

# Antriebstechnik

IEC Käfigläufermotoren  
Energiesparmotoren entspr. Richtlinie 2005/32/EG (EuP)  
Asynchrongeneratoren  
Schleifringläufermotoren

# Drive technology

IEC motors with squirrel-cage rotor  
Energy saving motors acc. to directive 2005/32/EC  
Asynchronous generators  
Motors with slip-ring rotor

## Preisliste 2011 Price list 2011

Die Preisliste ist gültig ab 01.01.2011.  
Ab diesem Zeitpunkt verliert die VEM-  
Bruttopreisliste 2010/1 ihre Gültigkeit.

The price list is valid from 01.01.2011.  
From this date the VEM gross price list  
2010/1 will become invalid.



# Inhalt

## Contents

	Seite Page
Allgemeines General .....	4
Erläuterung zur Ausführung von Käfigläufermotoren Explanation for modifications of squirrel-cage motors .....	5
Kundeninformation Customer information .....	6
Wirkungsgradklassifizierung und Wirkungsgradermittlung Efficiency classification and efficiency determination .....	7
Energiesparmotoren Standard Efficiency IE1, ab Lager lieferbar Energy saving motors, Standard Efficiency IE1, available ex stock .....	9
Energiesparmotoren High Efficiency IE2, ab Lager lieferbar Energy saving motors, High Efficiency IE2, available ex stock .....	10
Energiesparmotoren Standard Efficiency IE1, nach IEC 60034-30 Energy saving motors, Standard Efficiency IE1, acc. to IEC 60034-30 .....	11
Energiesparmotoren, High Efficiency IE2, nach IEC 60034-30 und IEC 60034-2-1 Energy saving motors, High Efficiency IE2, acc. to IEC 60034-30 and IEC 60034-2-1 .....	12
Energiesparmotoren, High Efficiency nach CSA C390 und NEMA MG1, Tab. 12-10 Energy saving motors, High Efficiency acc. to CSA C390 and NEMA MG1, Table 12-10 .....	13
Asynchrongeneratoren Asynchronous generators .....	14
Asynchrongeneratoren, wirkungsgradoptimierte Ausführung auf Basis IE2 Asynchronous generators, Design with optimized efficiency complying with IE2 .....	15
Käfigläufermotoren, polumschaltbar, 2 Drehzahlen, konstantes Belastungsmoment Motors with squirrel-cage rotor, pole changing, 2 speeds, constant loading torque .....	16
Käfigläufermotoren, polumschaltbar, 2 Drehzahlen, Lüfterausführung, quadratisch steigendes Belastungsmoment Motors with squirrel-cage rotor, pole changing, 2 speeds, fan version, squarely increasing loading torque .....	17
Käfigläufermotoren, polumschaltbar, 3 Drehzahlen, konstantes Belastungsmoment Motors with squirrel-cage rotor, pole-changing, 3 speeds, constant loading torque .....	18
Käfigläufermotoren für Umrichterbetrieb ohne Filter bis 500V, Kühlart IC 411, nach DIN VDE 0530-25:2009-08, Kurve A Motors with squirrel-cage rotor, for inverter feeding without filter up to 500V, cooling method IC 411, acc. to DIN VDE 0530-25:2009-08, curve A .....	19
Käfigläufermotoren für Umrichterbetrieb ohne Filter bis 690V, Kühlart IC 411, nach DIN VDE 0530-25:2009-08, Kurve B Motors with squirrel-cage rotor, for inverter feeding without filter up to 690V, cooling method IC 411, acc. to DIN VDE 0530-25:2009-08, curve B .....	20
Käfigläufermotoren, fremdbelüftet, Kühlart IC 416, für Umrichterbetrieb ohne Filter bis 500V, nach DIN VDE 0530-25:2009-08, Kurve A Motors with squirrel-cage rotor, forced ventilated, type of cooling IC 416, for inverter feeding without filter up to 500V, acc. to DIN VDE 0530-25:2009-08, curve A .....	21
Käfigläufermotoren, fremdbelüftet, Kühlart IC 416, für Umrichterbetrieb ohne Filter bis 690V, nach DIN VDE 0530-25:2009-08, Kurve B Motors with squirrel-cage rotor, forced ventilated, type of cooling IC 416, for inverter feeding without filter up to 690V, acc. to DIN VDE 0530-25:2009-08, curve B .....	22
Käfigläufermotoren, Marineausführung GL, RRS Squirrel-cage motors, marine version GL, RRS .....	23
Käfigläufermotoren, Marineausführung BV, DNV, LR, ABS, CCS Squirrel-cage motors, marine version BV, DNV, LR, ABS, CCS .....	24
Bremsmotoren mit Käfigläufer Brake motors, with squirrel cage rotor .....	25
Bremsmotoren mit angebaute Kompaktbremse BFK 457 Brake motors with built-on compact brake BFK 457 .....	26
Käfigläufermotoren, explosionsgeschützt, Zündschutzart Erhöhte Sicherheit "e" Squirrel-cage motors, explosion-protected, increased safety "e" .....	27

# Inhalt

## Contents

	Seite Page
Energiesparmotoren in Wirkungsgradklasse IE2 nach IEC 60034-30 für Einsatz in Zone 2, Zündschutzart "n" Energy saving motors, efficiency class IE2 acc. to IEC 60034-30 for use in zone 2, type of protection "n" .....	28
Energiesparmotoren in Wirkungsgradklasse IE1 nach IEC 60034-30, explosionsgeschützt für den Einsatz in Zone 2, Zündschutzart "n" Energy saving motors, efficiency class IE1 acc. to IEC 60034-30, explosion-protected for use in zone 2, type of protection "n" .....	29
Käfigläufermotoren für Umrichterbetrieb, Zündschutzart Erhöhte Sicherheit "e" Squirrel-cage motors for inverter operation, explosion-protected, increased safety "e" .....	30
Energiesparmotoren in Wirkungsgradklasse IE2 nach IEC 60034-30 für Einsatz in Zone 22, Zündschutzart "Schutz durch Gehäuse, tD A22" Energy saving motors, efficiency class IE2 acc. to IEC 60034-30 for use in zone 22, type of protection "Protection by enclosure, tD A22" ..	31
Energiesparmotoren in Wirkungsgradklasse IE1 nach IEC 60034-30 für Einsatz in Zone 22, Zündschutzart "Schutz durch Gehäuse, tD A22" Energy saving motors, efficiency class IE1 acc. to IEC 60034-30 for use in zone 22, type of protection "Protection by enclosure, tD A22" ..	32
Energiesparmotoren in Wirkungsgradklasse IE2 nach IEC 60034-30 für Einsatz in Zone 21, Zündschutzart "Schutz durch Gehäuse, tD A21" Energy saving motors, efficiency class IE2 acc. to IEC 60034-30 for use in zone 21, type of protection "Protection by enclosure, tD A21" ..	33
Energiesparmotoren in Wirkungsgradklasse IE1 nach IEC 60034-30 für Einsatz in Zone 21, Zündschutzart "Schutz durch Gehäuse, tD A21" Energy saving motors, efficiency class IE1 acc. to IEC 60034-30 for use in zone 21, type of protection "Protection by enclosure, tD A21" ..	34
Kompaktantriebe entsprechend Energieeffizienzklasse IE1 Compact drives corresponding with energy efficiency class IE1 .....	35
Kompaktantriebe entsprechend Energieeffizienzklasse IE2 Compact drives corresponding with energy efficiency class IE2 .....	36
Drehstrom-Asynchronmotoren mit Käfigläufer zum Einsatz in maschinellen Rauch- und Wärmeabzugsgeräten nach EN 12101-3, Klassen F200, F300, F400 Three-phase asynchronous motors with squirrel-cage rotor for use in mechanical smoke and heat exhaust ventilators acc. to EN 12101-3 .....	37 – 39
Energiesparmotoren, Premium Efficiency IE3 Energy saving motors, Premium Efficiency IE3 .....	40
Käfigläufermotoren, wassergekühlt Squirrel-cage motors, water cooling .....	41
Synchronmotoren mit Permanentmagnetläufer für Umrichterbetrieb Synchronous motors with permanent-magnet-rotor for inverter feeding .....	42
Synchronmotoren mit Permanentmagnetläufer Premium Efficiency IE3 Synchronous motors with permanent-magnet-rotor Premium Efficiency IE3 .....	43
Einphasen-Asynchronmotoren mit Betriebskondensator Single-phase asynchronous motors with operational capacitor .....	44
Einphasen-Asynchronmotoren mit Betriebskondensator und Widerstandsläufer oder Anlaufkondensator Single-phase asynchronous motor with operational and resistance rotor or starting capacitor .....	45
Mehrpreise Käfigläufermotoren, Reihen (IE-)K1../K2../B2../WE../KU../W2../KV../W4.. Extra charges squirrel-cage motors, Series (IE-)K1../K2../B2../WE../KU../W2../KV../W4.. .....	46 – 47
Mehrpreise Kompaktantriebe, Reihen M21R...T Extra charges compact drives, Series M21R...T .....	48
Mehrpreise Kompaktantriebe, Reihen M21R VS / M21F / ME1R VS / ME1F Extra charges compact drives, Series M21R VS / M21F / ME1R VS / ME1F .....	49
Schleifringläufermotoren, Grundaufbau Motors with slip-ring rotor, basic version .....	50
Schleifringläufermotoren, Kran- und Hüttenwerksausführung Motors with slip-ring rotor, version for cranes and steel industry .....	51
Mehrpreise Schleifringläufermotoren, Reihen SPER/S11R, SPEH/S11H Extra charges, motors with slip-ring rotor, Series SPER/S11R, SPEH/S11H .....	52
Ersatzteile Spare parts .....	53
Lieferprogramm Product range .....	57

## Allgemeines

### Lieferbedingungen

Es gelten die allgemeinen Verkaufs- und Lieferbedingungen für Erzeugnisse und Leistungen der VEM motors GmbH.

### Preise

Die Preise sind lediglich Berechnungsbasis für unsere Lieferpreise. Die Preisangaben sind keine Handels- oder Verbraucherempfehlung. Die Preise gelten in EUR ab Lager bzw. Werk, ausschließlich Verpackung. Die Umsatzsteuer (Mehrwertsteuer) ist in den Preisen nicht enthalten. Sie wird mit dem am Tag der Lieferung gültigen Prozentsatz berechnet. Änderungen an den in dieser Preisliste enthaltenen Preisen und technischen Angaben bleiben vorbehalten.

### Abnahmekosten

werden weiterberechnet.

### Stornierungen

Bei Stornierungen oder Änderungen werden die Kosten nach Aufwand verrechnet.

### Fracht + Verpackung (gilt innerhalb Deutschlands)

Dafür werden folgende Zuschläge berechnet:

Bestellwert bis	500,- EUR	7,5 % des Umsatzwertes
Bestellwert bis	2.500,- EUR	5,0 % des Umsatzwertes
Bestellwert über	2.500,- EUR	3,0 % des Umsatzwertes

### Kupfer-Zuschläge

Die Preise bleiben bis zu einer Cu-DEL-Notiz von EUR 225,-/100 kg unverändert. Bei DEL-Notierungen über EUR 225,-/100 kg werden die nachfolgenden prozentualen Zuschläge auf die jeweiligen Netto-Preise erhoben.

DEL-Notiz EUR je 100 kg	Cu-Zuschlag in %	Cu-Zuschlag Kompaktantriebe in %
225,- bis unter 275,-	1,2	1,0
275,- bis unter 325,-	2,5	1,5
325,- bis unter 375,-	3,5	2,0
375,- bis unter 425,-	4,5	3,0
425,- bis unter 475,-	5,5	4,0
475,- bis unter 525,-	6,5	5,0
525,- bis unter 575,-	7,5	6,0
575,- bis unter 625,-	8,5	7,0
625,- bis unter 675,-	9,5	8,0
675,- bis unter 725,-	10,5	9,0
725,- bis unter 775,-	11,5	10,0
775,- bis unter 825,-	12,5	11,0

Für die Verrechnung der Kupfer-Zuschläge ist die DEL-Notiz vom Tag des Bestelleingangs bzw. des Abrufs bei Abrufaufträgen maßgebend. Die Preise für Erzeugnisse unseres Fertigungsprogrammes, die in dieser Preisliste nicht enthalten sind, teilen wir auf Anfrage gern mit.

### Materialteuerungszuschlag

Die gegenwärtigen Entwicklungen der Rohstoffe beeinflusst die Preisentwicklung der verwendeten Materialien. Insbesondere bei Stahl und Elektroblechen sind die Anstiege erheblich. Deshalb behalten wir uns die zwischenzeitliche Erhebung eines Materialteuerungszuschlages (MTZ) vor. Für die Verrechnung des Materialteuerungszuschlages ist das Datum des Bestelleingangs bzw. des Abrufs bei Abrufaufträgen maßgebend.

### Ausfuhrbestimmungen

- Die Produkte von VEM motors GmbH können deutschen, europäischen bzw. US-Ausfuhrbestimmungen unterliegen.
- Soweit eine Ausfuhrgenehmigung erforderlich ist, bedarf der Export daher der Zustimmung der jeweils zuständigen Behörden.
- Die Vertragserfüllung steht daher unter dem Vorbehalt, dass der Ausfuhr keine Hindernisse aufgrund nationaler und internationaler Rechtsvorschriften, insbesondere Exportkontrollbestimmungen, entgegenstehen. Weiterhin steht die Erfüllung des Vertrages durch VEM motors GmbH bezüglich derjenigen Lieferteile, die von staatlichen Exportvorschriften erfasst werden, unter dem Vorbehalt, dass VEM motors die erforderlichen Ausfuhrgenehmigungen erteilt werden.

## General

### Terms of delivery

The general delivery terms for products and services of VEM motors GmbH are valid.

### Prices

The prices are exclusively a calculation base for our delivery prices. The quotations are neither trade nor consumer recommendations. Prices are valid in EUR ex stock and ex works, respectively, package not included. Also not included within the price is the turnover tax (surplus tax). It is charged by the percentage being in force at the delivery day. We reserve to ourselves changes of prices and technical data within this price list.

### Inspection charges

are passed on.

### Extra charges for cancellation

At cancellation our charge and expenses are charged separately.

### Freight + Packing (valid only inside of Germany)

For that we calculate the following extra charge:

Order value up to	500,- EUR	7.5 % of order price
Order value up to	2,500,- EUR	5.0 % of order price
above	2,500,- EUR	3.0 % of order price

### Additional copper charges

The prices remain unchanged up to a level of EUR 225,-/100 kg Cu-DEL-Quotation. For Cu-DEL-Quotation above EUR 225,-/100 kg, we take the following additional charges in percent of net prices:

DEL-Quotation EUR per kg	Copper charges in %	Copper charges compact drives in %
225,- up to below 275,-	1.2	1.0
275,- up to below 325,-	2.5	1.5
325,- up to below 375,-	3.5	2.0
375,- up to below 425,-	4.5	3.0
425,- up to below 475,-	5.5	4.0
475,- up to below 525,-	6.5	5.0
525,- up to below 575,-	7.5	6.0
575,- up to below 625,-	8.5	7.0
625,- up to below 675,-	9.5	8.0
675,- up to below 725,-	10.5	9.0
725,- up to below 775,-	11.5	10.0
775,- up to below 825,-	12.5	11.0

For copper charges calculation, the day is valid, when the order is received and the recall is made, respectively, for recall orders. On request we can give you also prices for other products of our product range not comprised in this price list.

### Surplus for raw materials

The temporary price increase for raw materials has a great influence on our used materials. Especially in case for magnetic sheet steel is the increase drastically. Therefore it can be, that we enter with reservations a surplus for raw materials (MTZ). For surplus for raw materials calculation, the day is valid, when the order is received and the recall is made, respectively, for recall orders.

### Export Regulations

- The products of VEM motors GmbH can be subject to export regulations of Germany, the EU and the USA.
- As far as an export licence is required, the delivery has to be approved by the competent authority.
- The fulfillment of an order is therefore to see under the reservation that there are no restrictions for the export cause of national and/or international legal rules, in particular by export control regulations. Furthermore is to consider: the fulfillment of a contract by VEM motors GmbH provide that the export licence has been given by the competent authority for those parts which are registered by national export regulations.

## Erläuterungen zur Ausführung von Käfigläufermotoren

VEM-Drehstrommotoren mit Käfigläufer stehen in zwei Ausführungen zur Verfügung, die beide in Bezug auf Abmessungen und Baugrößen auf der IEC 72 basieren. (Typenzuordnung siehe Tabellen Motorauswahldaten)

Die Reihen K11R/K21R/K22R sind als klassische IEC/DIN-Baureihen konzipiert, d. h. Anbauabmessungen und Zuordnung der Leistungen nach DIN 42673/DIN 42677. Die Reihen K10R/K20R/K25R gehen von einer gegenüber diesen DIN-Normen progressiven Leistungszuordnung aus. Sie bieten bei gleicher Baugröße bis zu zwei Stufen höhere Leistung. Die Baureihe K25R bietet bei gegenüber K21R erhöhter Typenleistung IEC/DIN-Anbaumaße. Die Baureihe ist im Achshöhenbereich 63...280 lieferbar. Die aus diesen Reihen abgeleiteten Varianten anderer Leistungszuordnungen sind auch als Sonderausführungen lieferbar.

### $P_B$ ... Bemessungsleistung

#### Standardspannung und Frequenz bei nicht IE klassifizierten Produkten

Spannungs- und Frequenzbereich A	Spannungs- und Frequenzbereich B (Explosiongeschützte Motoren eingeschränkt möglich)
230 V $\Delta$ /400 V Y, 50 Hz 400 V $\Delta$ /690 V Y, 50 Hz 500 V, 50 Hz 690 V, 50 Hz	220...240 V $\Delta$ /380...420 V Y, 50 Hz 380...420 V $\Delta$ /660...725 V Y, 50 Hz 475...525 V, 50 Hz 660...725 V, 50 Hz
275 V $\Delta$ /480 V Y, 60 Hz 480 V, 60 Hz 600 V, 60 Hz	265...290 V $\Delta$ /460...500 V Y, 60 Hz 460...500 V, 60 Hz 570...630 V, 60 Hz

nur für Schiffsmotoren:  
440 V  $\Delta$ , 60 Hz

Bei Spannungs- und Frequenzbereich B ist das Leistungsschild zusätzlich mit 60-Hz-Daten beschriftet.

#### Standardspannung und Frequenz bei IE klassifizierten Produkten

Spannungs- u. Frequenzbereich A
230 V $\Delta$ / 400 V Y, 50 Hz 400 V $\Delta$ / 690 V Y, 50 Hz 500 V , 50 Hz 690 V , 50 Hz

## Explanations for modifications of squirrel-cage motors

VEM three phase motors with squirrel-cage rotors are available in two type series that are both based on IEC 72 with regard to their designs and frame sizes. (See table of motor selection data for type coordination)

The K11R/K21R/K22R series is conceived as a classic IEC/DIN series, i.e. the fixing dimensions and correspondence of output as specified in DIN 42673/DIN 42677. The K10R/K20R/K25R series have arisen from a progressive coordination of output in comparison with these DIN standards. They offer output up to two stages higher with the same frame size. The type series K25R offers, compared with series K21R, increased output correlated to IEC/DIN mounting dimensions. The type series is available in shaft heights 63...280. The variations derived from series with different output coordination can also be supplied as special versions.

### $P_B$ ... Nominal output

#### Standard voltage and frequency for not IE classified products

voltage and frequency range A	voltage and frequency range B (explosion-protected motors restricted possible)
230 V $\Delta$ /400 V Y, 50 Hz 400 V $\Delta$ /690 V Y, 50 Hz 500 V, 50 Hz 690 V, 50 Hz	220...240 V $\Delta$ /380...420 V Y, 50 Hz 380...420 V $\Delta$ /660...725 V Y, 50 Hz 475...525 V, 50 Hz 660...725 V, 50 Hz
275 V $\Delta$ /480 V Y, 60 Hz 480 V, 60 Hz 600 V, 60 Hz	265...290 V $\Delta$ /460...500 V Y, 60 Hz 460...500 V, 60 Hz 570...630 V, 60 Hz

only for marine motors:  
440 V  $\Delta$ , 60 Hz

For motors with voltage range B, the name plate shows also the 60 Hz data.

#### Standard voltage and frequency for IE classified products

voltage and frequency range A
230 V $\Delta$ / 400 V Y, 50 Hz 400 V $\Delta$ / 690 V Y, 50 Hz 500 V , 50 Hz 690 V , 50 Hz

## Kundeninformation

### Gewährleistung für Produkte und Dienstleistungen der VEM motors GmbH und VEM motors Thurm GmbH

Grundsätzlich gelten beim Abschluss von Lieferverträgen zwischen Bestellern und der VEM motors GmbH die Verkaufs- und Lieferbedingungen der VEM motors GMBH und VEM motors Thurm GmbH. Diese werden den Kunden auf Wunsch zur Kenntnisnahme übersandt.

Niederspannungs-Drehstrommotoren gelten als Investitionsgüter. In Bezug auf Gewährleistung werden sie nicht von der Richtlinie 1999/44/EG des Europäischen Parlaments und des Rates vom 25. Mai 1999 erfasst. Diese regelt Fragen zur Garantie bei Verbrauchsgütern.

Grundsätzlich liefert VEM das Produkt entsprechend der mit dem Kunden vereinbarten technischen Spezifikation und der von VEM übergebenen Auftragsbestätigung. Der Kunde ist verpflichtet, die in der Montage-, Bedienungs- und Wartungsanleitung gegebenen Hinweise zu berücksichtigen und bei der Installation und Inbetriebnahme umzusetzen. Erst dann sind die Voraussetzungen erfüllt, wenn ein Gewährleistungsfall eintritt. Bei Nichtbeachtung übernimmt VEM keine Gewährleistung.

Für seine Produkte gibt VEM grundsätzlich eine Gewährleistung von 12 Monaten nach Inbetriebnahme, maximal 18 Monate nach Auslieferung ab Werk. Voraussetzung dafür ist die bestimmungsgemäße Inbetriebnahme und Verwendung.

Auf Kundenwunsch besteht die Möglichkeit, die Gewährleistung bis zu 24 Monaten nach Inbetriebnahme, maximal bis zu 36 Monaten nach Auslieferung ab Werk (nachfolgend als 24/36 bezeichnet) gegen einen Zuschlag von 0,5 % des Warenwertes pro Monat zu verlängern. Dabei sind bei der erweiterten Gewährleistung 24/36 Verschleißteile wie zum Beispiel Radialwellendichtringe, Lager und Lagerfett aber auch Anbauteile bzw. -baugruppen wie Bremsen, Fremdlüfter, Geber, Nachschmiereinrichtungen, Getriebe oder Rücklaufsperrn von der Gewährleistung ausgenommen. Wird von den Kunden die Einbeziehung der Anbauteile in die erweiterte Gewährleistung gefordert, wird VEM die Bedingungen dazu mit den Zulieferern verhandeln. Entsprechende Mehrkosten der Zulieferer werden von VEM an den Kunden weitergegeben.

Die maximale Gewährleistung, die VEM anbietet, beträgt 36 Monate nach Inbetriebnahme, maximal 60 Monate nach Auslieferung ab Werk mit einem Zuschlag von 0,5 % des Warenwertes pro Monat. Dabei ist, neben den Verschleiß- und Anbauteilen, zusätzlich der Klima- und Korrosionsschutz gemäß der Montage-, Bedienungs- und Wartungsanleitung von der Gewährleistung ausgenommen.

Basis für die Berechnung des Zuschlags für die erweiterte Gewährleistung sind die Angaben zur Auslieferung ab Werk.

Neben diesen grundsätzlichen Gewährleistungsbedingungen kann die Dauer der Gewährleistung innerhalb der vorstehend genannten Fristen projektbezogen in Abhängigkeit von den Kundenforderungen vereinbart werden.

## Customer information

### Warranty for products and services of VEM motors GmbH und VEM motors Thurm GmbH

When signing supply agreements between purchaser and VEM motors GmbH, the terms of purchase and delivery of VEM motors GmbH and VEM motors Thurm GmbH are valid. For Information they will be sent to the customer on request.

Low-voltage three-phase motors are classified as capital goods. Questions of warranty are not specified in the regulation 1999/44/EC of the European Parliament and of the Council of 25th May 1999. This regulation defines details about guarantee of consumer goods.

Generally VEM supplies the product according to the technical specifications that were agreed by the customer and described in the order confirmation that was sent by VEM to the customer. The customer is obliged to consider the hints in the installation, operation and maintenance manual and to include them when setting the product up for operation and starting it. Only if the customer complies with these requirements VEM accepts a case of warranty. If the content of the manual is not observed, VEM will not accept warranty.

In principle VEM offers a warranty of 12 month after start of operation for ist products, at most 18 months after delivery ex works. Basic requirement is the intended use and start of operation.

On customer request it is possible to extend the warranty period to 24 months after start of operation, at most 36 months after delivery ex works. On customer request it is also possible to extend the warranty period to 24 months after start of operation; at most 36 months after delivery ex works (named 24/36 in the following text). This will mean an additional charge of 0.5 % of the merchandise value for each month. The extended warranty 24/36 is not valid for wear parts like radial shaft seals, bearings, grease for bearings and also mounted parts and components like brakes, separately driven fans, encoders, relubrication devices, gears or return stops. If the customer requests to include the mounted parts in the warranty, VEM will negotiate the conditions with the suppliers. Additional costs from the suppliers will be passed on to the customer.

Maximum warranty by VEM is 36 months after start of operation, max. 60 months after delivery ex works with a corresponding additional charge of 0.5 % of the merchandise value for each month will be added. However no warranty will be accepted for wear parts or mounted parts and climate and corrosion protection according to the installation, operation and maintenance manual.

The calculation of the additional charge for extended warranty is based on the specification for delivery ex works.

Besides these basic warranty conditions it is possible to agree the warranty period within the above mentioned time limits for an individual project depending on the customer requirements.

## Wirkungsgradklassifizierung und Wirkungsgradermittlung

Die weltweite Entwicklung bei Energiesparmotoren hat in den vergangenen Jahren zu einer Vielzahl von länderspezifischen Vorschriften, Gesetzen und Normen geführt, die es schwer machen, eine vergleichbare Bewertung der einzelnen Produkte durchzuführen. Um hier wieder eine global einheitliche Basis zu erreichen, wurde die neue IEC-Norm 60034-30 geschaffen. Diese Norm löst in Europa das bisherige Voluntary Agreement of CEMEP ab. Gleichzeitig werden mit ihr der Leistungsbereich für 2- und 4-polige Motoren auf 0,75 kW bis 375 kW ausgeweitet und 6-polige Motoren im gleichen Leistungsbereich in die Wirkungsgradnormung mit aufgenommen. Die Kennzeichnung erfolgt in Anlehnung an die Schutzartkennzeichnung IP (International Protection) mit IE International Efficiency:

**IE1 Standard efficiency (alte EFF2-Klasse)**  
**IE2 High efficiency (alte EFF1-Klasse)**  
**IE3 Premium efficiency**

Mit der Einführung der neuen Wirkungsgradklassen ändert sich gleichzeitig die Normung für die Bestimmung der Wirkungsgrade. Nach der Norm IEC/EN 60034-2-1 werden die Zusatzverluste nicht mehr pauschal mit 0,5 % der aufgenommenen Leistung angesetzt, sondern analog IEEE 112 ermittelt. So sinken die nominellen Wirkungsgrade, obwohl real keine Änderung an den Motoren erfolgte. Die neuen Grenzwerte wurden an dieses Verfahren angepasst. Die IEC 60034-2-1 ersetzt ab November 2010 generell die gewohnte IEC/EN 60034-2.

### Anwendung der Klassifizierung

Die Wirkungsgradklassifizierung nach IEC 60034-30 muss angewendet werden auf Drehstrom-Niederspannungsmotoren mit Käfigläufer nach folgender Spezifikation:

- Bemessungsspannungen bis 1000 V
- geeignet für Betrieb am festen Drehstromnetz
- Bemessungsleistungen zwischen 0,75 kW und 375 kW
- Polzahlen 2, 4 oder 6
- Bemessen für Dauerbetrieb (S1) oder nahezu Dauerbetrieb (S3 mit Einschalt Dauern von 80 % oder mehr)
- geeignet für die in IEC 60034-1 definierten Umgebungsbedingungen (Temperatur, Aufstellhöhe).

### Ausgeschlossen sind:

- Motoren, die in Übereinstimmung mit IEC 60034-25 speziell für Umrichterbetrieb bemessen wurden
- Motoren, die vollständig in eine Maschine integriert sind (zum Beispiel Pumpen, Lüfter und Kompressoren) und nicht eigenständig geprüft werden können.

## Efficiency classification and efficiency determination

In the last few years the world-wide development for energy saving motors has led to a multitude of country-related regulations, laws and standards. This has made it difficult to compare and evaluate the individual products.

To create a uniform world-wide base, the new IEC standard 60034-30 has been issued. This standard replaces the former Voluntary Agreement of CEMEP and at the same time extends the former scope to 2-, 4- and 6-poles and to 0,75 to 375 kW. The marking is done corresponding with the code for type of protection IP (International Protection). It is now named IE International Efficiency:

**IE1 Standard efficiency (former class EFF2)**  
**IE2 High efficiency (former class EFF1)**  
**IE3 Premium efficiency**

With the introduction of the new efficiency classes the standard for the determination of efficiencies is changed as well. According to the standard IEC/EN 60034-2-1 the additional losses are not generally taken as 0.5% of the input power, but they are determined in accordance with IEEE 112. Thus the nominal efficiencies decrease, even if no change has been done in motor design. The new limit values were adapted to this new method. From November 2010 the standard IEC 60034-2-1 replaces the former IEC/EN 60034-2.

### Application of classification

The classification of efficiencies according to IEC 60034-30 must be applied to three-phase low voltage motors with squirrel-cage rotors with the following specification:

- Rated voltages up to 1000 V
- Suitable for operation with three-phase power supply
- Rated output between 0,75 kW and 375 kW
- Pole numbers 2, 4 or 6
- Rated for continuous duty (S1) or nearly continuous duty (S3 with operating cycles of 80% and more)
- Suitable for the ambient conditions defined in IEC 60034-1 (temperature, installation height).

### Not included are:

- Motors for inverter operation complying with IEC 60034-25
- Motors that are completely integrated into another machine (for example pumps, ventilators and compressors) and can therefore not be tested separately.

## Verordnung (EG) Nr. 640/2009 vom 22. Juli 2009

Diese Normung ist gleichzeitig Grundlage der Umsetzung der Richtlinie 2005/32/EG „Umweltgerechte Gestaltung energiebetriebener Produkte“ (EUP-Richtlinie) im Bereich der Antriebstechnik. Mit der Verordnung (EG) Nr. 640/2009 vom 22. Juli 2009 zur Durchführung der EUP-Richtlinie sind die Weichen für die Marktumstellung auf Energiesparmotoren gestellt. Die Umstellung erfolgt in drei Stufen:

Stufe 1: Mindestwirkungsgrad (MEPS) IE2 ab 16. Juni 2011

Stufe 2: Verschärfung auf IE3 (Premiummotoren) erfolgt zum 01.01.2015 für den Leistungsbereich 7,5 kW bis 375 kW. Optionale Möglichkeit: IE2 + Umrichter

Stufe 3: Zum 01.01.2017 wird der Leistungsbereich auf 0,75 kW bis 375 kW erweitert. Optionale Möglichkeit: IE2 + Umrichter

Diese Verordnung gilt nicht für

- (a) Motoren, die dafür ausgelegt sind, ganz in eine Flüssigkeit eingetaucht betrieben zu werden;
- (b) vollständig in ein Produkt (z. B. ein Getriebe, eine Pumpe, einen Ventilator oder einen Kompressor) eingebaute Motoren, deren Energiewirkungsgrad nicht unabhängig von diesem Produkt erfasst werden kann;
- (c) Motoren, die speziell für den Betrieb unter folgenden Bedingungen ausgelegt sind:
  - (i) in Höhen über 1 000 Meter über dem Meeresspiegel
  - (ii) bei Umgebungstemperaturen über 40 °C
  - (iii) bei Betriebshöchsttemperaturen über 300 °C
  - (iv) bei Umgebungstemperaturen unter -15 °C
  - (v) bei Kühlflüssigkeitstemperaturen am Einlass eines Produkts unter 5 °C oder über 25 °C
  - (vi) in explosionsgefährdeten Bereichen im Sinne der RL 94/9/EG;
- (d) Bremsmotoren.

## Regulation (EC) no. 640/2009 dated 22<sup>nd</sup> July 2009

This standard is also the base for the implementation of guideline 2005/32/EG “Environmentally sound design of energy driven products” (EUP directive) for drive technology products.

With the regulation (EC) no. 640/2009 dated 22<sup>nd</sup> July 2009 about implementation of the EUP directive the course is set for a market change to energy saving motors. The implementation is realised in three steps:

Step 1: Minimum efficiency (MEPS) IE2 from 16<sup>th</sup> June 2011

Step 2: Increase to IE3 [Premium motors] is done on 01.01.2015 for the power range 7.5 kW to 375 kW. As option: IE2 + inverter

Step 3: On 01.01.2017 the power range is enlarged to include 0.75 kW to 375 kW. As option: IE2 + inverter

This regulation is not valid for

- (a) Motors that are designed for operation immersed totally or partly in liquid media;
- (b) Motors that are completely integrated into another machine (for example pumps, ventilators and compressors) and therefore the energy efficiency can not be tested separately;
- (c) Motors specially designed for operation at the following ambient conditions:
  - (i) installation heights more than 1 000 meter above sea level
  - (ii) ambient temperatures above 40 °C
  - (iii) operating limit temperatures more than 300 °C
  - (iv) ambient temperatures below -15 °C
  - (v) coolant temperatures at the inlet opening below 5 °C or above 25 °C
  - (vi) areas with risks of explosions complying with guideline 94/9/EC;
- (d) Brake motors.

## Energiesparmotoren Standard Efficiency IE1, nach IEC 60034-30 ab Lager lieferbar Energy saving motors, Standard Efficiency IE1, acc. to IEC 60034-30 available ex stock

Wirkungsgradbestimmung nach IEC 60034-2-1, Einzelverlustverfahren, Zusatzverluste aus Restverlusten

Mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb, Thermische Klasse 155,

Schutzart IP 55, Bemessungspunkt 400V 50 Hz

Efficiency testing acc. to DIN EN 60034-2-1, individual losses method, additional losses from residual losses

With surface ventilation, mode of operation S1, continuous duty, thermal class 155,

degree of protection IP 55, Design point 400V 50 Hz

	P <sub>B</sub>	Typ	IM B3	IM B5, V1, V3	IM B14G+K	IM B35	
	P <sub>B</sub>	Type	Preis	Preis	Preis	Preis	
	kW		Price	Price	Price	Price	
			€	€	€	€	
<b>3000 min<sup>-1</sup></b> <b>2p = 2</b>	0,18	K21R 63 K2	224,10	264,20	264,20	280,80	
	0,25	K21R 63 G2	233,30	273,40	273,40	290,00	
	0,37	K21R 71 K2	242,60	286,00	286,00	301,60	
	0,55	K21R 71 G2	270,30	313,70	313,70	329,30	
	<b>IE1</b>	0,75	IE1-K21R 80 K2	314,20	364,70	364,70	381,80
		1,1	IE1-K21R 80 G2	355,70	406,20	406,20	423,40
		1,5	IE1-K21R 90 S2	437,70	497,60	497,60	514,10
		2,2	IE1-K21R 90 L2	552,10	611,90	611,90	628,40
		3,0	IE1-K21R 100 L2	669,90	744,70	744,70	762,70
		4,0	IE1-K21R 112 M2	828,10	921,00	921,00	950,60
		5,5	IE1-K21R 132 S2T	1.094,90	1.217,40	-	1.248,60
		7,5	IE1-K21R 132 SX2T	1.397,60	1.520,00	-	1.551,20
		11,0	IE1-K21R 160 M2 TWS	2.005,00	2.163,20	-	2.223,30
		15,0	IE1-K21R 160 MX2 TWS	2.560,00	2.717,60	-	2.777,70
		18,5	IE1-K21R 160 L2 TWS	2.998,30	3.156,50	-	3.216,60
		22,0	IE1-K21R 180 M2 TWS	3.766,50	4.015,90	-	4.102,60
		30,0	IE1-K21R 200 L2 TWS	4.829,10	5.132,90	-	5.272,60
		37,0	IE1-K21R 200 LX2 TWS	6.203,50	6.507,30	-	6.647,00
		45,0	IE1-K21R 225 M2 TWS	7.474,00	7.867,90	-	8.125,40
55,0	IE1-K21R 250 M2 TWS	9.033,30	9.504,50	-	9.915,70		
<b>1500 min<sup>-1</sup></b> <b>2p = 4</b>	0,12	K21R 63 K4	224,10	264,20	264,20	280,80	
	0,18	K21R 63 G4	233,30	273,40	273,40	290,00	
	0,25	K21R 71 K4	239,10	282,60	282,60	298,10	
	0,37	K21R 71 G4	264,50	308,00	308,00	323,50	
	<b>IE1</b>	0,55	K21R 80 K4	301,50	352,00	352,00	369,10
		0,75	IE1-K21R 80 G4	331,50	382,00	382,00	399,10
		1,1	IE1-K21R 90 S4	395,00	454,90	454,90	471,30
		1,5	IE1-K21R 90 L4	465,50	525,30	525,30	541,80
		2,2	IE1-K21R 100 L4	592,50	667,30	667,30	685,30
		3,0	IE1-K21R 100 LX4	702,20	795,10	795,10	824,70
		4,0	IE1-K21R 112 M4	865,10	957,90	957,90	987,50
		5,5	IE1-K21R 132 S4T	1.149,20	1.271,70	-	1.302,80
		7,5	IE1-K21R 132 M4 TWS	1.554,50	1.677,00	-	1.708,10
		11,0	IE1-K21R 160 M4 TWS	2.039,60	2.197,90	-	2.257,90
		15,0	IE1-K21R 160 L4 TWS	2.663,30	2.821,60	-	2.881,60
		18,5	IE1-K21R 180 M4 TWS	3.339,10	3.588,60	-	3.675,20
		22,0	IE1-K21R 180 L4 TWS	3.870,40	4.119,90	-	4.206,50
		30,0	IE1-K21R 200 L4 TWS	5.013,90	5.317,60	-	5.457,40
		37,0	IE1-K21R 225 S4 TWS	6.041,80	6.435,70	-	6.693,20
45,0	IE1-K21R 225 M4 TWS	7.300,80	7.694,60	-	7.952,20		
55,0	IE1-K21R 250 M4 TWS	8.779,20	9.250,40	-	9.661,60		
<b>1000 min<sup>-1</sup></b> <b>2p = 6</b>	0,09	K21R 63 K6	232,20	272,20	272,20	288,90	
	0,12	K21R 63 G6	239,10	279,20	279,20	295,80	
	0,18	K21R 71 K6	251,80	295,30	295,30	310,80	
	0,25	K21R 71 G6	278,40	321,80	321,80	337,40	
	<b>IE1</b>	0,37	K21R 80 K6	314,20	364,70	364,70	381,80
		0,55	K21R 80 G6	363,80	414,30	414,30	431,40
		0,75	IE1-K21R 90 S6	433,10	493,00	493,00	509,50
		1,1	IE1-K21R 90 L6	526,70	586,50	586,50	603,00
		1,5	IE1-K21R 100 L6	630,60	705,40	705,40	723,50
		2,2	IE1-K21R 112 M6	778,50	871,30	871,30	900,90
		3,0	IE1-K21R 132 S6T	1.030,40	1.153,80	-	1.185,00
		4,0	IE1-K21R 132 M6 TWS	1.392,80	1.515,30	-	1.546,40
		5,5	IE1-K21R 132 MX6 TWS	1.739,30	1.861,80	-	1.892,90
		7,5	IE1-K21R 160 M6 TWS	2.178,20	2.336,50	-	2.396,50
		11,0	IE1-K21R 160 L6 TWS	2.871,20	3.029,50	-	3.089,50
15,0	IE1-K21R 180 L6 TWS	3.985,90	4.235,40	-	4.322,00		
18,5	IE1-K21R 200 L6 TWS	4.748,20	5.052,00	-	5.191,70		
22,0	IE1-K21R 200 LX6 TWS	5.545,20	5.848,90	-	5.988,70		
30,0	IE1-K21R 225 M6 TWS	7.497,10	7.891,00	-	8.148,50		
37,0	IE1-K21R 250 M6 TWS	9.102,60	9.573,80	-	9.985,00		

## Energiesparmotoren, High Efficiency IE2 nach IEC 60034-30, ab Lager lieferbar

### Energy saving motors, High Efficiency IE2 acc. to IEC 60034-30, available ex stock

Wirkungsgradbestimmung nach IEC 60034-2-1, Einzelverlustverfahren; Zusatzverluste aus Restverlusten mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb, Thermische Klasse 155, Schutzart IP 55, Bemessungspunkt 400 V, 50 Hz

Efficiency testing acc. to IEC 60034-2-1, individual losses method, additional losses from residual losses with surface ventilation, mode of operation S1, continuous duty, thermal class 155, degree of protection IP 55, Design point 400 V, 50 Hz

	P <sub>B</sub>	Typ	IM B3	IM B5, V1, V3	IM B14G+K	IM B35
	P <sub>B</sub>	Type	Preis	Preis	Preis	Preis
	kW		€	€	€	€
<b>3000 min<sup>-1</sup> 2p = 2</b>	0,75	IE2-W21R 80 K2	444,70	504,50	505,00	521,00
	1,1	IE2-WE1R 80 G2	509,40	569,20	569,00	585,70
	1,5	IE2-WE1R 90 S2	606,40	681,10	681,00	699,20
	2,2	IE2-WE1R 90 L2	780,80	855,50	856,00	873,60
	3,0	IE2-WE1R 100 L2	937,90	1.030,70	1.030,00	1.060,30
	4,0	IE2-WE1R 112 MX2	112,30	1.234,70	1.230,00	1.265,90
	5,5	IE2-WE1R 132 S2T	1.397,60	1.520,00	-	1.551,20
	7,5	IE2-WE1R 132 SX2 TWS	1.785,50	1.907,90	-	1.939,10
	11,0	IE2-WE1R 160 M2 TWS	2.386,10	2.544,30	-	2.604,40
	15,0	IE2-WE1R 160 MX2 TWS	3.044,50	3.202,70	-	3.262,80
	18,5	IE2-WE1R 160 L2 TWS	3.575,80	3.734,00	-	3.794,10
	22,0	IE2-WE1R 180 M2 TWS	4.459,50	4.708,90	-	4.795,60
	30,0	IE2-WE1R 200 L2 TWS	5.741,50	6.045,30	-	6.185,00
	37,0	IE2-WE1R 200 LX2 TWS	7.393,20	7.696,90	-	7.836,70
	45,0	IE2-WE1R 225 M2 TWS	8.917,80	9.311,60	-	9.569,60
	55,0	IE2-WE1R 250 M2 TWS	10.788,90	11.260,10	-	11.671,30
	<b>1500 min<sup>-1</sup> 2p = 4</b>	0,75	IE2-W21R 80 G4	481,60	541,50	541,50
1,1		IE2-WE1R 90 S4	587,90	662,60	662,60	680,80
1,5		IE2-WE1R 90 LV4	697,60	772,30	772,30	790,50
2,2		IE2-WE1R 100 L4	854,70	947,60	947,60	977,10
3,0		IE2-WE1R 100 LX4	984,10	1.076,90	1.076,90	1.106,50
4,0		IE2-WE1R 112 MZ4	1.212,80	1.335,20	1.335,20	1.366,40
5,5		IE2-WE1R 132 S4 TWS	1.485,20	1.607,60	-	1.638,80
7,5		IE2-WE1R 132 M4 TWS	1.843,90	1.965,70	-	1.996,90
11,0		IE2-WE1R 160 M4 TWS	2.420,80	2.579,00	-	2.639,10
15,0		IE2-WE1R 160 L4 TWS	3.171,50	3.329,70	-	3.389,80
18,5		IE2-WE1R 180 M4 TWS	3.951,30	4.200,70	-	4.287,40
22,0		IE2-WE1R 180 L4 TWS	4.586,50	4.836,00	-	4.922,60
30,0		IE2-WE1R 200 L4 TWS	5.961,00	6.264,70	-	6.404,80
37,0		IE2-WE1R 225 S4 TWS	7.196,80	7.500,60	-	7.848,20
45,0		IE2-WE1R 225 M4 TWS	8.709,90	9.100,70	-	9.361,30
55,0		IE2-WE1R 250 M4 TWS	10.477,00	10.948,20	-	11.359,40
<b>1000 min<sup>-1</sup> 2p = 6</b>		0,75	IE2-W21R 90 S6	643,00	718,00	718,10
	1,1	IE2-W21R 90 LV6	681,10	892,00	892,50	910,60
	1,5	IE2-W21R 100 LX6	960,00	1.050,00	1.052,70	1.082,20
	2,2	IE2-W21R 112 MV6	1.030,70	1.230,00	1.226,60	1.257,80
	3,0	IE2-W21R 132 S6 TWS	1.346,60	1.469,00	-	1.500,23
	4,0	IE2-W21R 132 M6 TWS	1.646,90	1.769,30	-	1.800,50
	5,5	IE2-W21R 132 MX6 TWS	2.062,70	2.185,10	-	2.216,30
	7,5	IE2-W21R 160 M6 TWS	2.594,40	2.752,20	-	2.812,30
	11,0	IE2-W21R 160 L6 TWS	3.425,60	3.583,80	-	3.643,90
	15,0	IE2-W21R 180 L6 TWS	4.725,10	4.974,60	-	5.061,20
	18,5	IE2-W21R 200 L6 TWS	5.637,60	5.941,30	-	6.081,10
	22,0	IE2-W21R 200 LX6 TWS	6.596,20	6.900,00	-	7.039,70
	30,0	IE2-W21R 225 M6 TWS	8.940,90	9.334,70	-	9.592,30
	37,0	IE2-W21R 250 M6 TWS	10.869,70	11.340,90	-	11.752,10

