o                      | /  | 90            | 105           | 105           | 105           | 140           | 140           | 215           |
| q2                     | /  | 61.5          | 65            | 60            | 74            | 84.5          | 96            | 114           |
| q3                     | /  | 90            | 150           | 148           | 180           | 185           | 234           | 312           |
| s1                     | /  | 1x<br>M20x1.5 | 1x<br>M25x1.5 | 1x<br>M25x1.5 | 1x<br>M25x1.5 | 2x<br>M25x1.5 | 2x<br>M25x1.5 | 2x<br>M40x1.5 |
| s2                     | S  | 9             | 11            | 11            | 14            | 14            | 14            | 18            |
| s4                     | DB | -             | -             | M8            | M10           | M10           | M12           | M16           |
| s5                     | DC | -             | -             | M8            | M10           | M10           | M12           | M12           |
| s6                     | /  | G1/4"         | G1/4"         | G1/4"         | G1/4"         | G1/4"         | G1/2"         | G1/2"         |
| y                      | /  | 81            | 85            | 85            | 95            | 100           | 117.5         | 137           |
| z                      | /  | 108           | 128           | 143           | 165           | 190           | 206.5         | 255           |

| Baugröße<br>Frame size |    | 71 | 80   | 90 | 100 | 112 | 132 | 160 |
|------------------------|----|----|------|----|-----|-----|-----|-----|
| DIN                    | EN |    |      |    |     |     |     |     |
| d                      | D  | 14 | 19   | 24 | 28  | 28  | 38  | 42  |
| i2                     | /  | 30 | 40   | 50 | 60  | 60  | 80  | 110 |
| l                      | E  | 30 | 40   | 50 | 60  | 60  | 80  | 110 |
| t                      | GA | 16 | 21.5 | 27 | 31  | 31  | 41  | 45  |
| u                      | F  | 5  | 6    | 8  | 8   | 8   | 10  | 12  |
| d1                     | DA | 14 | 19   | 24 | 28  | 28  | 32  | 38  |
| l1                     | EA | 30 | 40   | 50 | 60  | 60  | 80  | 80  |
| t1                     | GC | 16 | 21.5 | 27 | 31  | 31  | 35  | 41  |
| u1                     | FA | 5  | 6    | 8  | 8   | 8   | 10  | 10  |

Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
 Passung b1 = ISA j6  
 Passfeder u/u1 = DIN 6885  
 Innengewinde s4/s5 = DIN 332 Form D

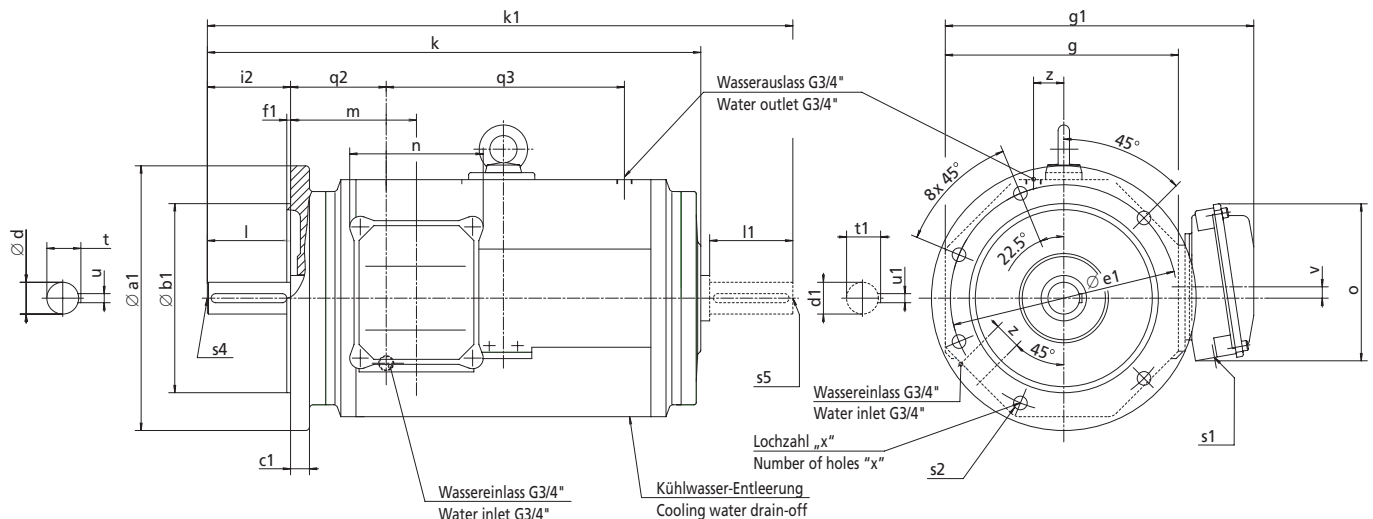
Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
 Fit diam. b1 = ISA j6  
 Featherkey u/u1 = DIN 6885  
 Internal thread s4/s5 = DIN 332 Form D

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/007  
Bauform B5  
Schutzart IP 55  
Klemmenkasten rechts (0°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/007  
Mounting B5  
Degree of protection IP 55  
Terminalbox right (0°)



| Baugröße<br>Frame size  |    | 180                    | 200<br>LK              | 200<br>L               | 225                    | 250                    | 280                    | Baugröße<br>Frame size |    | 180 | 200<br>LK | 200<br>L | 225 | 250 | 280 |
|-------------------------|----|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|----|-----|-----------|----------|-----|-----|-----|
| Polzahl<br>No. of poles |    | ≥ 2                    | ≥ 2                    | ≥ 2                    | ≥ 2                    | ≥ 2                    | 2<br>≥ 4               | DIN                    | EN |     |           |          |     |     |     |
| d <sub>max</sub>        | D  | 60                     | 65                     | 65                     | 65                     | 75                     | 75                     |                        |    |     |           |          |     |     |     |
| i2                      | /  | 140                    | 140                    | 140                    | 140                    | 140                    | 140                    |                        |    |     |           |          |     |     |     |
| l                       | E  | 140                    | 140                    | 140                    | 140                    | 140                    | 140                    |                        |    |     |           |          |     |     |     |
| t                       | GA | 64                     | 69                     | 69                     | 69                     | 79.5                   | 79.5                   |                        |    |     |           |          |     |     |     |
| u                       | F  | 18                     | 18                     | 18                     | 18                     | 20                     | 20                     |                        |    |     |           |          |     |     |     |
| d1 <sub>max</sub>       | DA | 48                     | 60                     | 60                     | 60                     | 65                     | 75                     |                        |    |     |           |          |     |     |     |
| l1                      | EA | 110                    | 140                    | 140                    | 140                    | 140                    | 140                    |                        |    |     |           |          |     |     |     |
| t1                      | GC | 51.5                   | 64                     | 64                     | 64                     | 69                     | 79.5                   |                        |    |     |           |          |     |     |     |
| u1                      | FA | 14                     | 18                     | 18                     | 18                     | 18                     | 20                     |                        |    |     |           |          |     |     |     |
| a1                      | P  | 400                    | 450                    | 450                    | 550                    | 660                    | 660                    |                        |    |     |           |          |     |     |     |
| b1                      | N  | 300                    | 350                    | 350                    | 500                    | 550                    | 550                    |                        |    |     |           |          |     |     |     |
| c1                      | LA | 20                     | 22                     | 22                     | 24                     | 24                     | 24                     |                        |    |     |           |          |     |     |     |
| e1                      | M  | 350                    | 400                    | 400                    | 450                    | 600                    | 600                    |                        |    |     |           |          |     |     |     |
| f1                      | T  | 5                      | 5                      | 5                      | 5                      | 6                      | 6                      |                        |    |     |           |          |     |     |     |
| x                       | /  | 4                      | 8                      | 8                      | 8                      | 8                      | 8                      |                        |    |     |           |          |     |     |     |
| g                       | AC | 350                    | 392                    | 392                    | 438                    | 484                    | 544                    |                        |    |     |           |          |     |     |     |
| g1                      | AD | 493                    | 535                    | 535                    | 582                    | 680                    | 710                    |                        |    |     |           |          |     |     |     |
| k                       | /  | 740                    | 740                    | 810                    | 820                    | 888                    | 1014                   |                        |    |     |           |          |     |     |     |
| k1                      | LC | 860                    | 890                    | 960                    | 970                    | 1038                   | 1164                   |                        |    |     |           |          |     |     |     |
| m                       | /  | 184                    | 194                    | 194                    | 205                    | 258                    | 271                    |                        |    |     |           |          |     |     |     |
| n                       | /  | 200                    | 200                    | 200                    | 200                    | 280                    | 280                    |                        |    |     |           |          |     |     |     |
| o                       | /  | 250                    | 250                    | 250                    | 250                    | 365                    | 365                    |                        |    |     |           |          |     |     |     |
| q2                      | /  | 119                    | 129                    | 129                    | 140                    | 153                    | 165                    |                        |    |     |           |          |     |     |     |
| q3                      | /  | 370                    | 354                    | 424                    | 424                    | 460                    | 550                    |                        |    |     |           |          |     |     |     |
| s1                      | /  | 2xM40x1.5<br>2xM16x1.5 | 2xM50x1.5<br>2xM16x1.5 | 2xM50x1.5<br>2xM16x1.5 | 2xM50x1.5<br>2xM16x1.5 | 2xM50x1.5<br>2xM16x1.5 | 2xM63x1.5<br>2xM16x1.5 |                        |    |     |           |          |     |     |     |
| s2                      | S  | 18                     | 18                     | 18                     | 18                     | 18                     | 22                     |                        |    |     |           |          |     |     |     |
| s4                      | DB | M20                    | M20                    | M20                    | M20                    | M20                    | M20                    |                        |    |     |           |          |     |     |     |
| s5                      | DC | M16                    | M20                    | M20                    | M20                    | M20                    | M20                    |                        |    |     |           |          |     |     |     |
| v                       | /  | 21                     | 25                     | 25                     | 25                     | 40                     | 40                     |                        |    |     |           |          |     |     |     |
| z                       | /  | 45                     | 50                     | 50                     | 57.5                   | 65                     | 75                     |                        |    |     |           |          |     |     |     |

Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
 Passung b1 = ISA h6  
 Passfeder u/u1 = DIN 6885  
 Innengewinde s4/s5 = DIN 332 Form D

Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
 Fit diam. b1 = ISA h6  
 Featherkey u/u1 = DIN 6885  
 Internal thread s4/s5 = DIN 332 Form D