## Energiesparmotoren, Standard Efficiency IE1, nach IEC 60034-30 Energy saving motors, Standard Efficiency IE1, acc. to IEC 60034-30

Wirkungsgradbestimmung nach IEC 60034-2-1, Einzelverlustverfahren, Zusatzverluste aus Restverlusten  
Mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb, Thermische Klasse 155,  
Schutzart IP 55, Bemessungspunkt 400V 50 Hz  
Efficiency testing acc. to DIN EN 60034-2-1, individual losses method, additional losses from residual losses  
With surface ventilation, mode of operation S1, continuous duty, thermal class 155,  
degree of protection IP 55, Design point 400V 50 Hz

	$P_b$ $P_b$ kW	Typ Type	Preis Price €	
<b>3000 min<sup>-1</sup> 2p = 2</b>	0,09	K210 56 K2 U	204,00	
	0,12	K21R 56 G2	204,00	
	0,18	K21R 63 K2	204,00	
	0,25	K21R 63 G2	212,00	
	<b>IE1</b>	0,37	K21R 71 K2	221,00
		0,55	K21R 71 G2	246,00
		0,75	IE1-K21R 80 K2	286,00
		1,1	IE1-K21R 80 G2	323,00
		1,5	IE1-K21R 90 S2	398,00
		2,2	IE1-K21R 90 L2	502,00
		3,0	IE1-K21R 100 L2	609,00
		4,0	IE1-K21R 112 M2	753,00
		5,5	IE1-K21R 132 S2T	995,00
		7,5	IE1-K21R 132 SX2T	1.270,00
		7,5	IE1-K21R 132 SX2	1.270,00
		11,0	IE1-K21R 160 M2	1.720,00
		15,0	IE1-K21R 160 MX2	2.230,00
		18,5	IE1-K21R 160 L2	2.630,00
		22,0	IE1-K21R 180 M2	3.170,00
		30,0	IE1-K21R 200 L2	4.140,00
		37,0	IE1-K21R 200 LX2	5.390,00
		45,0	IE1-K21R 225 M2	6.540,00
		55,0	IE1-K21R 250 M2	7.960,00
		75,0	IE1-K21R 280 S2	10.900,00
		90,0	IE1-K21R 280 M2	13.000,00
		110,0	IE1-K21R 315 S2	16.200,00
		132,0	IE1-K21R 315 M2	19.300,00
		160,0	IE1-K21R 315 MX2	23.700,00
		200,0	IE1-K21R 315 MY2	29.800,00
		250,0	IE1-K21R 315 L2	38.300,00
		315,0	IE1-K21R 315 LX2	48.600,00
		355,0	IE1-K22R 355 M2	A
		400,0	K22R 355 MX2	A
		450,0	K22R 355 LY2	A
		500,0	K22R 355 L2	A

	$P_b$ $P_b$ kW	Typ Type	Preis Price €	
<b>1500 min<sup>-1</sup> 2p = 4</b>	0,06	K210 56 K4 U	204,00	
	0,09	K21R 56 G4	204,00	
	0,12	K21R 63 K4	204,00	
	0,18	K21R 63 G4	212,00	
	<b>IE1</b>	0,25	K21R 71 K4	217,00
		0,37	K21R 71 G4	240,00
		0,55	K21R 80 K4	274,00
		0,75	IE1-K21R 80 G4	301,00
		1,1	IE1-K21R 90 S4	359,00
		1,5	IE1-K21R 90 L4	423,00
		2,2	IE1-K21R 100 L4	539,00
		3,0	IE1-K21R 100 LX4	638,00
		4,0	IE1-K21R 112 M4	786,00
		5,5	IE1-K21R 132 S4T	1.040,00
		7,5	IE1-K21R 132 M4	1.310,00
		11,0	IE1-K21R 160 M4	1.750,00
		15,0	IE1-K21R 160 L4	2.320,00
		18,5	IE1-K21R 180 M4	2.780,00
		22,0	IE1-K21R 180 L4	3.270,00
		30,0	IE1-K21R 200 L4	4.310,00
		37,0	IE1-K21R 225 S4	5.240,00
		45,0	IE1-K21R 225 M4	6.380,00
		55,0	IE1-K21R 250 M4	7.730,00
		75,0	IE1-K21R 280 S4	10.300,00
		90,0	IE1-K21R 280 M4	12.200,00
		110,0	IE1-K21R 315 S4	14.900,00
		132,0	IE1-K21R 315 M4	18.200,00
		160,0	IE1-K21R 315 MX4	22.600,00
		200,0	IE1-K21R 315 MY4	27.800,00
		250,0	IE1-K21R 315 L4	35.600,00
		315,0	IE1-K21R 315 LX4	45.300,00
		355,0	IE1-K22R 355 M4	A
		400,0	K22R 355 MX4	A
		450,0	K22R 355 LY4	A
		500,0	K22R 355 L4	A

	$P_b$ $P_b$ kW	Typ Type	Preis Price €	
<b>1000 min<sup>-1</sup> 2p = 6</b>	0,09	K21R 63 K6	211,00	
	0,12	K21R 63 G6	217,00	
	0,18	K21R 71 K6	229,00	
	0,25	K21R 71 G6	253,00	
	<b>IE1</b>	0,37	K21R 80 K6	286,00
		0,55	K21R 80 G6	331,00
		0,75	IE1-K21R 90 S6	394,00
		1,1	IE1-K21R 90 L6	479,00
		1,5	IE1-K21R 100 L6	573,00
		2,2	IE1-K21R 112 M6	708,00
		3,0	IE1-K21R 132 S6T	938,00
		4,0	IE1-K21R 132 M6	1.170,00
		5,5	IE1-K21R 132 MX6	1.480,00
		7,5	IE1-K21R 160 M6	1.880,00
		11,0	IE1-K21R 160 L6	2.510,00
		15,0	IE1-K21R 180 L6	3.370,00
		18,5	IE1-K21R 200 L6	4.060,00
		22,0	IE1-K21R 200 LX6	4.790,00
		30,0	IE1-K21R 225 M6	6.560,00
		37,0	IE1-K21R 250 M6	8.020,00
		45,0	IE1-K21R 280 S6	9.600,00
		55,0	IE1-K21R 280 M6	11.700,00
		75,0	IE1-K21R 315 S6	16.000,00
		90,0	IE1-K21R 315 M6	19.100,00
		110,0	IE1-K21R 315 MX6	23.400,00
		132,0	IE1-K21R 315 MY6	27.500,00
		160,0	IE1-K21R 315 L6	34.200,00
		200,0	IE1-K21R 315 LX6	42.300,00
		250,0	IE1-K22R 355 M6	55.200,00
		315,0	IE1-K22R 355 MX6	69.400,00
		355,0	IE1-K22R 355 LY6	80.100,00

	$P_b$ $P_b$ kW	Typ Type	Preis Price €	
<b>750 min<sup>-1</sup> 2p = 8</b>	0,09	K21R 71 K8	252,00	
	0,12	K21R 71 G8	274,00	
	0,18	K21R 80 K8	303,00	
	0,25	K21R 80 G8	360,00	
	<b>IE1</b>	0,37	K21R 90 S8	443,00
		0,55	K21R 90 L8	539,00
		0,75	K21R 100 L8	612,00
		1,1	K21R 100 LX8	753,00
		1,5	K21R 112 M8	888,00
		2,2	K21R 132 S8T	1.190,00
		3,0	K21R 132 M8	1.450,00
		4,0	K21R 160 M8	1.720,00
		5,5	K21R 160 MX8	2.140,00
		7,5	K21R 160 L8	2.570,00
		11,0	K21R 180 L8	3.550,00
		15,0	K21R 200 L8	4.630,00
		18,5	K21R 225 S8	5.600,00
		22,0	K21R 225 M8	6.460,00
		30,0	K21R 250 M8	8.680,00
		37,0	K21R 280 S8	10.000,00
		45,0	K21R 280 M8	12.300,00
		55,0	K21R 315 S8	14.700,00
		75,0	K21R 315 M8	20.200,00
		90,0	K21R 315 MX8	23.800,00
		110,0	K21R 315 MY8	28.200,00
		132,0	K21R 315 L8	34.300,00
		160,0	K21R 315 LX8	41.400,00
		200,0	K22R 355 M8	54.500,00
		250,0	K22R 355 MX8	69.200,00
		280,0	K22R 355 LY8	80.200,00

\* Nur Flanschausführung A = auf Anfrage  
\*) Only flange-version

8-polige Motoren nach Werksstandard A = on request  
8-pole motors acc. to factory standard

## Energiesparmotoren, High Efficiency IE2 nach IEC 60034-30 Energy saving motors, High Efficiency IE2 acc. to IEC 60034-30

Wirkungsgradbestimmung nach IEC 60034-2-1, Einzelverlustverfahren; Zusatzverluste aus Restverlusten mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb, Thermische Klasse 155, Schutzart IP 55, Bemessungspunkt 400 V, 50 Hz

Efficiency testing acc. to IEC 60034-2-1, individual losses method, additional losses from residual losses with surface ventilation, mode of operation S1, continuous duty, thermal class 155, degree of protection IP 55, design point 400 V, 50 Hz

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
3000 min <sup>-1</sup> 2p = 2	0,09	W21R 56 K2	227,00
	0,12	W21R 56 G2	230,00
IE2	0,18	W21R 63 K2	240,00
	0,25	W21R 63 G2	246,00
	0,37	W21R 71 K2	256,00
	0,55	W21R 71 G2	290,00
	0,75	IE2-W21R 80 K2	404,00
	1,1	IE2-WE1R 80 G2	463,00
	1,5	IE2-WE1R 90 S2	551,00
	2,2	IE2-WE1R 90 L2	710,00
	3,0	IE2-WE1R 100 L2	853,00
	4,0	IE2-WE1R 112 MX2	1.010,00
	5,5	IE2-WE1R 132 S2T	1.270,00
	7,5	IE2-WE1R 132 SX2	1.520,00
	11,0	IE2-WE1R 160 M2	2.070,00
	15,0	IE2-WE1R 160 MX2	2.670,00
	18,5	IE2-WE1R 160 L2	3.150,00
	22,0	IE2-WE1R 180 M2	3.800,00
	30,0	IE2-WE1R 200 L2	4.970,00
	37,0	IE2-WE1R 200 LX2	6.470,00
	45,0	IE2-WE1R 225 M2	7.850,00
	55,0	IE2-WE1R 250 M2	9.560,00
	75,0	IE2-WE1R 280 S2	12.600,00
	90,0	IE2-WE1R 280 M2	15.000,00
	110,0	IE2-W21R 315 S2	18.600,00
	132,0	IE2-W21R 315 M2	22.300,00
160,0	IE2-W21R 315 MX2	26.100,00	
200,0	IE2-W21R 315 MY2	32.800,00	
250,0	IE2-W21R 315 L2	40.200,00	
315,0	IE2-W21R 315 LX2	50.600,00	
355,0	IE2-W22R 355 M2	A	
400,0	W22R 355 MX2	A	
450,0	W22R 355 LY2	A	
500,0	W22R 355 L2	A	

1000 min <sup>-1</sup> 2p = 6	0,18	W21R 71 K6	272,00
	0,25	W21R 71 G6	295,00
IE2	0,37	W21R 80 K6	335,00
	0,55	W21R 80 G6	390,00
	0,75	IE2-W21R 90 S6	585,00
	1,1	IE2-W21R 90 LV6	743,00
	1,5	IE2-W21R 100 LX6	873,00
	2,2	IE2-W21R 112 MV6	1.000,00
	3,0	IE2-W21R 132 S6	1.120,00
	4,0	IE2-W21R 132 M6	1.400,00
	5,5	IE2-W21R 132 MX6	1.770,00
	7,5	IE2-W21R 160 M6	2.260,00
	11,0	IE2-W21R 160 L6	3.010,00
	15,0	IE2-W21R 180 L6	4.040,00
	18,5	IE2-W21R 200 L6	4.870,00
	22,0	IE2-W21R 200 LX6	5.740,00
	30,0	IE2-W21R 225 M6	7.880,00
	37,0	IE2-W21R 250 M6	9.630,00
	45,0	IE2-W21R 280 S6	11.000,00
	55,0	IE2-W21R 280 M6	13.400,00
	75,0	IE2-W21R 315 S6	18.400,00
	90,0	IE2-W21R 315 M6	21.900,00
	110,0	IE2-W21R 315 MX6	25.700,00
	132,0	IE2-W21R 315 MY6	30.200,00
	160,0	IE2-W21R 315 L6	35.900,00
	200,0	IE2-W21R 315 LX6	44.400,00
250,0	IE2-W22R 355 M6	A	
315,0	IE2-W22R 355 MX6	A	
355,0	IE2-W22R 355 LY6	A	

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
1500 min <sup>-1</sup> 2p = 4	0,06	W21R 56 K4	227,00
	0,09	W21R 56 G4	230,00
IE2	0,12	W21R 63 K4	240,00
	0,18	W21R 63 G4	246,00
	0,25	W21R 71 K4	256,00
	0,37	W21R 71 G4	284,00
	0,55	W21R 80 K4	321,00
	0,75	IE2-W21R 80 G4	438,00
	1,1	IE2-WE1R 90 S4	534,00
	1,5	IE2-WE1R 90 LV4	634,00
	2,2	IE2-WE1R 100 L4	777,00
	3,0	IE2-WE1R 100 LX4	895,00
	4,0	IE2-WE1R 112 MZ4	1.100,00
	5,5	IE2-WE1R 132 S4	1.250,00
	7,5	IE2-WE1R 132 M4	1.580,00
	11,0	IE2-WE1R 160 M4	2.100,00
	15,0	IE2-WE1R 160 L4	2.780,00
	18,5	IE2-WE1R 180 M4	3.340,00
	22,0	IE2-WE1R 180 L4	3.920,00
	30,0	IE2-WE1R 200 L4	5.170,00
	37,0	IE2-WE1R 225 S4	6.290,00
	45,0	IE2-WE1R 225 M4	7.670,00
	55,0	IE2-WE1R 250 M4	9.270,00
	75,0	IE2-WE1R 280 S4	11.900,00
	90,0	IE2-WE1R 280 M4	14.000,00
	110,0	IE2-W21R 315 S4	17.100,00
132,0	IE2-W21R 315 M4	20.900,00	
160,0	IE2-W21R 315 MX4	24.900,00	
200,0	IE2-W21R 315 MY4	30.700,00	
250,0	IE2-W21R 315 L4	37.400,00	
315,0	IE2-W21R 315 LX4	47.600,00	
355,0	IE2-W22R 355 M4	A	
400,0	W22R 355 MX4	A	
450,0	W22R 355 LY4	A	
500,0	W22R 355 L4	A	

750 min <sup>-1</sup> 2p = 8	0,37	W21R 90 S8	529,00
	0,55	W21R 90 LV8	652,00
IE2	0,75	W21R 100 S8	786,00
	1,1	W21R 100 LX8	925,00
	1,5	W21R 112 MV8	1.140,00
	2,2	W21R 132 S8	1.430,00
	3,0	W21R 132 M8	1.740,00
	4,0	W21R 160 M8	2.070,00
	5,5	W21R 160 MX8	2.570,00
	7,5	W21R 160 L8	3.090,00
	11,0	W21R 180 L8	4.260,00
	15,0	W21R 200 L8	5.550,00
	18,5	W21R 225 S8	6.720,00
	22,0	W21R 225 M8	7.750,00
	30,0	W21R 250 M8	10.400,00
	37,0	W21R 280 S8	11.600,00
	45,0	W21R 280 M8	14.200,00
	55,0	W21R 315 S8	16.900,00
	75,0	W21R 315 M8	23.200,00
	90,0	W21R 315 MX8	26.300,00
	110,0	W21R 315 MY8	31.100,00
	132,0	W21R 315 L8	36.100,00
	160,0	W21R 315 LX8	43.500,00
	200,0	W22R 355 M8	A
	250,0	W22R 355 MX8	A
	280,0	W22R 355 LY8	A

8-polige Motoren nach Werksstandard  
8-pole motors acc. to factory standard  
A = on request

Von Baugröße W21R 56 bis 132T entsprechen die Mehrpreise der Transnormreihe  
From size W21R 56 to 132T extra charges acc. to transnorm series  
A = auf Anfrage

## Energiesparmotoren, High Efficiency nach CSA C390 und NEMA MG1, Tab. 12-10

### Energy saving motors, High Efficiency acc. to CSA C390 and NEMA MG1, Table 12-10

Wirkungsgradbestimmung nach IEEE 112-1996, Methode B, mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb

Thermische Klasse 155, Schutzart IP 55, Design A, Bemessungspunkt 480 V, 60 Hz

Efficiency determination acc. to IEEE 112-1996, method B, with surface ventilation, mode of operation S1, continuous duty

thermal class 155, degree of protection IP 55, design A, design point 480 V, 60 Hz

	P <sub>B</sub>		Typ	Wirkungsgrad	Preis
	P <sub>B</sub>	hp			
	(kW)	(kW)	Type	Efficiency	Price
				%	€
<b>3600 min<sup>-1</sup></b>	1,0	0,75	WE1R 80 K2 EP	86,0	404,00
	1,5	1,12	WE1R 80 G2 EP	87,1	463,00
	2,0	1,49	WE1R 90 S2 EP	88,4	551,00
	3,0	2,24	WE1R 90 L2 EP	88,5	710,00
	5,0	3,73	WE1R 112 MX2 EP	88,9	1.010,00
	7,5	5,59	WE1R 112 MV2 EP	90,0	1.140,00
	10,0	7,46	WE1R 132 S2 EP	89,5	1.270,00
	15,0	11,2	WE1R 160 MY2 EP	90,2	1.670,00
	20,0	14,9	WE1R 160 M2 EP	90,2	2.070,00
	25,0	18,6	WE1R 160 MX2 EP	91,0	2.670,00
	30,0	22,4	WE1R 160 L2 EP	91,0	3.150,00
	40,0	29,8	WE1R 180 M2 EP	91,7	3.800,00
	50,0	37,3	WE1R 200 L2 EP	92,4	4.970,00
	60,0	44,7	WE1R 200 LX2 EP	93,0	6.470,00
	75,0	55,9	WE1R 225 M2 EP	93,0	7.850,00
	90,0	67,1	WE1R 250 M2 EP	93,6	9.560,00
	100,0	74,6	WE1R 280 S2 EP	93,6	12.600,00
	125,0	93,2	WE1R 280 S2 EP	94,5	12.600,00
	150,0	112,0	WE1R 280 M2 EP	94,5	15.000,00
	180,0	134,0	WE1R 315 S2 EP	95,0	18.600,00
200,0	149,0	WE1R 315 M2 EP	95,0	22.300,00	
250,0	186,0	WE1R 315 MX2 EP	95,4	26.100,00	
300,0	224,0	WE1R 315 MY2 EP	95,4	32.800,00	
350,0	261,0	WE1R 315 MY2 EP	95,4	32.800,00	
400,0	298,0	WE1R 315 L2 EP	95,4	40.200,00	
450,0	336,0	WE1R 315 LX2 EP	95,4	50.600,00	
500,0	373,0	WE1R 315 LX2 EP	95,4	50.600,00	

	P <sub>B</sub>		Typ	Wirkungsgrad	Preis
	P <sub>B</sub>	hp			
	(kW)	(kW)	Type	Efficiency	Price
				%	€
<b>1800 min<sup>-1</sup></b>	1,0	0,75	WE1R 80 G4 EP	82,5	438,00
	1,5	1,12	WE1R 90 S4 EP	84,0	534,00
	2,0	1,49	WE1R 90 LV4 EP	84,0	634,00
	3,0	2,24	WE1R 100 L4 EP	87,5	777,00
	5,0	3,73	WE1R 112 MX4 EP	87,5	1.010,00
	7,5	5,59	WE1R 132 SY4 EP	89,5	1.130,00
	10,0	7,46	WE1R 132 S4 EP	89,5	1.250,00
	15,0	11,2	WE1R 132 M4 EP	91,0	1.580,00
	20,0	14,9	WE1R 160 M4 EP	91,0	2.100,00
	25,0	18,6	WE1R 160 L4 EP	92,4	2.780,00
	30,0	22,4	WE1R 180 M4 EP	92,4	3.340,00
	40,0	29,8	WE1R 180 L4 EP	93,0	3.920,00
	50,0	37,3	WE1R 200 L4 EP	93,0	5.170,00
	60,0	44,7	WE1R 225 S4 EP	93,6	6.290,00
	75,0	55,9	WE1R 225 M4 EP	94,1	7.670,00
	90,0	67,1	WE1R 250 M4 EP	94,5	9.270,00
	125,0	93,2	WE1R 280 S4 EP	94,5	11.900,00
	150,0	112,0	WE1R 280 M4 EP	95,0	14.000,00
	180,0	134,0	WE1R 315 S4 EP	95,0	17.100,00
	200,0	149,0	WE1R 315 M4 EP	95,0	20.900,00
250,0	186,0	WE1R 315 MX4 EP	95,0	24.900,00	
300,0	224,0	WE1R 315 MY4 EP	95,4	30.700,00	
400,0	298,0	WE1R 315 L4 EP	95,4	37.400,00	
450,0	336,0	WE1R 315 LX4 EP	95,4	47.600,00	

## Asynchrongeneratoren, Grundauführung

### Asynchronous generators, basic version

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

Type of construction IM B3, degree of protection IP 55, thermal class 155

	P <sub>w</sub>	P <sub>s</sub>	Typ		Preis
	P <sub>w</sub>	P <sub>s</sub>	Type		Price
	kW	kVA			€
<b>1500 min<sup>-1</sup></b> <b>2p = 4</b>	5,5	8,3	G21R 132 S4	G20R 112 M4	1.210,00
	7,5	11,2	G21R 132 M4	G20R 132 S4	1.470,00
	11,0	15,1	G21R 160 M4	G20R 132 M4	1.940,00
	15,0	19,1	G21R 160 L4	G20R 160 S4	2.510,00
	18,5	23	G21R 180 M4	G20R 160 M4	3.020,00
	22	29	G21R 180 L4	G20R 180 S4	3.510,00
	30	37	G21R 200 L4	G20R 180 M4	4.620,00
	37	46	G21R 225 S4	G20R 200 M4	5.630,00
	45	55	G21R 225 M4	G20R 200 L4	6.770,00
	55	66	G21R 250 M4	G20R 225 M4	8.190,00
	75	90	G21R 280 S4	G20R 250 S4	10.900,00
	90	106	G21R 280 M4	G20R 250 M4	12.800,00
	110	132	G21R 315 S4	G20R 280 S4	15.600,00
	132	158	G21R 315 M4	G20R 280 M4	18.900,00
	160	187	G21R 315 MX4	G20R 315 S4	23.300,00
	200	229	G21R 315 MY4	G20R 315 M4	28.600,00
	250	284	G21R 315 L4	G20R 315 L4	36.300,00
	315	353	G21R 315 LX4	G20R 315 LX4	46.000,00
	315	384	G22R 355 MY4	-	51.900,00
	355	428	G22R 355 M4	-	53.800,00
400	482	G22R 355 MX4	-	60.400,00	
420	505	G22R 355 LY4	-	75.000,00	

	P <sub>w</sub>	P <sub>s</sub>	Typ		Preis
	P <sub>w</sub>	P <sub>s</sub>	Type		Price
	kW	kVA			€
<b>1000 min<sup>-1</sup></b> <b>2p = 6</b>	3,0	5,1	G21R 132 S6	G20R 112 M6	1.100,00
	4,0	6	G21R 132 M6	G20R 112 MX6	1.320,00
	5,5	8,5	G21R 132 MX6	G20R 132 S6	1.640,00
	7,5	11	G21R 160 M6	G20R 132 M6	2.070,00
	11,0	15	G21R 160 L6	G20R 160 S6	2.700,00
	12,5	22	G21R 180 L6	G20R 160 M6	3.610,00
	19,5	24,8	G21R 200 L6	G20R 180 S6	4.390,00
	22	28	G21R 200 LX6	G20R 180 M6	5.110,00
	30	37,2	G21R 225 M6	G20R 200 M6	6.950,00
	37	43,4	G21R 250 M6	G20R 225 M6	8.480,00
	45	55,0	G21R 280 S6	G20R 250 S6	10.200,00
	60	69,1	G21R 280 M6	G20R 250 M6	12.300,00
	75	88	G21R 315 S6	G20R 280 S6	16.700,00
	90	108	G21R 315 M6	G20R 280 M6	19.800,00
	110	133	G21R 315 MX6	G20R 315 S6	24.200,00
	132	155	G21R 315 MY6	G20R 315 M6	28.200,00
	160	182	G21R 315 L6	G20R 315 L6	35.000,00
	200	235	G21R 315 LX6	G20R 315 LX6	43.100,00
	200	235	G22R 355 MY6	-	52.800,00
	250	309	G22R 355 M6	-	56.100,00
315	375	G22R 355 MX6	-	70.200,00	
355	418	G22R 355 LY6	-	81.000,00	

	P <sub>w</sub>	P <sub>s</sub>	Typ		Preis
	P <sub>w</sub>	P <sub>s</sub>	Type		Price
	kW	kVA			€
<b>750 min<sup>-1</sup></b> <b>2p = 8</b>	2,2	4,3	G21R 132 S8	G20R 112 M8	1.340,00
	3,0	5,5	G21R 132 M8	G20R 112 MX8	1.610,00
	4,0	6,7	G21R 160 M8	G20R 132 S8	1.910,00
	5,5	8,9	G21R 160 MX8	G20R 132 M8	2.330,00
	7,5	12,4	G21R 160 L8	G20R 160 S8	2.760,00
	11,0	17,6	G21R 180 L8	G20R 160 M8	3.790,00
	15,0	22,3	G21R 200 L8	G20R 180 S8	4.960,00
	18,5	26,3	-	G20R 180 M8	5.990,00
	18,5	26,3	G21R 225 S8	-	5.990,00
	22	30,9	G21R 225 M8	G20R 200 M8	6.850,00
	30	39,8	G21R 250 M8	G20R 225 M8	9.150,00
	37	50	G21R 280 S8	G20R 250 S8	10.600,00
	45	60	G21R 280 M8	G20R 250 M8	12.900,00
	55	75	G21R 315 S8	G20R 280 S8	15.400,00
	75	100	G21R 315 M8	G20R 280 M8	20.900,00
	90	117	G21R 315 MX8	G20R 315 S8	24.600,00
	110	143	G21R 315 MY8	G20R 315 M8	29.000,00
	132	165	G21R 315 L8	G20R 315 L8	35.100,00
	160	203	G21R 315 LX8	G20R 315 LX8	42.100,00
	160	213	G22R 355 MY8	-	52.100,00
200	274	G22R 355 M8	-	55.300,00	
250	325	G22R 355 MX8	-	70.000,00	
280	394	G22R 355 LY8	-	81.100,00	

**Asynchrongeneratoren, Grundauführung,  
wirkungsgradoptimierte Ausführung auf Basis IE2  
Asynchronous generators, basic version,  
design with optimized efficiency complying with IE2**

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

Type of construction IM B3, degree of protection IP 55, thermal class 155

	P <sub>w</sub> P <sub>w</sub> kW	P <sub>s</sub> P <sub>s</sub> kVA	Typ Type	Preis Price €
<b>1500 min<sup>-1</sup> 2p = 4</b>	4,0	5,1	GE1R 112 M4	1.260,00
	5,5	6,9	GE1R 132 S4	1.410,00
	7,5	9,4	GE1R 132 M4	1.730,00
	11,0	13,4	GE1R 160 M4	2.290,00
	15,0	18,0	GE1R 160 L4	2.970,00
	18,5	22,2	GE1R 180 M4	3.580,00
	22,0	26,0	GE1R 180 L4	4.160,00
	30,0	35,2	GE1R 200 L4	5.490,00
	37,0	43,7	GE1R 225 S4	6.680,00
<b>750 min<sup>-1</sup> 2p = 8</b>	2,2	3,7	GE1R 132 S8	1.590,00
	3,0	4,9	GE1R 132 M8	1.900,00
	4,0	6,6	GE1R 160 M8	2.260,00
	5,5	8,7	GE1R 160 MX8	2.760,00
	7,5	11,1	GE1R 160 L8	3.280,00
	11,0	15,6	GE1R 180 L8	4.500,00
	15,0	21,1	GE1R 200 L8	5.880,00
	18,5	26,0	GE1R 225 S8	7.110,00

	P <sub>w</sub> P <sub>w</sub> kW	P <sub>s</sub> P <sub>s</sub> kVA	Typ Type	Preis Price €
<b>1000 min<sup>-1</sup> 2p = 6</b>	3	4,2	GE1R 132 S6	1.280,00
	4	5,3	GE1R 132 M6	1.550,00
	5,5	7,3	GE1R 132 MX6	1.930,00
	7,5	10,0	GE1R 160 M6	2.450,00
	11	14,0	GE1R 160 L6	3.200,00
	15	17,0	GE1R 180 L6	4.280,00
	18,5	21,5	GE1R 200 L6	5.200,00
	22	24,9	GE1R 200 LX6	6.070,00
	30	35,9	GE1R 225 M6	8.260,00

## Käfigläufermotoren, polumschaltbar, 2 Drehzahlen, konstantes Belastungsmoment

### Motors with squirrel-cage rotor, pole-changing, 2 speeds, constant loading torque

Dahlanderschaltung (Schaltung  $\Delta/YY$ ), Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

Dahlander-connection (connection  $\Delta/YY$ ), type of construction IM B3, degree of protection IP 55, thermal class 155

	$P_b$ $P_b$ kW	Typ Type	Preis Price €
1500 min <sup>-1</sup> / 3000 min <sup>-1</sup> 2p = 4/2	0,12/0,18	K21R 63 G4-2 HL	344,00
	0,17/0,23	K21R 71 K4-2 HL	352,00
	0,30/0,45	K21R 71 G4-2 HL	394,00
	0,48/0,55	K21R 80 K4-2 HL	435,00
	0,70/0,85	K21R 80 G4-2 HL	501,00
	1,1/1,4	K21R 90 S4-2 HL	631,00
	1,4/1,8	K21R 90 L4-2 HL	736,00
	2,0/2,4	K21R 100 L4-2 HL	807,00
	2,6/3,1	K21R 100 LX4-2 HL	978,00
	3,7/4,4	K21R 112 M4-2 HL	1.220,00
	4,9/5,9	K21R 132 S4-2	1.600,00
	6,8/8,0	K21R 132 M4-2	2.090,00
	9,5/11,0	K21R 160 M4-2	2.400,00
	12,5/15,0	K21R 160 L4-2	3.490,00
	15,0/19,0	K21R 180 M4-2	4.150,00
	18,5/22,0	K21R 180 L4-2	4.880,00
	25,0/30,0	K21R 200 L4-2	6.770,00
	30,0/35,0	K21R 225 S4-2	7.960,00
	36,0/43,0	K21R 225 M4-2	9.090,00
	47,0/54,0	K21R 250 M4-2	11.300,00
	60,0/72,0	K21R 280 S4-2	15.600,00
	75,0/85,0	K21R 280 M4-2	19.000,00
	85,0/95,0	K21R 315 S4-2	20.600,00
	95,0/115,0	K21R 315 M4-2	24.600,00
	110,0/132,0	K21R 315 MX4-2	28.200,00
	135,0/165,0	K21R 315 MY4-2	36.300,00
	145,0/190,0	K21R 315 L4-2	43.700,00
	160,0/220,0	K21R 315 LX4-2	54.400,00

	$P_b$ $P_b$ kW	Typ Type	Preis Price €
750 min <sup>-1</sup> / 1500 min <sup>-1</sup> 2p = 8/4	0,09/0,12	K21R 71 K8-4 HL	390,00
	0,12/0,20	K21R 71 G8-4 HL	394,00
	0,18/0,30	K21R 80 K8-4 HL	435,00
	0,25/0,40	K21R 80 G8-4 HL	501,00
	0,35/0,55	K21R 90 S8-4 HL	631,00
	0,44/0,75	K21R 90 L8-4 HL	736,00
	0,7/1,1	K21R 100 L8-4 HL	807,00
	1,0/1,5	K21R 100 LX8-4 HL	978,00
	1,4/2,2	K21R 112 M8-4 HL	1.220,00
	2,2/3,3	K21R 112 MV8-4 HL	1.250,00
	2,2/3,3	K21R 132 S8-4	1.280,00
	2,6/4,2	K21R 132 M8-4	1.670,00
	4,0/6,0	K21R 132 MX8-4	1.960,00
	5,0/7,8	K21R 160 M8-4	2.300,00
	7,0/11,0	K21R 160 L8-4	3.400,00
	10,0/16,0	K21R 180 L8-4	5.010,00
	15,0/21,0	K21R 200 L8-4	6.790,00
	17,5/25,0	K21R 200 LX8-4	7.250,00
	22,0/30,0	K21R 225 M8-4	9.090,00
	28,0/38,0	K21R 250 M8-4	11.300,00
	35,0/50,0	K21R 280 S8-4	14.600,00
	45,0/60,0	K21R 280 M8-4	18.100,00
	55,0/80,0	K21R 315 S8-4	20.600,00
	75,0/100,0	K21R 315 M8-4	27.200,00
	80,0/115,0	K21R 315 MX8-4	28.700,00
	100,0/140,0	K21R 315 MY8-4	36.300,00
	120,0/150,0	K21R 315 L8-4	43.700,00

2 getrennte Wicklungen (Schaltung Y/Y), Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

2 separate windings (connection Y/Y), type of construction IM B3, degree of protection IP 55, thermal class 155

	$P_b$ $P_b$ kW	Typ Type	Preis Price €
1000 min <sup>-1</sup> / 1500 min <sup>-1</sup> 2p = 6/4	0,10/0,15	K21R 71 K6-4	708,00
	0,13/0,2	K21R 71 G6-4	779,00
	0,20/0,28	K21R 80 K6-4	825,00
	0,25/0,37	K21R 80 G6-4	849,00
	0,35/0,6	K21R 90 S6-4	920,00
	0,5/0,9	K21R 90 L6-4	957,00
	0,8/1,2	K21R 100 L6-4	1.010,00
	1,1/1,6	K21R 100 LX6-4	1.110,00
	1,6/2,4	K21R 112 M6-4	1.230,00
	2,0/3,1	K21R 132 S6-4	1.550,00
	2,8/4,3	K21R 132 M6-4	1.910,00
	3,3/4,9	K21R 132 MX6-4	2.120,00
	4,5/6,9	K21R 160 M6-4	2.580,00
	6,5/9,5	K21R 160 L6-4	3.660,00
	9,5/14,0	K21R 180 L6-4	5.010,00
	13,5/16,0	K21R 200 L6-4	6.850,00
	15,0/18,0	K21R 200 LX6-4	7.100,00
	20,0/26,0	K21R 225 M6-4	9.170,00
	25,0/35,0	K21R 250 M6-4	11.700,00
	30,0/40,0	K21R 280 S6-4	15.600,00
	37,0/45,0	K21R 280 M6-4	19.000,00
	55,0/63,0	K21R 315 S6-4	21.500,00
	65,0/80,0	K21R 315 M6-4	27.500,00
	60,0/90,0	K21R 315 MX6-4	29.100,00
	100,0/120,0	K21R 315 MY6-4	36.400,00
	100,0/150,0	K21R 315 L6-4	44.000,00

## Käfigläufermotoren, polumschaltbar, 2 Drehzahlen, Lüfterausführung, quadratisch steigendes Belastungsmoment Motors with squirrel-cage rotor, pole-changing, 2 speeds, fan version, squarely increasing loading torque

Dahlanderschaltung (Schaltung Y/Y), Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

Dahlander-connection (connection Y/Y), type of construction IM B3, degree of protection IP 55, thermal class 155

	$P_n$ $P_b$ kW	Typ Type	Preis Price €
1500 min <sup>-1</sup> 3000 min <sup>-1</sup> 2p = 4/2	0,08/0,30	K21R 71 K4-2 L HL	K20R 63 K4-2L HL 352,00
	0,12/0,48	K21R 71 G4-2 L HL	K20R 63 G4-2L HL 394,00
	0,18/0,70	K21R 80 K4-2 L HL	K20R 71 K4-2L HL 435,00
	0,25/0,90	K21R 80 G4-2 L HL	K20R 71 G4-2L HL 501,00
	0,37/1,5	K21R 90 S4-2 L HL	K20R 80 K4-2L HL 631,00
	0,5/2,0	K21R 90 L4-2 L HL	K20R 80 G4-2L HL 736,00
	0,7/2,8	K21R 100 L4-2 L HL	K20R 90 L4-2L HL 807,00
	0,9/3,6	K21R 100 LX4-2 L HL	K20R 100 S4-2L HL 978,00
	1,2/4,8	K21R 112 M4-2 L HL	K20R 100 L4-2L HL 1.220,00
	1,5/5,5	K21R 112 MX4-2L HL	K20R 100 LX4-2L HL*) 1.460,00
	1,5/5,5	K21R 132 S4-2 L	K20R 112 M4-2L 1.600,00
	2,2/8,2	K21R 132 M4-2 L	K20R 132 S4-2L 2.090,00
	3,3/12,0	K21R 160 M4-2 L	K20R 132 M4-2L 2.400,00
	4,3/17,0	K21R 160 L4-2 L	K20R 160 S4-2L 3.490,00
	5,5/20,0	K21R 180 M4-2 L	K20R 160 M4-2L 4.150,00
	6,4/24,0	K21R 180 L4-2 L	K20R 180 S4-2L 4.880,00
	7,8/30,0	K21R 200 L4-2 L	K20R 180 M4-2L 6.770,00
	9,5/37,0	K21R 225 S4-2 L	K20R 200 M4-2L 7.960,00
	12,0/45,0	K21R 225 M4-2 L	K20R 200 L4-2L 9.090,00
	15,0/55,0	K21R 250 M4-2 L	K20R 225 M4-2L 11.300,00
	20,0/75,0	K21R 280 S4-2 L	K20R 250 S4-2L 15.600,00
	24,0/90,0	K21R 280 M4-2 L	K20R 250 M4-2L 19.000,00
	29,0/110,0	K21R 315 S4-2 L	K20R 280 S4-2L 20.600,00
	35,0/132,0	K21R 315 M4-2 L	K20R 280 M4-2L 24.600,00
	40,0/145,0	K21R 315 MX4-2 L	K20R 315 S4-2L 28.200,00
	50,0/160,0	K21R 315 MY4-2 L	K20R 315 M4-2L 36.300,00

	$P_n$ $P_b$ kW	Typ Type	Preis Price €
750 min <sup>-1</sup> / 1500 min <sup>-1</sup> 2p = 8/4	0,05/0,2	K21R 71 K8-4 L HL	K20R 63 K8-4L HL 390,00
	0,075/0,3	K21R 71 G8-4 L HL	K20R 63 G8-4L HL 394,00
	0,12/0,5	K21R 80 K8-4 L HL	K20R 71 K8-4L HL 435,00
	0,18/0,7	K21R 80 G8-4 L HL	K20R 71 G8-4L HL 501,00
	0,25/1,0	K21R 90 S8-4 L HL	K20R 80 K8-4L HL 631,00
	0,37/1,5	K21R 90 L8-4 L HL	K20R 80 G8-4L HL 736,00
	0,5/2,0	K21R 100 L8-4L HL	K20R 90 L8-4L HL 807,00
	0,65/2,5	K21R 100 LX8-4L HL	K20R 100 S8-4L HL 978,00
	0,9/3,6	K21R 112 M8-4 L HL	K20R 100 L8-4L HL 1.220,00
	1,1/4,5	K21R 132 M8-4 L	K20R 112 MX8-4L 1.670,00
	1,8/6,5	K21R 132 MX8-4 L	K20R 132 S8-4L 1.960,00
	2,3/9,0	K21R 160 M8-4 L	K20R 132 M8-4L 2.300,00
	3,5/12,5	K21R 160 L8-4 LF	K20R 160 S8-4LF 3.400,00
	4,5/16,0	K21R 180 M8-4 LF	K20R 160 M8-4LF 4.190,00
	5,0/20,0	K21R 180 L8-4 LF	K20R 180 S8-4LF 5.010,00
	7,2/26,0	K21R 200 L8-4 LF	K20R 180 M8-4LF 6.790,00
	9,5/35,0	K21R 225 S8-4 LF	K20R 200 M8-4LF 7.960,00
	11,5/42,0	K21R 225 M8-4 LF	K20R 200 L8-4LF 9.090,00
	12,0/48,0	K21R 250 M8-4 LF	K20R 225 M8-4LF 11.300,00
	14,0/50,0	K21R 280 S8-4 L	K20R 250 S8-4L 14.600,00
	17,0/55,0	K21R 280 M8-4 L	K20R 250 M8-4L 18.100,00
	21,0/80,0	K21R 315 S8-4 L	K20R 280 S8-4L 20.600,00
	28,0/95,0	K21R 315 M8-4 L	K20R 280 M8-4L 27.200,00
	36,0/110,0	K21R 315 MX8-4 L	K20R 315 S8-4L 28.700,00
	44,0/135,0	K21R 315 MY8-4 L	K20R 315 M8-4L 36.300,00
	48,0/160,0	K21R 315 L8-4 L	K20R 315 L8-4L 43.700,00
55,0/220,0	K21R 315 LX8-4 L	K20R 315 LX8-4L 55.100,00	

2 getrennte Wicklungen (Schaltung Y/Y), Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

2 separate windings (connection Y/Y), type of construction IM B3, degree of protection IP 55, thermal class 155

	$P_n$ $P_b$ kW	Typ Type	Preis Price €
1000 min <sup>-1</sup> / 1500 min <sup>-1</sup> 2p = 6/4	0,06/0,18	K21R 71 K6-4 L	K20R 63K 6-4L 708,00
	0,08/0,25	K21R 71 G6-4 L	K20R 63 G6-4L 779,00
	0,12/0,4	K21R 80 K6-4 L	K20R 71 K6-4L 825,00
	0,16/0,55	K21R 80 G6-4 L	K20R 71 G6-4L 849,00
	0,25/0,75	K21R 90 S6-4 L	K20R 80 K6-4L 920,00
	0,37/1,1	K21R 90 L6-4L	K20R 80 G6-4L 957,00
	0,5/1,5	K21R 100 L6-4 L	K20R 90 L6-4L 1.010,00
	0,75/2,0	K21R 100 LX6-4 L	K20R 100 S6-4L 1.110,00
	1,0/3,0	K21R 112 M6-4 L	K20R 100 L6-4L 1.230,00
	1,5/3,7	K21R 132 S6-4 L	K20R 112 M6-4L 1.550,00
	2,2/6,0	K21R 132 MX6-4 L	K20R 132 S6-4L 2.120,00
	3,0/8,2	K21R 160 M6-4 L	K20R 132 M6-4L 2.580,00
	4,4/13,0	K21R 160 L6-4 L	K20R 160 S6-4L 3.660,00
	5,4/16,0	K21R 180 M6-4 L	K20R 160 M6-4L 4.310,00
	6,7/20,0	K21R 180 L6-4 L	K20R 180 S6-4L 5.010,00
	9,0/26,0	K21R 200 L6-4 L	K20R 180 M6-4L 6.850,00
	12,0/34,0	K21R 225 S6-4 L	K20R 200 M6-4L 8.240,00
	14,0/40,0	K21R 225 M6-4 L	K20R 200 L6-4L 9.170,00
	18,0/50,0	K21R 250 M6-4 L	K20R 225 M6-4L 11.700,00
	23,0/68,0	K21R 280 S6-4 L	K20R 250 S6-4L 15.600,00
	28,0/80,0	K21R 280 M6-4 L	K20R 250 M6-4L 19.000,00
	34,0/95,0	K21R 315 S6-4 L	K20R 280 S6-4L 21.500,00
	40,0/115,0	K21R 315 M6-4 L	K20R 280 M6-4L 27.500,00
	45,0/125,0	K21R 315 MX6-4 L	K20R 315 S6-4L 29.100,00
	55,0/145,0	K21R 315 MY6-4 L	K20R 315 M6-4L 36.400,00
	55,0/185,0	K21R 315 L6-4 L	K20R 315 L6-4L 44.000,00