Welle AS Ø-max  
drive-end-shaft

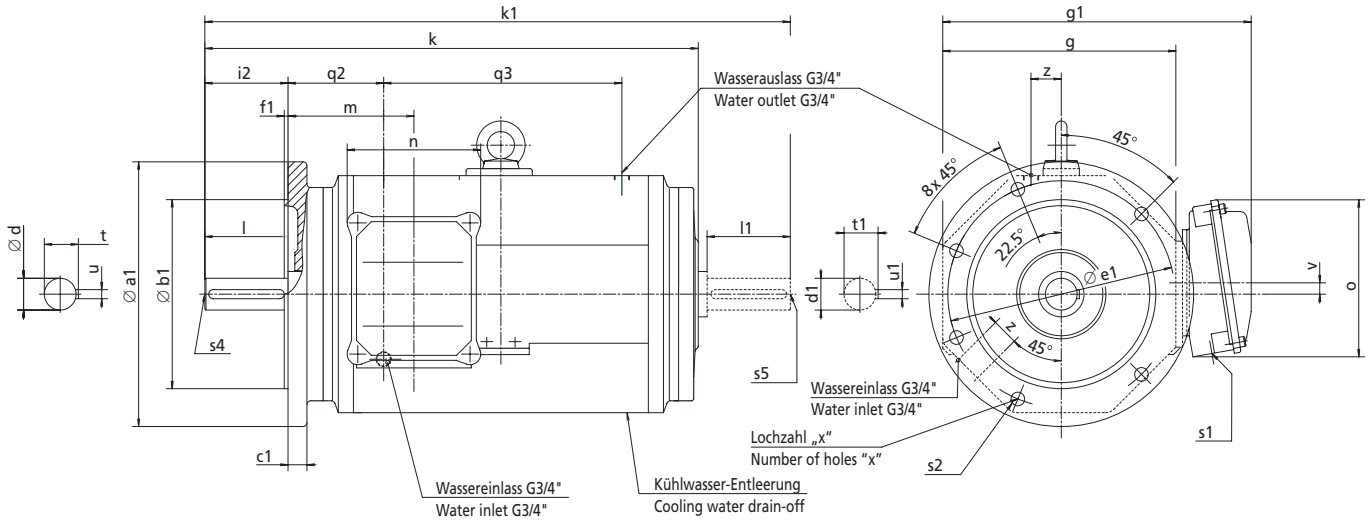
Welle BS Ø-max  
non-drive-end-shaft

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/007  
 Bauform B5  
 Schutzart IP 55  
 Klemmenkasten rechts (0°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/007  
 Mounting B5  
 Degree of protection IP 55  
 Terminalbox right (0°)