\*) Nur Flanschausführung  
\*) Only flange-version

## Käfigläufermotoren, polumschaltbar, 3 Drehzahlen, konstantes Belastungsmoment

### Motors with squirrel-cage rotor, pole-changing, 3 speeds, constant loading torque

2 getrennte Wicklungen (Schaltung  $\Delta/Y/YY$ ), Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

2 separate windings (connection  $\Delta/Y/YY$ ), type of construction IM B3, degree of protection IP 55, thermal class 155

	$P_B$ $P_B$ kW	Typ Type	Preis Price €	
750 min <sup>-1</sup> / 1000 min <sup>-1</sup> / 1500 min <sup>-1</sup> 2p = 8/6/4	0,6/0,8/1,1	K21R 100 LX8-6-4	K20R 100 S8-6-4	1.440,00
	0,9/1,2/1,8	K21R 112 M8-6-4	K20R 100 L8-6-4	1.480,00
	0,9/1,1/1,4	K21R 132 S8-6-4	K20R 112 M8-6-4	1.640,00
	1,2/1,5/2,0	K21R 132 M8-6-4	K20R 112 MX8-6-4	1.970,00
	1,6/2,1/2,8	K21R 132 MX8-6-4	K20R 132 S8-6-4	2.250,00
	2,3/2,9/3,9	K21R 160 M8-6-4	K20R 132 M8-6-4	2.700,00
	3,4/4,0/5,8	K21R 160 L8-6-4	K20R 160 S8-6-4	3.810,00
	4,8/5,5/8,0	K21R 180 L8-6-4	K20R 160 M8-6-4	5.520,00
	5,9/6,6/9,0	K21R 200 L8-6-4	K20R 180 S8-6-4	7.020,00
	7,0/7,9/11,0	K21R 200 LX8-6-4	K20R 180 M8-6-4	7.440,00
	9,5/10,5/15,0	K21R 225 M8-6-4	K20R 200 M8-6-4	9.520,00
	11,5/13,0/18,5	K21R 250 M8-6-4	K20R 225 M8-6-4	12.200,00
	14,0/16,0/20,0	K21R 280 S8-6-4	K20R 250 S8-6-4	16.300,00
	17,0/20,0/25,0	K21R 280 M8-6-4	K20R 250 M8-6-4	19.200,00
	24,0/27,0/37,0	K21R 315 S8-6-4	K20R 280 S8-6-4	22.200,00
	30,0/36,0/45,0	K21R 315 M8-6-4	K20R 280 M8-6-4	27.700,00
	45,0/55,0/68,0	K21R 315 MX8-6-4	K20R 315 S8-6-4	30.000,00
	55,0/68,0/80,0	K21R 315 MY8-6-4	K20R 315 M8-6-4	41.200,00

## Käfigläufermotoren, polumschaltbar, 3 Drehzahlen, Lüfterausführung, quadratisch steigendes Belastungsmoment

### Motors with squirrel-cage rotor, pole-changing, 3 speeds, fan version, square increasing loading torque

2 getrennte Wicklungen (Schaltung  $Y/Y/YY$ ), Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

2 separate windings (connection  $Y/Y/YY$ ), type of construction IM B3, degree of protection IP 55, thermal class 155

	$P_B$ $P_B$ kW	Typ Type	Preis Price €	
750 min <sup>-1</sup> / 1000 min <sup>-1</sup> / 1500 min <sup>-1</sup> 2p = 8/6/4	0,05/0,06/0,21	K21R 80 K8-6-4 L	K20R 71 K8-6-4L	962,00
	0,09/0,12/0,37	K21R 80 G8-6-4 L	K20R 71 G8-6-4L	1.030,00
	0,15/0,22/0,7	K21R 90 S8-6-4 L HL	K20R 80 K8-6-4L HL	1.090,00
	0,22/0,3/0,95	K21R 90 L8-6-4 L HL	K20R 80 G8-6-4L HL	1.270,00
	0,37/0,55/1,5	K21R 100 L8-6-4 L HL	K20R 90 L8-6-4L HL	1.410,00
	0,45/0,7/1,9	K21R 100 LX8-6-4 L HL	K20R 100 S8-6-4L HL	1.440,00
	0,75/1,1/2,6	K21R 112 M8-6-4 L HL	K20R 100 L8-6-4L HL	1.480,00
	0,75/1,1/3,0	K21R 132 S8-6-4 L	K20R 112 M8-6-4L	1.640,00
	1,0/1,4/4,0	K21R 132 M8-6-4 L	K20R 112 MX8-6-4L	1.970,00
	1,2/1,7/5,0	K21R 132 MX8-6-4 L	K20R 132 S8-6-4L	2.250,00
	1,9/2,5/7,5	K21R 160 M8-6-4 L	K20R 132 M8-6-4L	2.700,00
	2,5/4,0/11,0	K21R 160 L8-6-4 L	K20R 160 S8-6-4L	3.810,00
	3,5/5,0/14,0	K21R 180 L8-6-4 L	K20R 160 M8-6-4L	5.520,00
	4,0/6,5/18,0	K21R 200 L8-6-4 L	K20R 180 S8-6-4L	7.020,00
	5,5/7,5/22,0	K21R 200 LX8-6-4 L	K20R 180 M8-6-4L	7.440,00
	7,0/10,0/30,0	K21R 225 M8-6-4 L	K20R 200 M8-6-4L	9.520,00
	8,0/12,0/35,0	K21R 250 M8-6-4 L	K20R 225 M8-6-4L	12.200,00
	10,0/15,0/44,0	K21R 280 S8-6-4 L	K20R 250 S8-6-4L	16.300,00
	16,0/22,0/65,0	K21R 280 M8-6-4 L	K20R 250 M8-6-4L	19.200,00
	18,0/28,0/80,0	K21R 315 S8-6-4 L	K20R 280 S8-6-4L	22.200,00
	23,0/35,0/100,0	K21R 315 M8-6-4 L	K20R 280 M8-6-4L	27.700,00
	25,0/35,0/100,0	K21R 315 MX8-6-4 L	K20R 315 S8-6-4L	30.000,00
	28,0/42,0/110,0	K21R 315 MY8-6-4 L	K20R 315 M8-6-4L	41.200,00

## Käfigläufermotoren für Umrichterbetrieb ohne Filter bis 500 V, Kühlart IC 411 nach DIN VDE 0530-25:2009-08, Kurve A

### Motors with squirrel-cage rotor, for inverter feeding without filter up to 500 V, cooling method IC 411 acc. to DIN VDE 0530-25:2009-08, curve A

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

Type of construction IM B3, degree of protection IP 55, thermal class 155

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
3000 min <sup>-1</sup> 2p = 2	0,12	KU1R 56 G2	644,00
	0,18	KU1R 63 K2	644,00
	0,25	KU1R 63 G2	653,00
	0,37	KU1R 71 K2	677,00
	0,55	KU1R 71 G2	706,00
	0,75	KU1R 80 K2	765,00
	1,1	KU1R 80 G2	809,00
	1,5	KU1R 90 S2	914,00
	2,2	KU1R 90 L2	1.030,00
	3,0	KU1R 100 L2	1.300,00
	4,0	KU1R 112 M2	1.500,00
	5,5	KU1R 132 S2T	1.760,00
	7,5	KU1R 132 SX2	2.150,00
	10,5	KU1R 160 M2	2.220,00
	15,0	KU1R 160 MX2	2.720,00
	18,5	KU1R 160 L2	3.110,00
	22,0	KU1R 180 M2	3.850,00
	30,0	KU1R 200 L2	4.880,00
	37,0	KU1R 200 LX2	6.130,00
	45,0	KU1R 225 M2	7.590,00
	55,0	KU1R 250 M2	9.010,00
	74,0	KU1R 280 S2	12.500,00
	87,0	KU1R 280 M2	14.600,00
	110,0	KU1R 315 S2	19.500,00
	132,0	KU1R 315 M2	22.800,00
	160,0	KU1R 315 MX2	27.200,00
	192,0	KU1R 315 MY2	33.700,00
	220,0	KU1R 315 L2	42.200,00
	270,0	KU1R 315 LX2	52.600,00
	315,0	KU2R 355 MY2	- A
330,0	KU2R 355 M2	- A	
355,0	KU2R 355 MX2	- A	
380,0	KU2R 355 LY2	- A	
425,0	KU2R 355 L2	- A	
1000 min <sup>-1</sup> 2p = 6	0,09	KU1R 63 K6	651,00
	0,12	KU1R 63 G6	658,00
	0,18	KU1R 71 K6	688,00
	0,25	KU1R 71 G6	713,00
	0,37	KU1R 80 K6	765,00
	0,55	KU1R 80 G6	816,00
	0,75	KU1R 90 S6	907,00
	1,1	KU1R 90 L6	1.000,00
	1,5	KU1R 100 L6	1.260,00
	2,2	KU1R 112 M6	1.450,00
	3,0	KU1R 132 S6T	1.690,00
	4,0	KU1R 132 M6	1.790,00
	5,5	KU1R 132 MX6	1.880,00
	7,5	KU1R 160 M6	2.360,00
	11,0	KU1R 160 L6	2.990,00
	15,0	KU1R 180 L6	4.050,00
	18,5	KU1R 200 L6	4.820,00
	22,0	KU1R 200 LX6	5.550,00
	30,0	KU1R 225 M6	7.610,00
	37,0	KU1R 250 M6	9.090,00
	45,0	KU1R 280 S6	11.100,00
	55,0	KU1R 280 M6	13.200,00
	75,0	KU1R 315 S6	19.300,00
	90,0	KU1R 315 M6	22.600,00
	110,0	KU1R 315 MX6	26.800,00
	132,0	KU1R 315 MY6	31.500,00
	160,0	KU1R 315 L6	38.200,00
185,0	KU1R 315 LX6	46.400,00	
200,0	KU2R 355 MY6	56.300,00	
250,0	KU2R 355 M6	59.300,00	
300,0	KU2R 355 MX6	73.500,00	
315,0	KU2R 355 LY6	84.300,00	

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
1500 min <sup>-1</sup> 2p = 4	0,09	KU1R 56 G4	644,00
	0,12	KU1R 63 K4	644,00
	0,18	KU1R 63 G4	653,00
	0,25	KU1R 71 K4	673,00
	0,37	KU1R 71 G4	700,00
	0,55	KU1R 80 K4	754,00
	0,75	KU1R 80 G4	783,00
	1,1	KU1R 90 S4	870,00
	1,5	KU1R 90 L4	942,00
	2,2	KU1R 100 L4	1.220,00
	3,0	KU1R 100 LX4	1.380,00
	4,0	KU1R 112 M4	1.530,00
	5,5	KU1R 132 S4T	1.830,00
	7,5	KU1R 132 M4	2.190,00
	11,0	KU1R 160 M4	2.260,00
	15,0	KU1R 160 L4	2.810,00
	18,0	KU1R 180 M4	3.480,00
	22,0	KU1R 180 L4	3.960,00
	29,0	KU1R 200 L4	5.060,00
	37,0	KU1R 225 S4	5.990,00
	45,0	KU1R 225 M4	7.460,00
	55,0	KU1R 250 M4	8.790,00
	75,0	KU1R 280 S4	11.900,00
	90,0	KU1R 280 M4	13.900,00
	110,0	KU1R 315 S4	18.600,00
	132,0	KU1R 315 M4	21.500,00
	160,0	KU1R 315 MX4	25.900,00
	200,0	KU1R 315 MY4	31.900,00
	250,0	KU1R 315 L4	39.600,00
	285,0	KU1R 315 LX4	49.200,00
315,0	KU2R 355 MY4	- A	
355,0	KU2R 355 M4	- A	
390,0	KU2R 355 MX4	- A	
430,0	KU2R 355 LY4	- A	
750 min <sup>-1</sup> 2p = 8	0,09	KU1R 71 K8	712,00
	0,12	KU1R 71 G8	737,00
	0,18	KU1R 80 K8	786,00
	0,25	KU1R 80 G8	849,00
	0,37	KU1R 90 S8	962,00
	0,55	KU1R 90 L8	1.070,00
	0,75	KU1R 100 L8	1.300,00
	1,1	KU1R 100 LX8	1.500,00
	1,5	KU1R 112 M8	1.650,00
	2,2	KU1R 132 S8T	1.980,00
	3,0	KU1R 132 M8	2.100,00
	4,0	KU1R 160 M8	2.220,00
	5,5	KU1R 160 MX8	2.640,00
	7,5	KU1R 160 L8	3.070,00
	11,0	KU1R 180 L8	4.220,00
	15,0	KU1R 200 L8	5.370,00
	18,5	KU1R 225 S8	6.650,00
	22,0	KU1R 225 M8	7.530,00
	30,0	KU1R 250 M8	9.730,00
	37,0	KU1R 280 S8	11.600,00
	45,0	KU1R 280 M8	14.000,00
	55,0	KU1R 315 S8	18.200,00
	75,0	KU1R 315 M8	23.600,00
	90,0	KU1R 315 MX8	27.300,00
	110,0	KU1R 315 MY8	32.100,00
	132,0	KU1R 315 L8	38.300,00
	145,0	KU1R 315 LX8	45.300,00
160,0	KU2R 355 MY8	55.200,00	
200,0	KU2R 355 M8	58.700,00	
215,0	KU2R 355 MX8	73.400,00	
230,0	KU2R 355 LY8	84.400,00	

Ab Baugröße KU1R 315 / KUOR 280 inklusive isoliertes Wälzlager N-Seite  
Die Motoren mit Kaltleiter als thermischen Wicklungsschutz müssen mit Kaltleiter für Umrichterpeisung  $\geq 420$  V ausgerüstet werden.  
Es wird empfohlen, für alle Motoren Wicklungsschutz einzusetzen (Mehrpreis beachten).  
Frequenz höher 60 Hz High-Speed-Ausführung (Mehrpreis beachten)  
A = auf Anfrage

Insulated bearing N-end from shaft height KU1R 315 / KUOR 280 included  
The motors with thermistor temperature sensors as protection for stator winding have to be equipped with thermistors for inverter feeding  $\geq 420$  V.  
It is recommended to use winding protection for all motors (Additional prices).  
Frequency higher 60 Hz high-speed-version (Additional prices)  
A = on request

## Käfigläufermotoren für Umrichterbetrieb ohne Filter bis 690 V, Kühlart IC 411 nach DIN VDE 0530-25:2009-08, Kurve B

### Motors with squirrel-cage rotor, for inverter feeding, without filter up to 690 V, cooling method IC 411 acc. to DIN VDE 0530-25:2009-08, curve B

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

Type of construction IM B3, degree of protection IP 55, thermal class 155

	$P_B$	Typ	Preis	
	$P_B$ kW			Type
<b>3000 min<sup>-1</sup></b> <b>2p = 2</b>	5,5	KV1R 132 SX2	KVOR 112 M2	1.880,00
	7,5	KV1R 160 M2	KVOR 132 M2	2.580,00
	11,0	KV1R 160 MX2	KVOR 160 S2	3.090,00
	15,0	KV1R 160 L2	KVOR 160 M2	3.490,00
	18,5	KV1R 180 M2	KVOR 180 S2	4.460,00
	22,0	KV1R 200 L2	KVOR 180 M2	5.570,00
	30,0	KV1R 200 LX2	KVOR 200 M2	6.800,00
	37,0	KV1R 225 M2	KVOR 200L2	7.980,00
	45,0	KV1R 250 M2	KVOR 225 M2	10.500,00
	55,0	KV1R 280 S2	KVOR 250 S2	13.800,00
	75,0	KV1R 280 M2	KVOR 250 M2	16.000,00
	90,0	KV1R 315 S2	KVOR 280 S2	22.700,00
	110,0	KV1R 315 M2	KVOR 280 M2	25.800,00
	132,0	KV1R 315 MX2	KVOR 315 S2	30.200,00
	160,0	KV1R 315 MY2	KVOR 315 M2	39.100,00
	200,0	KV1R 315 L2	KVOR 315 L2	47.500,00
	250,0	KV1R 315 LX2	KVOR 315 LX2	57.900,00
	280,0	KV2R 355 MY2	-	A
	300,0	KV2R 355 M2	-	A
	340,0	KV2R 355 MX2	-	A
370,0	KV2R 355 LY2	-	A	
410,0	KV2R 355 L2	-	A	

	$P_B$	Typ	Preis	
	$P_B$ kW			Type
<b>1500 min<sup>-1</sup></b> <b>2p = 4</b>	5,52	KV1R 132 M4	KVOR 132 S4	1.910,00
	7,52	KV1R 160 M4	KVOR 132 M4	2.630,00
	11,0	KV1R 160 L4	KVOR 160 S4	3.170,00
	15,0	KV1R 180 M4	KVOR 160 MX4	4.070,00
	18,5	KV1R 180 L4	KVOR 180 S4	4.560,00
	22,0	KV1R 200 L4	KVOR 180 M4	5.720,00
	30,0	KV1R 225 S4	KVOR 200 M4	6.670,00
	37,0	KV1R 225 M4	KVOR 200 L4	7.820,00
	45,0	KV1R 250 M4	KVOR 225 M4	10.400,00
	55,0	KV1R 280 S4	KVOR 250 S4	13.100,00
	75,0	KV1R 280 M4	KVOR 250 M4	14.900,00
	90,0	KV1R 315 S4	KVOR 280 S4	21.400,00
	110,0	KV1R 315 M4	KVOR 280 M4	24.600,00
	132,0	KV1R 315 MX4	KVOR 315 S4	29.000,00
	160,0	KV1R 315 MY4	KVOR 315 M4	37.100,00
	200,0	KV1R 315 L4	KVOR 315 L4	44.700,00
	250,0	KV1R 315 LX4	KVOR 315 LX4	54.500,00
	280,0	KV2R 355 MY4	-	A
	300,0	KV2R 355 M4	-	A
	340,0	KV2R 355 MX4	-	A
370,0	KV2R 355 LY4	-	A	
410,0	KV2R 355 L4	-	A	

	$P_B$	Typ	Preis	
	$P_B$ kW			Type
<b>1000 min<sup>-1</sup></b> <b>2p = 6</b>	2,2	KV1R 132 M6	KVOR 112 MX6	1.540,00
	3,0	KV1R 132 MX6	KVOR 132 S6	1.750,00
	4,0	KV1R 132 LX6	KVOR 132 S6	2.080,00
	5,5	KV1R 160 M6	KVOR 132 M6	2.730,00
	7,5	KV1R 160 L6	KVOR 160 S6	3.360,00
	11,0	KV1R 180 L6	KVOR 160 M6	4.670,00
	15,0	KV1R 200 L6	KVOR 180 S6	5.490,00
	18,5	KV1R 200 LX6	KVOR 180 M6	6.220,00
	22,0	KV1R 225 M6	KVOR 200 M6	8.000,00
	30,0	KV1R 250 M6	KVOR 225 M6	10.600,00
	37,0	KV1R 280 S6	KVOR 250 S6	12.400,00
	45,0	KV1R 280 M6	KVOR 250 M6	14.600,00
	55,0	KV1R 315 S6	KVOR 280 S6	22.500,00
	75,0	KV1R 315 M6	KVOR 280 M6	25.600,00
	90,0	KV1R 315 MX6	KVOR 315 S6	29.800,00
	110,0	KV1R 315 MY6	KVOR 315 M6	36.800,00
	132,0	KV1R 315 L6	KVOR 315 L6	43.400,00
	160,0	KV1R 315 LX6	KVOR 315 LX6	51.600,00
	180,0	KV2R 355 MY6	-	62.800,00
	200,0	KV2R 355 M6	-	66.200,00
250,0	KV2R 355 MX6	-	80.300,00	
300,0	KV2R 355 LY6	-	91.000,00	

	$P_B$	Typ	Preis	
	$P_B$ kW			Type
<b>750 min<sup>-1</sup></b> <b>2p = 8</b>	1,5	KV1R 132 M8	KVOR 112 MX8	1.770,00
	2,2	KV1R 160 M8	KVOR 132 S8	2.040,00
	3,0	KV1R 160 M8	KVOR 132 S8	2.580,00
	4,0	KV1R 160 MX8	KVOR 132 M8	3.010,00
	5,5	KV1R 160 L8	KVOR 160 S8	3.430,00
	7,5	KV1R 180 L8	KVOR 160 M8	4.840,00
	11,0	KV1R 200 L8	KVOR 180 S8	6.050,00
	15,0	KV1R 200 M8	KVOR 180 M8	7.040,00
	18,5	KV1R 225 M8	KVOR 200 M8	7.890,00
	22,0	KV1R 250 M8	KVOR 225 M8	11.200,00
	30,0	KV1R 280 S8	KVOR 250 S8	12.800,00
	37,0	KV1R 280 M8	KVOR 250 M8	15.000,00
	45,0	KV1R 315 S8	KVOR 280 S8	21.200,00
	55,0	KV1R 315 M8	KVOR 280 M8	26.700,00
	75,0	KV1R 315 MX8	KVOR 315 S8	30.300,00
	90,0	KV1R 315 MY8	KVOR 315 M8	37.300,00
	110,0	KV1R 315 L8	KVOR 315 L8	44.600,00
	132,0	KV1R 315 LX8	KVOR 315 LX8	50.600,00
	145,0	KV2R 355 MY8	-	62.100,00
	160,0	KV2R 355 M8	-	65.400,00
190,0	KV2R 355 MX8	-	80.200,00	
210,0	KV2R 355 LY8	-	91.100,00	

Ab Baugröße KV1R 315 / KVOR 280 inklusive isoliertes Wälzlager N-Seite  
Die Motoren mit Kaltleiter als thermischen Wicklungsschutz müssen mit Kaltleiter für Umrichterspeisung  $\geq 420$  V ausgerüstet werden.  
Es wird empfohlen, für alle Motoren Wicklungsschutz einzusetzen (Mehrpreis beachten).  
Frequenz höher 60 Hz High-Speed-Ausführung (Mehrpreis beachten)  
Achtung: Baugrößen und Leistungsanordnung abweichend von Grundreihe  
A = auf Anfrage

Insulated bearing N-end from shaft height KV1R 315 / KVOR 280 included  
The motors with thermistor temperature sensors as protection for stator winding have to be equipped with thermistors for inverter feeding  $\geq 420$  V.  
It is recommended to use winding protection for all motors (Additional prices)  
Frequency higher 60 Hz high-speed-version (Additional prices)  
Attention: Sizes and power correlation different from basic range  
A = on request

## Käfigläufermotoren, fremdbelüftet, Kühlart IC 416, für Umrichterbetrieb ohne Filter bis 500 V nach DIN VDE 0530-25:2009-08, Kurve A

## Motors with squirrel-cage rotor, forced ventilated, type of cooling IC 416, for inverter feeding without filter up to 500 V acc. to DIN VDE 0530-25:2009-08, curve A

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

Type of construction IM B3, degree of protection IP 55, thermal class 155

	$P_b$ $P_b$ kW	Typ Type	Preis Price €	
3000 min <sup>-1</sup> 2p = 2	0,37	KU1F 71 K2	KUOF 63 K2	930,00
	0,55	KU1F 71 G2	KUOF 63 G2	963,00
	0,75	KU1F 80 K2	KUOF 71 K2	1.030,00
	1,1	KU1F 80 G2	KUOF 71 G2	1.070,00
	1,5	KU1F 90 S2	KUOF 80 K2	1.260,00
	2,2	KU1F 90 L2	KUOF 80 G2	1.390,00
	3,0	KU1F 100 L2	KUOF 90 L2	1.630,00
	4,0	KU1F 112 M2	KUOF 100 S2	1.900,00
	5,5	KU1F 112 MX2	KUOF 100 L2	2.290,00
	5,5	KU1F 132 S2T	-	2.400,00
	7,5	KU1F 132 SX2	KUOF 112 M2	2.420,00
	10,5	KU1F 160 M2	KUOF 132 M2	3.260,00
	15,0	KU1F 160 MX2	KUOF 160 S2	3.780,00
	18,5	KU1F 160 L2	KUOF 160 M2	4.180,00
	22,0	KU1F 180 M2	KUOF 180 S2	4.910,00
	30,0	KU1F 200 L2	KUOF 180 M2	5.940,00
	37,0	KU1F 200 LX2	KUOF 200 M2	7.220,00
	45,0	KU1F 225 M2	KUOF 200 L2	8.730,00
	55,0	KU1F 250 M2	KUOF 225 M2	10.100,00
	74,0	KU1F 280 S2	KUOF 250 S2	13.500,00
	87,0	KU1F 280 M2	KUOF 250 M2	15.800,00
	110,0	KU1F 315 S2	KUOF 280 S2	21.100,00
	132,0	KU1F 315 M2	KUOF 280 M2	24.000,00
	160,0	KU1F 315 MX2	KUOF 315 S2	28.800,00
	192,0	KU1F 315 MY2	KUOF 315 M2	35.800,00
	220,0	KU1F 315 L2	KUOF 315 L2	44.500,00
	270,0	KU1F 315 LX2	KUOF 315 LX2	54.900,00
	315,0	KU2F 355 MY2	-	A
330,0	KU2F 355 M2	-	A	
355,0	KU2F 355 MX2	-	A	
380,0	KU2F 355 LY2	-	A	
425,0	KU2F 355 L2	-	A	

	$P_b$ $P_b$ kW	Typ Type	Preis Price €	
1000 min <sup>-1</sup> 2p = 6	0,18	KU1F 71 K6	KUOF 63 K6	944,00
	0,25	KU1F 71 G6	KUOF 63 G6	969,00
	0,37	KU1F 80 K6	KUOF 71 K6	1.030,00
	0,55	KU1F 80 G6	KUOF 71 G6	1.070,00
	0,75	KU1F 90 S6	KUOF 80 K6	1.260,00
	1,1	KU1F 90 L6	KUOF 80 G6	1.380,00
	1,5	KU1F 100 L6	KUOF 90 L6	1.560,00
	2,2	KU1F 112 M6	KUOF 100 S6	1.870,00
	3,0	KU1F 132 S6T	-	2.090,00
	3,0	KU1F 132 S6	KUOF 112 M6	2.110,00
	4,0	KU1F 132 M6	KUOF 112 MX6	2.340,00
	5,5	KU1F 132 MX6	KUOF 132 S6	2.920,00
	7,5	KU1F 160 M6	KUOF 132 M6	3.400,00
	11,0	KU1F 160 L6	KUOF 160 S6	4.050,00
	15,0	KU1F 180 L6	KUOF 160 M6	5.100,00
	18,5	KU1F 200 L6	KUOF 180 S6	5.890,00
	22,0	KU1F 200 LX6	KUOF 180 M6	6.620,00
	30,0	KU1F 225 M6	KUOF 200 M6	8.730,00
	37,0	KU1F 250 M6	KUOF 225 M6	10.100,00
	45,0	KU1F 280 S6	KUOF 250 S6	12.600,00
	55,0	KU1F 280 M6	KUOF 250 M6	14.600,00
	75,0	KU1F 315 S6	KUOF 280 S6	21.100,00
	90,0	KU1F 315 M6	KUOF 280 M6	24.000,00
	110,0	KU1F 315 MX6	KUOF 315 S6	28.400,00
	132,0	KU1F 315 MY6	KUOF 315 M6	33.300,00
	160,0	KU1F 315 L6	KUOF 315 L6	39.900,00
	185,0	KU1F 315 LX6	KUOF 315 LX6	48.100,00
	200,0	KU2F 355 MY6	-	60.000,00
250,0	KU2F 355 M6	-	63.100,00	
300,0	KU2F 355 MX6	-	77.300,00	
315,0	KU2F 355 LY6	-	87.900,00	

	$P_b$ $P_b$ kW	Typ Type	Preis Price €	
1500 min <sup>-1</sup> 2p = 4	0,25	KU1F 71 K4	KUOF 63 K4	928,00
	0,37	KU1F 71 G4	KUOF 63 G4	952,00
	0,55	KU1F 80 K4	KUOF 71 K4	1.020,00
	0,75	KU1F 80 G4	KUOF 71 G4	1.050,00
	1,1	KU1F 90 S4	KUOF 80 K4	1.230,00
	1,5	KU1F 90 L4	KUOF 80 G4	1.280,00
	2,2	KU1F 100 L4	KUOF 90 L4	1.510,00
	3,0	KU1F 100 LX4	KUOF 100 S4	1.800,00
	4,0	KU1F 112 M4	KUOF 100 L4	1.930,00
	5,5	KU1F 132 S4T	-	2.230,00
	5,5	KU1F 132 S4	KUOF 112 M4	2.180,00
	7,5	KU1F 132 M4	KUOF 132 S4	2.740,00
	11,0	KU1F 160 M4	KUOF 132 M4	3.310,00
	15,0	KU1F 160 L4	KUOF 160 S4	3.870,00
	18,0	KU1F 180 M4	KUOF 160 M4	4.530,00
	22,0	KU1F 180 L4	KUOF 180 S4	5.030,00
	29,0	KU1F 200 L4	KUOF 180 M4	6.130,00
	37,0	KU1F 225 S4	KUOF 200 M4	7.370,00
	45,0	KU1F 225 M4	KUOF 200 L4	8.570,00
	55,0	KU1F 250 M4	KUOF 225 M4	9.880,00
	75,0	KU1F 280 S4	KUOF 250 S4	13.100,00
	90,0	KU1F 280 M4	KUOF 250 M4	15.000,00
	110,0	KU1F 315 S4	KUOF 280 S4	20.500,00
	132,0	KU1F 315 M4	KUOF 280 M4	23.700,00
	160,0	KU1F 315 MX4	KUOF 315 S4	27.900,00
	200,0	KU1F 315 MY4	KUOF 315 M4	33.900,00
	250,0	KU1F 315 L4	KUOF 315 L4	41.800,00
	285,0	KU1F 315 LX4	KUOF 315 LX4	51.600,00
315,0	KU2F 355 MY4	-	A	
355,0	KU2F 355 M4	-	A	
390,0	KU2F 355 MX4	-	A	
430,0	KU2F 355 LY4	-	A	

	$P_b$ $P_b$ kW	Typ Type	Preis Price €	
750 min <sup>-1</sup> 2p = 8	0,09	KU1F 71 K8	KUOF 63 K8	967,00
	0,12	KU1F 71 G8	KUOF 63 G8	978,00
	0,18	KU1F 80 K8	KUOF 71 K8	1.050,00
	0,25	KU1F 80 G8	KUOF 71 G8	1.110,00
	0,37	KU1F 90 S8	KUOF 80 K8	1.310,00
	0,55	KU1F 90 L8	KUOF 80 G8	1.420,00
	0,75	KU1F 100 L8	KUOF 90 L8	1.610,00
	1,1	KU1F 100 LX8	KUOF 100 S8	1.910,00
	1,5	KU1F 112 M8	KUOF 100 L8	2.050,00
	2,2	KU1F 132 S8T	-	2.340,00
	2,2	KU1F 132 S8	KUOF 112 M8	2.270,00
	3,0	KU1F 132 M8	KUOF 112 MX8	2.610,00
	4,0	KU1F 160 M8	KUOF 132 S8	3.240,00
	5,5	KU1F 160 MX8	KUOF 132 M8	3.690,00
	7,5	KU1F 160 L8	KUOF 160 S8	4.110,00
	11,0	KU1F 180 L8	KUOF 160 M8	5.280,00
	15,0	KU1F 200 L8	KUOF 180 S8	6.420,00
	18,5	KU1F 225 S8	-	7.740,00
	22,0	KU1F 225 M8	KUOF 200 M8	8.660,00
	30,0	KU1F 250 M8	KUOF 225 M8	10.800,00
	37,0	KU1F 280 S8	KUOF 250 S8	13.000,00
	45,0	KU1F 280 M8	KUOF 250 M8	15.400,00
	55,0	KU1F 315 S8	KUOF 280 S8	20.300,00
	75,0	KU1F 315 M8	KUOF 280 M8	25.400,00
	90,0	KU1F 315 MX8	KUOF 315 S8	29.100,00
	110,0	KU1F 315 MY8	KUOF 315 M8	33.600,00
	132,0	KU1F 315 L8	KUOF 315 L8	40.100,00
	145,0	KU1F 315 LX8	KUOF 315 LX8	47.000,00
160,0	KU2F 355 MY8	KUOF 315 LX8	59.100,00	
200,0	KU2F 355 M8	-	62.400,00	
215,0	KU2F 355 MX8	-	77.200,00	
230,0	KU2F 355 LY8	-	88.000,00	

Ab Baugröße KU1F 315 / KUOF 280 inklusive isoliertes Wälzlager N-Seite  
Fremdbelüftete Motoren müssen zwingend mit thermischen Motorschutz ausgerüstet sein  
Thermischer Wicklungsschutz erforderlich  
Frequenz höher 60 Hz High-Speed-Ausführung (Mehrpreis beachten)  
A = auf Anfrage

Insulated bearing N-end from shaft height KU1F 315 / KUOF 280 included  
Forced ventilated motors must have thermal winding protection as a mandatory requirement  
Thermal winding protection necessary  
Frequency higher 60 Hz high-speed-version (Additional prices)  
A = on request

## Käfigläufermotoren, fremdbelüftet, Kühlart IC 416, für Umrichterbetrieb ohne Filter bis 690 V nach DIN VDE 0530-25:2009-08, Kurve B

### Motors with squirrel-cage rotor, forced ventilated, type of cooling IC 416, for inverter feeding without filter up to 690 V, acc. to DIN VDE 0530-25:2009-08, curve B

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

Type of construction IM B3, degree of protection IP 55, thermal class 155

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
3000 min <sup>-1</sup> 2p = 2	5,5	KV1F 132 SX2	KVOF 112 M2	2.630,00
	7,5	KV1F 160 M2	KVOF 132 M2	3.630,00
	11,0	KV1F 160 MX2	KVOF 160 S2	4.150,00
	15,0	KV1F 160 L2	KVOF 160 M2	4.550,00
	18,5	KV1F 180 M2	KVOF 180 S2	5.520,00
	22,0	KV1F 200 L2	KVOF 180 M2	6.620,00
	30,0	KV1F 200 LX2	KVOF 200 M2	7.880,00
	37,0	KV1F 225 M2	KVOF 200L2	9.100,00
	45,0	KV1F 250 M2	KVOF 225 M2	11.600,00
	55,0	KV1F 280 S2	KVOF 250 S2	14.700,00
	75,0	KV1F 280 M2	KVOF 250 M2	17.100,00
	90,0	KV1F 315 S2	KVOF 280 S2	24.200,00
	110,0	KV1F 315 M2	KVOF 280 M2	27.000,00
	132,0	KV1F 315 MX2	KVOF 315 S2	31.900,00
	160,0	KV1F 315 MY2	KVOF 315 M2	41.200,00
	200,0	KV1F 315 L2	KVOF 315 L2	49.700,00
	250,0	KV1F 315 LX2	KVOF 315 LX2	60.000,00
	280,0	KV2F 355 MY2	-	A
	300,0	KV2F 355 M2	-	A
	340,0	KV2F 355 MX2	-	A
370,0	KV2F 355 LY2	-	A	
410,0	KV2F 355 L2	-	A	

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
1500 min <sup>-1</sup> 2p = 4	5,5	KV1F 132 M4	KVOF 132 S4	2.950,00
	7,5	KV1F 160 M4	KVOF 132 M4	3.690,00
	11,0	KV1F 160 L4	KVOF 160 S4	4.230,00
	15,0	KV1F 180 M4	KVOF 160 M4	5.150,00
	18,5	KV1F 180 L4	KVOF 180 S4	5.640,00
	22,0	KV1F 200 L4	KVOF 180 M4	6.790,00
	30,0	KV1F 225 S4	KVOF 200 M4	7.760,00
	37,0	KV1F 225 M4	KVOF 200 L4	8.970,00
	45,0	KV1F 250 M4	KVOF 225 M4	11.400,00
	55,0	KV1F 280 S4	KVOF 250 S4	14.500,00
	75,0	KV1F 280 M4	KVOF 250 M4	16.400,00
	90,0	KV1F 315 S4	KVOF 280 S4	23.500,00
	110,0	KV1F 315 M4	KVOF 280 M4	26.700,00
	132,0	KV1F 315 MX4	KVOF 315 S4	31.000,00
	160,0	KV1F 315 MY4	KVOF 315 M4	39.200,00
	200,0	KV1F 315 L4	KVOF 315 L4	46.900,00
	250,0	KV1F 315 LX4	KVOF 315LX4	56.700,00
	280,0	KV2F 355 MY4	-	A
	300,0	KV2F 355 M4	-	A
	340,0	KV2F 355 MX4	-	A
370,0	KV2F 355 LY4	-	A	
410,0	KV2F 355 L4	-	A	

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
1000 min <sup>-1</sup> 2p = 6	2,2	KV1F 132 M6	KVOF 112 MX6	2.320,00
	3,0	KV1F 132 MX6	KVOF 132 S6	2.530,00
	4,0	KV1F 132 MX6	KVOF 132 S6	3.120,00
	5,5	KV1F 160 M6	KVOF 132 M6	3.780,00
	7,5	KV1F 160 L6	KVOF 160 S6	4.430,00
	11,0	KV1F 180 L6	KVOF 160 M6	5.720,00
	15,0	KV1F 200 L6	KVOF 180 S6	6.560,00
	18,5	KV1F 200 LX6	KVOF 180 M6	7.290,00
	22,0	KV1F 225 M6	KVOF 200 M6	9.100,00
	30,0	KV1F 250 M6	KVOF 225 M6	11.700,00
	37,0	KV1F 280 S6	KVOF 250 S6	14.000,00
	45,0	KV1F 280 M6	KVOF 250 M6	16.000,00
	55,0	KV1F 315 S6	KVOF 280 S6	24.200,00
	75,0	KV1F 315 M6	KVOF 280 M6	27.000,00
	90,0	KV1F 315 MX6	KVOF 315 S6	31.200,00
	110,0	KV1F 315 MY6	KVOF 315 M6	38.400,00
	132,0	KV1F 315 L6	KVOF 315 L6	45.200,00
	160,0	KV1F 315 LX6	KVOF 315 LX6	53.300,00
	180,0	KV2F 355 MY6	-	66.500,00
	200,0	KV2F 355 M6	-	70.000,00
250,0	KV2F 355 MX6	-	84.100,00	
300,0	KV2F 355 LY6	-	94.700,00	

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
750 min <sup>-1</sup> 2p = 8	1,5	KV1F 132 M8	KVOF 112 MX8	2.460,00
	2,2	KV1F 160 M8	KVOF 132 S8	2.820,00
	3,0	KV1F 160 M8	KVOF 132 S8	3.620,00
	4,0	KV1F 160 MX8	KVOF 132 M8	4.060,00
	5,5	KV1F 160 L8	KVOF 160 S8	4.480,00
	7,5	KV1F 180 L8	KVOF 160 M8	5.900,00
	11,0	KV1F 200 L8	KVOF 180 S8	7.080,00
	15,0	KV1F 200 M8	KVOF 180 M8	8.120,00
	18,5	KV1F 225 M8	KVOF 200 M8	9.020,00
	22,0	KV1F 250 M8	KVOF 225 M8	12.300,00
	30,0	KV1F 280 S8	KVOF 250 S8	14.400,00
	37,0	KV1F 280 M8	KVOF 250 M8	16.600,00
	45,0	KV1F 315 S8	KVOF 280 S8	23.200,00
	55,0	KV1F 315 M8	KVOF 280 M8	28.700,00
	75,0	KV1F 315 MX8	KVOF 315 S8	32.200,00
	90,0	KV1F 315 MY8	KVOF 315 M8	38.700,00
	110,0	KV1F 315 L8	KVOF 315 L8	46.500,00
	132,0	KV1F 315 LX8	KVOF 315 LX8	52.500,00
	145,0	KV2F 355 MY8	-	65.800,00
	160,0	KV2F 355 M8	-	69.000,00
190,0	KV2F 355 MX8	-	83.900,00	
210,0	KV2F 355 LY8	-	94.800,00	

Ab Baugröße KV1F 315 / KVOF 280 inklusive isoliertes Wälzlager N-Seite  
Fremdbelüftete Motoren müssen zwingend mit thermischen Motorschutz ausgerüstet sein  
Frequenz höher 60 Hz High-Speed-Ausführung (Mehrpreis beachten)  
Achtung: Baugrößen und Leistungszuordnung abweichend von Grundreihe  
A = auf Anfrage

Insulated bearing N-end from shaft height KV1F 315 / KVOF 280 included  
Forced ventilated motors must have thermal winding protection as a mandatory requirement  
Frequency higher 60 Hz high-speed-version (Additional prices)  
Attention: Sizes and power correlation different from basic range  
A = on request

# Käfigläufermotoren, Marineausführung Squirrel-cage motors, marine version

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

Type of construction IM B3, degree of protection IP 55, thermal class 155

3000 min <sup>-1</sup> 2p = 2	P <sub>B</sub>		Typ		Preis
	GL, RRS 380 V 50 Hz	GL, RRS 440 V 60 Hz			€
	P <sub>B</sub>		Type		Price
	380 V 50 Hz	440 V 60 Hz			€
	kW				
0,18	0,21	KPER 63 K2	KPR 56 K2	323,00	
0,25	0,3	KPER 63 G2	KPR 56 G2	331,00	
0,37	0,44	KPER 71 K2	KPR 63 K2	338,00	
0,55	0,65	KPER 71 G2	KPR 63 G2	368,00	
0,75	0,9	KPER 80 K2	KPR 71 K2	406,00	
1,1	1,3	KPER 80 G2	KPR 71 G2	447,00	
1,5	1,8	KPER 90 S2	KPR 80 K2	520,00	
2,2	2,6	KPER 90 L2	KPR 80 G2	630,00	
3,0	3,6	KPER 100 L2	KPR 90 L2	746,00	
4,0	4,8	KPER 112 M2	KPR 100 S2	880,00	
5,5	6,6	K11R 132 S2	K10R 112 MY2	1.340,00	
7,5	9,0	K11R 132 SX2	K10R 112 M2	1.640,00	
11,0	13,0	K11R 160 M2	K10R 132 M2	2.130,00	
15,0	18,0	K11R 160 MX2	K10R 160 S2	2.630,00	
18,5	22,0	K11R 160 L2	K10R 160 M2	3.030,00	
22,0	26,0	K11R 180 M2	K10R 180 S2	3.860,00	
30,0	36,0	K11R 200 L2	K10R 180 M2	4.840,00	
37,0	44,0	K11R 200 LX2	K10R 200 M2	6.090,00	
45,0	54,0	K11R 225 M2	K10R 200 L2	7.220,00	
55,0	66,0	K11R 250 M2	K10R 225 M2	8.810,00	
75,0	90,0	K11R 280 S2	K10R 250 S2	11.900,00	
90,0	105,0	K11R 280 M2	K10R 250 M2	14.200,00	
110,0	132,0	K11R 315 S2	K10R 280 S2	17.100,00	
132,0	150,0	K11R 315 M2	K10R 280 M2	20.400,00	
160,0	190,0	K11R 315 MX2	K10R 315 S2	24.600,00	
200,0	225,0	K11R 315 MY2	K10R 315 M2	30.900,00	
250,0	280,0	K11R 315 L2	K10R 315 L2	39.500,00	
280,0	310,0	K11R 315 LX2	K10R 315 LX2	49.600,00	
315,0	340,0	K22R 355 M2	-	A	
355,0	390,0	K22R 355 MX2	-	A	
400,0	440,0	K22R 355 LY2	-	A	
450,0	490,0	K22R 355 L2	-	A	

1500 min <sup>-1</sup> 2p = 4	P <sub>B</sub>		Typ		Preis
	GL, RRS 380 V 50 Hz	GL, RRS 440 V 60 Hz			€
	P <sub>B</sub>		Type		Price
	380 V 50 Hz	440 V 60 Hz			€
	kW				
0,12	0,14	KPER 63 K4	KPR 56 K4	323,00	
0,18	0,21	KPER 63 G4	KPR 56 G4	331,00	
0,25	0,3	KPER 71 K4	KPR 63 K4	336,00	
0,37	0,44	KPER 71 G4	KPR 63 G4	359,00	
0,55	0,65	KPER 80 K4	KPR 71 K4	395,00	
0,75	0,9	KPER 80 G4	KPR 71 G4	422,00	
1,1	1,3	KPER 90 S4	KPR 80 K4	482,00	
1,5	1,8	KPER 90 L4	KPR 80 G4	550,00	
2,2	2,6	KPER 100 L4	KPR 90 L4	667,00	
3,0	3,6	KPER 100 LX4	KPR 100 S4	773,00	
4,0	4,8	KPER 112 M4	KPR 100 L4	917,00	
5,5	6,6	K11R 132 S4	K10R 112 M4	1.400,00	
7,5	9,0	K11R 132 M4	K10R 132 S4	1.670,00	
11,0	13,0	K11R 160 M4	K10R 132 M4	2.170,00	
15,0	18,0	K11R 160 L4	K10R 160 S4	2.730,00	
18,5	22,0	K11R 180 M4	K10R 160 M4	3.480,00	
22,0	26,0	K11R 180 L4	K10R 180 S4	3.960,00	
30,0	34,0	K11R 200 L4	K10R 180 M4	5.010,00	
37,0	44,0	K11R 225 S4	K10R 200 M4	5.910,00	
45,0	54,0	K11R 225 M4	K10R 200 L4	7.070,00	
55,0	66,0	K11R 250 M4	K10R 225 M4	8.600,00	
75,0	90,0	K11R 280 S4	K10R 250 S4	11.300,00	
90,0	105,0	K11R 280 M4	K10R 250 M4	13.100,00	
110,0	132,0	K11R 315 S4	K10R 280 S4	16.100,00	
132,0	158,0	K11R 315 M4	K10R 280 M4	19.200,00	
160,0	190,0	K11R 315 MX4	K10R 315 S4	23.600,00	
200,0	225,0	K11R 315 MY4	K10R 315 M4	28.900,00	
250,0	280,0	K11R 315 L4	K10R 315 L4	36.600,00	
280,0	310,0	K11R 315 LX4	K10R 315 LX4	46.400,00	
315,0	340,0	K22R 355 M4	-	A	
355,0	390,0	K22R 355 MX4	-	A	
400,0	440,0	K22R 355 LY4	-	A	