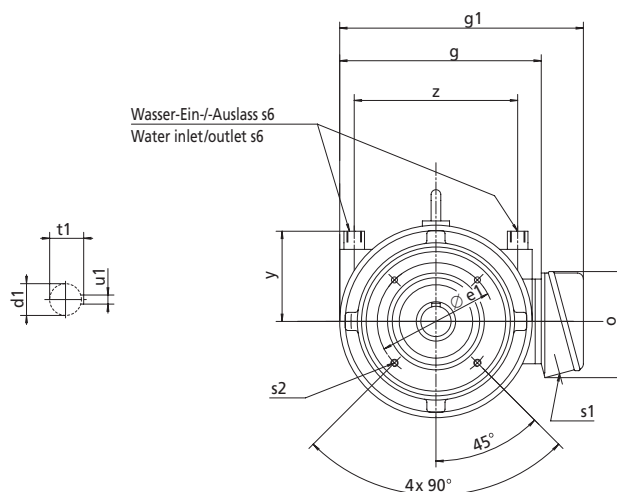
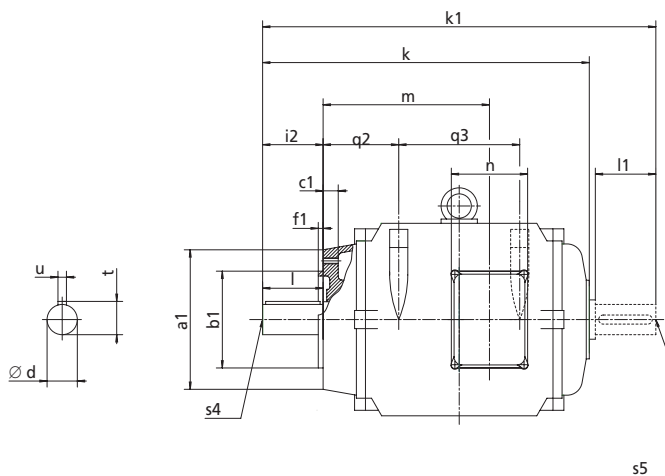
| Baugröße<br>Frame size                |    | 315 S                    | 315 L                | 355                  | 400                  | 450                  | Baugröße<br>Frame size  |    | 315 S      | 315 L      | 355      | 400      | 450   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
|---------------------------------------|----|--------------------------|----------------------|----------------------|----------------------|----------------------|---|----|------------|------------|----------|----------|---|---|------------------------|------------|---|--------|-----------------------------------|---|----------|--------------------|---|----------------|----------------|---------------------------------------|--------------------------|--------------|---|--------|-----------------|---|----------|-----------------------|---|----------------|
| Polzahl<br>No. of poles               |    | 2<br>≥ 4                 | 2<br>≥ 4             | ≥ 4                  | ≥ 4                  | ≥ 4                  | DIN   | EN |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| a1                                    | P  | 660                      | 660                  | 800                  | 1000                 | 1150                 | d <sub>max</sub>  | D  | 75<br>90   | 75<br>90   | -<br>90  | -<br>100 | -<br>110  |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| b1                                    | N  | 550                      | 550                  | 680                  | 880                  | 1000                 | i2  | /  | 140<br>170 | 140<br>170 | -<br>170 | -<br>210 | -<br>210  |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| c1                                    | LA | 25                       | 25                   | 25                   | 28                   | 30                   | l   | E  | 140<br>170 | 140<br>170 | -<br>170 | -<br>210 | -<br>210  |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| e1                                    | M  | 600                      | 600                  | 740                  | 940                  | 1080                 | t   | GA | 79,5<br>95 | 79,5<br>95 | -<br>95  | -<br>106 | -<br>116  |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| x                                     | /  | 8                        | 8                    | 8                    | 8                    | 8                    | u   | F  | 20<br>25   | 20<br>25   | -<br>25  | -<br>28  | -<br>28   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| f1                                    | T  | 6                        | 6                    | 6                    | 6                    | 6                    | d1 <sub>max</sub>   | DA | 75<br>80   | 75<br>80   | -<br>80  | -<br>90  | -<br>90   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| g                                     | AC | 614                      | 614                  | 690                  | 790                  | 860                  | l1  | EA | 140<br>170 | 140<br>170 | -<br>170 | -<br>170 | -<br>170  |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| g1                                    | AD | 812                      | 812                  | 917                  | 1130                 | 1205                 | t1  | GC | 79,5<br>85 | 79,5<br>85 | -<br>85  | -<br>95  | -<br>95   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| k                                     | L  | 185<br>1215              | 1465<br>1495         | -<br>1697            | -<br>1748            | -<br>2158            | u1  | FA | 20<br>22   | 20<br>22   | -<br>22  | -<br>25  | -<br>25   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| k1                                    | LC | 1335<br>1395             | 1615<br>1675         | -<br>1882            | -<br>1933            | -<br>2348            | <table border="0"> <tr> <td>Passung d/d1</td> <td>=</td> <td>ISA k6; ab Ø 55 ISA m6</td> </tr> <tr> <td>Passung b1</td> <td>=</td> <td>ISA h6</td> </tr> <tr> <td>Passfeder u/u1</td> <td>=</td> <td>DIN 6885</td> </tr> <tr> <td>Innengewinde s4/s5</td> <td>=</td> <td>DIN 332 Form D</td> </tr> <tr> <td>Fit diam. d/d1</td> <td>=</td> <td>ISA k6; from Ø 55 ISA m6</td> </tr> <tr> <td>Fit diam. b1</td> <td>=</td> <td>ISA h6</td> </tr> <tr> <td>Featherkey u/u1</td> <td>=</td> <td>DIN 6885</td> </tr> <tr> <td>Internal thread s4/s5</td> <td>=</td> <td>DIN 332 Form D</td> </tr> </table> |    |            |            |          |          | Passung d/d1  | = | ISA k6; ab Ø 55 ISA m6 | Passung b1 | = | ISA h6 | Passfeder u/u1                    | = | DIN 6885 | Innengewinde s4/s5 | = | DIN 332 Form D | Fit diam. d/d1 | =                                     | ISA k6; from Ø 55 ISA m6 | Fit diam. b1 | = | ISA h6 | Featherkey u/u1 | = | DIN 6885 | Internal thread s4/s5 | = | DIN 332 Form D |
| Passung d/d1                          | =  | ISA k6; ab Ø 55 ISA m6   |                      |                      |                      |                      |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| Passung b1                            | =  | ISA h6                   |                      |                      |                      |                      |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| Passfeder u/u1                        | =  | DIN 6885                 |                      |                      |                      |                      |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| Innengewinde s4/s5                    | =  | DIN 332 Form D           |                      |                      |                      |                      |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| Fit diam. d/d1                        | =  | ISA k6; from Ø 55 ISA m6 |                      |                      |                      |                      |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| Fit diam. b1                          | =  | ISA h6                   |                      |                      |                      |                      |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| Featherkey u/u1                       | =  | DIN 6885                 |                      |                      |                      |                      |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| Internal thread s4/s5                 | =  | DIN 332 Form D           |                      |                      |                      |                      |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| m                                     | /  | 323                      | 232                  | 342                  | 352                  | 364                  |   |    |            |            |          |          | <table border="0"> <tr> <td>Welle AS Ø-max<br/>drive-end-shaft</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Welle BS Ø-max<br/>non-drive-end-shaft</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> |   |                        |            |   |        | Welle AS Ø-max<br>drive-end-shaft |   |          |                    |   |                |                | Welle BS Ø-max<br>non-drive-end-shaft |                          |              |   |        |                 |   |          |                       |   |                |
| Welle AS Ø-max<br>drive-end-shaft     |    |                          |                      |                      |                      |                      |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| Welle BS Ø-max<br>non-drive-end-shaft |    |                          |                      |                      |                      |                      |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| n                                     | /  | 355                      | 355                  | 355                  | 470                  | 470                  |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| o                                     | /  | 427                      | 427                  | 427                  | 546                  | 546                  |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| q2                                    | /  | 301                      | 301                  | 343                  | 353                  | 383                  |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| q3                                    | /  | 535                      | 815                  | 950                  | 950                  | 1250                 |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| s                                     | /  | M24                      | M24                  | M24                  | M30                  | M30                  |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| s1                                    | /  | 2xM72x2<br>2xM16x1,5     | 2xM72x2<br>2xM16x1,5 | 2xM72x2<br>2xM16x1,5 | 3xM72x2<br>2xM16x1,5 | 3xM72x2<br>2xM16x1,5 |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| s2                                    | S  | 22                       | 22                   | 22                   | 28                   | 28                   |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| s4                                    | DB | M20<br>M24               | M20<br>M24           | -<br>M24             | -<br>M24             | -<br>M24             |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| s5                                    | DC | M20                      | M20                  | M20                  | M24                  | M24                  |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| v                                     | /  | 40                       | 40                   | 49,5                 | 49,5                 | 49,5                 |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |
| z                                     | /  | 90                       | 90                   | 90                   | 90                   | 90                   |   |    |            |            |          |          |   |   |                        |            |   |        |                                   |   |          |                    |   |                |                |                                       |                          |              |   |        |                 |   |          |                       |   |                |

# Wassergekühlte Drehstrommotoren Baureihe WK

Maßblatt Nr. 837/09/008  
Bauform B14  
Schutzart IP 55  
Klemmenkasten rechts (0°)

# Water-cooled three-phase motors type wk

Dimension sheet No. 837/09/008  
Mounting B14  
Degree of protection IP 55  
Terminalbox right (0°)