1000 min <sup>-1</sup> 2p = 6	P <sub>B</sub>		Typ		Preis
	GL, RRS 380 V 50 Hz	GL, RRS 440 V 60 Hz			€
	P <sub>B</sub>		Type		Price
	380 V 50 Hz	440 V 60 Hz			€
	kW				
0,09	0,105	KPER 63 K6	KPR 56 K6	331,00	
0,12	0,14	KPER 63 G6	KPR 56 G6	336,00	
0,18	0,21	KPER 71 K6	KPR 63 K6	351,00	
0,25	0,30	KPER 71 G6	KPR 63 G6	372,00	
0,37	0,44	KPER 80 K6	KPR 71 K6	406,00	
0,55	0,65	KPER 80 G6	KPR 71 G6	454,00	
0,75	0,9	KPER 90 S6	KPR 80 K6	518,00	
1,1	1,3	KPER 90 L6	KPR 80 G6	607,00	
1,5	1,8	KPER 100 L6	KPR 90 L6	704,00	
2,2	2,6	KPER 112 M6	KPR 100 L6	844,00	
3,0	3,6	K11R 132 S6	K10R 112 M6	1.280,00	
4,0	4,8	K11R 132 M6	K10R 112 MX6	1.540,00	
5,5	6,6	K11R 132 MX6	K10R 132 S6	1.840,00	
7,5	9,0	K11R 160 M6	K10R 132 M6	2.280,00	
11,0	13,0	K11R 160 L6	K10R 160 S6	2.910,00	
14,0	16,0	K11R 180 L6	K10R 160 M6	4.050,00	
18,5	21,0	K11R 200 L6	K10R 180 S6	4.780,00	
22,0	26,0	K11R 200 LX6	K10R 180 M6	5.490,00	
30,0	34,0	K11R 225 M6	K10R 200 M6	7.250,00	
37,0	42,0	K11R 250 M6	K10R 225 M6	8.880,00	
45,0	54,0	K11R 280 S6	K10R 250 S6	10.700,00	
55,0	66,0	K11R 280 M6	K10R 250 M6	12.700,00	
75,0	90,0	K11R 315 S6	K10R 280 S6	16.900,00	
90,0	108,0	K11R 315 M6	K10R 280 M6	20.200,00	
110,0	132,0	K11R 315 MX6	K10R 315 S6	24.300,00	
132,0	158,0	K11R 315 MY6	K10R 315 M6	28.600,00	
160,0	190,0	K11R 315 L6	K10R 315 L6	35.200,00	
200,0	230,0	K11R 315 LX6	K10R 315 LX6	43.400,00	
220,0	240,0	K22R 355 M6	-	56.600,00	
250,0	270,0	K22R 355 MX6	-	70.800,00	
315,0	340,0	K22R 355 LY6	-	81.500,00	

750 min <sup>-1</sup> 2p = 8	P <sub>B</sub>		Typ		Preis
	GL, RRS 380 V 50 Hz	GL, RRS 440 V 60 Hz			€
	P <sub>B</sub>		Type		Price
	380 V 50 Hz	440 V 60 Hz			€
	kW				
0,09	0,105	KPER 71 K8	KPR 63 K8	371,00	
0,12	0,14	KPER 71 G8	KPR 63 G8	395,00	
0,18	0,21	KPER 80 K8	KPR 71 K8	423,00	
0,25	0,30	KPER 80 G8	KPR 71 G8	485,00	
0,37	0,44	KPER 90 S8	KPR 80 K8	568,00	
0,55	0,65	KPER 90 L8	KPR 80 G8	667,00	
0,75	0,90	KPER 100 L8	KPR 90 L8	746,00	
1,1	1,3	KPER 100 LX8	KPR 100 S8	880,00	
1,5	1,8	KPER 112 M8	KPR 100 L8	1.030,00	
2,2	2,6	K11R 132 S8	K10R 112 M8	1.550,00	
3,0	3,6	K11R 132 M8	K10R 112 MX8	1.810,00	
4,0	4,8	K11R 160 M8	K10R 132 S8	2.130,00	
5,5	6,6	K11R 160 MX8	K10R 132 M8	2.540,00	
7,5	9,0	K11R 160 L8	K10R 160 S8	2.980,00	
11,0	13,0	K11R 180 L8	K10R 160 M8	4.220,00	
15,0	18,0	K11R 200 L8	K10R 180 S8	5.320,00	
18,5	22,0	K11R 225 S8	-	6.290,00	
22,0	26,0	K11R 225 M8	K10R 200 M8	7.130,00	
30,0	36,0	K11R 250 M8	K10R 225 M8	9.520,00	
37,0	44,0	K11R 280 S8	K10R 250 S8	11.100,00	
45,0	54,0	K11R 280 M8	K10R 250 M8	13.200,00	
55,0	66,0	K11R 315 S8	K10R 280 S8	16.000,00	
75,0	90,0	K11R 315 M8	K10R 280 M8	21.200,00	
90,0	108,0	K11R 315 MX8	K10R 315 S8	24.800,00	
110,0	132,0	K11R 315 MY8	K10R 315 M8	29.100,00	
132,0	158,0	K11R 315 L8	K10R 315 L8	35.300,00	
160,0	190,0	K11R 315 LX8	K10R 315 LX8	42.300,00	
180,0	200,0	K22R 355 M8	-	55.900,00	
200,0	220,0	K22R 355 MX8	-	70.700,00	
250,0	270,0	K22R 355 LY8	-	81.700,00	

Ohne Kosten für Typenprüfung und Abnahme  
Andere Klassifikationsgesellschaften auf Anfrage  
A = auf Anfrage

Without costs for type test and survey  
Other classification authorities on request  
A = on request

## Käfigläufermotoren, Marineausführung Squirrel-cage motors, marine version

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

Type of construction IM B3, degree of protection IP 55, thermal class 155

	P <sub>B</sub>		Typ		Preis
	BV,DNV,LR, ABS, CCS 380 V 50 Hz	BV,DNV,LR ABS, CCS 440 V 60 Hz			
	P <sub>B</sub>		Type		Price
	380 V 50 Hz	440 V 60 Hz			€
	kW				
<b>3000 min<sup>-1</sup></b> <b>2p = 2</b>	0,18	0,21	KPER 63 K2	KPR 56 K2	323,00
	0,25	0,3	KPER 63 G2	KPR 56 G2	331,00
	0,37	0,44	KPER 71 K2	KPR 63 K2	338,00
	0,55	0,65	KPER 71 G2	KPR 63 G2	368,00
	0,75	0,9	KPER 80 K2	KPR 71 K2	406,00
	1,1	1,3	KPER 80 G2	KPR 71 G2	447,00
	1,5	1,8	KPER 90 S2	KPR 80 K2	520,00
	2,2	2,6	KPER 90 L2	KPR 80 G2	630,00
	3,0	3,6	KPER 100 L2	KPR 90 L2	746,00
	4,0	4,8	KPER 112 M2	KPR 100 S2	880,00
	5,5	6,6	K11R 132 S2	K10R 112 MY2	1.340,00
	7,1	8,1	K11R 132 SX2	K10R 112 M2	1.640,00
	11,0	13,0	K11R 160 M2	K10R 132 M2	2.130,00
	15,0	18,0	K11R 160 MX2	K10R 160 S2	2.630,00
	18,5	22,0	K11R 160 L2	K10R 160 M2	3.030,00
	22,0	26,0	K11R 180 M2	K10R 180 S2	3.860,00
	30,0	36,0	K11R 200 L2	K10R 180 M2	4.840,00
	37,0	44,0	K11R 200 LX2	K10R 200 M2	6.090,00
	45,0	54,0	K11R 225 M2	K10R 200 L2	7.220,00
	55,0	66,0	K11R 250 M2	K10R 225 M2	8.810,00
	75,0	90,0	K11R 280 S2	K10R 250 S2	11.900,00
	90,0	105,0	K11R 280 M2	K10R 250 M2	14.200,00
	110,0	132,0	K11R 315 S2	K10R 280 S2	17.100,00
	132,0	158,0	K11R 315 M2	K10R 280 M2	20.400,00
	160,0	190,0	K11R 315 MX2	K10R 315 S2	24.600,00
	200,0	225,0	K11R 315 MY2	K10R 315 M2	30.900,00
	250,0	280,0	K11R 315 L2	K10R 315 L2	39.500,00
	280,0	310,0	K11R 315 LX2	K10R 315 LX2	49.600,00
315,0	340,0	K22R 355 M2	-	A	
355,0	390,0	K22R 355 MX2	-	A	
400,0	440,0	K22R 355 LY2	-	A	
450,0	490,0	K22R 355 L2	-	A	

	P <sub>B</sub>		Typ		Preis
	BV,DNV,LR, ABS, CCS 380 V 50 Hz	BV,DNV,LR ABS, CCS 440 V 60 Hz			
	P <sub>B</sub>		Type		Price
	380 V 50 Hz	440 V 60 Hz			€
	kW				
<b>1000 min<sup>-1</sup></b> <b>2p = 6</b>	0,09	0,105	KPER 63 K6	KPR 56 K6	331,00
	0,12	0,14	KPER 63 G6	KPR 56 G6	336,00
	0,18	0,21	KPER 71 K6	KPR 63 K6	351,00
	0,25	0,30	KPER 71 G6	KPR 63 G6	372,00
	0,37	0,44	KPER 80 K6	KPR 71 K6	406,00
	0,55	0,65	KPER 80 G6	KPR 71 G6	454,00
	0,75	0,9	KPER 90 S6	KPR 80 K6	518,00
	1,1	1,3	KPER 90 L6	KPR 80 G6	607,00
	1,5	1,8	KPER 100 L6	KPR 90 L6	704,00
	2,2	2,6	KPER 112 M6	KPR 100 L6	844,00
	3,0	3,6	K11R 132 S6	K10R 112 M6	1.280,00
	4,0	4,8	K11R 132 M6	K10R 112 MX6	1.540,00
	5,5	6,6	K11R 132 MX6	K10R 132 S6	1.840,00
	7,5	9,0	K11R 160 M6	K10R 132 M6	2.280,00
	11,0	13,0	K11R 160 L6	K10R 160 S6	2.910,00
	13,5	15,5	K11R 180 L6	K10R 160 M6	4.050,00
	18,5	21,0	K11R 200 L6	K10R 180 S6	4.780,00
	22,0	26,0	K11R 200 LX6	K10R 180 M6	5.490,00
	30,0	34,0	K11R 225 M6	K10R 200 M6	7.250,00
	37,0	42,0	K11R 250 M6	K10R 225 M6	8.880,00
	45,0	54,0	K11R 280 S6	K10R 250 S6	10.700,00
	55,0	66,0	K11R 280 M6	K10R 250 M6	12.700,00
	75,0	90,0	K11R 315 S6	K10R 280 S6	16.900,00
	90,0	108,0	K11R 315 M6	K10R 280 M6	20.200,00
	110,0	132,0	K11R 315 MX6	K10R 315 S6	24.300,00
	132,0	158,0	K11R 315 MY6	K10R 315 M6	28.600,00
	160,0	180,0	K11R 315 L6	K10R 315 L6	35.200,00
	190,0	220,0	K11R 315 LX6	K10R 315 LX6	43.400,00
220,0	240,0	K22R 355 M6	-	56.600,00	
250,0	270,0	K22R 355 MX6	-	70.800,00	
315,0	340,0	K22R 355 LY6	-	81.500,00	

Ohne Kosten für Typenprüfung und Abnahme  
Andere Klassifikationsgesellschaften auf Anfrage  
A = auf Anfrage

	P <sub>B</sub>		Typ		Preis
	BV,DNV,LR, ABS, CCS 380 V 50 Hz	BV,DNV,LR ABS, CCS 440 V 60 Hz			
	P <sub>B</sub>		Type		Price
	380 V 50 Hz	440 V 60 Hz			€
	kW				
<b>1500 min<sup>-1</sup></b> <b>2p = 4</b>	0,12	0,14	KPER 63 K4	KPR 56 K4	323,00
	0,18	0,21	KPER 63 G4	KPR 56 G4	331,00
	0,25	0,3	KPER 71 K4	KPR 63 K4	336,00
	0,37	0,44	KPER 71 G4	KPR 63 G4	359,00
	0,55	0,65	KPER 80 K4	KPR 71 K4	395,00
	0,75	0,9	KPER 80 G4	KPR 71 G4	422,00
	1,1	1,3	KPER 90 S4	KPR 80 K4	482,00
	1,5	1,8	KPER 90 L4	KPR 80 G4	550,00
	2,2	2,6	KPER 100 L4	KPR 90 L4	667,00
	3,0	3,6	KPER 100 LX4	KPR 100 S4	773,00
	4,0	4,8	KPER 112 M4	KPR 100 L4	917,00
	5,5	6,6	K11R 132 S4	K10R 112 M4	1.400,00
	7,5	9,0	K11R 132 M4	K10R 132 S4	1.670,00
	11,0	13,0	K11R 160 M4	K10R 132 M4	2.170,00
	15,0	18,0	K11R 160 L4	K10R 160 S4	2.730,00
	17,5	20,0	K11R 180 M4	K10R 160 M4	3.480,00
	22,0	26,0	K11R 180 L4	K10R 180 S4	3.960,00
	30,0	34,0	K11R 200 L4	K10R 180 M4	5.010,00
	37,0	44,0	K11R 225 S4	K10R 200 M4	5.910,00
	43,0	49,5	K11R 225 M4	K10R 200 L4	7.070,00
	55,0	63,0	K11R 250 M4	K10R 225 M4	8.600,00
	75,0	90,0	K11R 280 S4	K10R 250 S4	11.300,00
	90,0	105,0	K11R 280 M4	K10R 250 M4	13.100,00
	110,0	132,0	K11R 315 S4	K10R 280 S4	16.100,00
	132,0	158,0	K11R 315 M4	K10R 280 M4	19.200,00
	160,0	190,0	K11R 315 MX4	K10R 315 S4	23.600,00
	200,0	225,0	K11R 315 MY4	K10R 315 M4	28.900,00
	250,0	280,0	K11R 315 L4	K10R 315 L4	36.600,00
280,0	310,0	K11R 315 LX4	K10R 315 LX4	46.400,00	
315,0	340,0	K22R 355 M4	-	A	
355,0	390,0	K22R 355 MX4	-	A	
400,0	440,0	K22R 355 LY4	-	A	

	P <sub>B</sub>		Typ		Preis
	BV,DNV,LR, ABS, CCS 380 V 50 Hz	BV,DNV,LR ABS, CCS 440 V 60 Hz			
	P <sub>B</sub>		Type		Price
	380 V 50 Hz	440 V 60 Hz			€
	kW				
<b>750 min<sup>-1</sup></b> <b>2p = 8</b>	0,09	0,105	KPER 71 K8	KPR 63 K8	371,00
	0,12	0,14	KPER 71 G8	KPR 63 G8	395,00
	0,18	0,21	KPER 80 K8	KPR 71 K8	423,00
	0,25	0,30	KPER 80 G8	KPR 71 G8	485,00
	0,37	0,44	KPER 90 S8	KPR 80 K8	568,00
	0,55	0,65	KPER 90 L8	KPR 80 G8	667,00
	0,75	0,90	KPER 100 L8	KPR 90 L8	746,00
	1,1	1,3	KPER 100 LX8	KPR 100 S8	880,00
	1,5	1,8	KPER 112 M8	KPR 100 L8	1.030,00
	2,2	2,6	K11R 132 S8	K10R 112 M8	1.550,00
	3,0	3,6	K11R 132 M8	K10R 112 MX8	1.810,00
	4,0	4,8	K11R 160 M8	K10R 132 S8	2.130,00
	5,5	6,6	K11R 160 MX8	K10R 132 M8	2.540,00
	7,5	9,0	K11R 160 L8	K10R 160 S8	2.980,00
	10,5	12,0	K11R 180 L8	K10R 160 M8	4.220,00
	15,0	18,0	K11R 200 L8	K10R 180 S8	5.320,00
	17,5	20,0	-	K10R 180 M8	6.290,00
	17,5	20,0	K11R 225 S8	-	6.290,00
	22,0	26,0	K11R 225 M8	K10R 200 M8	7.130,00
	30,0	36,0	K11R 250 M8	K10R 225 M8	9.520,00
	37,0	44,0	K11R 280 S8	K10R 250 S8	11.100,00
	45,0	54,0	K11R 280 M8	K10R 250 M8	13.200,00
	55,0	66,0	K11R 315 S8	K10R 280 S8	16.000,00
	75,0	90,0	K11R 315 M8	K10R 280 M8	21.200,00
	90,0	108,0	K11R 315 MX8	K10R 315 S8	24.800,00
	110,0	132,0	K11R 315 MY8	K10R 315 M8	29.100,00
	132,0	158,0	K11R 315 L8	K10R 315 L8	35.300,00
	160,0	190,0	K11R 315 LX8	K10R 315 LX8	42.300,00
180,0	200,0	K22R 355 M8	-	55.900,00	
200,0	220,0	K22R 355 MX8	-	70.700,00	
250,0	270,0	K22R 355 LY8	-	81.700,00	

Without costs for type test and survey  
Other classification authorities on request  
A = on request

## Energiesparmotoren Standard Efficiency IE1, nach IEC 60034-30 Bremsmotoren Energy saving motors, Standard Efficiency IE1, acc. to IEC 60034-30 Brake motors

Wirkungsgradbestimmung nach IEC 60034-2-1, mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb  
Thermische Klasse 155, Schutzart IP 55, Ausführung für Bemessungsspannungen Bereich A nach IEC 60034-1, 50 Hz  
Efficiency testing acc. to IEC 60034-2-1, with surface ventilation, mode of operation S1, continuous duty,  
thermal class 155, degree of protection IP 55, version for design voltage range A in accordance to IEC 60034-1, 50 Hz

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Bremse Brake	M <sub>H</sub> M <sub>H</sub> Nm	Preis Price €		
3000 min <sup>-1</sup> 2p = 2	0,18	B21R 63 K2	B20R 56 K2	BZFM 0,25	3	690,00	
	0,25	B21R 63 G2	B20R 56 G2	BZFM 0,25	3	699,00	
	0,37	B21R 71 K2	B20R 63 K2	BZFM 0,25	3	753,00	
	0,37	B21R 71 K2	B20R 63 K2	BZFM 0,63	6,3	779,00	
	0,55	B21R 71 G2	B20R 63 G2	BZFM 0,25	3	782,00	
	0,55	B21R 71 G2	B20R 63 G2	BZFM 0,63	6,3	807,00	
	IE1	0,75	IE1-B21R 80 K2	IE1-B20R 71 K2	BZFM 0,63	6,3	911,00
		0,75	IE1-B21R 80 K2	IE1-B20R 71 K2	BZFM 1,6	13,5	938,00
		1,1	IE1-B21R 80 G2	IE1-B20R 71 G2	BZFM 0,63	6,3	946,00
		1,1	IE1-B21R 80 G2	IE1-B20R 71 G2	BZFM 1,6	13,5	972,00
		1,5	IE1-B21R 90 S2	IE1-B20R 80 K2	BZFM 1,6	13,5	1.120,00
		1,5	IE1-B21R 90 S2	IE1-B20R 80 K2	BZFM 2,5	27	1.160,00
		2,2	IE1-B21R 90 L2	IE1-B20R 80 G2	BZFM 1,6	13,5	1.220,00
		2,2	IE1-B21R 90 L2	IE1-B20R 80 G2	BZFM 2,5	27	1.260,00
		3,0	IE1-B21R 100 L2	IE1-B20R 90 L2	BZFM 2,5	27	1.460,00
		3,0	IE1-B21R 100 L2	IE1-B20R 90 L2	BZFM 4	37	1.500,00
		4,0	IE1-B21R 112 M2	IE1-B20R 100 S2	BZFM 4	37	1.770,00
		4,0	IE1-B21R 112 M2	IE1-B20R 100 S2	BZFM 6,3	65	1.820,00
		5,5	IE1-B21R 132 S2T	IE1-B20R 100 L2	BZFM 4	37	2.150,00
		5,5	IE1-B21R 132 S2T	IE1-B20R 100 L2	BZFM 6,3	65	2.220,00
		7,5	IE1-B21R 132 SX2T	IE1-B20R 100 LV2 <sup>*)</sup>	BZFM 4	37	2.510,00
		7,5	IE1-B21R 132 SX2T	IE1-B20R 100 LV2 <sup>*)</sup>	BZFM 6,3	65	2.560,00
		5,5	IE1-B21R 132 S2	IE1-B20R 112 MY2	BZFM 6,3	65	A
		7,5	IE1-B21R 132 SX2	IE1-B20R 112 M2	BZFM 6,3	65	A
		11,0	IE1-B21R 160 M2	IE1-B20R 132 M2	BZFM 10	125	A
		15,0	IE1-B21R 160 MX2	IE1-B20R 160 S2	BZFM 16	200	A
		18,5	IE1-B21R 160 L2	IE1-B20R 160 M2	BZFM 16	200	A
		22,0	IE1-B21R 180 M2	IE1-B20R 180 S2	BZFM 16	200	A
		30,0	IE1-B21R 200 L2	IE1-B20R 180 M2	BZFM 25	380	A
		37,0	IE1-B21R 200 LX2	IE1-B20R 200 M2	BZFM 25	380	A
		45,0	IE1-B21R 225 M2	IE1-B20R 200 L2	BZFM 25	380	A
		55,0	IE1-B21R 250 M2	IE1-B20R 225 M2	4BZFM 40	400	A
		75,0	IE1-B21R 280 S2	IE1-B20R 250 S2	4BZFM 63	630	A
90,0	IE1-B21R 280 M2	IE1-B20R 250 M2	4BZFM 63	630	A		
110,0	IE1-B21R 315 S2	IE1-B20R 280 S2	4BZFM 100	1000	A		
132,0	IE1-B21R 315 M2	IE1-B20R 280 M2	4BZFM 100	1000	A		
160,0	IE1-B21R 315 MX2	IE1-B20R 315 S2	4BZFM 100	1000	A		
200,0	IE1-B21R 315 MY2	IE1-B20R 315 M2	4BZFM 160	1600	A		
250,0	IE1-B21R 315 L2	IE1-B20R 315 L2	4BZFM 160	1600	A		
315,0	IE1-B21R 315 LX2	IE1-B20R 315 LX2	4BZFM 160	1600	A		

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Bremse Brake	M <sub>H</sub> M <sub>H</sub> Nm	Preis Price €		
1500 min <sup>-1</sup> 2p = 4	0,12	B21R 63 K4	B20R 56 K4	BZFM 0,25	3	690,00	
	0,18	B21R 63 G4	B20R 56 G4	BZFM 0,25	3	699,00	
	0,25	B21R 71 K4	B20R 63 K4	BZFM 0,25	3	753,00	
	0,25	B21R 71 K4	B20R 63 K4	BZFM 0,63	6,3	779,00	
	0,37	B21R 71 G4	B20R 63 G4	BZFM 0,25	3	775,00	
	0,37	B21R 71 G4	B20R 63 G4	BZFM 0,63	6,3	801,00	
	IE1	0,55	B21R 80 K4	B20R 71 K4	BZFM 0,63	6,3	896,00
		0,55	B21R 80 K4	B20R 71 K4	BZFM 1,6	13,5	924,00
		0,75	IE1-B21R 80 G4	IE1-B20R 71 G4	BZFM 0,63	6,3	932,00
		0,75	IE1-B21R 80 G4	IE1-B20R 71 G4	BZFM 1,6	13,5	960,00
		1,1	IE1-B21R 90 S4	IE1-B20R 80 K4	BZFM 1,6	13,5	1.080,00
		1,1	IE1-B21R 90 S4	IE1-B20R 80 K4	BZFM 2,5	27	1.120,00
		1,5	IE1-B21R 90 L4	IE1-B20R 80 G4	BZFM 1,6	13,5	1.140,00
		1,5	IE1-B21R 90 L4	IE1-B20R 80 G4	BZFM 2,5	27	1.180,00
		2,2	IE1-B21R 100 L4	IE1-B20R 90 L4	BZFM 2,5	27	1.380,00
		2,2	IE1-B21R 100 L4	IE1-B20R 90 L4	BZFM 4	37	1.500,00
		3,0	IE1-B21R 100 LX4	IE1-B20R 100 S4	BZFM 4	37	1.640,00
		3,0	IE1-B21R 100 LX4	IE1-B20R 100 S4	BZFM 6,3	65	1.750,00
		4,0	IE1-B21R 112 M4	IE1-B20R 100 L4	BZFM 4	37	1.840,00
		4,0	IE1-B21R 112 M4	IE1-B20R 100 L4	BZFM 6,3	65	1.880,00
		5,5	IE1-B21R 132 S4T	IE1-B20R 100 LX4 <sup>*)</sup>	BZFM 4	37	2.120,00
		5,5	IE1-B21R 132 S4T	IE1-B20R 100 LX4 <sup>*)</sup>	BZFM 6,3	65	2.140,00
		5,5	IE1-B21R 132 S4	IE1-B20R 112 M4	BZFM 6,3	65	2.140,00
		7,5	IE1-B21R 132 M4	IE1-B20R 132 S4	BZFM 10	125	3.110,00
		11,0	IE1-B21R 160 M4	IE1-B20R 132 M4	BZFM 16	200	3.990,00
		15,0	IE1-B21R 160 L4	IE1-B20R 160 S4	BZFM 16	250	4.530,00
		18,5	IE1-B21R 180 M4	IE1-B20R 160 M4	BZFM 16	250	5.100,00
		22,0	IE1-B21R 180 L4	IE1-B20R 180 S4	BZFM 25	380	7.250,00
		30,0	IE1-B21R 200 L4	IE1-B20R 180 M4	BZFM 25	380	8.310,00
		37,0	IE1-B21R 225 S4	IE1-B20R 200 M4	BZFM 25	380	9.030,00
		45,0	IE1-B21R 225 M4	IE1-B20R 200 L4	BZFM 25	380	10.200,00
		55,0	IE1-B21R 250 M4	IE1-B20R 225 M4	4BZFM 63	800	16.400,00
		75,0	IE1-B21R 280 S4	IE1-B20R 250 S4	4BZFM 63	800	19.200,00
90,0	IE1-B21R 280 M4	IE1-B20R 250 M4	4BZFM 100	1000	23.700,00		
110,0	IE1-B21R 315 S4	IE1-B20R 280 S4	4BZFM 100	1000	27.000,00		
132,0	IE1-B21R 315 M4	IE1-B20R 280 M4	4BZFM 100	1000	30.200,00		
160,0	IE1-B21R 315 MX4	IE1-B20R 315 S4	4BZFM 100	1000	34.700,00		
200,0	IE1-B21R 315 MY4	IE1-B20R 315 M4	4BZFM 160	1600	45.200,00		
250,0	IE1-B21R 315 L4	IE1-B20R 315 L4	4BZFM 160	1600	52.700,00		
315,0	IE1-B21R 315 LX4	IE1-B20R 315 LX4	4BZFM 160	1600	62.400,00		

<sup>\*)</sup> Nur Flanschausführung

<sup>\*)</sup> Only flange-version

A = auf Anfrage

A = on request

## Energiesparmotoren Standard Efficiency IE1, nach IEC 60034-30 Bremsmotoren Energy saving motors, Standard Efficiency IE1, acc. to IEC 60034-30 Brake motors

Wirkungsgradbestimmung nach IEC 60034-2-1, mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb  
Thermische Klasse 155, Schutzart IP 55, Ausführung für Bemessungsspannungen Bereich A nach IEC 60034-1, 50 Hz  
Efficiency testing acc. to IEC 60034-2-1, with surface ventilation, mode of operation S1, continuous duty,  
thermal class 155, degree of protection IP 55, version for design voltage range A in accordance to IEC 60034-1, 50 Hz

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Bremse Brake	M <sub>H</sub> M <sub>H</sub> Nm	Preis Price €		
<b>1000 min<sup>-1</sup> 2p = 6</b>	0,12	B21R 63 G6	B20R 56 G6	BZFM 0,25	3	706,00	
	0,18	B21R 71 K6	B20R 63 K6	BZFM 0,25	3	759,00	
	0,18	B21R 71 K6	B20R 63 K6	BZFM 0,63	6,3	786,00	
	0,25	B21R 71 G6	B20R 63 G6	BZFM 0,25	3	793,00	
	0,25	B21R 71 G6	B20R 63 G6	BZFM 0,63	6,3	818,00	
	<b>IE1</b>	0,37	B21R 80 K6	B20R 71 K6	BZFM 0,63	6,3	918,00
		0,37	B21R 80 K6	B20R 71 K6	BZFM 1,6	13,5	945,00
		0,55	B21R 80 G6	B20R 71 G6	BZFM 0,63	6,3	968,00
		0,55	B21R 80 G6	B20R 71 G6	BZFM 1,6	13,5	995,00
		0,75	IE1-B21R 90 S6	IE1-B20R 80 K6	BZFM 1,6	13,5	1.120,00
		0,75	IE1-B21R 90 S6	IE1-B20R 80 K6	BZFM 2,5	27,0	1.160,00
		1,1	IE1-B21R 90 L6	IE1-B20R 80 G6	BZFM 1,6	13,5	1.200,00
		1,1	IE1-B21R 90 L6	IE1-B20R 80 G6	BZFM 2,5	27	1.230,00
		1,5	IE1-B21R 100 L6	IE1-B20R 90 L6	BZFM 2,5	27	1.430,00
		1,5	IE1-B21R 100 L6	IE1-B20R 90 L6	BZFM 4	37	1.460,00
		2,2	IE1-B21R 112 M6	IE1-B20R 100 L6	BZFM 4	37	1.740,00
		2,2	IE1-B21R 112 M6	IE1-B20R 100 L6	BZFM 6,3	65	1.790,00
		3,0	IE1-B21R 132 S6T	IE1-B20R 100 LX6	BZFM 4	37	2.180,00
		3,0	IE1-B21R 132 S6T	IE1-B20R 100 LX6	BZFM 6,3	65	2.230,00
		3,0	IE1-B21R 132 S6	IE1-B20R 112 M6	BZFM 6,3	65	2.230,00
4,0		IE1-B21R 132 M6	IE1-B20R 112 MX6	BZFM 10	100	2.930,00	
5,5		IE1-B21R 132 MX6	IE1-B20R 132 S6	BZFM 10	125	3.380,00	
7,5		IE1-B21R 160 M6	IE1-B20R 132 M6	BZFM 16	200	4.150,00	
11,0		IE1-B21R 160 L6	IE1-B20R 160 S6	BZFM 16	250	4.810,00	
15,0		IE1-B21R 180 L6	IE1-B20R 160 M6	BZFM 25	380	7.460,00	
18,5	IE1-B21R 200 L6	IE1-B20R 180 S6	BZFM 25	380	8.070,00		
22,0	IE1-B21R 200 LX6	IE1-B20R 180 M6	BZFM 25	380	9.240,00		
30,0	IE1-B21R 225 M6	IE1-B20R 200 M6	BZFM 25	380	10.400,00		
37,0	IE1-B21R 250 M6	IE1-B20R 225 M6	4BZFM 63	800	16.600,00		
45,0	IE1-B21R 280 S6	IE1-B20R 250 S6	4BZFM 100	1000	21.200,00		
55,0	IE1-B21R 280 M6	IE1-B20R 250 M6	4BZFM 100	1000	23.400,00		
75,0	IE1-B21R 315 S6	IE1-B20R 280 S6	4BZFM 100	1000	27.700,00		
90,0	IE1-B21R 315 M6	IE1-B20R 280 M6	4BZFM 100	1000	31.000,00		
110,0	IE1-B21R 315 MX6	IE1-B20R 315 S6	4BZFM 100	1000	35.200,00		
132,0	IE1-B21R 315 MY6	IE1-B20R 315 M6	4BZFM 160	1600	44.700,00		
160,0	IE1-B21R 315 L6	IE1-B20R 315 L6	4BZFM 160	1600	51.500,00		
200,0	IE1-B21R 315 LX6	IE1-B20R 315 LX6	4BZFM 160	1600	59.500,00		

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Bremse Brake	M <sub>H</sub> M <sub>H</sub> Nm	Preis Price €		
<b>750 min<sup>-1</sup> 2p = 8</b>	0,12	B21R 71 G8	B20R 63 G8	BZFM 0,25	3	803,00	
	0,12	B21R 71 G8	B20R 63 G8	BZFM 0,63	6,3	831,00	
	0,18	B21R 80 K8	B20R 71 K8	BZFM 0,63	6,3	932,00	
	0,18	B21R 80 K8	B20R 71 K8	BZFM 1,6	13,5	960,00	
	0,25	B21R 80 G8	B20R 71 G8	BZFM 0,63	6,3	991,00	
	0,25	B21R 80 G8	B20R 71 G8	BZFM 1,6	13,5	1.020,00	
	<b>IE1</b>	0,37	B21R 90 S8	B20R 80 K8	BZFM 1,6	13,5	1.180,00
		0,37	B21R 90 S8	B20R 80 K8	BZFM 2,5	27	1.200,00
		0,55	B21R 90 L8	B20R 80 G8	BZFM 1,6	13,5	1.260,00
		0,55	B21R 90 L8	B20R 80 G8	BZFM 2,5	27	1.280,00
		0,75	B21R 100 L8	B20R 90 L8	BZFM 2,5	27	1.460,00
		0,75	B21R 100 L8	B20R 90 L8	BZFM 4	37	1.500,00
		1,1	B21R 100 LX8	B20R 100 S8	BZFM 4	37	1.620,00
		1,1	B21R 100 LX8	B20R 100 S8	BZFM 6,3	65	1.820,00
		1,5	B21R 112 M8	B20R 100 L8	BZFM 4	37	1.910,00
		1,5	B21R 112 M8	B20R 100 L8	BZFM 6,3	65	1.960,00
		2,2	B21R 132 S8T	B20R 100 LX8	BZFM 4	37	2.380,00
		2,2	B21R 132 S8T	B20R 100 LX8	BZFM 6,3	65	2.440,00
		2,2	B21R 132 S8	B20R 112 M8	BZFM 6,3	65	2.440,00
		3,0	B21R 132 M8	B20R 112 MX8	BZFM 10	100	3.270,00
4,0		B21R 160 M8	B20R 132 S8	BZFM 10	125	3.570,00	
5,5		B21R 160 MX8	B20R 132 M8	BZFM 16	200	4.390,00	
7,5		B21R 160 L8	B20R 160 S8	BZFM 16	250	4.910,00	
11,0		B21R 180 L8	B20R 160 M8	BZFM 25	380	7.090,00	
15,0		B21R 200 L8	B20R 180 S8	BZFM 25	380	8.680,00	
18,5		B21R 225 S8		BZFM 25	380	9.780,00	
18,5		B20R 180 M8	BZFM 25	380	9.780,00		
22,0	B21R 225 M8	B20R 200 M8	BZFM 25	380	10.300,00		
30,0	B21R 250 M8	B20R 225 M8	4BZFM 63	800	17.200,00		
37,0	B21R 280 S8	B20R 250 S8	4BZFM 100	1000	21.500,00		
45,0	B21R 280 M8	B20R 250 M8	4BZFM 100	1000	23.800,00		
55,0	B21R 315 S8	B20R 280 S8	4BZFM 100	1000	26.700,00		
75,0	B21R 315 M8	B20R 280 M8	4BZFM 100	1000	32.000,00		
90,0	B21R 315 MX8	B20R 315 S8	4BZFM 100	1000	35.700,00		
110,0	B21R 315 MY8	B20R 315 M8	4BZFM 160	1600	45.400,00		
132,0	B21R 315 L8	B20R 315 L8	4BZFM 160	1600	51.600,00		
160,0	B21R 315 LX8	B20R 315 LX8	4BZFM 160	1600	58.700,00		

## Energiesparmotoren, Standard Efficiency IE1, Bremsmotoren mit angebaute Kompaktbremse BFK 457 Energy saving motors, Standard Efficiency IE1, Brake motors with built-on compact brake BFK 457

Bauform IM B3, Schutzart IP 54, Thermische Klasse 155  
type of construction IM B3, degree of protection IP 54, thermal class 155

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	M <sub>H</sub> M <sub>H</sub> Nm	Preis Price €		
<b>3000 min<sup>-1</sup> 2p = 2</b>	0,18	B21R 63 K2 BLEN	B20R 56 K2 BLEN	2	600,00	
	0,25	B21R 63 G2 BLEN	B20R 56 G2 BLEN	2	612,00	
	0,37	B21R 71 K2 BLEN	B20R 63 K2 BLEN	2	633,00	
	0,55	B21R 71 G2 BLEN	B20R 63 G2 BLEN	2	662,00	
	<b>IE1</b>	0,75	IE1-B21R 80 K2 BLEN	IE1-B20R 71 K2 BLEN	4	697,00
		1,1	IE1-B21R 80 G2 BLEN	IE1-B20R 71 G2 BLEN	4	753,00
		1,5	IE1-B21R 90 S2 BLEN	IE1-B20R 80 K2 BLEN	8	818,00
		2,2	IE1-B21R 90 L2 BLEN	IE1-B20R 80 G2 BLEN	8	945,00
		3,0	IE1-B21R 100 L2 BLEN	IE1-B20R 90 L2 BLEN	16	1.080,00
		4,0	IE1-B21R 112 M2 BLEN	IE1-B20R 100 S2 BLEN	16	1.200,00
5,5		IE1-B21R 112 MX2 BLEN	IE1-B20R 100 L2 BLEN	16	A	
<b>1000 min<sup>-1</sup> 2p = 6</b>		0,12	B21R 63 G6 BLEN	B20R 56 G6 BLEN	2	618,00
		0,18	B21R 71 K6 BLEN	B20R 63 K6 BLEN	2	641,00
		0,25	B21R 71 G6 BLEN	B20R 63 G6 BLEN	2	677,00
	0,37	B21R 80 K6 BLEN	B20R 71 K6 BLEN	4	710,00	
	0,55	B21R 80 G6 BLEN	B20R 71 G6 BLEN	4	768,00	
	0,75	IE1-B21R 90 S6 BLEN	IE1-B20R 80 K6 BLEN	8	824,00	
	1,1	IE1-B21R 90 L6 BLEN	IE1-B20R 80 G6 BLEN	8	917,00	
	1,5	IE1-B21R 100 L6 BLEN	IE1-B20R 90 L6 BLEN	16	1.020,00	
2,2	IE1-B21R 112 M6 BLEN	IE1-B20R 100 L6 BLEN	16	1.160,00		

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	M <sub>H</sub> M <sub>H</sub> Nm	Preis Price €		
<b>1500 min<sup>-1</sup> 2p = 4</b>	0,12	B21R 63 K4 BLEN	B20R 56 K4 BLEN	2	600,00	
	0,18	B21R 63 G4 BLEN	B20R 56 G4 BLEN	2	612,00	
	0,25	B21R 71 K4 BLEN	B20R 63 K4 BLEN	2	633,00	
	0,37	B21R 71 G4 BLEN	B20R 63 G4 BLEN	2	654,00	
	<b>IE1</b>	0,55	B21R 80 K4 BLEN	B20R 71 K4 BLEN	4	702,00
		0,75	IE1-B21R 80 G4 BLEN	IE1-B20R 71 G4 BLEN	4	753,00
		1,1	IE1-B21R 90 S4 BLEN	IE1-B20R 80 K4 BLEN	8	801,00
		1,5	IE1-B21R 90 L4 BLEN	IE1-B20R 80 G4 BLEN	8	874,00
		2,2	IE1-B21R 100 L4 BLEN	IE1-B20R 90 L4 BLEN	16	978,00
		3,0	IE1-B21R 100 LX4 BLEN	IE1-B20R 100 S4 BLEN	16	1.110,00
4,0		IE1-B21R 112 M4 BLEN	IE1-B20R 100 L4 BLEN	16	1.230,00	
<b>750 min<sup>-1</sup> 2p = 8</b>		0,12	B21R 71 G8 BLEN	B20R 63 G8 BLEN	2	689,00
		0,18	B21R 80 K8 BLEN	B20R 71 K8 BLEN	4	731,00
		0,25	B21R 80 G8 BLEN	B20R 71 G8 BLEN	4	786,00
	0,37	B21R 90 S8 BLEN	B20R 80 K8 BLEN	8	888,00	
	0,55	B21R 90 L8 BLEN	B20R 80 G8 BLEN	8	972,00	
	0,75	B21R 100 L8 BLEN	B20R 90 L8 BLEN	16	1.070,00	
	1,1	B21R 100 LX8BLEN	B20R 100 S8 BLEN	16	1.200,00	
	1,5	B21R 112 M8 BLEN	B20R 100 L8 BLEN	16	1.340,00	

# Käfigläufermotoren, explosionsgeschützt, Zündschutzart Erhöhte Sicherheit „e“ Squirrel-cage motors, explosion-protected, Increased safety “e” CE 0637 II 2G, Ex e II T1–T3

Motoren für den Einsatz in Zone 1 nach EN 60079-7

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

Motors for use zone 1 in accordance to EN 60079-7

Type of construction IM B3, degree of protection IP 55, thermal class 155

$P_B$ T3		Typ	Preis	
$P_B$ T3 kW	T2	Type	Price €	
3000 min <sup>-1</sup> 2p = 2	0,18	KPER 63 K2 Ex e II	387,00	
	0,25	KPER 63 G2 Ex e II <sup>x)</sup>	396,00	
	0,37	KPER 71 K2 Ex e II	412,00	
	0,55	KPER 71 G2 Ex e II	448,00	
	0,75	KPER 80 K2 Ex e II	477,00	
	1,1	KPER 80 G2 Ex e II	527,00	
	1,3	KPER 90 S2 Ex e II	584,00	
	1,85	KPER 90 L2 Ex e II	698,00	
	2,5	KPER 100 L2 Ex e II	830,00	
	3,3	KPER 112 M2 Ex e II	985,00	
	4,1	KPER 112 MX2 Ex e II	1.140,00	
	4,6	KPER 132 S2T Ex e II	1.190,00	
	4,6	4,6	K11R 132 S2 Ex e II	1.190,00
	5,5		KPER 132 SX2T Ex e II	1.190,00
	5,5	5,5	K11R 132 SX2 Ex e II	1.620,00
	5,5	6,6	K12R 132 SX2 Ex e II	1.620,00
	7,5	9,5	K11R 160 M2 Ex e II	2.020,00
	10,0	13,0	K11R 160 MX2 Ex e II	2.530,00
	12,5	16,0	K11R 160 L2 Ex e II	2.960,00
	15,0	19,0	K11R 180 M2 Ex e II	3.640,00
	20,0	25,0	K11R 200 L2 Ex e II	4.730,00
	24,0	31,0	K11R 200 LX2 Ex e II	5.990,00
	28,0	38,0	K11R 225 M2 Ex e II	7.310,00
	36,0	47,0	K11R 250 M2 Ex e II	9.010,00
	47,0	64,0	K11R 280 S2 Ex e II	12.000,00
	58,0	76,0	K11R 280 M2 Ex e II	14.700,00
	68,0	95,0	K11R 315 S2 Ex e II	17.700,00
	80,0	112,0	K11R 315 M2 Ex e II	22.300,00
	110,0	110,0	K11R 315 MY2 Ex e II	32.300,00
	125,0	165,0	K11R 315 L2 Ex e II	39.500,00
	150,0	200,0	K11R 315 LX2 Ex e II	48.500,00
	190,0	255,0	K12R 355 M2 Ex e II	A
220,0	300,0	K12R 355 MX2 Ex e II	A	
250,0	335,0	K12R 355 L2 Ex e II	A	
1000 min <sup>-1</sup> 2p = 6	0,37	KPER 80 K6 Ex e II <sup>1)</sup>	532,00	
	0,55	KPER 80 G6 Ex e II <sup>x)</sup>	538,00	
	0,65	KPER 90 S6 Ex e II	574,00	
	0,95	KPER 90 L6 Ex e II <sup>x)</sup>	671,00	
	1,4	KPER 100 L6 Ex e II	796,00	
	1,9	KPER 112 M6 Ex e II	928,00	
	2,6	KPER 132 SX6T Ex e II	1.130,00	
	2,6	2,6	K11R 132 S6 Ex e II	1.130,00
	3,5	3,5	K11R 132 M6 Ex e II	1.400,00
	4,8	4,8	K11R 132 MX6 Ex e II	1.740,00
	6,6	6,6	K11R 160 M6 Ex e II	2.250,00
	9,7	9,7	K11R 160 L6 Ex e II	2.870,00
	13,2	13,2	K11R 180 L6 Ex e II	3.840,00
	16,5	16,5	K11R 200 L6 Ex e II	4.670,00
	20,0	20,0	K11R 200 LX6 Ex e II	5.450,00
	27,0	27,0	K11R 225 M6 Ex e II	7.360,00
	33,0	33,0	K11R 250 M6 Ex e II	9.380,00
	40,0	40,0	K11R 280 S6 Ex e II	10.900,00
	46,0	50,0	K11R 280 M6 Ex e II	13.100,00
	64,0	68,0	K11R 315 S6 Ex e II	18.600,00
	76,0	82,0	K11R 315 M6 Ex e II	23.000,00
	85,0	92,0	K11R 315 MY6 Ex e II	30.500,00
	95,0	100,0	K11R 315 L6 Ex e II	35.900,00
	110,0	120,0	K11R 315 LX6 Ex e II	50.200,00
	125,0	135,0	K12R 355 M6 Ex e II	64.300,00
	160,0	175,0	K12R 355 MX6 Ex e II	80.700,00
200,0	215,0	K12R 355 L6 Ex e II	93.200,00	