| Baugröße<br>Frame size |    | 71            | 80            | 90            | 100           | 112           | 132           |
|------------------------|----|---------------|---------------|---------------|---------------|---------------|---------------|
| DIN                    | EN |               |               |               |               |               |               |
| a1                     | P  | 105<br>140    | 120<br>160    | 140<br>160    | 160<br>200    | 160<br>200    | 160<br>200    |
| b1                     | N  | 70<br>95      | 80<br>110     | 95<br>110     | 110<br>130    | 110<br>130    | 110<br>130    |
| c1                     | LA | 12<br>10      | 12            | 12            | 12            | 12            | 12            |
| e1                     | M  | 85<br>115     | 100<br>130    | 115<br>130    | 130<br>165    | 130<br>165    | 130<br>165    |
| f1                     | T  | 2.5<br>3      | 3<br>3.5      | 3<br>3.5      | 3.5<br>3.5    | 3.5<br>3.5    | 3.5           |
| g                      | AC | 138           | 158           | 175           | 192           | 218           | 252           |
| g1                     | AD | 195           | 219           | 236           | 261           | 299           | 339           |
| k                      | L  | 240           | 317           | 320           | 380           | 405           | 497           |
| k1                     | LC | 275           | 362           | 372           | 445           | 470           | 586           |
| m                      | /  | 142.5         | 202.5         | 191.5         | 239.5         | 244.5         | 309           |
| n                      | /  | 90            | 105           | 105           | 105           | 140           | 140           |
| o                      | /  | 90            | 105           | 105           | 105           | 140           | 140           |
| q2                     | /  | 61.5          | 65            | 60            | 74            | 84.5          | 96            |
| q3                     | /  | 90            | 150           | 148           | 180           | 185           | 234           |
| s1                     | /  | 1x<br>M20x1.5 | 1x<br>M25x1.5 | 1x<br>M25x1.5 | 1x<br>M25x1.5 | 2x<br>M25x1.5 | 2x<br>M25x1.5 |
| s2                     | S  | 9             | 11            | 11            | 14            | 14            | 14            |
| s4                     | DB | -             | -             | M8            | M10           | M10           | M12           |
| s5                     | DC | -             | -             | M8            | M10           | M10           | M12           |
| s6                     | /  | G1/4"         | G1/4"         | G1/4"         | G1/4"         | G1/4"         | G1/2"         |
| y                      | /  | 81            | 85            | 85            | 95            | 100           | 117.5         |
| z                      | /  | 108           | 128           | 143           | 165           | 190           | 206.5         |

| Baugröße<br>Frame size |    | 71 | 80   | 90 | 100 | 112 | 132 |
|------------------------|----|----|------|----|-----|-----|-----|
| DIN                    | EN |    |      |    |     |     |     |
| d                      | D  | 14 | 19   | 24 | 28  | 28  | 38  |
| i2                     | /  | 30 | 40   | 50 | 60  | 60  | 80  |
| l                      | E  | 30 | 40   | 50 | 60  | 60  | 80  |
| t                      | GA | 16 | 21.5 | 27 | 31  | 31  | 41  |
| u                      | F  | 5  | 6    | 8  | 8   | 8   | 10  |
| d1                     | DA | 14 | 19   | 24 | 28  | 28  | 32  |
| l1                     | EA | 30 | 40   | 50 | 60  | 60  | 80  |
| t1                     | GC | 16 | 21.5 | 27 | 31  | 31  | 35  |
| u1                     | FA | 5  | 6    | 8  | 8   | 8   | 10  |

Welle AS  
Ø-max  
drive-end-shaft

Welle BS  
Ø-max  
non-drive-  
end-shaft

Passung d/d1 = ISA k6; ab Ø 55 ISA m6  
Passung b1 = ISA j6  
Passfeder u/u1 = DIN 6885  
Innengewinde s4/s5 = DIN 332 Form D

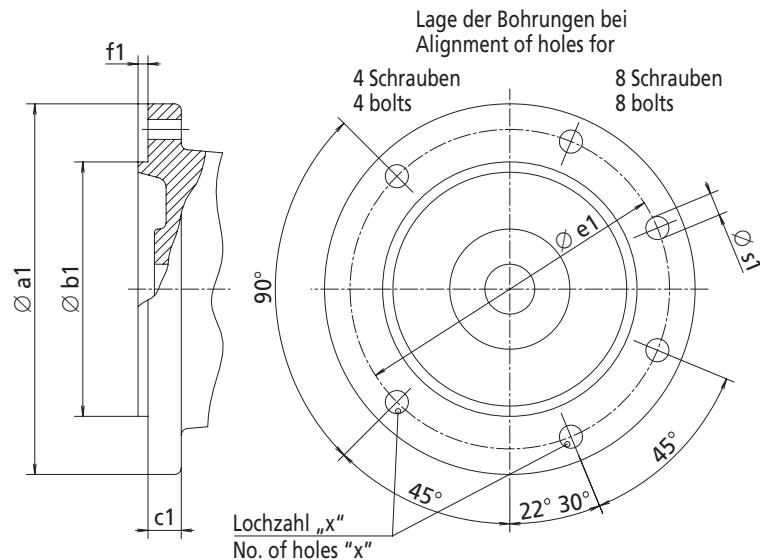
Fit diam. d/d1 = ISA k6; from Ø 55 ISA m6  
Fit diam. b1 = ISA j6  
Featherkey u/u1 = DIN 6885  
Internal thread s4/s5 = DIN 332 Form D

# Lieferbare Flansche

# Available flanges

Maßblatt Nr. 837/09/009

dimension sheet No. 837/09/009



Die bildliche Darstellung entspricht nicht immer der endgültigen Ausführung

b1 entspricht ISA j6, ab Ø a1 350 = ISA h6

Alle Maße in mm

The graphic presentation sometime doesn't agree with the final design

b1 corresponds to ISA j6, from Ø a1 350 = ISA h6

All dimensions in mm

| Baugröße<br>Frame size | Motor-<br>verlängerung<br>Motor<br>extension | Bauform<br>Mounting |           | a1  | b1  | c1 | e1  | f1  | s1      | x |
|------------------------|--|---------------------|-----------|-----|-----|----|-----|-----|---------|---|
|                        |  |                     |           | P   | N   | LA | M   | T   | S       |   |
| 71                     | ** 20<br>** 20                               | B14                 | FT 65     | 80  | 50  | 8  | 65  | 2.5 | M5      | 4 |
|                        |  | B14                 | FT 75     | 90  | 60  | 8  | 75  | 2.5 | M5      | 4 |
|                        |  | B14                 | FT 85     | 105 | 70  | 12 | 85  | 2.5 | M6      | 4 |
|                        |  | B14/B5              | FT/FF 100 | 120 | 80  | 12 | 100 | 3   | M6/Ø7   | 4 |
|                        |  | B14/B5              | FT/FF 115 | 140 | 95  | 10 | 115 | 3   | M8/Ø9   | 4 |
|                        |  | B14/B5              | FT/FF 130 | 160 | 110 | 10 | 130 | 3.5 | M8/Ø9   | 4 |
| 80                     | ** 15<br>** 15<br>** 15                      | B14                 | FT 75     | 90  | 60  | 8  | 75  | 2.5 | M5      | 4 |
|                        |  | B14                 | FT 85     | 105 | 70  | 12 | 85  | 2.5 | M6      | 4 |
|                        |  | B14/B5              | FT/FF 100 | 120 | 80  | 12 | 100 | 3   | M6/Ø7   | 4 |
|                        |  | B14/B5              | FT/FF 115 | 140 | 95  | 12 | 115 | 3   | M8/Ø9   | 4 |
|                        |  | B14/B5              | FT/FF 130 | 160 | 110 | 12 | 130 | 3.5 | M8/Ø9   | 4 |
|                        |  | B14/B5              | FT/FF 165 | 200 | 130 | 12 | 165 | 3.5 | M10/Ø11 | 4 |
|                        |  | B14/B5              | FT/FF 215 | 250 | 180 | 16 | 215 | 4   | M12/Ø14 | 4 |
|                        |  | B14/B5              | FT/FF 265 | 300 | 230 | 12 | 265 | 4   | M12/Ø14 | 4 |
| 90                     | ** 20<br>** 20<br>** 20                      | B14                 | FT 85     | 105 | 70  | 12 | 85  | 2.5 | M6      | 4 |
|                        |  | B14/B5              | FT/FF 100 | 120 | 80  | 12 | 100 | 3   | M6/Ø7   | 4 |
|                        |  | B14/B5              | FT/FF 115 | 140 | 95  | 12 | 115 | 3   | M8/Ø9   | 4 |
|                        |  | B14/B5              | FT/FF 130 | 160 | 110 | 12 | 130 | 3.5 | M8/Ø9   | 4 |
|                        |  | B14/B5              | FT/FF 165 | 200 | 130 | 12 | 165 | 3.5 | M10/Ø11 | 4 |
|                        |  | B14/B5              | FT/FF 215 | 250 | 180 | 16 | 215 | 4   | M12/Ø14 | 4 |
| 100                    | ** 20  | B14                 | FT 115    | 140 | 95  | 12 | 115 | 3   | M8      | 4 |
|                        |  | B14/B5              | FT/FF 130 | 160 | 110 | 12 | 130 | 3.5 | M8/Ø9   | 4 |
|                        |  | B14/B5              | FT/FF 165 | 200 | 130 | 12 | 165 | 3.5 | M10/Ø11 | 4 |
|                        |  | B14/B5              | FT/FF 215 | 250 | 180 | 16 | 215 | 4   | M12/Ø14 | 4 |
| 112                    | ** 20<br>** 20<br>1) *** 20.5                | B14                 | FT 115    | 140 | 95  | 12 | 115 | 3   | M8      | 4 |
|                        |  | B14                 | FT 130    | 160 | 110 | 12 | 130 | 3.5 | M8/Ø9   | 4 |
|                        |  | B14/B5              | FT/FF 165 | 200 | 130 | 14 | 165 | 3.5 | M10/Ø11 | 4 |
|                        |  | B14/B5              | FT/FF 215 | 250 | 180 | 16 | 215 | 4   | M12/Ø14 | 4 |
|                        |  | B14/B5              | FT/FF 265 | 300 | 230 | 20 | 265 | 4   | M12/Ø14 | 4 |
| 132                    | ** 15  | B14                 | FT 130    | 160 | 110 | 12 | 130 | 3.5 | M8      | 4 |
|                        |  | B14/B5              | FT/FF 165 | 200 | 130 | 16 | 165 | 3.5 | M10/Ø11 | 4 |
|                        |  | B14/B5              | FT/FF 215 | 250 | 180 | 16 | 215 | 4   | M12/Ø14 | 4 |
|                        |  | B14/B5              | FT/FF 265 | 300 | 230 | 20 | 265 | 4   | M12/Ø14 | 4 |
|                        |  | B14/B5              | FT/FF 300 | 350 | 250 | 20 | 300 | 5   | M16/Ø18 | 4 |

1) Lager 6308

\*\* Flansche B5 nur mit verlängertem Flanschhals lieferbar.

\*\*\* Flansche in B5 und B14 nur mit verlängertem Flanschhals lieferbar.

Bei verlängertem Flanschhals ändern sich die Maße w1, k, k1, m und q um den angegebenen Wert.

1) Bearing 6308

\*\* In construction B5 only extended-neck flanges available.

\*\*\* In construction B5 and B14 only extended-neck flanges available.

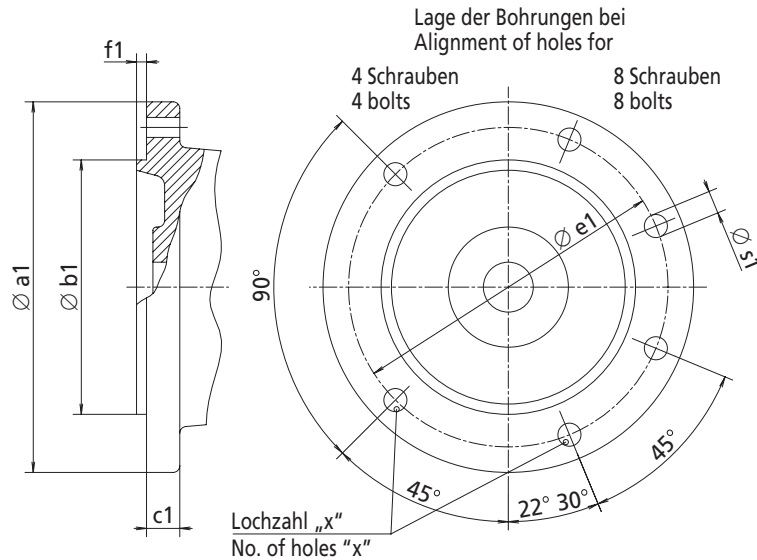
With extended-neck flanges used, the listed blanks must be added to the dimensions w1, k, k1, m und q.