$P_B$ T3		Typ	Preis	
$P_B$ T3 kW	T2	Type	Price €	
1500 min <sup>-1</sup> 2p = 4	0,12	KPER 63 K4 Ex e II <sup>x)</sup>	379,00	
	0,18	KPER 63 G4 Ex e II <sup>x)</sup>	393,00	
	0,25	KPER 71 K4 Ex e II	400,00	
	0,37	KPER 71 G4 Ex e II	435,00	
	0,55	KPER 80 K4 Ex e II	462,00	
	0,75	KPER 80 G4 Ex e II <sup>x)</sup>	504,00	
	1,0	KPER 90 S4 Ex e II	557,00	
	1,35	KPER 90 L4 Ex e II	626,00	
	2,0	KPER 100 L4 Ex e II	737,00	
	2,5	KPER 100 LX4 Ex e II	851,00	
	3,6	KPER 112 M4 Ex e II	1.020,00	
	4,4	KPER 132 S4T Ex e II	1.240,00	
	5,0	5,0	K11R 132 S4 Ex e II	1.270,00
	6,8	6,8	K11R 132 M4 Ex e II	1.620,00
	10,0	10,0	K11R 160 M4 Ex e II	2.130,00
	13,5	13,5	K11R 160 L4 Ex e II	2.780,00
	15,0	17,0	K11R 180 M4 Ex e II	3.150,00
	17,5	20,0	K11R 180 L4 Ex e II	3.700,00
	24,0	27,0	K11R 200 L4 Ex e II	4.880,00
	30,0	33,0	K11R 225 S4 Ex e II	5.930,00
	36,0	40,0	K11R 225 M4 Ex e II	7.110,00
	44,0	50,0	K11R 250 M4 Ex e II	8.740,00
	58,0	68,0	K11R 280 S4 Ex e II	11.900,00
	70,0	80,0	K11R 280 M4 Ex e II	13.800,00
	84,0	100,0	K11R 315 S4 Ex e II	17.200,00
	100,0	120,0	K11R 315 M4 Ex e II	20.600,00
	115,0	115,0	K11R 315 MY4 Ex e II	30.900,00
	135,0	165,0	K11R 315 L4 Ex e II	35.900,00
	170,0	200,0	K11R 315 LX4 Ex e II	47.100,00
	215,0	245,0	K12R 355 M4 Ex e II	A
	240,0	275,0	K12R 355 MX4 Ex e II	A
	275,0	315,0	K12R 355 L4 Ex e II	A
750 min <sup>-1</sup> 2p = 8	0,18	KPER 80 K8 Ex e II <sup>x)</sup>	457,00	
	0,25	KPER 80 G8 Ex e II	516,00	
	0,37	KPER 90 S8 Ex e II <sup>x)</sup>	618,00	
	0,55	KPER 90 L8 Ex e II <sup>x)</sup>	744,00	
	0,65	KPER 100 L8 Ex e II	815,00	
	0,95	KPER 100 LX8 Ex e II	979,00	
	1,3	KPER 112 M8 Ex e II	1.130,00	
	1,9		KPER 132 SX8T Ex e II	1.390,00
	1,9	1,9	K11R 132 S8 Ex e II	1.390,00
	2,6	2,6	K11R 132 M8 Ex e II	1.700,00
	3,5	3,5	K11R 160 M8 Ex e II	2.060,00
	4,8	4,8	K11R 160 MX8 Ex e II	2.450,00
	6,6	6,6	K11R 160 L8 Ex e II	2.960,00
	9,7	9,7	K11R 180 L8 Ex e II	4.110,00
	13,2	13,2	K11R 200 L8 Ex e II	5.260,00
	16,5	16,5	K11R 225 S8 Ex e II	6.350,00
	20,0	20,0	K11R 225 M8 Ex e II	7.360,00
	27,0	27,0	K11R 250 M8 Ex e II	9.520,00
	33,0	33,0	K11R 280 S8 Ex e II	11.700,00
	40,0	40,0	K11R 280 M8 Ex e II	13.800,00
	50,0	50,0	K11R 315 S8 Ex e II	17.200,00
	68,0	68,0	K11R 315 M8 Ex e II	22.800,00
	80,0	80,0	K11R 315 MY8 Ex e II	30.900,00
	95,0	95,0	K11R 315 L8 Ex e II	35.900,00
	115,0	115,0	K11R 315 LX8 Ex e II	48.800,00
	140,0	140,0	K12R 355 M8 Ex e II	63.500,00
180,0	180,0	K12R 355 MX8 Ex e II	80.500,00	
210,0	210,0	K12R 355 L8 Ex e II	93.300,00	

Polumschaltbare Ausführung auf Anfrage lieferbar  
T4 auf Anfrage lieferbar

<sup>x)</sup> Nicht in Breitspannung lieferbar

<sup>1)</sup> Anbaumaße nach Sonderzeichnung

Beachte: Maß W bei IM B34 und IM B35 abweichend von DIN

A = auf Anfrage

Pole-changing version available on request  
T4 available on request

<sup>x)</sup> Not available in version for voltage range

<sup>1)</sup> Mounting dimensions acc. to special drawing

Pay attention: dimension W for IM B34 and B35 is deviating from DIN

A = on request

## Energiesparmotoren in Wirkungsgradklasse IE2 nach IEC 60034-30 für Einsatz in Zone 2, Zündschutzart "n" Energy saving motors, efficiency class IE2 acc. to IEC 60034-30 for use in zone 2, type of protection "n"

**Ex II 3G, Ex nA II T1 - T3**

Wirkungsgradbestimmung nach IEC 60034-2-1, mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb  
Thermische Klasse 155, Schutzart IP 55, Ausführung für Bemessungsspannungen Bereich A nach IEC 60034-1, 50 Hz  
Efficiency testing acc. to IEC 60034-2-1, with surface ventilation, mode of operation S1, continuous duty,  
thermal class 155, degree of protection IP 55, version for design voltage range A in accordance to IEC 60034-1, 50 Hz

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €		P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €		
<b>3000 min<sup>-1</sup> 2p = 2</b>	0,75	IE2-KPR 80 K2 Ex nA II T3	544,00	<b>1500 min<sup>-1</sup> 2p = 4</b>	0,75	IE2-KPR 80 G4 Ex nA II T3	578,00		
	1,10	IE2-KPR 80 G2 Ex nA II T3	603,00		1,10	IE2-KPR 90 S4 Ex nA II T3	674,00		
	1,50	IE2-KPR 90 S2 Ex nA II T3	691,00		1,50	IE2-KPR 90 LV4 Ex nA II T3	774,00		
	2,20	IE2-KPR 90 L2 Ex nA II T3	849,00		2,20	IE2-KPR 100 L4 Ex nA II T3	917,00		
	3,00	IE2-KPR 100 L2 Ex nA II T3	992,00		3,00	IE2-KPR 100 LX4 Ex nA II T3	1.030,00		
	<b>IE2</b>	4,00	IE2-KPER 112 MX2 Ex nA II T3		1.160,00	<b>IE2</b>	4,00	IE2-KPER 112 MZ4 Ex nA II T3	1.250,00
	5,50	IE2-WE1R 132 S2T Ex nA II T3	1.370,00		5,50	IE2-WE1R 132 S4 Ex nA II T3	1.480,00		
	7,50	IE2-WE1R 132 SX2 Ex nA II T3	1.560,00		7,50	IE2-WE1R 132 M4 Ex nA II T3	1.640,00		
	11,00	IE2-WE1R 160 M2 Ex nA II T3	2.130,00		11,00	IE2-WE1R 160 M4 Ex nA II T3	2.180,00		
	15,00	IE2-WE1R 160 MX2 Ex nA II T3	2.720,00		15,00	IE2-WE1R 160 L4 Ex nA II T3	2.860,00		
	18,50	IE2-WE1R 160 L2 Ex nA II T3	3.240,00		18,50	IE2-WE1R 180 M4 Ex nA II T3	3.440,00		
	22,00	IE2-WE1R 180 M2 Ex nA II T3	3.900,00		22,00	IE2-WE1R 180 L4 Ex nA II T3	4.020,00		
	30,00	IE2-WE1R 200 L2 Ex nA II T3	5.110,00		30,00	IE2-WE1R 200 L4 Ex nA II T3	5.320,00		
	37,00	IE2-WE1R 200 LX2 Ex nA II T3	6.590,00		37,00	IE2-WE1R 225 S4 Ex nA II T3	6.470,00		
	45,00	IE2-WE1R 225 M2 Ex nA II T3	8.040,00		45,00	IE2-WE1R 225 M4 Ex nA II T3	7.840,00		
	55,00	IE2-WE1R 250 M2 Ex nA II T3	9.780,00		55,00	IE2-WE1R 250 M4 Ex nA II T3	9.500,00		
	75,00	IE2-WE1R 280 S2 Ex nA II T3	12.900,00		75,00	IE2-WE1R 280 S4 Ex nA II T3	12.300,00		
	90,00	IE2-WE1R 280 M2 Ex nA II T3	15.500,00		90,00	IE2-WE1R 280 M4 Ex nA II T3	14.300,00		
	110,00	IE2-W21R 315 S2 Ex nA II T3	19.100,00		110,00	IE2-W21R 315 S4 Ex nA II T3	17.700,00		
132,00	IE2-W21R 315 M2 Ex nA II T3	22.600,00	132,00	IE2-W21R 315 M4 Ex nA II T3	21.500,00				
160,00	IE2-W21R 315 MX2 Ex nA II T3	26.700,00	160,00	IE2-W21R 315 MX4 Ex nA II T3	25.200,00				
200,00	IE2-W21R 315 MY2 Ex nA II T3	35.300,00	200,00	IE2-W21R 315 MY4 Ex nA II T3	33.700,00				
250,00	IE2-W21R315 L2 Ex nA II T3	41.400,00	250,00	IE2-W21R 315 L4 Ex nA II T3	37.700,00				
<b>1000 min<sup>-1</sup> 2p = 6</b>	0,75	IE2-KPR 90 S6 Ex nA II T3	725,00						
	1,10	IE2-KPR 90 LV6 Ex nA II T3	883,00						
	1,50	IE2-KPR 100 LX6 Ex nA II T3	1.010,00						
	2,20	IE2-KPER 112 MV6 Ex nA II T3	1.140,00						
	3,00	IE2-W21R 132 S6 Ex nA II T3	1.320,00						
	<b>IE2</b>	4,00	IE2-W21R 132 M6 Ex nA II T3	1.460,00					
	5,50	IE2-W21R 132 MX6 Ex nA II T3	1.840,00						
	7,50	IE2-W21R 160 M6 Ex nA II T3	2.310,00						
	11,00	IE2-W21R 160 L6 Ex nA II T3	3.090,00						
	15,00	IE2-W21R 180 L6 Ex nA II T3	4.160,00						
	18,50	IE2-W21R 200 L6 Ex nA II T3	5.020,00						
	22,00	IE2-W21R 200 LX6 Ex nA II T3	5.880,00						
	30,00	IE2-W21R 225 M6 Ex nA II T3	8.070,00						
	37,00	IE2-W21R 250 M6 Ex nA II T3	9.850,00						
	45,00	IE2-W21R 280 S6 Ex nA II T3	11.400,00						
55,00	IE2-W21R 280 M6 Ex nA II T3	13.800,00							
75,00	IE2-W21R 315 S6 Ex nA II T3	18.900,00							
90,00	IE2-W21R 315 M6 Ex nA II T3	22.400,00							
110,00	IE2-W21R 315 MX6 Ex nA II T3	26.100,00							
132,00	IE2-W21R 315 MY6 Ex nA II T3	30.700,00							
160,00	IE2-W21R 315 L6 Ex nA II T3	37.600,00							

T4 auf Anfrage lieferbar  
andere eintourige Polzahlen auf Anfrage lieferbar

T4 available on request  
other one-speed pole numbers available on request

## Energiesparmotoren in Wirkungsgradklasse IE1 nach IEC 60034-30, explosionsgeschützt für den Einsatz in Zone 2, Zündschutzart "n"

### Energy saving motors, efficiency class IE1 acc. to IEC 60034-30, explosion-protected for use in zone 2, type of protection "n"

Ex II 3G, Ex nA II T1 - T3

Wirkungsgradbestimmung nach IEC 60034-2-1, mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb  
 Thermische Klasse 155, Schutzart IP 55, Ausführung für Bemessungsspannungen Bereich A nach IEC 60034-1, 50 Hz  
 Efficiency testing acc. to IEC 60034-2-1, with surface ventilation, mode of operation S1, continuous duty,  
 thermal class 155, degree of protection IP 55, version for design voltage range A in accordance to IEC 60034-1, 50 Hz

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €		P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €			
<b>3000 min<sup>-1</sup></b> <b>2p = 2</b>	0,18	KPER 63 K2	KPR 56 K2	282,00	<b>1500 min<sup>-1</sup></b> <b>2p = 4</b>	0,12	KPER 63 K4	KPR 56 K4	274,00	
	0,25	KPER 63 G2	KPR 56 G2	291,00		0,18	KPER 63 G4	KPR 56 G4	288,00	
	0,37	KPER 71 K2	KPR 63 K2	307,00		0,25	KPER 71 K4	KPR 63 K4	295,00	
	0,55	KPER 71 G2	KPR 63 G2	343,00		0,37	KPER 71 G4	KPR 63 G4	330,00	
	<b>IE1</b>	0,75	IE1-KPER 80 K2	IE1-KPR 71 K2		372,00	0,55	KPER 80 K4	KPR 71 K4	357,00
		1,1	IE1-KPER 80 G2	IE1-KPR 71 G2		422,00	0,75	IE1-KPER 80 G4	IE1-KPR 71 G4	399,00
		1,5	IE1-KPER 90 S2	IE1-KPR 80 K2		479,00	1,1	IE1-KPER 90 S4	IE1-KPR 80 K4	452,00
		2,2	IE1-KPER 90 L2	IE1-KPR 80 G2		593,00	1,5	IE1-KPER 90 L4	IE1-KPR 80 G4	521,00
		3,0	IE1-KPER 100 L2	IE1-KPR 90 L2		725,00	2,2	IE1-KPER 100 L4	IE1-KPR 90 L4	632,00
		4,0	IE1-KPER 112 M2	IE1-KPR 100 S2		880,00	3,0	IE1-KPER 100 LX4	IE1-KPR 100 S4	746,00
		5,5	IE1-KPER 112 MX2	IE1-KPR 100 L2		1.120,00	4,0	IE1-KPER 112 M4	IE1-KPR 100 L4	917,00
		5,5	IE1-K11R 132 S2	-		1.190,00	5,5	IE1-KPER 112 MX4	IE1-KPR 100 LX4 *)	1.090,00
		7,5	IE1-K11R 132 SX2	IE1-K10R 112 M2		1.310,00	5,5	IE1-K11R 132 S4	IE1-K10R 112 M4	1.270,00
		11,0	IE1-K11R 160 M2	IE1-K10R 132 M2		1.790,00	7,5	IE1-K11R 132 M4	IE1-K10R 132 S4	1.380,00
		15,0	IE1-K11R 160 MX2	IE1-K10R 160 S2		2.280,00	11,0	IE1-K11R 160 M4	IE1-K10R 132 M4	1.840,00
		18,5	IE1-K11R 160 L2	IE1-K10R 160 M2		2.720,00	15,0	IE1-K11R 160 L4	IE1-K10R 160 S4	2.390,00
		22,0	IE1-K11R 180 M2	IE1-K10R 180 S2		3.270,00	18,5	IE1-K11R 180 M4	IE1-K10R 160 M4	2.890,00
		30,0	IE1-K11R 200 L2	IE1-K10R 180 M2		4.280,00	22,0	IE1-K11R 180 L4	IE1-K10R 180 S4	3.370,00
		37,0	IE1-K11R 200 LX2	IE1-K10R 200 M2		5.510,00	30,0	IE1-K11R 200 L4	IE1-K10R 180 M4	4.460,00
		45,0	IE1-K11R 225 M2	IE1-K10R 200 L2		6.730,00	37,0	IE1-K11R 225 S4	IE1-K10R 200 M4	5.420,00
55,0		IE1-K11R 250 M2	IE1-K10R 225 M2	8.180,00	45,0	IE1-K11R 225 M4	IE1-K10R 200 L4	6.560,00		
75,0		IE1-K11R 280 S2	IE1-K10R 250 S2	11.200,00	55,0	IE1-K11R 250 M4	IE1-K10R 225 M4	7.960,00		
90,0		IE1-K11R 280 M2	IE1-K10R 250 M2	13.500,00	75,0	IE1-K11R 280 S4	IE1-K10R 250 S4	10.700,00		
110,0		IE1-K11R 315 S2	IE1-K10R 280 S2	16.700,00	90,0	IE1-K11R 280 M4	IE1-K10R 250 M4	12.500,00		
132,0	IE1-K11R 315 M2	IE1-K10R 280 M2	19.600,00	110,0	IE1-K11R 315 S4	IE1-K10R 280 S4	15.500,00			
160,0	IE1-K11R 315 MX2	IE1-K10R 315 S2	24.300,00	132,0	IE1-K11R 315 M4	IE1-K10R 280 M4	18.800,00			
200,0	IE1-K11R 315 MY2	IE1-K10R 315 M2	32.300,00	160,0	IE1-K11R 315 MX4	IE1-K10R 315 S4	22.900,00			
250,0	IE1-K11R 315 L2	-	39.500,00	200,0	IE1-K11R 315 MY4	IE1-K10R 315 M4	30.900,00			
315,0	IE1-K12R 355 M2	-	A	250,0	IE1-K11R 315 L4	-	35.900,00			
355,0	IE1-K12R 355 MX2	-	A	315,0	IE1-K12R 355 M4	-	A			
400,0	K12R 355 LY2	-	A	355,0	IE1-K12R 355 MX4	-	A			
450,0	K12R 355 L2	-	A	400,0	K12R 355 LY4	-	A			
				450,0	K12R 355 L4	-	A			
<b>1000 min<sup>-1</sup></b> <b>2p = 6</b>	0,37	KPER 80 K6	KPR 71 K6	382,00	<b>750 min<sup>-1</sup></b> <b>2p = 8</b>	0,18	KPER 80 K8	KPR 71 K8	352,00	
	0,55	KPER 80 G6	KPR 71 G6	433,00		0,25	KPER 80 G8	KPR 71 G8	411,00	
	0,75	IE1-KPER 90 S6	IE1-KPR 80 K6	469,00		0,37	KPER 90 S8	KPR 80 K8	513,00	
	1,1	IE1-KPER 90 L6	IE1-KPR 80 G6	566,00		0,55	KPER 90 L8	KPR 80 G8	639,00	
	<b>IE1</b>	1,5	IE1-KPER 100 L6	IE1-KPR 90 L6		691,00	0,75	KPER 100 L8	KPR 90 L8	710,00
		2,2	IE1-KPER 112 M6	IE1-KPR 100 L6		844,00	1,1	KPER 100 LX8	KPR 100 S8	874,00
		3,0	IE1-K11R 132 S6	IE1-K10R 112 M6		1.130,00	1,5	KPER 112 M8	KPR 100 L8	1.030,00
		4,0	IE1-K11R 132 M6	IE1-K10R 112 MX6		1.230,00	2,2	K11R 132 S8	K10R 112 M8	1.390,00
		5,5	IE1-K11R 132 MX6	IE1-K10R 132 S6		1.540,00	3,0	K11R 132 M8	K10R 112 MX8	1.500,00
		7,5	IE1-K11R 160 M6	IE1-K10R 132 M6		1.930,00	4,0	K11R 160 M8	K10R 132 S8	1.790,00
		11,0	IE1-K11R 160 L6	IE1-K10R 160 S6		2.580,00	5,5	K11R 160 MX8	K10R 132 M8	2.220,00
		15,0	IE1-K11R 180 L6	IE1-K10R 160 M6		3.490,00	7,5	K11R 160 L8	K10R 160 S8	2.630,00
		18,5	IE1-K11R 200 L6	IE1-K10R 180 S6		4.210,00	11,0	K11R 180 L8	K10R 160 M8	3.630,00
		22,0	IE1-K11R 200 LX6	IE1-K10R 180 M6		4.920,00	15,0	K11R 200 L8	K10R 180 S8	4.760,00
		30,0	IE1-K11R 225 M6	IE1-K10R 200 M6		6.760,00	18,5	K11R 225 S8	K10R 180 M8	5.760,00
		37,0	IE1-K11R 250 M6	IE1-K10R 225 M6		8.240,00	22,0	K11R 225 M8	K10R 200 M8	6.640,00
		45,0	IE1-K11R 280 S6	IE1-K10R 250 S6		10.000,00	30,0	K11R 250 M8	K10R 225 M8	8.950,00
		55,0	IE1-K11R 280 M6	IE1-K10R 250 M6		12.000,00	37,0	K11R 280 S8	K10R 250 S8	10.400,00
		75,0	IE1-K11R 315 S6	IE1-K10R 280 S6		16.500,00	45,0	K11R 280 M8	K10R 250 M8	12.700,00
		90,0	IE1-K11R 315 M6	IE1-K10R 280 M6		19.500,00	55,0	K11R 315 S8	K10R 280 S8	15.400,00
110,0		IE1-K11R 315 MX6	IE1-K10R 315 S6	23.800,00	75,0	K11R 315 M8	K10R 280 M8	20.600,00		
132,0		IE1-K11R 315 MY6	IE1-K10R 315 M6	27.900,00	90,0	K11R 315 MX8	K10R 315 S8	24.400,00		
160,0		IE1-K11R 315 L6	-	35.900,00	110,0	K11R 315 MY8	K10R 315 M8	28.700,00		
200,0		IE1-K12R 355 M6	-	64.300,00	132,0	K11R 315 L8	-	35.900,00		
250,0	IE1-K12R 355 MX6	-	80.700,00	160,0	K12R 355 M8	-	63.500,00			
315,0	IE1-K12R 355 LY6	-	92.900,00	200,0	K11R 355 MX8	-	80.500,00			
				250,0	K12R 355 LY8	-	92.600,00			

Andere eintourige Polzahlen auf Anfrage lieferbar  
 T4 auf Anfrage lieferbar  
 \*) Nur Flanschausführung  
 A = auf Anfrage

other one-speed pole numbers available on request  
 T4 available on request  
 \*) Only flange-version  
 A = on request

## Käfigläufermotoren für Umrichterbetrieb, Zündschutzart Erhöhte Sicherheit „e“ Squirrel-cage motors for inverter operation, explosion-protected, Increased safety “e” CE 0637 II 2G Ex e II T3

Motoren für den Einsatz in Zone 1 nach EN 60079-7, Zündschutzart Erhöhte Sicherheit „e“

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155; maximale Umrichtereingangsspannung 500 V

Motors for use in zone 1 in accordance to EN 60079-7, explosion-protected Increased safety “e”

Type of construction IM B3, degree of protection IP 55, thermal class 155; maximum inverter input voltage 500 V

	M <sub>B</sub> (50 Hz)	P <sub>B</sub>	Typ	Preis
	M <sub>B</sub> (50 Hz)	P <sub>B</sub>	Type	Price
	Nm	kW		€
1500 min <sup>-1</sup> 2p = 4	30	4,551	K11R 132 S4	2.490,00
	40	6,1	K11R 132 M4	3.030,00
	65	10	K11R 160 M4	4.220,00
	85	13,1	K11R 160 L4	4.990,00
	95	14,7	K11R 180 M4	5.680,00
	130	20	K11R 180 L4	6.930,00
	195	30	K11R 200 L4	8.220,00
	230	37	K11R 225 S4	9.240,00
	285	45	K11R 225 M4	9.870,00
	355	55	K11R 250 M4	11.700,00
	480	75	K11R 280 S4*	13.500,00
	580	90	K11R 280 M4*	15.300,00
	700	110	K11R 315 S4*	18.500,00
850	132	K11R 315 M4*	21.700,00	

Ü ≤ 1.800 V, inklusive Kaltleiter

Weitere Typen auf Anfrage lieferbar

\* Zur Zeit verlängerte Lieferzeit (Einreichung)

	M <sub>B</sub> (50 Hz)	P <sub>B</sub>	Typ	Preis
	M <sub>B</sub> (50 Hz)	P <sub>B</sub>	Type	Price
	Nm	kW		€
1000 min <sup>-1</sup> 2p = 6	26	2,6	K11R 132 S6*	2.690,00
	35	3,5	K11R 132 M6*	3.280,00
	48	4,8	K11R 132 MX6*	3.950,00
	65	6,6	K11R 160 M6*	4.550,00
	95	9,7	K11R 160 L6*	5.360,00
	150	15,0	K11R 180 L6	6.010,00
	160	16,5	K11R 200 L6*	8.870,00
	215	22	K11R 200 LX6*	9.950,00
	295	30	K11R 225 M6*	10.800,00
	360	37	K11R 250 M6*	12.500,00
	440	45	K11R 280 S6*	12.700,00
	535	55	K11R 280 M6*	16.300,00
	725	75	K11R 315 S6*	20.400,00
865	90	K11R 315 M6*	24.600,00	

Ü ≤ 1.800 V, included PTC

Other types available on request

\* At the moment prolonged delivery time caused by getting the approval

## Käfigläufermotoren für Umrichterbetrieb, Zündschutzart Erhöhte Sicherheit „e“, VIK-Ausführung Squirrel-cage motors for inverter operation, explosion-protected, Increased safety “e”, VIK CE 0637 II 2G Ex e II T3

Motoren für den Einsatz in Zone 1 nach EN 60079-7, Zündschutzart Erhöhte Sicherheit „e“

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155; maximale Umrichtereingangsspannung 500 V

Motors for use in zone 1 in accordance to EN 60079-7, explosion-protected Increased safety “e”

Type of construction IM B3, degree of protection IP 55, thermal class 155; maximum inverter input voltage 500 V

	M <sub>B</sub> (50 Hz)	P <sub>B</sub>	Typ	Preis
	M <sub>B</sub> (50 Hz)	P <sub>B</sub>	Type	Price
	Nm	kW		€
1500 min <sup>-1</sup> 2p = 4	30	4,551	K11R 132 S4	2.850,00
	40	6,1	K11R 132 M4	3.390,00
	65	10	K11R 160 M4	4.590,00
	85	13,1	K11R 160 L4	5.360,00
	95	14,7	K11R 180 M4	6.120,00
	130	20	K11R 180 L4	7.370,00
	195	30	K11R 200 L4	9.290,00
	230	37	K11R 225 S4	12.100,00
	285	45	K11R 225 M4	12.700,00
	355	55	K11R 250 M4	14.400,00
	480	75	K11R 280 S4*	18.100,00
	580	90	K11R 280 M4*	19.800,00
	700	110	K11R 315 S4*	21.600,00
850	132	K11R 315 M4*	24.900,00	

Ü ≤ 1.800 V, inklusive Kaltleiter

Weitere Typen auf Anfrage lieferbar

\* Zur Zeit verlängerte Lieferzeit (Einreichung)

	M <sub>B</sub> (50 Hz)	P <sub>B</sub>	Typ	Preis
	M <sub>B</sub> (50 Hz)	P <sub>B</sub>	Type	Price
	Nm	kW		€
1000 min <sup>-1</sup> 2p = 6	26	2,6	K11R 132 S6*	3.050,00
	35	3,5	K11R 132 M6*	3.630,00
	48	4,8	K11R 132 MX6*	4.310,00
	65	6,6	K11R 160 M6*	4.910,00
	95	9,7	K11R 160 L6*	5.720,00
	150	15,0	K11R 180 L6*	6.450,00
	160	16,5	K11R 200 L6*	9.940,00
	215	22	K11R 200 LX6*	11.000,00
	295	30	K11R 225 M6*	13.700,00
	360	37	K11R 250 M6*	15.400,00
	440	45	K11R 280 S6*	17.000,00
	535	55	K11R 280 M6*	20.800,00
	725	75	K11R 315 S6*	23.500,00
865	90	K11R 315 M6*	27.700,00	

Ü ≤ 1.800 V, included PTC

Other types available on request

\* At the moment prolonged delivery time caused by getting the approval

**Energiesparmotoren in Wirkungsgradklasse IE2 nach IEC 60034-30  
für Einsatz in Zone 22, Zündschutzart "Schutz durch Gehäuse, tD A22"  
Energy saving motors, efficiency class IE2 acc. to IEC 60034-30  
for use in zone 22, type of protection "Protection by enclosure, tD A22"  
Ex II 3D, Ex tD A22 IP55 T125 °C**

Wirkungsgradbestimmung nach IEC 60034-2-1, mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb  
Thermische Klasse 155, Schutzart IP 55, Ausführung für Bemessungsspannungen Bereich A nach IEC 60034-1, 50 Hz  
Efficiency testing acc. to IEC 60034-2-1, with surface ventilation, mode of operation S1, continuous duty,  
thermal class 155, degree of protection IP 55, version for design voltage range A in accordance to IEC 60034-1, 50 Hz

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
3000 min <sup>-1</sup> 2p = 2	0,75	IE2-KPR 80 K2 Ex II 3D	544,00
	1,10	IE2-KPR 80 G2 Ex II 3D	603,00
IE2	1,50	IE2-KPR 90 S2 Ex II 3D	691,00
	2,2	IE2-KPR 90 L2 Ex II 3D	849,00
	3,0	IE2-KPR 100 L2 Ex II 3D	992,00
	4,0	IE2-KPER 112 MX2 Ex II 3D	1.160,00
	5,5	IE2-KPER 132 S2T Ex II 3D	1.370,00
	5,5	IE2-WE1R 132 S2 Ex II 3D	1.460,00
	7,5	IE2-WE1R 132 SX2 Ex II 3D	1.560,00
	11,0	IE2-WE1R 160 M2 Ex II 3D	2.130,00
	15,0	IE2-WE1R 160 MX2 Ex II 3D	2.720,00
	18,5	IE2-WE1R 160 L2 Ex II 3D	3.240,00
	22,0	IE2-WE1R 180 M2 Ex II 3D	3.900,00
	30,0	IE2-WE1R 200 L2 Ex II 3D	5.110,00
	37,0	IE2-WE1R 200 LX2 Ex II 3D	6.590,00
	45,0	IE2-WE1R 225 M2 Ex II 3D	8.040,00
	55,0	IE2-WE1R 250 M2 Ex II 3D	9.780,00
	75,0	IE2-WE1R 280 S2 Ex II 3D	12.900,00
	90,0	IE2-WE1R 280 M2 Ex II 3D	15.500,00
110,0	IE2-W21R 315 S2 Ex II 3D	19.100,00	
132,0	IE2-W21R 315 M2 Ex II 3D	22.600,00	
160,0	IE2-W21R 315 MX2 Ex II 3D	26.700,00	
200,0	IE2-W21R 315 MY2 Ex II 3D	35.300,00	
250,0	IE2-W21R 315 L2 Ex II 3D	41.400,00	

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
1500 min <sup>-1</sup> 2p = 4	0,75	IE2-KPR 80 G4 Ex II 3D	578,00
	1,1	IE2-KPR 90 S4 Ex II 3D	674,00
IE2	1,5	IE2-KPR 90 LV4 Ex II 3D	774,00
	2,2	IE2-KPR 100 L4 Ex II 3D	917,00
	3,0	IE2-KPR 100 LX4 Ex II 3D	1.030,00
	4,0	IE2-KPER 112 MZ4 Ex II 3D	1.250,00
	5,5	IE2-WE1R 132 S4 Ex II 3D	1.480,00
	7,5	IE2-WE1R 132 M4 Ex II 3D	1.640,00
	11,0	IE2-WE1R 160 M4 Ex II 3D	2.180,00
	15,0	IE2-WE1R 160 L4 Ex II 3D	2.860,00
	18,5	IE2-WE1R 180 M4 Ex II 3D	3.440,00
	22,0	IE2-WE1R 180 L4 Ex II 3D	4.020,00
	30,0	IE2-WE1R 200 L4 Ex II 3D	5.320,00
	37,0	IE2-WE1R 225 S4 Ex II 3D	6.470,00
	45,0	IE2-WE1R 225 M4 Ex II 3D	7.840,00
	55,0	IE2-WE1R 250 M4 Ex II 3D	9.500,00
	75,0	IE2-WE1R 280 S4 Ex II 3D	12.300,00
	90,0	IE2-WE1R 280 M4 Ex II 3D	14.300,00
	110,0	IE2-W21R 315 S4 Ex II 3D	17.700,00
132,0	IE2-W21R 315 M4 Ex II 3D	21.500,00	
160,0	IE2-W21R 315 MX4 Ex II 3D	25.200,00	
200,0	IE2-W21R 315 MY4 Ex II 3D	33.700,00	
250,0	IE2-W21R 315 L4 Ex II 3D	37.700,00	

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
1000 min <sup>-1</sup> 2p = 6	0,75	IE2-KPR 90 S6 Ex II 3D	725,00
	1,10	IE2-KPR 90 LV6 Ex II 3D	883,00
IE2	1,50	IE2-KPR 100 LX6 Ex II 3D	1.010,00
	2,20	IE2-KPER 112 MV6 Ex II 3D	1.140,00
	3,00	IE2-W21R 132 S6 Ex II 3D	1.320,00
	4,00	IE2-W21R 132 M6 Ex II 3D	1.460,00
	5,50	IE2-W21R 132 MX6 Ex II 3D	1.840,00
	7,50	IE2-W21R 160 M6 Ex II 3D	2.310,00
	11,00	IE2-W21R 160 L6 Ex II 3D	3.090,00
	15,0	IE2-W21R 180 L6 Ex II 3D	4.160,00
	18,5	IE2-W21R 200 L6 Ex II 3D	5.020,00
	22,0	IE2-W21R 200 LX6 Ex II 3D	5.880,00
	30,0	IE2-W21R 225 M6 Ex II 3D	8.070,00
	37,0	IE2-W21R 250 M6 Ex II 3D	9.850,00
	45,0	IE2-W21R 280 S6 Ex II 3D	11.400,00
	55,0	IE2-W21R 280 M6 Ex II 3D	13.800,00
	75,0	IE2-W21R 315 S6 Ex II 3D	18.900,00
	90,0	IE2-W21R 315 M6 Ex II 3D	22.400,00
	110,0	IE2-W21R 315 MX6 Ex II 3D	26.100,00
132,0	IE2-W21R 315 MY6 Ex II 3D	30.700,00	
160,0	IE2-W21R 315 L6 Ex II 3D	37.600,00	

andere eintourige Polzahlen und polumschaltbare Motoren auf Anfrage lieferbar

other one-speed pole and pole-changing numbers available on request

**Energiesparmotoren in Wirkungsgradklasse IE1 nach IEC 60034-30  
für Einsatz in Zone 22, Zündschutzart "Schutz durch Gehäuse, tD A22"  
Energy saving motors, efficiency class IE1 acc. to IEC 60034-30  
for use in zone 22, type of protection "Protection by enclosure, tD A22"**

**Ex II 3D, Ex tD A22 IP55 T125 °C**

Wirkungsgradbestimmung nach IEC 60034-2-1, mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb  
Thermische Klasse 155, Schutzart IP 55, Ausführung für Bemessungsspannungen Bereich A nach IEC 60034-1, 50 Hz  
Efficiency testing acc. to IEC 60034-2-1, with surface ventilation, mode of operation S1, continuous duty,  
thermal class 155, degree of protection IP 55, version for design voltage range A in accordance to IEC 60034-1, 50 Hz

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €		P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €		
<b>3000 min<sup>-1</sup> 2p = 2</b>	0,09	K210 56 K2	-	282,00	<b>1500 min<sup>-1</sup> 2p = 4</b>	0,06	K210 56 K4	-	282,00
	0,12	K21R 56 G2	-	282,00		0,09	K21R 56 G4	-	282,00
	0,18	K21R 63 K2	K20R 56 K2	282,00		0,12	K21R 63 K4	K20R 56 K4	282,00
	0,25	K21R 63 G2	K20R 56 G2	291,00		0,18	K21R 63 G4	K20R 56 G4	291,00
	0,37	K21R 71 K2	K20R 63 K2	307,00		0,25	K21R 71 K4	K20R 63 K4	303,00
	0,55	K21R 71 G2	K20R 63 G2	332,00		0,37	K21R 71 G4	K20R 63 G4	327,00
	0,75	IE1-K21R 80 K2	IE1-K20R 71 K2	384,00		0,55	K21R 80 K4	K20R 71 K4	373,00
	1,1	IE1-K21R 80 G2	IE1-K20R 71 G2	422,00		0,75	IE1-K21R 80 G4	IE1-K20R 71 G4	400,00
	1,5	IE1-K21R 90 S2	IE1-K20R 80 K2	503,00		1,1	IE1-K21R 90 S4	IE1-K20R 80 K4	464,00
	2,2	IE1-K21R 90 L2	IE1-K20R 80 G2	607,00		1,5	IE1-K21R 90 L4	IE1-K20R 80 G4	528,00
	3,0	IE1-K21R 100 L2	IE1-K20R 90 L2	725,00		2,2	IE1-K21R 100 L4	IE1-K20R 90 L4	654,00
	4,0	IE1-K21R 112 M2	IE1-K20R 100 S2	880,00		3,0	IE1-K21R 100 LX4	IE1-K20R 100 S4	765,00
	5,5	IE1-K21R 132 S2T	IE1-K20R 100 L2	1.190,00		4,0	IE1-K21R 112 M4	IE1-K20R 100 L4	914,00
	5,5	IE1-K21R 132 S2	IE1-K20R 112 MY2	1.190,00		5,5	IE1-K21R 132 S4T	-	1.270,00
	7,5	IE1-K21R 132 SX2T	-	1.310,00		5,5	IE1-K21R 132 S4	IE1-K20R 112 M4	1.270,00
	7,5	IE1-K21R 132 SX2	IE1-K20R 132 M2	1.310,00		7,5	IE1-K21R 132 M4	IE1-K20R 132 S4	1.380,00
	11,0	IE1-K21R 160 M2	IE1-K20R 132 M2	1.790,00		11,0	IE1-K21R 160 M4	IE1-K20R 132 M4	1.840,00
	15,0	IE1-K21R 160 MX2	IE1-K20R 160 S2	2.280,00		15,0	IE1-K21R 160 L4	IE1-K20R 160 S4	2.390,00
	18,5	IE1-K21R 160 L2	IE1-K20R 160 M2	2.720,00		18,5	IE1-K21R 180 M4	IE1-K20R 160 M4	2.890,00
	22,0	IE1-K21R 180 M2	IE1-K20R 180 S2	3.270,00		22,0	IE1-K21R 180 L4	IE1-K20R 180 S4	3.370,00
	30,0	IE1-K21R 200 L2	IE1-K20R 180 M2	4.280,00		30,0	IE1-K21R 200 L4	IE1-K20R 180 M4	4.460,00
	37,0	IE1-K21R 200 LX2	IE1-K20R 200 M2	5.510,00		37,0	IE1-K21R 225 S4	IE1-K20R 200 M4	5.420,00
	45,0	IE1-K21R 225 M2	IE1-K20R 200 L2	6.730,00		45,0	IE1-K21R 225 M4	IE1-K20R 200 L4	6.560,00
	55,0	IE1-K21R 250 M2	IE1-K20R 225 M2	8.180,00		55,0	IE1-K21R 250 M4	IE1-K20R 225 M4	7.960,00
	75,0	IE1-K21R 280 S2	IE1-K20R 250 S2	11.200,00		75,0	IE1-K21R 280 S4	IE1-K20R 250 S4	10.700,00
	90,0	IE1-K21R 280 M2	IE1-K20R 250 M2	13.500,00		90,0	IE1-K21R 280 M4	IE1-K20R 250 M4	12.500,00
	110,0	IE1-K21R 315 S2	IE1-K20R 280 S2	16.700,00		110,0	IE1-K21R 315 S4	IE1-K20R 280 S4	15.500,00
	132,0	IE1-K21R 315 M2	IE1-K20R 280 M2	19.600,00		132,0	IE1-K21R 315 M4	IE1-K20R 280 M4	18.800,00
160,0	IE1-K21R 315 MX2	IE1-K20R 315 S2	24.300,00	160,0	IE1-K21R 315 MX4	IE1-K20R 315 S4	22.900,00		
200,0	IE1-K21R 315 MY2	IE1-K20R 315 M2	32.300,00	200,0	IE1-K21R 315 MY4	IE1-K20R 315 M4	30.900,00		
250,0	IE1-K21R 315 L2	IE1-K20R 315 L2	39.500,00	250,0	IE1-K21R 315 L4	IE1-K20R 315 L4	35.900,00		
355,0	IE1-K22R 355 M2	-	A	355,0	IE1-K22R 355 M4	-	A		
400,0	K22R 355 MX2	-	A	400,0	K22R 355 MX4	-	A		
450,0	K22R 355LY2	-	A	450,0	K22R 355 LY4	-	A		
500,0	K22R 355 L2	-	A	500,0	K22R 355 L 4	-	A		
<b>1000 min<sup>-1</sup> 2p = 6</b>	0,09	K21R 63 K6	K20R 56 K6	290,00	<b>750 min<sup>-1</sup> 2p = 8</b>	0,09	K21R 71 K8	K20R 63 K8	338,00
	0,12	K21R 63 G6	K20R 56 G6	296,00		0,12	K21R 71 G8	K20R 63 G8	360,00
	0,18	K21R 71 K6	K20R 63 K6	315,00		0,18	K21R 80 K8	K20R 71 K8	402,00
	0,25	K21R 71 G6	K20R 63 G6	350,00		0,25	K21R 80 G8	K20R 71 G8	459,00
	0,37	K21R 80 K6	K20R 71 K6	384,00		0,37	K21R 90 S8	K20R 80 K8	548,00
	0,55	K21R 80 G6	K20R 71 G6	429,00		0,55	K21R 90 L8	K20R 80 G8	644,00
	0,75	IE1-K21R 90 S6	IE1-K20R 80 K6	499,00		0,75	K21R 100 L8	K20R 90 L8	728,00
	1,1	IE1-K21R 90 L6	IE1-K20R 80 G6	584,00		1,1	K21R 100 LX8	K20R 100 S8	880,00
	1,5	IE1-K21R 100 L6	IE1-K20R 90 L6	689,00		1,5	K21R 112 M8	K20R 100 L8	1.080,00
	2,2	IE1-K21R 112 M6	IE1-K20R 100 L6	835,00		2,2	K21R 132 S8T	-	1.390,00
	3,0	IE1-K21R 132 S6T	-	1.130,00		2,2	K21R 132 S8	K20R 112 M8	1.390,00
	3,0	IE1-K21R 132 S6	IE1-K20R 112 M6	1.130,00		3,0	K21R 132 M8	K20R 112 MX8	1.500,00
	4,0	IE1-K21R 132 M6	IE1-K20R 112 MX6	1.230,00		4,0	K21R 160 M8	K20R 132 S8	1.790,00
	5,5	IE1-K21R 132 MX6	IE1-K20R 132 S6	1.540,00		5,5	K21R 160 MX8	K20R 132 M8	2.220,00
	7,5	IE1-K21R 160 M6	IE1-K20R 132 M6	1.930,00		7,5	K21R 160 L8	K20R 160 S8	2.630,00
	11,0	IE1-K21R 160 L6	IE1-K20R 160 S6	2.580,00		11,0	K21R 180 L8	K20R 160 M8	3.630,00
	15,0	IE1-K21R 180 L6	IE1-K20R 160 M6	3.490,00		15,0	K21R 200 L8	K20R 180 S8	4.760,00
	18,5	IE1-K21R 200 L6	IE1-K20R 180 S6	4.210,00		18,5	K21R 225 S8	K20R 180 M8	5.760,00
	22,0	IE1-K21R 200 LX6	IE1-K20R 180 M6	4.920,00		18,5	K21R 225 M8	-	5.760,00
	30,0	IE1-K21R 225 M6	IE1-K20R 200 M6	6.760,00		22,0	K21R 225 M8	K20R 200 M8	6.640,00
	37,0	IE1-K21R 250 M6	IE1-K20R 225 M6	8.240,00		30,0	K21R 250 M8	K20R 225 M8	8.950,00
	45,0	IE1-K21R 280 S6	IE1-K20R 250 S6	10.000,00		37,0	K21R 280 S8	K20R 250 S8	10.400,00
	55,0	IE1-K21R 280 M6	IE1-K20R 250 M6	12.000,00		45,0	K21R 280 M8	K20R 250 M8	12.700,00
	75,0	IE1-K21R 315 S6	IE1-K20R 280 S6	16.500,00		55,0	K21R 315 S8	K20R 280 S8	15.400,00
	90,0	IE1-K21R 315 M6	IE1-K20R 280 M6	19.500,00		75,0	K21R 315 M8	K20R 280 M8	20.600,00
	110,0	IE1-K21R 315 MX6	IE1-K20R 315 S6	23.800,00		90,0	K21R 315 MX8	K20R 315 S8	24.400,00
	132,0	IE1-K21R 315 MY6	IE1-K20R 315 M6	27.900,00		110,0	K21R 315 MY8	K20R 315 M8	28.700,00
	160,0	IE1-K21R 315 L6	IE1-K20R 315 L6	35.900,00		132,0	K21R 315 L8	K20R 315 L8	35.900,00
250,0	IE1-K22R 355 M6	-	64.300,00	200,0	K22R 355 M8	-	63.500,00		
315,0	IE1-K22R 355 MX6	-	80.700,00	250,0	K22R 355 MX8	-	80.500,00		
355,0	IE1-K22R 355 LY6	-	92.900,00	280,0	K22R 355 LY8	-	92.600,00		