# Lieferbare Flansche

Maßblatt Nr. 837/09/009

# Available flanges

dimension sheet No. 837/09/009



Die bildliche Darstellung entspricht nicht immer der endgültigen Ausführung

b1 entspricht ISA j6, ab  $\varnothing$  a1 350 = ISA h6

Alle Maße in mm

The graphic presentation sometime doesn't agree with the final design

b1 corresponds to ISA j6, from  $\varnothing$  a1 350 = ISA h6

All dimensions in mm

· 40 ·

| Baugröße<br>Frame size | Motor-<br>verlängerung<br>Motor<br>extension | Bauform<br>Mounting |         | a1   | b1   | c1 | e1   | f1 | s1               | x |
|------------------------|--|---------------------|---------|------|------|----|------|----|------------------|---|
|                        |  |                     |         | P    | N    | LA | M    | T  | S                |   |
| 160                    | ** 20  | B5                  | FF 215  | 250  | 180  | 16 | 215  | 4  | $\varnothing$ 14 | 4 |
|                        |  | B5                  | FF 265  | 300  | 230  | 20 | 265  | 4  | $\varnothing$ 14 | 4 |
|                        |  | B5                  | FF 300  | 350  | 250  | 20 | 300  | 5  | $\varnothing$ 18 | 4 |
|                        |  | B5                  | FF 350  | 400  | 300  | 20 | 350  | 5  | $\varnothing$ 18 | 4 |
|                        |  | B5                  | FF 400  | 450  | 350  | 22 | 400  | 5  | $\varnothing$ 18 | 8 |
| 180                    |  | B14                 | FF 300  | 350  | 250  | 20 | 300  | 5  | M16              | 4 |
|                        |  | B5                  | FF 350  | 400  | 300  | 20 | 350  | 5  | $\varnothing$ 18 | 4 |
|                        |  | B5                  | FF 400  | 450  | 350  | 22 | 400  | 5  | $\varnothing$ 18 | 8 |
| 200                    |  | B5                  | FF 350  | 400  | 300  | 22 | 350  | 5  | $\varnothing$ 18 | 4 |
|                        |  | B5                  | FF 400  | 450  | 350  | 22 | 400  | 5  | $\varnothing$ 18 | 8 |
| 225                    |  | B5                  | FF 400  | 450  | 350  | 22 | 400  | 5  | $\varnothing$ 18 | 8 |
|                        |  | B5                  | FF 500  | 550  | 450  | 25 | 500  | 5  | $\varnothing$ 18 | 8 |
| 250                    | ** 35  | B5                  | FF 400  | 450  | 350  | 22 | 400  | 5  | $\varnothing$ 18 | 8 |
|                        |  | B5                  | FF 500  | 550  | 450  | 25 | 500  | 5  | $\varnothing$ 18 | 8 |
|                        |  | B5                  | FF 600  | 660  | 550  | 25 | 600  | 6  | $\varnothing$ 22 | 8 |
| 280                    | ** 35  | B5                  | FF 400  | 450  | 350  | 22 | 400  | 5  | $\varnothing$ 18 | 8 |
|                        |  | B5                  | FF 500  | 550  | 450  | 24 | 500  | 5  | $\varnothing$ 18 | 8 |
|                        |  | B5                  | FF 600  | 660  | 550  | 24 | 600  | 6  | $\varnothing$ 22 | 8 |
| 315                    |  | B5                  | FF 600  | 660  | 550  | 25 | 600  | 6  | $\varnothing$ 22 | 8 |
| 355                    |  | B5                  | FF 740  | 800  | 680  | 25 | 740  | 6  | $\varnothing$ 22 | 8 |
| 400                    |  | B5                  | FF 940  | 1000 | 880  | 28 | 940  | 6  | $\varnothing$ 28 | 8 |
| 450                    |  | B5                  | FF 1080 | 1150 | 1000 | 57 | 1080 | 6  | $\varnothing$ 28 | 8 |