**Energiesparmotoren in Wirkungsgradklasse IE2 nach IEC 60034-30  
für Einsatz in Zone 21, Zündschutzart "Schutz durch Gehäuse, tD A21"  
Energy saving motors, efficiency class IE2 acc. to IEC 60034-30  
for use in zone 21, type of protection "Protection by enclosure, tD A21"  
CE 0637 II 2D, Ex tD A21 IP65 T125 °C**

Wirkungsgradbestimmung nach IEC 60034-2-1, mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb  
Thermische Klasse 155, Schutzart IP 65, Ausführung für Bemessungsspannungen Bereich A nach IEC 60034-1, 50 Hz  
Efficiency testing acc. to IEC 60034-2-1, with surface ventilation, mode of operation S1, continuous duty,  
thermal class 155, degree of protection IP 65, version for design voltage range A in accordance to IEC 60034-1, 50 Hz

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
<b>3000 min<sup>-1</sup> 2p = 2</b>	0,75	IE2-KPR 80 K2 Ex II 2D	694,00
	1,1	IE2-KPR 80 G2 Ex II 2D	753,00
<b>IE2</b>	1,5	IE2-KPR 90 S2 Ex II 2D	841,00
	2,2	IE2-KPR 90 L2 Ex II 2D	1.000,00
	3,0	IE2-KPR 100 L2 Ex II 2D	1.140,00
	4,0	IE2-KPER 112 MX2 Ex II 2D	1.300,00
	5,5	IE2-KPER 132 S2T Ex II 2D	1.530,00
	5,5	IE2-WE1Q 132 S2 Ex II 2D	1.630,00
	7,5	IE2-WE1Q 132 SX2 Ex II 2D	1.730,00
	11,0	IE2-WE1Q 160 M2 Ex II 2D	2.360,00
	15,0	IE2-WE1Q 160 MX2 Ex II 2D	2.940,00
	18,5	IE2-WE1Q 160 L2 Ex II 2D	3.440,00
	22,0	IE2-WE1Q 180 M2 Ex II 2D	4.170,00
	30,0	IE2-WE1Q 200 L2 Ex II 2D	5.460,00
	37,0	IE2-WE1Q 200 LX2 Ex II 2D	6.950,00
	45,0	IE2-WE1Q 225 M2 Ex II 2D	8.410,00
	55,0	IE2-WE1Q 250 M2 Ex II 2D	10.300,00
	75,0	IE2-WE1Q 280 S2 Ex II 2D	13.400,00
	90,0	IE2-WE1Q 280 M2 Ex II 2D	16.200,00
	110,0	IE2-W21Q 315 S2 Ex II 2D	19.700,00
132,0	IE2-W21Q 315 M2 Ex II 2D	23.300,00	
160,0	IE2-W21Q 315 MX2 Ex II 2D	27.400,00	
200,0	IE2-W21Q 315 MY2 Ex II 2D	36.000,00	
250,0	IE2-W21Q 315 L2 Ex II 2D	41.900,00	
315,0	IE2-W21Q 315 LX2 Ex II 2D	50.700,00	

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
<b>1500 min<sup>-1</sup> 2p = 4</b>	0,75	IE2-KPR 80 G4 Ex II 2D	728,00
	1,1	IE2-KPR 90 S4 Ex II 2D	824,00
<b>IE2</b>	1,5	IE2-KPR 90 LV4 Ex II 2D	924,00
	2,2	IE2-KPR 100 L4 Ex II 2D	1.070,00
	3,0	IE2-KPR 100 LX4 Ex II 2D	1.180,00
	4,0	IE2-KPER 112 MZ4 Ex II 2D	1.390,00
	5,5	IE2-WE1Q 132 S4 Ex II 2D	1.660,00
	7,5	IE2-WE1Q 132 M4 Ex II 2D	1.810,00
	11,0	IE2-WE1Q 160 M4 Ex II 2D	2.390,00
	15,0	IE2-WE1Q 160 L4 Ex II 2D	3.080,00
	18,5	IE2-WE1Q 180 M4 Ex II 2D	3.710,00
	22,0	IE2-WE1Q 180 L4 Ex II 2D	4.280,00
	30,0	IE2-WE1Q 200 L4 Ex II 2D	5.670,00
	37,0	IE2-WE1Q 225 S4 Ex II 2D	6.850,00
	45,0	IE2-WE1Q 225 M4 Ex II 2D	8.220,00
	55,0	IE2-WE1Q 250 M4 Ex II 2D	9.980,00
	75,0	IE2-WE1Q 280 S4 Ex II 2D	12.800,00
	90,0	IE2-WE1Q 280 M4 Ex II 2D	14.800,00
	110,0	IE2-WE1Q 315 S4 Ex II 2D	18.400,00
	132,0	IE2-WE1Q 315 M4 Ex II 2D	22.100,00
160,0	IE2-W21Q 315 MX4 Ex II 2D	25.900,00	
200,0	IE2-W21Q 315 MY4 Ex II 2D	34.300,00	
250,0	IE2-W21Q 315 L4 Ex II 2D	38.400,00	
315,0	IE2-W21Q 315 LX4 Ex II 2D	48.000,00	

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
<b>1000 min<sup>-1</sup> 2p = 6</b>	0,75	IE2-KPR 90 S6 Ex II 2D	875,00
	1,1	IE2-KPR 90 LV6 Ex II 2D	1.030,00
<b>IE2</b>	1,5	IE2-KPR 100 LX6 Ex II 2D	1.170,00
	2,2	IE2-KPER 112 MV6 Ex II 2D	1.300,00
	3,0	IE2-W21Q 132 S6 Ex II 2D	1.490,00
	4,0	IE2-W21Q 132 M6 Ex II 2D	1.620,00
	5,5	IE2-W21Q 132 MX6 Ex II 2D	2.000,00
	7,5	IE2-W21Q 160 M6 Ex II 2D	2.520,00
	11,0	IE2-W21Q 160 L6 Ex II 2D	3.320,00
	15,0	IE2-W21Q 180 L6 Ex II 2D	4.400,00
	18,5	IE2-W21Q 200 L6 Ex II 2D	5.360,00
	22,0	IE2-W21Q 200 LX6 Ex II 2D	6.230,00
	30,0	IE2-W21Q 225 M6 Ex II 2D	8.440,00
	37,0	IE2-W21Q 250 M6 Ex II 2D	10.300,00
	45,0	IE2-W21Q 280 S6 Ex II 2D	12.100,00
	55,0	IE2-W21Q 280 M6 Ex II 2D	14.400,00
	75,0	IE2-W21Q 315 S6 Ex II 2D	19.500,00
	90,0	IE2-W21Q 315 M6 Ex II 2D	23.100,00
	110,0	IE2-W21Q 315 MX6 Ex II 2D	26.700,00
	132,0	IE2-W21Q 315 MY6 Ex II 2D	31.400,00
160,0	IE2-W21Q 315 L6 Ex II 2D	38.300,00	
200,0	IE2-W21Q 315 LX6 Ex II 2D	45.000,00	

andere eintourige Polzahlen und polumschaltbare Motoren auf Anfrage lieferbar

other one-speed pole and pole-changing numbers available on request

**Energiesparmotoren in Wirkungsgradklasse IE1 nach IEC 60034-30  
für Einsatz in Zone 21, Zündschutzart "Schutz durch Gehäuse, tD A21"  
Energy saving motors, efficiency class IE1 acc. to IEC 60034-30  
for use in zone 21, type of protection "Protection by enclosure, tD A21"  
CE 0637 II 2D, Ex tD A21 IP65 T125 °C**

Wirkungsgradbestimmung nach IEC 60034-2-1, mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb  
Thermische Klasse 155, Schutzart IP 55, Ausführung für Bemessungsspannungen Bereich A nach IEC 60034-1, 50 Hz  
Efficiency testing acc. to IEC 60034-2-1, with surface ventilation, mode of operation S1, continuous duty,  
thermal class 155, degree of protection IP 55, version for design voltage range A in accordance to IEC 60034-1, 50 Hz

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type		Preis Price €	
<b>3000 min<sup>-1</sup> 2p = 2</b>	0,09	KPEO 56 K2 U	-	381,00	
	0,12	KPER 56 G2	-	381,00	
	0,18	KPER 63 K2	KPR 56 K2	381,00	
	0,25	KPER 63 G2	KPR 56 G2	392,00	
	<b>IE1</b>	0,37	KPER 71 K2	KPR 63 K2	405,00
	0,55	KPER 71 G2	KPR 63 G2	442,00	
	0,75	IE1-KPER 80 K2	IE1-KPR 71 K2	471,00	
	1,1	IE1-KPER 80 G2	IE1-KPR 71 G2	521,00	
	1,5	IE1-KPER 90 S2	IE1-KPR 80 K2	576,00	
	2,2	IE1-KPER 90 L2	IE1-KPR 80 G2	693,00	
	3,0	IE1-KPER 100 L2	IE1-KPR 90 L2	824,00	
	4,0	IE1-KPER 112 M2	IE1-KPR 100 S2	978,00	
	5,5	IE1-KPER 132 S2T	IE1-KPR 100 L2	1.350,00	
	5,5	IE1-K21Q 132 S2	IE1-K20Q 112 MY2	1.350,00	
	7,5	IE1-KPER 132 SX2T	-	1.480,00	
	7,5	IE1-K21Q 132 SX2	IE1-K20Q 112 M2	1.480,00	
	11,0	IE1-K21Q 160 M2	IE1-K20Q 132 M2	2.020,00	
	15,0	IE1-K21Q 160 MX2	IE1-K20Q 160 S2	2.500,00	
	18,5	IE1-K21Q 160 L2	IE1-K20Q 160 M2	2.920,00	
	22,0	IE1-K21Q 180 M2	IE1-K20Q 180 S2	3.540,00	
	30,0	IE1-K21Q 200 L2	IE1-K20Q 180 M2	4.630,00	
	37,0	IE1-K21Q 200 LX2	IE1-K20Q 200 M2	5.870,00	
	45,0	IE1-K21Q 225 M2	IE1-K20Q 200 L2	7.100,00	
	55,0	IE1-K21Q 250 M2	IE1-K20Q 225 M2	8.660,00	
	75,0	IE1-K21Q 280 S2	IE1-K20Q 250 S2	11.800,00	
	90,0	IE1-K21Q 280 M2	IE1-K20Q 250 M2	14.200,00	
	110,0	IE1-K21Q 315 S2	IE1-K20Q 280 S2	17.300,00	
	132,0	IE1-K21Q 315 M2	IE1-K20Q 280 M2	20.400,00	
160,0	IE1-K21Q 315 MX2	IE1-K20Q 315 S2	25.000,00		
200,0	IE1-K21Q 315 MY2	IE1-K20Q 315 M2	33.100,00		
250,0	IE1-K21Q 315 L2	IE1-K20Q 315 L2	40.000,00		
315,0	IE1-K21Q 315 LX2	IE1-K20Q 315 LX2	48.700,00		

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type		Preis Price €	
<b>1500 min<sup>-1</sup> 2p = 4</b>	0,06	KPEO 56 K4 U	-	372,00	
	0,09	KPER 56 G4	-	372,00	
	0,12	KPER 63 K4	KPR 56 K4	372,00	
	0,18	KPER 63 G4	KPR 56 G4	387,00	
	<b>IE1</b>	0,25	KPER 71 K4	KPR 63 K4	396,00
	0,37	KPER 71 G4	KPR 63 G4	428,00	
	0,55	KPER 80 K4	KPR 71 K4	456,00	
	0,75	IE1-KPER 80 G4	IE1-KPR 71 G4	496,00	
	1,1	IE1-KPER 90 S4	IE1-KPR 80 K4	550,00	
	1,5	IE1-KPER 90 L4	IE1-KPR 80 G4	618,00	
	2,2	IE1-KPER 100 L4	IE1-KPR 90 L4	731,00	
	3,0	IE1-KPER 100 LX4	IE1-KPR 100 S4	844,00	
	4,0	IE1-KPER 112 M4	IE1-KPR 100 L4	1.020,00	
	5,5	IE1-KPER 132 S4T	IE1-KPR 100 LX4	1.450,00	
	5,5	IE1-K21Q 132 S4	IE1-K20Q 112 M4	1.450,00	
	7,5	IE1-K21Q 132 M4	IE1-K20Q 132 S4	1.540,00	
	11,0	IE1-K21Q 160 M4	IE1-K20Q 132 M4	2.050,00	
	15,0	IE1-K21Q 160 L4	IE1-K20Q 160 S4	2.610,00	
	18,5	IE1-K21Q 180 M4	IE1-K20Q 160 M4	3.150,00	
	22,0	IE1-K21Q 180 L4	IE1-K20Q 180 S4	3.630,00	
	30,0	IE1-K21Q 200 L4	IE1-K20Q 180 M4	4.810,00	
	37,0	IE1-K21Q 225 S4	IE1-K20Q 200 M4	5.800,00	
	45,0	IE1-K21Q 225 M4	IE1-K20Q 200 L4	6.940,00	
	55,0	IE1-K21Q 250 M4	IE1-K20Q 225 M4	8.430,00	
	75,0	IE1-K21Q 280 S4	IE1-K20Q 250 S4	11.200,00	
	90,0	IE1-K21Q 280 M4	IE1-K20Q 250 M4	13.000,00	
	110,0	IE1-K21Q 315 S4	IE1-K20Q 280 S4	16.200,00	
	132,0	IE1-K21Q 315 M4	IE1-K20Q 280 M4	19.300,00	
160,0	IE1-K21Q 315 MX4	IE1-K20Q 315 S4	23.600,00		
200,0	IE1-K21Q 315 MY4	IE1-K20Q 315 M4	31.500,00		
250,0	IE1-K21Q 315 L4	IE1-K20Q 315 L4	36.600,00		
315,0	IE1-K21Q 315 LX4	IE1-K20Q 315 LX4	45.700,00		

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type		Preis Price €	
<b>1000 min<sup>-1</sup> 2p = 6</b>	0,09	KPER 63 K6	KPR 56 K6	412,00	
	0,12	KPER 63 G6	KPR 56 G6	418,00	
	0,18	KPER 71 K6	KPR 63 K6	431,00	
	0,25	KPER 71 G6	KPR 63 G6	455,00	
	<b>IE1</b>	0,37	KPER 80 K6	KPR 71 K6	480,00
	0,55	KPER 80 G6	KPR 71 G6	532,00	
	0,75	IE1-KPER 90 S6	IE1-KPR 80 K6	567,00	
	1,1	IE1-KPER 90 L6	IE1-KPR 80 G6	665,00	
	1,5	IE1-KPER 100 L6	IE1-KPR 90 L6	792,00	
	2,2	IE1-KPER 112 M6	IE1-KPR 100 L6	945,00	
	3,0	IE1-KPER 132 S6T	IE1-KPR 100 LX6	1.300,00	
	3,0	IE1-K21Q 132 S6	IE1-K20Q 112 M6	1.300,00	
	4,0	IE1-K21Q 132 M6	IE1-K20Q 112 MX6	1.390,00	
	5,5	IE1-K21Q 132 MX6	IE1-K20Q 132 S6	1.700,00	
	7,5	IE1-K21Q 160 M6	IE1-K20Q 132 M6	2.140,00	
	11,0	IE1-K21Q 160 L6	IE1-K20Q 160 S6	2.810,00	
	15,0	IE1-K21Q 180 L6	IE1-K20Q 160 M6	3.730,00	
	18,5	IE1-K21Q 200 L6	IE1-K20Q 180 S6	4.550,00	
	22,0	IE1-K21Q 200 LX6	IE1-K20Q 180 M6	5.270,00	
	30,0	IE1-K21Q 225 M6	IE1-K20Q 200 M6	7.130,00	
	37,0	IE1-K21Q 250 M6	IE1-K20Q 225 M6	8.720,00	
	45,0	IE1-K21Q 280 S6	IE1-K20Q 250 S6	10.600,00	
	55,0	IE1-K21Q 280 M6	IE1-K20Q 250 M6	12.600,00	
	75,0	IE1-K21Q 315 S6	IE1-K20Q 280 S6	17.100,00	
	90,0	IE1-K21Q 315 M6	IE1-K20Q 280 M6	20.300,00	
	110,0	IE1-K21Q 315 MX6	IE1-K20Q 315 S6	24.400,00	
	132,0	IE1-K21Q 315 MY6	IE1-K20Q 315 M6	28.700,00	
	160,0	IE1-K21Q 315 L6	IE1-K20Q 315 L6	36.600,00	
200,0	IE1-K21Q 315 LX6	IE1-K20Q 315 LX6	42.900,00		

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type		Preis Price €	
<b>750 min<sup>-1</sup> 2p = 8</b>	0,09	KPER 71 K8	KPR 63 K8	404,00	
	0,12	KPER 71 G8	KPR 63 G8	423,00	
	0,18	KPER 80 K8	KPR 71 K8	452,00	
	0,25	KPER 80 G8	KPR 71 G8	510,00	
	<b>IE1</b>	0,37	KPER 90 S8	KPR 80 K8	611,00
	0,6	KPER 90 L8	KPR 80 G8	736,00	
	0,8	KPER 100 L8	KPR 90 L8	807,00	
	1,1	KPER 100 LX8	KPR 100 S8	972,00	
	1,5	KPER 112 M8	KPR 100 L8	1.120,00	
	2,2	KPER 132 S8T	-	1.550,00	
	2,2	K21Q 132 S8	K20Q 112 M8	1.550,00	
	3,0	K21Q 132 M8	K20Q 112 MX8	1.670,00	
	4,0	K21Q 160 M8	K20Q 132 S8	2.020,00	
	5,5	K21Q 160 MX8	K20Q 132 M8	2.430,00	
	7,5	K21Q 160 L8	K20Q 160 S8	2.850,00	
	11,0	K21Q 180 L8	K20Q 160 M8	3.900,00	
	15,0	K21Q 200 L8	K20Q 180 S8	5.100,00	
	18,5	K21Q 225 S8	K20Q 180 M8	6.140,00	
	18,5	K21Q 225 M8	-	6.140,00	
	22,0	K21Q 225 L8	K20Q 200 M8	7.040,00	
	30,0	K21Q 250 M8	K20Q 225 M8	9.430,00	
	37,0	K21Q 280 S8	K20Q 250 S8	11.000,00	
	45,0	K21Q 280 M8	K20Q 250 M8	13.200,00	
	55,0	K21Q 315 S8	K20Q 280 S8	16.100,00	
	75,0	K21Q 315 M8	K20Q 280 M8	21.200,00	
	90,0	K21Q 315 MX8	K20Q 315 S8	25.100,00	
	110,0	K21Q 315 MY8	K20Q 315 M8	29.200,00	
	132,0	K21Q 315 L8	K20Q 315 L8	36.600,00	
160,0	K21Q 315 LX8	K20Q 315 LX8	41.800,00		

## Kompaktantriebe

Motor entspricht Energieeffizienzklasse IE1 nach IEC 60034-30

Compact drives

Motor corresponds to motor energy efficiency class IE1 acc. to IEC 60034-30

Wirkungsgradbestimmung nach IEC 60034-2-1, mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb  
 Thermische Klasse 155, Schutzart IP 55, Ausführung für Bemessungsspannungen Bereich A nach IEC 60034-1, 50 Hz  
 Efficiency testing acc. to IEC 60034-2-1, with surface ventilation, mode of operation S1, continuous duty,  
 thermal class 155, degree of protection IP 55, version for design voltage range A in accordance to IEC 60034-1, 50 Hz

Reihe M21R...T 3AC 360 – 440 V, IP 55  
 Series M21R...T 3AC 360 – 440 V, IP 55

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type		Preis Price €
		3000 min <sup>-1</sup> 2p = 2	0,55	
	0,75	MT21R 80 K2 T	MT20R 71 K2 T	699,00
	1,1	MT21R 80 G2 T	MT20R 71 G2 T	731,00
	1,5	MT21R 90 S2 T	MT20R 80 K2 T	768,00
	2,2	MT21R 90 L2 T	MT20R 80 G2 T	818,00
	3,0	MT21R 100 L2 T	MT20R 90 L2 T	944,00

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type		Preis Price €
		1500 min <sup>-1</sup> 2p = 4	0,55	
	0,75	MT21R 80 G4 T	MT20R 71 G4 T	701,00
	1,1	MT21R 90 S4 T	MT20R 80 K4 T	743,00
	1,5	MT21R 90 L4 T	MT20R 80 G4 T	768,00
	2,2	MT21R 100 L4 T	MT20R 90 L4 T	837,00
	3,0	MT21R 100 LX4 T	M20R 100 S4 T	944,00

Reihe M21R...T 3AC 380 – 480 V, IP 55  
 Series M21R...T 3AC 380 – 480 V, IP 55

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type		Preis Price €
		3000 min <sup>-1</sup> 2p = 2	0,55	
	0,75	M21R 80 K2 T	M20R 71 K2 T	873,00
	1,1	M21R 80 G2 T	M20R 71 G2 T	914,00
	1,5	M21R 90 S2 T	M20R 80 K2 T	960,00
	2,2	M21R 90 L2 T	M20R 80 G2 T	1.020,00
	3,0	M21R 100 L2 T	M20R 90 L2 T	1.180,00
	4,0	M21R 112 M2 T	M20R 100 S2 T	1.280,00
	5,5	M21R 112 MX2 T	M20R 100 L2 T	1.600,00
	5,5	M21R 132 S2 T	M20R 100 L2 T	1.660,00
	7,5	M21R 112 MV2 T	M20R 100 L2 T	1.980,00
	7,5	M21R 132 SX2 T	-	2.040,00

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type		Preis Price €
		1500 min <sup>-1</sup> 2p = 4	0,55	
	0,75	M21R 80 G4 T	M20R 71 G4 T	877,00
	1,1	M21R 90 S4 T	M20R 80 K4 T	929,00
	1,5	M21R 90 L4 T	M20R 80 G4 T	960,00
	2,2	M21R 100 L4 T	M20R 90 L4 T	1.050,00
	3,0	M21R 100 LX4 T	M20R 100 S4 T	1.180,00
	4,0	M21R 112 M4 T	M20R 100 L4 T	1.300,00
	5,5	M21R 112 MX4 T	M20R 100 LX4 T	1.640,00
	5,5	M21R 132 S4 T	M20R 112 M4 T	1.690,00
	7,5	M21R 132 M4 T	-	2.150,00

Reihe M21R 3AC 380 – 415 V, IP 54  
 Series M21R 3AC 380 – 415 V, IP 54

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type		Preis Price €
		3000 min <sup>-1</sup> 2p = 2	5,5	
	7,5	M21R 132 SX2 VS	M20R 112 M2 VS	2.460,00
	11,0	M21R 160 M2 VS	M20R 132 M2 VS	3.190,00
	15,0	M21R 160 MX2 VS	M20R 160 S2 VS	3.690,00
	18,5	M21R 160 L2 VS	M20R 160 M2 VS	4.280,00
	22,0	M21R 180 M2 VS	M20R 180 S2 VS	4.710,00

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type		Preis Price €
		1500 min <sup>-1</sup> 2p = 4	5,5	
	7,5	M21R 132 M4 VS	M20R 132 S4 VS	2.480,00
	11,0	M21R 160 M4 VS	M20R 132 M4 VS	3.110,00
	15,0	M21R 160 L4 VS	M20R 160 S4 VS	3.700,00
	18,5	M21R 180 M4 VS	M20R 160 M4 VS	4.270,00
	22,0	M21R 180 L4 VS	M20R 180 S4 VS	4.710,00

Abweichender Rabatt zu Normmotorenreihe  
 Thermischer Wicklungsschutz inklusive

Attention: Deviating discount to standard motor series  
 Thermal winding protection included

## Kompaktantriebe

Motor entspricht Energieeffizienzklasse IE2 nach IEC 60034-30

## Compact drives

Motor corresponds to motor energy efficiency class IE2 acc. to IEC 60034-30

Wirkungsgradbestimmung nach IEC 60034-2-1, mit Oberflächenkühlung, Betriebsart S1, Dauerbetrieb

Thermische Klasse 155, Schutzart IP 55, Ausführung für Bemessungsspannungen Bereich A nach IEC 60034-1, 50 Hz

Efficiency testing acc. to IEC 60034-2-1, with surface ventilation, mode of operation S1, continuous duty,

thermal class 155, degree of protection IP 55, version for design voltage range A in accordance to IEC 60034-1, 50 Hz

Reihe ME1R....T 3AC 380 – 480 V, IP 55  
Series ME1R....T 3AC 380 – 480 V, IP 55

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
3000 min <sup>-1</sup> 2p = 2	0,75	ME1R 80 K2 T	983,00
	1,1	ME1R 80 G2 T	1.040,00
	1,5	ME1R 90 S2 T	1.180,00
	2,2	ME1R 90 L2 T	1.320,00
	3,0	ME1R 100 L2 T	1.530,00
	4,0	ME1R 112 MX2T	1.800,00
	5,5	ME1R 132 S2 T	2.140,00
	7,5	ME1R 132 SX2 T	2.520,00

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
1500 min <sup>-1</sup> 2p = 4	0,75	ME1R 80 G4 T	973,00
	1,1	ME1R 90 S4 T	1.020,00
	1,5	ME1R 90 LV4 T	1.110,00
	2,2	ME1R 100 L4 T	1.340,00
	3,0	ME1R 100 LX4 T	1.520,00
	4,0	ME1R 112 MZ4 T	1.820,00
	5,5	ME1R 132 S4 T	2.180,00
	7,5	ME1R 132 M4 T	2.540,00

Reihe ME1R 3AC 380 – 415 V, IP 54  
Series ME1R 3AC 380 – 415 V, IP 54

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
3000 min <sup>-1</sup> 2p = 2	5,5	ME1R 132 S2 VS	2.630,00
	7,5	ME1R 132 SX2 VS	2.710,00
	11,0	ME1R 160 M2 VS	3.540,00
	15,0	ME1R 160 MX2 VS	4.130,00
	18,5	ME1R 160 L2 VS	4.810,00
	22,0	ME1R 180 M2 VS	5.340,00

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
1500 min <sup>-1</sup> 2p = 4	5,5	ME1R 132 S4 VS	2.530,00
	7,5	ME1R 132 M4 VS	2.740,00
	11,0	ME1R 160 M4 VS	3.450,00
	15,0	ME1R 160 L4 VS	4.160,00
	18,5	ME1R 180 M4 VS	4.830,00
	22,0	ME1R 180 L4 VS	5.370,00

Abweichender Rabatt zu Normmotorenreihe  
Thermischer Wicklungsschutz inklusive

Attention: Deviating discount to standard motor series  
Thermal winding protection included

# Drehstrom-Asynchronmotoren mit Käfigläufer zum Einsatz in maschinellen Rauch- und Wärmeabzugsgeräten nach EN 12101-3 Klasse F200, Kühlart IC 418

## Three-phase motors with squirrel-cage rotor for use in mechanical smoke and heat exhaust ventilators acc. to EN 12101-3 Class F200, cooling method IC 418

Bauform IM B3, Schutzart IP 55, Thermische Klasse 180

Type of construction IM B3, degree of protection IP 55, thermal class 180

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
3000 min <sup>-1</sup> 2p = 2	0,25	K210 71 K2	K200 63 K2	591,00
	0,37	K210 71 G2	K200 63 G2	615,00
	0,55	K210 80 K2	K200 71 K2	621,00
	0,75	K210 80 G2	K200 71 G2	692,00
	1,1	K210 90 S2	K200 80 K2	737,00
	1,5	K210 90 L2	K200 80 G2	833,00
	2,2	K210 100 L2	K200 90 L2	962,00
	3,0	K210 112 M2	K200 100 S2	1.090,00
	4,0	K210 132 S2T	K200 100 L2	1.270,00
	5,5	K210 132 SX2T	K200 100 LV2	1.640,00
	7,5	K11R 132 SX2 FAN	K10R 112 M2 FAN	1.930,00
	11,0	K11R 160 M2 FAN	K10R 132 M2 FAN	2.670,00
	15,0	K11R 160 MX2 FAN	K10R 160 S2 FAN	3.270,00
	18,5	K11R 160 L2 FAN	K10R 160 M2 FAN	3.740,00
	22,0	K11R 180 M2 FAN	K10R 180 S2 FAN	4.600,00
	30,0	K11R 200 L2 FAN	K10R 180 M2 FAN	5.940,00
	37,0	K11R 200 LX2 FAN	K10R 200 M2 FAN	7.360,00
	45,0	K11R 225 M2 FAN	K10R 200 L2 FAN	9.150,00
	55,0	K11R 250 M2 FAN	K10R 225 M2 FAN	11.000,00
	75,0	K11R 280 S2 FAN	K10R 250 S2 FAN	14.000,00
	90,0	K11R 280 M2 FAN	K10R 250 M2 FAN	16.700,00
	110,0	K11R 315 S2 FAN	K10R 280 S2 FAN	20.000,00
	132,0	K11R 315 M2 FAN	K10R 280 M2 FAN	23.100,00
	160,0	K11R 315 MX2 FAN	K10R 315 S2 FAN	27.900,00
	200,0	K11R 315 MY2 FAN	K10R 315 M2 FAN	35.800,00
	250,0	K11R 315 L2 FAN	K10R 315 L2 FAN	45.600,00
	315,0	K11R 315 LX2 FAN	K10R 315 LX2 FAN	58.700,00
355,0	K22R 355 M2 FAN	-	A	
400,0	K22R 355 MX2 FAN	-	A	
450,0	K22R 355 LY2 FAN	-	A	
500,0	K22R 355 L2 FAN	-	A	

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
1000 min <sup>-1</sup> 2p = 6	0,12	K210 71 K6	K200 63 K6	596,00
	0,18	K210 71 G6	K200 63 G6	601,00
	0,25	K210 80 K6	K200 71 K6	629,00
	0,37	K210 80 G6	K200 71 G6	637,00
	0,55	K210 90 S6	K200 80 K6	686,00
	0,75	K210 90 L6	K200 80 G6	760,00
	1,1	K210 100 L6	K200 90 L6	853,00
	1,5	K210 112 M6	K200 100 L6	963,00
	2,2	K210 132 S6T	K200 100 LX6	1.120,00
	3,0	K11R 132 S6 FAN	K10R 112 M6 FAN	1.430,00
	4,0	K11R 132 M6 FAN	K10R 112 MX6 FAN	1.690,00
	5,5	K11R 132 MX6 FAN	K10R 132 S6 FAN	2.020,00
	7,5	K11R 160 M6 FAN	K10R 132 M6 FAN	2.610,00
	11,0	K11R 160 L6 FAN	K10R 160 S6 FAN	3.310,00
	15,0	K11R 180 L6 FAN	K10R 160 M6 FAN	4.430,00
	18,5	K11R 200 L6 FAN	K10R 180 S6 FAN	5.380,00
	22,0	K11R 200 LX6 FAN	K10R 180 M6 FAN	6.180,00
	30,0	K11R 225 M6 FAN	K10R 200 M6 FAN	8.530,00
	37,0	K11R 250 M6 FAN	K10R 225 M6 FAN	10.200,00
	45,0	K11R 280 S6 FAN	K10R 250 S6 FAN	12.600,00
	55,0	K11R 280 M6 FAN	K10R 250 M6 FAN	14.900,00
	75,0	K11R 315 S6 FAN	K10R 280 S6 FAN	18.200,00
	90,0	K11R 315 M6 FAN	K10R 280 M6 FAN	20.600,00
	110,0	K11R 315 MX6 FAN	K10R 315 S6 FAN	24.800,00
	132,0	K11R 315 MY6 FAN	K10R 315 M6 FAN	28.100,00
	160,0	K11R 315 L6 FAN	K10R 315 L6 FAN	34.800,00
	200,0	K11R 315 LX6 FAN	K10R 315 LX6 FAN	43.400,00
250,0	K22R 355 M6 FAN	-	55.400,00	
315,0	K22R 355 MX6 FAN	-	73.000,00	
355,0	K22R 355 LY6 FAN	-	86.100,00	

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
1500 min <sup>-1</sup> 2p = 4	0,18	K210 71 K4	K200 63 K4	587,00
	0,25	K210 71 G4	K200 63 G4	593,00
	0,37	K210 80 K4	K200 71 K4	636,00
	0,55	K210 80 G4	K200 71 G4	679,00
	0,75	K210 90 S4	K200 80 K4	708,00
	1,1	K210 90 L4	K200 80 G4	785,00
	1,5	K210 100 L4	K200 90 L4	863,00
	2,2	K210 100 LX4	K200 100 S4	990,00
	3,0	K210 112 M4	K200 100 L4	1.120,00
	4,0	K210 132 S4T	K200 100 LX4	1.310,00
	5,5	K11R 132 S4 FAN	K10R 112 M4 FAN	1.660,00
	7,5	K11R 132 M4 FAN	K10R 132 S4 FAN	1.980,00
	11,0	K11R 160 M4 FAN	K10R 132 M4 FAN	2.700,00
	15,0	K11R 160 L4 FAN	K10R 160 S4 FAN	3.340,00
	18,5	K11R 180 M4 FAN	K10R 160 M4 FAN	4.130,00
	22,0	K11R 180 L4 FAN	K10R 180 S4 FAN	4.670,00
	30,0	K11R 200 L4 FAN	K10R 180 M4 FAN	6.100,00
	37,0	K11R 225 S4 FAN	K10R 200 M4 FAN	7.580,00
	45,0	K11R 225 M4 FAN	K10R 200 L4 FAN	8.980,00
	55,0	K11R 250 M4 FAN	K10R 225 M4 FAN	11.000,00
	75,0	K11R 280 S4 FAN	K10R 250 S4 FAN	13.200,00
	90,0	K11R 280 M4 FAN	K10R 250 M4 FAN	15.900,00
	110,0	K11R 315 S4 FAN	K10R 280 S4 FAN	18.400,00
	132,0	K11R 315 M4 FAN	K10R 280 M4 FAN	22.900,00
	160,0	K11R 315 MX4 FAN	K10R 315 S4 FAN	28.000,00
	200,0	K11R 315 MY4 FAN	K10R 315 M4 FAN	35.100,00
	250,0	K11R 315 L4 FAN	K10R 315 L4 FAN	43.500,00
	315,0	K11R 315 LX4 FAN	K10R 315 LX4 FAN	55.000,00
	355,0	K22R 355 M4 FAN	-	A
	400,0	K22R 355 MX4 FAN	-	A
450,0	K22R 355 LY4 FAN	-	A	
500,0	K22R 355 L4 FAN	-	A	

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
750 min <sup>-1</sup> 2p = 8	0,06	K210 71 K8	K200 63 K8	653,00
	0,09	K210 71 G8	K200 63 G8	665,00
	0,12	K210 80 K8	K200 71 K8	677,00
	0,18	K210 80 G8	K200 71 G8	720,00
	0,25	K210 90 S8	K200 80 K8	776,00
	0,37	K210 90 L8	K200 80 G8	821,00
	0,55	K210 100 L8	K200 90 L8	966,00
	0,75	K210 100 LX8	K200 100 S8	1.180,00
	1,1	K210 112 M8	K200 100 L8	1.350,00
	1,5	K210 132 S8T	K200 100 LX8	1.660,00
	2,2	K11R 132 S8 FAN	K10R 112 M8 FAN	2.130,00
	3,0	K11R 132 M8 FAN	K10R 112 MX8 FAN	2.710,00
	4,0	K11R 160 M8 FAN	K10R 132 S8 FAN	3.050,00
	5,5	K11R 160 MX8 FAN	K10R 132 M8 FAN	3.650,00
	7,5	K11R 160 L8 FAN	K10R 160 S8 FAN	4.400,00
	11,0	K11R 180 L8 FAN	K10R 160 M8 FAN	5.740,00
	15,0	K11R 200 L8 FAN	K10R 180 S8 FAN	7.210,00
	18,5	K11R 225 S8 FAN	K10R 180 M8 FAN	9.390,00
	22,0	K11R 225 M8 FAN	K10R 200 M8 FAN	13.100,00
	30,0	K11R 250 M8 FAN	K10R 225 M8 FAN	17.200,00
	37,0	K11R 280 S8 FAN	K10R 250 S8 FAN	20.600,00
	45,0	K11R 280 M8 FAN	K10R 250 M8 FAN	24.700,00
	55,0	K11R 315 S8 FAN	K10R 280 S8 FAN	30.000,00
	75,0	K11R 315 M8 FAN	K10R 280 M8 FAN	34.400,00
	90,0	K11R 315 MX8 FAN	K10R 315 S8 FAN	42.000,00
	110,0	K11R 315 MY8 FAN	K10R 315 M8 FAN	44.500,00
	132,0	K11R 315 L8 FAN	K10R 315 L8 FAN	54.100,00
	160,0	K11R 315 LX8 FAN	K10R 315 LX8 FAN	70.900,00
	200,0	K22R 355 M8 FAN	-	89.500,00
	250,0	K22R 355 MX8 FAN	-	119.700,00
280,0	K22R 355 LY8 FAN	-	141.800,00	

Bis Baugröße 132S...T mit Klemmenkasten  
Ab Baugröße 132 bis 355 mit 3 herausgeführten Kabelenden, 1,5 m lang  
Wicklungsschaltung wahlweise Y- oder Δ-Schaltung  
(nur Direktschaltung; Y-Δ-Einschaltung auf Anfrage)

Up to size 132S...T with terminal box  
From size 132 to 355 with 3 flying cables, 1.5 m length  
Windings connection Y or Δ  
(only direct-on-line starting; Y-Δ on request)

# Drehstrom-Asynchronmotoren mit Käfigläufer zum Einsatz in maschinellen Rauch- und Wärmeabzugsgeräten nach EN 12101-3 Klasse F300, Kühlart IC 418

## Three-phase motors with squirrel-cage rotor for use in mechanical smoke and heat exhaust ventilators acc. to EN 12101-3 Class F300, cooling method IC 418

Bauform IM B3, Schutzart IP 55, Thermische Klasse 180

Type of construction IM B3, degree of protection IP 55, thermal class 180

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
<b>3000 min<sup>-1</sup></b> <b>2p = 2</b>	0,25	K210 71 K2	K200 63 K2	A
	0,37	K210 71 G2	K200 63 G2	A
	0,55	K210 80 K2	K200 71 K2	A
	0,75	K210 80 G2	K200 71 G2	A
	1,1	K210 90 S2	K200 80 K2	A
	1,5	K210 90 L2	K200 80 G2	A
	2,2	K210 100 L2	K200 90 L2	A
	3,0	K210 112 M2	K200 100 S2	A
	4,0	K210 132 S2 T	K200 100 L2	A
	5,5	K210 132 SX2T	K200 100 LV2	A
	7,5	K11R 160 M2 FAN	K10R 132 M2 FAN	A
	11,0	K11R 160 MX2 FAN	K10R 160 S2 FAN	A
	15,0	K11R 160 L2 FAN	K10R 160 M2 FAN	A
	18,5	K11R 180 M2 FAN	K10R 180 S2 FAN	A
	22,0	K11R 200 L2 FAN	K10R 180 M2 FAN	A
	30,0	K11R 200 LX2 FAN	K10R 200 M2 FAN	A
	37,0	K11R 225 M2 FAN	K10R 200 L2 FAN	A
	45,0	K11R 250 M2 FAN	K10R 225 M2 FAN	A
	55,0	K11R 280 S2 FAN	K10R 250 S2 FAN	A
	75,0	K11R 280 M2 FAN	K10R 250 M2 FAN	A
	90,0	K11R 315 S2 FAN	K10R 280 S2 FAN	A
	110,0	K11R 315 M2 FAN	K10R 280 M2 FAN	A
	132,0	K11R 315 MX2 FAN	K10R 315 S2 FAN	A
	160,0	K11R 315 MY2 FAN	K10R 315 M2 FAN	A
200,0	K11R 315 L2 FAN	K10R 315 L2 FAN	A	
250,0	K11R 315 LX2 FAN	K10R 315 LX2 FAN	A	
300,0	K22R 355 M2 FAN	-	A	
340,0	K22R 355 MX2 FAN	-	A	
380,0	K22R 355 LY2 FAN	-	A	
420,0	K22R 355 L2 FAN	-	A	

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
<b>1000 min<sup>-1</sup></b> <b>2p = 6</b>	0,12	K210 71 K6	K200 63 K6	A
	0,18	K210 71 G6	K200 63 G6	A
	0,25	K210 80 K6	K200 71 K6	A
	0,37	K210 80 G6	K200 71 G6	A
	0,55	K210 90 S6	K200 80 K6	A
	0,75	K210 90 L6	K200 80 G6	A
	1,1	K210 100 L6	K200 90 L6	A
	1,5	K210 112 M6	K200 100 L6	A
	2,2	K210 132 S6T	K200 100 LX6	A
	3,0	K11R 132 M6 FAN	K10R 112 MX6 FAN	A
	4,0	K11R 132 MX6 FAN	K10R 132 S6 FAN	A
	5,5	K11R 160 M6 FAN	K10R 132 M6 FAN	A
	7,5	K11R 160 L6 FAN	K10R 160 S6 FAN	A
	11,0	K11R 180 L6 FAN	K10R 160 M6 FAN	A
	15,0	K11R 200 L6 FAN	K10R 180 S6 FAN	A
	18,5	K11R 200 LX6 FAN	K10R 180 M6 FAN	A
	22,0	K11R 225 M6 FAN	K10R 200 M6 FAN	A
	30,0	K11R 250 M6 FAN	K10R 225 M6 FAN	A
	37,0	K11R 280 S6 FAN	K10R 250 S6 FAN	A
	45,0	K11R 280 M6 FAN	K10R 250 M6 FAN	A
	55,0	K11R 315 S6 FAN	K10R 280 S6 FAN	A
	75,0	K11R 315 M6 FAN	K10R 280 M6 FAN	A
	90,0	K11R 315 MX6 FAN	K10R 315 S6 FAN	A
	110,0	K11R 315 MY6 FAN	K10R 315 M6 FAN	A
132,0	K11R 315 L6 FAN	K10R 315 L6 FAN	A	
160,0	K11R 315 LX6 FAN	K10R 315 LX6 FAN	A	
200,0	K22R 355 M6 FAN	-	A	
250,0	K22R 355 MX6 FAN	-	A	
300,0	K22R 355 LY6 FAN	-	A	

Bis Baugröße 132S...T mit Klemmenkasten

Ab Baugröße 132 bis 355 mit 3 herausgeführten Kabelenden, 1,5 m lang

Wicklungsschaltung wahlweise Y- oder Δ-Schaltung

(nur Direkteinschaltung; Y-Δ-Einschaltung auf Anfrage)

A = auf Anfrage

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
<b>1500 min<sup>-1</sup></b> <b>2p = 4</b>	0,18	K210 71 K4	K200 63 K4	A
	0,25	K210 71 G4	K200 63 G4	A
	0,37	K210 80 K4	K200 71 K4	A
	0,55	K210 80 G4	K200 71 G4	A
	0,75	K210 90 S4	K200 80 K4	A
	1,1	K210 90 L4	K200 80 G4	A
	1,5	K210 100 L4	K200 90 L4	A
	2,2	K210 100 LX4	K200 100 S4	A
	3,0	K210 112 M4	K200 100 L4	A
	4,0	K210 132 S4 T	K200 100 LX4	A
	5,5	K11R 132 M4 FAN	K10R 132 S4 FAN	A
	7,5	K11R 160 M4 FAN	K10R 132 M4 FAN	A
	11,0	K11R 160 L4 FAN	K10R 160 S4 FAN	A
	15,0	K11R 180 M4 FAN	K10R 160 M4 FAN	A
	18,5	K11R 180 L4 FAN	K10R 180 S4 FAN	A
	22,0	K11R 200 L4 FAN	K10R 180 M4 FAN	A
	30,0	K11R 225 S4 FAN	K10R 200 M4 FAN	A
	37,0	K11R 225 M4 FAN	K10R 200 L4 FAN	A
	45,0	K11R 250 M4 FAN	K10R 225 M4 FAN	A
	55,0	K11R 280 S4 FAN	K10R 250 S4 FAN	A
	75,0	K11R 280 M4 FAN	K10R 250 M4 FAN	A
	90,0	K11R 315 S4 FAN	K10R 280 S4 FAN	A
	110,0	K11R 315 M4 FAN	K10R 280 M4 FAN	A
	132,0	K11R 315 MX4 FAN	K10R 315 S4 FAN	A
160,0	K11R 315 MY4 FAN	K10R 315 M4 FAN	A	
200,0	K11R 315 L4 FAN	K10R 315 L4 FAN	A	
250,0	K11R 315 LX4 FAN	K10R 315 LX4 FAN	A	
300,0	K22R 355 M4 FAN	-	A	
340,0	K22R 355 MX4 FAN	-	A	
380,0	K22R 355 LY4 FAN	-	A	
420,0	K22R 355 L4 FAN	-	A	

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
<b>750 min<sup>-1</sup></b> <b>2p = 8</b>	0,06	K210 71 K8	K200 63 K8	A
	0,09	K210 71 G8	K200 63 G8	A
	0,12	K210 80 K8	K200 71 K8	A
	0,18	K210 80 G8	K200 71 G8	A
	0,25	K210 90 S8	K200 80 K8	A
	0,37	K210 90 L8	K200 80 G8	A
	0,55	K210 100 L8	K200 90 L8	A
	0,75	K210 100 LX8	K200 100 S8	A
	1,1	K210 112 M8	K200 100 L8	A
	1,5	K210 132 S8T	K200 100 LX8	A
	2,2	K11R 132 M8 FAN	K10R 112 MX8 FAN	A
	3,0	K11R 160 M8 FAN	K10R 132 S8 FAN	A
	4,0	K11R 160 MX8 FAN	K10R 132 M8 FAN	A
	5,5	K11R 160 L8 FAN	K10R 160 S8 FAN	A
	7,5	K11R 180 L8 FAN	K10R 160 M8 FAN	A
	11,0	K11R 200 L8 FAN	K10R 180 S8 FAN	A
	15,0	-	K10R 180 M8 FAN	A
	18,5	K11R 225 S8 FAN	-	A
	18,5	-	K10R 200 M8 FAN	A
	22,0	K11R 250 M8 FAN	K10R 225 M8 FAN	A
	30,0	K11R 280 S8 FAN	K10R 250 S8 FAN	A
	37,0	K11R 280 M8 FAN	K10R 250 M8 FAN	A
	45,0	K11R 315 S8 FAN	K10R 280 S8 FAN	A
	55,0	K11R 315 M8 FAN	K10R 280 M8 FAN	A
75,0	K11R 315 MX8 FAN	K10R 315 S8 FAN	A	
90,0	K11R 315 MY8 FAN	K10R 315 M8 FAN	A	
110,0	K11R 315 L8 FAN	K10R 315 L8 FAN	A	
132,0	K11R 315 LX8 FAN	K10R 315 LX8 FAN	A	
160,0	K22R 355 M8 FAN	-	A	
200,0	K22R 355 MX8 FAN	-	A	

Up to size 132S...T with terminal box

From size 132 to 355 with 3 flying cables, 1.5 m length

Windings connection Y or Δ

(only direct-on-line starting; Y-Δ on request)

A = on request

# Drehstrom-Asynchronmotoren mit Käfigläufer zum Einsatz in maschinellen Rauch- und Wärmeabzugsgeräten nach EN 12101-3 Klasse F400, Kühlart IC 418

## Three-phase motors with squirrel-cage rotor for use in mechanical smoke and heat exhaust ventilators acc. to EN 12101-3 Class F400, cooling method IC 418

Bauform IM B3, Schutzart IP 55, Thermische Klasse 180

Type of construction IM B3, degree of protection IP 55, thermal class 180

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €		P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €		
<b>3000 min<sup>-1</sup></b> <b>2p = 2</b>	0,25	K210 71 G2	K200 63 G2	A	<b>1500 min<sup>-1</sup></b> <b>2p = 4</b>	0,18	K210 71 G4	K200 63 G4	A
	0,37	K210 80 K2	K200 71 K2	A		0,25	K210 80 K4	K200 71 K4	A
	0,55	K210 80 G2	K200 71 G2	A		0,37	K210 80 G4	K200 71 G4	A
	0,75	K210 90 S2	K200 80 K2	A		0,55	K210 90 S4	K200 80 K4	A
	1,1	K210 90 L2	K200 80 G2	A		0,75	K210 90 L4	K200 80 G4	A
	1,5	K210 100 L2	K200 90 L2	A		1,1	K210 100 L4	K200 90 L4	A
	2,2	K210 112 M2	K200 100 L2	A		1,5	K210 100 LX4	K200 100 S4	A
	3,0	K210 112 MX2	K200 100 LX2	A		2,2	K210 112 M4	K200 100 L4	A
	4,0	K210 112 MV2	K200 100 LV2	A		3,0	K210 112 MX4	K200 100 LX4	A
	5,5	K11R 160 M2 FAN	K10R 132 M2 FAN	A		4,0	K11R 132 M4 FAN	K10R 132 S4 FAN	A
	7,5	K11R 160 MX2 FAN	K10R 160 S2 FAN	A		5,5	K11R 160 M4 FAN	K10R 132 M4 FAN	A
	11,0	K11R 160 L2 FAN	K10R 160 M2 FAN	A		7,5	K11R 160 L4 FAN	K10R 160 S4 FAN	A
	15,0	K11R 180 M2 FAN	K10R 180 S2 FAN	A		11,0	K11R 180 M4 FAN	K10R 160 M4 FAN	A
	18,5	K11R 200 L2 FAN	K10R 180 M2 FAN	A		15,0	K11R 180 L4 FAN	K10R 180 S4 FAN	A
	30,0	K11R 200 LX2 FAN	K10R 200 M2 FAN	A		18,5	K11R 200 L4 FAN	K10R 180 M4 FAN	A
	37,0	K11R 225 M2 FAN	K10R 200 L2 FAN	A		30,0	K11R 225 S4 FAN	K10R 200 M4 FAN	A
	45,0	K11R 250 M2 FAN	K10R 225 M2 FAN	A		37,0	K11R 225 M4 FAN	K10R 200 L4 FAN	A
	55,0	K11R 280 S2 FAN	K10R 250 S2 FAN	A		45,0	K11R 250 M4 FAN	K10R 225 M4 FAN	A
	75,0	K11R 280 M2 FAN	K10R 250 M2 FAN	A		55,0	K11R 280 S4 FAN	K10R 250 S4 FAN	A
	90,0	K11R 315 S2 FAN	K10R 280 S2 FAN	A		75,0	K11R 280 M4 FAN	K10R 250 M4 FAN	A
	110,0	K11R 315 M2 FAN	K10R 280 M2 FAN	A		90,0	K11R 315 S4 FAN	K10R 280 S4 FAN	A
	132,0	K11R 315 MX2 FAN	K10R 315 S2 FAN	A		110,0	K11R 315 M4 FAN	K10R 280 M4 FAN	A
	160,0	K11R 315 MY2 FAN	K10R 315 M2 FAN	A		132,0	K11R 315 MX4 FAN	K10R 315 S4 FAN	A
	200,0	K11R 315 L2 FAN	K10R 315 L2 FAN	A		160,0	K11R 315 MY4 FAN	K10R 315 M4 FAN	A
250,0	K11R 315 LX2 FAN	K10R 315 LX2 FAN	A	200,0	K11R 315 L4 FAN	K10R 315 L4 FAN	A		
300,0	K22R 355 M2 FAN	-	A	250,0	K11R 315 LX4 FAN	K10R 315 LX4 FAN	A		
340,0	K22R 355 MX2 FAN	-	A	300,0	K22R 355 M4 FAN	-	A		
380,0	K22R 355 LY2 FAN	-	A	340,0	K22R 355 MX4 FAN	-	A		
420,0	K22R 355 L2 FAN	-	A	380,0	K22R 355 LY4 FAN	-	A		
				420,0	K22R 355 L4 FAN	-	A		
<b>1000 min<sup>-1</sup></b> <b>2p = 6</b>	0,12	K210 71 G6	K200 63 G6	A	<b>750 min<sup>-1</sup></b> <b>2p = 8</b>	0,06	K210 71 G8	K200 63 G8	A
	0,18	K210 80 K6	K200 71 K6	A		0,09	K210 80 K8	K200 71 K8	A
	0,25	K210 80 G6	K200 71 G6	A		0,12	K210 80 G8	K200 71 G8	A
	0,37	K210 90 S6	K200 80 K6	A		0,18	K210 90 S8	K200 80 K8	A
	0,55	K210 90 L6	K200 80 G6	A		0,25	K210 90 L8	K200 80 G8	A
	0,75	K210 100 L6	K200 90 L6	A		0,37	K210 100 L8	K200 90 L8	A
	1,1	K210 112 M6	K200 100 L6	A		0,55	K210 100 LX8	K200 100 S8	A
	1,5	K210 112 MX6	K200 100 LX6	A		0,75	K210 112 M8	K200 100 L8	A
	2,2	K210 112 MV6	K200 100 LV6	A		1,1	K210 112 MX8	K200 100 LX8	A
	3,0	K11R 132 MX6 FAN	K10R 132 S6 FAN	A		1,5	K210 112 MV8	K200 100 LV8	A
	4,0	K11R 160 M6 FAN	K10R 132 M6 FAN	A		2,2	K11R 160 M8 FAN	K10R 132 S8 FAN	A
	5,5	K11R 160 L6 FAN	K10R 160 S6 FAN	A		3,0	K11R 160 MX8 FAN	K10R 132 M8 FAN	A
	7,5	K11R 180 L6 FAN	K10R 160 M6 FAN	A		4,0	K11R 160 L8 FAN	K10R 160 S8 FAN	A
	11,0	K11R 200 L6 FAN	K10R 180 S6 FAN	A		5,5	K11R 180 L8 FAN	K10R 160 M8 FAN	A
	15,0	K11R 200 LX6 FAN	K10R 180 M6 FAN	A		7,5	K11R 200 L8 FAN	K10R 180 S8 FAN	A
	22,0	K11R 225 M6 FAN	K10R 200 M6 FAN	A		11,0	-	K10R 180 M8 FAN	A
	30,0	K11R 250 M6 FAN	K10R 225 M6 FAN	A		18,5	K11R 225 S8 FAN	-	A
	37,0	K11R 280 S6 FAN	K10R 250 S6 FAN	A		18,5	K11R 225 M8 FAN	K10R 200 M8 FAN	A
	45,0	K11R 280 M6 FAN	K10R 250 M6 FAN	A		22,0	K11R 250 M8 FAN	K10R 225 M8 FAN	A
	55,0	K11R 315 S6 FAN	K10R 280 S6 FAN	A		30,0	K11R 280 S8 FAN	K10R 250 S8 FAN	A
	75,0	K11R 315 M6 FAN	K10R 280 M6 FAN	A		37,0	K11R 280 M8 FAN	K10R 250 M8 FAN	A
	90,0	K11R 315 MX6 FAN	K10R 315 S6 FAN	A		45,0	K11R 315 S8 FAN	K10R 280 S8 FAN	A
	110,0	K11R 315 MY6 FAN	K10R 315 M6 FAN	A		55,0	K11R 315 M8 FAN	K10R 280 M8 FAN	A
	132,0	K11R 315 L6 FAN	K10R 315 L6 FAN	A		75,0	K11R 315 MX8 FAN	K10R 315 S8 FAN	A
160,0	K11R 315 LX6 FAN	K10R 315 LX6 FAN	A	90,0	K11R 315 MY8 FAN	K10R 315 M8 FAN	A		
200,0	K22R 355 M6 FAN	-	A	110,0	K11R 315 L8 FAN	K10R 315 L8 FAN	A		
250,0	K22R 355 MX6 FAN	-	A	132,0	K11R 315 LX8 FAN	K10R 315 LX8 FAN	A		
300,0	K22R 355 LY6 FAN	-	A	160,0	K22R 355 M8 FAN	-	A		
				200,0	K22R 355 MX8 FAN	-	A		
				230,0	K22R 355 LY8 FAN	-	A		

Bis Baugröße 132S...T mit Klemmenkasten  
Ab Baugröße 132 bis 355 mit 3 herausgeführten Kabelenden, 1,5 m lang  
Wicklungsschaltung wahlweise Y- oder Δ-Schaltung  
(nur Direkteinschaltung; Y-Δ-Einschaltung auf Anfrage)  
A = auf Anfrage

Up to size 132S...T with terminal box  
From size 132 to 355 with 3 flying cables, 1.5 m length  
Windings connection Y or Δ  
(only direct-on-line starting; Y-Δ on request)  
A = on request

**Energiesparmotoren, Premium Efficiency IE3 nach IEC 60034-30**  
**Energy saving motors, Premium Efficiency IE3 acc. to IEC 60034-30**  
**Käfigläufermotoren mit Oberflächenkühlung, Kühlart IC 411**  
**Motors with squirrel-cage rotor and surface ventilation, cooling method IC 411**

Thermische Klasse 155, Schutzart IP 55, Bemessungspunkt 400V 50 Hz, Betriebsart S1, Dauerbetrieb

Wirkungsgradbestimmung nach IEC 60034-2-1

thermal class 155, degree of protection IP 55, Design point 400V 50 Hz, mode of operation S1, continuous duty,

Efficiency testing acc. to IEC 60034-2-1, with surface ventilation

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Wirkungsgrad Efficiency %	Preis Price €
<b>3000 min<sup>-1</sup></b> <b>2p = 2</b>	110,0	IE3-W41R 315 S2	95,2	20.500,00
	132,0	IE3-W41R 315 M2	95,4	24.500,00
	160,0	IE3-W41R 315 MX2	95,6	28.800,00
	200,0	IE3-W41R 315 MY2	95,8	36.000,00
	250,0	IE3-W41R 315 L2	95,8	44.200,00
	315,0	IE3-W41R 315 LX2	95,8	55.700,00
<b>IE3</b>	355,0	IE3-W41R 355 M2	95,8	64.800,00

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Wirkungsgrad Efficiency %	Preis Price €
<b>1500 min<sup>-1</sup></b> <b>2p = 4</b>	110,0	IE3-W41R 315 S4	95,4	18.800,00
	132,0	IE3-W41R 315 M4	95,6	23.000,00
	160,0	IE3-W41R 315 MX4	95,8	27.400,00
	200,0	IE3-W41R 315 MY4	96,0	33.700,00
	250,0	IE3-W41R 315 L4	96,0	41.200,00
	315,0	IE3-W41R 315 LX4	96,0	52.300,00
<b>IE3</b>	355,0	IE3-W41R 355 M4	96,0	61.100,00

Die Motoren W41R der Wirkungsgradklasse "Premium Efficiency" IE3 sind ausschließlich in 50 Hz-Ausführung verfügbar.

Sie können nicht im Spannungsbereich B gem. IEC 60034-1 oder bei 60 Hz eingesetzt werden. Ein Einsatz gemäß NEMA Premium ist ebenfalls nicht zulässig.

Motors of type W41R with the efficiency class "Premium Efficiency" IE3 can be delivered only in 50 Hz design.

These motors can not be used in the voltage range B acc. IEC 60034-1 or in 60 Hz design. It is also not permitted to use these motors acc. Nema Premium.

## Käfigläufermotoren, wassergekühlt, Kühlart IC 31W, Standard Efficiency IE2 Motors with squirrel-cage rotor, water cooling, cooling method IC 31W Standard Efficiency IE2

Thermische Klasse 155, Schutzart IP 55, Bemessungspunkt 400V 50 Hz, Betriebsart S1, Dauerbetrieb

Wirkungsgradbestimmung nach IEC 60034-2-1

thermal class 155, degree of protection IP 55, Design point 400V 50 Hz, mode of operation S1, continuous duty,

Efficiency testing acc. to IEC 60034-2-1, with surface ventilation

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €		P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
3000 min <sup>-1</sup> 2p = 2	37,00	IE2-W21B 225 S2	A	1500 min <sup>-1</sup> 2p = 4	37,00	IE2-W21B 225 S4	A
	45,00	IE2-W21B 225 M2	A		45,00	IE2-W21B 225 M4	A
	55,00	IE2-W21B 250 M2	A		55,00	IE2-W21B 250 M4	A
	75,00	IE2-W21B 280 S2	A		75,00	IE2-W21B 280 S4	A
	90,00	IE2-W21B 280 M2	A		90,00	IE2-W21B 280 M4	A
	110,0	IE2-W21B 315 S2	A		110,0	IE2-W21B 315 S4	A
	132,0	IE2-W21B 315 M2	A		132,0	IE2-W21B 315 M4	A
	160,0	IE2-W21B 315 MX2	A		160,0	IE2-W21B 315 MX4	A
	200,0	IE2-W21B 315 MY2	A		200,0	IE2-W21B 315 MY4	A
	250,0	IE2-W21B 315 L2	A		250,0	IE2-W21B 315 L4	A
	315,0	IE2-W21B 315 LX2	A		315,0	IE2-W21B 315 LX4	A
	355,0	IE2-W22B 355 M2	A		355,0	IE2-W22B 355 M4	A
	400,0	W22B 355 MX2	A		400,0	W22B 355 MX4	A
	450,0	W22B 355 LY2	A		450,0	W22B 355 LY4	A
	500,0	W22B 355 L2	A		500,0	W22B 355 L4	A
1000 min <sup>-1</sup> 2p = 6	30,0	IE2-W21B 225 M6	A				
	37,0	IE2-W21B 250 M6	A				
	45,0	IE2-W21B 280 S6	A				
	55,0	IE2-W21B 280 M6	A				
	75,0	IE2-W21B 315 S6	A				
	90,0	IE2-W21B 315 M6	A				
	110,0	IE2-W21B 315 MX6	A				
	132,0	IE2-W21B 315 MY6	A				
	160,0	IE2-W21B 315 L6	A				
	200,0	IE2-W21B 315 LX6	A				
	250,0	IE2-W22B 355 M6	A				
	315,0	IE2-W22B 355 MX6	A				
	355,0	IE2-W22B 355 LY6	A				

Erhöhte Leistung auf Anfrage  
Increased output on request

A = auf Anfrage  
A = on request

## Käfigläufermotoren, wassergekühlt, Kühlart IC 31W Motors with squirrel-cage rotor, water cooling, cooling method IC 31W

Thermische Klasse 155, Schutzart IP 55, Bemessungspunkt 400V 50 Hz, Betriebsart S1, Dauerbetrieb

Wirkungsgradbestimmung nach DIN EN 60034-2-1

thermal class 155, degree of protection IP 55, Design point 400V 50 Hz, mode of operation S1, continuous duty,

Efficiency testing acc. to DIN EN 60034-2-1

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Wirkungsgrad Efficiency %	Preis Price €		P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Wirkungsgrad Efficiency %	Preis Price €
3000 min <sup>-1</sup> 2p = 2	110,0	IE3-W41B 315 S2	95,2	A	1500 min <sup>-1</sup> 2p = 4	110,0	IE3-W41B 315 S4	95,4	A
	132,0	IE3-W41B 315 M2	95,4	A		132,0	IE3-W41B 315 M4	95,6	A
	160,0	IE3-W41B 315 MX2	95,6	A		160,0	IE3-W41B 315 MX4	95,8	A
	200,0	IE3-W41B 315 MY2	95,8	A		200,0	IE3-W41B 315 MY4	96,0	A
	250,0	IE3-W41B 315 L2	95,8	A		250,0	IE3-W41B 315 L4	96,0	A
	315,0	IE3-W41B 315 LX2	95,8	A		315,0	IE3-W41B 315 LX4	96,0	A
	355,0	IE3-W41B 355 M2	95,8	A		355,0	IE3-W41B 355 M4	96,0	A

Die Motoren W41R der Wirkungsgradklasse "Premium Efficiency" IE3 sind ausschließlich in 50 Hz-Ausführung verfügbar.  
Sie können nicht im Spannungsbereich B gem. IEC 60034-1 oder bei 60 Hz eingesetzt werden. Ein Einsatz gemäß NEMA Premium ist ebenfalls nicht zulässig.

Motors of type W41R with the efficiency class "Premium Efficiency" IE3 can be delivered only in 50 Hz design.  
These motors can not be used in the voltage range B acc. IEC 60034-1 or in 60 Hz design. It is also not permitted to use these motors acc. Nema Premium.

## Synchronmotoren mit Permanentmagnetläufer, erhöhte Leistung Synchronous motors with permanent-magnet rotor, high-output design

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

Type of construction IM B3, degree of protection IP 55, thermal class 155

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
1500 min <sup>-1</sup> 2p = 4	0,19	P21R 63 K4	P20R 56 K4	1.020,00
	0,25	P21R 63 G4	P20R 56 G4	1.060,00
	0,30	P21R 71 K4	P20R 63 K4	1.120,00
	0,45	P21R 71 G4	P20R 63 G4	1.170,00
	0,80	P21R 80 K4	P20R 71 K4	1.240,00
	1,20	P21R 80 G4	P20R 71 G4	1.320,00
	1,5	P21R 90 S4	P20R 80 K4	1.420,00
	2,2	P21R 90 L4	P20R 80 G4	1.550,00
	3,5	P21R 100 L4	P20R 90 L4	1.710,00
	4,0	P21R 100 LX4	P20R 100 S4	1.960,00
	5,5	P21R 112 M4	P20R 100 L4	2.400,00
7,5	P21R 132 S4T	P20R 100 LX4	3.050,00	
750 min <sup>-1</sup> 2p = 8	0,25	P21R 71 K8	P20R 63 K8	1.460,00
	0,3	P21R 71 G8	P20R 63 G8	1.530,00
	0,35	P21R 80 K8	P20R 71 K8	1.600,00
	0,55	P21R 80 G8	P20R 71 G8	1.660,00
	0,75	P21R 90 S8	P20R 80 K8	1.750,00
	1,1	P21R 90 L8	P20R 80 G8	2.020,00
	1,7	P21R 100 L8	P20R 90 L8	2.110,00
	2,0	P21R 100 LX8	P20R 100 S8	2.350,00
	3,0	P21R 112 M8	P20R 100 L8	2.850,00
	4,0	P21R 132 S8T	P20R 100 LX8	3.590,00
	4,5	P21R 132 SX8T	P20R 100 LV8	3.980,00

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
1000 min <sup>-1</sup> 2p = 6	0,18	P21R 63 K6	P20R 56 K6	1.220,00
	0,25	P21R 63 G6	P20R 56 G6	1.290,00
	0,40	P21R 71 K6	P20R 63 K6	1.350,00
	0,50	P21R 71 G6	P20R 63 G6	1.430,00
	0,60	P21R 80 K6	P20R 71 K6	1.490,00
	0,90	P21R 80 G6	P20R 71 G6	1.600,00
	1,40	P21R 90 S6	P20R 80 K6	1.700,00
	1,9	P21R 90 L6	P20R 80 G6	1.950,00
	3,0	P21R 100 L6	P20R 90 L6	2.310,00
	3,5	P21R 112 M6	P20R 100 L6	2.920,00
	5,0	P21R 132 S6T	P20R 100 LX6	3.530,00
5,5	P21R 132 M6	P20R 112 MX6	4.380,00	
500 min <sup>-1</sup> 2p = 12	0,6	P21R 90 S12	P20R 80 K12	2.140,00
	0,9	P21R 90 L12	P20R 80 G12	2.400,00
	1,5	P21R 100 LX12	P20R 100 S12	2.740,00

Hinweis: Motoren nur für Umrichterbetrieb, PM-taugliche Umrichter sind auf Anfrage mit lieferbar  
Note: Motors only for inverter feeding, useable inverter for permanent-magnet motors on request deliverable

## Permanenterregte Synchronmotoren für Umrichterbetrieb, fremdbelüftet, Kühlart IC 416 Permanent-magnet synchronous motors for inverter feeding, forced ventilated, type of cooling IC 416

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

Type of construction IM B3, degree of protection IP 55, thermal class 155

	M <sub>B</sub> M <sub>B</sub> Nm	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €	
500 min <sup>-1</sup> 2p = 12	573	30,0	P21F 225 M12	P20F 200 M12	19.400,00
	750	39,0	P21F 250 M12	P20F 225 M12	23.000,00
	900	47,0	P21F 280 S12	P20F 250 S12	28.200,00
	1200	63,0	P21F 280 M12	P20F 250 M12	33.500,00
	1600	84,0	P21F 315 S12	P20F 280 S12	42.900,00
	1800	94,0	P21F 315 M12	P20F 280 M12	51.700,00
	2200	115,0	P21F 315 MX12	P20F 280 MX12	58.300,00
	3400	178,0	P21F 315 L12	P20F 315 L12	79.900,00
	4200	220,0	P22F 355 MY12		99.900,00
	5200	272,0	P22F 355 M12		114.100,00
	6200	325,0	P22F 355 MX12		133.000,00
	6500	340,0	P22F 355 LY12		148.200,00
	7500	393,0	P22F 355 L12		151.500,00

## Permanenterregte Synchronmotoren für Umrichterbetrieb, wassergekühlt, Kühlart IC 31W Permanent-magnet synchronous motors for inverter feeding, water cooling, cooling method IC 31W

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

Type of construction IM B3, degree of protection IP 55, thermal class 155

	M <sub>B</sub> M <sub>B</sub> Nm	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
500 min <sup>-1</sup> 2p = 12	860	45,0	P21B 225 M12	20.500,00
	1125	59,0	P21B 250 M12	24.400,00
	1425	75,0	P21B 280 S12	28.900,00
	1800	94,0	P21B 280 M12	33.900,00

Hinweis: Motoren nur für Umrichterbetrieb, PM-taugliche Umrichter sind auf Anfrage mit lieferbar  
Note: Motors only for inverter feeding, useable inverter for permanent-magnet motors on request deliverable

## Synchronmotoren mit Permanentmagnetläufer Wirkungsgrad besser als Premium Efficiency IE3 nach IEC 60034-30 Synchronous motors with Permanent-magnet Rotor Efficiency better than Premium Efficiency IE3 nach IEC 60034-30

Bauform IM B3, Schutzart IP 55, Thermische Klasse 155

type of construction IM B3, degree of protection IP 55, thermal class 155

P <sub>B</sub>	Typ		Wirkungsgrad	Grenzwert	Preis	
	Type		Efficiency	IE3 nach 60034-30 Limit	Price	
kW			%	%	€	
1500 min <sup>-1</sup> 2p = 4	0,75	PE1R 80 G4	PEOR 71 G4	82,5	82,5	A
	1,1	PE1R 90 S4	PEOR 80 K4	84,1	84,1	A
	1,5	PE1R 90 L4	PEOR 80 G4	87,0	85,3	A
	2,2	PE1R 100 L4	PEOR 90 L4	88,5	86,7	A
	3,0	PE1R 100 LX4	PEOR 100 S4	91,5	87,7	A
	4,0	PE1R 112 M4	PEOR 100 L4	92,0	88,6	A
	5,5	PE1R 112 MX4	PEOR 100 LX4	93,0	89,6	A
	7,5	PE1R 132 M4	PEOR 132 S4	93,5	90,4	A
	11,0	PE1R 160 M4	PEOR 132 M4	94,1	91,4	A
	15,0	PE1R 160 L4	PEOR 160 S4	94,8	92,1	A
	18,5	PE1R 180 M4	PEOR 160 M4	95,0	92,6	A
	22,0	PE1R 180 L4	PEOR 180 S4	95,4	93,0	A
	30,0	PE1R 200 L4	PEOR 180 M4	95,6	93,6	A
	37,0	PE1R 225 S4	PEOR 200 M4	95,6	93,9	A
	45,0	PE1R 225 M4	PEOR 200 L4	95,7	94,2	A

P <sub>B</sub>	Typ		Wirkungsgrad	Grenzwert	Preis	
	Type		Efficiency	IE3 nach 60034-30 Limit	Price	
kW			%	%	€	
1000 min <sup>-1</sup> 2p = 6	0,75	PE1R 90 S6	PEOR 80 K6	85,0	78,9	A
	1,1	PE1R 90 L6	PEOR 80 G6	87,0	81,0	A
	1,5	PE1R 100 L6	PEOR 90 L6	89,0	82,5	A
	2,2	PE1R 112 M6	PEOR 100 L6	91,0	84,3	A
	3,0	PE1R 132 S6T	PEOR 100 LX6	91,8	85,6	A
	4,0	PE1R 132 M6	PEOR 112 MX6	90,1	86,8	A
	5,5	PE1R 132 MX6	PEOR 132 S6	92,5	88,0	A
	7,5	PE1R 160 M6	PEOR 132 M6	93,0	89,1	A
	11,0	PE1R 160 L6	PEOR 160 S6	93,4	90,3	A
	15,0	PE1R 180 L6	PEOR 160 M6	93,8	91,2	A
	18,5	PE1R 200 L6	PEOR 180 S6	93,5	91,7	A
	22,0	PE1R 200 LX6	PEOR 180 M6	93,2	92,2	A
	30,0	PE1R 225 M6	PEOR 200 M6	94,2	92,9	A

Hinweis: Motoren nur für Umrichterbetrieb, PM-taugliche  
Umrichter sind auf Anfrage mit lieferbar  
A = auf Anfrage

Note: Motors only for inverter feeding, useable inverter for  
permanent-magnet motors on request deliverable  
A = on request

## Einphasen-Asynchronmotoren mit Betriebskondensator Single-phase asynchronous motors with operational capacitor

Grundauführung, Schutzart IP 55, Thermische Klasse 155  
basic version, degree of protection IP 55, thermal class 155

	$P_B$	Typ		IM B3
	$P_B$	Type		Preis
	kW			Price
				€
3000 min <sup>-1</sup> 2p = 2	0,12	EB21R 63 K2	EB20R 56 K2	235,00
	0,18	EB21R 63 G2	EB20R 56 G2	239,00
	0,25	EB21R 71 K2	EB20R 63 K2	245,00
	0,37	EB21R 71 G2	EB20R 63 G2	276,00
	0,55	EB21R 80 K2	EB20R 71 K2	330,00
	0,75	EB21R 80 G2	EB20R 71 G2	379,00
	1,10	EB21R 90 S2	EB20R 80 K2	457,00
	1,50	EB21R 90 L2	EB20R 80 G2	559,00
	2,20	EB21R 100 LX2	EB20R 90 LX2	677,00
	1500 min <sup>-1</sup> 2p = 4	0,09	EB21R 63 K4	EB20R 56 K4
0,12		EB21R 63 G4	EB20R 56 G4	250,00
0,18		EB21R 71 K4	EB20R 63 K4	269,00
0,25		EB21R 71 G4	EB20R 63 G4	274,00
0,37		EB21R 80 K4	EB20R 71 K4	317,00
0,55		EB21R 80 G4	EB20R 71 G4	359,00
0,75		EB21R 90 S4	EB20R 80 K4	412,00
1,10		EB21R 90 L4	EB20R 80 G4	508,00

## Einphasen-Asynchronmotoren mit Betriebskondensator und Widerstandsläufer

### Single-phase asynchronous motors with operational capacitor and resistance rotor

Grundauführung, Schutzart IP 55, Thermische Klasse 155  
basic version, degree of protection IP 55, thermal class 155

	$P_B$	Typ		IM B3
	$P_B$	Type		Preis
	kW			Price
				€
3000 min <sup>-1</sup> 2p = 2	0,09	EB21RW 63 K2	EB20RW 56 K2	237,00
	0,12	EB21RW 63 G2	EB20RW 56 G2	252,00
	0,18	EB21RW 71 K2	EB20RW 63 K2	270,00
	0,25	EB21RW 71 G2	EB20RW 63 G2	290,00
	0,37	EB21RW 80 K2	EB20RW 71 K2	316,00
	0,55	EB21RW 80 G2	EB20RW 71 G2	357,00
	0,75	EB21RW 90 S2	EB20RW 80 K2	434,00
	1,10	EB21RW 90 L2	EB20RW 80 G2	497,00
	1,50	EB21RW 100 L2	EB20RW 90 L2	615,00
	2,00	EB21RW 100LX2	EB20RW 90 LX2	638,00
1500 min <sup>-1</sup> 2p = 4	0,06	EB21RW 63 K4	EB20RW 56 K4	240,00
	0,09	EB21RW 63 G4	EB20RW 56 G4	257,00
	0,12	EB21RW 71 K4	EB20RW 63 K4	270,00
	0,18	EB21RW 71 G4	EB20RW 63 G4	290,00
	0,25	EB21RW 80 K4	EB20RW 71 K4	324,00
	0,37	EB21RW 80 G4	EB20RW 71 G4	362,00
	0,55	EB21RW 90 S4	EB20RW 80 K4	419,00
	0,75	EB21RW 90 L4	EB20RW 80 G4	469,00
	1,10	EB21RW 100 L4	EB20RW 90 L4	588,00
	1,50	EB21RW 100 LZ4	EB20RW 90 LZ4	699,00
2,20	EB21RW 112 M4	EB20RW 100 L4	982,00	

## Einphasen-Asynchronmotoren mit Betriebskondensator und Anlaufkondensator

### Single-phase asynchronous motors with operational capacitor and starting capacitor

Grundauführung, Schutzart IP 55, Wärmeklasse F  
basic version, degree of protection IP 55, insulation class F

	$P_B$	Typ		IM B3
	$P_B$	Type		Preis
	kW			Price
				€
3000 min <sup>-1</sup> 2p = 2	0,12	ED21RE 63 K2	ED20RE 56 K2	392,00
	0,18	ED21RE 63 G2	ED20RE 56 G2	405,00
	0,25	ED21RE 71 K2	ED20RE 63 K2	422,00
	0,37	ED21RE 71 G2	ED20RE 63 G2	452,00
	0,55	ED21RE 80 K2	ED20RE 71 K2	503,00
	0,75	ED21RE 80 G2	ED20RE 71 G2	550,00
	1,10	ED21RE 90 S2	ED20RE 80 K2	629,00
	1,50	ED21RE 90 L2	ED20RE 80 G2	726,00
	2,20	ED21RE 100 LX2	ED20RE 90 LX2	846,00
	1500 min <sup>-1</sup> 2p = 4	0,09	ED21RE 63 K4	ED20RE 56 K4
0,12		ED21RE 63 G4	ED20RE 56 G4	427,00
0,18		ED21RE 71 K4	ED20RE 63 K4	440,00
0,25		ED21RE 71 G4	ED20RE 63 G4	448,00
0,37		ED21RE 80 K4	ED20RE 71 K4	491,00
0,55		ED21RE 80 G4	ED20RE 71 G4	533,00
0,75		ED21RE 90 S4	ED20RE 80 K4	584,00
1,10		ED21RE 90 L4	ED20RE 80 G4	675,00
1,50		ED21RWE 100 LZ4	ED20RWE 90 LZ4	860,00
2,20		ED21RWE 112 M4	ED20RWE 100 L4	1140,00

# Mehrpreise Käfigläufermotoren

## Reihen (IE-)K1../K2../B2../WE../KU../W2../KV../W4..

Preise in €

Baugröße	Transnorm	56	63	71	80	90	100	112	132		
Modifikation	IE2 (IE1-)IEC/DIN	56	63	71	80	90	100	112, 132T 132T	132	160	
							100LX 112/112MX				
<b>elektrisch</b>											
abweichende Spannung <sup>1)</sup>		47,90	47,90	54,40	62,30	72,50	92,40	110,00	110,00	126,00	155,00
und/oder Frequenz (Sonderwicklung) <sup>2)</sup>											
K21R 56 – 132T mit Sonderkennzeichen Sp. 2945, Ü ≤ 1,350 V und du/dt ≤ 1 kV/µs		-	-	256,00	256,00	256,00	352,00	352,00	352,00	-	-
<b>Wicklungsschutz (thermisch)</b>											
Kaltleiter 1 Satz (3 Stück)		101,00	101,00	101,00	101,00	101,00	101,00	101,00	101,00	101,00	101,00
Kaltleiter 1 Satz (3 Stück) für Umrichterspeisung > 420 V (KU, KV)		167,00	167,00	167,00	167,00	167,00	167,00	167,00	167,00	179,00	179,00
Kaltleiter 2 Satz (6 Stück)		196,00	196,00	196,00	196,00	196,00	196,00	196,00	196,00	196,00	196,00
Kaltleiter 2 Satz (6 Stück) für Umrichterspeisung > 420 V (KU, KV)		267,00	267,00	267,00	267,00	267,00	267,00	267,00	267,00	267,00	267,00
1 PT 100 (Wicklungsschutz), 2-Leiterschaltung		156,00	156,00	156,00	156,00	156,00	156,00	156,00	156,00	295,00	295,00
3 PT 100 (Wicklungsschutz), 2-Leiterschaltung	A	A	A	A	A	A	A	A	A	885,00	885,00
Temperatursensor KTY 84-130 (1 Stück)		86,50	86,50	86,50	86,50	86,50	86,50	86,50	86,50	86,50	86,50
Mikrothermschalter 1 Satz (3 Stück)		101,00	101,00	101,00	101,00	101,00	101,00	101,00	101,00	101,00	101,00
<b>mechanisch</b>											
FF Flansch DIN EN 50347	Transnorm		FF115	FF130	FF165	FF165	FF215	FF215	FF265	FF265	FF300
	IEC/DIN	FF100	FF115	FF130	FF165	FF165	FF215	FF215	FF265	FF265	FF300
		A120	A140	A160	A200	A200	A250	A250	A300	A300	A350
Bauform IM B5, IM V1, IM V3 <sup>6) 14)</sup>		36,40	36,40	39,50	45,90	54,40	67,90	84,40	111,00	111,00	144,00
Bauform IM B35, IM V36		51,60	51,60	53,70	61,40	69,40	84,40	111,00	140,00	140,00	198,00
Bauform IM V15		51,60	51,60	53,70	61,40	69,40	84,40	111,00	140,00	140,00	198,00
Lüfterhaube Schutzdach		37,20	37,20	40,20	47,10	55,90	58,00	68,70	88,90	88,90	120,00
FT Flansch DIN EN 50347	Transnorm		FT75	FT85	FT100	FT115	FT130	FT130	FT130	FT130	FT165
	IEC/DIN	FT65	FT75	FT85	FT100	FT115	FT130	FT130	FT130	FT130	FT165
		C80	C90	C105	C120	C140	C160	C160	C160	C160 <sup>10)</sup>	C200 <sup>11)</sup>
Bauform IM B14, IM V18, V19 <sup>8)</sup>		36,40	36,40	39,50	45,90	54,40	67,90	84,40	111,00	111,00	144,00
Bauform IM B34		51,60	51,60	53,70	61,40	69,40	84,40	111,00	140,00	140,00	198,00
Lüfterhaube Schutzdach		37,20	37,20	40,20	47,10	55,90	58,00	68,70	88,90	88,90	120,00
FT Flansch DIN EN 50347	Transnorm		FT100	FT115	FT130	FT130	FT165	FT165	FT165	FT165	FT215
	IEC/DIN	FT85	FT100	FT115	FT130	FT130	FT165	FT165	FT165	FT165	FT215
		C105	C120	C140	C160	C160	C200	C200	C200	C200 <sup>13)</sup>	C250 <sup>13)</sup>
Bauform IM B14, IM V18, V19 <sup>8)</sup>		36,40	36,40	39,50	45,90	54,40	67,90	84,40	111,00	111,00	144,00
Bauform IM B34		51,60	51,60	53,70	61,40	69,40	84,40	111,00	140,00	140,00	198,00
Lüfterhaube Schutzdach		37,20	37,20	40,20	47,10	55,90	58,00	68,70	88,90	88,90	120,00
Klemmenkasten seitlich (rechts, links)		23,60	23,60	26,60	28,70	33,60	41,50	62,30	82,40	82,40	95,30
Klemmenkasten drehen (Einf. links/D-S./N-S.)		10,80	10,80	10,80	10,80	10,80	13,50	21,40	24,80	24,80	31,40
zweites Wellenende nach Katalog <sup>3)</sup>		88,00	90,90	93,00	93,00	110,00	125,00	156,00	198,00	198,00	264,00
erhöhte Querkräfte D-Seite <sup>4)</sup>		61,40	61,40	64,30	66,50	70,20	74,60	76,80	76,80	86,50	99,40
verstärkte Lagerung D-Seite (inklusive Festlager Reihe 42..)	K	K	142,00	158,00	172,00	184,00	184,00	210,00	K	K	
isoliertes Lager N-Seite		293,00	293,00	327,00	432,00	490,00	622,00	753,00	849,00	1.030,00	1.400,00
Radialwellendichtring auf D-Seite		28,80	30,10	31,40	32,70	36,60	39,40	45,70	45,70	181,00	206,00
Nachschmiereinrichtung <sup>5) 9)</sup>	A	A	A	A	A	A	A	A	A	332,00	364,00
Schwinggrößenstufe B <sup>2)</sup>		142,00	154,00	164,00	175,00	202,00	222,00	235,00	235,00	521,00	560,00
<b>Sonstiges</b>											
cUL us-Ausführung		95,80	103,00	112,00	118,00	132,00	147,00	166,00	206,00	206,00	270,00
NEMA-Ausführung (elektrisch)		47,00	49,60	56,20	58,90	66,70	75,80	84,90	84,90	112,00	148,00
Sonderfarbtöne <sup>2)</sup>	A	A	A	A	A	A	A	A	A	A	A
Stillstandsheizung 110 V oder 230 V 50 Hz (gilt nicht für EX-Ausführung)		337,00	337,00	337,00	337,00	337,00	348,00	360,00	360,00	386,00	434,00
zweites Leistungsschild, lose		9,30	9,30	9,30	9,30	9,30	9,30	9,30	9,30	47,00	47,00
Handlingkosten für Beistellungen		443,00	443,00	443,00	443,00	443,00	443,00	443,00	443,00	443,00	443,00

<sup>1)</sup> Bemessungsspannung ohne Mehrpreis siehe Seite 5  
<sup>3)</sup> einschl. verkleinertes Wellenende, abweichende Durchmesser  
<sup>4)</sup> Normalausführung bei K10R 250 4-8 pol./K1.R280 4-8 pol., 315 S u. M 4-8-pol. und 315 MX, MY, L, LX (außer Marineausführung)  
<sup>5)</sup> bei den BG 132 S, SX2, M6, M8 und 160 M, MX8 ist Nachschmiereinrichtung nicht möglich  
<sup>6)</sup> B5-Ausführung ab Baugröße 315 L nicht möglich, bei Ex-Bauform V1 Schutzdach erforderlich

<sup>8)</sup> Bauform IM B14 bei von DIN EN 50347 abweichende Ausführung Rückfrage erforderlich  
<sup>9)</sup> ab AH 315 MX Normalausführung  
<sup>10)</sup> Baugröße 132 M4, MX6 FT165  
<sup>11)</sup> Baugröße 160 MX2, L FT215  
<sup>12)</sup> Baugröße 180 M2, L4 nicht lieferbar  
<sup>13)</sup> Baugröße 132 M4, MX6 FT215  
<sup>14)</sup> zzgl. Q-Lager für IM V1, V3 (ab 315 MY erforderlich)

A = auf Anfrage  
N = Normalausführung  
K = nicht lieferbar  
<sup>2)</sup> andere Lieferzeiten beachten