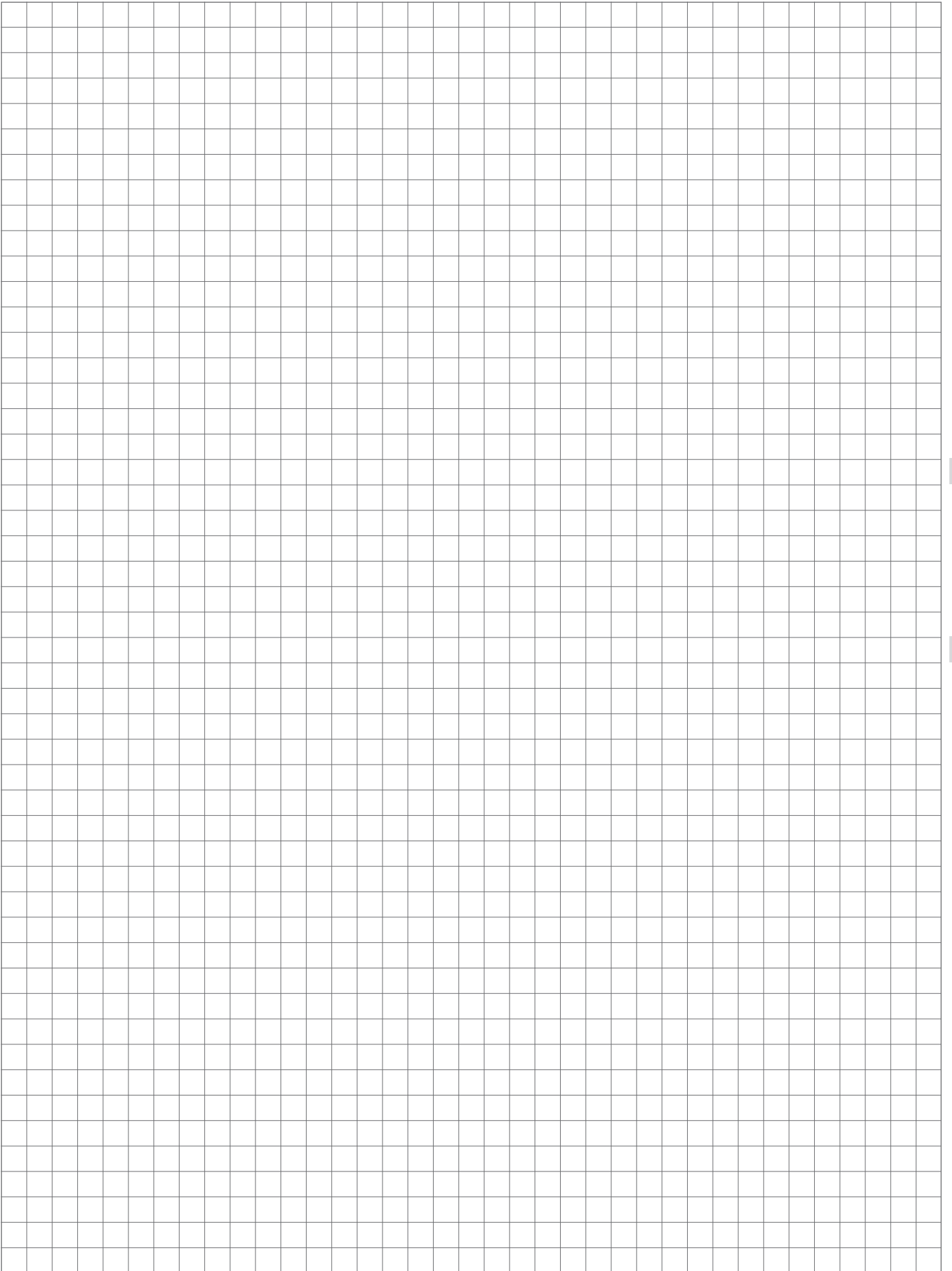
\*\* Flansche B5 nur mit verlängertem Flanschnals lieferbar.

Bei verlängertem Flanschnals ändern sich die Maße w1, k, k1, m und q um den angegebenen Wert.

\*\* In construction B5 only extended-neck flanges available.

With extended-neck flanges used, the listed blanks must be added to the dimensions w1, k, k1, m und q.







- Baureihe 820 Einphasenmotoren**  
Schutzart IP 55 bis 2,5 kW
- Baureihe 821 Drehstrommotoren IP 55**  
in Norm- und Sonderausführungen  
bis 1000 kW
- Baureihe 822 Drehstrommotoren IP 23**  
in Norm- und Sonderausführungen  
bis 1200 kW
- Baureihe 823 Außenläufermotoren**  
Baureihe AS
- Baureihe 824 Topfmotoren**  
Schutzart IP 67 bis 6 kW
- Baureihe 825 Tauchmotoren**  
Schutzart IP 68 bis 1000 kW
- Baureihe 826 Fahr- und Hebezeugmotoren**  
bis 2/32-polig und regelbar
- Baureihe 827 Positionierantriebe**  
mit höchster Positioniergenauigkeit

- Type 820 Single-phase motors**  
degree of protection IP 55, up to 2.5kW
- Type 821 Three-phase motors, IP 55**  
in standard and special configurations,  
up to 1000kW
- Type 822 Three-phase motors, IP 23**  
in standard and special configurations,  
up to 1200kW
- Type 823 External rotor motors**  
types AS
- Type 824 Encapsulated motors**  
degree of protection IP 67, up to 6kW
- Type 825 Submersible motors**  
degree of protection IP 68, up to 1000kW
- Type 826 Crane and hoist drive motors**  
with pole switching up to 2/32 poles  
and variable speed
- Type 827 Positioning drives**  
with extremely high positioning accuracy

## Das EMOD-Lieferprogramm Delivery program

- Baureihe 828 Frequenzregelbare Drehstrommotoren**  
für 1-, 2- und 4-Quadrantenbetrieb,  
Schutzart IP 55 und IP 23
- Baureihe 829 Schiffsmotoren**  
für Unter- und Oberdeckaufstellung,  
mit oder ohne Abnahme
- Baureihe 831 Gleichstrommotoren**  
Schutzart IP 44
- Baureihe 832 Gleichstrommotoren**  
Schutzart IP 23s
- Baureihe 833 Thyristorregelbare Drehstrommotoren**  
für Antriebe mit quadratischem  
Gegenmomentverlauf
- Baureihe 834 Reluktanzmotoren**  
mit hohen Außertrittfallmomenten
- Baureihe 835 Drehstrom-Servomotoren**  
mit hohem Stillstandsmoment
- Baureihe 836 Drehstrom-Schleifringläufermotoren**  
Schutzart IP 54
- Baureihe 837 Wassergekühlte Drehstrommotoren**  
Leistungsbereich 0,75 bis 1000 kW
- Baureihe 838 Flachmotoren**  
Drehzahlen bis 24.000 U/min

- Type 828 Variable speed polyphase motors**  
1, 2 and 4 quadrant operation,  
degrees of protection IP 55 and IP 23
- Type 829 Marine motors**  
for on-deck and below-deck applications,  
with and without certification
- Type 831 DC motors**  
degree of protection IP 44
- Type 832 DC motors**  
degree of protection IP 23s
- Type 833 Variable speed motors for thyristor control**  
especially for fan installations
- Type 834 Reluctance motors**  
for maintaining synchronisation  
at high torques
- Type 835 AC servomotors**  
with increased standstill torques
- Type 836 Wound-rotor induction motors**  
degree of protection IP 54
- Type 837 Water-cooled three-phase motors**  
rated output 0.75kW to 1000kW
- Type 838 Flat motors**  
rated speeds up to 24,000rpm

# Motoren nach Maß



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