## Extra charges, squirrel-cage motors Series (IE-)K1../K2../B2../WE../KU../W2../KV../W4..

Prices in €

160	180	200	225	250	280	315M	315L,LX	355M,MX	355L,L	Transnorm IE2 (IE1-)IEC/DIN	Size  Modification
180	200	225	250	280	315S,M,MX	315MY	315L,LX	355M,MX	355L,L		
180	200	225	250	280	315S,M,MX	315MY	315L,LX	355M,MX	355L,L		
211,00	282,00	411,00	519,00	656,00	889,00	1.200,00	1.200,00	1.540,00	1.540,00		electrical Differing voltage <sup>1)</sup> and/or frequency (special winding) <sup>+</sup> size K21R 56 – 132T with special marking Sp. 2945, $\dot{U} \leq 1.350 \text{ V}$ and slew rate $du/dt \leq 1 \text{ kV}/\mu\text{s}$
-	-	-	-	-	-	-	-	-	-		
253,00	253,00	253,00	253,00	253,00	253,00	253,00	253,00	253,00	253,00		Winding protection (thermal) 1 set (3 PTC sensors)
332,00	332,00	332,00	332,00	332,00	332,00	332,00	332,00	332,00	332,00		1 set (3 PTC sensors) for inverter feeding > 420 V (KU, KV)
422,00	422,00	422,00	422,00	422,00	422,00	422,00	422,00	422,00	422,00		2 sets (6 PTC sensors)
464,00	464,00	464,00	464,00	464,00	464,00	464,00	464,00	464,00	464,00		2 set (6 PTC sensors) for inverter feeding > 420 V (KU, KV)
295,00	295,00	295,00	295,00	295,00	295,00	295,00	295,00	295,00	373,00		1 PT 100 (winding protection) 2-wires connection
885,00	885,00	885,00	885,00	885,00	885,00	885,00	885,00	1.110,00	1.110,00		3 PT 100 (winding protection) 2-wires connection
86,50	86,50	502,00	502,00	502,00	502,00	502,00	502,00	502,00	502,00		Temperature sensor KTY 84-113 (1 pc.)
253,00	253,00	253,00	253,00	253,00	253,00	253,00	253,00	253,00	253,00		Microtherm switch
FF300	FF350	FF400	FF500	FF500	FF600	FF600	FF600	FF740	FF740	Transnorm	mechanical FF Flange DIN EN 50347
A350	A400	A450	A550	A550	A660	A660	A660	A800	A800		
FF300	FF350	FF400	FF500	FF500	FF600	FF600	FF600	FF740	FF740	IEC/DIN	
A350	A400	A450	A550	A550	A660	A660	A660	A800	A800		
227,00	276,00	358,00	428,00	627,00	889,00	1.540,00	1.540,00 <sup>6)</sup>	2.530,00 <sup>6)</sup>	2.530,00 <sup>6)</sup>		Type of construction IM B5, IM V1, IM V3 <sup>6) 14)</sup>
306,00	403,00	592,00	802,00	1.040,00	1.380,00	1.970,00	1.970,00	2.810,00	2.810,00		Type of construction IM B35, IM V36
306,00	403,00	592,00	802,00	1.040,00	1.380,00	1.970,00	1.970,00	2.810,00	2.810,00		Type of construction IM V15
162,00	240,00	320,00	404,00	482,00	641,00	960,00	960,00	1.140,00	1.140,00		Canopy for fan cover
FT215										Transnorm	FT Flange DIN EN 50347
C250											
C300 <sup>12)</sup>										IEC/DIN	
227,00	K	K	K	K	K	K	K	K	K		Type of construction IM B14, IM V18, IM V19 <sup>8)</sup>
306,00	K	K	K	K	K	K	K	K	K		Type of construction IM B34
162,00	240,00	320,00	404,00	482,00	641,00	960,00	960,00	1.140,00	1.140,00		Canopy for fan cover
C300											FT Flange DIN EN 50347
227,00	K	K	K	K	K	K	K	K	K		Type of construction IM B14, IM V18, IM V19 <sup>8)</sup>
306,00	K	K	K	K	K	K	K	K	K		Type of construction IM B34
162,00	240,00	320,00	404,00	482,00	641,00	960,00	960,00	1.140,00	1.140,00		Canopy for fan cover
120,00	172,00	203,00	238,00	276,00	319,00	363,00	363,00	406,00	406,00		Terminal box (right, left)
37,90	49,60	60,30	74,80	90,20	107,00	A	A	A	A		Terminal box turned (cable gland left-hand side/D-end/N-end)
317,00	374,00	450,00	521,00	551,00	684,00	851,00	851,00	1.110,00	1.110,00		Second shaft end acc. to catalogue <sup>3)</sup>
131,00	144,00	144,00	173,00	222,00	222,00	368,00	368,00	753,00	753,00		increased lateral forces D-end <sup>4)</sup>
K	K	K	K	K	K	K	K	K	K		heavy bearing D-end (fixed bearing series 42..)
1.400,00	1.400,00	1.400,00	1.470,00	1.540,00	1.620,00	1.910,00	1.910,00	1.910,00	1.910,00		insulated bearing N-end
340,00	95,30	138,00	175,00	240,00	285,00	326,00	326,00	369,00	369,00		Radial sealing ring on D-end
380,00	418,00	423,00	504,00	595,00	680,00	N	N	N	N		Relubrication device <sup>5) 9)</sup>
563,00	632,00	754,00	966,00	1.120,00	1.440,00	1.820,00	1.820,00	2.250,00	2.250,00		Vibration class stage B <sup>+</sup>
371,00	488,00	610,00	744,00	991,00	1.200,00	1.590,00	1.590,00	K	K		others cUL us-Version
203,00	267,00	333,00	408,00	545,00	616,00	740,00	740,00	901,00	901,00		NEMA-Version (electrical)
A	A	A	A	A	A	A	A	A	A		Special colours <sup>+</sup>
482,00	537,00	613,00	743,00	760,00	771,00	862,00	862,00	920,00	920,00		Anticondensation heating 110 V or 230 V 50 c/s (not to apply for Ex version)
47,00	47,00	47,00	47,00	47,00	47,00	47,00	47,00	47,00	47,00		Second rating plate, loose
443,00	443,00	443,00	443,00	443,00	443,00	443,00	443,00	443,00	443,00		Handling costs for provision

<sup>1)</sup> Design voltage without extra charge, see p. 5

<sup>3)</sup> Smaller shaft end and differing diameters included

<sup>4)</sup> Normal version for size K10R 250 4-8-pole/  
K1.R280 4-8-pole, 315 S and M 4-8-pole and 315 MX,  
MY, L, LX (except marine version)

<sup>5)</sup> For size 132 S, SX2, M6, M8 and 160 M, MX8  
relubrication device not possible

<sup>6)</sup> Design B5 not possible for size 315 L

for Ex: V1 type of mounting: fan cover with canopy

<sup>8)</sup> Mounting B14 differing from DIN EN 50347  
request must be made

<sup>9)</sup> from size 315 MX standard version

<sup>10)</sup> Size 132 M4, MX6 FT165

<sup>11)</sup> Size 160 MX2, L FT215

<sup>12)</sup> Size 180 M2, L4 not available

<sup>13)</sup> Size 132 M4, MX6 FT215

<sup>14)</sup> Q-bearings added for IM V1, V3 (from size 315 MY requested)

A = on request

N = standard version

K = not available

<sup>+</sup> attention to changed delivery times



# Mehrpreise Kompaktantriebe Reihen M21R ...T IE.M21R ...T

# Extra charges, compact drives Series M21R ...T IE.M21R ...T

Preise in €

Prices in €

Baugröße Modifikation	St.	80	90	100L	100LX	112	132	pc.	Size Modification
		von			from				
Wicklungsschutz (thermisch)									Winding protection (thermal)
Kaltleiter 1 Satz (3 Stück)	N	N	N	N	N	N	N		1 set (3 PTC sensors)
Kaltleiter 2 Satz (6 Stück)	98,90	98,90	98,90	98,90	98,90	98,90	98,90		2 sets (6 PTC sensors)
Mikrothermschalter 1 Satz (3 Stück)	50,40	50,40	50,40	50,40	50,40	50,40	50,40		Microtherm switch
mechanisch									mechanical
FF Flansch DIN EN 50347	FF165	FF165	FF215	FF215	FF215	FF265			FF Flange DIN EN 50347
	A200	A200	A250	A250	A250	A300			
Bauform IM B5, IM V1, IM V3, IM B14	22,90	27,30	34,00	42,20	42,20	55,90			Type of construction IM B5, IM V1, IM V3, IM B14
Bauform IM B35, IM V36, IM V15	30,90	34,80	42,20	55,90	55,90	70,10			Type of construction IM B35, IM V36, IM V15
Bauform V1	22,90	27,30	34,00	42,20	42,20	55,90			Type of construction IM V1
Lüfterhaube mit Schutzdach	23,70	27,90	29,00	34,20	34,20	44,50			canopy for fan cover
FT Flansch DIN EN 50347	FT100	FT115	FT130	FT130	FT130	FT130			FT Flange DIN EN 50347
	C120	C140	C160	C160	C160	C160			
Bauform IM B14, IM V18, V19	22,90	27,30	34,00	42,20	42,20	55,90			Type of construction IM B14, IM V18, IM V19
Bauform IM B34	30,90	34,80	42,20	55,90	55,90	70,10			Type of construction IM B34
Bauform V18	22,90	27,30	34,00	42,20	42,20	A			Type of construction IM V18 with canopy
Lüfterhaube mit Schutzdach	23,70	27,90	29,00	34,20	34,20	A			canopy for fan cover
FT Flansch DIN EN 50347	FT130	FT130	FT165	FT165	FT165	FT165			FT Flange DIN EN 50347
	C160	C160	C200	C200	C200	C200			
Bauform IM B14, IM V18, V19	22,90	27,30	34,00	42,20	42,20	55,90			Type of construction IM B14, IM V18, IM V19
Bauform IM B34	30,90	34,80	42,20	55,90	55,90	70,10			Type of construction IM B34
Bauform V18	22,90	27,30	34,00	42,20	42,20	A			Type of construction IM V18 with canopy
Lüfterhaube mit Schutzdach	23,70	27,90	29,00	34,20	34,20	A			canopy for fan cover
zweites Wellenende nach Katalog <sup>1)</sup>	46,60	55,10	62,80	77,70	77,70	100,00			Second shaft end acc. to catalogue <sup>1)</sup>
erhöhte Querkkräfte D-Seite	33,30	35,10	37,20	38,30	38,30	43,40			increased lateral forces D-end
Radialwellendichtring auf D-Seite	16,50	18,40	19,60	22,70	22,70	23,90			Radial sealing ring on D-end
Nachschmiereinrichtung <sup>+) </sup>	K	K	K	K	K	K			Relubrication device <sup>+) </sup>
Sonstiges									others
Sonderfarbtöne <sup>+) </sup>	A	A	A	A	A	A			Special colours <sup>+) </sup>
zweites Leistungsschild, lose	4,60	4,60	4,60	4,60	4,60	23,40			Second rating plate, loose
Optionen									Options
Einbaupotentiometer	70,50	70,50	70,50	70,50	70,50	70,50			Built-in potentiometer
LOP Local Operation Panel	74,30	74,30	74,30	74,30	74,30	74,30			LOP Local Operation Panel
LCP2 Local Control Panel	146,00	146,00	146,00	146,00	146,00	146,00			LCP2 Local Control Panel
Zubehör zum LCP2									Accessories to LCP2
Anschlusskabel (mit freien Enden)	25,60	25,60	25,60	25,60	25,60	25,60			Connection cable (with flying ends)
Steckersatz IP 65	29,30	29,30	29,30	29,30	29,30	29,30			Plug in set IP 65
Anschlusskabel für Steckersatz	29,30	29,30	29,30	29,30	29,30	29,30			Connection cable for plug set
Service-Steckersatz für gleichzeitigen Betrieb LCP2 und Profibus	94,70	94,70	94,70	94,70	94,70	94,70			Service plug-in set for simultaneous operation LCP2 and Profi bus
Einbaurahmen für LCP2 und Profibus	52,00	52,00	52,00	52,00	52,00	52,00			Mounting kit for LCP2
Bremsenansteuerung	173,00	173,00	173,00	173,00	173,00	173,00			Brake control
Filter B									Filter type B
	0,55 - 1,5 kW	61,30	61,30	61,30	61,30	61,30	61,30	0,55 - 1,5 kW	
	2,2 - 7,5 kW	76,80	76,80	76,80	76,80	76,80	76,80	2,2 - 7,5 kW	
Profibus Ausführung									Unit Profi bus
	3 MBaud	162,00	162,00	162,00	162,00	162,00	162,00	3 MBaud	
	12 MBaud	205,00	205,00	205,00	205,00	205,00	205,00	12 MBaud	
Software Dialog auf CD-ROM	150,00	150,00	150,00	150,00	150,00	150,00	150,00		Software dialog on CD-ROM

<sup>1)</sup> einschl. verkleinertes Wellenende, abweichende Durchmesser (ohne Lagergrößenwechsel)

<sup>+)</sup>  andere Lieferzeiten beachten

A = auf Anfrage  
N = Normalausführung  
K = nicht lieferbar

Abweichender Rabatt analog Kompaktantrieb

<sup>1)</sup> smaller shaft end and differing diameters included (without change of bearing size)

<sup>+)</sup>  attention to changed delivery times

A = on request  
N = standard version  
K = not available

Differing discount according to Compact drive



## Mehrpreise Kompaktantriebe Reihen M21R VS / M21F/ME1R VS / ME1F IE. M21R VS / M21F/ME1R VS / ME1F

## Extra charges, Compact Drives Series M21R VS / M21F/ME1R VS / ME1F IE. M21R VS / M21F/ME1R VS / ME1F

Preise in €

Prices in €

Baugröße Modifikation	132	160	180	Size Modification
Wicklungsschutz (thermisch)				Winding protection (thermal)
Kaltleiter 1 Satz (3 Stück)	N	N	N	1 set (3 PTC sensors)
Kaltleiter 2 Satz (6 Stück)	98,90	98,90	211,00	2 sets (6 PTC sensors)
Mikrothermschalter 1 Satz (3 Stück)	50,40	50,40	126,00	Microtherm switch
mechanisch				mechanical
FF Flansch DIN EN 50347	FF265 A300	FF300 A350	FF300 A350	FF Flange DIN EN 50347
Bauform IM B5, IM V1, IM V3	57,20	72,00	113,00	Type of construction IM B5, IM V1, IM V3
Bauform IM B35, IM V36, IM V15	70,10	100,00	151,00	Type of construction IM B35, IM V36, IM V15
zweites Wellenende nach Katalog <sup>2)</sup>	100,00	131,00	160,00	Second shaft end acc. to catalogue <sup>2)</sup>
Radialwellendichtring auf D-Seite	90,20	103,00	170,00	Radial sealing ring on D-end
Nachschmiereinrichtung <sup>1)</sup>	140,00 <sup>2)</sup>	158,00 <sup>2)</sup>	165,00	Relubrication device <sup>1)</sup>
Sonstiges				others
Sonderfarbtöne <sup>+) </sup>	30,90	35,10	44,70	Special colours <sup>+) </sup>
Stillstandsheizung 110 V oder 230 V 50 Hz	193,00	217,00	242,00	Anticondensation heating 110 V or 230 V 50 Hz
zweites Leistungsschild, lose	23,40	23,40	23,40	Second rating plate, loose
Optionen				Options
Filter Typ B	160,00	179,00	179,00	Filter type B
RS 232 Modul	162,00	162,00	162,00	Unit RS 232
Profibus DP Modul	529,00	529,00	529,00	Unit Profi bus DP
Zubehör				Accessories
externe Bedien- und Parametriereinheit (inkl. Kabel)	350,00	350,00	350,00	external operating and parametric unit (incl. cable)

<sup>1)</sup> bei den Baugrößen 132 S, SX2 und 160 M ist Nachschmiereinrichtung nicht möglich

<sup>2)</sup> einschl. verkleinertes Wellenende, abweichende Durchmesser

<sup>+)</sup>  andere Lieferzeiten beachten

N = Normalausführung

Abweichender Rabatt analog Kompaktantrieb

<sup>1)</sup> For size 132 S, SX2 and 160 M relubrication device not possible

<sup>2)</sup> Smaller shaft end and differing diameters included

<sup>+)</sup>  attention to changed delivery times

N = standard version

Differing discount according to Compact drive

## Schleifringläufermotoren, Grundauführung Motors with slip-ring rotor, basic version

Bauform IM B3, Schutzart IP 54, Thermische Klasse 155, Betriebsart S1

Type of construction IM B3, degree of protection IP 54, thermal class 155, mode of operation S1

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
1500 min <sup>-1</sup> 2p = 4	4,0	SPER 132 M4	3.440,00
	5,5	SPER 132 MX4	3.560,00
	7,5	SPER 160 M4	4.800,00
	11,0	SPER 160 L4	6.290,00
	15,0	SPER 180 L4	6.860,00
	18,5	SPER 200 L4	8.180,00
	22,0	SPER 200 LX4	9.170,00
	30,0	SPER 225 M4	11.700,00
	37,0	SPER 250 M4	13.500,00
	45,0	SPER 250 MX4	15.600,00
	55,0	S11R 280 S4 <sup>2)</sup>	18.100,00
	75,0	S11R 280 M4 <sup>2)</sup>	23.600,00
	90,0	S11R 315 S4 <sup>2)</sup>	27.200,00
	110,0	S11R 315 M4 <sup>2)</sup>	32.000,00
	132,0	S11P 315 MX4 <sup>1) 2)</sup>	36.900,00
	160,0	S11P 315 MY4 <sup>1) 2)</sup>	42.600,00
	200,0	S11P 315 LX4 <sup>1) 2)</sup>	51.200,00
250,0	S11P 315 LY4 <sup>1) 2)</sup>	58.000,00	

750 min <sup>-1</sup> 2p = 8	2,2	SPER 132 M8	3.620,00
	3,0	SPER 132 MX8	4.210,00
	4,0	SPER 160 M8	4.900,00
	5,5	SPER 160 L8	6.360,00
	7,5	SPER 180 L8	6.670,00
	11,0	SPER 200 L8	8.950,00
	15,0	SPER 225 M8	11.100,00
	18,5	SPER 225 MX8	13.000,00
	22,0	SPER 250 M8	14.600,00
	30,0	S11R 250 MX8 <sup>2)</sup>	18.900,00
	37,0	S11R 280 S8 <sup>2)</sup>	21.300,00
	45,0	S11R 280 M8 <sup>2)</sup>	25.700,00
	55,0	S11R 315 S8 <sup>2)</sup>	28.500,00
	75,0	S11R 315 M8 <sup>2)</sup>	36.400,00
	90,0	S11P 315 MX8 <sup>1) 2)</sup>	42.600,00
	110,0	S11P 315 MY8 <sup>1) 2)</sup>	49.000,00
	132,0	S11P 315 LX8 <sup>1) 2)</sup>	55.900,00

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
1000 min <sup>-1</sup> 2p = 6	3,0	SPER 132 M6	3.420,00
	4,0	SPER 132 MX6	3.860,00
	5,5	SPER 160 M6	4.800,00
	7,5	SPER 160 L6	6.290,00
	11,0	SPER 180 L6	7.070,00
	15,0	SPER 200 L6	9.600,00
	18,5	SPER 225 M6	10.600,00
	22,0	SPER 225 MX6	12.200,00
	30,0	SPER 250 M6	14.700,00
	37,0	S11R 250 MX6 <sup>2)</sup>	17.500,00
	45,0	S11R 280 S6 <sup>2)</sup>	21.000,00
	55,0	S11R 280 M6 <sup>2)</sup>	23.800,00
	75,0	S11R 315 S6 <sup>2)</sup>	30.600,00
	90,0	S11R 315 M6 <sup>2)</sup>	34.400,00
	110,0	S11P 315 MX6 <sup>1) 2)</sup>	41.400,00
132,0	S11P 315 MY6 <sup>1) 2)</sup>	46.700,00	
160,0	S11P 315 LX6 <sup>1) 2)</sup>	54.200,00	

600 min <sup>-1</sup> 2p = 10	16,5	SPER 225 M10	A
	20,0	S11R 250 MX10 <sup>2)</sup>	19.600,00
	27,0	S11R 280 S10 <sup>2)</sup>	21.800,00
	35,0	S11R 280 M10 <sup>2)</sup>	25.600,00
	44,0	S11R 315 S10 <sup>2)</sup>	30.600,00
	55,0	S11R 315 M10 <sup>2)</sup>	36.200,00
	70,0	S11P 315 MX10 <sup>1) 2)</sup>	42.400,00
	80,0	S11P 315 MY10 <sup>1) 2)</sup>	47.000,00
	90,0	S11P 315 LX10 <sup>1) 2)</sup>	52.900,00

<sup>1)</sup> Ab Baugröße 315 MX ist Schutzart IP 55 und Nachschmereinrichtung Grundauführung

<sup>2)</sup> Ab Baugröße 250 MX 6,8,10 und 280 S 4 polig ist verstärkte Lagerung Standard

<sup>1)</sup> From size 315 MX standard version is IP 55 and relubrication device

<sup>2)</sup> From size 250 MX 6,8,10 and 280 S 4 pole heavy bearing arrangement is standard

## Schleifringläufermotoren, Kran- und Hüttenwerksausführung Motors with slip-ring rotor, version for cranes and metallurgical plants

Bauform IM B3, Schutzart IP 54, Thermische Klasse 155, Betriebsart S3 (40%)

Type of construction IM B3, degree of protection IP 54, thermal class 155, mode of operation S3 (40%)

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
<b>1500 min<sup>-1</sup></b> <b>2p = 4</b>	6,3	SPEH 132 M4	3.790,00
	7,5	SPEH 132 MX4	3.920,00
	10,0	SPEH 160 M4	5.280,00
	14,5	SPEH 160 L4	6.930,00
	19,5	SPEH 180 L4	7.530,00
	24,0	SPEH 200 L4	8.950,00
	28,0	SPEH 200 LX4	10.100,00
	39,0	SPEH 225 M4	12.700,00
	48,0	SPEH 250 M4	14.700,00
	58,0	SPEH 250 MX4	17.300,00
	75,0	S11H 280 S4 <sup>2)</sup>	20.200,00
	95,0	S11H 280 M4 <sup>2)</sup>	25.900,00
	115	S11H 315 S4 <sup>2)</sup>	29.500,00
	140	S11H 315 M4 <sup>2)</sup>	35.200,00
	165	S11D 315 MX4 <sup>1) 2)</sup>	40.600,00
	200	S11D 315 MY4 <sup>1) 2)</sup>	46.900,00
	250	S11D 315 LX4 <sup>1) 2)</sup>	56.200,00
315	S11D 315 LY4 <sup>1) 2)</sup>	63.800,00	

<b>750 min<sup>-1</sup></b> <b>2p = 8</b>	3,3	SPEH 132 M8	4.020,00
	4,3	SPEH 132 MX8	4.670,00
	5,3	SPEH 160 M8	5.410,00
	7,2	SPEH 160 L8	6.970,00
	10,0	SPEH 180 L8	7.310,00
	14,5	SPEH 200 L8	9.810,00
	20,0	SPEH 225 M8	12.200,00
	25,0	SPEH 225 MX8	14.300,00
	30,0	SPEH 250 M8	16.200,00
	37,0	S11H 250 MX8 <sup>2)</sup>	20.600,00
	50,0	S11H 280 S8 <sup>2)</sup>	23.700,00
	63,0	S11H 280 M8 <sup>2)</sup>	28.600,00
	80,0	S11H 315 S8 <sup>2)</sup>	31.200,00
	100,0	S11H 315 M8 <sup>2)</sup>	40.400,00
	115,0	S11D 315 MX8 <sup>1) 2)</sup>	46.900,00
	140,0	S11D 315 MY8 <sup>1) 2)</sup>	54.000,00
	170,0	S11D 315 LX8 <sup>1) 2)</sup>	61.300,00

<b>500 min<sup>-1</sup></b> <b>2p = 12</b>	10,0	SPEH 225 M12	14.600,00
	13,0	SPEH 225 MX12	16.400,00
	17,0	SPEH 250 M12	17.300,00
	23,0	S11H 250 MX12 <sup>2)</sup>	20.500,00
	27,0	S11H 280 S12 <sup>2)</sup>	21.300,00
	33,0	S11H 280 M12 <sup>2)</sup>	27.600,00
	40,0	S11H 315 S12 <sup>2)</sup>	33.700,00
	46,0	S11H 315 M12 <sup>2)</sup>	39.400,00
	53,0	S11D 315 MX12 <sup>1) 2)</sup>	43.800,00
	60,0	S11D 315 MY12 <sup>1) 2)</sup>	53.100,00
	65,0	S11D 315 LX12 <sup>1) 2)</sup>	62.400,00

	P <sub>B</sub> P <sub>B</sub> kW	Typ Type	Preis Price €
<b>1000 min<sup>-1</sup></b> <b>2p = 6</b>	4,5	SPEH 132 M6	3.680,00
	5,5	SPEH 132 MX6	4.230,00
	7,0	SPEH 160 M6	5.280,00
	10,0	SPEH 160 L6	6.930,00
	14,5	SPEH 180 L6	7.790,00
	20,0	SPEH 200 L6	10.700,00
	25,0	SPEH 225 M6	11.400,00
	30,0	SPEH 225 MX6	13.500,00
	37,0	SPEH 250 M6	16.500,00
	45,0	S11H 250 MX6 <sup>2)</sup>	19.300,00
	60,0	S11H 280 S6 <sup>2)</sup>	22.900,00
	75,0	S11H 280 M6 <sup>2)</sup>	26.600,00
	100,0	S11H 315 S6 <sup>2)</sup>	33.400,00
	120,0	S11H 315 M6 <sup>2)</sup>	37.900,00
	140,0	S11D 315 MX6 <sup>1) 2)</sup>	45.500,00
170,0	S11D 315 MY6 <sup>1) 2)</sup>	51.300,00	
210,0	S11D 315 LX6 <sup>1) 2)</sup>	59.400,00	

<b>600 min<sup>-1</sup></b> <b>2p = 10</b>	12,0	SPEH 225 M10	12.700,00
	18,0	SPEH 225 MX10	15.000,00
	23,0	SPEH 250 M10	17.900,00
	28,0	S11H 250 MX10 <sup>2)</sup>	21.800,00
	37,0	S11H 280 S10 <sup>2)</sup>	23.800,00
	48,0	S11H 280 M10 <sup>2)</sup>	28.200,00
	60,0	S11H 315 S10 <sup>2)</sup>	33.600,00
	75,0	S11H 315 M10 <sup>2)</sup>	40.200,00
	90,0	S11D 315 MX10 <sup>1) 2)</sup>	46.800,00
	100,0	S11D 315 MY10 <sup>1) 2)</sup>	51.900,00
	115,0	S11D 315 LX10 <sup>1) 2)</sup>	61.300,00

<sup>1)</sup> Ab Baugröße 315 MX ist Schutzart IP 55 und Nachschmiereinrichtung Grundausführung

<sup>2)</sup> Ab Baugröße 250 MX 6,8,10 und 280 S 4 polig ist verstärkte Lagerung Standard

<sup>1)</sup> From size 315 MX standard version is IP 55 and relubrication device

<sup>2)</sup> From size 250 MX 6,8,10 and 280 S 4 pole heavy bearing arrangement is standard



## Mehrpriese Schleifringläufermotoren Reihen SPER/S11R, SPEH/S11H

## Extra charges, motors with slip-ring rotor Series SPER/S11R, SPEH/S11H

Preise in €

Prices in €

Baugröße Modifikation	IEC/DIN	132	160	180	200	225	250	280	315 S,M	315 MX,MY,LX,LY	IEC/DIN	Size Modification
elektrisch abweichende Spannung <sup>1)</sup> und/oder Frequenz (Sonderwicklung) <sup>+) </sup>	ab	126,00	155,00	211,00	282,00	411,00	519,00	656,00	889,00	1.200,00	from	electrical differing voltage <sup>1)</sup> and/or frequency (special winding) <sup>+) </sup>
Wicklungsschutz (thermisch)												Winding protection (thermal)
Kaltleiter 1 Satz (3 Stück)	101,00	101,00	253,00	253,00	253,00	253,00	253,00	253,00	253,00	253,00		1 set (3 PTC sensors)
Kaltleiter 2 Satz (6 Stück)	196,00	196,00	422,00	422,00	422,00	422,00	422,00	422,00	422,00	422,00		2 sets (6 PTC sensors)
1 PT 100 (Wicklungsschutz), 2-Leiterschaltung	295,00	295,00	295,00	295,00	295,00	295,00	295,00	295,00	295,00	295,00	1 PT 100 (winding protection), 2-wires connection	
3 PT 100 (Wicklungsschutz), 2-Leiterschaltung	885,00	885,00	885,00	885,00	885,00	885,00	885,00	885,00	885,00	885,00	3 PT 100 (winding protection), 2-wires connection	
Temperatursensor KTY 84-130 (1 Stück)	86,50	86,50	86,50	86,50	86,50	502,00	502,00	502,00	502,00	502,00	temperature sensor KTY 84-113 (1 pc.)	
Mikrothermschalter 1 Satz (3 Stück)	101,00	101,00	253,00	253,00	253,00	253,00	253,00	253,00	253,00	253,00		Microtherm switch 1 set (3 pieces)
mechanisch <sup>2)</sup>												mechanical <sup>2)</sup>
FF Flansch DIN EN 50347	FF265 A300	FF300 A350	FF300 A350	FF350 A400	FF400 A450	FF500 A550	FF500 A550	FF600 A660	FF600 A660			FF Flange DIN EN 50347
Bauform IM B5	111,00	144,00	227,00	K	K	K	K	K	K			Type of construction IM B5
Bauform IM V1, IM V3 <sup>4) 6)</sup>	111,00	144,00	227,00	276,00	358,00	428,00	627,00	889,00	1.540,00			Type of construction IM V1, IM V3 <sup>4) 6)</sup>
Bauform IM B35, IM V15, IM V36	140,00	198,00	306,00	403,00	592,00	802,00	1040,00	1.380,00	1.970,00			Type of construction IM B35, IM V15, IM V36
Lüfterhaube mit Schutzdach	88,90	120,00	162,00	240,00	320,00	404,00	482,00	641,00	960,00			canopy for fan cover
Klemmenkasten rechts, links	K	K	K	K	K	K	K	K	K			Terminal box (right, left)
zweites Wellenende nach Katalog <sup>3)</sup>	198,00	264,00	317,00	374,00	450,00	521,00	551,00	684,00	851,00			Second shaft end acc. to catalogue <sup>3)</sup>
1 kegl. Wellenende (1:10)	299,00	370,00	443,00	508,00	629,00	731,00	773,00	952,00	1.160,00			one conical shaft end (1:10)
zwei kegl. Wellenenden (1:10)	501,00	635,00	759,00	882,00	1.080,00	1.250,00	1.310,00	1.640,00	2.020,00			two conical shaft ends (1:10)
erhöhte Querkräfte D-Seite <sup>5)</sup>	86,50	99,40	131,00	144,00	144,00	173,00	N	N	N			increased lateral forces D-end <sup>5)</sup>
Nachschmiereinrichtung	A	A	A	A	A	A	A	A	N			Relubrication device
Radialwellendichtring auf D-Seite	181,00	206,00	340,00	95,30	138,00	175,00	240,00	285,00	326,00			Radial sealing ring on D-end
Schutzart IP 55	106,00	143,00	173,00	209,00	267,00	352,00	352,00	462,00	N			IP 55 degree of protection
Sonstiges												others
Sonderfarbtöne <sup>+) </sup>	A	A	A	A	A	A	A	A	A			Special colours <sup>+) </sup>
Stillstandsheizung 110 V oder 230 V 50 Hz	386,00	434,00	482,00	537,00	613,00	743,00	760,00	771,00	862,00			Anticondensation heating 110 V or 230 V 50 c/s
zweites Leistungsschild, lose	47,00	47,00	47,00	47,00	47,00	47,00	47,00	47,00	47,00			Second rating plate, loose
Handlingkosten für Beistellung	443,00	443,00	443,00	443,00	443,00	443,00	443,00	443,00	443,00			Handling costs for provision

<sup>1)</sup> Bemessungsspannung ohne Mehrpreis siehe Seite 5

<sup>2)</sup> Bei den Achshöhen 200 – 315 S/M ist bei Bauformen mit Wand- oder Deckenmontage eine Rückfrage erforderlich.

<sup>3)</sup> einschl. verkleinertes Wellenende und abweichende Durchmesser

<sup>4)</sup> V3 ab Achshöhe 200 nicht möglich

<sup>5)</sup> ab Baugröße 250 MX6, 8, 10, 280 S4 Standard

<sup>6)</sup> zzgl. Q-Lager für IM V1, V3 (ab 315 MY erforderlich)

<sup>1)</sup> Design voltage without extra charge, see p. 5

<sup>2)</sup> For shaft heights 200 – 315 S/M for types of construction with wall or ceiling mounting request is necessary.

<sup>3)</sup> smaller shaft end and differing diameters included

<sup>4)</sup> V3 frame size from 200 – 315 not possible

<sup>5)</sup> from size 250 MX6, 8, 10, 280 S4 standard

<sup>6)</sup> Q-bearings added for IM V1, V3 (from size 315 MY requested)

<sup>+)</sup>  andere Lieferzeiten beachten

<sup>+)</sup>  attention to changed delivery times

A = auf Anfrage  
K = nicht lieferbar

A = on request  
K = not available

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# **Drehstrommotoren mit Käfigläufer**

## **Ersatzteilliste**

**Three-phase motors with squirrel-cage rotor**  
**List of spare parts**

## Ersatzteilliste

### Allgemeines

#### Lieferverpflichtung für Ersatzmotoren und Ersatzteile

Bis 5 Jahre nach Auslaufen einer Reihe sind Ersatzteile lieferbar. Nach mehr als 5 Jahren gibt VEM technische Auskunft über den kompletten Motor bzw. Bauteile und liefert im Bedarfsfall Ersatzteile (wenn noch vorhanden) oder Fertigungsunterlagen für Ersatzteile.

#### Bestelldaten

Bei Bestellung bzw. Anfrage sind folgende Angaben unbedingt erforderlich:

Motor-Typ  
Motor-Nummer  
Bauform  
Sonderangaben (siehe Leistungsschild)

Bei einem Bestellwert unter 50,00 EUR erfolgt generell Lieferung „ab Werk“ gemäß Incoterms 2000.

#### Lieferbedingungen

Es gelten die allgemeinen Verkaufs- und Lieferbedingungen für Erzeugnisse und Leistungen der VEM motors GmbH.

#### Lieferzeiten

Die Lieferzeiten sind mit dem Lieferwerk abzustimmen.

#### Stornierungen

Bei Stornierungen oder Änderungen werden die Kosten nach Aufwand verrechnet.

## List of spare parts

### General

#### Responsibility for the delivery of spare motors and spare parts

Spare parts available up to 5 years after phase-out of a series. After more than 5 years, VEM gives technical information about the whole motor, and components respectively and supplies, if requested, spare parts (if still available) or technical documents for manufacturing of spare parts.

#### Order data

For inquiry and order, the following information is in every case necessary:

motor type  
motor number  
type of construction and mounting  
special informations see nameplate

For order value less than 50,00 EUR the mode of delivery will be in principle “ex work” acc. to Incoterms 2000.

#### Terms of delivery

The general delivery terms for products and services of VEM motors GmbH are valid.

#### Delivery times

The delivery time has to be confirmed by the deliverer.

#### Extra charges for cancellation

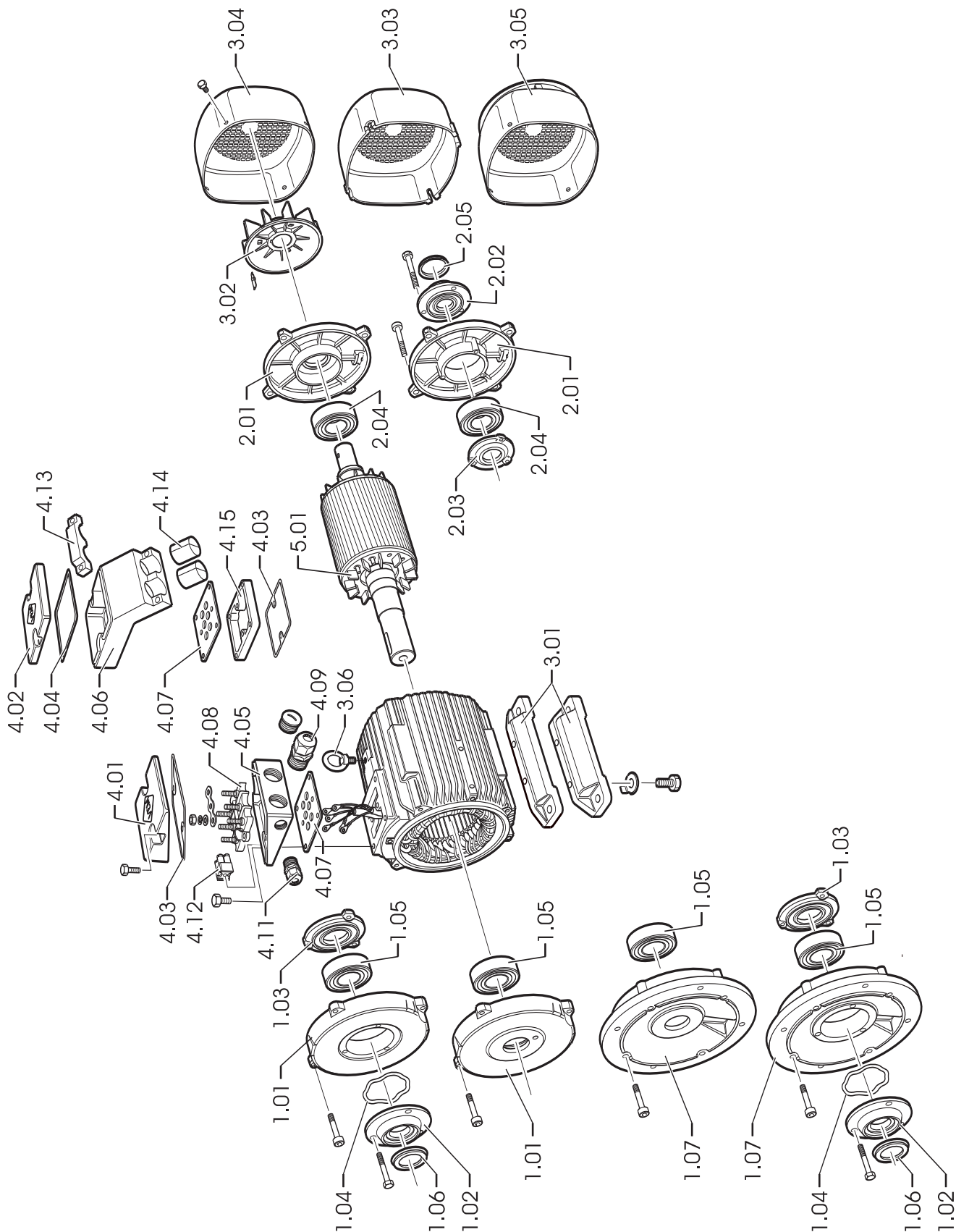
At cancellation our charge and expenses are charged separately.

# Drehstrom-Asynchronmotor / Grundausführung (IE-) K1.R/K2.R/KP.R/W..R/KU.R/KV.R

(Beispiel, gelieferte Ausführung kann in Details abweichen)

# Three-phase asynchronous motor / basic version (IE-) K1.R/K2.R/KP.R/W..R/KU.R/KV.R

(Example, delivered version may differ in details)



## Ersatzteilliste Drehstrommotoren mit Käfigläufer

## List of spare parts Three-phase motors with squirrel-cage rotor

Baureihe/ -größe K21./K11./KPER/IE1-/IE2-

Series/Size K21./K11./KPER/IE1-/IE2-

Pos.	Benennung	Designation	pos.
<b>1</b>	<b>Lagerung D-Seite</b>	<b>bearing arrangement DE</b>	<b>1</b>
1.01	Lagerschild D-S <sup>2)</sup>	end shield DE <sup>2)</sup>	1.01
1.02	Lagerdeckel D-S außen	bearing cover DE outside	1.02
1.03	Lagerdeckel D-S innen <sup>1)</sup>	bearing cover DE inside <sup>1)</sup>	1.03
1.04	Tellerfeder/Wellfeder D-S, nicht bei Rollenlager	disk springs/wave washer DE, not for roller bearings	1.04
1.05	Wälzlager D-S	antifriction bearing DE	1.05
1.06	V-Ring D-S	V-ring DE	1.06
1.07	Flanschlagerschild <sup>2)</sup>	flange end shield <sup>2)</sup>	1.07
1.071	B5	B5	1.071
1.072	B14 G	B14 big	1.072
1.073	B14 K	B14 small	1.073
<b>2</b>	<b>Lagerung N-Seite</b>	<b>bearing arrangement NDE</b>	<b>2</b>
2.01	Lagerschild N-S <sup>2)</sup>	end shield NDE <sup>2)</sup>	2.01
2.02	Lagerdeckel N-S außen	bearing cover NDE outside	2.02
2.03	Lagerdeckel N-S innen <sup>1)</sup>	bearing cover NDE inside <sup>1)</sup>	2.03
2.04	Wälzlager N-S	antifriction bearing NDE	2.04
2.05	V-Ring N-S	V-ring NDE	2.05
<b>3</b>	<b>Sonstige Bauteile</b>	<b>other elements</b>	<b>3</b>
3.01	1 Paar Motorfüße	1 pair of motor feet	3.01
3.02	Lüfter <sup>3)</sup>	fan <sup>3)</sup>	3.02
3.03	Lüfterhaube (Kunststoff)	fan cover (plastic)	3.03
3.04	Lüfterhaube (Stahlblech)	fan cover (sheet steel)	3.04
3.05	Lüfterhaube mit Schutzdach	fan cover with canopy	3.05
3.06	Ringschraube	lifting eye bolt	3.06
<b>4</b>	<b>Klemmenkasten</b>	<b>terminal box</b>	<b>4</b>
4.01	Klemmenkastendeckel (GG) <sup>5)</sup>	terminal box cover (grey cast iron) <sup>5)</sup>	4.01
4.01	Klemmenkastendeckel (Alu) <sup>5)</sup>	terminal box cover (aluminium) <sup>5)</sup>	4.01
4.01	Klemmenkastendeckel (Stahlblech) <sup>5)</sup>	terminal box cover (steel sheet) <sup>5)</sup>	4.01
4.02	Klemmenkastendeckel f. Kl. K. m. Vergussstutzen	terminal box cover for terminal box with sealing connection pipe	4.02
4.03	Dichtung für Kl. K. Deckel	terminal box cover gasket	4.03
4.04	Dichtung Kl. K. Deckel f. Kl. K. m. Vergussstutzen	terminal box with seal connection	4.04
4.05	Klemmenkastenunterteil (GG) <sup>4)</sup>	terminal box base (grey cast iron) <sup>4)</sup>	4.05
4.05	Klemmenkastenunterteil (Alu)	terminal box base (aluminium)	4.05
4.06	Klemmenkastenunterteil mit Vergussstutzen	terminal box base with sealing connection pipe	4.06
4.07	Dichtung Kl. K. Unterenteil	terminal box base gasket	4.07
4.08	Klemmensockel	terminal plate	4.08
4.09	Kabeleinführung	cable gland	4.09
4.10	Verschlusschraube	plug for screwed glands	4.10
4.11	Kabeleinführung für Kaltleiter (1 Satz)	cable gland for thermal winding protection	4.11
4.12	Klemmensockel für Kaltleiter (1 Satz)	terminal socket for thermal winding protection	4.12
4.13	Schelle (für Vergussstutzen)	clamp (for seal connection)	4.13
4.14	Verschlussstück f. Kl. K. m. Vergussstutzen	locking part for terminal box with sealing connection	4.14
4.15	Zwischenplatte f. Kl. K. m. Vergussstutzen	intermediate plate for terminal box with sealing connection	4.15
<b>5</b>	<b>Läufer</b>	<b>rotor</b>	<b>5</b>
5.1	Läufer, komplett	rotor complete	5.1
<b>6</b>	<b>Teile für Nachschmiereinrichtung</b>	<b>elements for regreasing device</b>	<b>6</b>
6.01	Schleuderscheibe D-Seite	centrifugal disc DE	6.01
6.02	Schleuderscheibe N-Seite	centrifugal disc NDE	6.02
6.03	Labyrinthbuchse D+N-Seite	labyrinth bushing DE + NDE	6.03
6.04	Leitscheibe D-Seite	guide disc DE	6.04
6.05	Leitscheibe N-Seite	guide disc NDE	6.05

<sup>1)</sup> Lagerdeckel für Festlager einschließl. Schrauben bis AH 112

<sup>2)</sup> Lagerschild mit Filzdichtung bis AH 112

<sup>3)</sup> 2-polige Ausführung ist gesondert zu bestellen

<sup>4)</sup> für eine oder zwei Kabeleinführungen

<sup>5)</sup> ab Achshöhe 132 einschließlich Dichtung

<sup>1)</sup> bearing cover for fixed bearing incl. screws up to size 112

<sup>2)</sup> end shield with felt ring up to size 112

<sup>3)</sup> 2-pole version must be ordered separately

<sup>4)</sup> for one or two cable glands

<sup>5)</sup> from frame size 132 incl. gasket

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Drehstrom-Asynchronmotoren mit Kurzschluss- und Schleifringläufer bis 500 kW  
Rollgangsmotoren bis 160 kW  
Explosiongeschützte Motoren bis 630 kW  
Kranmotoren und Schiffsmotoren  
Spezialmotoren mit Bremse, Fremdlüfter, Encoder  
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Energiesparmotoren  
Einbaumotoren  
Drehstrom-Asynchrongeneratoren

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Compact drives up to 22 kW  
Energy-saving motors  
Built-in motors  
Three-phase asynchronous generators

### High Voltage Machines

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## Notizen



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Eine Welt voller Bewegung